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ALAMEDA POINT
SSIC NO. 5090.3.A

FOLDER 1 OF 5

Final

Site Inspection Report
Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point
Alameda, California

Contract Task Order FZN0

January 2011
Document Control Number: CH2M-1000-FZN0-0008.R1

Prepared for

Department of the Navy
Naval Facilities Engineering Command–Southwest
San Diego, California 92132.5190

Under the

NAVFAC CLEAN 1000 Program
Contract N62470-08-D-1000

Prepared by

CH2MHILL.

Oakland, California

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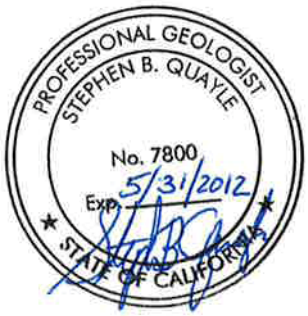

Stephen Quayle, P.G.
Professional Geologist

January 31, 2011
Date

Jamie Eby
Project Manager

January 31, 2011
Date

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Contract No. N62470-08-D-1000 **Document Control No.** CH2M-1000-FZN0-0009

TO: Remedial Project Manager
Base Realignment and Closure
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San Diego, CA 92108
(619) 532-0902

DATE: January 31, 2011
CTO #: FZN0
LOCATION: San Diego, California

FROM: Jamie J. Eby Project Manager
(510) 587-7551

DESCRIPTION: Final Site Inspection Report Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda California. Changes pages are being submitted. Provided in this submittal are the text, tables, and figures that have changes since the Draft Final version of this document dated October 2010. Please replace the following pages in the Draft Final Site Inspection Report Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda California with the pages provided in this submittal: Report cover and spine; entire main text from cover page through last page of Section 9.0 References; replace Tables 6-1 and 8-1; replace Figure 4-1 and add Figure 8-1; Appendix A, after Attachment A1 Analytical Table flysheet replace Tables A2-1 through A2-15; Appendix E, replace Table E-1; Appendix G, after page G-1 replace Tables G-1 through G-12; Appendix J, replace flysheet through last page of J10 References; and Appendix L, replace response to comment table for J. Polisini, HERD 7/9/2008, rec'd 8/5/08.

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TO: Remedial Project Manager
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DATE: October 22, 2010
CTO #: FZN0
LOCATION: San Diego, California

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DESCRIPTION: Draft Final Site Inspection Report Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda California

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Base Realignment and Closure
Program Management Office, West.
Ms. Cecily Sabedra
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San Diego, CA 92108
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DATE: March 15, 2011
CTO #: FZN0
LOCATION: San Diego, California

FROM: Jamie J. Eby/Project Manager
(510) 587-7551

DESCRIPTION: Final Site Inspection Report Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California. Additional Responses to Agency Comments (RTCs) are being submitted. Please add the attached pages to Appendix L of the Draft Final Site Inspection Report Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California. Additional RTCs provided in this submittal include: M. Garvey /USEPA (dated 12/20/11); J. Polisini/DTSC (dated 12/13/10); D. Smith/RAB (dated 12/18/10); and L. Morgan/ CDPH (dated 12/7/10). For CD only recipients, a replacement CD has been provided.

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To: NAVFAC Southwest
Environmental Records Office

1220 Pacific Highway
Code EV33, NBSD BLDG. 3519
San Diego, CA 92132

From: Jamie Eby, CH2M HILL

Attn: Sharon Cristiano

Date: April 8, 2011

Re: Updated Maini TOC Pages, Tables, and CD for Fianl Site Inspection Report Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California

We Are Sending You: √ Attached **Method of shipment:** Federal Express

Quantity	Description
1	Main Document TOC – hard copy of Executive Summary first page Page v (revised from Page iii); replace in hard copy
1	Appendix A - hard copy of Tables A2-9 through A2-15; add to hard copy
1	CD of complete PDF of whole report, including all change pages.

If the material received is not as listed, please notify us at once. Also, please replace the hard copy Appendix E, Attachment E3 Combined Boring Logs (marked as draft) with the hard copy Appendix E, Attachment E3 Combine Boring Logs (these are final and were sent as change pages).

Remarks: Please feel free to contact me (510) 587-7551 if you have any questions or concerns.

Executive Summary

A site inspection (SI) was conducted at former Naval Air Station (NAS) Alameda, now referred to as Alameda Point, in Alameda, California, to evaluate current environmental conditions at Transfer Parcels Federal Agency (FED)-1A, FED-2B, and FED-2C.

ES.1 Introduction and Objective

In 1993, former NAS Alameda was designated for closure under the Base Realignment and Closure Act. In 1999, Alameda Point was placed on the National Priorities List. The Navy is currently in the process of transferring the land to the City of Alameda and to other federal entities. As part of the closure process, an environmental baseline survey (EBS) was conducted in 1994. During the EBS, the former base was divided into 209 EBS parcels. Transfer Parcels FED-1A, FED-2B, and FED-2C contain seven of these EBS parcels, as follows:

- Transfer Parcel FED-1A: EBS Parcels 5, 23, 24
- Transfer Parcel FED-2B: EBS Parcels 25, 26, 27
- Transfer Parcel FED-2C: EBS Parcel 23E

The objective of this SI Report is to evaluate the environmental condition of each of the EBS parcels located within the three transfer parcels and to recommend the disposition of each. Transfer Parcels FED-1A, FED-2B, and FED-2C occupy approximately 400, 27, and 12 acres, respectively, in the western portion of Alameda Point. The Navy formerly used the land at Transfer Parcel FED-1A as aircraft runways, taxiways, and support service facilities (e.g., aircraft-arresting devices, compass pads, and lighting vaults) and as magazines. Currently, a 10-acre portion of Transfer Parcel FED-1A is identified as part of a California least tern sanctuary, which provides protective habitat for the endangered avian species. Transfer Parcel FED-2B is entirely unpaved open space that includes coastal scrub and wetlands habitat. Transfer Parcel FED-2C is entirely paved open space and serves as a buffer zone between Transfer Parcel FED-1A and Installation Restoration (IR) Program Site 26.

Although Transfer Parcels FED-1A, FED-2B, and FED-2C were previously proposed for reuse as a wildlife refuge, in 2006 the Department of Veterans Affairs (VA) formally requested a 'Federal-to-Federal' property transfer of these transfer parcels. At this time, the VA intends to construct and operate an outpatient clinic, long-term care facility, and a national columbarium on approximately 100 acres at the northern end of Transfer Parcel FED-1A (EDAW, 2008).

IR Site 33 is an IR site that is located entirely within the boundaries of Transfer Parcels FED-1A and FED-2B. The portion of Transfer Parcel FED-1A included within IR Site 33 extends north from the southern boundary of Transfer Parcel FED-1A and was identified to address polycyclic aromatic hydrocarbons (PAHs) detected in soil. All of Transfer Parcel FED-2B was included in IR Site 33 to address potentially outstanding ecological issues in the wetlands portion of the transfer parcel.

The Draft Transfer Parcels FED-1A, 2B, and 2C SI report (BEI, 2008) identified three areas of concern (AOCs) within Transfer Parcel FED-1A for further evaluation, and also recommended further evaluation at two sites within Transfer Parcel FED-1A that are currently incorporated in existing programs (soils which are part of IR Site 33; and Solid Waste Management Unit (SWMU) former aboveground storage tank (AST) 488, which is part of the Petroleum Program). The following areas were also recommended for further evaluation; all 13 former ASTs in Transfer Parcel FED-1A, as well as Building 100, Washdown 259, munitions in soil near the former munitions storage area in Transfer Parcel FED-1A, and firefighting training areas (Open Area 3) in Transfer Parcel FED-1A (U.S. Environmental Protection Agency [USEPA], 2008). To further evaluate the AOCs and the other areas, the Navy collected additional data in Spring 2010 according to the Final Expanded Site Inspection Work Plan for Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California (CH2M HILL, 2010). Data from the 2010 investigation are included in this report.

ES.2 Data Evaluation

Analytical data for chemicals reported at Transfer Parcels FED-1A, FED-2B, and FED-2C were reviewed and compared to applicable screening criteria. Based on this data evaluation, the three EBS parcels in Transfer Parcel FED-1A (EBS Parcels 5, 23, and 24), EBS Parcel 25 (in Transfer Parcel FED-2B), and EBS Parcel 23E (in Transfer Parcel FED-2C), were found to have chemicals in soil, surface water, and/or groundwater reported at concentrations above screening criteria and/or above background metals concentrations. No chemicals were reported in soil or groundwater at concentrations exceeding screening criteria at EBS Parcels 26 and 27 (in Transfer Parcel FED-2B).

ES.2.1 EBS Parcel 5

Previous studies have shown the presence of Aroclor 1260 in soil at a concentration exceeding the screening criterion. Vinyl chloride was the only volatile organic compound (VOC) reported at concentrations above its maximum contaminant level (MCL) at one of the monitoring wells located at EBS Parcel 5. Iron was the only metal present in soil at a concentration above screening criteria at one location in EBS Parcels 5.

ES.2.2 EBS Parcel 23

Elevated concentrations of PAHs in soil in the central and southern portion of EBS Parcel 23 were reported within the boundary of IR Site 33. PAHs in groundwater were reported above the regulatory screening criteria for benzo(a)anthracene, benzo(a) pyrene, and benzo(b)fluoranthene at three locations within or on the boundary of IR Site 33. Benzo(a)pyrene concentrations were also reported above Federal and California Modified MCLs at two locations outside of the IR Site 33 boundary. Only one VOC, 1,2-dichloroethane, was detected at a concentration slightly above the MCL at EBS Parcel 23. Arsenic and cobalt were detected in soil above screening criteria and arsenic, iron, manganese, vanadium were detected in groundwater above screening criteria at EBS Parcel 23. Concentrations of total radium were reported at or above the MCL of 5 pCi/L in groundwater samples collected at monitoring wells DRA-01 and M108-B in EBS Parcel 23.

Total petroleum hydrocarbons (TPH)-diesel and TPH-motor oil were detected in several soil samples at concentrations exceeding respective Alameda Point-Petroleum Strategy Plan

environmental screening level (ESL). The maximum detected concentrations of TPH-diesel and TPH-motor oil in soil at EBS Parcel 23 are below the Alameda Point Soil Preliminary Remediation Criteria – Nonresidential. TPH-diesel and TPH-motor oil were also detected in several groundwater samples at concentrations exceeding respective Alameda Point Petroleum Strategy Plan ESL. The maximum detected concentrations of TPH-diesel and TPH-motor oil in groundwater at EBS Parcel 23 are above the Alameda Point Groundwater Preliminary Remediation Criteria. The screening criteria are based on a potential drinking water source; however, the groundwater below this parcel is not considered a potential drinking water source.

ES.2.3 EBS Parcel 24

Lead was the only metal present in groundwater at a concentration above screening criteria at one location in EBS Parcel 24.

TPH-diesel was reported above the screening criterion in two of the sidewall soil samples collected during a vault and underground storage tank (UST) removal, a soil sample collected from the bottom of the excavation had TPH concentrations below screening criteria. Additionally, the TPH-diesel at concentrations exceeding the screening criterion in sidewall samples from the excavation were below ecological screening criteria used during the removal action and likely represent isolated concentrations. Since this concentration of TPH-diesel does not present an ecological concern, is likely to be an isolated occurrence, and the area is protected from human use, no further evaluation to delineate or remediate TPH-diesel in soil at this location is recommended.

ES.2.4 EBS Parcel 25

Arsenic was the only metal reported above the screening criteria in wetland soil samples collected within EBS Parcel 25. Metals, including copper, nickel, tributyltin, and zinc, were reported at concentrations above the screening criteria in four surface water samples collected at EBS Parcel 25.

ES.2.5 EBS Parcel 23E

One sample location for soil and groundwater was advanced to investigate possible aircraft parking and staining. One sample concentration of chromium in soil was reported above the regulatory screening level. In groundwater, benzo(a)pyrene, iron, and manganese was reported above the regulatory screening level.

ES.3 Human Health Risk

A screening-level human health risk evaluation was conducted to assess whether chemical concentrations in soil and groundwater might pose potential human health concerns that would require further evaluation. The human health risk screening evaluation was based on the planned future land use of the site, which includes residential areas (VA medical facilities), commercial/industrial areas (national columbarium), wetlands/open space, and the California least tern sanctuary (EDAW, 2008). This evaluation used maximum reported analytical results from the 2010 investigation and previous environmental studies conducted for Transfer Parcels FED-1A, FED-2B, and FED-2C. Use of the maximum reported concentrations may result in the overestimation of potential human health risk.

Lead was not included in the risk calculations because human health risks attributed to lead are evaluated based on estimating lead concentration in blood, which differs from the approach (i.e., evaluation of the incidence of cancer or systemic effects) used for assessing potential risk for other chemicals of potential concern. Therefore, risk associated with lead is not additive to the estimated cancer risk or noncancer hazard values in the risk evaluation. Results of recent radionuclide sampling at Transfer Parcel FED-1A were not included in the risk screening evaluation completed as part of this SI because the results were consistent with background at Alameda Point and therefore are not indicative of contamination.

Human health risks were calculated for the three EBS parcels located in Transfer Parcel FED-1A (EBS Parcels 5, 23, and 24), and EBS Parcel 23E in Transfer Parcel FED-2C. Human health risk were not calculated for the two EBS parcels located in Transfer Parcel FED-2B for which data exist (EBS Parcels 25 and 26) since these parcels are wetland habitat.

For calculating cancer risk, separate target risk levels for PAH and non-PAH analytes in soil were used. The cumulative target cancer risk level for PAHs in soil was equivalent to 1 additional cancer case in a population of 100,000 (10^{-5}) (as determined during the PAH technical meeting between the Navy, regulatory agencies, and the City of Alameda in May 2001, which established the PAH residential preliminary screening criterion of 620 micrograms per kilogram [µg/kg] for soil). The cumulative target cancer risk level for non-PAH analytes in soil and for all chemical classes in groundwater was equivalent to 1 additional cancer case in a population of 1,000,000 (10^{-6}). The target risk level for noncancer adverse health effects was a hazard quotient of 1 for individual chemicals of potential concern and a cumulative hazard index of 1 for all chemicals of potential concern. Reported concentrations of lead were evaluated using the 2004 California-modified preliminary remediation goal (PRG) for lead in residential soil of 150 mg/kg, the USEPA Regional Screening Level (RSL) (USEPA, 2010) for lead in industrial soil of 800 mg/kg, and the USEPA/California regulatory action level for lead in groundwater of 15 micrograms per liter (µg/L) (California Department of Health Services [DHS], 2006).

Human health target risk levels were exceeded at Transfer Parcel FED-1A, including EBS Parcels 5, 23, and 24. The incremental risk for EBS Parcel 23 is above the target risk levels using industrial risk-based guidelines; however, this is due to the elevated levels of PAH concentrations from samples located in a portion of this parcel (IR Site 33). Incremental risks were calculated for EBS Parcel 23 without the IR Site 33 samples and were below target levels using industrial risk-based guidelines. The evaluation of groundwater risks and hazards from vapor intrusion concerns indicated risks and hazards below target levels.

Risks at EBS Parcels 23E and 27 were below target risk levels.

ES.4 Ecological Risk

Ecological risk evaluations for Transfer Parcels FED-1A, FED-2B, and FED-2C were conducted; these evaluations included the development of a conceptual site model for potentially complete exposure pathways and for the potential presence of special-status species and habitats. In addition, screening-level ecological risk assessments (ERAs) were conducted for Transfer Parcels FED-1A and FED-2B.

The ecological evaluation for Transfer Parcel FED-1A indicated that a potentially complete pathway existed for special-status species to be exposed to chemicals of potential ecological concern (COPECs) in soil at the area that is grassland and coastal scrub habitat (25 percent of the transfer parcel). The other 75 percent of the site is covered by a paved surface. EBS Parcels 5 and 23 within Transfer Parcel FED-1A were further evaluated with a screening-level ERA that assessed potential risk for representative receptors for the grassland and coastal scrub habitats. Results of the screening-level ERA indicated that the potential risk estimates were not greater than risk estimates for the background conditions. Additionally, the potential risk is expected to be lower than originally estimated for ecological receptors in the grasslands and coastal scrub habitats due to the generally poor habitat quality and small size of these areas. The California least tern nesting colony is not exposed to soil COPECs due to the paved surfaces at its nesting area.

For Transfer Parcel FED-2B, the ecological evaluation indicated that potential exposure may occur for special-status species that forage in the scrub and wetland habitats. A screening-level ERA was conducted in 2002 that evaluated representative terrestrial and aquatic receptors for the area within EBS Parcels 25 and 26. The 2002 ERA concluded that the magnitude and extent of the identified potential risk was small and similar to risk associated with background conditions, suggesting that no further ecological evaluation was warranted. Regulatory agency reviews of the report cited uncertainties in the risk estimates presented; however, a review of these uncertainties indicates that the magnitude of the noted uncertainties is small and the conclusions of the 2002 ERA will not change.

Transfer Parcel FED-2C consists of barren habitat (pavement); no potentially complete exposure pathways exist for ecological receptors in this barren habitat. It is also unlikely that potentially complete exposure pathways exist for special-status species, which are unlikely to be present at Transfer Parcel FED-2C because of the poor habitat quality of this developed area. No sensitive habitats are present at Transfer Parcel FED-2C.

ES.5 Conclusions and Recommendations

Further evaluation is recommended in Transfer Parcels FED-1A at previously identified AOC 2 in EBS Parcel 5, IR Site 33, monitoring well DRA-01 in EBS Parcel 23, and at previously identified AOC 3 in EBS Parcel 24. No further evaluation is recommended for FED-2B or FED-2C.

Further evaluation in EBS Parcel 5 is limited to AOC 2. Vinyl chloride concentrations have been detected above the MCL of 0.5 µg/L in this monitoring well M025A, but the concentrations were within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario. Further monitoring of this well for VOCs is recommended to confirm that VOC levels remain within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario. Continuation of annual sampling of M025A for VOCs (8260) analysis is recommended for a minimum of 1 year. Vinyl chloride has not been detected in monitoring well M025-C, paired with monitoring well M025A. Further monitoring of this well for VOCs is recommended to confirm that VOC levels remain within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario and to ensure VOCs are not migrating to the SWBZ.

Further evaluation in EBS Parcel 23 is limited to IR Site 33 and monitoring wells DRA-01 and M108-B. Elevated PAH concentrations with B(a)P equivalent concentrations above the Alameda Point–specific screening criterion for residential use were also reported in soil in the central and southern portion of EBS Parcel 23; this area is included within the boundary of IR Site 33. PAHs in groundwater were reported above the regulatory screening criteria for benzo(a)anthracene, benzo(a) pyrene, and benzo(b)fluoranthene within or on the boundary of IR Site 33. The Navy recommends that elevated PAH concentrations in soil and groundwater be addressed as part of the IR Site 33 investigation. Because this area has previously been identified as requiring further evaluation as an IR site, it has not been identified as an AOC in this SI Report.

Further evaluation is recommended for monitoring wells DRA-01 and M108-B to verify the presence of total radium in groundwater. A previous concentration of total radium was reported at or above the MCL of 5 pCi/L in groundwater samples collected at DRA-01 (5 pCi/L) and M108-B (10.95 pCi/L). Both monitoring wells have been included in the Alameda Point Basewide Groundwater Monitoring Program to verify the total radium concentrations in groundwater. Monitoring wells DRA-01 and M108-B will be sampled quarterly for 1 year for total radium. If total radium concentrations are not detected above screening levels, no further sampling will be performed. If total radium concentrations are detected above screening levels, the samples will be speciated and the results will be further assessed to determine a path forward.

In addition, further evaluation is recommended in the western central portion of EBS Parcel 24 in AOC 3, which was identified based on concentrations of TPH-diesel in soil and naphthalene and lead in groundwater collected from the bottom of the excavation during removal of a UST in 2005. Monitoring well M108-A is located in EBS Parcel 23 immediately downgradient of the excavation site where the elevated chemical concentrations were reported; this monitoring well has not been sampled since 1995 (prior to excavation activities). Therefore, monitoring well M108-A has been included in the Alameda Point Basewide Groundwater Monitoring Program to address elevated chemical concentrations in groundwater reported in EBS Parcel 23. Monitoring well M108-A will be sampled quarterly for 1 year for lead and PAHs. If lead or naphthalene concentrations are not detected above screening levels, no further sampling will be performed. If lead or naphthalene concentrations are detected above screening levels, the results will be further assessed to determine a path forward, which may include sampling the SWBZ monitoring well (M108-B) or semiannual sampling of monitoring well M108-A.

The southern portion of IR Site 33, which is located within Transfer Parcel FED-2B, was tentatively identified as requiring further evaluation based on potential ecological concerns. However, based on the findings of the ecological and human health risk evaluations conducted for this SI Report, it has been concluded that there is no significant ecological or human health risk presented by current conditions at Transfer Parcel FED-2B. Therefore, it is recommended that the IR Site 33 boundary be revised to exclude the portion now located in Transfer Parcel FED-2B.

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Acronyms and Abbreviations

°F	degrees Fahrenheit
µg/L	micrograms per liter
µg/kg	micrograms per kilogram
AFWBZ	Alameda Formation Water-Bearing Zone
AOC	area of concern
APP	Accident Prevention Plan
AST	aboveground storage tank
BAF	bioaccumulation factor
B(a)P	benzo(a)pyrene
BCT	BRAC Cleanup Team
BEI	Bechtel Environmental, Inc.
BGMP	Basewide Groundwater monitoring Program
bgs	below ground surface
BRAC	Base Realignment and Closure
BTAG	Biological Technical Assistance Group
BSU	Bay Sediment Unit
CAA	corrective action area
Cal/EPA	California Environmental Protection Agency
CCC	criteria continuous concentration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CLEAN	Comprehensive Long-term Environmental Action—Navy
CMC	criteria maximum concentration
CONEX	container express
COPEC	chemical of potential ecological concern
CSM	conceptual site model
CTO	Contract Task Order
CTR	California Toxics Rule
DHS	California Environmental Protection Agency Department of Health Services
DON	Department of the Navy
DQO	data quality objective
DSR	data summary report
DTSC	California Department of Toxic Substances Control
EBS	Environmental Baseline Survey
EDC	Economic Development Conveyance
EPC	exposure point concentration
ERA	ecological risk assessment
ESD	Environment Summary Document

ESL	environmental screening level
FED	Federal Agency
FID	flame ionization detector
FS	Feasibility Study
FSP	Field Sampling Plan
FWBZ	First Water-Bearing Zone
GAP	generator accumulation point
HERD	Cal/EPA DTSC Human and Ecological Risk Division
HI	hazard index
HQ	hazard quotient
ID	identification number
IDW	investigation-derived waste
IR	Installation Restoration
ISCO	*in situ* chemical oxidation
IT	International Technology Corporation
ITSI	Innovative Technical Solutions, Inc.
IWTP	Industrial Waste Treatment Plant
KVA	kilovolt-ampere
LOAEL	lowest-observed-adverse-effect level
MCL	maximum contaminant level
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
msl	mean sea level
MTBE	methyl tert-butyl ether
NACIP	Navy Assessment and Control of Installation Pollutants
NADEP	Naval Aviation Depot
NAS	Naval Air Station
NEESA	Naval Energy and Environmental Support Activity
NOAEL	no-observed-adverse-effect level
NPL	National Priorities List
NWS	National Weather Service
OU	operable unit
PAH	polycyclic aromatic hydrocarbon
PBC	Public Benefit Conveyance
PCB	polychlorinated biphenyl
pCi/g	picoCuries per gram
pCi/L	picoCuries per liter
PCE	tetrachloroethene
PEP	Parcel Evaluation Plan
PID	photoionization detector
PRC	PRC Environmental Management, Inc.

PRG	preliminary remediation goal
PWC	Public Works Center
QAPP	Quality Assurance Project Plan
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation
RSL	USEPA Regional Screening Level
SAP	Sampling and Analysis Plan
Shaw	Shaw Environmental, Inc.
SI	Site Inspection
SOP	standard operating procedure
SulTech	Joint Venture of Sullivan Consulting Group and Tetra Tech EM Inc.
SVOC	semivolatile organic compound
SWAT	solid waste water quality assessment test
SWBZ	Second Water-Bearing Zone
SWMU	solid waste management unit
SWPPP	storm water pollution prevention plan
SWRCB	California State Water Resources Control Board
TAL	United States Environmental Protection Agency Contract Laboratory Program Target Analyte List
TCA	trichloroethane
TCE	tricholoroethene
TCL	United States Environmental Protection Agency Contract Laboratory Program Target Compound List
TCRA	time critical removal action
TDS	total dissolved solids
TEQ	Toxic Equivalency Factor
TPH	total petroleum hydrocarbon
TRV	toxicity reference value
TtEC	Tetra Tech EC, Inc.
TtEMI	Tetra Tech EM, Inc.
TtFW	Tetra Tech FW, Inc.
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	underground storage tank
VA	Department of Veterans Affairs
VOC	volatile organic compound
Water Board	California Regional Water Quality Control Board, San Francisco Bay Region
YBM	Yerba Buena Mud

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1.0 Introduction

This site inspection (SI) report evaluates current environmental conditions at Transfer Parcels Federal Agency (FED)-1A, FED-2B, and FED-2C at former Naval Air Station (NAS) Alameda, now referred to as Alameda Point, in Alameda, California (Figure 1-1). A previous SI report was prepared in 2008 that identified areas of concern (AOCs) recommended for further evaluation (BEI, 2008). Based on the draft SI recommendations and concerns from the regulatory agencies the Department of the Navy (Navy) decided to conduct an additional investigation and perform further data evaluation before finalizing the SI. The Navy conducted a field investigation in 2010 and the results are incorporated into this Draft Final SI Report (CH2M HILL, 2010 and BEI, 2008).

1.1 Purpose

The Navy conforms to the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) for closing military bases. The Navy seeks concurrence from the United States Environmental Protection Agency (USEPA) that the property is suitable for transfer.

The objective of the SI for Transfer Parcels FED-1A, FED-2B, and FED-2C was to characterize potential environmental contamination in soil and groundwater, estimate any potential human health risk, and identify the presence of any special-status species and/or potential exposure pathways for ecological receptors. Assessments of the environmental conditions of three environmental baseline survey (EBS) parcels within Transfer Parcel FED-1A, three EBS parcels within Transfer Parcel FED-2B, and one EBS parcel within Transfer Parcel FED-2C were included in the evaluation.

1.2 Regulatory Context and Status of Alameda Point

CERCLA Section 120(h) (4) directs federal agencies with jurisdiction over property on which federal government operations are to be terminated to identify parcels of the property ". . . on which no hazardous substances and no petroleum products or their derivatives were known to have been released, or disposed of." The Community Environmental Response Facilitation Act and USEPA guidance (USEPA, 1997) refer to such parcels as "uncontaminated." Identification of these parcels is based on an investigation of the property, including requirements set forth in CERCLA Section 120(h) (4) (A). Parcels identified as uncontaminated can be sold or otherwise transferred. However, the ultimate responsibility for assuring that the remedial objectives are met remains with the Navy as the responsible party under CERCLA.

The initial assessment study conducted by the Navy (NEESA, 1983) identified 12 sources of potentially hazardous waste at NAS Alameda, 4 of which were recommended for further investigation under the Navy Assessment and Control of Installation Pollutants program. However, the California Environmental Protection Agency (Cal/EPA) Department of Health Services (currently the California Department of Health Services) issued a remedial action order to the Navy in 1988 requiring additional investigations at Alameda Point (DHS,

1988). In fulfilling this remedial action order, the Navy identified 34 sites (Installation Restoration [IR] Program Sites 1 through 35; IR Site 18 was eliminated) as CERCLA/IR sites between 1988 and 2004 (TtEMI, 2003a).

In September 1993, the United States Congress and Base Realignment and Closure Commission designated NAS Alameda for closure. NAS Alameda ceased naval operations in April 1997. The Navy is currently in the process of transferring the land to the City of Alameda and other federal agencies. On July 22, 1999, Alameda Point was placed on the National Priorities List (64 *Federal Register* 140, 39878–39885, Final Rule, July 22, 1999). The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) identification number for NAS Alameda is CA2170023236

1.3 Base History

In 1936, Alameda Point was acquired by the Navy; NAS Alameda was operated as an active naval facility from 1940 to 1997. Alameda Point and its two major tenants, the Navy Public Works Center (PWC) and Naval Aviation Depot (NADEP) Alameda, conducted a variety of operations at Alameda Point, including aircraft, engine, gun, and avionics maintenance; engine overhaul and repair; fueling activities; and plating, stripping, and painting activities. The PWC also operated two power plants, a transportation shop, and a pesticide shop at Alameda Point. In addition, the base operated a deepwater port capable of berthing aircraft carriers. The deepwater port was used primarily for minor ship maintenance. The following tenants also occupied Alameda Point during its tenure as an active military base:

- Construction Battalion Unit 416
- Commander Naval Air Force, U.S. Pacific Fleet Material Representative
- Defense Property Disposal Office
- Navy Disease Vector Ecology Control Center
- Alameda Detachment, Explosive Ordnance Disposal Group One
- Marine Air Group 42
- Naval Air Reserve Unit
- Naval Regional Dental Center Branch Clinic
- Naval Regional Medical Center Branch Clinic
- Pacific Fleet Audio-Visual Facility Component
- Shore Intermediate Maintenance Activity
- Supervisor of Shipbuilding, Conversion, and Repair

1.4 Transfer Parcel Descriptions and Histories

Transfer Parcels FED-1A, FED-2B, and FED-2C are located in the western portion of Alameda Point along or near San Francisco Bay (Figure 1-2).

1.4.1 Transfer Parcel FED-1A

Transfer Parcel FED-1A is bounded by Transfer Parcels Economic Development Conveyance (EDC)-3, EDC-13, and Public Benefit Conveyance (PBC)-1A to the north, Transfer Parcels FED-1B, FED-2A (IR Site 2), and San Francisco Bay to the west and south, and Transfer Parcels FED-2B, FED-2C, and EDC-9 to the east (Figure 1-3). A small portion of fuel line Corrective Action Area (CAA)-A passes through the northeastern corner of the

transfer parcel. IR Site 1 is located in Transfer Parcel EDC-13, adjacent to the northern boundary of Transfer Parcel FED-1A. Transfer Parcel FED-1A consists of EBS Parcels 5, 23, and 24. Additionally, Transfer Parcel FED-1A includes a portion of IR Site 33, located in the southern portion of the transfer parcel. This portion of the IR site was tentatively identified to address elevated concentrations of polycyclic aromatic hydrocarbons (PAHs) in soil reported in the PAH investigation conducted at Transfer Parcel FED-1A. EBS parcels are described in more detail and are shown on figures in Section 3.

Transfer Parcel FED-1A occupies approximately 400 acres. Approximately 75 percent of the transfer parcel is paved open space; a limited number of buildings and structures are also present. Unpaved grassy areas occupy the remainder of the parcel. The Navy formerly used the land as aircraft runways, taxiways, and support service facilities (e.g., aircraft-arresting devices, compass pads, and lighting vaults) and as magazines. Currently, a small portion of the transfer parcel is identified as a California Least Tern sanctuary, providing approximately 10 acres of protective habitat for this endangered avian species. Most of Transfer Parcel FED-1A was previously proposed for reuse as a wildlife refuge (ARRA, 1994 and 2006); however, in 2006 the Department of Veterans Affairs (VA) formally requested a "Federal-to-Federal" property transfer of the transfer parcel. At this time, the VA intends to construct and operate an outpatient clinic, long-term care facility, and a national columbarium on approximately 100 acres at the northern end of Transfer Parcel FED-1A (EDAW, 2008).

1.4.2 Transfer Parcel FED-2B

Transfer Parcel FED-2B is bounded by Transfer Parcels FED-1A and EDC-9 to the north, Transfer Parcel FED-1A to the west, San Francisco Bay to the south, and Transfer Parcel EDC-9 to the east (Figure 1-3). Transfer Parcel FED-2B consists of EBS Parcels 25, 26, and 27. CAA-12 is located adjacent to the southeastern boundary of Transfer Parcel FED-2B; the CAA includes EBS Parcel 26, which is part of Transfer Parcel FED-2B. Additionally, Transfer Parcel FED-2B was included within the boundaries of IR Site 33. However, based on the findings of this SI evaluation, the tentative boundaries of IR Site 33 are recommended for revision to exclude Transfer Parcel FED-2B. The EBS parcels are described in more detail and are shown on the figures in Section 3.

Transfer Parcel FED-2B occupies approximately 27 acres. The transfer parcel is entirely unpaved open space, including seasonal ponds and designated wetland habitat restricted from future residential use. Most of Transfer Parcel FED-2B was previously proposed for reuse as a wildlife refuge (ARRA, 1994). A small portion of the transfer parcel, located at the northeastern corner, is included in the area proposed for mixed use. A redevelopment concept for the transfer parcel (which has not yet been approved) now proposes 100 percent wildlife refuge and no mixed use (ARRA, 2006). However, in 2006 the VA formally requested a "Federal-to-Federal" property transfer of the transfer parcel, so future use is not currently known.

1.4.3 Transfer Parcel FED-2C

Transfer Parcel FED-2C is bounded by Transfer Parcel PBC-1A to the north, Transfer Parcel FED-1A to the west and south, and Transfer Parcels EDC-9 and EDC-15 to the east (Figure 1-3). A small portion of fuel line CAA-A passes through the northern portion of the parcel. IR Site 26 is located in Transfer Parcel EDC-15, adjacent to the eastern boundary of

Transfer Parcel FED-2C. Transfer Parcel FED-2C consists of EBS Parcel 23E, which is described in more detail and is shown on the figures in Section 3.

Transfer Parcel FED-2C occupies approximately 12 acres. The transfer parcel is entirely paved open space and serves as a buffer zone between Transfer Parcel FED-1A and IR Site 26. Historically, Transfer Parcel FED-2C was included in the runway portion of NAS Alameda and was used as a taxiway. Transfer Parcel FED-2C was previously proposed for reuse as a wildlife refuge (ARRA, 1994 and 2006). However, in 2006 the VA formally requested a 'Federal-to-Federal' property transfer of the transfer parcel. Based on figures presented in the *Public Information Meeting: Navy/VA FED-to-FED Transfer Former NAS Alameda* given on December 18, 2008, Transfer Parcel FED-2C appears to be used as an "alternate access road".

1.5 Report Organization

This SI Report is organized into the following sections and appendices.

- Section 1 discusses the history of NAS Alameda and Transfer Parcels FED-1A, FED-2B, and FED-2C.
- Section 2 describes the environmental setting of Alameda Point.
- Section 3 summarizes previous investigations conducted at Transfer Parcels FED-1A, FED-2B, and FED-2C and provides a detailed description of the historical activities that occurred in these transfer parcels.
- Section 4 summarizes the approach and scope of the 2010 investigation.
- Section 5 summarizes analytical data results used for this SI Report.
- Section 6 provides the screening-level human health risk evaluation for Transfer Parcels FED-1A, FED-2B, and FED-2C.
- Section 7 presents the ecological evaluation for Transfer Parcels FED-1A, FED-2B, and FED-2C.
- Section 8 presents the conclusions of the SI Report.
- Section 9 lists references cited in this report.
- Appendix A presents the analytical results for samples collected at Transfer Parcels FED-1A, FED-2B, and FED-2C and the additional analytical results for samples collected in 2010 at Transfer Parcels FED-1A, FED-2B, and FED-2C.
- Appendix B (on CD-ROM) presents the Parcel Evaluation Plans (PEPs) prepared by ERM-West in 1994.
- Appendix C (on CD-ROM) presents the summary tables presented in the 1994 EBS prepared by ERM-West.
- Appendix D discusses field procedures and results of the 2002 PAH sampling activities. (This appendix has been copied from Appendix D of the Draft Final

Site Inspection Report for Transfer Parcel EDC-5 in Alameda Point, dated February 2005.)

- Appendix E describes the 2010 field methodology.
- Appendix F presents the 2010 aircraft parking and staining evaluation.
- Appendix G presents the screening-level human health risk evaluation results.
- Appendix H presents the 2010 data quality evaluation and validation results.
- Appendix I discusses the comparison of analytical reporting limits to the regulatory screening criteria.
- Appendix J presents the screening-level ecological risk assessment (ERA) for Transfer Parcel FED-1A.
- Appendix K (on CD-ROM) presents the Runway Wetland Human Health and Ecological Risk Screening Report referenced in the text.
- Appendix L presents the responses to agency comments to the draft SI Report.
- Appendix M (on CD-ROM) presents the Solid Waste Management Unit Evaluation Report for Transfer Parcel FED-1A (SulTech, 2005).

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2.0 Setting and History

This section presents background information relevant to the Alameda area. An overview of the climate, topography, geology, hydrogeology, fill placement history, and ecology of Alameda Island is included.

2.1 Climate

The San Francisco Bay area is characterized by a Mediterranean climate with year round temperatures. The mean annual precipitation on Alameda Island is 23 inches, with most of the precipitation occurring from October to April. Mean yearly low and high temperatures are 52 degrees Fahrenheit (°F) and 67 °F, respectively. The wind direction is predominantly from the west or northwest, with rare occurrences of gale force or greater winds. Heavy fog that sometimes impairs visibility for navigation occurs an average of 21 days per year (NWS, 2001). Table 2-1 summarizes maximum and minimum monthly temperatures and average rainfall totals for Alameda Island.

2.2 Topography

Alameda Island lies at the base of a gently westward-sloping plain that extends from the Oakland-Berkeley Hills in the east to the shore of San Francisco Bay in the west. Alameda Island is characterized by a low topographic profile, with surface elevations varying from mean sea level (msl) to approximately 30 feet above msl (Figure 2-1). Alameda Point is located on the western portion of Alameda Island (Figure 1-1). Transfer Parcels FED-1A, FED-2B, and FED-2C are located in the western and central portion of Alameda Point to the west of Seaplane Lagoon. The topography of Transfer Parcels FED-1A, FED-2B, and FED-2C is primarily flat and rises from msl to approximately 10 feet above msl.

2.3 Geology

Alameda Island is located in the eastern portion of San Francisco Bay. The bay occupies a depression between the Berkeley Hills to the east and the Montara and Coast Ranges to the west. The depression and hills were formed by two active faults, the San Andreas Fault, west of San Francisco Bay, and the Hayward Fault, east of the San Francisco Bay. The San Andreas and Hayward Faults are approximately 12 miles west and 5 miles east of the island, respectively.

The stratigraphy beneath Alameda Island and San Francisco Bay consists of unconsolidated sediment that is approximately 400 to 500 feet thick at the eastern margin of the bay.

2.3.1 Alameda Island Geology

Alameda Island sedimentary deposits consist of five units (Figure 2-2). From oldest to youngest, they are the Franciscan Formation, the Alameda Formation (alluvial deposits and upper clay-rich portion), the San Antonio Formation (lower and upper units), the Merritt Sand Formation, and the Bay Sediment Unit (BSU). These sediments overlie bedrock

consisting of metamorphosed sandstone, siltstone, shale, graywacke, and igneous bedrock of Jurassic to Cretaceous age, all of which represent the Franciscan Formation (Rogers and Figuers, 1991).

Most of the sedimentary deposits at Alameda Point are overlain by fill material. Fill material thickness generally decreases from west to east across Alameda Point. Up to 40 feet of fill soil is present at the western margin of Alameda Point where offshore areas were filled to create new land. As little as 3 to 5 feet of fill soil is present at the eastern margin of Alameda Point where tidal marshes and estuarine channels were filled. The fill material is predominantly poorly graded, fine- to medium-grained sand with silt and clay.

In the eastern portion of Alameda Point, a Marsh Crust Horizon (2 to 6 inches thick) exists just beneath the fill layer and overlies the BSU. The Marsh Crust Horizon contains elevated levels of petroleum-related chemicals, including volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). A Remedial Action Plan/Record of Decision was prepared for the Marsh Crust Horizon and was signed and approved by the Department of the Navy, USEPA, and Cal/EPA (DON, 2001a).

The BSU, which underlies the Marsh Crust Horizon, includes an upper and a lower unit. The upper unit is referred to as the Young Bay Mud, which consists of an estuarine deposit of stiff, dark, olive-gray clay with discontinuous silty and clayey sand layers. The lower unit consists of estuarine deposits of silty sand with interbedded layers of fine sand.

The BSU overlies the Merritt Sand Formation, which is composed of a brown, poorly graded, fine- to medium-grained sand. The Merritt Sand Formation overlies the San Antonio Formation, which comprises an upper and a lower unit. The upper unit is composed of alluvial deposits, and the lower unit is composed of estuarine deposits. The Yerba Buena Mud is the uppermost member of the lower San Antonio Formation estuarine deposits. The San Antonio Formation is underlain by the Alameda Formation, which comprises an upper and a lower unit. The upper unit is composed of clay-rich deposits, and the lower portion is composed of alluvial deposits. The Alameda Formation overlies the Franciscan Formation.

2.3.2 Geology at Transfer Parcels FED-1A, FED-2B, and FED-2C

The fill layer at Transfer Parcel FED-1A was observed in direct-push borings drilled from the ground surface to 8 to 9 feet below ground surface (bgs), based on the descriptions in the boring logs obtained from the 2005 PAH Study (Appendix D). Based on monitoring well boring logs (wells M-103B, -104C, and -105B), the fill layer continues beyond what was observed in direct-push borings, extending to approximately 17 to 20 feet bgs in the central area of Transfer Parcel FED-1A and to approximately 15 to 17 feet bgs in the southern area of the transfer parcel (boring WB-3) (PRC and MW, 1993a). The fill material is composed of fine- to coarse-grained sands, sand with gravel, and clays. The Young Bay Mud was not encountered beneath the fill material in the soil borings. The Marsh Crust Horizon was not visually observed in the soil borings advanced at Transfer Parcel FED-1A, nor is it considered to be potentially present beneath the transfer parcel (DON, 2001b).

Sampling in Transfer Parcel FED-2B was confined to wetland sediment and shallow water sampling for ecological assessment purposes; therefore, site-specific geological information is not available. However, assuming it is similar to the southern portion of Transfer Parcel FED-1A, the fill layer is anticipated to extend to approximately 15 to 17 feet bgs (PRC and

MW, 1993b). Fill material includes fine- to coarse-grained sands, sand with gravel, and clays. The Young Bay Mud is generally encountered beneath the fill material at Alameda Point.

The fill layer at Transfer Parcel FED-2C was observed in borings 26B28, 26B29, 26B40, and 26SW02, drilled from the ground surface to depths of 8 to 18 feet bgs as part of the IR Site 26 remedial investigation (RI) (BEI, 2003b). Fill material consists predominantly of poorly graded fine- to medium-grained sand with silt and clay. The Young Bay Mud was not encountered beneath the fill material in the IR Site 26 borings located in Transfer Parcel FED-2C, but was reported to be present in other IR Site 26 borings at 12 to 18 feet bgs. The Marsh Crust Horizon was not visually observed in the soil borings advanced at Transfer Parcel FED-2C; it is not considered to be potentially present beneath this transfer parcel (DON, 2001b).

2.4 Hydrogeology

The following subsections discuss the regional hydrogeology at Alameda Point and the site-specific hydrogeology at Transfer Parcels FED-1A, FED-2B, and FED-2C. Alameda Point Basewide groundwater elevations for Winter 2007 and Spring 2008 are presented on Figures 2-3 and 2-4, respectively.

2.4.1 Regional Hydrogeology

Alameda Island is underlain by two primary aquifers: the shallow Merritt Sand aquifer, which yields saline water, and the deeper Alameda aquifer, which yields freshwater (TtEMI, 2000b). These aquifers are separated by the San Antonio aquitard, which is approximately 55 to 90 feet thick and consists of three units:

- Yerba Buena Mud
- Other estuarine deposits
- Upper clay-rich portion of the Alameda Formation

The Merritt Sand Formation is a semiconfined aquifer with potentiometric head elevations from 0 to 6 feet above msl at Alameda Island (TtEMI, 1999a). Regionally, groundwater recharge occurs at outcrop areas of the Merritt Sand located in the southeastern portion of Alameda Point, as well as east of Alameda Point. Groundwater recharge is from irrigation, precipitation, and possibly leaking water-supply lines, sewer lines, and storm drains (TtEMI, 1999a). There is no hydraulic communication between the shallow aquifer systems on Alameda Island and the Oakland mainland because of the barrier created by the Oakland Inner Harbor (TtEMI, 1999a).

The Alameda aquifer is the principal regional aquifer. Depth to the top of the Alameda aquifer ranges from 180 feet bgs at Alameda Point to 220 feet beneath the surface of the sediment in Oakland Inner Harbor. The thickness of the Alameda Formation is between 230 and 800 feet (Hickenbottom and Muir, 1988).

The first water-bearing zone (FWBZ) occurs primarily in the fill material (where present), the Merritt Sand Formation, and the underlying Upper San Antonio Formation in the southeastern portion of Alameda Point. In this area, the FWBZ extends vertically to the top of the Yerba Buena Mud (Lower San Antonio Formation), which acts as a confining layer

below the FWBZ. Throughout Alameda Point, the second water-bearing zone (SWBZ) is a semiconfined and unconfined aquifer that occurs within the Merritt Sand Formation and the Upper San Antonio Formation. The SWBZ is found only in the portions of Alameda Point where the overlying BSU is present, as it is at Transfer Parcels FED-1A, FED-2B, and FED-2C, and consists of low-permeability materials, allowing the BSU to act as a confining unit for the SWBZ. The SWBZ extends to the top of the Yerba Buena Mud, which functions as a confining unit below the SWBZ.

2.4.2 Hydrogeology at Alameda Point and Transfer Parcels FED-1A, FED-2B, and FED-2C

There are no naturally occurring streams at Alameda Point, and the only naturally occurring ponds within the salt marshes at West Beach Landfill Wetland and Runway Wetland are the seasonal wetlands at the northwestern (IR Site 1 and Transfer Parcel EDC-3) and southwestern (IR Site 2) ends of the island. Precipitation at Alameda Point primarily evaporates into the atmosphere, runs off through the storm drain network, feeds seasonal ponds and wetlands, or infiltrates to groundwater. The Ecological Risk Assessment discussed in Section 7 assumes a connection between surface and groundwater.

Previous studies indicated that groundwater across Alameda Point is encountered at 3 to 8 feet bgs within the fill layer. Groundwater recharge occurs from infiltrating precipitation over unpaved areas in Alameda Point. Groundwater generally flows to the north and west in the northern and western portions of Transfer Parcel FED-1A, respectively. Groundwater generally flows to the southwest in the southern portion of Transfer Parcels FED-1A and FED-2B. Groundwater beneath Transfer Parcel FED-2C generally flows to the northeast in the northern area and to the east in the central and southern areas (BEI, 2003b); however, the groundwater gradient appears to be relatively flat in Transfer Parcel FED-2C and the eastern portion of Transfer Parcel FED-1A. Groundwater elevation and potentiometric surface maps for the FWBZ and SWBZ, which were prepared as part of the basewide groundwater monitoring program using data from fall 2006 (ITSI, 2007), are the basis for the approximate groundwater flow direction shown by arrows on the figures in this SI Report.

During an RI/Feasibility Study (FS) (PRC, 1996a) conducted in the vicinity of Transfer Parcel FED-1A, depths to groundwater measured in shallow monitoring wells were used to generate groundwater elevation contours for the western and panhandle area of this transfer parcel. Based on these contours, groundwater elevations in this area ranged from approximately 6.5 to 10.5 feet above msl. During the 2002 PAH study at Transfer Parcel FED-1A, depth to groundwater ranged from 1 to 8 feet bgs (approximately 0 to 7 feet above msl) (BEI, 2003a).

In the western portion of Alameda Point, the BSU occurs as a continuous layer and the FWBZ occurs primarily in the fill soil and the sandy upper portion of the BSU. The proximity to San Francisco Bay contributes to the presence of salt water in the aquifer. Groundwater collected from wells at Transfer Parcel FED-1A has been found to have elevated salinity, with total dissolved solids (TDS) concentrations exceeding 10,000 milligrams per liter (mg/L) for nearly all wells screened in the SWBZ (TtEMI, 2000b). Groundwater in deeper portions of the FWBZ at Transfer Parcel FED-1A (below 20 to 30 feet bgs) is generally more saline than the shallower portions (less than 15 feet bgs). Typical TDS levels for the shallow FWBZ inland from the shoreline with San Francisco Bay are 300 to

1,000 mg/L (freshwater). At locations nearer to the shoreline, TDS values for wells screened in the SWBZ at Transfer Parcel FED-1A are generally greater than 20,000 mg/L and even approach levels found in seawater (35,000 mg/L) (TtEMI, 2000b).

2.4.3 Groundwater Use and Potential Beneficial Use

Groundwater beneath the western portion of Alameda Point (including that which underlies Transfer Parcels FED-1A, FED-2B, and FED-2C) is not currently used for drinking water, irrigation, or industrial supply. Drinking water is supplied to Alameda Point by the East Bay Municipal Utilities District. A groundwater beneficial use report was conducted for the purposes of CERCLA cleanup decisions (TtEMI, 2000b). The beneficial use evaluation stated that most of the FWBZ at Alameda Point was considered to be a potential, although unlikely, source of drinking water but that the SWBZ could not be used for drinking purposes due to TDS concentrations in excess of 10,000 mg/L.

Other potential beneficial uses for groundwater discussed in the groundwater beneficial use report at Alameda Point included industrial supply and agricultural use (crop irrigation or livestock watering) (TtEMI, 2000b). However, the report concluded that using groundwater for livestock watering would be the only possible (although unlikely) future use for groundwater in the western region of Alameda Point (including Transfer Parcels FED-1A, FED-2B, and FED-2C). This conclusion was based on the high levels of TDS in groundwater (or the likelihood of saltwater intrusion if any significant pumping takes place), which would require costly pretreatment before the groundwater would be suitable for other uses such as crop irrigation or industrial supply.

The groundwater beneficial use report for Alameda Point (TtEMI, 2000b) summarized the following factors supporting the conclusion that groundwater in the western region should not be considered a potential drinking water source for CERCLA cleanup decisions.

- Safe yield and maximum pumping rate are inadequate to support common uses of water as well as multiple domestic users.
- No supply wells currently exist within or downgradient of Transfer Parcels FED-1A, FED-2B, or FED-2C.
- No supply wells are likely to be installed within the golf course or landfill areas (i.e., downgradient of Transfer Parcels FED-1A, FED-2B, or FED-2C).
- State and county limitations exist on well construction because of a thin, vulnerable aquifer.

A January 2000 letter from the USEPA outlined the reasons why the USEPA considered groundwater underlying the western and central regions of Alameda Point unlikely to be considered a potential source of drinking water (USEPA, 2000).

Groundwater beneath Alameda Point is currently classified by Cal/EPA's State Water Resources Control Board (SWRCB) as potentially suitable for municipal or domestic supply, industrial process water, industrial service water, and agricultural water supply. In 2000, the San Francisco Bay Regional Water Quality Control Board (Water Board) adopted groundwater basin plan amendments (Water Board Resolution [Res.] 00-024) to dedesignate the municipal supply beneficial use portions of Alameda Point, including Transfer Parcels

FED-1A, FED-2B, and FED-2C. These amendments are still subject to approval by the SWRCB and the State Office of Administrative Law. At this time, the SWRCB staff has not yet determined when these amendments will be considered. However, in a July 2003 letter, the Navy received concurrence from the Water Board that groundwater meets the municipal and domestic water supply designation exemption criteria in the sources of drinking water policy Res. 88-63 of the California SWRCB (SWRCB, 1988) and Water Board Res. 89-39 for groundwater west of Saratoga Street at Alameda Point (Water Board, 2003). This includes groundwater beneath Transfer Parcels FED-1A, FED-2B, and FED-2C.

2.5 Fill History of Alameda Island

Before 1850, the peninsula of Alameda consisted of approximately 2,200 acres of high ground (dry land) and 1,000 acres of marshland. The peninsula measured approximately 1.5 by 4.5 miles and consisted of only the eastern portion of what is now Alameda Island. Alameda Island is now three times its original size because of fill projects conducted between 1871 and 1961. The general trend of fill events was to initially fill areas north of Atlantic Avenue, and then to fill areas west of Main Street (Figure 2-5). Currently, Alameda Island occupies approximately 6,912 acres of dry land (Valeska, pers. com. 2001).

In 1930, the U.S. Army acquired the western portion of Alameda Island, now referred to as Alameda Point (Figure 1-1), and began construction activities in 1931. In 1936, the Navy acquired land from the U.S. Army and began building NAS Alameda. The U.S. Army and Navy construction activities involved filling tidelands, marshes, and sloughs south of Oakland Inner Harbor and the western edge of Alameda Island. The fill material largely consisted of dredge spoils from the surrounding San Francisco Bay and Oakland Inner Harbor. After 1941, the Navy conducted additional fill activities in subtidal areas, extending the western edge of the base.

Transfer Parcels FED-1A, FED-2B, and FED-2C are located on man-made land that was filled during successive fill events conducted between 1930 and 1959. A small portion of Transfer Parcel FED-1A located in the north-central portion of the transfer parcel was filled between 1930 and 1936. Most of Transfer Parcel FED-1A, occupied by EBS Parcels 23 and 24, along with Transfer Parcel FED-2C and the northernmost strip of Transfer Parcel FED-2B, was constructed between 1936 and 1941 during a fill event that involved the pumping of sediments from San Francisco Bay (Merlin, 1977; Vigness, 1952). The western portion of Transfer Parcel FED-1A, occupied by EBS Parcel 5, was filled between 1945 and 1949 (USGS, 1949). A fill event conducted between 1949 and 1959 created the westernmost strip and southern portion of Transfer Parcel FED-1A and most of Transfer Parcel FED-2B (USGS, 1959).

2.6 Ecological Setting

The following ecological habitats are known to occur in the vicinity of Alameda Point.

- Barren habitat occurs as bare soil, buildings, roads, parking areas, and runways.
- Urban habitat occurs as grass lawns, ornamental shrubs, trees, and landscaped areas.
- Annual grassland habitat occurs throughout Alameda Point.

- Coastal scrub habitat occurs between the annual grassland habitat and the saline emergent wetland habitat at the West Beach Landfill Wetland (IR Site 2) and the Runway Wetland (Transfer Parcel FED-2B).
- Saline emergent wetland habitat occurs at the West Beach Landfill Wetland and the Runway Wetland.
- Estuarine habitat occurs at Oakland Inner Harbor to the north of Alameda Point, at Seaplane Lagoon, and at San Francisco Bay to the south of Alameda Point.

Barren, grassland, and wetland habitats currently exist at Transfer Parcels FED-1A, FED-2B, and FED-2C. A detailed evaluation of ecological conditions at Alameda Point and Transfer Parcels FED-1A, FED-2B, and FED-2C is presented in Section 7.

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3.0 Investigations Conducted at Transfer Parcels FED-1A, FED-2B, and FED-2C

The following environmental studies were conducted within the boundaries of Transfer Parcels FED-1A, FED-2B, and FED-2C prior to the 2010 investigation:

- *RI/FS Sampling Plan for NAS Alameda* (Canonie, 1990)
- *Data Summary Report RI/FS, Phases 1 and 2A* (PRC and MW, 1993b)
- *Solid Waste Water Quality Assessment Test and Data Summary Report for RI/FS Phases 5 and 6* (PRC and MW, 1993a)
- *Environmental Baseline Survey Report* (ERM-West, 1994a)
- *Parcel Evaluation Plans* (ERM-West, 1994b)
- *Ecological Assessment* (PRC and MW, 1994)
- RI/FS Data Transmittal Memorandum, Sites 1, 2, 3, Runway Areas 6, 7A, 7B, 7C, 9, 10B, 11, 13, 15, 16, and 19 (PRC, 1996a)
- *Operable Unit (OU)-4 Ecological Risk Assessment Revision 2* (PRC, 1996b)
- *OU-4 Follow-on Ecological Assessment Work Plan/Field Sampling Plan* (PRC, 1996c)
- *Resource Conservation and Recovery Act (RCRA) Part B Permit Closure for Industrial Waste Treatment Plant (IWTP)* # 25 (IT, 2000)
- *Underground Storage Tank (UST) Summary Report* (TtEMI, 2000a)
- *Fuel Pipeline Oversight and Sampling* (TtEMI and R&M, 2000)
- *Storm Sewer Study Report* (TtEMI, 2000c)
- *EBS Data Evaluation Summary* (IT, 2001)
- *Environmental Summary Document (ESD) for Transfer Parcel FED-1* (TtEMI, 2001a)
- *Storm Sewer Study Report, Total Petroleum Hydrocarbons (TPH) Addendum* (TtEMI, 2001b)
- *Summary Report, Data Gap Investigation at CAAs* (TtEMI, 2001c)
- *Data Summary Report, Supplemental RI Data Gap Sampling for OUs 1 and 2* (TtEMI, 2002b)
- *Runway Wetland Risk Screening* (Neptune, 2002)
- *PAH Field Activity Study* (BEI, 2003a)
- *RI for IR Site 26* (BEI, 2003b)

- *Basewide Groundwater Monitoring Program Work Plan* (Shaw, 2004a)
- *Underground Storage Tank Removal, Least Tern Nesting Site* (Shaw, 2005a)
- *Final Closure Report for IWTP #25* (Shaw, 2005b)
- *SWMU Evaluation Report for Transfer Parcel FED-1A* (SulTech, 2005)
- *Petroleum Aboveground Storage Tanks (ASTs) Evaluation and Closure Request* (SulTech, 2006)
- *Fall 2006 Groundwater Monitoring Report* (ITSI, 2007)
- *2007 Investigation* (DON, 2007)

With the exception of the PAH study that addressed Transfer Parcel FED-1A as a whole, the studies focused on specific environmental concerns within each of the three transfer parcels. Section 3.1 presents general information about the environmental investigations reported in the above studies which took place prior to the 2010 Investigation. Information about the 2010 Investigation can be found in Section 4. Section 3.2 provides detailed information about the historical uses and analytical results of the investigations for each EBS parcel within each of the three transfer parcels. Section 3.3 presents information on the historical uses and analytical results of investigations related to SWMUs, including USTs and ASTs currently or historically present in each of the three transfer parcels.

In addition to the above studies, a review of aerial photographs was conducted during the preparation of this SI Report. Aerial photographs dated between 1930 and 1994 were reviewed; significant findings of this review are presented in Section 3.1.14.

Samples collected and submitted for analyses during previous investigations at the three transfer parcels included 468 soil samples, 7 manhole sediment samples, 44 surface sediment samples, 43 surface water samples, and 262 groundwater samples. Twenty-seven monitoring wells are present at these transfer parcels. In addition, 25 samples of animal tissue, 7 samples of plant tissue, and 3 samples of pore water were collected. The following types of samples were collected at these transfer parcels:

- Soil: 432 primary, 2 confirmation, and 34 duplicate
- Manhole sediment: 6 primary and 1 duplicate
- Surface sediment: 39 primary and 5 duplicate
- Surface water: 43 primary
- Groundwater: 40 grab primary and 3 grab duplicate; 200 monitoring well and 19 duplicate

Detailed information on the samples collected, analytical suites, and results for all three transfer parcels are presented in Sections 3.2 and 3.3.

3.1 Previous Investigations at Transfer Parcels FED-1A, FED-2B, and FED-2C

This subsection summarizes the environmental investigations that have been conducted within the boundaries of the three transfer parcels. Analytical results from these investigations are discussed in Sections 3.2 and 3.3.

3.1.1 Environmental Baseline Survey Investigation

In 1993, the Environmental Survey Baseline (EBS) program was initiated at Alameda Point to facilitate property transfer. Initially, the property was divided into 214 EBS parcels. Subsequently, six of these parcels were determined to be on Fleet and Industrial Supply Center, Alameda Annex, property, leaving 208 EBS parcels at Alameda Point. A portion of the Todd Shipyards was later added to the Alameda EBS program, resulting in a total of 209 EBS parcels. Subsequent to the completion of the EBS, 53 EBS parcels were divided into subparcels and assigned alphanumeric identifiers (e.g., a portion of EBS Parcel 23 became EBS Parcel 23E).

Figure 3-1 identifies the seven EBS parcels located within the boundaries of the three transfer parcels (FED-1A [EBS Parcels 5, 23, and 24]; FED-2B [EBS Parcels 25, 26, and 27]; and FED-2C [EBS Parcel 23E]). EBS Parcel 26 has been evaluated as part of petroleum remediation site CAA-12 and portions of EBS Parcels 23 and 23E have previously been evaluated as portions of fuel line remediation site CAA-A.

Table 3-1 lists buildings and structures within or formerly within Transfer Parcels FED-1A, FED-2B, and FED-2C, their construction and demolition dates (if available), and the reported uses of buildings, structures, and open space. Figure 3-2 shows the EBS parcels, buildings, structures, open space, and potential subsurface conduits within the boundaries of the three transfer parcels.

The EBS investigation was implemented in two phases. Phase 1 provided an assessment of the environmental impacts due to base operations and included site visits, employee interviews, historical research, and a property inventory on a parcel-by-parcel basis (ERM-West, 1994a).

Based on the results of the Phase 1 analysis, Phase 2 was conducted to further examine the potential environmental impacts at Alameda Point; this phase included the collection of environmental samples. Potential impacts were identified as either "parcel-specific target areas" associated with site-specific uses, or "zonewide target areas" associated with activities occurring basewide (e.g., use of pesticides or the presence of a railroad track). Potential impacts from sewer systems (sanitary, storm, and industrial) were also identified. Phase 2 was conducted in two subphases: 2A and 2B (IT, 2001). Activities conducted during these subphases were as follows:

- Phase 2A – collection of soil samples from selected parcels (parcel-specific, zonewide, and sewer-related target areas)
- Phase 2B – collection of groundwater samples and additional soil samples from selected parcels

The results of the groundwater sampling are presented in Section 3.2.1.2 for EBS Parcel 23 and Section 3.2.1.3 for EBS Parcel 24. No information regarding the data validation for these samples is known.

3.1.2 Parcel Evaluation Plans

In 1994 and 1995, ERM-West prepared PEPs as supplements to the original EBS (ERM-West, 1994b). The PEPs were prepared for each EBS parcel and included findings from Phase 1 of the EBS (e.g., a summary of the historical use of the parcels and results of the EBS inspection). The PEPs also proposed sampling to address potential contamination. The PEPs are included as Appendix B of this report and are summarized in Section 3.2.

3.1.3 Total Petroleum Hydrocarbons Program

A short segment of fuel line CAA-A cuts across the northeastern corner of Transfer Parcel FED-1A and the northern tip of Transfer Parcel FED-2C (Figure 3-2). Fuel line CAA-A was created to investigate a portion of the fuel line that historically carried jet fuel from its delivery point on Pier 4 (located on Oakland Inner Harbor, northeast of Transfer Parcel FED-1A), where fuel was delivered by barge. Approximately 3,600 feet of pipeline carried the fuel to the fuel storage area located in EBS Parcel 37, near the northeastern corner of Transfer Parcel FED-1A. In 1998, the pipeline was excavated and removed (TtEMI, 2000a). Single soil samples were collected from Transfer Parcels FED-1A and FED-2C after the pipeline was removed and overexcavation activities were completed, to document the concentrations of petroleum hydrocarbons remaining in the ground (TtEMI and R&M, 2000). TPH concentrations reported in confirmation soil samples did not require action under the Petroleum Program (TtEMI, 2002a).

A portion of CAA-12 comprises all of EBS Parcel 26 within Transfer Parcel FED-2B. In general, CAA-12 consists of areas formerly used for aircraft weapons overhaul and testing, acoustical enclosures for aircraft engines, and aircraft run-up. The CAA was established because of TPH concentrations reported in soil samples near the storm drain line in the portion of the CAA located northeast of Transfer Parcel FED-2B. Additional samples collected during a data gap investigation (TtEMI, 2001c) found that TPH concentrations in groundwater were not of concern.

The SWMU report (see Section 3.1.10 for details) recommended 11 SWMU sites located outside the CAAs but within Transfer Parcel FED-1A for inclusion in the Petroleum Program. These SWMU locations are discussed in greater detail in Section 3.3.

3.1.4 NAS Alameda Remedial Investigation/Feasibility Study

In 1988, a remedial action order issued by the California Department of Health Services required the Navy to perform a remedial investigation/feasibility study (RI /FS) at 20 of the current 34 IR sites at NAS Alameda. The RI/FS was conducted in eight phases, beginning with field investigations and data summary reports (DSRs) for all 20 sites (Phases 1, 2A, 2B, and 3) followed by ecological assessments in Phase 4 and solid waste water quality assessment test (SWAT) investigations in Phases 5 and 6. Phases 7 and 8 are the RI and FS reports for all sites, respectively (PRC, 1996a).

IR Sites 1 and 2 are located adjacent to the western portion of Transfer Parcel FED-1A. Because a number of samples were actually collected within the western panhandle of

Transfer Parcel FED-1A during investigations at IR Sites 1 and 2, a brief description of the operational histories of these IR sites is presented below.

IR Site 1 was a disposal area between 1943 and 1956 and was the principal site for waste disposal at NAS Alameda, reportedly receiving solid waste (liquid wastes were discharged directly to Seaplane Lagoon) during its period of operation. It is estimated that the site received 150,000 to 200,000 tons of solid waste, including old aircraft engines, cooked garbage from ships in port, cables, scrap metals, waste oil, waste paint, waste solvents, cleaning compounds, medical waste, construction debris, dredge spoils, and low-level radiological material (Canonie, 1990). The RI for IR Site 1 (as part of OU-3) was completed in 1999 (TtEMI, 1999b), and a final FS (BEI, 2006) and Proposed Plan (TtEMI, 2006) were completed for IR Site 1 in 2006. The IR Site 1 Record of Decision (ChaduxTt, 2009) was completed in 2009.

IR Site 2 was also a disposal area, known as the West Beach Landfill, which operated from 1952 to 1978 and went into full operation after IR Site 1 was closed in 1956. IR Site 2 received most of the solid waste from base operations as well as lesser amounts of waste from nearby Navy bases including Oakland Naval Hospital, Naval Supply Center, Oakland, and Naval Station Treasure Island. It is estimated that 1.6 million tons of waste were disposed at IR Site 2, including waste chemical drums, municipal garbage, solvents, oily waste and sludges, paint waste, strippers, thinners, plating wastes, cleaners, acids, mercury, polychlorinated biphenyl (PCB)-contaminated fluids and rags, batteries, low-level radiological wastes, scrap metal, inert ordnance, asbestos, pesticides, tear gas agent, infectious waste, creosote, dredge spoils, waste medicines, and reagents. The RI for IR Site 2 was completed in 2006 (Battelle, 2006) and the final FS (Battelle and BBL, 2007) for this site was also completed in 2006. In addition, a time-critical removal action (TCRA) to address radiological anomalies was completed at both IR Sites 1 and 2 (Tetra Tech EC, Inc. [TtEC], 2007a).

During the RI/FS at Alameda Point, soil and groundwater samples were collected within Transfer Parcel FED-1A and analyzed for radionuclides (Canonie, 1990). However, because the validity of the soil data was not known (there was no available documentation on the analytical methodology or data validation methods used), this information was not used to determine the actual radionuclide activity present in soil (TtEC, 2007b). Areas within Transfer Parcel FED-1A at which elevated radium-226 levels in soil were previously measured were resampled for radionuclides in 2007, as described in Section 3.1.13.

3.1.4.1 Solid Waste Water Quality Assessment Test

As part of Phases 5 and 6 of the Alameda Point RI/FS, a SWAT (PRC and MW, 1993a) was performed between 1988 and 1993 at IR Sites 1 and 2. At the time of the SWAT investigation, the western panhandle of Transfer Parcel FED-1A was considered part of IR Site 1. Samples were collected throughout Transfer Parcel FED-1A during the SWAT investigations in order to establish "background" concentrations for IR Sites 1 and 2.

As part of the first phase of the SWAT investigation, soil samples were collected from 15 borings located in a grid pattern in the western portion of Transfer Parcel FED-1A and from two soil borings along the western edge of the transfer parcel. During the second phase of the SWAT investigation, groundwater samples and additional soil samples were collected for analysis during and after the installation of monitoring wells. Twelve monitoring wells (M025-A/E/C, M103-A, M103-B, M104-A, M104-C, M105-A, M105-B, M106-A, M107-A,

M108-A, M108-B, M109-A) were installed to varying depths in Transfer Parcel FED-1A to investigate stratigraphic differences in data.

3.1.4.2 Basewide Ecological Assessment

Several previous investigations have been conducted at the Runway Wetland, which comprises most of Transfer Parcel FED-2B. Although the Runway Wetland was not originally identified as a potentially contaminated area, general disposal practices common to NAS Alameda have occurred in this area (PRC and MW, 1994).

An initial field investigation was conducted at the offshore and wetland areas (including West Beach Landfill Wetland and Runway Wetland) in 1993. This study was part of a basewide ecological assessment (PRC and MW, 1994) conducted during Phase 4 of the RI/FS, to define the extent of wetland habitat in the Runway Wetland area. Sediment samples were collected for analysis at four locations in the Runway Wetland located in low-lying areas periodically inundated by tides. Wetland surface water was also sampled at two of these locations; and bioaccumulation assessments, benthic infauna analyses, and bioassays were performed at one of the locations. Storm water was sampled at Outfalls U, S, and T (south of Transfer Parcel FED-1A) and at Outfall HH (west of Transfer Parcel FED-1A panhandle) during a storm event. Outfalls are shown on Figure 3-2. In addition, a water column profile was collected in the subtidal area near Outfall U to analyze physiochemical water parameters at various depths.

Concentrations of chemicals in sediment samples from the eastern location in the western seasonal pond in Transfer Parcel FED-2B were higher than concentrations at the other three stations and had sufficiently high toxicity in the bioassay test to warrant inclusion in a Tier II bioaccumulation and benthic population analysis. Specifically, the sediment sample from location R-3 showed levels of mercury, zinc, total dichlorodiphenyltrichloroethanes, and total PCBs that exceeded the wetland cover creation criteria. The report noted that the Runway Wetland is valuable to many wintering and migrating wildlife species; however, it was also noted that the diversity and abundance of aquatic organisms were low. The source of the contamination at location R-3 was not known but hypothesized that it could be related to 1) the possible use of PCBs to minimize the growth of vegetation around runway lights or 2) the water and entrained sediments from Seaplane Lagoon that enter the Runway Wetland during flood tides, where the sediment would be deposited and the water would accumulate instead of draining back into the Lagoon.

3.1.4.3 Operable Unit 4 Ecological Risk Assessment

An ERA for OU-4 (which includes IR Site 2) was prepared in 1996 as a revision to the basewide ERA described above and as part of the ongoing RI/FS study for NAS Alameda (PRC, 1996b). The report presented an updated interpretation of the data collected in 1993 due to changes in the regulatory guidance for design and implementation of ERAs. Significant changes included new sediment screening criteria, guidelines for property transfer and probable reuse, and the request for a follow-on investigation. A work plan/field sampling plan (PRC, 1996c) for the follow-on ecological work was submitted concurrently with the OU-4 ERA. The follow-on ecological work plan noted that recent anecdotal information indicated that an “elevated area” within the northern portion of the Runway Wetland may have been used for disposal of construction wastes and debris. The results of further investigation at the Runway Wetland are presented in the "Runway

Wetland Human Health and Ecological Risk Screening Report," which is summarized in Section 3.1.4.7.

3.1.4.4 Follow-on Ecological Investigation

During a follow-on investigation at the Runway Wetland (TtEMI, 1998), six locations (RW001 through RW006) were sampled in 1996 and 1997. Three surface sediment samples, three pore water samples, two surface water samples, and four grab groundwater samples were collected. In addition, because the Runway Wetland was originally not an IR site, an additional investigation was conducted to establish the site history and hydrology of the wetland. The data were reported in the Chemical DSR for Offshore Sediments and Wetland Areas at Alameda Point (TtEMI, 1998).

3.1.4.5 Follow-on Remedial Investigation/Feasibility Study Investigation

In 1996, a follow-on investigation was conducted (PRC, 1996a) to locate USTs, assess the integrity of some drain lines, and/or collect additional chemical, geologic, and hydrogeologic data at IR sites where data gaps existed from previous studies. HydroPunch samples were collected to assist in the placement of monitoring wells. Monitoring wells were installed in the FWBZ and SWBZ. Soil samples were collected for analysis during monitoring well installation. At Transfer Parcel FED-1A, groundwater samples were collected for analysis from seven clusters of HydroPunch locations (HP1-10-A/E/D, HP1-11-A/E/D, HP2-4-A/E/D, HP2-5-A/E/D, HPRA-8-A/E/D, HPRA-20-A/E/D, and HPRA-23-A/E/D) and soil samples were collected at two locations to investigate subsurface conditions at IR Sites 1 and 2 and the Runway Area. Groundwater samples were collected from multiple depths.

3.1.4.6 IR Site 2 Remedial Investigation

Although the Runway Wetland in Transfer Parcel FED-2B is not located adjacent to the West Beach Landfill Wetland in IR Site 2, these wetlands are considered to be ecologically contiguous. As a result, ecological samples were collected in 1998 at the Runway Wetland during activities conducted in support of the baseline ERA portion of the RI for IR Site 2. The sampling effort at the Runway Wetland included the collection of tissue samples from plants, soft-bodied invertebrates, nonmigratory fishes, and small mammals that serve as food sources for site-specific ecological receptors. In addition, a parallel sampling and analysis effort was conducted for a reference area at Alameda Point. Analytical results of samples were presented in the human health and ecological screening report for the Runway Wetland (see Section 3.1.4.7).

Three borings were completed by Foster Wheeler in 2002 as part of investigation activities for the adjacent IR Site 1. The soil samples collected were analyzed for geotechnical parameters.

3.1.4.7 Runway Wetland Human Health and Ecological Risk Screening Report

A human health and ecological screening assessment (Neptune, 2002) was completed in 2002 at the Runway Wetland in Transfer Parcel FED-2B. The screening evaluation was conducted to document site conditions and assess whether the site poses an unacceptable risk to human health or the environment. No data were collected as part of the screening evaluation; however, the report evaluated all previously existing data, including data originally collected for the IR Site 2 RI. The report stated that debris, consisting of concrete, asphalt, and sheet-type metal, was placed in an elevated area in the northeastern portion of

this site. There is no evidence that hazardous materials or municipal solid wastes were placed in the area, and chemical constituents present in sediments at the Runway Wetland were generally consistent with ambient concentrations. Therefore it was concluded that no site-related chemical releases had occurred. In addition, the report concluded that, even under the conservative set of assumptions used in the evaluations, no significant risks to human or ecological receptors exist at the Runway Wetland.

3.1.4.8 IR Site 26 Remedial Investigation

IR Site 26 (Western Hangar Zone) is located immediately east of Transfer Parcel FED-2C. The IR Site 26 RI was conducted to investigate several chemicals in areas of potential concern, including VOCs in groundwater southeast of the northernmost building, fuel-related hydrocarbons in soil and groundwater between the southernmost two buildings, and near a former fuel-loading station in the northern portion of the site. In addition, a small portion of a storm sewer line between the southernmost two buildings was also investigated. The RI included collection of soil and groundwater samples within the boundaries of Transfer Parcel FED-2C to refine the characterization of contamination and provide data for risk assessment.

Based on recommendations in the RI Report, the TPH-affected areas are being addressed under the Petroleum Program (BEI, 2003b). The storm sewer line between the southernmost two buildings is being investigated for potential radioactive waste materials as part of IR Site 5 CERCLA activities.

Although there was no immediate threat to human health or the environment from groundwater contamination reported at the site, the RI Report recommended further study of the VOCs in groundwater in the northern portion of IR Site 26. A final FS Report (BEI, 2005) was developed for IR Site 26 to evaluate remedial action alternatives to address potential risks to human health and the environment from the groundwater plume containing VOCs. The final record of decision for IR Site 26 was issued in August 2006 (DON, 2006a).

Within the boundaries of Transfer Parcel FED-2C, three grab groundwater samples were collected and one monitoring well was installed (26SW02) during the RI sampling activities at IR Site 26 in 2002 (BEI, 2003b). The grab groundwater samples were collected and analyzed to help in determining the final placement and depth of the monitoring well. These sampling locations were considered upgradient to the fuel-related soil and groundwater contamination at the southwestern corner of Building 23.

3.1.5 Storm Sewer Investigations

The storm sewer system at Alameda Point was initially constructed by the Navy to collect surface runoff from streets, runways, tarmac, landscaped areas, and building roof drains. Prior to 1972, wastes from industrial operations were discharged into the storm sewer system. After 1972, as a result of the Clean Water Act, the Navy stopped direct discharge of industrial wastes to the storm sewer system; wastes were diverted to industrial waste treatment plants, treated on-site, and then routed to the East Bay Municipal Utility Department sanitary sewer (DON, 1996). Additionally, numerous engineering controls, wastewater treatment systems, and other waste management improvements have been

implemented to significantly reduce direct and indirect discharges to the offshore areas through the storm sewer system.

Storm sewer segments within Transfer Parcel FED-1A lead to one of six outfalls along San Francisco Bay (Outfalls HH, S, T, and U), the Oakland Inner Harbor (Outfall Z), and Seaplane Lagoon (Outfall R), as shown on Figure 3-2 (TtEMI, 2000c). A short segment of a storm sewer line in the northern portion of Transfer Parcel FED-2C drains to Oakland Inner Harbor (Outfall Z). Another short sewer line segment crossing the northern portion of Transfer Parcel FED-2B drains to Seaplane Lagoon (Outfall R).

The stormwater investigations were carried out for the purpose of evaluating whether the stormwater sewers were behaving as a preferential pathway for the migration of legacy chemicals to ecological receptors.

A storm water pollution prevention Plan (SWPPP) was initiated to ensure that only surface runoff is carried into the offshore areas. Currently, onshore sources of contaminants to San Francisco Bay are controlled and are addressed as part of the city of Alameda's SWPPP. In 1996, the Navy performed storm water sampling to support a basewide SWPPP as required by the Alameda Point National Pollutant Discharge. According to the 1996 and 1997 storm water monitoring report, industrial activities at Alameda Point were not associated with water quality impacts (TtEMI, 2000c).

A series of storm-sewer-related investigations was conducted by the Navy at the three transfer parcels and included the following activities

- Removal of sediment from storm sewer segments
- Use of closed-circuit television to identify cracks, offset joints, and resulting areas of groundwater infiltration
- Identification of areas where TPH contamination in shallow groundwater had the potential for infiltrating into cracked or offset storm sewer segments

The sediment removal was conducted as a two-phase CERCLA time-critical removal action for sediment and debris in the storm drain system (TtEMI, 2000c). Phase I consisted of vacuum cleaning sediment and debris from storm drain catch basins and manholes associated with the six outfalls. Phase II consisted of cleaning all manholes and subsystem lines associated with additional outfalls, including Outfalls HH, R, S, T, U , and Z. Inaccessible sections of lines that were not cleaned included the distal ends (between the last manhole and outfall). Following the removal action activities, the cleaned lines were inspected using closed-circuit television surveys to identify cracks, offset joints, and resulting areas of groundwater infiltration.

The condition of storm sewer pipeline segments in the three transfer parcels were categorized, and most were determined to be "sound." However, three storm sewer segments located in the southern portion of Transfer Parcel FED-1A, which discharge to Outfalls S, T, and U, were assessed as "condition unknown" (TtEMI, 2000c). In addition, one sewer segment located in the northern portion of Transfer Parcel FED-1A, which drains to Outfall U, was identified as one that could have "potential infiltration of groundwater." Since these "condition unknown" and "potential infiltration" segments of storm sewer

pipeline were not in areas of known groundwater contamination, they were not considered data gaps that needed to be investigated at the site (TtEMI, 2001b).

3.1.6 RCRA Investigation of Industrial Waste Treatment Plant 25

Although IWTP 25 is located northeast of Transfer Parcel FED-2B, one sampling location (027-IWTP-004) was advanced within the boundary of the transfer parcel in 1999 as part of the IWTP 25 RCRA Site Closure investigation (IT, 2000). The site closure investigation originally specified the reuse of IWTP 25 and surrounding facilities. A closure amendment (Shaw, 2005b) was drafted to allow for a "clean closure," which included decontamination, dismantling, and disposal of the IWTP and surrounding facilities. In support of the clean closure amendment, additional samples were collected in 2004, including samples from the same location in Transfer Parcel FED-2B that was sampled previously in 1999. Closure was granted, based on analytical results, and no further action was recommended for IWTP 25 (Shaw, 2005b).

3.1.7 Property Transfer

In 2001, an ESD for Transfer Parcel FED-1 (inclusive of Transfer Parcel FED-1A) was prepared to document the environmental conditions of the property before transfer to another federal agency (TtEMI, 2001a). The ESD concluded that Transfer Parcel FED-1A was suitable for transfer to the United States Fish and Wildlife Service (USFWS) for use as a national wildlife refuge with "acceptable risk" to human health and the environment.

In 2006, the VA formally requested a "Federal-to-Federal" property transfer of the transfer parcel. At this time, the VA intends to construct and operate an outpatient clinic, long-term care facility, and a national columbarium on approximately 100 acres at the northern end of Transfer Parcel FED-1A. No change to the human health risk is required based on any change in reuse, as the residential exposure scenario is the most conservative.

3.1.8 Basewide Groundwater Monitoring Program

A basewide groundwater monitoring program was implemented in 2002 and is ongoing at Alameda Point (Shaw, 2004a). The purpose of the program is to inventory, assess, and evaluate the adequacy of the current monitoring well network and to evaluate groundwater quality at Alameda Point. Ten of the monitoring wells originally included in the basewide groundwater monitoring program are located in Transfer Parcel FED-1A: M010-B, M011-A, M012-A/B, M013-A/C, M014-A/B, and M025-A/C. The most recent data for each chemical analyzed for as part of the basewide groundwater monitoring program (ITSI, 2007) from the wells at Transfer Parcel FED-1A are included in Appendix A of this SI Report.

3.1.9 Polycyclic Aromatic Hydrocarbon Studies at Alameda Point

In 2002 and 2003, Bechtel Environmental, Inc., conducted two PAH-related investigations that included the collection of soil samples within Transfer Parcel FED-1A. The 2002 investigation was designed to characterize PAH concentrations in fill soil at sites with no known releases. A PAH Field Activity Summary describes the activities and results of the 2002 PAH study (BEI, 2003a) and is included as Appendix D to this SI Report. In Transfer Parcel FED-1A, 316 soil samples were collected from 79 soil borings and analyzed for PAHs.

3.1.10 Solid Waste Management Unit Evaluation Report

Fourteen inactive solid waste management units (SWMUs) are located in Transfer Parcel FED-1A; no SWMUs are located in Transfer Parcels FED-2B or FED-2C. The SWMU Evaluation Report (SulTech, 2005; see Appendix M) was prepared to facilitate appropriate actions for all SWMUs in Transfer Parcel FED-1A under the appropriate Navy and regulatory programs. The recommendations made in the SWMU Evaluation Report were based on an analysis and evaluation of existing data and historical information. The report recommended that petroleum-related SWMUs (11) be addressed under the Petroleum Program and that non-petroleum-related SWMUs (3) be addressed under the CERCLA program.

The three SWMUs recommended for the CERCLA program were recommended for no further action (NFA) in the SWMU Evaluation Report (SulTech, 2005). The 11 SWMUs recommended to be addressed under the Petroleum Program were not evaluated in the SWMU Evaluation Report. Additional information about the SWMUs located in Transfer Parcel FED-1A is presented in Section 3.3.

3.1.11 Underground Storage Tank Removal at the Least Tern Nesting Site

An emergency response action was conducted by the Navy in March 2005 to address product and fluids identified in a concrete vault located at EBS Parcel 24 within the area designated as the least tern sanctuary (Shaw, 2005a). The response action included the removal of a concrete vault containing a 500-gallon UST, product, and fluids. Additionally, the following were removed during excavation activities:

- An area of impacted soils immediately adjacent to the vault measuring approximately 20 feet by 25 feet by 6 feet
- Visibly stained surface soils around and immediately east of the vault to a depth of approximately 6 inches bgs
- Approximately 800 gallons of groundwater

One groundwater sample was collected prior to complete removal of the vault and was considered to reflect residues from the vault. Therefore, this sample was not considered representative of post-removal groundwater conditions (Shaw, 2005a) and was not included in the evaluation conducted in this SI. Following removal, six confirmation soil samples and one groundwater sample were collected and analyzed for TPH, VOCs, PAHs, and lead. Concentrations of TPH reported in the confirmation samples were below the cleanup levels cited in the post-removal Construction Completion Report (Shaw, 2005a). None of the other confirmation sample results exceeded the emergency response action cleanup criteria. The excavation was backfilled with clean, imported material, and waste products were disposed off-site.

3.1.12 Petroleum Aboveground Storage Tanks Evaluation and Closure Request

An AST status report was prepared in 2006 to address former and existing ASTs used to store and dispense petroleum products at Alameda Point (SulTech, 2006). The report was presented in three parts, including 1) concurrence from the Regional Water Quality Control Board on the closure with NFA of 45 former ASTs, 2) closure in place for 16 existing ASTs,

and 3) recommendation for further investigation at two former ASTs, one of which is AST 488, located in EBS Parcel 23.

3.1.13 2007 Investigation

As presented in Section 3.1.4, radionuclide data for soil were collected at Transfer Parcel FED-1A during the RI/FS investigations at adjacent IR Sites 1 and 2 (Canonie, 1990). However, because the validity of the soil data was not known (there was no available documentation on the analytical methodology or data validation methods used), this information was not used to determine the actual radionuclide activity present in soil. Therefore, to assess radionuclide activity present in soil, the Navy conducted an additional soil investigation in 2007 (TtEC, 2007b).

Soil from nine previously sampled locations (M009-A, M015-A, M025A/E, M104-A/C, M106-A, M107-A, M109-A) was resampled during the 2007 investigation and analyzed for radium-226 by USEPA Method 901.1M in accordance with the final Sampling and Analysis Plan (TtEC, 2007b). Two soil samples were collected at each location at 0 to 0.5 foot bgs and 2 to 2.5 feet bgs; one equipment rinsate sample was also collected. All samples were collected on October 29, 2007, and submitted to Severn Trent Laboratories (now called TestAmerica), in St. Louis, Missouri. The mean radium-226 activity in the soil samples collected during the 2007 investigation was 0.37 picoCuries per gram (pCi/g), which is below the release criterion of 1.538 pCi/G (TtEC, 2009). Based on this limited screening, the parcels do not contain high levels of widespread radiological contamination in the immediate area surrounding the sampling locations. Analytical results of the 2007 investigation are presented in Appendix A, Table A1-2c.

3.1.14 2008 Supplemental Aerial Photograph Review

A review of aerial photographs dated between 1930 and 1994 was conducted during preparation of this SI Report. The findings of this aerial photograph review were generally consistent with the findings documented in the 1994 EBS investigations. Aircraft parking was consistently observed in photographs dated between 1947 and 1994 at locations in EBS Parcel 23 in Transfer Parcel FED-1A. In a photograph dated 1947, an aircraft parking apron was first observed in an area extending through the northeastern and central eastern portion of EBS Parcel 23 (including former ASTs 407A/B, 488, and 499). Aerial photographs document that this area was a central locus that was consistently and heavily used for aircraft parking until 1985 and was still used for aircraft parking (in slowly decreasing amounts) until after 1994. Additional satellite parking areas were also visible at various locations in EBS Parcel 23 (mostly along the edges of runways) over the years as follows.

- In an aerial photograph from 1963, additional aircraft parking had spread slightly to the south central portion of the EBS parcel.
- By 1966 and 1968, aerial photographs showed some aircraft parking near the northwestern corner of EBS Parcel 23.
- By 1969, an aerial photograph showed some additional aircraft parking areas near the northeastern corner and in the south central portions of EBS Parcel 23.
- Aerial photographs from 1975 and 1985 indicated that aircraft parking was also present in the southeastern portion of the parcel and was more prevalent along the northern

border than shown in previous photos. The photo from 1975 was also the first photo in which aircraft parking in the area near the former ASTs showed signs of decrease (fewer parked aircraft).

- Aerial photographs from 1990 and 1993 showed only minor aircraft parking in the northeastern, south central, eastern, and southeastern portions of the EBS parcel.
- By 1994, an aerial photo showed that only a few aircraft remained parked in the northeastern and south central portions of the EBS parcel.

Consistent with the findings of the EBS, significant staining was observed during the aerial photograph review for this SI Report in the area extending through the northeastern and central eastern portions of EBS Parcel 23 near the former ASTs. Stains in this area were clearly visible on aerial photographs from 1947 through 1994; the most pronounced stains were visible on photographs taken between 1947 and 1969, when the area was being heavily used for aircraft parking. Elongated black marks were visible near the ends and middle of runway areas in aerial photographs from this time period as well; however, these features were assumed to be associated with the skid marks from braking aircraft landings rather than potential spill areas.

No evidence of aircraft parking or staining was visible at Transfer Parcel FED-2B or FED-2C on the aerial photographs reviewed.

3.2 Historical Uses and Previous Sampling Results by EBS Parcel

The following subsections summarize the historical uses of each EBS parcel in Transfer Parcels FED-1A, FED-2B, and FED-2C and the results of previous sampling at these EBS parcels. SWMUs within the transfer parcels, including ASTs and USTs, are discussed more completely in Section 3.3. The information presented is taken largely from the PEPs and 1994 EBS reports (ERM-West, 1994a, b) (Appendices B and C, respectively), the 2001 EBS report (IT, 2001), and the SWMU Evaluation Report (SulTech, 2005; see Appendix M).

In the following subsections, the term "not reported" means that no concentrations of the analyte were reported above the detection limits by the analytical laboratory. The screening criteria discussed in these subsections are as follows.

- For VOCs, SVOCs (excluding PAHs in soil), pesticides, PCBs, and metals in soil and groundwater, analytical results were compared to 2004 USEPA Region 9 preliminary remediation goals (PRGs) for residential soil (USEPA, 2004). California-modified (Cal-modified) PRGs were also used where available (USEPA, 2004). Where concentrations exceeded residential soil PRGs, concentrations were also compared to industrial soil PRGs. PRGs are risk-based concentrations that are considered by the USEPA to be protective for humans (including sensitive groups) over a lifetime. Additionally, groundwater samples were compared to maximum contaminant levels (MCLs) or California MCLs, whichever were lower (DHS, 2006; USEPA, 2006a). It should be noted, however, that MCLs are an overly conservative comparison criterion because groundwater below Transfer Parcels FED-1A, FED-2B, and FED-2C is not considered a drinking water source (Water Board, 2003).

- For lead in groundwater, analytical results were compared to the federal and California action level for lead (DHS, 2006; USEPA, 2006a).
- For surface water, analytical results were compared to California Toxics Rule (CTR) values (USEPA, 2006b), including the criteria continuous concentration (CCC) and the criteria maximum concentration (CMC).
- For TPH, analytical results were compared to environmental screening levels (ESLs) (Water Board, 2007). TPH in soil was compared to ESLs for shallow soil (less than 3 meters [about 10 feet] bgs), and TPH in groundwater was compared to ESLs for locations where groundwater is not a potential drinking water source (Water Board, 2003). Where concentrations exceeded residential soil ESLs, concentrations were also compared to industrial soil ESLs.
- For PAHs in soil, benzo(a)pyrene (B[a]P) equivalent concentrations were calculated and compared to the Alameda Point–specific screening criterion for residential use of 620 micrograms per kilogram (µg/kg) (see Section 4.3) (DON, 2001c).
- For metals, concentrations in soil and groundwater were also compared to background concentrations developed specifically for Alameda Point (TtEMI, 2004) (Tables 3-2 through 3-4 and Figure 3-3). For soil located in the western and central portions of Alameda Point, the appropriate background data sets (referred to as the yellow and pink areas) were used. Metals in soil and groundwater were considered to exceed the screening criteria if the concentration was above the USEPA Regional Screening Level (RSL) and the background concentration representing the 95th percentile distribution of the background data sets.

Tables presenting regulatory screening criteria used in this SI Report are provided for reference in Appendices A and I; background metals concentrations developed for the relevant portion of Alameda Point are provided in Tables 3-2 through 3-4.

Radionuclide analyses were also conducted on soil samples at EBS Parcels 5 and 23 collected at Transfer Parcel FED-1A during the 2007 investigation, as discussed in Section 3.1.13. The radionuclide data collected at FED-1A were below the release criterion. Based on this limited screening, the parcels do not contain high levels of widespread radiological contamination in the immediate area surrounding the sampling locations. Because radionuclide data collected at Transfer Parcel FED-1A were collected for screening level purposes, these data were not included in the risk screening evaluation completed as part of this SI Report. However, the radionuclide data for soil collected during the 2007 investigation are presented in Appendix A for completeness.

3.2.1 Transfer Parcel FED-1A

Transfer Parcel FED-1A includes EBS Parcels 5, 23, and 24. Summaries of the historical uses and sampling results for EBS parcels located in Transfer Parcel FED-1A are presented below.

3.2.1.1 EBS Parcel 5

During the 1994 EBS, EBS Parcel 5 comprised the northwestern portion of Alameda Point and included areas now designated as EBS Parcels 5, 5A, 5B, 5C, 5D, and 5E. Currently, only

EBS Parcel 5 is located within the Transfer Parcel FED-1A boundary. EBS Parcels 5A, 5B, 5C, and 5D are located outside the transfer parcel boundary. Where possible, only information related to the parcel currently designated as EBS Parcel 5 is discussed below.

EBS Parcel 5 was historically used as a taxiway and runway; grass-covered open space occupied the remainder of the parcel. Structure 467, serving as aircraft-arresting gear, was formerly located along the runway and was associated with AST 467A, located outside the transfer parcel boundary, and 467B, located within the transfer parcel.

During the 1994 EBS open space survey, staining was observed beneath AST 467B. Additionally, small stains, generally less than one square foot in size, were observed sporadically along paved areas of the runway in EBS Parcel 5. A dark stain, less than five square feet in size, was observed beneath a cable associated with the arresting gear. One area of asphalt deterioration attributed to jet engine blasts was observed on the western end of the runway. However, during the aerial photograph review conducted during preparation of this SI Report, no significant staining was observed at this EBS parcel.

To address staining observed near AST 467B, one surface soil sample was collected during the EBS survey at the location of former AST 467B and analyzed for TPH. TPH was not reported at concentrations above screening criteria.

As part of the EBS storm sewer investigation, one manhole sediment sample and one duplicate sample were collected from a manhole on the storm sewer line leading to Outfall HH along San Francisco Bay and analyzed for TPH, VOCs, SVOCs, pesticides, PCBs, and metals. Manhole sediment data collected during the EBS are not considered to be representative of site activities or indicative of current site conditions. Therefore, manhole sediment data, although included in Appendix A for completeness, were not considered further in this SI Report.

During Phases 5 and 6 of the RI/FS performed at IR Sites 1 and 2, 15 surface soil samples were collected in a grid pattern between the two IR sites and analyzed for SVOCs, pesticides/PCBs, and metals; four samples were additionally analyzed for total recoverable petroleum hydrocarbons. Aroclor 1260 was reported at a concentration of 370 µg/kg at location A-1, below the industrial screening criterion of 740 µg/kg. B(a)P equivalent concentrations in each of the 15 soil samples exceeded the Alameda Point–specific screening criterion for residential soil. Calculated concentrations reported in these samples ranged from 760 to 3,400 µg/kg. Remaining analytes in soil were not reported above screening criteria. Radionuclide analysis was also conducted on these soil samples; however, because there was no available documentation on the analytical methodology or data validation methods (if any) that were used, the data were not a valid representation of site conditions and therefore were not used to evaluate the EBS parcel. Soil was resampled for radionuclides during the 2007 investigation.

In Phases 5 and 6 of the RI/FS, three clustered monitoring wells (M025-A, -C, and -E) were installed in the FWBZ and SWBZ along the western edge of EBS Parcel 5. During the installation, five soil samples were collected from varying depths and analyzed for VOCs, TPH, SVOCs, pesticides, PCBs, and metals. Iron was reported in a sample collected at 80 feet bgs at location M025-A at a concentration of 26,500 milligrams per kilogram (mg/kg), exceeding screening criteria. Additionally, the B(a)P equivalent concentration of 920 µg/kg

calculated for the surface soil sample collected from location M025-C exceeded the Alameda Point–specific screening criterion. Remaining analytes in soil were not reported at concentrations above screening criteria. Radionuclide analysis was also conducted on these soil samples collected during monitoring well installation; however, because the validity of the soil data was not known (there was no available documentation on the analytical methodology or data validation methods used), this information was not used to evaluate the EBS parcel. Soil was resampled for radionuclides during the 2007 investigation.

As part of Phases 5 and 6 of the RI/FS and the basewide groundwater monitoring program, the clustered monitoring wells (M025-A, -C, and -E) were sampled regularly between 1991 and 2007. Monitoring well M025-E was last sampled in 1995 and has since been used for groundwater level measurement only. During groundwater sampling in 2007, only one VOC (vinyl chloride) was reported at a concentration above the MCL (0.5 micrograms per liter [µg/L]) at a concentration of 2.1 µg/L, in monitoring well M025-A. Remaining analytes in groundwater were not reported above screening criteria.

During the RI/FS follow-on investigation, six grab groundwater samples were collected from two locations and analyzed for VOCs and SVOCs; analytes were either reported below screening criteria or were not reported above laboratory detection limits. Additionally, two surface soil samples were collected and analyzed for TPH, SVOCs, pesticides/PCBs, and metals. Analytes were not reported above screening criteria.

As part of the RI for IR Site 2, 22 soil samples were collected from three locations at depths ranging from 10 to approximately 110 feet bgs; samples were analyzed for geotechnical parameters only.

Sixteen soil samples were collected from four locations during the sampling conducted during the 2002 PAH study (Appendix D). The B(a)P equivalent concentrations in all samples were below the Alameda Point–specific screening criterion for residential use of 620 µg/kg.

Two soil samples were collected from two depths at two locations at EBS Parcel 5 (M025-A and M025-E) and analyzed for radionuclides during the 2007 investigation. For completeness, the radionuclide soil data from the 2007 investigation are presented in Appendix A.

3.2.1.2 EBS Parcel 23

During the 1994 EBS, EBS Parcel 23 originally comprised a large area in the western portion of Alameda Point and included areas presently designated as EBS Parcels 23, 23A, 23B, 23C, 23D, 23E, 23F, 23G, and 23H. Currently, only EBS Parcel 23 is included within the Transfer Parcel FED-1A boundary. EBS Parcel 23E is coincident with Transfer Parcel FED-2C and is discussed in Section 3.4. EBS Parcels 23A, 23B, 23C, 23D, 23F, 23G, 23H, and a portion of EBS Parcel 23 are located outside the boundaries of the transfer parcels included in this SI Report. Where possible, only information related to the portion of the current EBS Parcel 23 that is located within Transfer Parcel FED-1A is discussed in this report.

Historical Uses

EBS Parcel 23 was historically used as a runway (Runway 31), taxiways, and parking aprons. Approximately 10 acres of EBS Parcel 23 are within the California least tern

sanctuary, along with all of EBS Parcel 24. Additional information about the sanctuary is presented in Section 3.2.1.3 and in Section 6.

EBS Parcel 23 also contained numerous small buildings or structures used as magazines (container express [CONEX] boxes of approximately 50 square feet each); storage lockers for munitions, chemicals, and miscellaneous items; an aircraft washdown site; and aircraft landing support service facilities such as field monitoring stations and meteorological facilities. Fire-fighting training activities were also conducted at the parcel. Building 492 was incorrectly identified during the 1994 EBS as located within EBS Parcel 23; however, this building is located outside the Transfer Parcel FED-1A boundary in EBS Parcel 12.

During the 1994 EBS building survey, no staining was observed on the floors of buildings or structures located within EBS Parcel 23. Additionally, documents reviewed did not indicate that spills had occurred at the buildings. Classified munitions storage was reported at several buildings at the EBS parcel, including Buildings 50, 51, 56, 57, 58, and 270, located along the western boundary of the parcel. Liquid oxygen and nitrogen storage was reported at former Building 272 and Building 407. There were no stains noted or documented spills reported within these buildings during the 1994 EBS inspection. The remaining buildings and structures at EBS Parcel 23 were not reported to have been used for chemical storage. Additionally, no staining or documented leaks were reported.

Most of EBS Parcel 23 is paved open space; grass-covered open space also occupies a small portion of the parcel. During the 1994 EBS, the open space was divided into four general areas based on location and historical use, as described below.

Open space in the eastern central portion of EBS Parcel 23 (identified in the 1994 EBS as Open Space II) was used as a parking apron for helicopters and airplanes and included refueling and maintenance activities. Several ASTs (ASTs 407A and B, 488, and 499) and a compass pad were located within this portion of the open space. An oil/water separator may have been present in the southern portion of this open space, although the presence of this oil-water separator could not be verified during the open space survey or during review of historical documents. Aircraft degreasing may also have occurred at these parking aprons

During the 1994 open space survey conducted in the eastern central portion of Open Space II, light staining was observed beneath the ASTs formerly located in the parking aprons. Although no spills were documented to have occurred within this area, dark stains up to approximately 900 square feet in size were observed during a review of aerial photographs conducted as part of the EBS. These stains were attributed to fuels or lubricated fluids and were reported to have likely resulted from refueling and parking activities. Results of the aerial photograph review conducted during preparation of this SI Report concur with previous findings of staining in EBS Parcel 23. Specifically, photographs reviewed between 1949 and 1994 show that a consistent series of stains were visible in the eastern central portion of the EBS parcel, which was used as a parking apron for aircraft during this time.

The open space located in the northern and central portions of the EBS parcel (identified in the 1994 EBS as Open Space III) is occupied by concrete taxiways and was historically used for aircraft washdown and fire-fighting training activities. Aircraft washdown was conducted on a sloped concrete pad in the southeastern portion of the parcel; washdown

rinsate may have drained to the storm sewer system. There was no reported oil/water separator associated with this washdown area. Two ASTs, including AST 485B, associated with an aircraft arresting device for Runway 25, and AST 496, providing fuel for a generator, were also present. A concrete compass pad was also located within this open space in the southeastern portion of EBS Parcel 23. Approximately 60 gallons of flammable fuels used for fire-fighting training were documented to have been stored in CONEX boxes near Structure 480.

During the 1994 EBS document review for Open Space III, dark areas along the central portion of the runway were identified and attributed to skid marks from aircraft tires or minor undocumented releases from aircraft. No staining was observed in the washdown area during the open space survey or the aerial photograph review. Fire-fighting activities in this open space reportedly resulted in residual fire-fighting foam in various areas of the open space; the composition of the fire-fighting foam was reported as unknown in the EBS.

Runway 31 (identified in the 1994 EBS as a portion of Open Space IV) is present in the western portion of the parcel and included three aircraft-arresting devices (Structures 483, 495, and 599) and pairs of associated diesel fuel ASTs identified as ASTs 483A/B, 495A/B, and 599A/B. During the 1994 EBS open space survey conducted near Runway 31 (Open Space IV), staining was observed beneath ASTs 483A/B, 495A/B, and 599A/B associated with aircraft-arresting gear structures along the runway. The stains were reported to be either diesel or hydraulic fuel and to have involved a relatively minor quantity of released material. Additionally, a release of approximately 40 gallons of PCB-containing hydraulic fluid to a concrete vault was also documented to have occurred on the eastern side of Runway 31. The spill was reportedly absorbed and containerized and the contaminated concrete removed for disposal (IT, 2001).

The southwestern portion of EBS Parcel 23 (identified as Open Space V in the 1994 EBS) included taxiways and was the location of munitions storage and CONEX boxes.

Sampling Activities

To assess impacts from aircraft parking, fueling, and maintenance activities within the parking aprons located in the northeastern portion of the EBS parcel (Open Space II), a parcel-specific target area was identified during Phase 1 of the EBS. During Phase 2A, five surface soil samples, five subsurface soil samples, and two confirmation soil samples were collected from the most heavily stained areas within the parking apron area. Soil samples were analyzed for TPH constituents and metals; subsurface soil samples were additionally analyzed for VOCs. TPH constituents and metals were reported below screening criteria and VOCs were not reported above laboratory detection limits.

To address staining observed beneath ASTs associated with aircraft-arresting devices (Open Space IV), a second parcel-specific target area was identified during Phase 1 of the EBS that extended beyond the Transfer Parcel FED-1A boundary. The parcel-specific target area included the collection of samples from three of the six aircraft-arresting gear structures located in the runway portion of Alameda Point. One of the three selected structures to be sampled (Structure 599) was located in Transfer Parcel FED-1A. As a result, two surface soil samples were collected near the ASTs associated with Structure 599 and analyzed for TPH and PCBs. TPH as motor oil was reported at a concentration of 1,000 mg/kg, exceeding the residential ESL of 410 mg/kg but below the industrial ESL of 2,500 mg/kg in one of the

samples collected (023-0002M). Remaining analytes were either reported below screening criteria or were not reported above laboratory detection limits. Based on the elevated concentrations of TPH as motor oil reported in sample 023-0002M, one subsurface soil sample and one groundwater sample were collected during a second phase of sampling. The samples were collocated with the location of the previous sample (023-0002M); the soil and groundwater sample were analyzed for VOCs, TPH, and SVOCs. Analysis of TPH as diesel and motor oil in soil sample 023-0044 was rejected by the laboratory; therefore, TPH as diesel and motor oil data are not available for this sample. Remaining analytes in soil and groundwater were reported at concentrations below laboratory detection limits, with the exception of acetone, a common laboratory contaminant, which was reported in soil at a concentration below the screening criterion.

To assess potential impacts from former munitions storage in the southwestern portion of the EBS parcel (Open Space V) and aircraft washdown activities in the southeastern portion of the EBS parcel (Open Space III), an additional parcel-specific target area was identified during Phase 2A of the EBS and sampled during Phase 2B. Sampling activities included the collection of six groundwater samples in the former munitions storage area and two subsurface soil samples, one duplicate soil sample, and two groundwater samples in the aircraft washdown area. Groundwater samples in the former munitions storage area were analyzed for explosives; one explosive, octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine, was reported at a concentration of 4.8 µg/L, below the screening criterion of 1,800 µg/L. Soil and groundwater samples collected in the aircraft washdown area were analyzed for VOCs, TPH, and SVOCs; constituents in soil and groundwater were either reported below screening criteria or were not reported above laboratory detection limits.

Additionally, as part of the EBS sampling conducted at adjacent EBS Parcel 25 (Section 3.2.2.1), a surface soil sample was collected in EBS Parcel 23 to address a stain observed in a roadway. EBS Parcel 25 is located in Transfer Parcel FED-2B, outside the Transfer Parcel FED-1A boundary. The surface soil sample was analyzed for TPH, SVOCs, and metals; reported concentrations were below screening criteria.

As part of the storm sewer corridor sampling conducted during the EBS, one subsurface soil sample and one confirmation soil sample were collected from the storm sewer corridor at EBS Parcel 23. The sample was analyzed for VOCs, TPH, SVOCs, PCBs, tributyltin, metals, and oil and grease. Oil and grease, which has no screening criterion, was reported at a concentration of 160 mg/kg and remaining analytes were either reported below screening criteria or not reported above laboratory detection limits. Additionally, five manhole sediment samples and one duplicate sample were collected on the storm sewer lines leading to outfalls along San Francisco Bay and Seaplane Lagoon; samples were analyzed for TPH, VOCs, SVOCs, pesticides, PCBs, and metals. Manhole sediment samples collected in 1994 have been subsequently removed as part of the storm sewer system cleaning that was performed by the Navy between 1995 and 1996. Therefore, manhole sediment data, although included in Appendix A for completeness, will not be considered further in this SI Report.

As part of the confirmation sampling conducted during the removal of the CAA-A fuel line, located in the northeastern corner of EBS Parcel 23, one confirmation soil sample was collected within EBS Parcel 23 and analyzed for TPH; reported concentrations were below screening criteria.

As part of the RI/FS performed at IR Sites 1 and 2, 24 soil samples were collected from 2 locations (WB-3 and WB-4) at various depths ranging from the surface to approximately 50 feet bgs. The samples were analyzed for one or more of the following: TPH, VOCs, SVOCs, pesticides, PCBs, and metals. Arsenic was reported at a concentration (26 mg/kg) above the screening criterion (0.062 mg/kg) and background (25 mg/kg) in a sample collected from 46 feet bgs at location WB-3. Additionally, calculated B(a)P equivalent concentrations exceeded the Alameda Point–specific screening criterion (620 µg/kg) for PAHs in residential soil in one surface soil sample collected at location WB-3 (6,700 µg/kg) and in four soil samples ranging in depth from the surface to 51 feet bgs at location WB-4; B(a)P equivalent concentrations above screening criterion in these samples ranged between 810 and 990 µg/kg. Remaining analytes were not reported above screening criteria. Radionuclide analysis was also conducted on these soil samples; however, because the validity of the soil data was not known (there was no available documentation on the analytical methodology or data validation methods used), this information was not used to evaluate this EBS parcel. Soil was resampled for radionuclides during the 2007 investigation.

As part of Phases 5 and 6 of the RI/FS, 20 monitoring wells were installed in 12 locations at EBS Parcel 23; the clustered monitoring wells were installed in both the FWBZ and the SWBZ. During the installation, soil samples were collected from varying depths and analyzed for TPH, VOCs, SVOCs, pesticides, PCBs, and metals. The surface soil sample collected from location M108-B contained a B(a)P equivalent concentration in excess of the Alameda Point–specific screening criterion for residential use of 620 µg/kg. No other samples contained concentrations above screening criteria. Radionuclide analysis was also conducted on these soil samples collected during monitoring well installation; however, because the validity of the soil data was not known (there was no available documentation on the analytical methodology or data validation methods used), this information was not used to evaluate the EBS parcel.

As part of the RI/FS report, monitoring wells at EBS Parcel 23 were sampled regularly beginning in 1991 and analyzed for VOCs, SVOCs, metals, and radionuclides; selected locations were monitored through 1999. Ten of the monitoring wells (M108-A/B, M010-B, M011-A, M012-A/B, M013-A/C, and M014-A/B) were included in the basewide groundwater monitoring program, which conducted additional sampling between 2002 and 2007. No groundwater samples contained chemicals at concentrations above screening criteria. However, total radium was reported at or above the MCL of 5 picocuries per liter (pCi/L) in groundwater samples collected at DRA-01 (5 pCi/L) and at M108-B (10.95 pCi/L).

During the RI/FS follow-on investigation, 15 grab groundwater samples were collected from five locations at EBS Parcel 23 and analyzed for VOCs and SVOCs; analytes were not reported above screening criteria. Additionally, one surface soil sample was collected and analyzed for TPH; TPH was not reported above the laboratory detection limit.

As part of the ecological evaluation conducted in the wetlands located in EBS Parcel 25 (in Transfer Parcel FED-2B), two plant and animal tissue samples were collected from one location within EBS Parcel 23; samples were analyzed for SVOCs, PCBs, organotins, and metals. Analytical results from this sampling effort are provided in Section 6.

During the 2002 PAH study, 300 soil samples were collected from 75 locations in EBS Parcel 23 (Appendix D), including 5 locations within IR Site 33. The B(a)P equivalent concentrations in 9 samples collected from 6 locations exceeded the Alameda Point–specific screening criterion for residential use of 620 µg/kg; 8 of the samples were collected from the 5 locations located within the approximate boundary of IR Site 33. The sixth location (32-FED-1A-74) located in the northeastern corner of EBS Parcel 23. Data from two samples collected in one location (32FED-1A-18) were rejected during the validation process. B(a)P equivalent concentrations in the remaining 289 samples were below the screening criterion.

Two soil samples were collected from two depths at seven locations (M009-A, M015-A, M104-A/C, M106-A, M107-A, and M109-A) and analyzed for radionuclides during the 2007 investigation. Analytical results from the 2007 investigation indicated that radionuclide activity levels are consistent with the established background levels at Alameda Point.

3.2.1.3 EBS Parcel 24

EBS Parcel 24 consists entirely of open space. This EBS parcel lies within the area designated as the California least tern sanctuary. EBS Parcel 24 is located in the general runway area and is covered by gravel over weathered pavement. A vault containing a 500-gallon fuel UST was formerly present within the boundary of EBS Parcel 24. The UST and vault were removed in 2005 and surrounding soil was excavated. One groundwater and six soil confirmation samples were collected and analyzed for VOCs, SVOCs, TPH, and metals. TPH as diesel was reported above the screening criterion (100 mg/kg) in 2 soil samples collected from side walls subsequent to the excavation; TPH as diesel was reported at concentrations of 200 and 2,000 mg/kg. Additionally, lead was reported in the groundwater sample collected from the bottom of the excavation at a concentration (68.7 µg/L) exceeding the screening criterion (15 µg/L). Remaining analytes were reported below detection limits or screening criteria.

There was no evidence of chemical use or storage at EBS Parcel 24 except at the former UST-containing vault. During the aerial photograph review conducted for this SI Report, no significant staining was observed at this EBS parcel.

3.2.2 Transfer Parcel FED-2B

Transfer Parcel FED-2B includes EBS Parcels 25, 26, and 27. Transfer Parcel FED-2B was partially located within the tentative boundaries of IR Site 33; however, based on the findings of this SI evaluation, it is recommended that the boundaries of IR Site 33 be revised to exclude Transfer Parcel FED-2B. Summaries of the historical uses and sampling activities for the EBS parcels located in Transfer Parcel FED-2B are presented below.

3.2.2.1 EBS Parcel 25

EBS Parcel 25 includes the southern portion of the current IR Site 33 and was formerly used as 'industrial/wetlands/least tern habitat', according to the EBS (IT, 2001). Three concrete pads were formerly located at this EBS parcel, but it now consists entirely of open space occupied by ponds and wetlands. A portion of asphalt road was identified in the 1994 EBS as entering EBS Parcel 25 in the northwestern corner; however, the road is located entirely in EBS Parcel 23, to the north and west.

During the 1994 EBS open space survey, the three concrete pads were observed. Two of the concrete pads were noted to be empty and one supported a wind meter. Additionally, miscellaneous debris was observed scattered at the parcel. A stain was noted in the 1994 EBS report to be present on the road along the northern boundary of the EBS parcel. This stain was identified as a parcel-specific target area; however, the road is actually located in adjacent EBS Parcel 23 and therefore, the sampling conducted to address the stain was discussed in Section 3.2.1.2. During the aerial photograph review conducted during preparation of this SI Report, no significant staining was observed at this EBS parcel.

The ecological assessment conducted in the Runway Wetlands area, including wetlands located in EBS Parcel 25, included sampling of sediment, surface water, and animal tissues. Thirty-six sediment samples and 10 animal tissue samples were collected from 4 locations; 76 surface water samples were collected from 2 locations. Samples collected were analyzed for pesticides, PCBs, metals, tributyltin, and oil and grease (selected samples only). Metals, including nickel, tributyltin, and zinc, were reported above CCCs in samples from two locations (R1 and R2); nickel and zinc were also reported above CMCs.

Arsenic was reported in a duplicate sediment sample (R3 duplicate) collected during the ecological assessment at a concentration of 13 mg/kg, exceeding the residential PRG (0.062 mg/kg) and the 95th percentile concentration for the pink background area (9.14 mg/kg). Arsenic (at a concentration of 8.4 mg/kg) was below the 95th percentile concentration in the primary sample collected from this location. Analytical results from the sediment samples are provided in Appendix A.

As part of the follow-on ecological work plan (PRC, 1996c), samples were collected from six locations in EBS Parcel 25. These samples included three surface sediment samples, six invertebrate and fish tissue samples, three pore water samples, and two surface water samples. The sediment, water, and tissue samples were analyzed for SVOCs, PCBs, organotins, and metals. In addition, sediment samples and water samples were analyzed for TPH. Metals, including copper and nickel, were reported above CCCs in surface water samples collected from two locations (RW002 and RW006); copper also exceeded the CMC in both locations. Analytical results from sediment samples, tissue and pore water samples, and surface water samples are provided in Appendix A.

In addition, as part of the DSR for Offshore Sediments and Wetland Areas at Alameda Point, 17 additional plant and animal tissue samples were collected from six locations and analyzed for SVOCs, PCBs, organotins, and metals. Analytical results from these tissue samples are provided in Appendix A.

3.2.2.2 EBS Parcel 26

During the 1994 EBS, EBS Parcel 26 included the areas presently designated as EBS Parcels 26 and 26A. Currently, only EBS Parcel 26 is located within the Transfer Parcel FED-2B boundary; EBS Parcel 26A is located to the east of the transfer parcel boundary. Where possible, only information related to the parcel currently designated as EBS Parcel 23 is discussed in this report.

EBS Parcel 26 is an unpaved area occupied almost entirely by salt marsh wetlands. During the 1994 EBS, there was no staining or evidence of chemical use or storage in this area. Consequently, no parcel-specific target areas were identified in the EBS. During the aerial

photograph review conducted during preparation of this SI Report, no significant staining was observed at this EBS parcel.

EBS Parcel 26 is included in CAA-12. CAA-12 was established as a result of TPH concentrations detected in soil samples near the storm drain line in the portion of the CAA located northeast of Transfer Parcel FED-2B. Because CAA-12 has already been addressed as part of the Petroleum Program, it was not evaluated in this SI.

3.2.2.3 EBS Parcel 27

During the 1994 EBS, EBS Parcel 27 originally comprised the area northwest of Seaplane Lagoon and included the areas presently designated as EBS Parcels 27 and 27A. Currently, only EBS Parcel 27 is located within the Transfer Parcel FED-2B boundary and EBS Parcel 27A is located immediately northeast of the transfer parcel. Where possible, only information related to the parcel currently designated as EBS Parcel 27 is discussed in this report.

EBS Parcel 27 consists entirely of unpaved open space and is adjacent to the salt marsh wetlands located in EBS Parcels 25 and 26. During Phase 1 of the 1994 EBS, no documentation of chemical storage or use was found for this area. As a result, there were no parcel-specific target areas identified during the EBS to address historical activities in EBS Parcel 27. During the aerial photograph review conducted during preparation of this SI Report, no significant staining was observed at this EBS parcel.

As part of the RCRA Site Closure investigation of the IWTP located at EBS Parcel 27A (IWTP 25), one boring was advanced in EBS Parcel 27 in 1999 (TtEMI, 2003b) and one boring was advanced in 2004 (Shaw, 2005b). One soil sample was collected from both borings and one groundwater sample was collected from the 1999 boring; samples were analyzed for some or all of the following analytes: VOCs, SVOCs, metals, and hexavalent chromium. No other analytes in soil or groundwater were reported above screening criteria.

3.2.3 Transfer Parcel FED-2C

Transfer Parcel FED-2C is occupied entirely by EBS Parcel 23E, a paved area historically used as a taxiway (Taxiway 4) surrounded by open space. EBS Parcel 23E serves as a buffer zone, separating adjacent Transfer Parcel FED-1A from IR Site 26. CAA-A passes through the northernmost portion of the EBS parcel.

During the 1994 EBS, no staining or evidence of chemical use or storage was reported at EBS Parcel 23E. However, as part of EBS Phase 2B sampling at adjacent EBS Parcels 30 and 190, soil and groundwater samples were collected within the boundary of EBS Parcel 23E to assess impacts from aircraft refueling and maintenance in the open space of the adjacent parcels. Two subsurface soil samples, one duplicate soil sample, and two discrete groundwater samples were collected and analyzed for VOCs and TPH. Constituents were not reported at concentrations above screening criteria.

As part of the fuel line corrective action at CAA-A, one confirmation soil sample was collected following pipeline removal and over excavation activities in the northwestern corner of EBS Parcel 23E. The confirmation soil sample was analyzed for TPH; TPH was not reported above screening criteria.

As part of the RI conducted at IR Site 26 (BEI, 2003b), located east of EBS Parcel 23E, one monitoring well was installed at EBS Parcel 23E and sampled during three subsequent sampling events; groundwater samples were analyzed for VOCs, metals, and hexavalent chromium. Additionally, three grab groundwater samples were collected at other locations within Transfer Parcel FED-2C and analyzed for VOCs and metals. During the three rounds of monitoring well sampling and in the grab groundwater samples, no analytes were reported above screening criteria.

During the aerial photograph review conducted for this SI Report, no significant staining was observed at this EBS parcel.

3.3 Historical Uses and Previous Sampling Results for SWMU Sites

This subsection summarizes the historical uses and regulatory status of each SWMU site (including ASTs) located within Transfer Parcel FED-1A (by EBS parcel). The results of previous investigations are also included, where available. There are no SWMUs located in either Transfer Parcel FED-2B or FED-2C. In addition, there are no USTs located in any of the three transfer parcels. Table 3-5 contains detailed information for each SWMU site in Transfer Parcel FED-1A.

3.3.1 EBS Parcel 5

EBS Parcel 5 included one 100-gallon AST (AST 467B), which contained diesel fuel. The SWMU Evaluation Report recommended that this SWMU be addressed under the Petroleum Program (SulTech, 2005).

3.3.2 EBS Parcel 23

EBS Parcel 23 included 12 ASTs; 9 of these ASTs contained diesel fuel (ASTs 483A, 483B, 485B, 495A, 495B, 496, 499, 599A and 599B), 2 contained liquid oxygen (ASTs 407A and 407B), and 1 contained aviation gasoline (AST 488). The SWMU Evaluation Report recommended that ASTs 407A and 407B be addressed under the CERCLA program and recommended that the remaining 10 ASTs be addressed under the Petroleum Program (SulTech, 2005). Only one of the ASTs (AST 488) was recommended for further investigation in the SWMU Evaluation Report; this recommendation was based on the absence of nearby soil and groundwater data (SulTech, 2004). This SWMU is being addressed under the Petroleum Program (SulTech, 2006). One additional SWMU (WD 259) was also located in EBS Parcel 23. This SWMU was used as a wash pad for aircraft and was investigated during the EBS along with a nearby munitions storage area. Samples collected at WD 259 during the EBS included two subsurface soil samples and eight groundwater samples. SVOCs, VOCs, and TPH as diesel were reported at concentrations below screening criteria in subsurface soil samples and explosives were reported below screening criteria in one groundwater sample. Because historical washing activities at WD 259 would have channeled rinsewater into the storm sewer system rather than into surrounding soil and groundwater, the EBS recommended no further investigation of this area (IT, 2001; TtEMI, 2003b).

4.0 2010 Investigation Approach and Scope

This section describes the evaluations which addressed the areas recommended for further evaluation as described in the work plan and sampling and analysis plan (CH2M HILL, 2010).

The Draft Transfer Parcels FED-1A, 2B, and 2C SI report (BEI, 2008) identified three areas of concern (AOCs) within Transfer Parcel FED-1A for further evaluation, and also recommended further evaluation at two sites within Transfer Parcel FED-1A that are currently incorporated in existing programs (soils which are part of IR Site 33; and SWMU former AST 488, which is part of the Petroleum Program). The USEPA comments to the Draft Transfer Parcels FED-1A, 2B, and 2C SI report (BEI, 2008) also recommended further evaluation of all 13 former ASTs in Transfer Parcel FED-1A, as well as evaluations of Building 100, of Washdown 259, of munitions in soil near the former munitions storage area in Transfer Parcel FED-1A, and of firefighting training areas in Transfer Parcel FED-1A (USEPA, 2008). To further evaluate the AOCs and the areas identified by USEPA, the Navy collected additional data in Spring 2010 according to the Final Expanded Site Inspection Work Plan for Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California (CH2M HILL, 2010). Data from the 2010 investigation are included in this report.

Section 4.1 describes the six evaluations conducted that did not require any further data collection, but involved an additional analysis of previous investigations. Section 4.2 describes the data quality objectives used when collecting data for the 2010 investigation. Section 4.3 describes the eight evaluations which required additional data to be collected as part of the 2010 investigation. All sampled locations can be seen on Figure 4-1.

4.1 Additional Analysis of Previous Investigations

The six evaluations described in this section are based on field observations and data previously collected, and did not require further sampling during the 2010 investigation.

4.1.1 AOC 2 Vinyl Chloride in Groundwater

Groundwater samples from monitoring well M025-A, located in AOC 2, have shown levels of vinyl chloride above the MCL of 0.5 microgram per liter (µg /L); since the winter of 2004 to spring 2009, concentrations have ranged from <0.5 µg /L to 3.3 µg /L. Concern has been raised whether vinyl chloride in groundwater poses unacceptable risk to human health. Existing groundwater data and a human health evaluation was performed and described below.

While chemical concentrations of vinyl chloride in groundwater have exceeded the MCL, groundwater is not used as drinking water at Alameda Point. As described in Section 2.4.3, groundwater underlying the western and central regions of Alameda Point is unlikely to be considered a potential source of drinking water (USEPA, 2000). Safe yield and maximum pumping rates are inadequate to support common uses of water by multiple domestic users.

No supply wells currently exist, and none are likely to be installed, as state and county limitations would prohibit installation on such a thin and vulnerable aquifer.

The vapor intrusion pathway was also evaluated in the event a commercial building is built over the area with VOCs in groundwater. The current planned future use in this area is a columbarium.

The concentrations of vinyl chloride detected are below the commercial/industrial groundwater screening levels for evaluation of potential vapor intrusion concerns (ESLs) (Water Board, 2005). For commercial/industrial land use in highly permeable vadose-zone soil, the groundwater ESL is 13 µg /L and the groundwater ESL for residential land use is 3.8 µg /L. Based on the planned future use the site, VOC analysis for groundwater in AOC 2 was not included in the 2010 field investigation. Upgradient monitoring wells M009-A, M103-A, and M103-B were added to the Alameda Point Basewide Groundwater Monitoring program and VOCs will continue to be monitored at M025-A, M025-C, M024-A, M024-E, M26-A, and 442-MW to ensure VOC levels are within acceptable ranges. Available results from upgradient monitoring wells M009-A, M103-A, and M103-B are currently being sampled under the Alameda Point Basewide Groundwater Monitoring Program (BGMP) and will be included in the pending BGMP monitoring report.

4.1.2 AOC 3 PAHs and Metals in Groundwater

Elevated levels of naphthalene and lead were detected in a groundwater sample collected from the bottom of the excavation during removal of an UST in 2005. The Navy evaluated these data to determine whether additional investigation should be included as part of the SI 2010 field investigation.

The elevated levels of naphthalene and lead resulted from sediment in the groundwater sample and are not considered representative of groundwater in the area. In order to get analytical results that are more representative of site conditions, additional monitoring over a 1 year period is preferable to a single sampling event. Therefore, monitoring well M108-A was added to the BGMP for Lead (USEPA 6010B/6020A/7470A) and PAH (USEPA 8370 SIM) analyses. Sampling will be performed on a quarterly basis for 1 year. Following four quarters of sampling (one year), if lead or PAHs are not detected above screening levels, no further sampling will be performed. If lead or PAHs are detected above screening levels, the results will be further assessed to determine a path forward, which may include sampling the SWBZ monitoring well (M108-B) or semiannual sampling of monitoring well M108A.

4.1.3 Transfer Parcel FED-1A – Radiological Issues

As discussed in Sections 3.2.1.2 and 3.2.1.3, radium has been detected at 5 and 10.95 pCi/L in groundwater samples collected from monitoring wells DRA-01 and M108-B, respectively. The Navy evaluated these data to determine whether additional investigation should be included as part of the SI 2010 field investigation and determined that these wells should also be included in the BGMP. Samples will be collected quarterly for 1 year. If total radium is not detected above the MCL of 5 pCi/L, no further sampling will be conducted. If total radium is detected above the MCL of 5 pCi/L, further evaluation, including evaluation of the background concentrations will be addressed at that time.

4.1.4 Sediments in Storm Sewers

The Navy evaluated the potential infiltration of contaminated groundwater into the storm drain system. Storm sewer pipelines are not located in areas of known groundwater contamination; therefore, this is not a potential migration pathway. In addition, the majority of the storm sewers were cleaned in 1997 and results of the inspection showed that the sewer lines are in sound condition (TtEMI, 2001b).

4.1.5 Transfer Parcel FED-2B – Waste Disposed of in Northern Portion of Runway Wetland

An ERA for OU-4 was prepared in 1996 as a revision to the basewide ERA and as part of the ongoing RI/FS study for NAS Alameda (PRC, 1996b). The report presented an updated interpretation of the data collected in 1993 due to changes in the regulatory guidance for design and implementation of ERAs. The follow-on ecological work plan noted that recent anecdotal information indicated that an "elevated area" within the northern portion of the Runway Wetland may have been used for disposal of construction wastes and debris. A human health and ecological screening assessment (Neptune, 2002) was completed in 2002 at the Runway Wetland in Transfer Parcel FED-2B. The screening evaluation was conducted to document site conditions and assess whether the site poses an unacceptable risk to human health or the environment. No data were collected as part of the screening evaluation; however, the report evaluated all previously existing data, including data originally collected for the IR Site 2 RI. The report stated that debris, consisting of concrete, asphalt, and sheet-type metal, was placed in an elevated area in the northeastern portion of this site. There is no evidence that hazardous materials or municipal solid wastes were placed in the area, and chemical constituents present in sediments at the Runway Wetland were generally consistent with ambient concentrations. It was therefore concluded that no site-related chemical releases had occurred. In addition, the report concluded that, even under the conservative set of assumptions used in the evaluations, no significant risks to human or ecological receptors exist at the Runway Wetland. Therefore, the disposal area within the Runway Wetlands is better characterized as a debris pile, which requires no further sampling under CERCLA.

4.1.6 Least Tern Area Site Walk

The Navy further evaluated the condition of the vaults and structures in the designated Least Tern nesting area during a site walk conducted between March 29, 2010 and April 7, 2010. Several vaults and structures were observed and appeared to be related to runway lighting and electrical operations and not underground storage tanks. Based on visual inspection, the vaults and structures appeared to be free of contamination and no further sampling or investigation is necessary. Photographs taken during the site walk are included in Appendix F.

4.2 Data Quality Objectives

Data quality objectives were developed in reference to Worksheet 10 of the Sampling Analysis Plan from the Final Work Plan (CH2M HILL, 2010). These objectives served as a guide in determining the extent of sampling required and are summarized in Table 4-1.

4.3 2010 Sampling Locations, Analyses and Rationale

The following is a discussion of the sampling locations, analyses and rationale for the eight evaluations which required additional data to be collected as part of the 2010 investigation. The soil, groundwater and concrete sampling discussed below was conducted from March 22, 2010 through May 5, 2010. The field methodology used in these investigations is discussed in Appendix E.

4.3.1 Aircraft Parking and Staining Evaluation

The Navy evaluated FED-1A and -2C to assess whether visual aircraft parking staining was indicative of CERCLA-related hazardous substances having been released into the soil and groundwater.

Historical aerial photographs were reviewed for aircraft parking and staining. If staining was present in three of more of the aerial photographs reviewed, that area was identified as an area of interest. Previously collected soil and groundwater data near the areas of interest was then analyzed. If no data had been collected near these areas of interest, or if data suggested a release of a CERCLA contaminant, then site reconnaissance was conducted in order to look for current visual evidence of aircraft parking and staining. Based on the historical data and site reconnaissance, soil sampling locations were chosen within areas of interest. These locations were chosen at a density of one sample location per acre and in some cases were biased towards observed surface cracking/seams. A groundwater sample was collected from at least one sample location per area of interest.

Thirty-two sample locations were sampled throughout FED Parcels -1A and -2C, as shown on Figure 4-1. Soil samples were collected from each borehole at specific depth intervals. Seven of the 39 samples were associated with the firefighter training area evaluation (AP1AFTA-DP16, AP1AFTA-DP19, AP1AFTA-DP22, AP1AFTA-DP24, AP1AFTA-DP28, AP1AFTA-DP31, and AP1AFTA-DP32) and soil and groundwater sample results from these locations were used to assess historical aircraft parking and staining. At sample location AP1AAPS- DP12, contamination was observed by field screening (visual observations, olfactory observations, and flame ionization/photoionization detector [FID/PID] results) and seven step-out locations were advanced.

Two discrete direct-push groundwater samples from the FWBZ, one at the groundwater table (2 to 7 feet bgs) and one deeper sample (10 to 15 feet bgs) were collected from each of the boreholes. Soil and groundwater samples were analyzed for TCL VOCs, USEPA Contract Laboratory Program Target Analyte List (TAL) metals, TCL PAHs and petroleum constituents (i.e., TPH-gasoline, TPH-diesel, TPH-motor oil). The analytical results are discussed in Section 5 and presented on Tables A2-1 through Table A2-14 in Appendix A.

Additional details about the 2010 Aircraft Parking and Staining Evaluation and the analytical results can be found in Appendix F.

4.3.2 AOC 1 Pesticide and Polychlorinated Biphenyl (PCB) Evaluation

The PCB Aroclor-1260 was detected above the residential screening criterion in a single surface soil sample (A-1) located near the western end of AOC 1 during the 1994 EBS. In addition, laboratory detection limits for up to six PCBs and one pesticide were above

screening criteria. Further sampling was done in AOC 1 in order to define the horizontal and vertical extent of Aroclor-1260 and to better characterize pesticide and PCB concentrations in the areas neglected by the high detection limits.

One borehole (AP1AA1-DP01) at previous sample location A-1, and four step-out boreholes (AP1AA1-DP02 through AP1AA1-DP05) from previous sample location A-1 were advanced, and soil samples were collected from each borehole at specific depth intervals, as shown on Figure 4-1. Four boreholes (AP1AA1-DP-06 through AP1AA1-DP09) were advanced at previous surface soil sample locations A-2, A-3, A-4, and A-6, and soil samples were collected from each borehole at specific depth intervals. Soil samples were analyzed for PCBs and pesticides. The analytical results are discussed in Section 5 and presented in Appendix A, Tables A2-2 and A2-3.

4.3.3 13 SWMU ASTs – VOCs, PAHs, PCBs, TPH, Metals in Soil

The Navy evaluated 11 of the 13 SWMU ASTs in order to assess whether the storage of diesel, aviation fuels and hydraulic oil in this area has resulted in a CERCLA-related hazardous substances release.

Two boreholes were advanced on either side of each former AST, for a total of 11 boreholes. A surface soil sample (0 to 0.5 feet bgs) and two subsurface samples (between 0.5 foot bgs and 8 feet bgs) were collected from each of the boreholes. The subsurface samples were collected at 4 feet bgs and 8 feet bgs. When groundwater was encountered at a depth shallower than 8 feet bgs, then the deepest soil sample was collected at the groundwater interface. Two discrete direct-push samples from the FWBZ (approximately 7 feet bgs, and 15 feet bgs) were collected from at least one borehole near each of the remaining former ASTs.

Former liquid oxygen ASTs 407A and 407B were analyzed for metals only to assess the potential for lead and/or other metals that may have been deposited during sandblasting and repainting. Based on historical use as ASTs used to store aviation or diesel fuel, soil and discrete groundwater samples collected near former ASTs 467B, 483A, 483B, 485B, 495B, 495A, 496, 499, 599A and 599B were analyzed for TPH-diesel and TPH-motor-oil. To obtain the required data needed for closure under the Alameda Point Petroleum Program for former ASTs 467B, 483A, 483B, 485B, 495A, 495B, 496, 499, 599A, and 599B, soil and discrete groundwater samples were also analyzed for TCL VOCs and TCL PAHs. In addition, soil samples collected near the six former ASTs associated with the aircraft-arresting devices (ASTs 467B, 483A, 483B, 485B, 495A and 495B) were also analyzed for PCBs. The analytical results are discussed in Section 5 and presented in Appendix A.

4.3.4 IR Site 33, PAHs in Soil

In 2002, the Navy conducted a PAH-related investigation that included the collection of soil samples within Transfer Parcel FED-1A. Five of the 75 boreholes were located within IR Site 33. All five boreholes for PAH soil sample collection within IR Site 33 have had samples with B(a)P equivalent concentrations that exceed the Alameda point-specific screening criterion for residential use. The five boreholes were between 400 and 1,000 feet apart from one another, so the sampling density was inadequate to delineate the aerial extent of PAHs in soils within IR Site 33. Therefore, the 2010 investigation was needed to evaluate the extent of PAHs detected above Alameda Point specific screening criterion for residential use. At

each sample location, four step-out boreholes were advanced and soil samples were collected at specific depth intervals within each borehole. Samples were analyzed for TCL PAHs. The analytical results are discussed in Section 5 and presented in Appendix A, Table A2-7.

4.3.5 Munitions in Soil in Former Munitions Storage Area

Soil samples were collected at the Former Munitions Storage Area in order to assess whether the former presence of munitions resulted in a CERCLA-related hazardous substances release. Ten boreholes were advanced near the front door of Buildings 50, 51, 56, 57, 58, and 270, near the previous discrete direct-push groundwater location (023-0039), and randomly placed near the former lockers, as shown in Figure 4-1. Soil samples were collected from each borehole at specific depth intervals. Soil samples were analyzed for explosives. The analytical results are discussed in Section 5 and presented in Appendix A, Table A2-6.

4.3.6 Firefighter Training Area Evaluation

The Navy performed an evaluation to assess whether historical firefighting training activities in Transfer Parcel FED-1A have resulted in a CERCLA-related hazardous substances release. Thirty-five boreholes were advanced in an approximately 500-foot grid pattern across the suspected firefighting training area (Open Space III) in Transfer Parcel FED-1A; soil samples were collected from each borehole at specific depth intervals.

There is little information pertaining to the materials and methods used for Fire Training Activities within Transfer Parcel FED-1A. However, IR Site 14, which is located directly to the north of Transfer Parcel FED-1A, has documentation describing Fire Training Activities that occurred within its boundaries. IR 14's proximity to the Fire Training Area within Transfer Parcel Fed-1A leads to a reasonable conclusion that materials and methods were consistent throughout both areas. As stated in the "Final Remedial Investigation Report" for IR Sites 14 and 15 (TtEMI, 2003c), that fire training activities performed in IR 14 involved the use of Ansulite® firefighting foam, carbon dioxide, potassium chloride, and purple K (a compound used to extinguish fires that contains specially fluidized and siliconized potassium bicarbonate dry chemical. Given this information, soil samples were analyzed for TCL VOCs, TAL metals, dioxins/furans, and petroleum (i.e., TPH-gasoline, TPH-diesel, and TPH-motor oil). The analytical results are discussed in Section 5 and presented in Tables A2-1, A2-4, A2-5, and A2-8 in Appendix A, respectively.

4.3.7 Building 100 PCB Evaluation

Building 100 is a one-story, approximate 600-square-foot building which has previously been identified as a transformer vault. It is located near the southern end of Parking Apron No. 2 and in the southeastern portion of transfer parcel FED-1A. Building 100 is comprised of two separate rooms, one of which previously held a 4,160-kilovolt-amprere (KVA) transformer and oil-filled switches suspected of containing oil contaminated with PCBs. According to the EBS, PCBs were not detected in the switches; however, the transformer was not accessible during the sampling activities and was therefore not sampled. The transformer has since been removed from the building. Sampling was conducted in order to assess whether the presence of the transformer resulted in a CERCLA-related hazardous substance release of PCBs.

Six concrete chip samples were submitted for laboratory analysis after compositing samples collected from an approximate 1.5-meter grid pattern across the floor surface of Building 100 in Transfer Parcel FED-1A. Additional samples were collected from each square in the grid and were put on hold until the first six sample results were received. These concrete samples were analyzed for PCBs only. The analytical results are discussed in Section 5 and presented in Appendix A; Table A2-15.

4.3.8 Washdown 259 Evaluation

An evaluation of Washdown Area 259 was performed to assess whether the former usage of the aircraft washdown area resulted in a CERCLA-related hazardous substances release.

The trench drain located in the center of Washdown 259 was cleaned to remove debris and standing water. After cleaning, the trench drain was inspected for weak areas such as cracked concrete. Based on these observations, one boring location was marked within the trench drain. In addition, an attempt was made to trace the drainage line that is connected to the trench drain to find its discharge point. A second boring was placed along this trace line to the north of the trench. Two additional boreholes, one to the east and one to the south, were advanced adjacent to Washdown 259 and soil samples were collected from each borehole at specific depth intervals. Two discrete direct-push samples from the FWBZ, one at the groundwater table and one deeper sample were also collected from each of the boreholes. All soil and discrete direct-push groundwater samples were analyzed for TCL VOCs. The analytical results are discussed in Section 5 and presented in Appendix A; Table A2-1.

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5.0 Data Evaluation and Results

Analytical results from samples collected at Transfer Parcels FED-1A, FED-2B, and FED-2C are evaluated in this section, with the exception of ecological samples, which are evaluated in Section 7. Section 5.1 describes the screening criteria used to evaluate the data presented in Sections 5-2 through 5-8. Figures 5-1 through 5-7 present the sampling locations and exceedances of applicable screening criteria for the following chemical classes:

- VOCs
- TPH
- SVOCs
- PAHs
- Pesticides and PCBs
- Dioxins and Furans
- Explosives
- Metals

Figure 4-1 shows sampling locations in Transfer Parcels FED-1A, FED-2B, and FED-2C.

5.1 Screening Criteria Used for Evaluation of Soil, Sediment, Concrete, Groundwater and Surface Water

This section describes the screening criteria used in the evaluation of the data collected during the sampling events. The regulatory screening criteria used in this SI Report are presented on tables in Appendix A2and compared to laboratory detection limits in Appendix I. The presence of chemicals at concentrations above screening criteria does not indicate that there is a health concern; however, further evaluation of the areas in which the chemicals were reported may be warranted. A detailed evaluation of potential human health risks and ecological risks associated with the presence of these chemicals is presented in Section 6 and 7, respectively. Plant and animal tissue and pore water data were not evaluated but are provided for reference in Appendix A.

5.1.1 Screening Criteria for Soil

Prior to the 2010 investigation, concentrations of VOCs, SVOCs (excluding PAHs), pesticides, PCBs and metals were compared to their respective USEPA Region 9 PRGs for residential soil (USEPA, 2004). Results from the 2010 investigation for VOCs, pesticides, PCBs, dioxins and explosives were compared to their respective USEPA Region 9 RSLs for residential soil (USEPA, 2010). Where concentrations exceeded the residential RSLs for soil, concentrations were also compared to industrial soil RSLs. In addition, VOC concentrations reported in soil samples were compared to USEPA Residential and Industrial ESLs for Soil Protective of Indoor Air (USEPA, 2005), and dioxin and furan concentrations were compared to California Department of Toxic Substances Control (DTSC) Residential and Industrial TEQ Remedial Goals. Metals were also compared to the 95th percentile background concentrations developed specifically for Alameda Point for soil and

groundwater. These background values are presented in Tables 3-2 through 3-4. For soil located in the western and central portions of Alameda Point, the appropriate background data sets (referred to as the yellow and pink areas, respectively) were used (TtEMI, 2004). For arsenic, the PRGs and 95th percentile background concentrations were exceeded; an additional analysis was conducted to compare the distribution of concentrations in soil at the transfer parcel to the distribution of background concentrations in soil in the 95th percentile pink background data set.

Radionuclide levels were compared to the release criterion of radium-226 and cesium-137 of 1.538 pCi/g and 0.113 pCi/g, respectively (TtEC, 2009 and DON, 2006b). Release criteria are defined as 1 plus the background concentration. Concentrations below the release criteria are considered to be acceptable for free or unrestricted use. Radionuclide data are evaluated in Section 5.10.

TPH concentrations reported in soil were compared to ESLs established by the Petroleum Strategy Plan at Alameda Point for areas where groundwater is not a current or potential drinking water source (Water Board, 2007). Prior to the 2010 investigation, TPH data for soil were compared to residential ESLs for shallow soil (less than 3 meters [about 10 feet] bgs) in areas where groundwater is not a current or potential drinking water source. Where concentrations exceeded the residential ESLs, concentrations were also compared to industrial soil ESLs.

PAHs in the soil were evaluated based on a benzo(a)pyrene [B(a)P] equivalent concentration that normalizes the toxicity of seven of the carcinogenic PAHs relative to the toxicity of B(a)P. B(a)P equivalent concentrations were calculated with the following PAHs:

- Benz(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(k)fluoranthene
- Chrysene
- Dibenz(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

Each carcinogenic PAH concentration was multiplied by the assigned relative potency factor, and the results were summed to achieve a total B(a)P equivalent concentration. For results reported as "nondetect" (i.e., qualified as "U" [analyte not reported above the detection limit] or "UJ" [analyte was analyzed for but not detected; the sample detection limit is an estimated value]), a value zero was used. Estimated values ("J" qualified) were used without modification. For samples with associated field duplicates, the highest analyte concentration was selected to represent the analytical result. These B(a)P equivalent concentrations were compared to an Alameda Point–specific screening criterion for residential use of 620 µg/kg. This value was agreed upon by the Navy, regulatory agencies, and the City of Alameda during the PAH technical meeting (DON, 2001c). This Alameda Point–specific screening criterion for residential use of 620 µg/kg corresponds to a risk value of 10^{-5} (one additional cancer case in a population of 100,000), which was derived from the USEPA Region 9 PRGs for residential soil (USEPA, 2004).

5.1.2 Screening Criteria for Sediment

Concentrations in wetland sediments were compared to soil PRGs. This is a conservative approach used to identify areas that may require further evaluation. If lower than federal criteria, Cal-modified PRGs were used as comparison criteria for chemicals in soil and groundwater where available. Where concentrations in soil or sediment exceeded the residential PRGs for soil, concentrations were also compared to industrial soil PRGs. At EBS Parcels 25 and 26 in Transfer Parcel FED-2B, a designated wetland habitat restricted from future residential use, industrial soil PRGs were considered more appropriate screening criteria; however, for completeness, both the residential and industrial criteria are presented.

Chemical concentrations in wetland sediments were compared to screening level ecotoxicity estimates. Manhole sediment data were not evaluated because they are not considered to be representative of site activities or indicative of current conditions.

5.1.3 Screening Criteria for Concrete

Results from the 2010 investigation for PCBs were compared to their respective USEPA Region 9 RSLs for residential and industrial soil (USEPA, 2010). Total PCBs were calculated by summing the results of individual Aroclors and comparing them to the TSCA action level of 1,000 µg/kg residential action level. For results reported as "nondetect" (i.e., qualified as "U" [analyte not reported above the detection limit] or "UJ" [analyte was analyzed for but not detected; the sample detection limit is an estimated value]), a value zero was used.

5.1.4 Screening Criteria for Groundwater

Prior to the 2010 investigation, concentrations of VOCs, SVOCs (excluding PAHs), pesticides, PCBs, and metals were compared to their respective MCLs for groundwater. Results from the 2010 investigation for VOCs, pesticides, PCBs, and dioxins were compared to their respective USEPA MCLs for groundwater. It should be noted, however, that MCLs are not applicable as comparison criteria because groundwater below Transfer Parcels FED-1A, FED-2B, and FED-2C is not considered a drinking water source (Water Board, 2003). Groundwater sample results reported during the 2010 investigation were compared to their respective Tap Water Regional Screening Levels if no MCL was defined. If there were MCLs available, no comparison to Tap Water RSLs was made. In addition, metals were compared to the 95th percentile background concentrations developed specifically for Alameda Point for groundwater. These background values are presented in Tables 3-2 through 3-4.

TPH concentrations reported in groundwater were compared to ESLs established by the Petroleum Strategy Plan at Alameda Point for areas where groundwater is not a current or potential drinking water source (Water Board, 2007).

Chemical concentrations in groundwater samples collected within 100 feet of the shoreline were also compared to CTR values. Comparison of groundwater results to CTR values is a conservative screening evaluation because CTR values are intended for use with surface water, not groundwater. Groundwater concentrations are considered conservative estimates of surface water concentrations (if the groundwater flow is toward a surface water body). Actual surface water concentrations are expected to be much lower than measured groundwater concentrations due to such factors as adsorption and dilution.

5.1.5 Screening Criteria for Surface Water

Chemical concentrations in surface water were compared to CTR values (USEPA, 2006b).

5.2 Volatile Organic Compounds Results

No VOCs were reported in soil at concentrations above their respective screening criteria, as shown in Figure 5-1.

Vinyl chloride was reported at a concentration of 2.1 µg/L, above the screening criterion (California MCL 0.5 µg/L), in the FWBZ sample collected in March 2007 at monitoring well M025-A.

5.3 Total Petroleum Hydrocarbons Results

TPH-motor oil in soil was reported at concentrations above the screening criterion (Petroleum Strategy Plan ESL of 370 mg/kg) in the Aircraft Parking and Staining Evaluation Areas, EBS Parcel 23, the Firefighter Training Area and in several of the 13 SWMUs as presented on Figure 5-2. The maximum concentration of TPH-motor oil was reported in a surface sample collected from AP1AW495A-DP01 at a concentration of 2,370 mg/kg.

TPH-diesel was reported in soil at concentrations above the screening criterion (Petroleum Strategy Plan ESL of 83 mg/kg) in the Aircraft Parking and Staining Evaluation Areas, the Firefighter Training Area, EBS Parcel 24, and in several of the 13 SWMUs. The maximum concentration of TPH-diesel was reported from sample 101-LT-SO-07, taken from the sidewall of an excavation at EBS Parcel 24 at a concentration of 2,000 mg/kg. This concentration is greater than the residential (100 mg/kg) and industrial (150 mg/kg) ESLs, as well as the Petroleum Strategy Plan ESL of 83 mg/kg.

TPH-gasoline in soil was not reported at concentrations above the screening criteria.

TPH-motor oil was reported in groundwater at concentrations above the screening criterion (Petroleum Strategy Plan ESL of 100 µg/L) at several locations in the Aircraft Parking and Staining Evaluation Areas and the area surrounding the 13 SWMUs. The highest concentration of TPH-motor oil in groundwater was reported in the FWBZ from AP1AW495A-DP02 with a concentration of 548 µg/L.

TPH-diesel was reported in groundwater at concentrations above the screening criterion (Petroleum Strategy Plan ESL of 100 µg/L) at several locations in the Aircraft Parking and Staining Evaluation Areas and the area surrounding the 13 SWMUs. The highest concentration of TPH-diesel in groundwater was reported in the FWBZ from AP1AAPS-DP12 with a concentration of 1,730 µg/L.

TPH-gasoline in groundwater was not reported above the screening criteria.

5.4 Semivolatile Organic Compounds Results

Of the SVOCs, only PAHs in soil and groundwater were reported at concentrations above their respective screening criteria. PAH concentrations are discussed in Section 5.5.

5.5 Polycyclic Aromatic Hydrocarbons Results

5.5.1 Soil Results

B(a)P equivalent concentrations in soil exceeded the Alameda Point–specific screening criterion for residential use (620 µg/kg) at several locations: Transfer Parcel FED-1A, including among the Aircraft Parking and Staining evaluation areas, area surrounding IR Site 33, and the 13 SWMU former ASTs, including EBS Parcels 5, 23, and 24 (Figure 5-3).

At EBS Parcel 23, B(a)P equivalent concentrations exceeded the screening criterion in 14 soil samples collected from 8 locations; 8 of these samples were collected from IR Site 33, and 6 were collected outside the estimated IR Site 33 boundary. The 8 samples exceeding the screening criterion in IR Site 33 (collected during the 2002/2003 PAH studies) had the maximum reported concentration at the time of 100,000 µg/kg. Further sampling of IR Site 33 in 2010 returned equivalence concentrations exceeding regulatory criteria at each sample location, with a maximum concentration returned from AP1AIR33-DP16 at 130,000 µg/kg.

Although PAH concentrations exceeded the Alameda Point screening criterion at locations throughout EBS Parcels 5 and 23 during investigations that occurred prior to 2002, all samples (except for sample 32-FED-1A-74 located in EBS Parcel 23) were either located within the approximate boundary of IR Site 33 or were collected prior to the PAH studies that were conducted in 2002 and 2003. During the 2002/2003 PAH studies, samples were collected in a grid pattern across Transfer Parcel FED-1A and analyzed using an analytical methodology to obtain more accurate PAH results. Consequently, the 2002/2003 PAH data are considered more representative than data collected previously. The samples collected within the approximate boundary for IR Site 33 sample locations were expected to return high B(a)P equivalent based on the high results consistently returned from IR Site 33, as discussed in Section 4.3.4 and above. Therefore these results are not considered representative of their respective evaluation area.

5.5.2 Groundwater Results

PAH concentrations in groundwater exceeded their respective ESLs from the Petroleum Strategy Plan in several locations in the Aircraft Parking and Staining Evaluation Areas and in the areas surrounding the 13 SWMUs as shown in Figure 5-3. There were seven sampling locations in the Aircraft Parking and Staining Evaluation Areas that returned levels of PAHs that exceeded ESLs, and three locations that had concentrations that exceeded Federal and California Modified MCLs, AP1AAPS-DP17, DP24 and AP2CAPS-DP01. The highest of these concentrations was found in Transfer Parcel FED-2C, AP2CAPS-DP01 at 0.296 µg/L, which was greater than the MCL of 0.2 µg/L.

There were two locations in the area surrounding the 13 SWMUs, W483A-DP02 and W599B-DP02, which had exceedances for Benzo(a)Pyrene and Benzo(b)fluoranthene and one that had an exceedance for Benzo(a)anthracene. These concentrations were all found between 5 and 7 feet bgs. These results are presented in Appendix A, Table A2-13.

5.6 Pesticides and Polychlorinated Biphenyls Results

Pesticides were not reported in soil at concentrations exceeding the screening criteria.

PCB, Aroclor 1260 was reported at a concentration exceeding a screening criterion in a surface soil sample (A-1) collected at EBS Parcel 5 in Transfer Parcel FED-1A (Figure 5-4). Aroclor 1260, reported at a concentration of 370 µg/kg at this location, exceeded the residential screening criterion of 220 µg/kg but was below the industrial screening criterion of 740 µg/kg.

The pesticide heptachlor epoxide was reported at a concentration that exceeded the CTR criterion in a groundwater sample from well M025-A (located within 100 feet of the shoreline). The concentration of heptachlor epoxide (0.006 µg/L) exceeded the CCC value (0.0036 µg/L) but did not exceed the MCL (0.01 µg/L).

Concrete chip samples from the floor of Building 100, PCBs were not reported above the screening level (1,000 µg /kg) (Appendix A; Table A2-14).

5.7 Dioxins and Furans Results

Dioxins and furans were not reported in soil at concentrations that exceeded their respective screening criteria (Appendix A, Table A2-5) at sample locations within Transfer Parcel FED-A, as shown in Figure 5-5.

5.8 Explosives Results

Explosives were not reported at levels above their respective screening criteria (Appendix A, Table A2-6) at any of the sample locations within Transfer Parcel FED-1A, as shown in Figure 5-6.

5.9 Metals Results

Metals were reported at concentrations above the screening criteria in soil at EBS Parcels 5, 23, and 25, and in groundwater at EBS Parcels 23 and 24, in Transfer Parcel FED-1A (Figure 5-7; Appendix A, Tables A1-1, A1-2, A2-4, and A2-12). Metals were also present at concentrations above screening criteria in surface water at EBS Parcel 25 in Transfer Parcel FED-2B (Figure 5-7; Appendix A, Tables A1-1, A1-2, A2-4, and A2-12). Metals concentrations are discussed below only if concentrations exceeded both the screening criteria and background values.

5.9.1 Transfer Parcel FED-1A

Arsenic and iron were reported at concentrations above PRGs and RSLs and background values in deep soil at all three EBS parcels in Transfer Parcel FED-1A. At EBS Parcel 5, iron was reported in a deep soil sample (80 feet bgs) collected at location M025-A at an estimated concentration of 26,500 mg/kg, which is slightly above the residential PRG of 23,000 mg/kg; however, this concentration did not exceed the industrial PRG for iron (100,000 mg/kg). At EBS Parcel 23, arsenic was reported in one deep soil sample (45.5 feet bgs) collected from location WB-3 at a concentration of 26 mg/kg, which is above the residential and industrial PRGs and background (Appendix A, Tables A1-2 and A2-4). Based on the presence of arsenic

concentrations above PRGs and background levels, additional screening was conducted for arsenic in soil at EBS Parcels 5 and 23. This additional screening consisted of a comparison of the distribution of arsenic concentrations at each of the EBS parcels with the distribution in the pink background area. The distribution pattern of arsenic concentrations at EBS Parcels 5 and 23 is similar to the distribution of background arsenic. For this reason, concentrations at these EBS parcels are considered to be within the background range. Additionally, these concentrations are not considered indicative of a site release because the elevated arsenic and iron concentrations are at depth (greater than 45.5 feet and 80 feet bgs, respectively). Therefore, arsenic and iron concentrations in soil in FED Parcel 1A are not considered further in this SI Report.

Cobalt was reported to exceed the background value and the residential screening level at several soil sample locations. The maximum concentration detected was collected from APlAAPS-DP22 at a concentration of 156 mg/kg. This value exceeds the background value of 9.4 mg/kg and the residential screening level of 23 mg/kg.

Arsenic was detected in groundwater at several locations in the Aircraft Parking and Staining evaluation areas, 13 SWMU areas, and monitoring well M013-A at concentrations above the California and Federal MCLs (10 µg/L) and above background levels (20.72 µg/L). The maximum concentration for arsenic as reported the FWBZ at location AP1AAPS-DP21 at a concentration of 35.4 µg/L.

Iron, manganese and vanadium were also reported to exceed background levels in groundwater, but did not have California or Federal MCLs or Tap water screening levels. The maximum iron concentration reported was detected in the FWBZ at location AP1AW467B--DP02 at 12,500 µg/L, above the background level of 6,586 µg/L. The maximum manganese concentration reported was detected in AP1AAPS-DP22 at 3,020 µg/L, the background level is 1,741 µg/L. The maximum vanadium was detected in AP1AAPS-DP24 at 43.2 µg/L, which is almost twice the background level of 26.27 µg/L.

Aluminum was reported at concentrations above the secondary MCL (50 µg/L [there is no federal MCL]) and background (1,070 µg/L) in FWBZ groundwater samples collected at M107-A (1,220 µg/L), M010-A (4,530 µg/L), and M015-A (1,790 µg/L).

Barium and thallium were present at concentrations above screening criteria in groundwater samples collected from deep wells. Barium was reported at concentrations above the California MCL (1,000 µg/L) in a sample collected from well DRA-01 (1,110 µg/L) and thallium was reported at concentrations above the MCL (2 µg/L) in a sample collected at M104-C (11.1 µg/L).

Lead was reported at a concentration (68.7 µg/L) above the screening criteria (11.45 µg/L [background] and 15 µg/L [action level]) in a groundwater sample (location 101-LT-GW-03) collected from the bottom of a 6-foot excavation at EBS Parcel 24, following the UST and vault removal effort. Because this sample was a grab sample collected from the bottom of an open excavation, it most likely does not accurately represent groundwater conditions in the area.

5.9.2 Transfer Parcel FED-2B

At EBS Parcel 25, arsenic was reported above the screening criteria in a primary (12 mg/kg) and a duplicate (13 mg/kg) wetland soil sample collected at location R3. Based on the presence of arsenic at concentrations above the PRG and the background level, additional analysis was conducted for arsenic at EBS Parcel 25, comparing the distribution with the distribution of background concentrations in the pink background area. The distribution pattern of arsenic concentrations at EBS Parcel 25 is similar to the distribution of background arsenic. For this reason, concentrations of arsenic at EBS Parcel FED-2B are considered to be within the background range.

Metals, including copper, nickel, tributyltin, and zinc, were reported at concentrations above the screening criteria in four surface water samples collected at EBS Parcel 25. Copper was reported at two locations (RW002 and RW006) at concentrations of 7.9 µg/L and 7.6 µg/L, respectively, exceeding the screening criteria of 3.1 µg/L (CCC) and 4.8 µg/L (CMC). Nickel was reported at three locations (R1, RW002 and RW006) at concentrations of 190 µg/L, 9.2 µg/L and 10.8 µg/L, respectively, exceeding at least one of the screening criteria (8.2 µg/L [CCC] and 74 µg/L [CMC]). Tributyltin was reported at one location (R1) at a concentration of 0.024 µg/L, exceeding the screening criterion of 0.0074 µg/L (CCC). Zinc was reported in three samples from two locations (R1 and R2) at concentrations ranging from 100 µg/L to 150 µg/L, exceeding the screening criteria of 81 µg/L (CCC) and 90 µg/L (CMC).

5.9.3 Transfer Parcel FED-2C

Metals were not reported in soil at concentrations exceeding the screening criteria in Transfer Parcel FED-2C.

Iron and manganese were reported to exceed background levels in groundwater, but did not have California or Federal MCLs or Tap water screening levels in Transfer Parcel FED-2C. Iron was reported in the FWBZ at location AP2CAPS-DP01 at a concentration of 22,100 µg/L, well above the background level of 6,586 µg/L. Manganese was reported in the AP1CAPS-DP01 at 2,610 µg/L, also above the background level of 1,741 µg/L.

5.10 Radionuclides Results

5.10.1 Transfer Parcel FED-1A

Soil samples collected during the 2007 investigation showed activity levels for radium-226 ranging from 0.22 to 0.54 pCi/g at Transfer Parcel FED-1A (DON, 2007). These values are well below the release criterion of 1.538 pCi/G (TtEC, 2009).

In 2010, soil sample were collected from five locations in Transfer Parcel FED-1A along the eastern boundary of Transfer Parcel FED-2A. Activity levels for radium-226 did not exceed the release criterion of 1.538 pCi/g (TtEC, 2009). In addition, the activity level of cesium-137 did not exceed the release criterion of 0.113 pCi/g (DON, 2006b). Radium-226 activity levels in soil at Transfer Parcel FED-1A are not considered to be indicative of contamination.

A previous concentration of total radium was reported at or above the MCL of 5 pCi/L in groundwater samples collected at M108-B (10.95 pCi/L) and DRA-01 (5 pCi/L). These

monitoring wells have been included in the basewide groundwater monitoring program to verify the total radium concentrations in groundwater.

5.10.2 Transfer Parcel FED-2B

Soil samples were collected from two locations in Transfer Parcel, FED-2B. Location FED-2B-001 is located in EBS Parcel 27, while location FED-2B-002 is located in EBS Parcel 26. Activity levels for radium-226 did not exceed the release criterion of 1.538 pCi/g. In addition, the activity level of cesium-137 did not exceed the limit of 0.113 pCi/g. Radium-226 activity levels in soil at Transfer Parcel FED-2B are not considered to be consistent with background at Alameda Point and are not indicative of contamination.

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6.0 Human Health Risk Evaluation

A screening-level human health risk evaluation was conducted to evaluate whether chemical concentrations in soil and groundwater at Transfer Parcels Fed-1A, FED-2B, and FED-2C might pose potential human health concerns that would require further evaluation.

A conceptual site model (CSM) for human health is used to identify ways in which people might come into contact with chemicals of potential concern in soil or groundwater (Figure 6-1). Specifically, the CSM illustrates human health exposure. Transfer Parcels FED-1A, FED-2B and FED-2C encompass approximately 439 acres, most of which is unused open space. Approximately 75 percent of Transfer Parcel FED-1A is paved, Transfer Parcel FED-2B is entirely unpaved, and Transfer Parcel FED-2C is entirely paved. Limited exposure pathways exist within select areas for current site workers. Potential exposure pathways for current workers include direct contact with soil and inhalation of dusts from soil and vapors from soil or groundwater. Future hypothetical residential soil exposure pathways for children and adults could also include exposure via contact with soil (ingestion, dermal contact, inhalation of vapors in indoor and outdoor air, and inhalation of dust in outdoor air) in addition to exposure via contact with groundwater (inhalation of vapors in indoor air).

The human health risk screening evaluation was based on protection of future receptors, including children and adults. These hypothetical receptors are evaluated for screening purposes; residential exposures are not likely to occur at the site. The cancer risks and noncancer hazards were calculated using published risk-based guidelines. The most stringent of the residential reuse scenarios was assumed, although not proposed, as part of current redevelopment plans. Residential USEPA Regional Screening Levels (RSLs) (USEPA, 2010) and Water Board ESLs (Water Board, 2008) for indoor air used in this human health risk evaluation address the following pathways for cancer and noncancer adverse health effects in adults and children:

- Soil – incidental ingestion, dermal contact, inhalation of vapors in outdoor air, and inhalation of airborne dust particles in outdoor air
- Groundwater –inhalation of vapors in indoor air

Human health risks and hazards were calculated for all three EBS parcels located in Transfer Parcel FED-1A (EBS Parcels 5, 23, and 24), EBS Parcel 27 located in Transfer Parcel FED-2B, and the EBS parcel in Transfer Parcel FED-2C (EBS Parcel 23E). Data from the 2010 investigation have been added to the EBS Parcels 5, 23, and 23E data sets. Human health risk was evaluated using analytical results from samples collected during environmental studies at Alameda Point (Figure 4-1). EBS Parcels 25 and 26 were not evaluated for human health risk and hazards based on the current status of the habitat as a designated wetland. These parcels were evaluated in the Ecological Evaluation (Section 7.0).

Soil data used in the risk evaluation are from samples collected between the surface and 10 feet bgs; groundwater data are from samples collected in the FWBZ. The data set used in

this risk evaluation was discussed in Sections 4 and 5. Tables showing the complete human health risk results for soil and groundwater are presented in Appendix G.

6.1 Target Risks

The total cancer risk and a noncancer hazard index (HI) were calculated using both soil and groundwater data for each EBS parcel evaluated. For cancer risk, separate target risk levels were assessed for PAH and non-PAH analytes in soil. The cumulative target cancer risk level for PAHs in soil was equivalent to 10^{-5}, which corresponds to the B(a)P equivalent Alameda Point–specific screening criterion for residential use of 620 µg/kg (DON, 2001c). The cumulative target cancer risk level for non-PAH analytes in soil and for all chemical classes in groundwater was 10^{-6}, as specified in the National Oil and Hazardous Substances Pollution Contingency Plan under Title 40 *Code of Federal Regulations* Section 300.

For noncancer adverse health effects, the target hazard level was a hazard quotient (HQ) of 1 for individual analytes and a cumulative HI of 1 for all analytes. The USEPA recommends adding HQ values only for chemicals that affect similar target organs.

Lead was evaluated separately, using the 2004 USEPA California-modified PRG of 150 mg/kg for residential land use, the USEPA RSL of 800 mg/kg for industrial land use for lead in soil, and the USEPA and California regulatory action level for lead in groundwater of 15 µg/L (DHS, 2006).

6.2 Decision Process

Human health risks were evaluated using the decision processes shown on Figures 6-2, 6-3, and 6-4. As depicted on these figures, the total risk, including cumulative risk from both soil and groundwater, was compared to the target risk levels for cancer and noncancer effects. If the total cancer risk was greater than 10^{-6} or the HI was greater than 1, soil and groundwater were evaluated separately.

If the total groundwater cancer risk or noncancer HI was greater than the target risk level, further evaluation or action may be warranted.

The total risk in soil was initially calculated for all analytes (including PAHs and metals reported at concentrations below background levels). Metals were categorized as below background if the maximum concentrations were equal to or less than the 95th percentile in the Alameda Point background data set (TtEMI, 2004). The risk from PAHs was then subtracted to evaluate non-PAH soil cancer risk only (target risk of 10^{-5}). Cancer risks from metals with concentrations below background levels were subtracted from the total non-PAH soil cancer risk to obtain an incremental non-PAH soil cancer risk (target risk of 10^{-6}). Similarly, HQs for those metals with concentrations below background levels were subtracted from the total HI to obtain an incremental soil HI (target HI of 1). An incremental PAH HI was also calculated. If the incremental non-PAH cancer risk, PAH cancer risk, or incremental HI is above the target risk levels, further evaluation may be warranted.

6.3 Determination of Exposure Point Concentrations

Exposure point concentrations (EPCs) were determined for all analytes in soil and groundwater at Transfer Parcels FED-1A, FED-2B, and FED-2C. An EPC is the concentration that represents the level of exposure for a human lifetime. For this SI Report, the maximum reported concentrations were selected as EPCs. In soil, the maximum concentrations between the surface and 10 feet bgs were used. Use of the maximum reported concentrations likely overestimates the potential human health risk.

6.4 Risk Characterization

The methodology used to calculate the cancer risk and noncancer hazard values and the results of the human health risk evaluation are presented in the following subsections.

6.4.1 Methodology

Cancer risks and noncancer hazard values were calculated by dividing the EPC by the residential risk-based guideline (USEPA, 1989).

For cancer risk, the ratio of the EPC to the risk-based guideline (e.g., the RSL or ESL) was multiplied by 10^{-6} to convert the ratio to a cancer risk probability. The risk estimate for potential carcinogenic effects is an individual excess cancer risk. This represents the probability that an individual could have an increased risk of cancer above the background risk. A risk of 10^{-6} means that each individual has a 1 in 1,000,000 probability that the individual's risk of incurring cancer will increase above the baseline cancer risk.

For noncancer risk, the ratio of the EPC to the risk-based guideline is equivalent to the HQ for that chemical. It is considered unlikely that adverse health effects would occur over a lifetime due to exposure to a chemical with an HQ of 1 or less (USEPA, 1989).

Surrogate screening levels were used for chemicals without state or federal RSLs; these surrogates were based on chemical similarity with compounds for which RSLs have been developed.

The risks for PAHs were calculated for individual analytes rather than using the B(a)P equivalency approach. This allowed evaluation of the individual contribution of each PAH to the cancer risk. Risk calculations for PAHs in soil were calculated in the same way as for all other non-PAH compounds in soil. However, the cumulative target risk for PAHs is 10^{-5} while the cumulative target risk for non-PAHs is 10^{-6}. The presentation of total risk for PAHs in soil in the Appendix G tables includes a cancer risk probability estimate for each individual PAH based on its RSL (a value equivalent to a target risk level of 10^{-5}).

Lead is evaluated by comparison to the USEPA California-modified PRG in soil of 150 mg/kg for residential and 800 mg/kg for industrial and the action level in groundwater of 15 µg/L. An HQ is not calculated for lead.

6.4.2 Risk Evaluation Results for 5 EBS Parcels

Soil and groundwater risks were evaluated for five EBS parcels. EBS Parcels 5, 23, and 24, located in Transfer Parcel FED-1A and EBS Parcel 23E located in Transfer Parcel FED-2C, had residential risks above the target risk levels, as shown in Table 6-1. Industrial soil risk-

based guidelines were used to estimate risk to site workers, as development of the property for residential use is unlikely.

- EBS Parcel 5 had a total cancer risk of 4×10^{-5} and a total HI of 2.1, including exposure to both soil and groundwater. Using residential risk-based guidelines, the total cancer risk for soil was 4×10^{-5}, of which 6×10^{-6} was attributed to PAHs; the total soil HI was 2.1. The total PAH risk of 6×10^{-6} is below target levels for PAHs. After subtracting metals below background levels, the non-PAH incremental risk for soil was 2×10^{-6}, which just exceeds the target risk level; the incremental soil HI was 1.1. The primary risk driver for the non-PAH incremental soil cancer risk was Aroclor 1260 (risk of 2×10^{-6} for this constituent).

  Using industrial risk-based guidelines, the total cancer risk for soil was 8×10^{-6} and total soil HI was 0.16. After subtracting metals below background levels, the non-PAH incremental risk for soil was 5×10^{-7} which is below target levels.

  The evaluation of groundwater risks and hazards from vapor intrusion concerns indicated total cancer risk of 5×10^{-7} and total groundwater HI was 0.019, both below target levels. Lead concentrations in soil (maximum concentration of 62 mg/kg) were below the 2004 USEPA residential California-modified PRG (150 mg/kg) and 2010 USEPA industrial RSL (800 mg/kg); lead was not reported in groundwater.

- EBS Parcel 23 had a total cancer risk of 9×10^{-3} and a total HI of 9.8, including exposure to soil and groundwater. Using residential risk-based guidelines, the total cancer risk for soil was 9×10^{-3}, largely attributed to PAHs, and the total soil HI was 9.8. The PAH soil risk of 9×10^{-3} exceeds the target risk level of 1×10^{-5}. After subtracting metals present at concentrations below background levels, the non-PAH incremental risk for soil was 2×10^{-6} and the incremental soil HI was 9.1. The primary contributor to the HI of 6.8 was cobalt.

  Using industrial risk-based guidelines, the total cancer risk for soil was 6×10^{-4} and the total soil HI was 0.77. The PAH soil risk of 6×10^{-4} exceeds the target risk level. After subtracting metals present at concentrations below background levels, the non-PAH incremental risk for soil was 2×10^{-7} which is below the target risk level. The evaluation of groundwater risks and hazards from vapor intrusion concerns indicated total cancer risk of 7×10^{-8} and total groundwater HI was 0.024, both below target levels. The maximum lead concentration in soil of 163 mg/kg exceeds the 2004 USEPA residential California-modified PRG of 150 mg/kg but is below the 2010 USEPA industrial RSL of 800 mg/kg. The maximum lead concentration in groundwater of 2 µg/L is below the USEPA and California regulatory action levels.

- Because EBS Parcel 23 is a large area including many areas of concern, a hot spot analysis was conducted to narrow down the area causing the high risk and hazard levels. High levels of PAHs were found in the samples associated with IR Site 33. The samples collected near IR Site 33 that affect the PAH risk include: AP1AW495A-DP01, AP1AW495A-DP02, AP1AW495B-DP01, AP1AW599A-DP01, AP1AW599A-DP02, AP1AW599B-DP01, and AP1AW599B-DP02. Potential risks and hazards were estimated for the EBS Parcel 23 data grouping excluding the IR Site 33 sample data and nearby high-PAH sample data to discover if other areas need to be remediated or further

investigations performed. The total cancer risk for the remaining portion of EBS Parcel 23 (non-IR Site 33 areas) is 8×10^{-6} with arsenic as the primary contributor (81% contribution). The HI for the remaining portion of EBS Parcel 23 is 0.7, which is below the noncancer threshold of 1. EBS Parcel 23E in Transfer Parcel FED-2C had a total cancer risk of 4×10^{-6} and a total HI of 0.0095, including both soil and groundwater. After subtracting metals present at concentrations below background levels, the cancer risk and HI were below target levels for exposure to soil. Cancer risk was not calculated for the groundwater vapor intrusion pathway because no carcinogenic COPCs were identified. The HI for exposure to groundwater was 0.009, well below target levels. Lead concentrations in soil (maximum concentration of 1.65 mg/kg) were below the 2004 USEPA residential California-modified PRG of 150 mg/kg and 2010 USEPA industrial RSL of 800 mg/kg; lead was not reported in groundwater at this EBS parcel.

- EBS Parcel 24 had a total cancer risk of 2×10^{-6} and a total HI of 0.0061, including exposure to both soil and groundwater. The total cancer risk for soil was 2×10^{-6} and the total soil HI was 0.006. The soil cancer risk, less PAHs, was 9×10^{-10}. Of the total cancer risk and HI, the total groundwater cancer risk was 2×10^{-8} and the total groundwater HI was 0.00003. Lead concentrations in soil (maximum concentration of 5.9 mg/kg) were below the 2004 USEPA residential California-modified PRG of 150 mg/kg and 2010 USEPA industrial RSL of 800 mg/kg. Lead was also reported in this groundwater sample at a concentration of 68.7 μg/L, exceeding the screening criterion of 15 μg/L.
- EBS Parcel 27 in Transfer Parcel FED-2B had a total cancer risk of 3×10^{-6} and a total HI of 2.2, including both soil and groundwater. Of this total, the total soil cancer risk was 3×10^{-6} and the total soil HI was 0.77; there was no PAH risk associated with soil at this EBS parcel. After subtracting metals present at concentrations below background levels, there was no incremental soil cancer risk or HI. Of the total risk for the EBS parcel, the total groundwater cancer risk was 2×10^{-9}. There was no VOC risk associated with groundwater vapor intrusion. Additionally, the maximum reported lead concentration in soil of 3 mg/kg was below the 2004 USEPA residential California-modified PRG of 150 mg/kg and 2010 USEPA RSL of 800 mg/kg; lead was not reported in groundwater.

Total and incremental soil risks and groundwater risks for these EBS parcels are presented in Appendix G and summarized in Table 6-1. Incremental risk is total risk less risk from background metals.

6.5 Uncertainty Analysis

An uncertainty analysis discusses the level of confidence that can be placed in the results of a screening-level risk evaluation. The areas affecting confidence in this screening-level risk evaluation include data adequacy, EPCs, and the reliability of the risk-based levels from state and federal agencies.

Samples collected during the current and previous investigations were biased towards worst-case locations based on historical uses, previous SI reports, and reviews of aerial photographs. Contaminants reported at concentrations above screening criteria were either defined laterally or incorporated into an AOC.

The EPC is the maximum concentration of each chemical that has ever been reported; the receptors are assumed to be in contact with this concentration for 350 days a year for 30 years. USEPA guidance recommends that the risk be based on an average concentration. Therefore, use of the maximum concentration is more protective than the EPC that would be used in a baseline risk assessment or is likely to be encountered in any actual exposure that might occur.

The risk-based levels from USEPA, Cal/EPA, and the Water Board are used as screening levels so that soil with concentrations below these levels can be considered acceptable for unrestricted residential use. The presence of concentrations above these levels does not indicate a health concern but only that further evaluation may be warranted.

It should be noted that the background comparison calculations for this SI were completed in a manner consistent with all previously approved SI reports, rather than as outlined in DTSC's memorandum of June 2006 (DTSC, 2006). However, if the methodology presented in this SI were to be modified as recommended in DTSC's memorandum, the results of the human health risk screening evaluation would change only slightly, and the conclusions and recommendations of this report would not change.

In addition, the potential groundwater exposure pathway for a construction or utility worker is considered to be an incomplete or limited pathway for Transfers Parcel FED-1A, FED-2B, and FED-2C. Although it is possible that future construction or repair of existing utilities could result in trenching operations at or below the groundwater level, standard industrial practices would preclude most contact with groundwater. Special techniques are used for construction below the groundwater table to keep the work area reasonably dry. A construction project in Transfer Parcel FED-1A, FED-2B, or FED-2C would likely require sheet piling (or a similar cut-off technique) as well as sumps and pumps to keep the trenches dry enough to allow work to proceed. This pathway is therefore considered an insignificant source of exposure for a construction or utility worker.

6.6 Risk Summary

Human health target risk levels were exceeded at Transfer Parcel FED-1A, including EBS Parcels 5 and 23. The incremental risk for EBS Parcel 23 is above the target risk levels using industrial risk-based guidelines; however, this is due to the elevated levels of PAH concentrations from samples located in a portion of this parcel (IR Site 33). Incremental risks were calculated for EBS Parcel 23 without the IR Site 33 samples and were below target levels using industrial risk-based guidelines. Although potential cancer risks and hazards exceeded target levels for a residential scenario at EBS Parcels 5 and 23, when evaluated for an industrial scenario, EBS Parcel 5 has a cancer risk and HI within target levels. As discussed in detail in Section 6.4.2, at EBS Parcel 23, only the area associated with IR Site 33 has cancer risks and HIs that exceed target levels.

Risks and hazards at EBS Parcels 23E and 27 were below target risk levels.

7.0 Ecological Evaluation

This section describes biological habitats, representative organisms, and special-status species at Alameda Point and Transfer Parcels FED-1A, FED-2B, FED-2C. This ecological evaluation is a streamlined approach that evaluates potentially complete exposure pathways, potential presence of special-status species and habitats, and a CSM, using the approach agreed upon with the regulatory agencies (BEI, 2004).

7.1 Ecological Setting at Alameda Point

The ecological information for Alameda Point presented in this subsection is based on a review of previously prepared environmental documents (City of Oakland, 2002; LSA, 2001, 2002; Parsons, 2001; USACE and Port of Oakland, 2000; USACE et al., 1998; WRT, 2002; TtFW, 2004; EDAW, 2005) and on a June 2004 site visit. Habitat descriptions are based on information presented in California Wildlife Habitat Relationships System (CDFG, 2001; Sawyer and Keeler-Wolf, 1995; Mayer and Laudenslayer, Jr., 1988).

7.1.1 Ecological Habitats at Alameda Point

The following six ecological habitats occur at or within a 1-mile radius of Alameda Point.

7.1.1.1 Barren Habitat

Barren habitat generally offers little value to wildlife; it may serve as a corridor between other habitats or as a place of brief resting, but it is not a significant place of shelter. At Alameda Point, the Barren Habitat description is applied to paved areas and areas covered by buildings. The California least tern (*Sternula antillarum browni*), however, has established a nesting colony on the runway/tarmac area within Transfer Parcel FED-1A at Alameda Point.

7.1.1.2 Urban Habitat

Urban habitat generally supports few wildlife species due to human disturbances and limited vegetation. Vegetation includes grass lawns, ornamental trees, and landscaped shrubs. Typical animal representatives of the urban habitat in this region include the house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), American robin (*Turdus migratorius*), red-winged blackbird (*Agelaius phoeniceus*), western scrub jay (*Aphelocoma californica*), California ground squirrel (*Spermophilus beecheyi*), and feral cats (USFWS, 1998). In addition, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*) may occur occasionally. Some of the buildings may provide shelter for bats such as the Brazilian free-tailed bat (*Tadarida brasiliensis*).

7.1.1.3 Annual Grassland Habitat

Annual grassland habitat offers shelter, forage, and nesting opportunities for a variety of animal species. The annual grassland habitat at Alameda Point occurs mostly as a disturbed habitat due to various facility-related activities such as periodic mowing. The grassland vegetation consists primarily of nonnative grasses and herbaceous plants. The northern harrier (*Circus cyaneus*), killdeer (*Charadrius vociferus*), California horned lark (*Eremophila*

alpestris actia), and burrowing owl (*Athene cunicularia*) are avian species that are known or suspected of nesting in the grassland habitat of Alameda Point (USFWS, 1998). Avian predators occurring in the grassland habitat include the red-tailed hawk (*Buteo jamaicensis*), northern harrier, American peregrine falcon (*Falco peregrinus anatum*), white-tailed kite (*Elanus leucurus*), and American kestrel (*Falco sparverius*). Prey species occurring in the grassland habitat include the rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), black-tailed hare (*Lepus californicus*), cottontail rabbit (*Sylvilagus floridanus*), and California ground squirrel. Raccoon, striped skunk, and Virginia opossum may forage in the grassland region. Small areas of scrub habitat occur within the annual grassland habitat.

7.1.1.4 Coastal Scrub Habitat

Coastal scrub habitat occurs along the margins of the wetlands and in an area along the south shore (in Transfer Parcel FED-1A). The coastal scrub habitat on Alameda Point occurs as a disturbed habitat with mixed scrub vegetation and vegetation from the nonnative grassland. This habitat has been referred to as ruderal upland vegetation. Wildlife characteristics of the scrub habitat are essentially the same as for the annual grassland habitat.

7.1.1.5 Wetland Habitat

Several saline emergent wetland habitat areas, also known as salt marshes, occur at Alameda Point. The West Beach Landfill Wetland (22.3 acres) is located at the western end of Alameda Point (PRC and MW, 1994). The Runway Wetland (12.7 acres) is located along the southern margin of Alameda Point near Seaplane Lagoon (PRC and MW, 1994). Three narrow areas (less than approximately 50 feet wide) of saline emergent wetland were identified in the northern portion of Alameda Point along the shoreline of Oakland Inner Harbor (TtEMI, 2001b; EDAW, 2005). These narrow shoreline wetlands are routinely inundated during high tide but are poor habitat because they lack a typical high-tide zone into which marsh vertebrates can escape the tidal water.

The salt marshes support characteristic vegetation, invertebrates, and birds. Few mammals occur in the salt marsh. Pickleweed (*Salicornia virginica*) is the dominant vegetation of saline emergent habitat. Numerous invertebrates occur in the salt marsh, such as polychaete worms, amphipod crustaceans, clams, snails, and crabs. Depending on the availability of water in the salt marsh, several fish species may occur, including topsmelt (*Atherinops affinis*), killifish (*Fundulus parvipinnis*), and anchovy (*Engraulis mordax* and *Anchoa compressa*).

Invertebrates represent an abundant food source for birds such as the great blue heron (*Ardea herodias*), great egret (*Ardea alba*), snowy egret (*Egretta thula*), willet (*Catoptrophorus semipalmatus*), and American avocet (*Recurvirostra americana*) that have been observed at Alameda Point (USFWS, 1998). The Alameda song sparrow (*Melospiza melodia pusillula*) and salt marsh common yellowthroat (*Geothlypis trichas sinuosa*) may nest and forage in the upper reaches of the salt marsh. The Caspian tern (*Hydroprogne caspia*) has established a significant nesting site at the West Beach Landfill Wetland. Small mammals such as house mouse (*Mus musculus*), salt marsh harvest mouse (*Reithrodontomys raviventris*), and Norway rat (*Rattus norvegicus*) may also occur in the salt marsh.

Several seasonal wetlands were identified at the western portion of Alameda Point and along some of the runway margins (TtFW, 2004; EDAW 2005). Seasonal wetlands are

characterized by hydrophytic vegetation, i.e., plants that have adapted to growing in the low-oxygen (anaerobic) conditions associated with prolonged saturation or flooding. Common plants in the seasonal wetlands in the western portion of Alameda Point include salt grass (*Distichlis spicata*), dock willow (*Rumex salicifolius*), bird's-foot trefoil (*Lotus corniculatus*), and creeping spikerush (*Eleocharis macrostachyas*) (TtFW, 2004). Common plants in seasonal wetlands in the central portion of Alameda Point include sand pygmy weed (*Crassula erecta*), loose-strife hyssop (*Lythrum hyssopifolia*), rabbit's-foot grass (*Polypogon monspeliensis*), and Baltic rush (*Juncus balticus*) (EDAW, 2005). The seasonal wetlands provide rest, shelter, and forage for Canada geese (*Branta canadensis*) and other migratory water fowl. No amphibians have been reported at Alameda Point, but the California slender salamander (*Batrachoseps attenuatus*) and the Pacific tree frog (*Pseudacris regilla*, formerly *Hyla regilla*) may potentially occur in the grassland or seasonal wetland areas (USFWS, 1998).

7.1.1.6 Estuarine Habitat

Estuarine habitat of San Francisco Bay exists in the intertidal and subtidal zones along the shoreline of Alameda Point and at nearby aquatic areas. To the north of Alameda Point is the San Francisco Bay waterway known as Oakland Inner Harbor. A man-made embayment known as Seaplane Lagoon is located in the southeastern portion of Alameda Point. The main body of San Francisco Bay is adjacent to the southern margin of Alameda Point. Predominant vegetation includes eelgrass (*Zostera marinara*), various marine algae, and phytoplankton.

The estuarine habitat supports numerous invertebrates, including polychaete worms, amphipod crustaceans, clams, snails, and crabs. Common fish species include topsmelt, jacksmelt (*Atherinopsis californiensis*), Pacific herring (*Clupea pallasii*), northern anchovy (*Engraulis mordax*), arrow goby (*Clevelandia ios*), yellowfin goby (*Acanthogobius flavimanus*), striped bass (*Morone saxatilis*), shiner perch (*Cymatogaster aggregata*), Pacific staghorn sculpin (*Leptocottus armatus*), white croaker (*Genyonemus lineatus*), and English sole (*Pleuronectes vetulus*). Numerous other fish species are also present. During migration, chinook salmon (*Oncorhynchus tshawytscha*) also occur in the estuarine habitat.

Fish and invertebrates occurring in the estuarine habitat represent a food source for many birds, including the California least tern, California brown pelican (*Pelecanus occidentalis californicus*), western grebe (*Aechmophorus occidentalis*), and western snowy plover (*Charadrius alexandrinus nivosus*) (PRC, 1996b; USFWS, 1998; EDAW, 2005). Harbor seal (*Phoca vitulina*) and California sea lion (*Zalophus californicus californianus*) forage in the estuarine habitat and use the rock shoreline and breakwaters as haul-out sites.

7.1.2 Sensitive Habitats at Alameda Point

Wetlands, eelgrass beds, and the paved runway/tarmac used for California least tern nesting are considered sensitive habitats. The wetlands occur in the western portion of Alameda Point. Salt marsh wetlands are located near shoreline areas; seasonal wetlands are located in some low grassy areas. Eelgrass beds are located in the shallow water off the west end of Alameda Point. The California least tern nesting site is on the runway/tarmac in the southeastern portion of the airfield in Transfer Parcel FED-1A.

7.1.3 Special-Status Species at Alameda Point

Special-status species for Alameda Point are those plant and animal species that are classified as threatened, endangered, or species-of-concern by state or federal agencies (CDFG, 2006a,b,c,d,e). A table can be found in Appendix J which provides a list of special-status species that may have occurred or have the potential to occur in the terrestrial or aquatic habitats in the vicinity of Alameda Point. Local environmental impact reports were used to determine the likelihood of these species occurring at or in the vicinity of Alameda Point (LSA, 2001; WRT, 2002). Of the 53 species listed on Table 6-1, 27 are unlikely to be present at Alameda Point because of barren or disturbed habitat. Twelve have been confirmed at Alameda Point, and 14 more are considered possibly present.

Point Reyes bird's-beak (*Cordylanthus maritimus palustris*), a small annual herb that grows along the fringe of coastal salt marshes, has not been reported at Alameda Point since 1917. According to historical records, the grassland and scrub plant species alkali milk vetch (*Astragalus tener* var. *tener*), San Francisco Bay spineflower (*Chorizanthe cuspidata* var. *cuspidata*), robust spineflower (*Chorizanthe robusta* var. *robusta*), Santa Cruz tarplant (*Holocarpha macradenia*), Kellogg's horkelia (*Horkelia cuneata sericea*), Contra Costa goldfields (*Lasthenia conjugens*), and Adobe sanicle (*Sanicula maritima*) have also not been observed in the area for many years. It is therefore unlikely that these species will occur at Alameda Point. None of the plant species on state or federal lists were reported in vegetation surveys at Alameda Point (LSA, 2001).

Steelhead (*Oncorhynchus mykiss*) and chinook salmon traverse the San Francisco Bay during migration from the ocean to the Sacramento River delta and freshwater rivers and streams (USACE et al., 1998). Green sturgeon (*Acipenser medirostris*) occur primarily in the northern portion of San Francisco Bay (San Pablo and Suisun Bays) and spawn in the rivers (USACE et al., 1998). Steelhead, salmon, and sturgeon may occasionally occur in the vicinity of Alameda Point. The delta smelt (*Hypomesus transpacificus*) and longfin smelt (*Spirinichus thaleichthys*), which spawn in freshwater streams and are more numerous in the northern portion of the bay, may occur in the water adjacent to Alameda Point. The tidewater goby (*Eucyclogobius newberryi*), which prefers the lower salinity of the delta regions, may occur near Alameda Point.

The Alameda whipsnake (*Masticophus lateralis euryxanthus*) occurs primarily in scrub habitat and occasionally in grassland habitat. The Alameda whipsnake has not been observed at Alameda Point and is unlikely to occur due to limited habitat.

Occasional observations of marine mammals such as seals and sea lions, including the Steller sea lion (*Eumetopias jubatus*), have been recorded in the area near Alameda Point. The Steller sea lion is not expected to occur regularly near Alameda Point. The salt marsh harvest mouse and salt marsh wandering shrew (*Sorex vagrans halicoetes*) inhabit salt marshes, but neither has been observed at Alameda Point. No salt marsh harvest mice were reported during a biological survey conducted in 1995 (TtEMI, 2003). The San Francisco dusky-footed wood rat (*Neotoma fuscipes annectens*) and Alameda Island mole (*Scapanus latimanus parvus*) are unlikely to occur at Alameda Point, based on infrequent observations in the past. The pallid bat (*Antrozous pallidus*), Western mastiff bat (*Eumops perotis californicus*), and Townsend's big-eared bat (*Corynorhinus townsendii*) may occur at Alameda Point and may forage in the grassland and scrub habitats.

Several sea birds, shore birds, marsh birds, and water birds such as the western snowy plover, California least tern, double-crested cormorant (*Phalacrocorax auritus*), California brown pelican, California clapper rail (*Rallus longirostris obsoletus*), California black rail (*Laterallus jamaicensis coturniculus*), salt marsh common yellowthroat, Canada goose, and Alameda song sparrow occur or may occur at Alameda Point wetlands and grasslands. Sea birds such as cormorants, pelicans, and terns may forage for fish in the bay at Oakland Inner Harbor or Seaplane Lagoon. Several birds may occur in the grassland or scrub habitats of Alameda Point, such as the northern harrier, merlin (*Falco columbarius*), burrowing owl, California horned lark, loggerhead shrike (*Lanius ludovicianus*), white-tailed kite, American peregrine falcon, and golden eagle (*Aquila chrysaetos*).

None of the special-status plant, fish, or reptile species has been recently recorded at Alameda Point. The only special-status mammal recently recorded at Alameda Point is the northern sea lion, which has occasionally been observed in nearby waters. The only special-status species regularly recorded at Alameda Point are aquatic and upland birds.

7.2 Ecological Setting at Transfer Parcel FED-1A

The following subsections describe ecological habitats, potentially sensitive habitats, and special-status species at Transfer Parcel FED-1A. A CSM for the parcel is also presented.

7.2.1 Ecological Habitats

Transfer Parcel FED-1A is an intensely developed area and consists of paved runway areas with interspersed grassy areas (Figure 7-1). Very few buildings remain at the site. The paved areas at Transfer Parcel FED-1A are barren habitat and represent approximately 75 percent of the 400-acre parcel. Generally, wildlife is expected to be found only occasionally in the barren habitat, usually as a result of moving between other preferred habitats. However, on an area of mostly tarmac and bare soil near the center of Transfer Parcel FED-1A, there is a significant nesting colony of California least terns.

The runway perimeter and much of the open space between runway segments is characterized as nonnative annual grassland (Figure 7-1). Coastal scrub habitat occurs along the south shore of Transfer Parcel FED-1A. The grassland and coastal scrub habitats, which occupy approximately 83 acres, have been disturbed by routine maintenance to control vegetation growth near the runways. The grassland and coastal scrub vegetation consists primarily of nonnative grasses and herbaceous plants. The northern harrier, killdeer, California horned lark, and burrowing owl may potentially nest in the grassland and coastal scrub habitats of Transfer Parcel FED-1A. The red-tailed hawk, northern harrier, American peregrine falcon, white-tailed kite, burrowing owl, and American kestrel likely forage in the grassland and coastal scrub habitats at Transfer Parcel FED-1A and prey on species such as rock dove, mourning dove, black-tailed hare, cottontail rabbit, and California ground squirrel. Raccoon, striped skunk, and Virginia opossum also may potentially forage in the Transfer Parcel FED-1A grassland and coastal scrub region.

A portion of the grassland (approximately 2.5 acres) may represent seasonal wetland habitat. Seasonal wetlands often appear as dry grassland during the dry season and as flooded grassland during the wet season. These areas have not been evaluated for wetlands

delineation, but are similar in appearance to delineated seasonal wetlands at the adjacent IR Sites 1 and 2 and Transfer Parcel EDC-3.

7.2.2 Potentially Sensitive Habitats

The California least tern nesting area is a sensitive habitat that is located at Transfer Parcel FED-1A. The least tern nesting area at Transfer Parcel FED-1A is one of the most important nesting sites of this endangered species.

Because of their limited distribution, wetlands of all types are considered sensitive habitats. There is a potential that areas of Transfer Parcel FED-1A may be characterized as a seasonal wetland. These areas are generally located in narrow segments adjacent to roadways/runways and in low-lying paved areas subject to flooding.

7.2.3 Special-Status Species

Special-status species occurring or potentially occurring at Alameda Point are described in Appendix J. The special-status plants, invertebrates, reptiles, and amphibians are unlikely to be present at Transfer Parcel FED-1A due to lack of suitable habitat and historical absence. Of the potentially occurring fish, the sturgeon and the salmonids are expected only to occur near Transfer Parcel FED-1A occasionally as they traverse the bay. The longfin smelt is also expected only to occur occasionally near Transfer Parcel FED-1A, as it prefers the northern portion of the bay.

Based on a survey of more than 300 buildings at Alameda Point and nearby areas (Constantine, 1996), the potentially occurring special-status bat species are unlikely to occur at Transfer Parcel FED-1A. Northern sea lion have been reported once in the waters adjacent to Alameda Point and are likely only rare visitors to the area near Transfer Parcel FED-1A (DON and TtEMI, 2003d). The remaining special-status mammals are small mammals that are unlikely to be present at Transfer Parcel FED-1A due to lack of suitable habitat and historical absence.

Burrowing owl, northern harrier, white-tailed kite, California horned lark, golden eagle, Cooper's hawk, merlin, and loggerhead shrike, which are considered federal or California species-of-concern, may potentially forage in the grassland and coastal scrub habitats of Transfer Parcel FED-1A. Burrowing owl, northern harrier, and California horned lark may also potentially nest in the grassland and coastal scrub habitats of Transfer Parcel FED-1A. American peregrine falcon, which is considered a federal species-of-concern and a California endangered species, may potentially forage at Transfer Parcel FED-1A. Visits by peregrine falcons to Alameda Point are occasional (DON, 1993), from individuals nesting at distant sites such as the San Francisco-Oakland Bay Bridge (ARRA, 1994).

The California least tern use a portion of Transfer Parcel FED-1A as a nesting area that is among the largest least tern nesting areas in California. The least tern breeding season is considered to be April 1 to September 30; however, the terns typically arrive during mid- to late April and remain until mid- to late August. During this time, nesting and chick-rearing activities take place on the runway surface, and foraging occurs at Oakland Inner Harbor, Seaplane Lagoon, the area between Seaplane Lagoon and Long Breakwater, and at areas of San Francisco Bay south and west of Transfer Parcel FED-1A. The least tern typically forages in shallow areas on small fish such as anchovy and silversides. Potential predators of the

least tern include but are not limited to burrowing owl, American kestrel, raccoon, northern harrier, American crow, common raven, feral cat, grey fox, and red fox.

Principal concerns for the success of the nesting of this endangered species are increased predation, increased human disturbance, increased contaminant exposure (principally from the activities of proposed adjacent development such as a golf course and marina), and loss of foraging area quality due to marina development and related dredging (USFWS, 1999). The Biological Opinion presented by the U.S. Fish and Wildlife Service (1999) outlines several management strategies to address these concerns. The strategies included maintaining an adequate buffer zone around the least tern nesting area that did not support predators (minimize areas for hiding, nesting, or perching), and maintaining an adequate area of nearby grassland to attract predators and direct them away from the nesting area.

The remaining special-status species that may potentially occur in wetlands of Alameda Point may occur at the seasonally flooded grassland areas (potential seasonal wetlands) of Transfer Parcel FED-1A. The California brown pelican and double-crested cormorant are unlikely to occur at Transfer Parcel FED-1A; however, they may forage in the adjacent waters of the bay.

7.2.4 Conceptual Site Model

A generalized CSM for Transfer Parcel FED-1A is presented on Figure 7-2. The CSM is a representation of the known, expected, and/or predicted relationships between site chemicals of potential ecological concern (COPECs) and ecological receptors. The CSM identifies contaminant sources, fate-and-transport mechanisms, exposure pathways, and ecological receptors, based on current knowledge about Alameda Point and Transfer Parcel FED-1A.

Transfer Parcel FED-1A investigations have reported the presence of VOCs, SVOCs, PAHs, pesticides, PCBs, and metals in soil, and VOCs, SVOCs, PAHs, and metals in groundwater. Approximately 290 acres (75 percent) of the site is paved, which represents the former runways, taxiways, and related roadways. The paved surfaces protect ecological receptors from exposure to soil COPECs. The California least terns are not expected to be exposed to soil COPECs while using the nesting area.

Fate-and-transport mechanisms exist that provide for potential exposure of terrestrial and wetland organisms to COPECs at the grassland and coastal scrub areas in Transfer Parcel FED-1A. Soil COPECs generally maintain persistent forms and stable concentrations by sorbing to soil particles and materials. These soil COPECs may migrate by erosion and bioaccumulate in local biota. COPECs may be present in food items of wildlife occurring at the unpaved areas of the site through transfer (bioaccumulation) of soil COPECs to lower trophic level organisms (e.g., vegetation, invertebrates, and small mammals). Transfer to biota of higher trophic orders (e.g., predators) may occur as food items are ingested.

Site-related COPECs may migrate to San Francisco Bay through percolation to groundwater and groundwater flow to the bay. For approximately 75 percent of the 400-acre parcel, these fate-and-transport mechanisms are precluded by the presence of pavement.

This CSM evaluates birds, mammals, reptiles, and amphibians of the major terrestrial/wetland feeding guilds as potential ecological receptors (Figure 7-2) at Transfer Parcel FED-1A. This ecological evaluation is focused on special-status species (BEI, 2004). No amphibians have been reported at Alameda Point, but the California slender salamander and the Pacific tree frog may occur in the grassland or seasonal wetland areas (USFWS, 1998).

Since this ecological evaluation is focused on special-status species (BEI, 2004), these species are shown on the CSM (Figure 7-2). All of the major feeding guilds are represented by one or more special-status species.

This preliminary exposure model for Alameda Point overestimates potential exposure at Transfer Parcel FED-1A, because most of the potentially occurring special-status species are unlikely to be present at Transfer Parcel FED-1A due to lack of suitable habitat and historical absence.

7.2.5 Summary of Preliminary Ecological Evaluation

Special-status species that were assessed as representative ecological receptors at Transfer Parcel FED-1A are not likely exposed to soil COPECs for 75 percent of the 400-acre site, due to paved surfaces of the former runway. Where COPECs are present in surface soil, potential exposure may occur for special-status species that forage in the grassland/scrub habitat. Potential exposure to soil COPECs is expected to be low for ecological receptors in the grassland/scrub habitats due to the generally poor habitat quality and small size of these areas. The grassland/scrub habitats at EBS Parcels 5 and 23 are recommended for further ecological evaluation.

The least tern is not exposed to soil chemicals due to the paved surfaces at the nesting colony. The barren nature of most of the site benefits the least tern by reducing the advantage of predators. The bare soil, pavement, and sparse vegetation reduce the cover and perching sites of predators and allow the least tern to detect potential predators from a distance.

7.2.6 Screening-Level Ecological Risk Assessment

Based on the findings of the preliminary ecological evaluation which indicated that complete exposure pathways and special-status species exist at Transfer Parcel FED-1A, a screening-level ERA (DON, 1999, 2001a; USEPA, 1997b) was conducted by the Navy in association with the SI to estimate the potential impacts of chemicals reported in soil and groundwater at the transfer parcel. Details of the screening-level ERA are presented in Appendix J.

COPECs in soil were identified using analytical data from samples collected between 0 and 6 feet bgs. COPECs in groundwater were identified using analytical data collected from groundwater monitoring wells in the FWBZ and other groundwater sampling locations. The initial COPEC lists for soil and groundwater include all chemicals that were reported at least once at a concentration above the detection limit.

Transfer Parcel FED-1A investigations have reported the presence of VOCs, SVOCs (including PAHs), pesticides, PCBs, and metals in soil. Transfer of soil COPECs to the biota of lower trophic levels (e.g., vegetation, invertebrates, and small mammals) was estimated

using bioaccumulation factors (BAFs). Transfer to biota of higher trophic orders (e.g., predators) was estimated using receptor-specific exposure factors.

The screening-level ERA evaluated birds and mammals of the major terrestrial feeding guilds as potential ecological receptors, as follows:

- Omnivorous mammals, deer mouse as representative species
- Herbivorous mammals, California ground squirrel as representative species
- Avian receptors that feed on a combination of invertebrates and plant material, Alameda song sparrow as representative species
- Avian receptors that feed primarily on terrestrial invertebrates, American robin as representative species
- Avian predators (raptors) that feed on small mammals, red-tailed hawk as representative species

Investigations have reported the presence of VOCs, SVOCs, PAHs, pesticides, metals, and radionuclides in groundwater. These groundwater COPECs may discharge to surface water according to groundwater flow patterns and may bioaccumulate in local aquatic biota. Transfer of COPECs to the biota of lower trophic levels, such as invertebrates and small fish, was estimated using BAF values. Transfer to biota of higher trophic orders, such as predators, was estimated using receptor-specific exposure factors.

The screening-level ERA evaluated aquatic life as well as aquatic-dependent birds and mammals as potential ecological receptors, as follows:

- Aquatic life, a general classification that includes fish and invertebrates in the bay
- Piscivorous (fish-eating) marine mammals, harbor seal as representative species
- Piscivorous birds, California least tern and California brown pelican as representative species
- Birds that feed on aquatic invertebrates, western snowy plover as representative species

COPECs were evaluated using screening-level ecotoxicity estimates. These values are preferentially based on a no-effect level for chronic exposures.

Avian and mammalian guideline toxicity reference values (TRVs) originally prepared by the Navy and the USEPA Region 9 Biological Technical Assistance Group (BTAG) (EFA-West, 1998) are included in ERA guidance documents by Cal/EPA (Cal/EPA, 2000, 2002b). Ambient water quality criteria, i.e. criteria continuous concentrations, for saltwater aquatic life (USEPA, 2006b) were used for aquatic life TRVs. For chemicals without a Navy-BTAG wildlife TRV or a CTR aquatic life TRV, a value was selected from the scientific literature.

Screening-level exposure estimates for terrestrial wildlife were developed from maximum reported soil concentrations. Concentrations of COPECs in bay surface water were assumed to be the maximum concentration for each COPEC reported in groundwater samples. Exposure factors were selected from available scientific literature, such as the USEPA Wildlife Exposure Handbook (USEPA, 1993) and the California Wildlife Biology, Exposure

Factor, and Toxicity database (Cal/EPA, 2002a). Minimum values were used for body weight. Maximum values were used for ingestion rates.

For mammalian and avian receptors, the primary toxicological endpoint used for the development of the TRV is the chronic-no-observed-adverse-effect level (NOAEL) (in units of mg/kg body weight-day). Based on the soil concentrations, there is potential screening-level ecological risk for terrestrial ecological receptors from 12 organic and 15 inorganic COPECs based on no-effect threshold toxicity values (NOAELs; Low-TRVs). Based on the groundwater concentrations, there is a potential screening-level ecological risk for aquatic wildlife (vertebrates) and aquatic life (fish and invertebrates) from 10 organic and 22 inorganic COPECs. Because of the uncertainties associated with the screening-level ERA, the actual hazard of adverse ecological effects is overestimated. Because the screening-level ERA indicates potentially unacceptable ecological risk, further evaluation with a baseline ERA is warranted for those COPEC compounds and groups that have HQ values greater than 1. The following discussion presents the first step of the baseline ERA, Step 3a, to refine the COPEC list using refined exposure estimates.

The refined EPCs for soil COPECs are the 95 percent upper confidence limit of the mean concentrations representative of average exposures. To refine the EPCs for groundwater potentially discharging to the bay, the shoreline groundwater samples were evaluated with the maximum concentration. The shoreline locations were considered those locations within 100 feet of the shoreline. Exposure factors for terrestrial wildlife and aquatic wildlife were refined to represent average site-specific conditions. Mean values were used for body weight and ingestion rate, and site-use factors were evaluated.

Based on the refined soil exposure estimates using NOAELs and Low-TRVs, there is potential ecological risk for terrestrial ecological receptors from one organic COPEC (butylbenzyl phthalate) and eight inorganic COPECs (aluminum, cadmium, chromium, lead, nickel, selenium, thallium, and vanadium). Based on the shoreline groundwater concentrations, there is potential ecological risk for aquatic life and aquatic wildlife from heptachlor epoxide, aluminum, and lead. The baseline ERA reduces some uncertainties; however, the actual ecological hazard is overestimated due to the remaining uncertainties such as exposure estimates similar to background levels and exposure estimates of chemicals only rarely detected. COPECs where EPCs were refined and NOAEL-HQ values were greater than 1 were further evaluated with effect-threshold toxicity values. The effect-threshold toxicity values are less conservative than the no-effect levels used for the HQ calculation. The effect-thresholds represent exposure levels at which adverse effects are expected. The effect-threshold TRV were selected from the Navy-BTAG High-TRV and scientific literature (lowest-observed-adverse-effect [LOAELs]). The refined evaluation indicated that all LOAEL- HQs were less than 1 with the exception of aluminum in soil. Aluminum is only considered a potential ecological risk when soil pH is below 5.5, which is not expected at this site. The COPECs likely represent a negligible potential ecological risk, due to similar concentrations to background, low frequency of detection, and effect-threshold HQs not exceeding 1. In addition, future exposure conditions will remain incomplete based on the FED-1A land use designation.

Due to the negligible potential ecological risk from reported COPECs, no further investigation or assessment of soil or groundwater is recommended.

7.3 Ecological Setting at Transfer Parcel FED-2B

Transfer Parcel FED-2B is located at the southeastern tip of Transfer Parcel FED-1A, and consists primarily of the Runway Wetland. The northern and western boundaries are adjacent to Transfer Parcel FED-1A. The eastern boundary is adjacent to Transfer Parcel EDC-9. The southern boundary is adjacent to San Francisco Bay (Figures 1-3 and 7-1). Transfer Parcel FED-2B occupies approximately 27 acres, including approximately 19 acres of salt marsh wetland (Runway Wetland and pond areas) and 8 acres of surrounding coastal scrub habitat (Figure 7-1). A screening-level ERA was prepared for the Runway Wetland (Neptune, 2002), which provided site-specific ecological information for Transfer Parcel FED-2B. Therefore, a separate screening-level ERA was not prepared for this SI Report. Instead, the 2002 screening-level ERA and agency comments on the report were reviewed during this SI. A summary of the screening-level ERA and the findings of the review conducted during this SI are presented in Section 7.3.6.

The following subsections describe ecological habitats, potentially sensitive habitats, and special-status species at Transfer Parcel FED-2B. A CSM for the parcel is also presented.

7.3.1 Ecological Habitats

The salt marsh habitat at Transfer Parcel FED-2B includes two areas of surface water that develop seasonally and persist through much of the year. Tidal influence in the salt marsh is irregular, probably due to the condition of restricted inlets and outlets. The salt marshes support characteristic vegetation, invertebrates, and birds. Few mammals occur in the salt marsh. Pickleweed is the dominant vegetation of the salt marsh. Numerous invertebrates occur in the salt marsh, such as worms and crustaceans. Depending on the availability of water, fish, including Pacific herring, may occur in the salt marsh.

Invertebrates represent an abundant food source for birds such as the great blue heron, great egret, snowy egret, American avocet, and black-necked stilt (*Himantopus mexicanus*). Red-tailed hawk, northern harrier, burrowing owl, and Alameda song sparrow also forage in the wetland. The Canada goose, black-necked stilt, and American avocet may nest in the Runway Wetland. Small mammals such as house mouse and black rat (*Rattus rattus*) may also occur in the salt marsh.

Much of the open space around the wetland is characterized as coastal scrub habitat (Figure 7-1). This habitat has also been referred to as ruderal upland vegetation. Ecological characteristics of the scrub habitat are similar to the grassland habitats of Alameda Point. The coastal scrub habitat has been disturbed by emplacement of fill soil and construction debris. The coastal scrub vegetation consists primarily of nonnative grasses, herbaceous plants, and shrubs including pampas grass (*Cortaderia sellona*), ice plant (*Carpobrotus chilensis*), black mustard (*Brassica nigra*), coyote bush (*Baccharis pilularis*), and fennel (*Foeniculum vulgare*). The red-tailed hawk, northern harrier, American peregrine falcon, white-tailed kite, burrowing owl, and American kestrel likely forage in the coastal scrub habitats at Transfer Parcel FED-2B and prey on species such as rock dove, mourning dove, black-tailed hare, cottontail rabbit, and California ground squirrel. Raccoon, striped skunk, and Virginia opossum also may potentially forage in the Transfer Parcel FED-2B grassland and coastal scrub region.

7.3.2 Potentially Sensitive Habitats

The principal feature of Transfer Parcel FED-2B is the Runway Wetland, which is a sensitive habitat. The wetland provides habitat for many species of shorebirds and waterfowl. No other sensitive habitats occur at Transfer Parcel FED-2B. However, the nesting area of the California least tern is a sensitive habitat that is located approximately 1,400 feet to the northwest, in Transfer Parcel FED-1A.

7.3.3 Special-Status Species

Special-status species occurring or potentially occurring at Alameda Point are listed in Appendix J. The special-status plants, invertebrates, reptiles, and amphibians are unlikely to be present at Transfer Parcel FED-2B due to lack of suitable habitat and historical absence. Of the potentially occurring fish, the sturgeon and the salmonids are expected only to occasionally occur in the bay near Transfer Parcel FED-2B as they traverse the bay. The longfin smelt is also expected only to occur occasionally near Transfer Parcel FED-2B, as it prefers the northern portion of the bay.

Northern sea lion have been reported once in the waters adjacent to Alameda Point and are likely only rare visitors to the area near Transfer Parcel FED-2B (TtEMI, 2003a). The remaining special-status mammals are small mammals and bats that are unlikely to be present at Transfer Parcel FED-2B due to lack of suitable habitat and historical absence.

Burrowing owl, northern harrier, white-tailed kite, California horned lark, golden eagle, Cooper's hawk, merlin, and loggerhead shrike, which are considered federal or California species-of-concern, may potentially forage in the coastal scrub habitats of Transfer Parcel FED-2B. American peregrine falcon, which is considered a federal species-of-concern and a California endangered species, may potentially forage at Transfer Parcel FED-2B. Visits by peregrine falcons to Alameda Point occur occasionally (DON, 1993) from distant nesting sites such as the San Francisco-Oakland Bay Bridge (ARRA, 1994).

Western snowy plover, salt marsh common yellowthroat, California black rail, and California clapper rail may potentially occur in the wetlands, but these species were not observed at the Runway Wetland during the 1997 avian survey. The Alameda song sparrow has been observed at the Runway Wetland. California brown pelican and double-crested cormorant have been observed roosting at piers and breakwater to the south of Transfer Parcel FED-2B. California least tern may fly over the site traveling between the nesting area and forage areas to the south and southwest.

7.3.4 Conceptual Site Model

The generalized CSM for Transfer Parcel FED-2B (Figure 7-3) presents the known, expected, and/or predicted relationships between site COPECs and ecological receptors. Transfer Parcel FED-2B investigations have reported the presence of metals in soil, and VOCs, SVOCs, and metals in groundwater, at concentrations above detection limits.

Fate-and-transport mechanisms exist that provide for potential exposure of terrestrial and wetland organisms to COPECs at the coastal scrub and wetland areas. Soil COPECs may migrate by erosion and may bioaccumulate in local biota. Erosion is expected to occur within the site, but not to transfer soils off-site. COPECs may be present in food items of wildlife due to bioaccumulation of soil COPECs. Transfer to biota of higher trophic orders

(e.g., predators) may occur as food items are ingested. Site-related COPECs may migrate to San Francisco Bay through percolation to groundwater and groundwater flow to the bay.

This CSM (Figure 7-3) evaluates birds, mammals, reptiles, and amphibians of the major terrestrial/wetland feeding guilds as potential ecological receptors at Transfer Parcel FED-2B. Since this ecological evaluation is focused on special-status species (BEI, 2004), these species are shown in the CSM (Figure 7-3). All of the major feeding guilds are represented by one or more special-status species.

7.3.5 Summary of Streamlined Ecological Evaluation

The streamlined ecological evaluation presented in this report shows that potential exposure may occur for special-status species that forage in the scrub and wetland habitats of Transfer Parcel FED-2B. Consequently, a screening-level ERA is appropriate. An ERA was prepared for Transfer Parcel FED-2B in 2002 and is summarized below.

7.3.6 Screening-Level Ecological Risk Assessment

A screening-level ERA was conducted for Transfer Parcel FED-2B by Neptune and Company in 2002. The process followed by Neptune and Company and the conclusions of their assessment are summarized in this subsection. In addition, regulatory agency comments on this ERA were provided to the Navy in 2002. The review conducted in this SI evaluation of the screening-level ERA included addressing key agency concerns.

The 2002 ERA evaluated samples of sediment, surface water, and biota (plants, invertebrates, fish, and small mammals) collected between 1993 and 1998. All samples were evaluated for chemical characterization. Sediment samples were also evaluated by toxicity bioassays (amphipod survival and polychaete worm growth) and benthic invertebrate community analysis.

The 2002 ERA evaluated potential ecological risk due to direct contact for benthic invertebrates and ingestion of contaminated food items and incidental ingestion of soil for terrestrial herbivorous, omnivorous, and carnivorous mammals; terrestrial omnivorous and carnivorous birds; and aquatic herbivorous, omnivorous, invertebrate-feeding, and carnivorous birds. In addition to the screening-level approach, the ERA included elements that are usually considered part of a baseline risk assessment: analysis of site biota for tissue residue, central tendency estimate of the concentration, and comparison to background concentrations. Bioavailability considerations were discussed but were not used to calculate the HQ values (ratio of central tendency exposure dose estimate to TRV) that were presented.

The 2002 ERA for Transfer Parcel FED-2B concluded that the potential ecological risk was negligible for the exposure of representative receptors to organic compounds (central tendency exposure dose estimates were lower than TRVs). Concentrations for most inorganic chemicals were shown to be within the range of background concentrations. Concentrations of cadmium, lead, mercury, and selenium were not within the range of background concentrations (or were considered potentially outside the range of background concentrations due to insufficient data) and represented potential ecological risk (central tendency exposure dose estimates were higher than TRVs). For cadmium, the maximum reported HQ was 1.5, based on the omnivorous bird exposure model. Similarly for mercury,

the maximum reported HQ value was 1.2, based on the omnivorous bird exposure model. The maximum reported HQ value for lead was 118, based on the omnivorous bird exposure model. The HQ values for lead for mammalian receptors are not presented here because if the revised USEPA Region 9 BTAG TRV (Cal/EPA, 2002b) is used, these HQ values would be less than 1. The maximum reported HQ value for selenium was 4.3, based on the herbivorous mammal exposure model.

In the 2002 ERA, potential risk for Transfer Parcel FED-2B was calculated from central tendency exposure dose estimates and no-effect TRVs. The actual ecological risk is overestimated due to the uncertainties of the exposure and toxicity estimates. Additional uncertainties were identified in agency comments (discussed below) on the 2002 ERA report (Neptune, 2002). The 2002 ERA concluded that the magnitude and extent of the potential risk was small, based on the following arguments.

- The site cadmium concentrations were likely not higher than the background cadmium concentrations.
- Consideration of a bioavailability factor for cadmium and mercury would reduce the exposure dose and the HQ.
- The selenium exposure dose and HQ were elevated since selenium was not reported above detection limits in terrestrial biota (food items).
- The TRVs for lead were overly conservative.

None of the HQ values based on lowest-observed-adverse effect level values were greater than 1, indicating that no ecological risk was indicated at this less conservative level.

The conclusion of the 2002 ERA for Transfer Parcel FED-2B suggests that no further ecological evaluation is warranted at the Runway Wetland. Regulatory agency (USEPA, USFWS, and Cal/EPA DTSC Human and Ecological Risk Division [HERD]) comments on the draft version of the ERA report addressed several issues that led to the final conclusion. For this SI report, the regulatory agency comments were reviewed to assess the uncertainty associated with the conclusions of the 2002 ERA for Transfer Parcel FED-2B (Neptune, 2002). Two principal comments from regulatory agencies were noted regarding the selection of TRVs and the use of BAFs.

The 2002 ERA report used the recommended Navy USEPA Region 9 BTAG TRVs when these values were available. When these values were not available, TRVs were selected from the scientific literature; however, the reference citation presented was a compendium document from Los Alamos National Laboratory rather than the original scientific literature citation. Most of the TRVs selected from the scientific literature are the same those used for other ERA reports at Alameda Point. If TRVs less conservative than those used for other Alameda Point ERAs were used, a review of the risk calculation showed that the HQ values would remain lower than 1. The avian TRV for lead is often considered overly conservative; however, adequate data have not been presented to establish a revised BTAG TRV. The evaluation of the potential ecological risk due to lead can be supplemented with the USEPA avian TRV (1.63 mg/kg per day; USEPA, 2005). Maximum HQ values based on the USEPA TRV would be approximately 1.

The 2002 ERA report discussed BAFs for several inorganic chemicals; however, the HQ values presented in the report are based on a default BAF of 1. Site-specific BAFs cannot be estimated with the existing data; however, the report discussed the typical range of BAFs reported in literature. Such a discussion of BAFs can be used to aid the interpretation of low HQ values such as the cadmium HQ of 1.5 and the mercury HQ of 1.2. A discussion of general bioavailability can support the conclusion that chemicals with low HQs such as cadmium and mercury may not warrant additional evaluation.

Due to the generally low HQs, the similarity of inorganic chemical concentrations to the background concentrations, the small size of the site, and the use of standard evaluation procedures, the conclusions of the 2002 ERA for Transfer Parcel FED-2B did not change due to the regulatory agency comments.

7.4 Ecological Setting at Transfer Parcel FED-2C

Transfer Parcel FED-2C is located to the east of Transfer Parcel FED-1A. The southern and western boundaries are adjacent to Transfer Parcel FED-1A. The northern boundary is adjacent to Transfer Parcel PBC-1A, and the eastern boundary is adjacent to Transfer Parcels EDC-9 and EDC-15 (Figures 1-3 and 7-1).

The following subsections describe ecological habitats, potentially sensitive habitats, and special-status species at Transfer Parcel FED-2C. A CSM for the parcel is also presented.

7.4.1 Ecological Habitats

Transfer Parcel FED-2C is an intensely developed area and consists entirely of paved areas (Figure 7-1). The paved areas at Transfer Parcel FED-2C are barren habitat and represent all of the approximately 12-acre parcel. Wildlife may occasionally be found in the barren habitat, usually as a result of moving between other preferred habitats.

7.4.2 Potentially Sensitive Habitats

No sensitive habitats, such as wetlands or nesting areas, are located at Transfer Parcel FED-2C. However, the nesting area of the California least tern is a sensitive habitat that is located approximately 1,000 feet to the west, in Transfer Parcel FED-1A. The paved barren habitat of Transfer Parcel FED-2C serves as a buffer zone between the least tern nesting area and areas to the east that might support predators.

7.4.3 Special-Status Species

None of the special-status species listed discussed in Appendix J are known or suspected to occur at Transfer Parcel FED-2C. Special-status birds may occasionally be observed at the barren habitat of Transfer Parcel FED-2C. However, Transfer Parcel FED-2C offers little value to wildlife and likely serves only as a corridor between other preferred habitats.

7.4.4 Conceptual Site Model

A generalized CSM for Transfer Parcel FED-2C is presented on Figure 7-4. Transfer Parcel FED-2C investigations have reported the presence of VOCs in soil and VOCs and metals in groundwater. All of the approximately 12-acre site is paved with former roadways. The paved surfaces protect ecological receptors from exposure to soil COPECs. Fate-and-transport

mechanisms such as soil erosion, percolation, and bioaccumulation of soil COPECs are prevented by the paved surface.

This CSM evaluates potentially occurring birds, mammals, reptiles, and amphibians of the major terrestrial/wetland feeding guilds as potential ecological receptors (Figure 7-4) at Transfer Parcel FED-2C. Since this ecological evaluation is focused on special-status species (BEI, 2004), these species are shown in the CSM (Figure 7-4). Due to the paved surface, no receptors are expected to occur at the site, except for occasionally wandering individuals, including least terns that stray from the nesting area.

7.4.5 Summary of Ecological Evaluation

Transfer Parcel FED-2C consists of barren habitat (pavement). No potentially complete exposure pathways exist for ecological receptors in this barren habitat. It is also unlikely that potentially complete exposure pathways exist for special-status species since these species are unlikely to be present at Transfer Parcel FED-2C because of the poor habitat quality of this intensely developed area. No sensitive habitats are present at Transfer Parcel FED-2C.

8.0 Conclusions

This section presents the conclusions and the rationales for recommendations for further evaluation or no further evaluation for the EBS parcels located within Transfer Parcels FED-1A, FED-2B, and FED-2C that have been addressed in this SI Report. Recommendations were developed using a decision process that evaluated the following factors:

- Transfer parcel history, including chemical usage and storage
- Findings of the supplemental aerial photograph review
- Analytical results from previous sampling of soil, wetland soil (sediment), groundwater, and surface water
- Analytical results from 2010 investigation of soil, groundwater, and concrete
- Results of the screening-level human health risk evaluation
- Results of the ecological evaluations and screening-level ERAs

These six factors were considered in combination in making recommendations for the transfer parcels; no single factor was used alone to make a recommendation.

The Draft Transfer Parcels FED-1A, 2B, and 2C SI report (BEI, 2008) identified three AOCs within Transfer Parcel FED-1A for further evaluation. The three AOCs identified at Transfer FED-1A are shown on Figure 1-3. AOC 1 has been designated to further evaluate Aroclor 1260 in soil and to address data gaps for other PCBs and pesticides in EBS Parcel 5. AOC 2 has been designated to address a vinyl chloride exceedance in groundwater at EBS Parcel 5. AOC 3 has been designated to further evaluate chemicals reported above screening criteria in groundwater at EBS Parcel 24. Also recommended further evaluation at two sites within Transfer Parcel FED-1A that are currently incorporated in existing programs (soils which are part of IR Site 33; and SWMU former AST 488, which is part of the Petroleum Program). The following areas were also recommended for further evaluation; all 13 former ASTs in Transfer Parcel FED-1A, as well as Building 100, of Washdown 259, of munitions in soil near the former munitions storage area in Transfer Parcel FED-1A, and of firefighting training areas in Transfer Parcel FED-1A (USEPA, 2008). These areas were evaluated as part of the 2010 investigation.

As part of the 2010 investigation, the Navy conducted an evaluation to address the issue of aircraft parking and staining throughout Transfer Parcels FED-1A, FED-2B, and FED-2C. This parking and staining evaluation was conducted for all portions of each transfer parcel, regardless of whether a particular EBS parcel has a history of aircraft parking or staining.

The human health risk screening evaluation assumed that future land use would be residential, with children and adults experiencing daily exposure for 30 years; however, planned future land use is likely to be institutional (VA medical facilities), wetlands/open space, and the California least tern sanctuary. Therefore, residential risks are hypothetical.

As part of the ecological evaluation at Transfer Parcel FED-1A, complete exposure pathways and special-status species were found to exist. Based on this finding, a screening-level ERA was conducted, as described in Section 7 and detailed in Appendix J. Results of the screening-level ERA indicated that no further ecological evaluation or assessment of soil or groundwater is required at the transfer parcel.

At Transfer Parcel FED-2B, a screening-level ERA was conducted in 2002 (Neptune, 2002). The 2002 ERA concluded that no further ecological evaluation was warranted at the Runway Wetland. The 2002 ERA and associated regulatory agency comments were reviewed as part of this SI evaluation. The findings of this SI Report are in agreement with the conclusions of the 2002 screening-level ERA for Transfer Parcel FED-2B.

No areas requiring a screening-level ERA have been identified at Transfer Parcel FED-2C.

At Transfer Parcel FED-1A, one SWMU (AST 488) was previously identified as requiring additional evaluation. This SI Report concurs with the previous finding that this SWMU requires further evaluation. SWMU AST 488 is currently included in an AST work plan and is being addressed under the Petroleum Program.

Further evaluation is warranted in the northern portion of IR Site 33, which is located in Transfer Parcel FED-1A. This portion of the IR site was tentatively identified based on reported PAH concentrations in soil. Concentrations of PAHs have been reported in soil at concentrations above screening criteria and the calculated human health risk associated with these reported concentrations is above target levels. Therefore, it is recommended that this area be included in IR Site 33. The southern portion of IR Site 33, located within Transfer Parcel FED-2B, was previously identified as requiring further evaluation based on potential ecological concerns. However, based on the findings of the ecological and human health risk evaluations conducted in this SI, there is no significant ecological or human health risk presented by conditions at Transfer Parcel FED-2B. Therefore, it is recommended that the IR Site 33 boundary not include Transfer Parcel FED-2B. Table 8-1 summarizes the Navy's recommendations. Groundwater monitoring wells recommended for further investigation can be seen in Figure 8-1.

8.1 Transfer Parcel FED-1A

Transfer Parcel FED-1A includes EBS Parcels 5, 23, and 24. An area in the southern portion of EBS Parcel 23 is included within the currently defined boundary of IR Site 33. The three AOCs designated in this transfer parcel and recommendations are discussed in the subsections below.

8.1.1 EBS Parcel 5

Further evaluation is recommended at previously identified AOC 2, to confirm that VOC (specifically vinyl chloride) levels in paired monitoring wells M025A and M025C remain within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario. Vinyl chloride was reported at concentrations above its MCL at monitoring well MW25A located at this EBS Parcel 5 in AOC 2. Although vinyl chloride concentrations have been detected above the MCL of 0.5 µg/L in this monitoring well, the concentrations were within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario. Continuation of annual sampling of M025A for VOCs (8260) analysis is recommended for a

minimum of 1 year to confirm that VOC levels remain within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario. Vinyl chloride has not been detected in monitoring well M025C screened in the SWBZ. Further monitoring of this well for VOCs is recommended to confirm that VOC levels remain within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario and to ensure VOCs are not migrating to the SWBZ.

No further evaluation is recommended for the remaining portions EBS Parcel 5, including the previously identified AOC. The following are rationales for recommending no further evaluation for the remaining portions of EBS Parcel 5. Previous investigations conducted at the site have indicated the presence of PAHs (as B[a]P equivalent concentrations) in soil; however, subsequent analyses using a more sensitive analytical laboratory method have shown that concentrations are below the Alameda Point–specific screening criterion for residential use. Thus no further investigation is recommended for PAHs at EBS Parcel 5.

Iron was reported in one deep soil sample collected from location M025-A at a concentration of 26,500 mg/kg, above the residential PRG of 23,000 mg/kg. However, this concentration is not considered indicative of a site release because the elevated iron concentration was collected from a depth of 80 feet bgs, and is therefore unlikely related to Navy activities. For this reason, further evaluation of iron at this location in EBS Parcel 5 is not recommended.

Previous studies have shown the presence of Aroclor 1260 in soil at a concentration exceeding the screening criterion; this area was included in AOC 1. Detection limits used in previous studies for up to six PCBs and one pesticide were above screening criteria, creating data gaps at four locations in EBS Parcel 5. In 2010, resampling was completed for pesticides and PCBs at locations with previously high detection limits. No pesticides or PCBs were reported above their respective screening levels.

The elevated concentrations of Aroclor 1260 have resulted in screening-level human health cancer risks that exceed target risk levels under the residential scenario. Concentrations of PAHs in soil have not resulted in a cancer risk above the target risk level of 10^{-5}. Excluding metals at concentrations within the background range, the incremental non-PAH soil cancer risk of 2×10^{-6} exceed target risk levels for the residential scenario.

Using industrial risk-based guidelines, which is the current and potential future use scenario, the total cancer risk for soil was 8×10^{-6} and total soil HI was 0.2. After subtracting metals below background levels, the non-PAH incremental risk for soil was 5×10^{-7} which is below target levels.

The evaluation of groundwater risks and hazards from vapor intrusion concerns indicated risks and hazards below target levels.

No further evaluation is warranted for the 100-gallon diesel fuel AST (AST 467B) in EBS Parcel 5; the Navy will prepare a closure letter for closure under the Petroleum Program.

8.1.2 EBS Parcel 23

Further evaluation in EBS Parcel 23 is limited to IR Site 33 and monitoring well DRA-01.

Elevated PAH concentrations with B(a)P equivalent concentrations above the Alameda Point–specific screening criterion for residential use were also reported in soil in the central

and southern portion of EBS Parcel 23; this area is included within the boundary of IR Site 33. Three locations within EBS Parcel 23 but outside of IR Site 33 also had PAHs above the site-specific criterion for residential use. These few isolated occurrences of elevated PAHs in soil outside the boundaries of IR Site 33 were superseded by samples collected during subsequent PAH studies that used a more sensitive analytical method and did not show elevated concentrations. During the 2010 investigation the majority of the soil samples collected within or on the boundary of IR Site 33 reported concentrations of B(a)P equivalence exceeding the Alameda Point-specific screening criterion for residential use. Using the residential risk-based guidelines, the total cancer risk for soil was 9×10^{-3}, largely attributed to PAHs, and the total soil HI was 10. The PAH soil risk of 9×10^{-3} exceeds the target risk level of 1×10^{-5}. Using industrial risk-based guidelines, which is current and potential future use scenario, the total cancer risk for soil was 6×10^{-4} and the total soil HI was 0.2. The PAH soil risk of 6×10^{-4} exceeds the target cancer risk.

PAHs in groundwater were reported above the regulatory screening criteria for benzo(a)anthracene, benzo(a) pyrene, and benzo(b)fluoranthene at AST locations 483A and 599B. The reported concentrations of benzo(a)pyrene is below the Alameda Point Preliminary Remediation Criteria – Residential Ingestion of Water at 0.2 µg/L (Water Board, 2008). At AST location 483A, the concentrations of benzo(a)anthracene and benzo(b) fluoranthene were 0.0829 µg/L and 0.0992 µg/L, respectively. These concentrations were only slightly above the Alameda Point Preliminary Remediation Criteria – Residential Ingestion of Water at 0.029 µg/L for benzo(a)anthracene and benzo(b) fluoranthene (Water Board, 2008). At AST location 559B, benzo(b) fluoranthene was reported at a concentration of 0.127 µg/L which is above the Alameda Point Preliminary Remediation Criteria – Residential Ingestion of Water at 0.029 µg/L for benzo(b) fluoranthene. The groundwater below this parcel is not considered a potential drinking water source. Since ASTs 495A, 599a, and 599B are within or on the boundary of IR Site 33, these elevated PAH concentrations will be further evaluated at IR Site 33. Due to the low concentrations of benzo(a)anthracene and benzo(b) fluoranthene at AST location 483A, this location is not recommended for further action.

Therefore, the Navy recommends that elevated PAH concentrations in soil and groundwater be addressed as part of the IR Site 33 investigation. Because this area has previously been identified as requiring further evaluation as an IR site, it has not been identified as an AOC in this SI Report.

In addition, further evaluation is recommended for monitoring wells DRA-01 and M108-B to verify the presence of total radium in groundwater. Concentrations of total radium were reported at or above the MCL of 5 pCi/L in groundwater samples collected at DRA-01 (5 pCi/L) and M108-B (10.95 pCi/L). Monitoring well DRA-01 has been included in the Alameda Point Basewide Groundwater Monitoring Program to verify the total radium concentrations in groundwater. Monitoring wells DRA-01 and M108-B will be sampled quarterly for 1 year for total radium. If total radium concentrations are not detected above screening levels, no further sampling will be performed. If total radium concentrations are detected above screening levels, the samples will be speciated and the results will be further assessed to determine a path forward.

In addition, further evaluation is recommended at monitoring well M108-A, which is located immediately downgradient of the excavation site in EBS Parcel 24 where elevated

chemical concentrations were reported. This monitoring well has not been sampled since 1995 (prior to excavation activities). Therefore, monitoring well M108-A has been included in the Alameda Point Basewide Groundwater Monitoring Program to address elevated chemical concentrations in groundwater. Monitoring well M108-A will be sampled quarterly for 1 year for lead and PAHs. If lead or naphthalene concentrations are not detected above screening levels, no further sampling will be performed. If lead or naphthalene concentrations are detected above screening levels, the results will be further assessed to determine a path forward, which may include sampling the SWBZ monitoring well (M108-B) or semiannual sampling of monitoring well M108-A.

No further action is recommended for the remaining portions of EBS Parcel 23. The following are rationales for recommending no further evaluation for the remaining portions of EBS Parcel 23.

Arsenic was reported in one deep soil sample collected from location WB-3 at a concentration of 26 mg/kg, which is above background and both the residential and industrial PRGs. However, this concentration is not considered indicative of a site release because the elevated arsenic concentration was collected from a depth greater than 45 feet bgs, and is therefore unlikely to be related to Navy activities. For this reason, further evaluation of arsenic at this location in EBS Parcel 23 is not recommended.

Cobalt was reported to exceed the background value and the residential screening level at several soil sample locations. The maximum concentration detected was collected from APlAAPS-DP22 at a concentration of 156 mg/kg. This value exceeds the background value of 9.4 mg/kg and slightly exceeds the residential screening level of 23 mg/kg.

The elevated concentrations of cobalt have resulted in screening-level human health cancer risks that exceed target risk levels under the residential scenario for the remaining portion of EBS Parcel 23. Concentrations of PAHs in soil have not resulted in a cancer risk above the target risk level of 10^{-5}. After subtracting metals present at concentrations below background levels, the non-PAH incremental risk for soil was 2×10^{-6} and the incremental soil HI was 9 for the residential scenario.

Using industrial risk-based guidelines, which is current and potential future use scenario, the total cancer risk for soil was 6×10^{-4} and the total soil HI was 0.2. After subtracting metals present at concentrations below background levels, the non-PAH incremental risk for soil was 5×10^{-7} which is below the target risk level.

Arsenic in groundwater was detected above the regulatory screening criteria at AST locations 467B and 495B. Iron and manganese in groundwater was detected above regulatory screening criteria at AST location 467B. Arsenic was reported at concentrations exceeding background levels in groundwater (20.27 µg/L) and California and Federal MCLs (10 µg/L). Iron, manganese and vanadium were detected above their respective background levels; however, these metals do not have an established California or Federal MCL. Benzo(a)pyrene concentrations were reported that exceeded Federal and California Modified MCLs of 0.2 µg/L at locations AP1AAPS-DP17, and AP1AAPS-DP24 . Although metals c and benzo(a)pyrene were detected above their respective screening criteria (i.e., MCLs and background), the groundwater below this parcel is not considered a potential

drinking water source . For this reason, further evaluation of arsenic, iron, manganese, vanadium, and benzo(a)pyrene (outside of IR Site 33) in EBS Parcel 23 is not recommended.

The detection of 1,2-dichloroethane (0.6 µg/L) at a concentration slightly above the MCL (0.5 µg/L) at well M011-A is not of concern because MCLs were used as screening criteria only because groundwater beneath the parcel is not considered a drinking water source. Risk levels for vapor intrusion are below screening levels. The risks and hazards from vapor intrusion are below target levels.

In 2010, an additional soil and groundwater investigation was performed at 10 former AST (467B, 483A, 483B, 485B, 495A, 495B, 496, 499, 599A, and 599B) locations. An aircraft parking and staining evaluation was also completed in EBS Parcel 23. Results from these investigations reported concentration of TPH-diesel and TPH-motor oil exceeding their respective regulatory criteria. TPH-gasoline was not reported at concentrations exceeding regulatory criteria.

The maximum concentration of TPH-diesel was reported in a surface sample from AP1AAPS-DP22 at a concentration of 1,740 mg/kg above the Petroleum Strategy Plan ESL of 83 mg/kg. This concentration exceeds the Alameda Point Soil Preliminary Remediation Criteria – Residential of 429 mg/kg. Using Soil Preliminary Criteria for nonresidential soil (1,914 mg/kg), which is a current and potential future use scenario, the maximum TPH-diesel concentration does not exceed this remediation criteria. Therefore, the Navy recommends no further action for TPH-diesel in soil at EBS Parcel 23.

The maximum groundwater concentration of TPH-diesel was reported in location A1APS-DP12 at 1,730 µg/L, above the ESL from the Petroleum Strategy Plan of 100 µg/L. Seven step-out locations were advanced to define the vertical and lateral extent of the TPH-diesel concentration reported at location A1APS-DP12. The screening criteria are based on a potential drinking water source; however, the groundwater below this parcel is not considered a potential drinking water source. The Alameda Point Groundwater Preliminary Remediation Criteria is 1,400 µg/L for Total TPH. The maximum concentration of TPH-diesel in groundwater is at a sample location with a Total TPH of 1,978 µg/L, which is within the same magnitude as Preliminary Remediation Criteria of 1,400 µg/L. Therefore, the Navy recommends no further evaluation of TPH-diesel in groundwater in EBS Parcel 23.

The maximum concentration of TPH-motor oil was reported in a surface sample from AP1AAPS-DP27 at a concentration of 1,910 mg/kg, above the Petroleum Strategy Plan ESL of 370 mg/kg. This concentration exceeds the Alameda Point Soil Preliminary Remediation Criteria – Residential of 600 mg/kg. Using the Soil Preliminary Criterion for nonresidential soil (2,680 mg/kg), which is a current and potential future use scenario, the maximum TPH-motor oil concentration does not exceed this remediation criterion. Therefore, the Navy recommends no further action for TPH-motor oil in soil at EBS Parcel 23.

The maximum groundwater concentration of TPH-motor oil was reported in a sample collected between 13 and 15 feet bgs in location AP1AAPS-DP01 at 546 µg/L, above the Petroleum Strategy Plan ESL of 100 µg/L. The screening criteria are based on a potential drinking water source; however, the groundwater below this parcel is not considered a potential drinking water source. The Alameda Point Groundwater Preliminary Remediation Criteria is 1,400 µg/L for Total TPH. The reported maximum concentration has a total TPH

of 988 µg/L, and is therefore below the Alameda Point Groundwater Preliminary Remediation Criteria of 1,400 µg/L for Total TPH. The Navy recommends no further evaluation of TPH-motor oil in groundwater in EBS Parcel 23.

8.1.3 EBS Parcel 24

No further evaluation is recommended in EBS Parcel 24. The following are rationales for recommending no further evaluation for the remaining portions of EBS Parcel 24.

A vault and UST removal activity was conducted in March 2005; this removal action included excavation of contaminated soil and the collection of confirmation soil and groundwater samples. There was no other evidence of historical chemical storage, use, or disposal at the EBS parcel. Although TPH-diesel was reported above the screening criterion in two of the sidewall soil samples collected, a soil sample collected from the bottom of the excavation had TPH concentrations below screening criteria. Additionally, the TPH-diesel at concentrations exceeding the screening criterion in sidewall samples from the excavation were below ecological screening criteria used during the removal action and likely represent isolated concentrations. Since this concentration of TPH-diesel does not present an ecological concern, is likely to be an isolated occurrence, and the area is protected from human use, no further evaluation to delineate or remediate TPH-diesel in soil at this location is recommended.

EBS Parcel 24 had a total cancer risk of 2×10^{-6} and a total HI of 0.0061, including exposure to both soil and groundwater. The total cancer risk for soil was 2×10^{-6} and the total soil HI was 0.006. The soil cancer risk, less PAHs, was 9×10^{-10}. Of the total cancer risk and HI, the total groundwater cancer risk was 2×10^{-8} and the total groundwater HI was 0.00003. Lead concentrations in soil (maximum concentration of 5.9 mg/kg) were below the 2004 USEPA residential California-modified PRG of 150 mg/kg and 2010 USEPA industrial RSL of 800 mg/kg. Lead was also reported in this groundwater sample at a concentration of 68.7 µg/L, exceeding the screening criterion of 15 µg/L.

8.2 Transfer Parcel FED-2B

Transfer Parcel FED-2B includes EBS Parcels 25, 26, and 27. Rationales for recommending no further evaluation are presented in the subsections below. There were no AOCs identified at this transfer parcel. An aircraft parking and staining evaluation was completed for this parcel. Based on the initial screening, there was no indication that aircraft parking or staining occurred within this parcel. No sampling was performed for aircraft parking and staining evaluation within this parcel.

Transfer Parcel FED-2B was previously identified for further evaluation as part of IR Site 33. Although Transfer Parcel FED-2B was recommended for no further ecological evaluation in the Runway Wetlands Report, the transfer parcel was included in IR Site 33 because regulatory comments on the report indicated that the conclusions might have been different if another methodology were used. As part of this SI, the regulatory comments were reviewed and the methodologies were evaluated to assess whether the conclusions would change if those recommended by regulatory agencies were implemented. Due to the generally low HQs, the similarity of inorganic chemical concentrations to the background concentrations, the small size of the site, and the use of standard evaluation procedures, the

conclusions of the 2002 ERA for Transfer Parcel FED-2B did not change due to the regulatory agency comments. It is concluded in this SI that the finding of the Runway Wetlands Report that no further evaluation is warranted would be unlikely to change if another methodology were used. For these reasons, no further evaluation is warranted for Transfer Parcel FED-2B. Therefore, it is recommended that the boundaries of IR Site 33 be revised to exclude Transfer Parcel FED-2B.

There are no SWMUs present at Transfer Parcel FED-2B.

8.2.1 EBS Parcel 25

No further evaluation is recommended for EBS Parcel 25. An aircraft parking and staining evaluation was completed for this parcel. Based on the initial screening, there was no indication that aircraft parking or staining occurred within this parcel. EBS Parcel 25 is a designated wetland that does not have a history of chemical use or storage. Based on the land-use restrictions resulting from the designation of the site as wetland habitat, human health risks and hazards were not evaluated for Parcels 25, 26, and 27.

Although metals were reported above CTR values (CCCs and CMCs [selected metals only]) in surface water samples collected from four locations within the ponds at EBS Parcel 25, the reported concentrations do not warrant further evaluation. As stated in Section 7.3, no further ecological evaluation is recommended for the transfer parcel, including EBS Parcel 25.

Based on these findings, it is recommended that the currently defined boundary of IR Site 33 be revised to exclude EBS Parcel 25.

8.2.2 EBS Parcel 26

No further evaluation is recommended for EBS Parcel 26. An aircraft parking and staining evaluation was completed for this parcel. Based on the initial screening, there was no indication that aircraft parking or staining occurred within this parcel. EBS Parcel 26 is included in the area identified as CAA-12. However, the portion of CAA-12 occupied by EBS Parcel 26 was not identified during the corrective action as an area of potential impact and therefore did not require sampling. Additionally, there was no evidence of chemical use, storage, or release in this portion of the parcel. Although sampling was not conducted at EBS Parcel 26 because no potential release areas were identified, this EBS parcel is located adjacent to EBS Parcel 25, which is similar to EBS Parcel 26 in terms of past usage and current site conditions. Data collected for EBS Parcel 25 are considered representative of conditions at all of the Transfer Parcel FED-2B wetland areas. As stated in Section 7.3, no further ecological evaluation is recommended for the transfer parcel, including EBS Parcel 26.

Based on these findings, it is recommended that the boundary of IR Site 33 be revised to exclude EBS Parcel 26. No further evaluation is recommended for EBS Parcel 26.

8.2.3 EBS Parcel 27

Further evaluation is not recommended because there was no evidence of aircraft parking and staining; chemical storage, use, or releases at the EBS parcel. Additionally, there was no human health incremental cancer risk or hazard index in soil and the incremental

groundwater risk and hazard index were below the target risk levels. Chemicals analyzed in soil and groundwater was not reported above screening criteria. Additionally, as stated in Section 8.2, no further ecological evaluation is recommended for the transfer parcel, including EBS Parcel 27.

Based on these findings, it is recommended that the currently defined boundary of IR Site 33 be revised to exclude EBS Parcel 27. No further evaluation is recommended for EBS Parcel 27.

8.3 Transfer Parcel FED-2C

No further evaluation is recommended for Transfer Parcel FED-2C. Transfer Parcel FED-2C consists entirely of EBS Parcel 23E. No AOCs have been identified at the transfer parcel. In 2010, an aircraft parking and staining evaluation was performed No further evaluation is recommended for EBS Parcel 23E based on the historical use, chemical concentrations reported, and the results of the human health risk and ecological evaluations.

EBS Parcel 23E was historically used as a taxiway. There was no evidence of chemical use or storage. Aircraft parking and staining was the only possibility of release in the parcel. Chemical concentrations reported in the soil and groundwater samples collected during the IR Site 26 investigation were below screening criteria. In EBS Parcel 23E, one sample location for soil and groundwater was advanced to investigate possible aircraft parking and staining. One concentration of chromium in soil was reported above the regulatory screening level. In groundwater, benzo(a)pyrene, iron, and manganese was reported above the regulatory screening level. However, there were no carcinogenic compounds reported in soil, there was no incremental groundwater risk, and the incremental soil and groundwater hazard indices were significantly below the target level of 1.

No further ecological evaluation was recommended at EBS Parcel 23E because:

- There were no potentially complete exposure pathways found to exist for ecological receptors,
- It is unlikely that potentially complete exposure pathways exist for special-status species, and
- There were no sensitive habitats present at the EBS parcel.

There are no SWMUs present at Transfer Parcel FED-2C.

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Tables

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TABLE 2-1
Monthly Temperature and Rainfall Summary for Alameda Island
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average maximum temperature (°F)	57.3	61.6	63.3	66.5	69.0	71.7	72.6	73.6	74.6	72.0	63.9	57.4	66.9
Average minimum temperature (°F)	44.5	47.9	49.1	50.6	53.5	55.7	57.0	58.3	58.3	55.3	49.6	44.5	52.0
Average total precipitation (inches)	4.85	4.40	3.56	1.35	0.56	0.12	0.07	0.10	0.32	1.31	3.45	3.33	23.43

Notes:

°F – degrees Fahrenheit

Source: Oakland Museum data from October 1, 1970, to July 31, 2000

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TABLE 3-1
Buildings, Structures, and Open Spaces at Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel or Subparcel	Underground Conduits Present on Parcel	Building, Structure, or Open Space Number	Construction Date	Demolition Date	Past Activities and Uses of Building or Open Space
Transfer Parcel FED-1A					
5	Storm drain lines	OS005	NA	NA	Asphalt and concrete paving, primarily used as an aircraft runway. Portions of two runways (Runways 7 and 13) are located on this parcel with associated aircraft-arresting gear, an asphalt access road, parking areas, and grassy open space. Approximately 27 acres.
		Structure 467B	NA	Prior to 1995	Arresting-gear station on aircraft Runway 7 has associated ASTs (one tank on each side of the runway) used in activating the arresting gear. The southern portion of the arresting gear and the AST 467B on southern side of runway are within Transfer Parcel FED-1A.
23	Storm drain, fuel lines, electrical conduit	Parcel 23	NA	NA	EBS Parcel 23 encompasses the majority of runways, taxiways and parking aprons in the transfer parcel, occupying approximately 378 acres. EBS Parcel 23 includes a portion of aircraft Runways 25 and 31. Most of the area is open space paved with asphalt or concrete.
		OS023-II	NA	NA	Open Space II is 70 percent concrete paving, 15 percent asphalt paving, and 15 percent bare soil and vegetation. Open Space II has been used as a parking apron for helicopters and airplanes. Structures located in Open Space II include Structure 488, Buildings 272, 407, 499, 490, and unnumbered buildings #1 and #2.
		OS023-III	NA	NA	Open Space III is 95 percent asphalt paving with patches of soil and vegetation, and 5 percent concrete taxiways. Structures located in the open space include Structures 480, 496, and 489. In general, Open Space III consists of abandoned runways.
		OS023-IV	NA	NA	Open Space IV includes aircraft Runway 31. Ninety-five percent of the open space is asphalt and concrete paving; 5 percent is bare soil covered with grasses and other vegetation. Open Space IV was used primarily as an aircraft runway.

TABLE 3-1
Buildings, Structures, and Open Spaces at Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel or Subparcel	Underground Conduits Present on Parcel	Building, Structure, or Open Space Number	Construction Date	Demolition Date	Past Activities and Uses of Building or Open Space
23 (continued)		OS023-V	NA	NA	Open Space V is located in the southwestern corner of EBS Parcel 23, to the southwest of Runway 31. Nearly 50 percent of the surface of this open space is paved with asphalt or concrete and about 50 percent is covered with grasses and other vegetation. It includes taxiways and access roads and Buildings 50, 51, 56, 57, 58, 270, and 568 through 581, which were used to hold munitions.
		Buildings 50, 51, 56, 57, 58	1941	None	High explosive, pyrotechnic, and missile magazines.
		Building 100	Unknown	None	Transformer vault.
		Structure WD-259	1983	None	Aircraft washdown pad (WD-259).
		Building 270	1944	1987	Pyrotechnics magazine.
		Building 272	1945	None	Liquid oxygen/liquid nitrogen facility, miscellaneous storage facility.
		Building 379	1966	Unknown	Tactical antenna station. Not able to determine if this was located in Transfer Parcel FED-1A.
		Building 406	1957	1993	Tactical antenna station. Not able to determine if this was located in Transfer Parcel FED-1A.
		Building 407	1957	None	Liquid oxygen/liquid nitrogen storage.
		Structure 407 A/B	1957 to 1967	None, 1988	Fuel farm.
		Structure 452 A/B	1960	None	Aviation meteorological facility.
		Structure 480	1942	None	Wind direction indicator.

TABLE 3-1
Buildings, Structures, and Open Spaces at Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel or Subparcel	Underground Conduits Present on Parcel	Building, Structure, or Open Space Number	Construction Date	Demolition Date	Past Activities and Uses of Building or Open Space
23 (continued)		Structure 483 A/B, 495 A/B, 599 A/B	1957 to 1967	None, 1988	Aircraft-arresting devices along Runway 31 with two associated ASTs, AST A and AST B.
		Structure 485 B	1957 to 1967	None, 1988	Aircraft-arresting device along Runway 25 with two associated ASTs; only AST 485B is in within Transfer Parcel FED-1A.
		Structure 488	1944	None	Aircraft compass calibration pad.
		Structure AST-488		None	Former AST associated with Structure 488 (compass calibration pad).
		Structures 489	1944	None	Aircraft compass calibration pad.
		Structure 490	1957	None	Line maintenance shelter.
		Building 492	Unknown	Unknown	Sewage pumping station. Possibly located in Transfer Parcel FED-1A.
		Structure 496	1957 to 1967	None, 1988	GAC turntable.
		Structure AST 496	1957 to 1967	None, 1988	Former AST associated with Structure 496 (turntable).
		Building 499	1964	NA	Electrical distribution shelter.
		Structure AST-499	1964	NA	Former AST 499 – 1,000-gallon diesel tank.
		Building 519	1968	1987	Field monitor station, 64 square feet. Possibly located in Transfer Parcel FED-1A.
		Structure 520	1968	None	Aircraft compass calibration pad. Possibly located in Transfer Parcel FED-1A.

TABLE 3-1
Buildings, Structures, and Open Spaces at Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel or Subparcel	Underground Conduits Present on Parcel	Building, Structure, or Open Space Number	Construction Date	Demolition Date	Past Activities and Uses of Building or Open Space
23 (continued)		Structure 567	1957 and 1967	None	Aircraft arresting device. Possibly located in Transfer Parcel FED-1A.
		Structures 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581	1975	1992	One-story CONEX boxes served as ready magazines.
		Unnumbered building 1 (OTHO23-1)	Unknown	Unknown	Storage of magnetic compass calibrator equipment.
		Unnumbered building 2 (OTHO23-2)	Unknown	Unknown	Unknown use.
24	Storm drain	OS24	NA	NA	Open area surrounded by paved runway. Approximately 10 acres; 100 percent unpaved open space. Former and current use: California least tern habitat/wildlife habitat.
Transfer Parcel FED-2B					
25	Storm drain	OS25	NA	NA	Open area bordering on open water of San Francisco Bay to the south, with brackish pools and estuarine intertidal wetlands; 100 percent unpaved open space. Former and current use: industrial, wetland, California least tern habitat. Approximately 24 acres.

TABLE 3-1
Buildings, Structures, and Open Spaces at Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel or Subparcel	Underground Conduits Present on Parcel	Building, Structure, or Open Space Number	Construction Date	Demolition Date	Past Activities and Uses of Building or Open Space
25 (continued)	Three concrete pads	Unnumbered			Three concrete pads reported in this parcel: One pad was empty, the second was gated and empty and the third formerly supported a wind meter.
26	None	OS26			Open area; 100 percent open unpaved space. Former and current use: wetland, California least tern habitat. Approximately 1.2 acres.
27	None	OS27			Open area; 100 percent unpaved open space. Approximately 1.1 acres.
Transfer Parcel FED-2C					
23E	Storm drain lines with catch basins, fuel lines (abandoned)	OS23E	NA	NA	Taxiway Number 4 on east side of runway areas. Approximately 12 acres. Paved open space.

Notes:
AST – aboveground storage tank
EBS – environmental baseline survey
FED – federal agency transfer
GAC – ground approach control
NA – not applicable
OS – open space
Source: IT 2001

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TABLE 3-2
Background Levels of Metals in Soil* in the Runway Area and Central Portion of Alameda Point (Pink Area)
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Analyte	95 Percentile (mg/kg)
aluminum	13,960
antimony	9.5
arsenic	9.14
barium	93.68
beryllium	1.27
cadmium	1.72
chromium	54.84
cobalt	14.3
copper	39.14
iron	22,280
lead	37.66
manganese	383
mercury	0.52
molybdenum	5.2
nickel	55.72
selenium	1.78
silver	2.22
thallium	0.5
titanium	518
vanadium	47.34
zinc	67.48

Notes:
* See Figure 3-3
mg/kg – milligrams per kilogram
Source: TtEMI 2004

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TABLE 3-3
Background Levels of Metals in Soil in the Far Western Portion of Alameda Point (Yellow Area)*
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Analyte	95th Percentile (mg/kg)
aluminum	12,250
antimony	3.6
arsenic	25
barium	78
beryllium	1.1
cadmium	2
chromium	45
cobalt	9.4
copper	48
iron	18,850
lead	175
manganese	315
mercury	0.18
nickel	48
selenium	11
silver	6.5
thallium	5.8
vanadium	47
zinc	125

Notes:
* See Figure 3-3
mg/kg – milligrams per kilogram
Source: TtEMI 2004

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TABLE 3-4
Background Levels of Metals in Shallow Groundwater at Alameda Point
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Analyte	95th Percentile (µg/L)
aluminum	1,070
antimony	37.50
arsenic	20.72
barium	569.50
beryllium	2.50
chromium	12.45
copper	24.03
iron	6,586
lead	11.45
manganese	1,741
selenium	8.58
thallium	16.15
vanadium	26.27
zinc	36.39

Notes:
µg/L – micrograms per liter

Source: TtEMI 2004

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TABLE 3-5
Historical Uses and Status of SWMUs Located in Transfer Parcel FED-1A*
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

AST/ SWMU	EBS Parcel	Description	Removal Status	Navy Recommendation	Regulatory Status	Reference(s)
AST 467B	5	100-gallon tank containing diesel; associated with Building 467	Removed; removal date unknown; however, Building 467 was removed prior to 1995	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2005, TtEMI 2006
AST 407A	23	6,000-gallon tank containing liquid oxygen	Removed prior to 2002	Integrated with the CERCLA program. NFA recommended.	Navy to prepare closure letter	SulTech 2005
AST 407B	23	6,000-gallon tank containing liquid oxygen	Removed prior to 2002	Integrated with the CERCLA program. NFA recommended.	Navy to prepare closure letter	SulTech 2005
AST 483A	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 483B	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 485B	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 488	23	5,000-gallon tank containing AVGAS	Removed prior to 1994	Integrated with Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005, 2006
AST 495A	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 495B	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 496	23	200-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 499	23	1,000-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 599A	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005
AST 599B	23	30-gallon diesel tank	Removed prior to 1994	Integrated with the Petroleum Program. NFA recommended.	Navy to prepare closure letter	SulTech 2004, 2005

TABLE 3-5
Historical Uses and Status of SWMUs Located in Transfer Parcel FED-1A*
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

AST/ SWMU	EBS Parcel	Description	Removal Status	Navy Recommendation	Regulatory Status	Reference(s)
WD 259	23	aircraft washdown pad	Not removed	Integrated with the CERCLA program. NFA recommended.	Navy to prepare closure letter	SulTech 2005

Notes:

* There are no SWMU sites in Transfer Parcels FED-2B or FED-2C

Acronyms/Abbreviations:

AST – aboveground storage tank
AVGAS – aviation gasoline
CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act
EBS – environmental baseline survey
FED – federal agency
NFA – no further action
SWMU – solid waste management unit
WD – washdown

TABLE 4-1
Summary of Data Quality Objectives
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Problem Definition	Environmental Questions to be Answered	Method
Aircraft Parking/Staining Evaluation		
No groundwater sampling has occurred in the in the aircraft parking apron in the northeastern and central-eastern portion of EBS Parcel 23 where significant staining was observed in historical aerial photographs resulting from aircraft parking, possible maintenance, and possible washdown activities. During the BCT site walk on July 28, 2009, BCT members requested that groundwater samples be collected in this aircraft parking apron. In addition, further evaluation of aircraft parking and staining is needed to assess if additional areas have been impacted by these historic activities.	1. Was there a release(s) of hazardous constituents to groundwater from aircraft parking, possible maintenance, and possible washdown activities in the aircraft parking apron where significant staining was observed in historical aerial photographs? 2. Was there a release(s) of hazardous constituents from historical use of other areas of the transfer parcel for aircraft parking, maintenance, and washdown activities?	Soil and discrete direct-push samples will be collected from three boreholes advanced in the northeastern and central-eastern portion of EBS Parcel 23 where significant staining was observed. Samples will analyzed for TAL metals, petroleum constituents using silica gel cleanups (i.e., TPH-gasoline, TPH-diesel, TPH-motor-oil), TCL VOCs, and TCL PAHs. Stains identified in other areas of the transfer parcel during the aerial photograph review will be verified by a site reconnaissance.
AOC 1 - PCB and Pesticide Evaluation		
Aroclor-1260 was detected at sample location A-1 above the residential screening criterion at AOC 1. In addition, detection limits used in previous studies were above screening criteria for up to six PCBs and one pesticide compound, creating a data gap at four previous sample locations (A-2, A-3, A-4, and A-6). Therefore, the spatial coverage of reliable PCB and pesticide data is inadequate to assess whether or not a release has occurred and, if so, if the release resulted in contamination at concentrations that would pose a potentially unacceptable risk to human or ecological receptors or leaching concern for groundwater.	1. What is the extent of PCB contamination above residential screening levels surrounding sample location A-1, previous sample location where Aroclor-1260 exceeded the screening criterion during the EBS? 2. Are PCBs and pesticides present at previous surface soil sample locations A-2, A-3, A-4, and A-6, which were previously sampled for PCBs and pesticides, but detection limits exceeded the screening criteria? 3. If PCBs and pesticides are present at concentrations above the screening criteria new sample locations, is further investigation or action warranted?	Advance one borehole at previous sample location A-1 and four step-out boreholes 25 feet to the north, south, east, and west of previous sample A-1. Soil samples will be analyzed for TCL PCBs. Advance four boreholes at previous surface soil sample locations A-2, A-3, A-4, and A-6. Soil samples will be analyzed for PCBs and pesticides.

TABLE 4-1
Summary of Data Quality Objectives
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Problem Definition	Environmental Questions to be Answered	Method
13 SWMU Former ASTs - TPH, PCB, and Metals Evaluation		
No soil samples have been collected in the vicinity of ten of the former ASTs located in EBS Transfer Parcel 23. Prior sampling at the other two former ASTs in EBS Transfer Parcel 23 has been inadequate to sufficiently address the potential chemical constituents of concern that may be associated with these former ASTs. The potential constituents of concern at the former ASTs include Petroleum-Based Fuels, PCBs and Metals	1. Was there a release of petroleum-based fuels at any of the 11 of the 13 former ASTs for petroleum storage? 2. Was there a release of PCBs at any of the five former ASTs associated with aircraft-arresting devices that were not previously sampled and analyzed for PCBs? 3. Was there a release of paint-based metals occurred at any of the 13 former ASTs? 4. If a CERCLA-related release is identified, is further investigation or action warranted?	Advance two boreholes at each former ASTs. Analyze soil samples collected near former ASTs 467B, 483A, 483B, 485B, 495A, 495B, 496, 499, and 599A for TPH-diesel, TPH-motor-oil, TCL VOCs and TCL PAHs. Analyze soil samples collected near AST 599B for TCL VOCs and TCL PAHs. Soil samples collected near former ASTs 467B, 483A, 483B, 495A, 495B, and 485B will be analyzed for TCL PCBs. Soil samples collected near former AST488 will be analyzed for Title 22 metals.
IR Site 33 - PAHs in Soil Evaluation		
Five boreholes for PAH soil sample collection have been advanced within IR Site 33, and all five boreholes have had samples with B(a)P equivalent concentrations that exceed the Alameda Point-specific screening criterion for residential use. The five boreholes were between 400 and 1,000 feet apart from one another. This sampling density is inadequate to delineate the aerial extent of PAHs in soils within IR Site 33.	1. What is the area of release of PAH contamination surrounding sample locations 32FED-1A-31, 32FED-1A-38, 32FED-1A-47, 32FED-1A-58, and 32FED-1A-67? 2. If a CERCLA-related release is identified, is further investigation or action warranted?	Advance four boreholes near each of the 2002 boreholes, 40 feet to the north, south, east, and west of the former boring. Soil samples collected will be analyzed for TCL PAHs.
Munitions in Soil at Former Munitions Storage Area		
No soil sampling has occurred in the former munitions area and one explosive was detected at a low concentration below the screening criteria in a grab groundwater sample. Although the data collected during the 1994 EBS suggest there has not been a CERCLA-related release at the site that has resulted in contamination of groundwater, sufficient groundwater samples have already been collected to help draw conclusions for this area; however, no soil samples have been collected in the former munitions area.	1. Was there a release(s) of hazardous constituents from historical munitions storage? 2. If a CERCLA-related release is identified, is further investigation or action warranted?	Advance one borehole each near the front doors of Buildings 50, 51, 56, 57, 58, and 270, one near the pervious grab groundwater location that had the low level detect of an explosive, and two randomly placed near the former lockers. Soil samples will be analyzed for explosives.

TABLE 4-1
Summary of Data Quality Objectives
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Problem Definition	Environmental Questions to be Answered	Method
Firefighting Training Activities Evaluation		
Historic soil sampling (2002 PAH investigation) did not account for all potential hazardous constituents that may have been used during the firefighting training activities in Open Space II so these data are inadequate to draw this conclusion with certainty.	1. Was there a release(s) of hazardous constituents from historic firefighting training activities? 2. If a CERCLA-related release is identified, is further investigation or action warranted?	Thirty-five boreholes will be advanced in an approximate 500 foot grid pattern across Open Space III. Soil samples will be analyzed for petroleum constituents using silica gel cleanups (i.e., TPH-gasoline, TPH diesel, and TPH-motor-oil), TCL VOCs, dioxins/furans, and TAL metals.
Building 100 PCB Evaluation		
Although there are no records and is no evidence of past releases observed during the preliminary assessment performed by the Facility Management Office, the potential presence of CERCLA-related hazardous substances cannot be ruled out without sample collection due to the nature of the historical activities at Building 100.	1. Was there a release of PCBs at Building 100? 2. If a CERCLA-related release is identified, is further action warranted?	Concrete samples will be collected from a 1.5-meter grid pattern on the floor of each of the two rooms that comprise Building 100 forming six sampling areas. Sub-samples will composited to form one composite sample per sampling area which will be analyzed for TCL PCBs.
Washdown 259 Evaluation		
Soil and groundwater samples have been collected near Washdown 259; however, no soil or groundwater samples have been collected from beneath the trench drain. Although the data collected during the 1994 EBS suggest there has not been a CERCLA-related release at the site that has resulted in contamination of groundwater or soil above acceptable levels, no samples have been collected from the trench drain or from the eastern side of the wash pad.	1. Was there a release(s) of hazardous constituents from historic washdown activities at this area? 2. If a CERCLA-related release is identified, is further action warranted?	Advance two boreholes within the open trench drain and one borehole to the east and south of Washdown 259. Soil and discrete direct-push samples will be collected from each borehole and analyzed for TCL VOCs.

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TABLE 4-2
Analytical Methods by Media
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Media Investigated	Analysis	Methods
Soil		
	VOCs	SW8260B/624
	TPH-P	SW8015B-P
	TPH-E	SW8015B-E
	PAHs	SW8270Sim
	Pesticides	SW8081A
	PCBs	SW8082
	Dioxins/Furans	SW 8290
	Explosives	SW8330
	Metals	SW6010B/7470A
	Radionuclides	901.1M
Concrete		
	PCBs	SW8082
Groundwater		
	VOCs	SW8260B/624
	TPH-P	SW8015B-P
	TPH-E	SW8015B-E
	PAHs	SW8270Sim
	PCBs	SW8082
	Metals	SW6010B/7470A

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TABLE 6-1
Cancer Risk and Noncancer Hazard Indices
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

		Cancer Risk[a]							Noncancer Hazard [a,b]			
Transfer Parcel	**EBS Parcel**	**Total Risk for Soil and GW**	**Total Risk for Soil**	**Incremental Risk[c] for Soil**	**Risk for PAHs in Soil**	**Total Risk for Soil (Non-PAH)**	**Incremental Risk[c] for Soil (Non-PAH)**	**Total Risk for GW from Vapor Intrusion**	**Total Hazard for Soil and GW**	**Total Hazard for Soil**	**Incremental Hazard[d] for Soil**	**Total Hazard for GW from Vapor Intrusion**
	5	4E-05	4E-05	7E-06	6E-06	3E-05	2E-06[e]	5E-07	2.1E+00	2.1E+00	1.1E+00	1.9E-02
	5[h]	8E-06	8E-06	9E-07	4E-07	7E-06	5E-07	NA	1.6E-01	1.6E-01	8.4E-02	NA
FED-1A	23	9E-03	9E-03	9E-03	9E-03[f]	3E-05	2E-06[e]	7E-08	9.8E+00	9.8E+00	9.1E+00[g]	2.4E-02
	23[h]	6E-04	6E-04	6E-04	6E-04[f]	7E-06	2E-07	NA	7.6E-01	7.6E-01	7.1E-01	NA
	24	8E-06	8E-06	8E-06	8E-06	9E-10	9E-10	2E-08	6.1E-03	6.0E-03	6.0E-03	3.4E-05
FED-2B	27	3E-06	3E-06	NA	NA	3E-06	NA	2E-09	7.7E-01	7.7E-01	NA	NA
FED-2C	23E	4E-06	4E-06	6E-08	NA	4E-06	6E-08	NA	1.3E+00	1.3E+00	9.3E-01	9.3E-03

Notes:
[a] Radionuclide data were not included in the risk screening evaluation completed as part of this SI because the intent of the sampling was for screening purposes and the type of radionuclide analysis performed was not meant for use in risk assessment.
[b] PAH and non-PAH hazard indices not presented separately due to insignificant contributions to the hazard index by PAHs.
[c] Incremental risk is total risk less risk from background metals.
[d] Incremental hazard is total hazard less hazard from background metals.
[e] Shaded risk value exceeds the target cancer level of 1×10^{-6} for soil (non-PAH).
[f] Shaded risk value exceeds the target cancer level of 1×10^{-5} for PAHs in soil.
[g] Shaded risk value exceeds the target hazard index of 1.
[h] Values calculated using industrial RSLs; all others use residential RSLs.

Acronyms/Abbreviations:
EBS – environmental baseline survey
FED – federal agency
GW – groundwater
NA – not applicable
PAH – polycyclic aromatic hydrocarbon
PRG – preliminary remediation goal

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TABLE 8-1
Recommendation Summary Table
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Transfer Parcel	EBS Parcel	Recommendation
FED-1A	5	• Continue monitoring of volatile organic compounds under the Alameda Point BGMP at monitoring wells M025A and M025C in AOC 2 for a minimum of 1 year. The purpose of the monitoring is to confirm that VOC levels remain within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario and to ensure VOCs are not migrating to the SWBZ.
FED-1A	23	• Further evaluation of PAHs in soil and groundwater at IR Site 33 as part of the IR Site 33 Investigation. • It is recommended that the IR Site 33 boundary be revised to exclude the portion now located in Transfer Parcel FED-2B • Continue monitoring of total radium under the Alameda Point BGMP at DRA-01 to verify previous total radium result reported at the MCL; if total radium result is still at or above MCL the sample will be speciated. • Monitor lead and polycyclic aromatic hydrocarbons under the Alameda Point BGMP at M108-A in AOC 3 to verify lead and naphthalene results in a groundwater sample collected from the bottom of a vault and UST excavation. • Continue monitoring of total radium under the Alameda Point BGMP at M108-B to verify previous total radium result reported above the MCL; if total radium result is still at or above MCL the sample will be speciated.
FED-2B	25	• No further evaluation recommended.
FED-2B	26	• No further evaluation recommended.
FED-2B	27	• No further evaluation recommended.
FED-2C	23E	• No further evaluation recommended.

Notes:

AOC = Area of Concern

BGMP = Basewide Groundwater Monitoring Program

EBS = Environmental Baseline Survey

FED = Federal Agency

UST=Underground Storage Tank

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Figures

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N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURES 1-1 THROUGH 1-3

FIGURE 2-1 – REGIONAL TOPOGRAPHY AND GEOLOGY

FOR ADDITIONAL INFORMATION, CONTACT:

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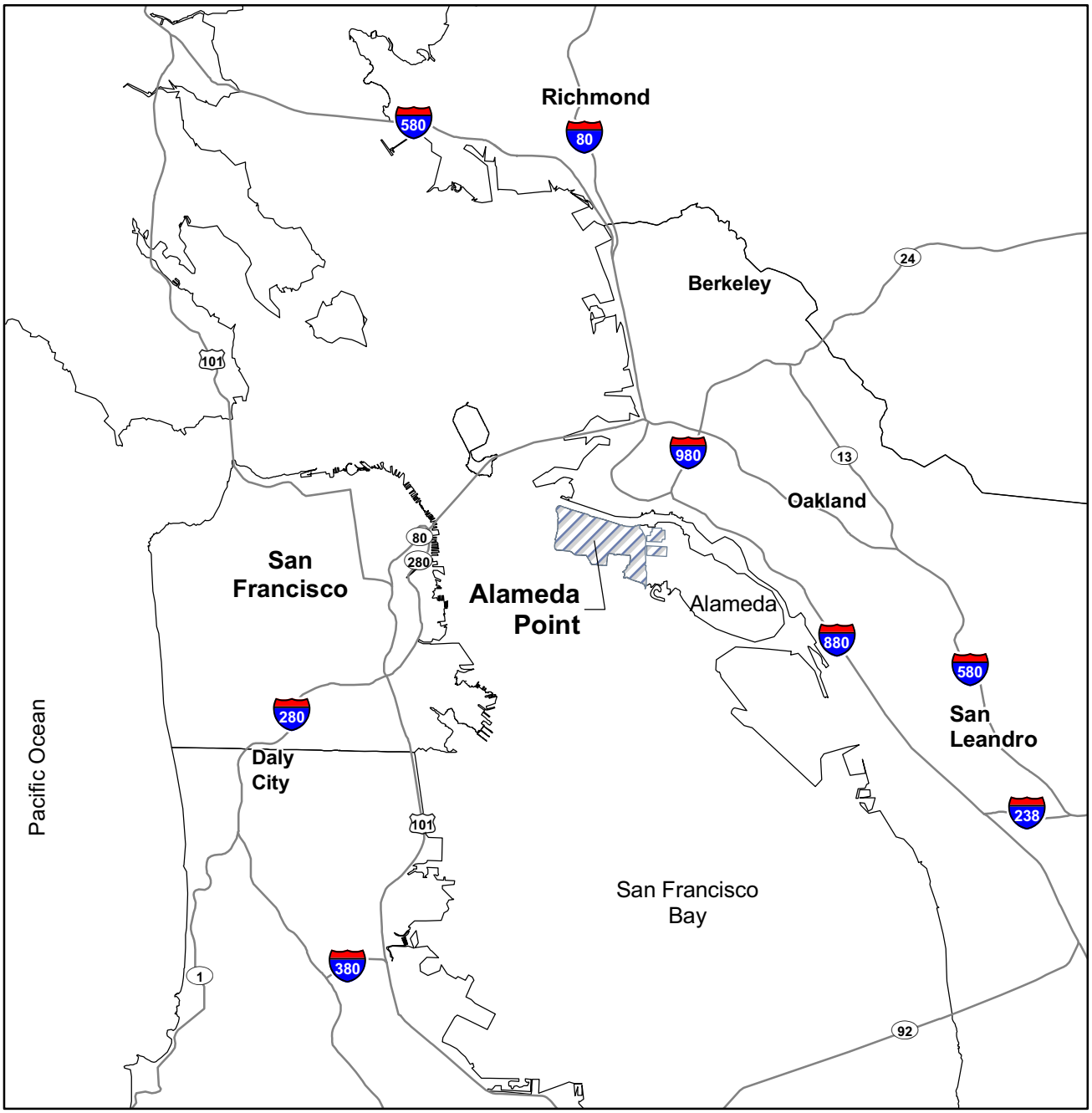
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil



LEGEND

Alameda Naval Air Station

County Boundary

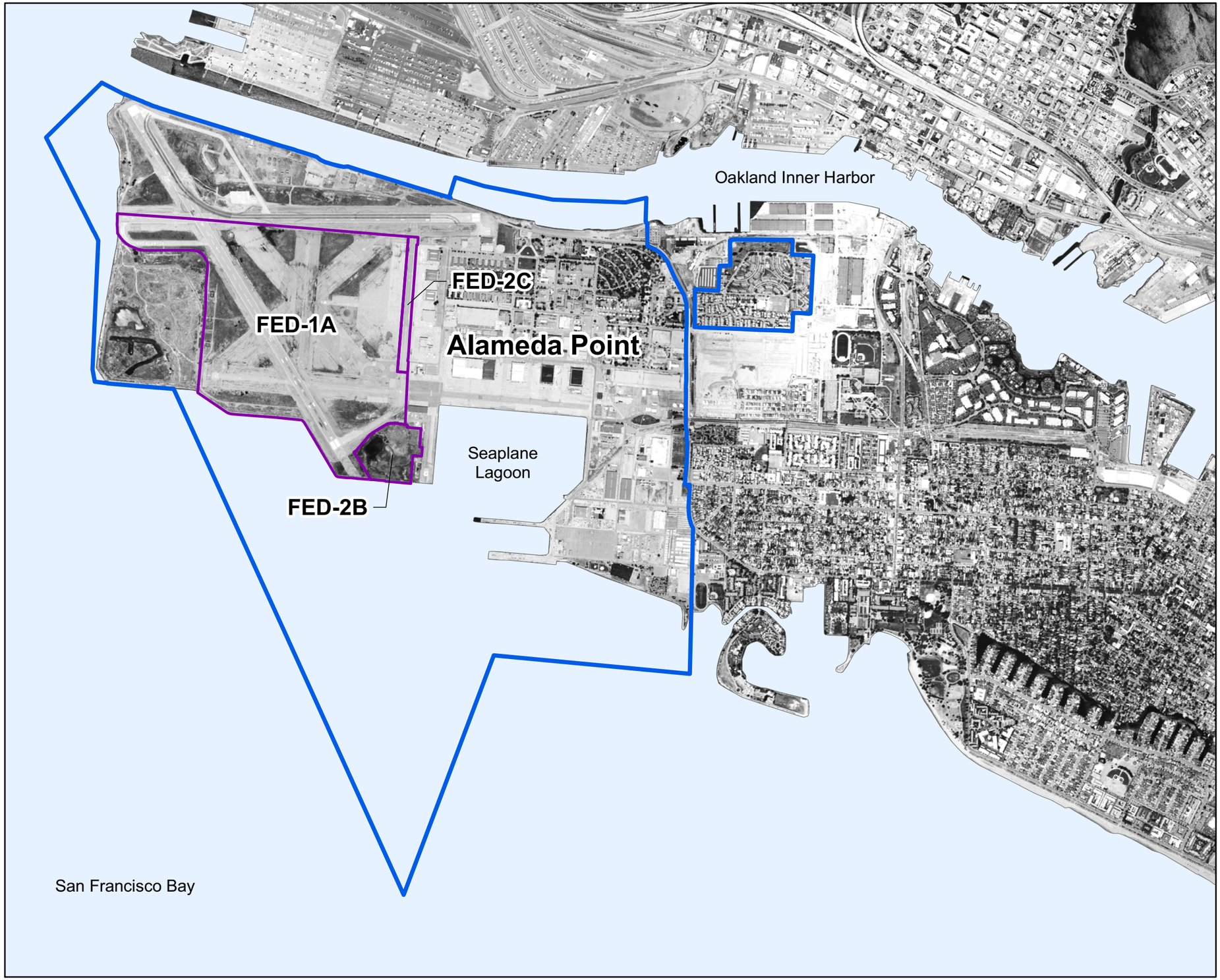
VICINITY MAP

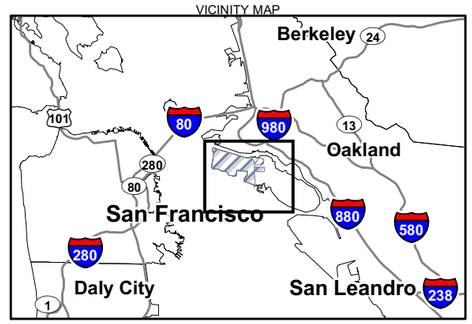
N

0 0.5 1 2 3 4

Miles

FIGURE 1-1
Alameda Point Regional Map
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California





LEGEND

- Alameda Point Navy Property Boundaries
- Transfer Parcel Boundaries
- Water

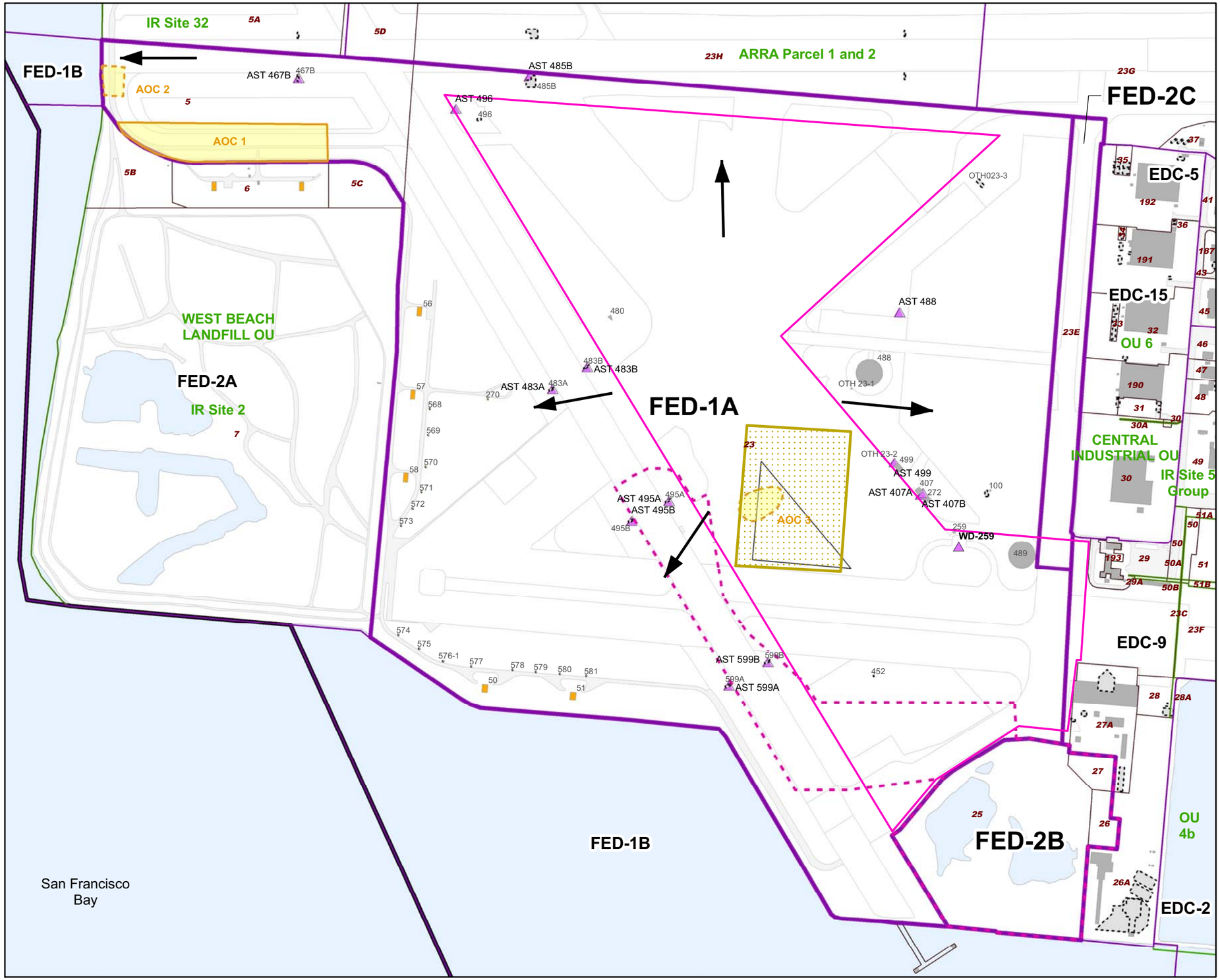
Notes:
EDC = Economic Development Conveyance
FED = Federal Agency

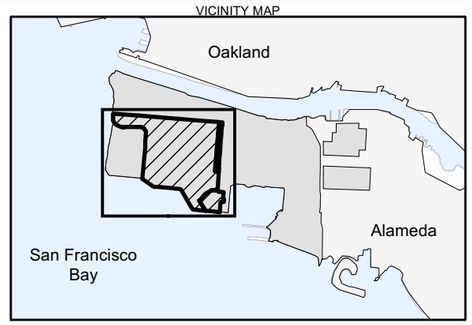
Aerial Source:
National Aerial Imagery Program, August 2005

N

0 2,000 4,000
Feet

FIGURE 1-2
Location of Transfer Parcels FED-1A, FED-2B, FED-2C In Alameda Point
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California





LEGEND

- SWMU
- IR SITE 33
- Area of Concern (Soil)
- Area of Concern (Groundwater)
- Transfer Parcels FED-1A, 2B, and 2C
- Other Transfer Parcels
- Open Area 3 (suspected Firefighter Training Area)
- Environmental Restoration Site
- Alameda Point Navy Property Boundaries
- Environmental Baseline Survey Parcel
- Least Tern Sanctuary
- Munitions Storage Areas (MSA)
- Building or Structure (Present)
- Building or Structure (Removed)
- Water
- Approximate Groundwater Flow Direction

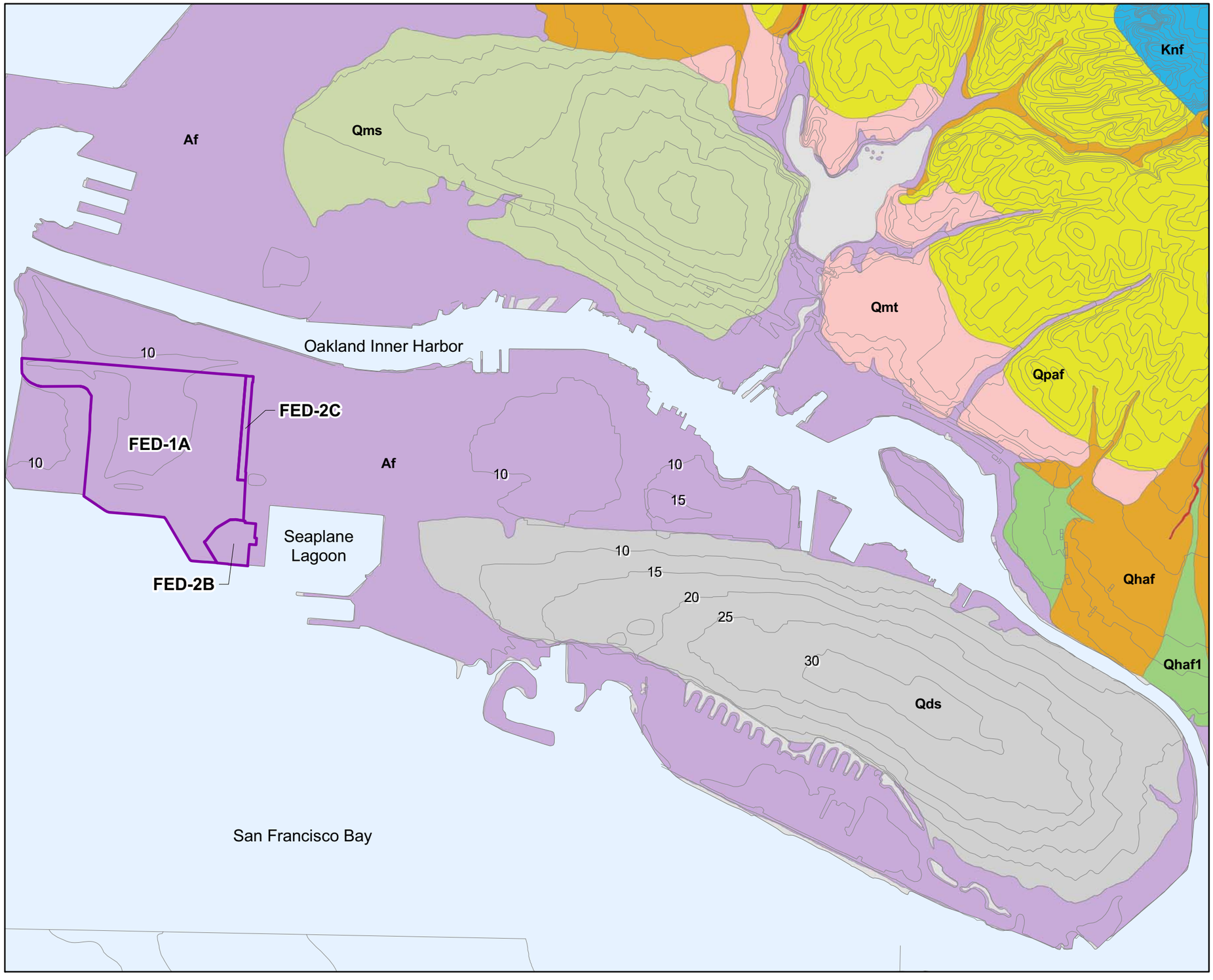
Notes:
EDC = Economic Development Conveyance
FED = Federal Agency
OU = Operable Unit
IR = Installation Restoration (Program)

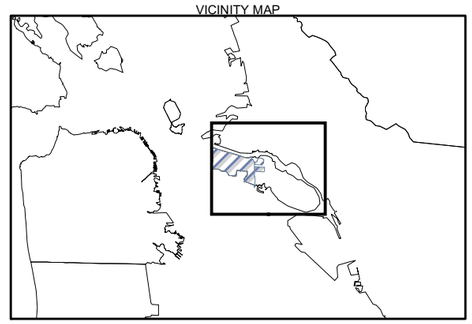
GROUNDWATER FLOW DIRECTION FROM:
INNOVATIVE TECHNICAL SOLUTIONS, INC. 2007.
FALL 2006 QUARTERLY GROUNDWATER MONITORING DATA REPORT,
ALAMEDA POINT, ALAMEDA, CALIFORNIA.MARCH.
NOT INDEPENDETLY VERIFIED BY CH2M HILL, INC

N

0 600 1,200
Feet

FIGURE 1-3
Transfer Parcels FED-1A, FED-2B, FED-2C and Adjacent Areas
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California





LEGEND

- Transfer Parcel FED-1A, 2B, 2C Boundaries
- topo arc
- Water
- Af - Artificial Fill

Quaternary (Q) Period:

- Qds - Dune Sand
- Qhaf - Alluvial Fan and Fluvial Deposit (Holocene)
- Qhaf1 - Younger Alluvial Fan Deposits (Holocene)
- Qhsc - Steam Channel Deposits (Holocene)
- Qms - Merritt Sand (Holocene and Pleistocene)
- Qmt - Marine Terrace Deposits (Pleistocene)
- Qpaf - Alluvial Fan and Fluvial Deposits (Pleistocene)

Cretaceous (K) Period:

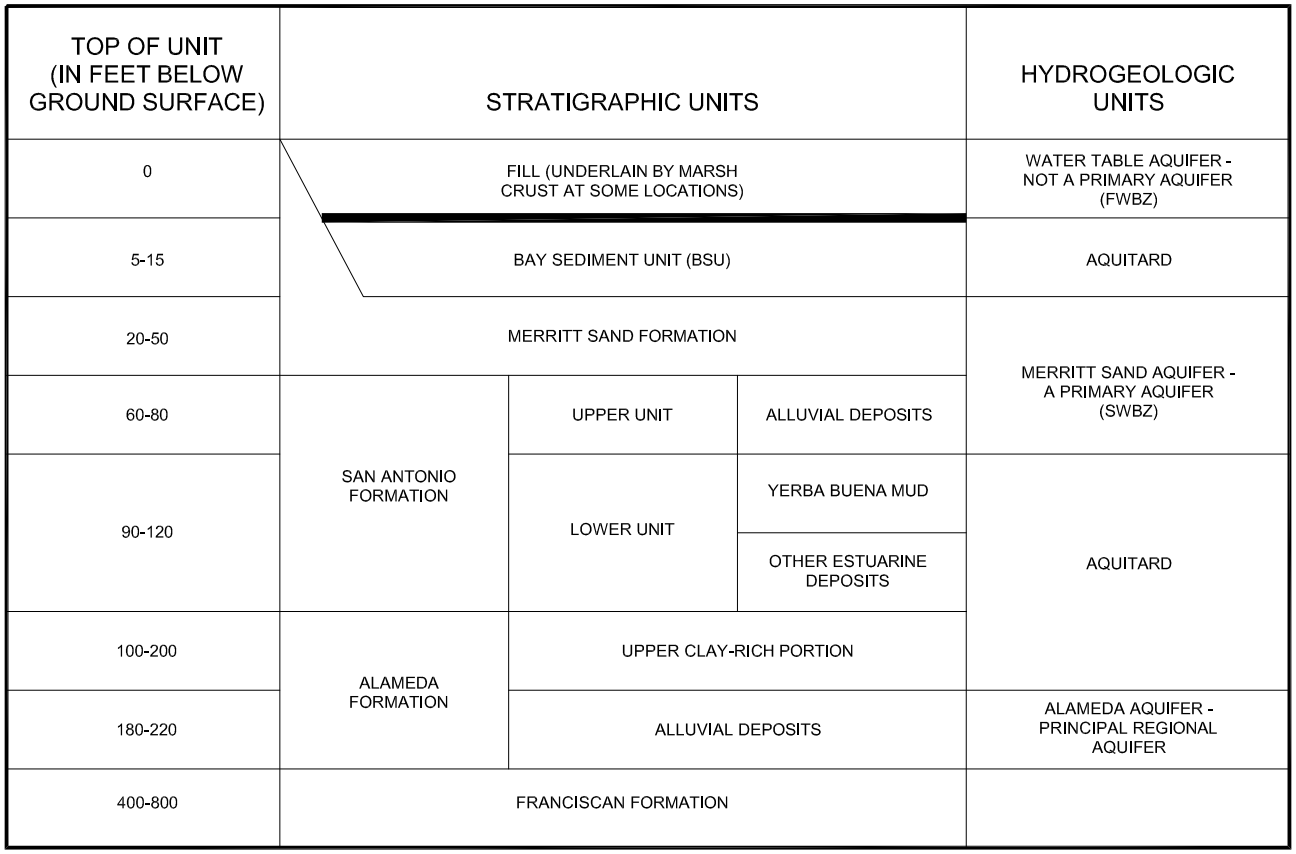
- Kfn - Sandstone (Late Cretaceous)

Notes:
SI - Site Inspection
FED - Federal Agency

N

0 2,000 4,000 6,000
Feet

FIGURE 2-1
Regional Topography and Geology
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California



NOTES:

FWBZ - FIRST WATER-BEARING ZONE
SWBZ - SECOND WATER-BEARING ZONE

SOURCE:

TETRA TECH EM INC. 1999. OU-2 RI REPORT DRAFT, ALAMEDA POINT, ALAMEDA, CALIFORNIA. PREPARED FOR THE UNITED STATES DEPARTMENT OF THE NAVY, ENGINEERING FIELD ACTIVITY WEST, NAVAL FACILITIES ENGINEERING COMMAND, SAN BRUNO, CALIFORNIA. JUNE 29.

FIGURE 2-2
Schematic Stratigraphy and Hydrogeology of Alameda Point
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

FIGURES TAKEN FROM:
INNOVATIVE TECHNICAL SOLUTIONS, INC. 2008. ALAMEDA BASEWIDE 2008 ANNUAL GROUNDWATER MONITORING REPORT ALAMEDA POINT, ALAMEDA, CALIFORNIA. NOVEMBER.
NOT INDEPENDENTLY VERIFIED BY CH2M HILL, INC

FIGURE 2-3
Groundwater Elevations – Winter 2007
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURES 2-4 AND 2-5

FIGURES 3-1 THROUGH 3-3

FIGURE 4-1 – 2010 SAMPLING LOCATIONS IN TRANSFER PARCELS FED-1A, FED-2B, AND FED-2C

FIGURES 5-1 THROUGH 5-7

FOR ADDITIONAL INFORMATION, CONTACT:

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FIGURES TAKEN FROM:
INNOVATIVE TECHNICAL SOLUTIONS, INC, 2008. ALAMEDA BASEWIDE 2008 ANNUAL GROUNDWATER MONITORING REPORT ALAMEDA POINT, ALAMEDA, CALIFORNIA. NOVEMBER.
NOT INDEPENDENTLY VERIFIED BY CH2M HILL, INC

FIGURE 2-4
Groundwater Elevations – Spring 2008
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL

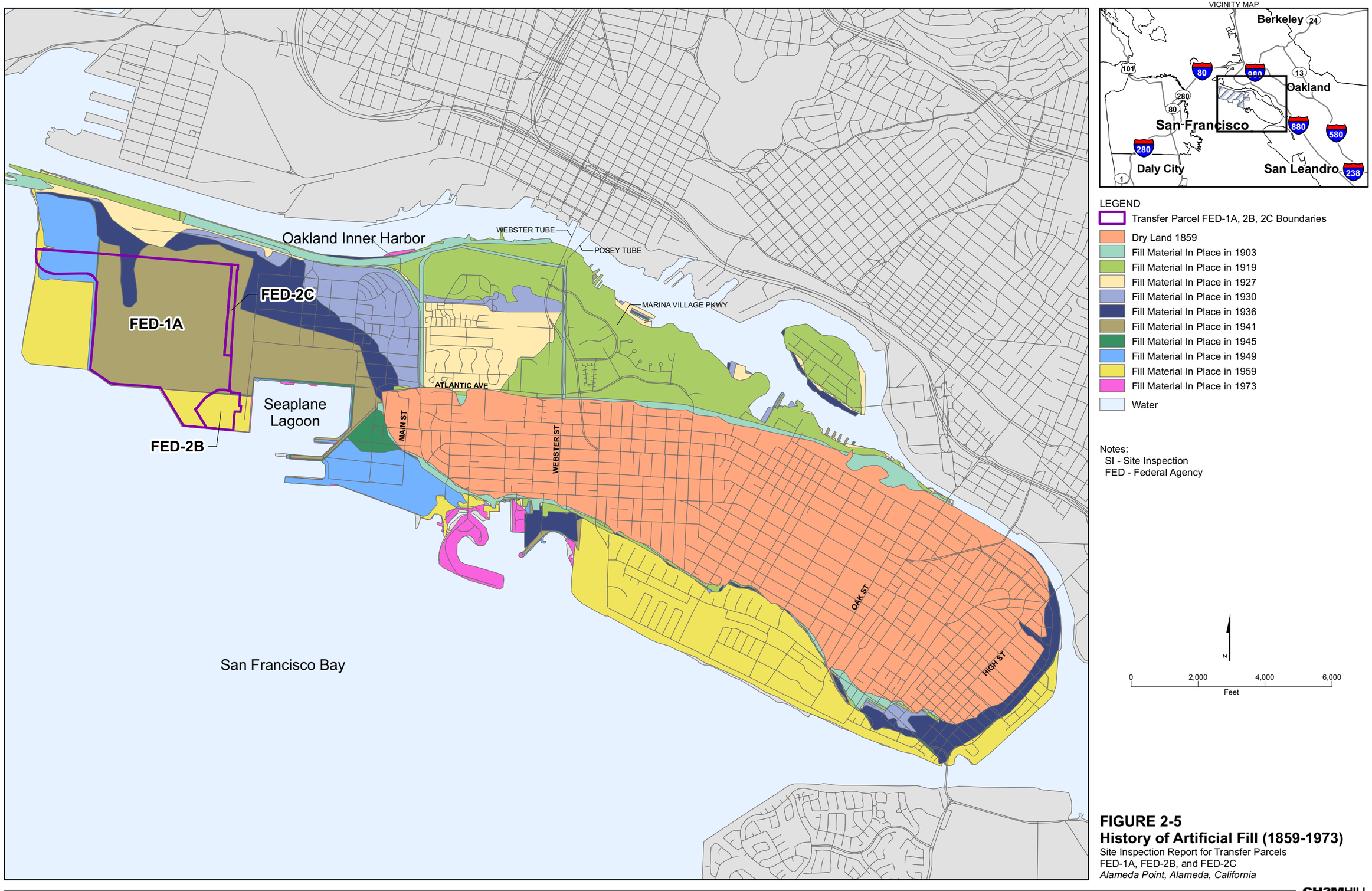


FIGURE 2-5
History of Artificial Fill (1859-1973)
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

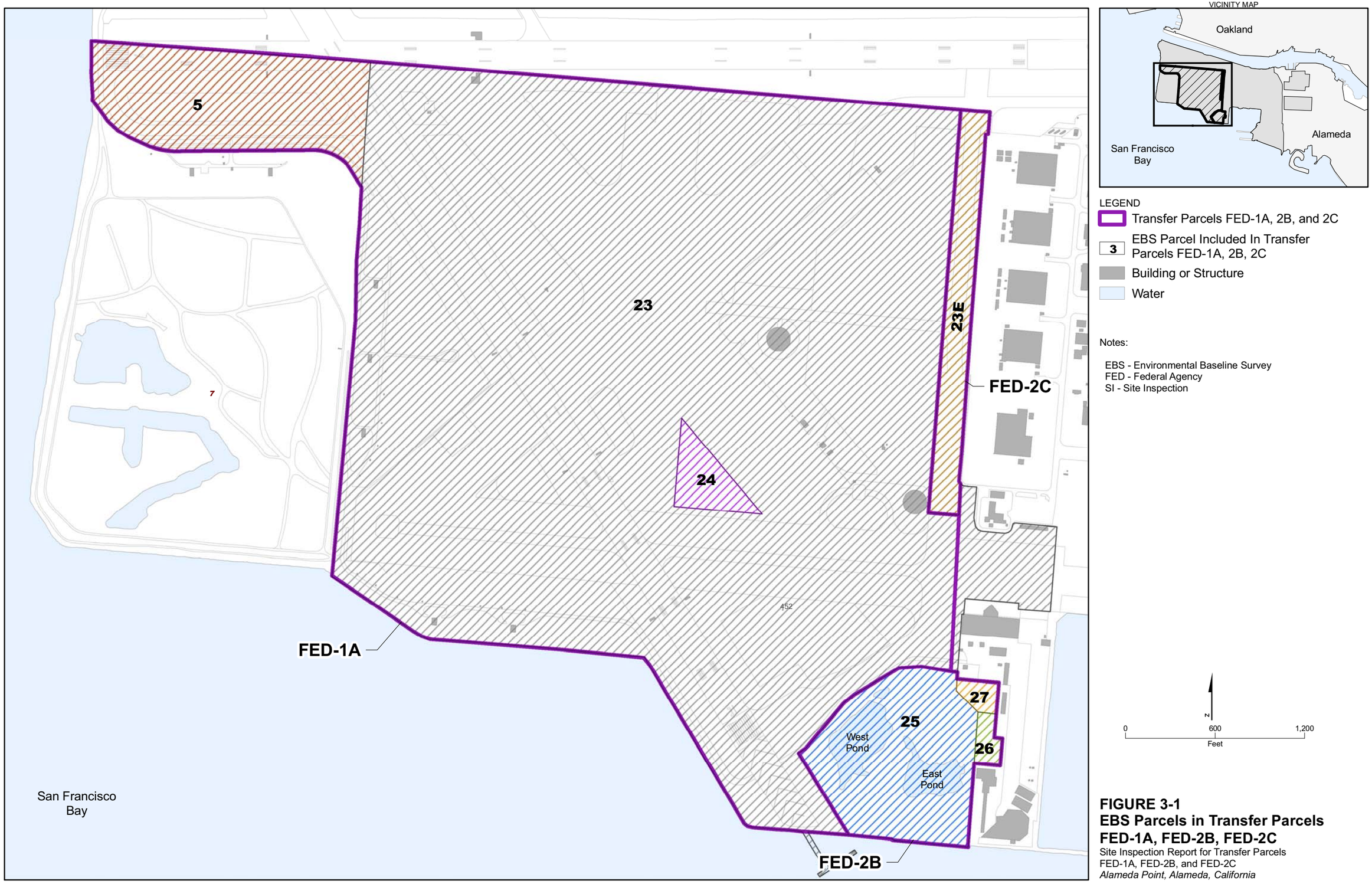
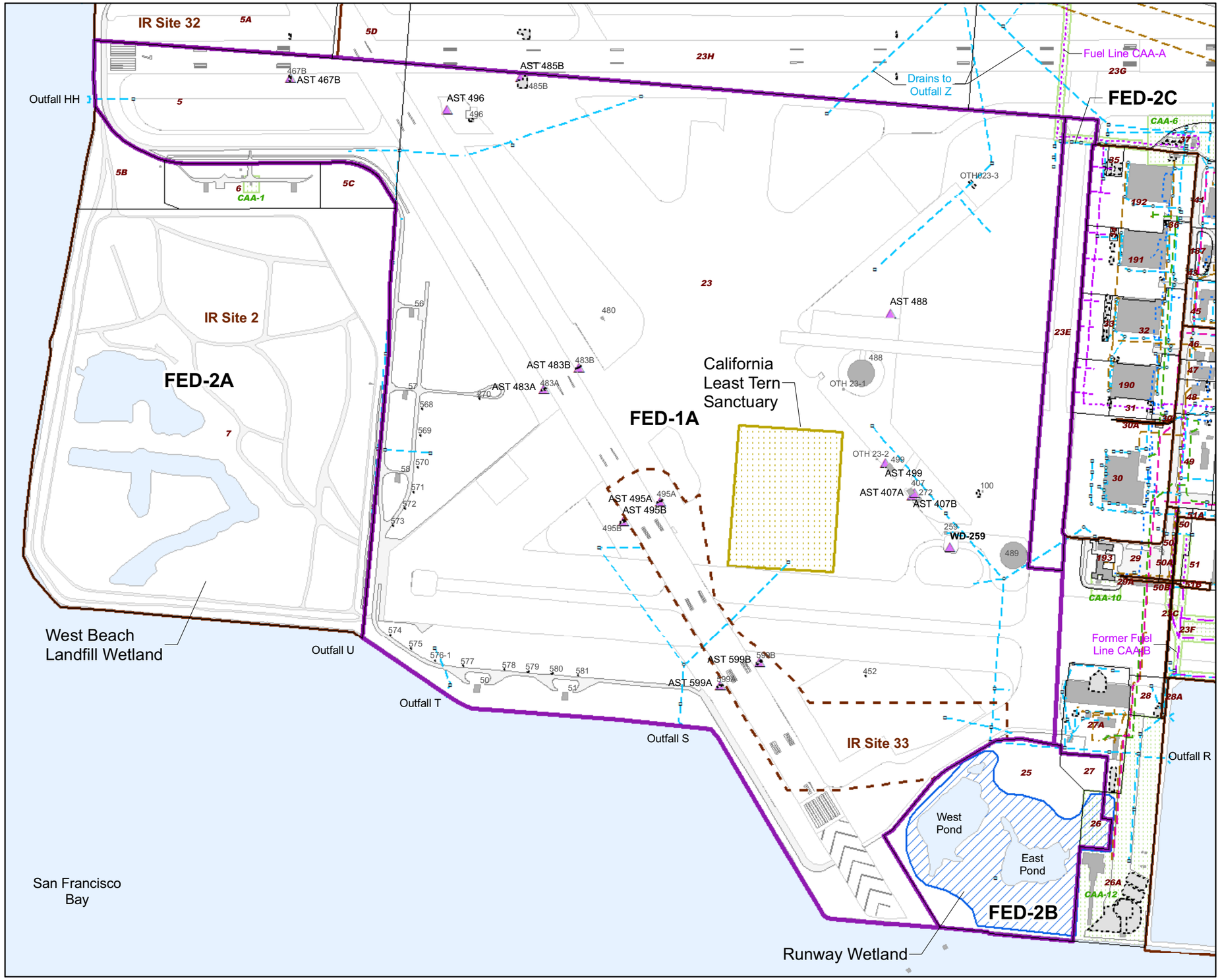
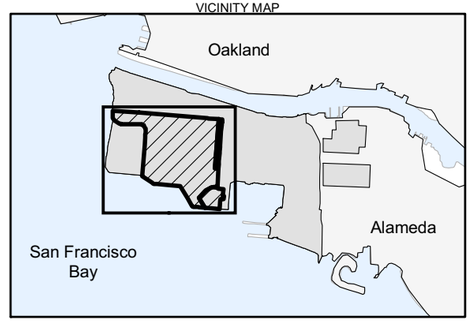


FIGURE 3-1
EBS Parcels in Transfer Parcels FED-1A, FED-2B, FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California





LEGEND

- Transfer Parcels FED-1A, 2B, and 2C
- irsites_polygon
- irsites_polygon
- EBS Parcel Inculded in Transfer Parcels FED-1A, 2B, 2C
- Water
- Wetland
- Least Tern Sanctuary
- Building or Structure (Present)
- Building or Structure (Removed)
- Caa
- SWMU
- Catch Basin
- Manhole
- Storm Drain
- Steam Line
- Sanitary Sewer Line
- Industrial Wastewater Line
- Gas Line
- Fuel Line
- Fuel Line (abandonded-in-place)
- Fuel Line (Removed)

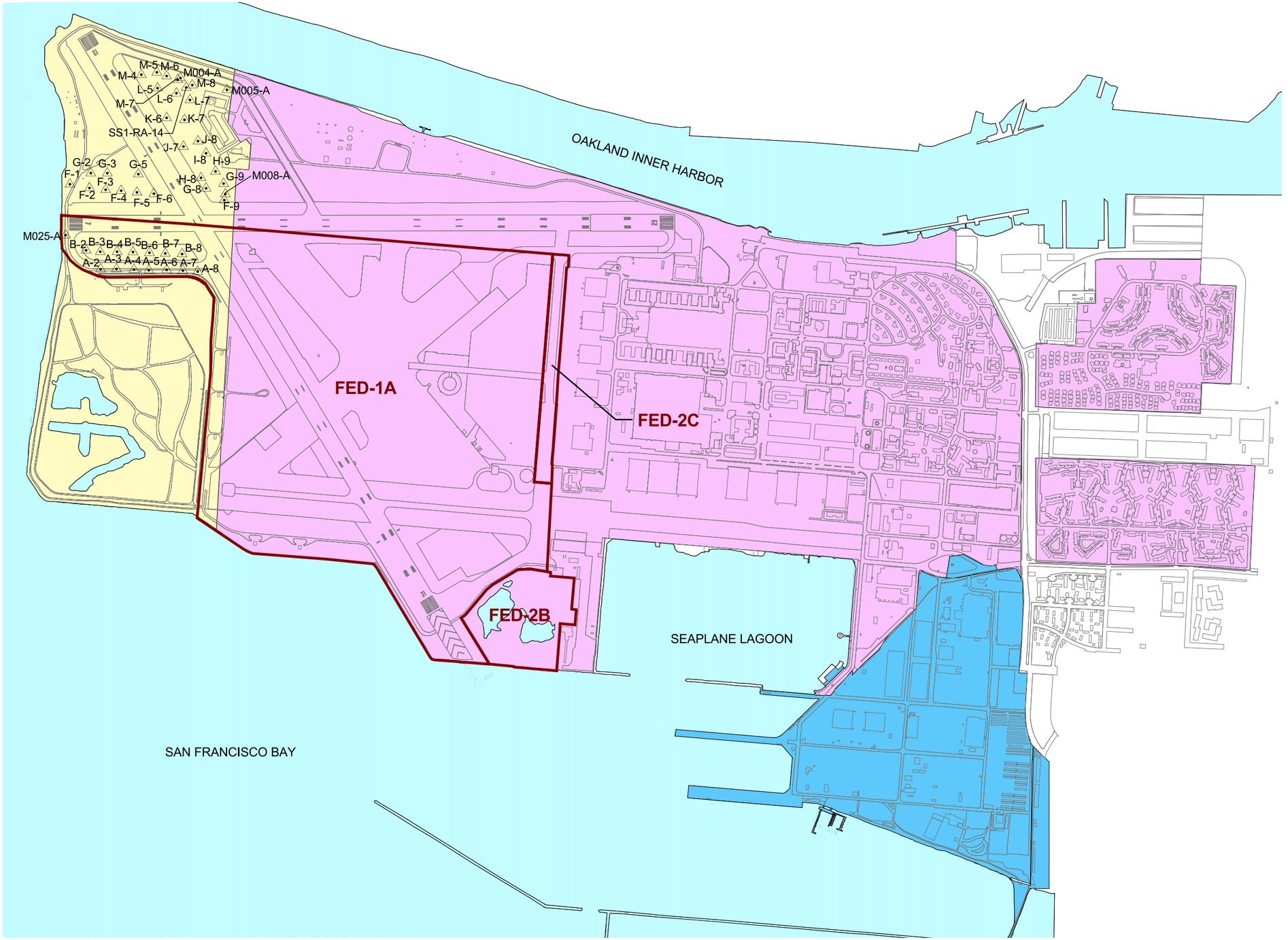
Notes:
All ASTs in transfer parcel FED-1A have been removed.

AST - Aboveground Storage Tank
EBS - Environmental Baseline Survey
FED - Federal Agency
IR - Installation Restoration (program)
SI - Site Inspection
SWMU - Solid Waste Management Unit
WD - Washdown

N

0 600 1,200
Feet

FIGURE 3-2
Site Features in Transfer Parcels FED-1A, FED-2B, FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-FED-2B, and FED-FED-2C
Alameda Point, Alameda, California



LEGEND

- A2 — BACKGROUND SOIL SAMPLE LOCATION AND STATION ID
- TRANSFER PARCEL BOUNDARY
- BUILDINGS, RUNWAYS AND PAVED AREAS
- FILL AREA 1
- FILL AREA 2
- FILL AREA 3
- WATER

NOTE:

FED – FEDERAL AGENCY

IR – INSTALLATION RESTORATION (PROGRAM)

SOURCE:

TETRA TECH EM INC. 2001. SUMMARY OF BACKGROUND CONCENTRATIONS IN SOIL AND GROUNDWATER, ALAMEDA POINT, ALAMEDA, CALIFORNIA. NOVEMBER.

N

1200 0 1200 Feet

FIGURE 3-3
Soil Background Areas
Site Inspection Report for Transfer Parcels
FED-1A, FED-FED-2B, and FED-FED-2C
Alameda Point, Alameda, California

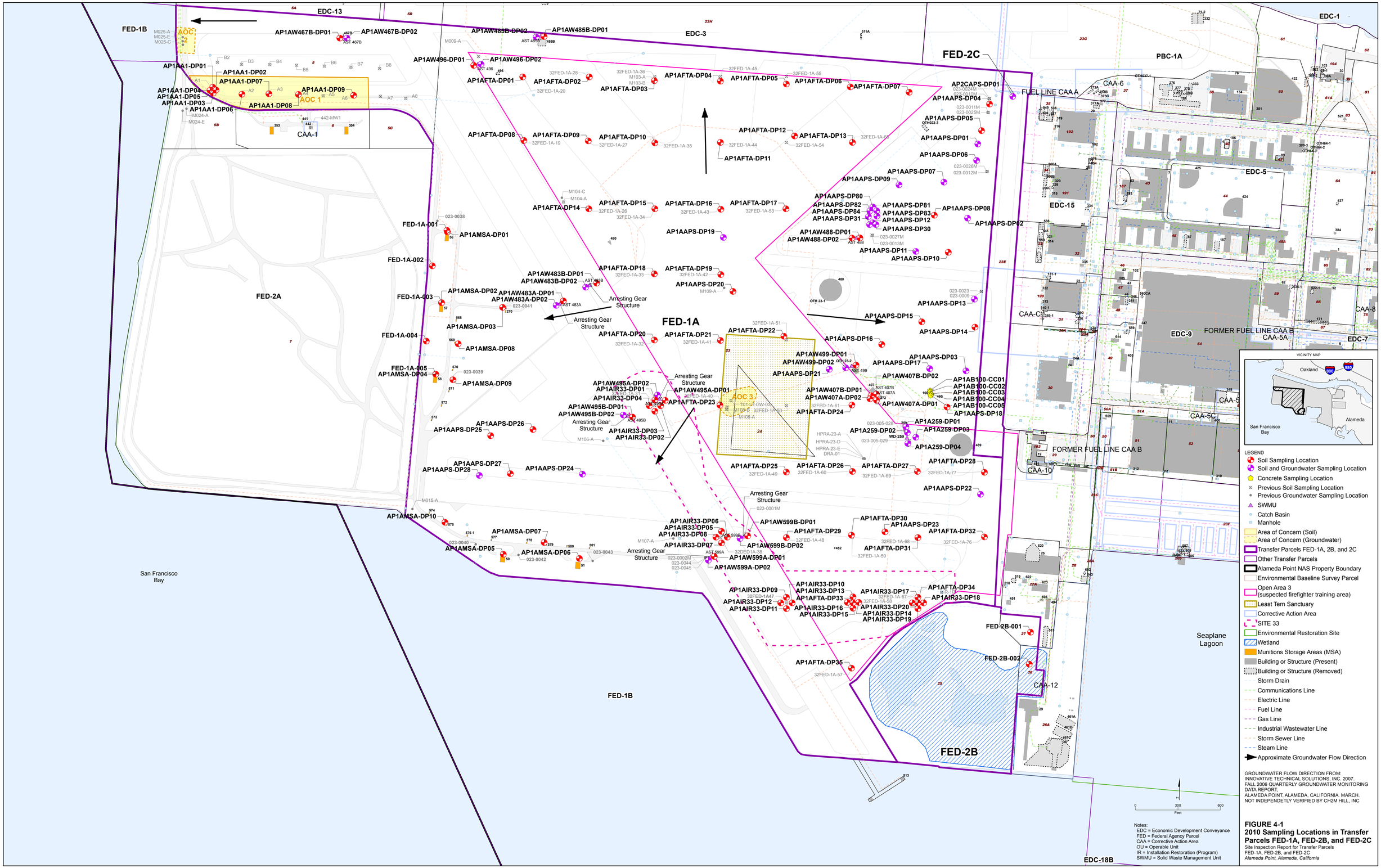


FIGURE 4-1
2010 Sampling Locations in Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL

FED-1B
FED-2A
FED-1A
FED-2C
FED-2B
EDC-13
EDC-3
EDC-1
EDC-15
EDC-9
EDC-18B
PBC-1A
AOC
AOC 1
AOC 2
WATER
Text
CAA-1
CAA-6
CAA-C
CAA-5
CAA-5C
CAA-10
CAA-12
FUEL LINE CAA A
FORMER FUEL LINE CAA B
FORMER F
Arresting Gear Structure
San Francisco Bay
Seaplane Lagoon
MD25-A
MD25-E
M025-C
HHIT001-02
HH-IT001
HP1-10-A
HP1-10-E
HP1-10-D
HP1-11-A
HP1-11-D
HP1-11-E
AP1AW467B-DP01
AP1AW467B-DP02
AST 467B
AP1AW496-DP01
AP1AW496-DP02
AST 496
M009-A
HPRA-8-D
HPRA-8-E
HPRA-8-A
AP1AFTA-DP01
AP1AFTA-DP02
AP1AFTA-DP03
AP1AFTA-DP04
AP1AFTA-DP05
AP1AFTA-DP06
AP1AFTA-DP07
M103-A
M103-B
AP1AW485B-DP02
AP1AW485B-DP01
AST 485B
HP2-5-A
HP2-5-E
HP2-5-D
M011-A
AP1AFTA-DP08
AP1AFTA-DP09
AP1AFTA-DP10
AP1AFTA-DP11
AP1AFTA-DP12
AP1AFTA-DP13
M104-C
M104-A
M010-A
M010-B
WB-4
AP1AFTA-DP14
AP1AFTA-DP15
AP1AFTA-DP16
AP1AFTA-DP17
AP1AAPS-DP19
AP1AFTA-DP18
AP1AFTA-DP19
M012-B
M012-A
AP1AW483B-DP01
AP1AW483B-DP02
AST 483B
AP1AW483A-DP01
AP1AW483A-DP02
AST 483A
M105-B
M105-A
M109-A
AP1AAPS-DP20
M013-A
M013-C
U-1U-1
AP1AFTA-DP20
AP1AFTA-DP21
M014-B
HP2-4-E
HP2-4-D
HP2-4-A
M014-A
AP1AAPS-DP25
AP1AAPS-DP26
AP1AW495A-DP02
AP1AW495A-DP01
AST 495A
AP1AFTA-DP23
M108-E101-LT-SO-07
M108-A
101-LT-SO-10
101-LT-SO-09
101-LT-SO-08
101-LT-SO-05
101-LT-SO-06
101-LT-GW-03
101-LT-SO-11
101-LT-SO-07
AP1AW495B-DP02
AP1AW495B-DP01
AST 495B
M106-A
AP1AAPS-DP27
AP1AAPS-DP24
AP1AAPS-DP28
AP1AFTA-DP24
AP1AFTA-DP25
AP1AFTA-DP26
AP1AFTA-DP27
AP1AFTA-DP28
AP1AAPS-DP22
HPRA-20-D
HPRA-20-E
HPRA-20-A
AP1AW499-DP02
AP1AW499-DP01
AST 499
AP1AAPS-DP21
AP1AAPS-DP17
AP1AAPS-DP03
AP1AAPS-DP18
AST 407A
AST 407B
HPRA-23-A
HPRA-23-E
HPRA-23-D
DRA-01
AP1A259-DP01
AP1A259-DP02
AP1A259-DP03
AP1A259-DP04
023-005-028
WD-259
023-005-029
AP1A250-DP01
AP1A250-DP02
AP1A250-DP03
AP1A250-DP04
AP1A250-DP05
AP1A250-DP06
AP1A250-DP07
AP1A250-DP08
AP1A250-DP09
AP1A250-DP10
AP1A250-DP11
AP1A250-DP12
AP1A250-DP13
AP1A250-DP14
AP1A250-DP15
AP1A250-DP16
AP1A250-DP17
AP1A250-DP18
AP1A250-DP19
AP1A250-DP20
AP1A250-DP21
AP1A250-DP22
AP1A250-DP23
AP1A250-DP24
AP1A250-DP25
AP1A250-DP26
AP1A250-DP27
AP1A250-DP28
AP1A250-DP29
AP1A250-DP30
AP1A250-DP31
AP1A250-DP32
AP1A250-DP33
AP1A250-DP34
AP1A250-DP35
AP1AAPS-DP09
AP1AAPS-DP07
AP1AAPS-DP80
AP1AAPS-DP81
AP1AAPS-DP02
AP1AAPS-DP82
AP1AAPS-DP08
AP1AAPS-DP83
AP1AAPS-DP84
AP1AAPS-DP12
AP1AAPS-DP31
AP1AAPS-DP30
AST 488
023-003-013
AP1AAPS-DP11
AP1AAPS-DP10
023-003-009
AP1AAPS-DP13
AP1AAPS-DP15
AP1AAPS-DP14
026B28
026B40
026B29
026SW02
030-Z06-038
190-Z06-011
030-FLI-120
030-FLI-121
023-SS-003
AP1AAPS-DP04
023-003-010
023-003-011
AP1AAPS-DP05
AP1AAPS-DP01
AP1AAPS-DP06
023-003-012
AP2CAPS-DP01
OTH023-3
OTH023-4
OTH037-1
OTH064-1
R-1R
025-001-001
027-IWTP-004
WB-3
M015-A
M107-A
S-2S
S-1S
T-IT001
023-005-023
023-005-027
AP1AW599B-DP01
AP1AW599B-DP02
AST 599B
AP1AFTA-DP29
AP1AW599A-DP01
AST 599A
AP1AW599A-DP02
AP1AAPS-DP23
AP1AFTA-DP30
AP1AFTA-DP31
AP1AFTA-DP32
AP1AFTA-DP33
AP1AFTA-DP34
AP1AFTA-DP35
OTH 23-1
OTH 23-2
VICINITY MAP
Oakland
Alameda
San Francisco Bay
LEGEND
VOC Groundwater Sampling Location
VOC Groundwater Sampling Location Exceeding Industrial Screening Levels
VOC Groundwater Sampling Location Exceeding Residential Screening Levels
VOC Groundwater Sampling Location Exceeding Both Residential and Industrial Screening Levels
VOC Soil Sampling Location
VOC Soil Sampling Location Exceeding Industrial Screening Levels
VOC Soil Sampling Location Exceeding Residential Screening Levels
VOC Soil Sampling Location Exceeding Both Residential and Industrial Screening Levels
Previous VOC Groundwater Sampling Location
Previous VOC Groundwater Sampling Location Exceeding Screening Levels
Previous VOC Soil Sampling Location
Previous VOC Soil Sampling Location Exceeding Screening Levels
Previous VOC Sediment Sampling Location
Previous VOC Sediment Sampling Location Exceeding Screening Levels
Previous VOC Surface Water Sampling Location
Previous VOC Surface Water Sampling Location Exceeding Screening Levels
SWMU
Catch Basin
Manhole
Area of Concern (Soil)
Area of Concern (Groundwater)
Transfer Parcels FED-1A, 2B, and 2C
Other Transfer Parcels
Alameda Point NAS Property Boundary
Environmental Baseline Survey Parcel
Open Area 3 (suspected firefighter training area)
Least Tern Sanctuary
Corrective Action Area
IR 33
Environmental Restoration Site
Wetland
Munitions Storage Areas (MSA)
Building or Structure (Present)
Building or Structure (Removed)
Storm Drain
Communications Line
Electric Line
Fuel Line
Gas Line
Industrial Wastewater Line
Storm Sewer Line
Steam Line
Approximate Groundwater Flow Direction
0
300
600
Feet
Notes:
VOC= Volatile Organic Compound
EDC = Economic Development Conveyance
FED = Federal Agency Parcel
CAA = Corrective Action Area
OU = Operable Unit
IR = Installation Restoration (Program)
SWMU = Solid Waste Management Unit

FIGURE 5-1
Sampling Locations and Maximum Contaminent Level Exceedances - Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL

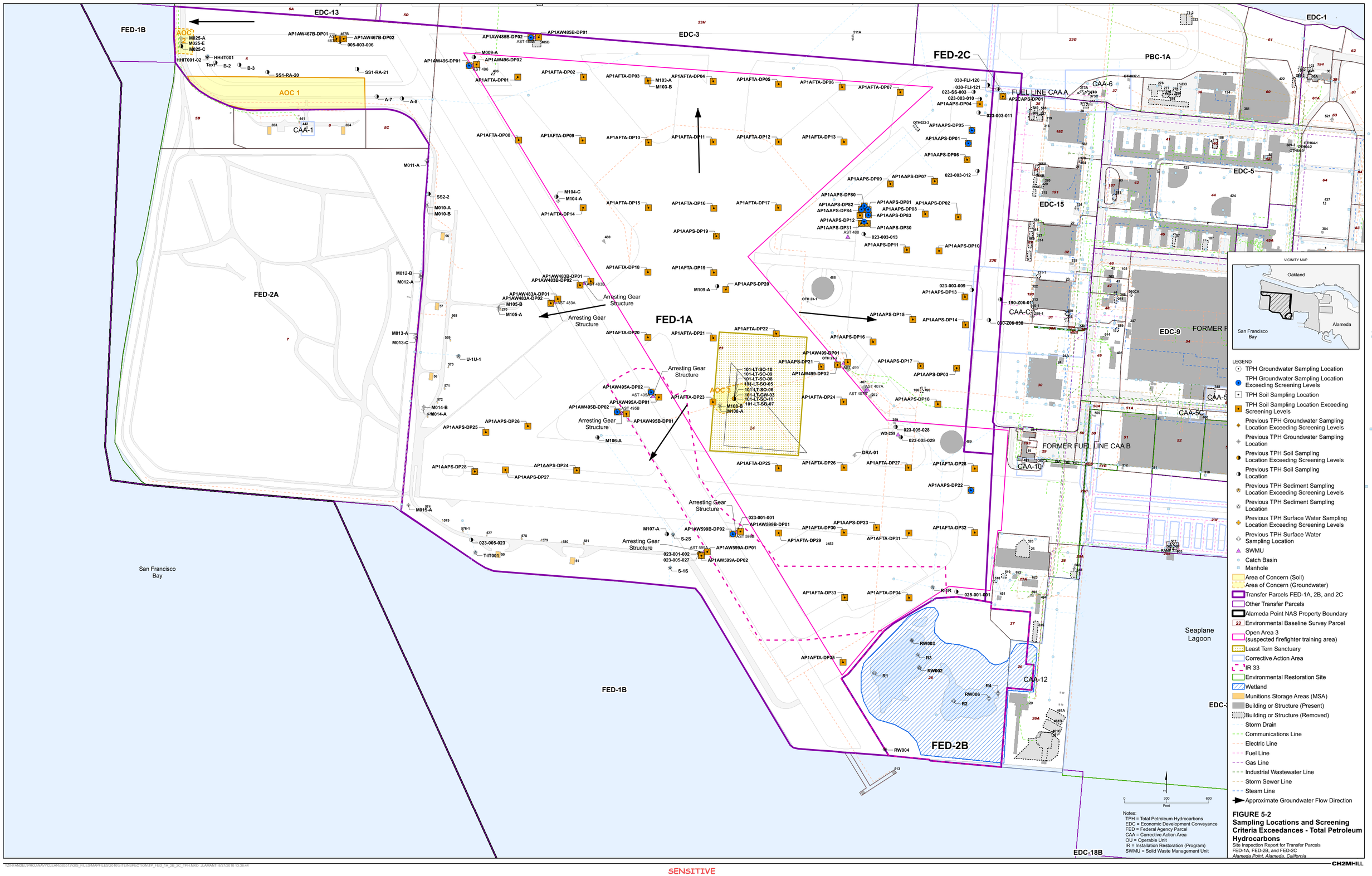


FIGURE 5-2
Sampling Locations and Screening Criteria Exceedances - Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

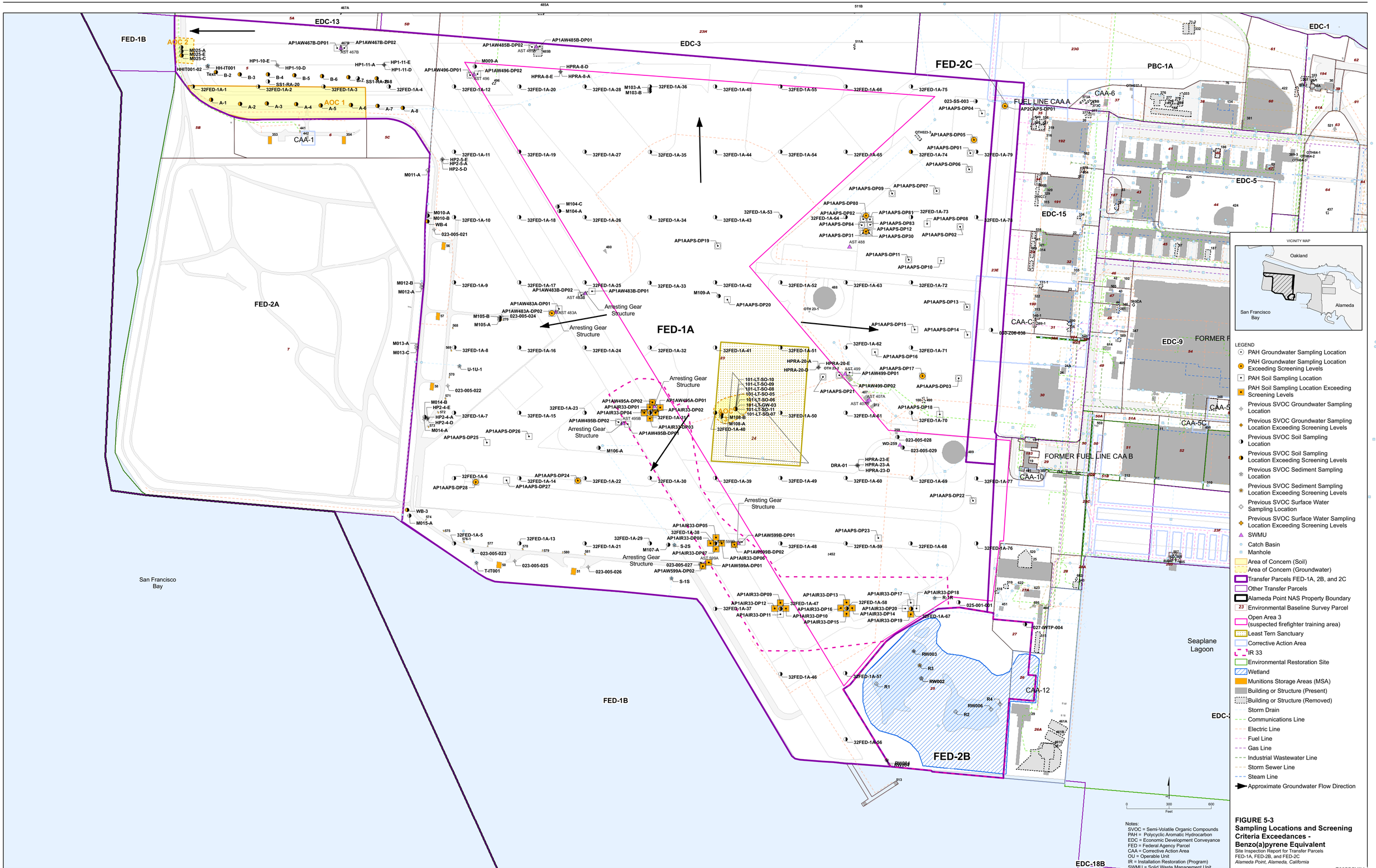


FIGURE 5-3
Sampling Locations and Screening Criteria Exceedances - Benzo(a)pyrene Equivalent
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Notes:
SVOC = Semi-Volatile Organic Compounds
PAH = Polycyclic Aromatic Hydrocarbon
EDC = Economic Development Conveyance
FED = Federal Agency Parcel
CAA = Corrective Action Area
OU = Operable Unit
IR = Installation Restoration (Program)
SWMU = Solid Waste Management Unit

CH2MHILL

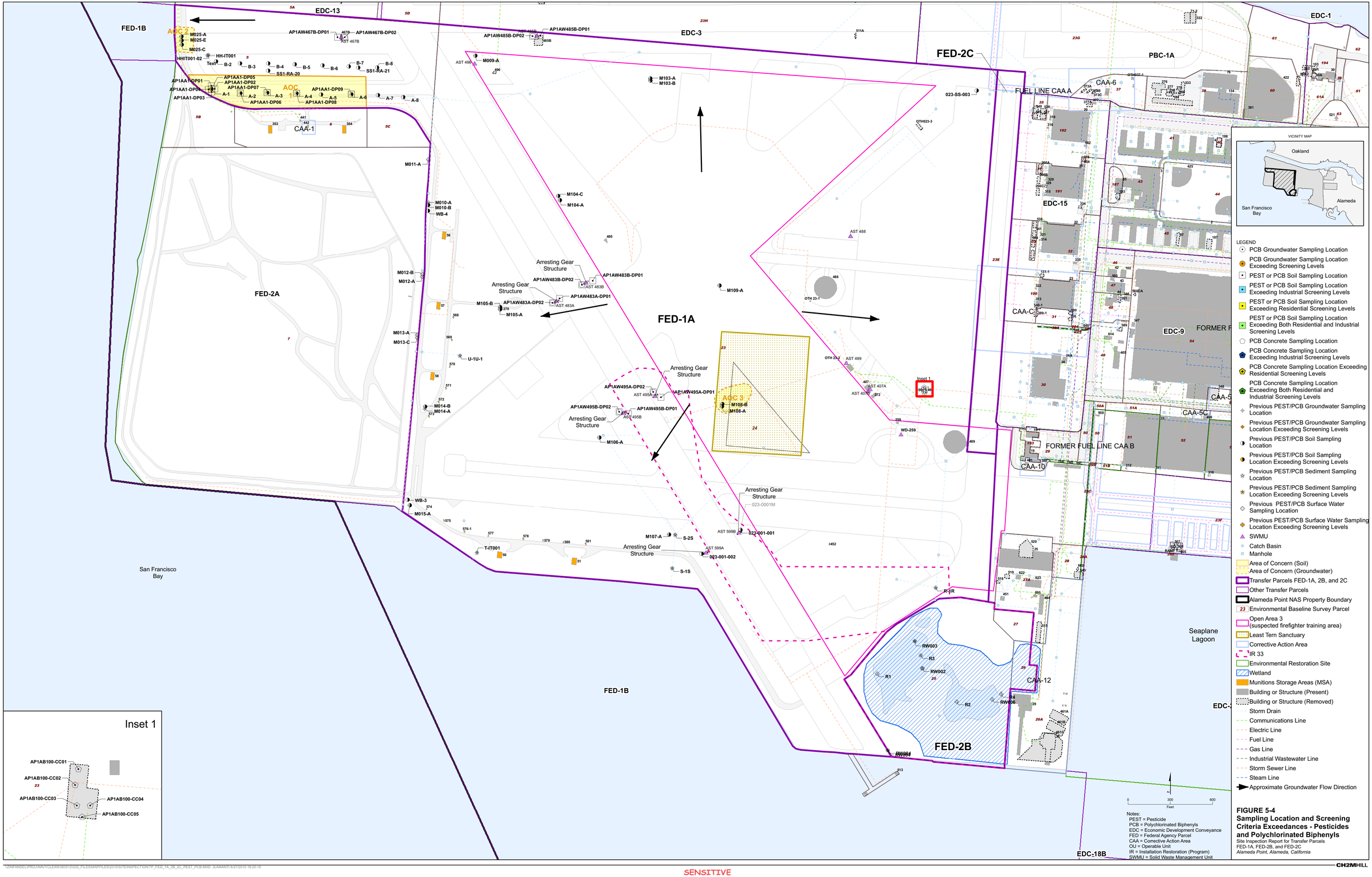


FIGURE 5-4
Sampling Location and Screening Criteria Exceedances - Pesticides and Polychlorinated Biphenyls
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

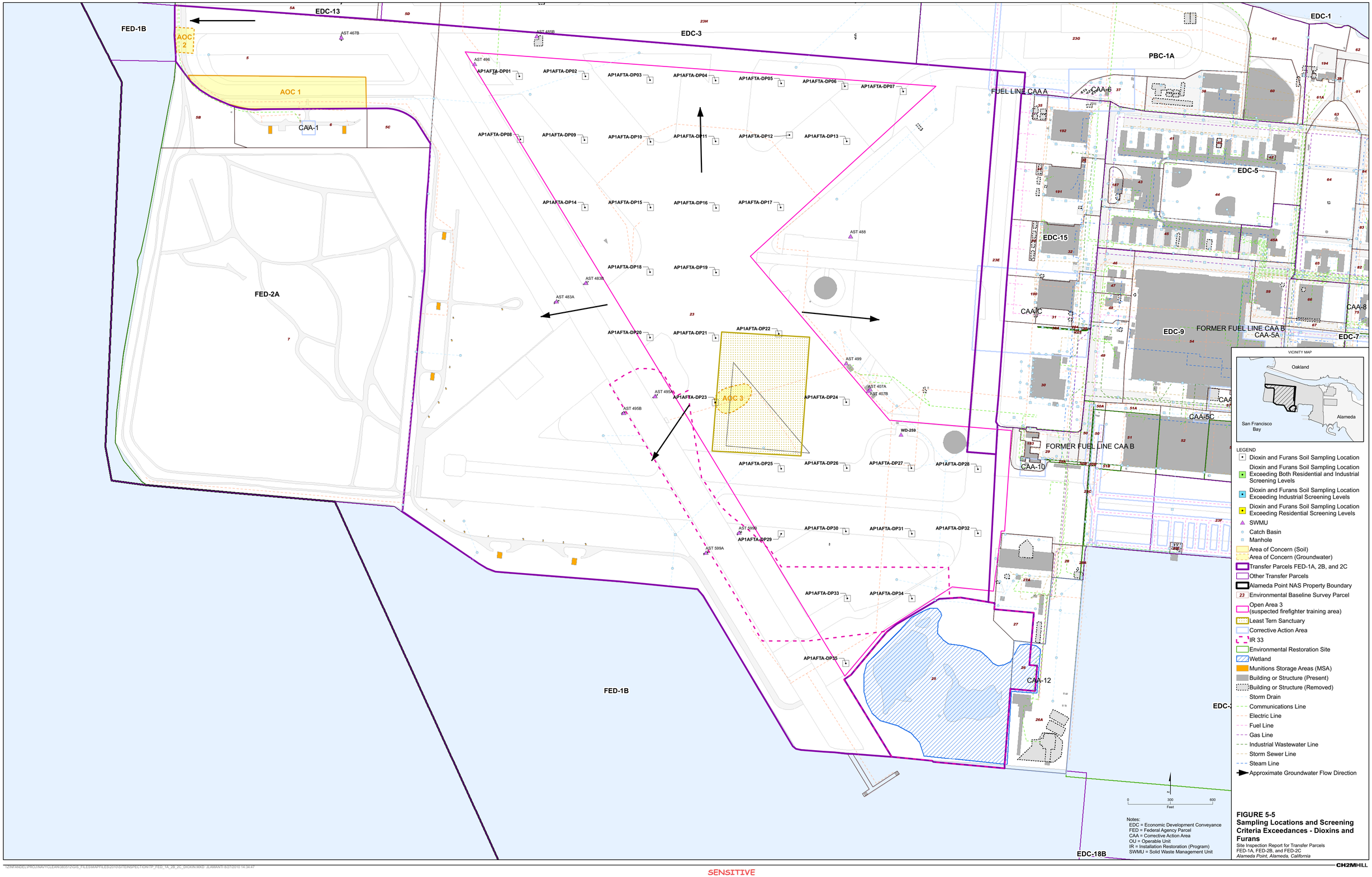


FIGURE 5-5
Sampling Locations and Screening Criteria Exceedances - Dioxins and Furans
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

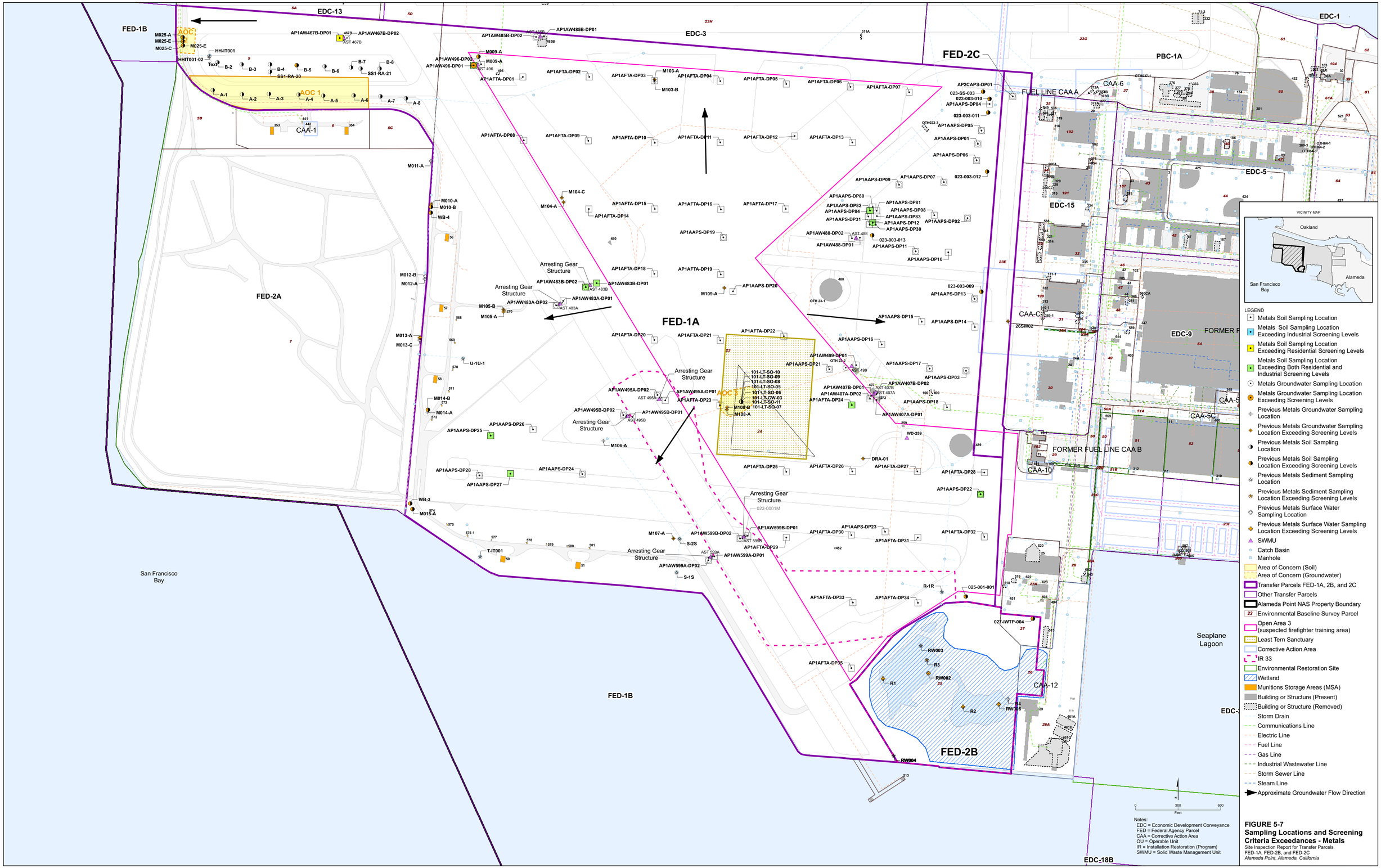
EDC-13
FED-1B
AOC 2
AOC 1
CAA-1
FED-2A
EDC-3
FED-1A
AOC 3
FED-2C
PBC-1A
FUEL LINE CAA A
CAA-6
EDC-1
EDC-5
EDC-15
CAA-C
EDC-9
FORMER FUEL LINE CAA B
CAA-5A
EDC-7
CAA-8
CAA-5
CAA-5C
FORMER FUEL LINE CAA B
CAA-10
CAA-12
EDC-
EDC-18B
FED-2B
Seaplane Lagoon
San Francisco Bay
FED-1B
AP1AMSA-DP01
AP1AMSA-DP02
AP1AMSA-DP03
AP1AMSA-DP08
AP1AMSA-DP04
AP1AMSA-DP09
AP1AMSA-DP10
AP1AMSA-DP07
AP1AMSA-DP05
AP1AMSA-DP06
Arresting Gear Structure
AST 467B
AST 485B
AST 496
AST 488
AST 483B
AST 483A
AST 495A
AST 495B
AST 599B
AST 599A
OTH 23-1
OTH 23-2
AST 499
AST 407A
AST 407B
OTH023-3
WD-259
OTH037-1
OTH064-1
OTH064-2
OTH064-3
VICINITY MAP
Oakland
Alameda
San Francisco Bay

LEGEND
- Explosives Soil Sampling Location
- Explosives Soil Sampling Location Exceeding Industrial Screening Levels
- Explosives Soil Sampling Location Exceeding Residential Screening Levels
- Explosives Soil Sampling Location Exceeding Both Residential and Industrial Screening Levels
- SWMU
- Catch Basin
- Manhole
- Area of Concern (Soil)
- Area of Concern (Groundwater)
- Transfer Parcels FED-1A, 2B, and 2C
- Other Transfer Parcels
- Alameda Point NAS Property Boundary
- Environmental Baseline Survey Parcel
- Open Area 3 (suspected firefighter training area)
- Least Tern Sanctuary
- Corrective Action Area
- IR 33
- Environmental Restoration Site
- Wetland
- Munitions Storage Areas (MSA)
- Building or Structure (Present)
- Building or Structure (Removed)
- Storm Drain
- Communications Line
- Electric Line
- Fuel Line
- Gas Line
- Industrial Wastewater Line
- Storm Sewer Line
- Steam Line
- Approximate Groundwater Flow Direction

0 300 600 Feet

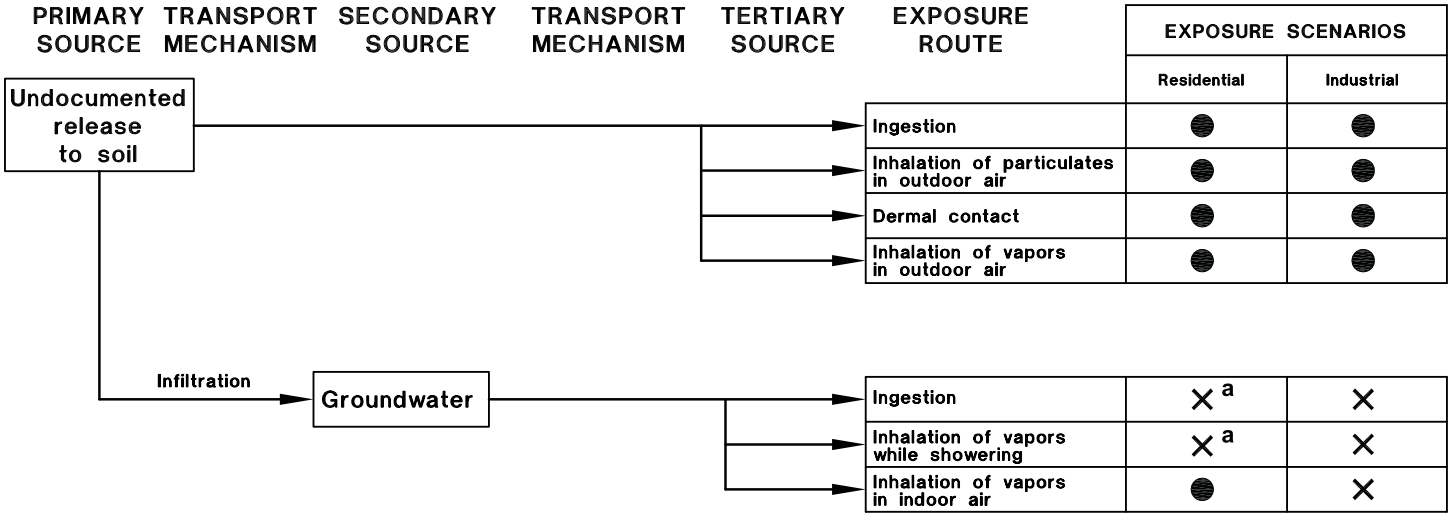
Notes:
EDC = Economic Development Conveyance
FED = Federal Agency Parcel
CAA = Corrective Action Area
OU = Operable Unit
IR = Installation Restoration (Program)
SWMU = Solid Waste Management Unit

FIGURE 5-6
Sampling Locations and Screening Criteria Exceedances - Explosives
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California



Notes:
EDC = Economic Development Conveyance
FED = Federal Agency Parcel
CAA = Corrective Action Area
OU = Operable Unit
IR = Installation Restoration (Program)
SWMU = Solid Waste Management Unit

FIGURE 5-7
Sampling Locations and Screening Criteria Exceedances - Metals
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California



LEGEND:

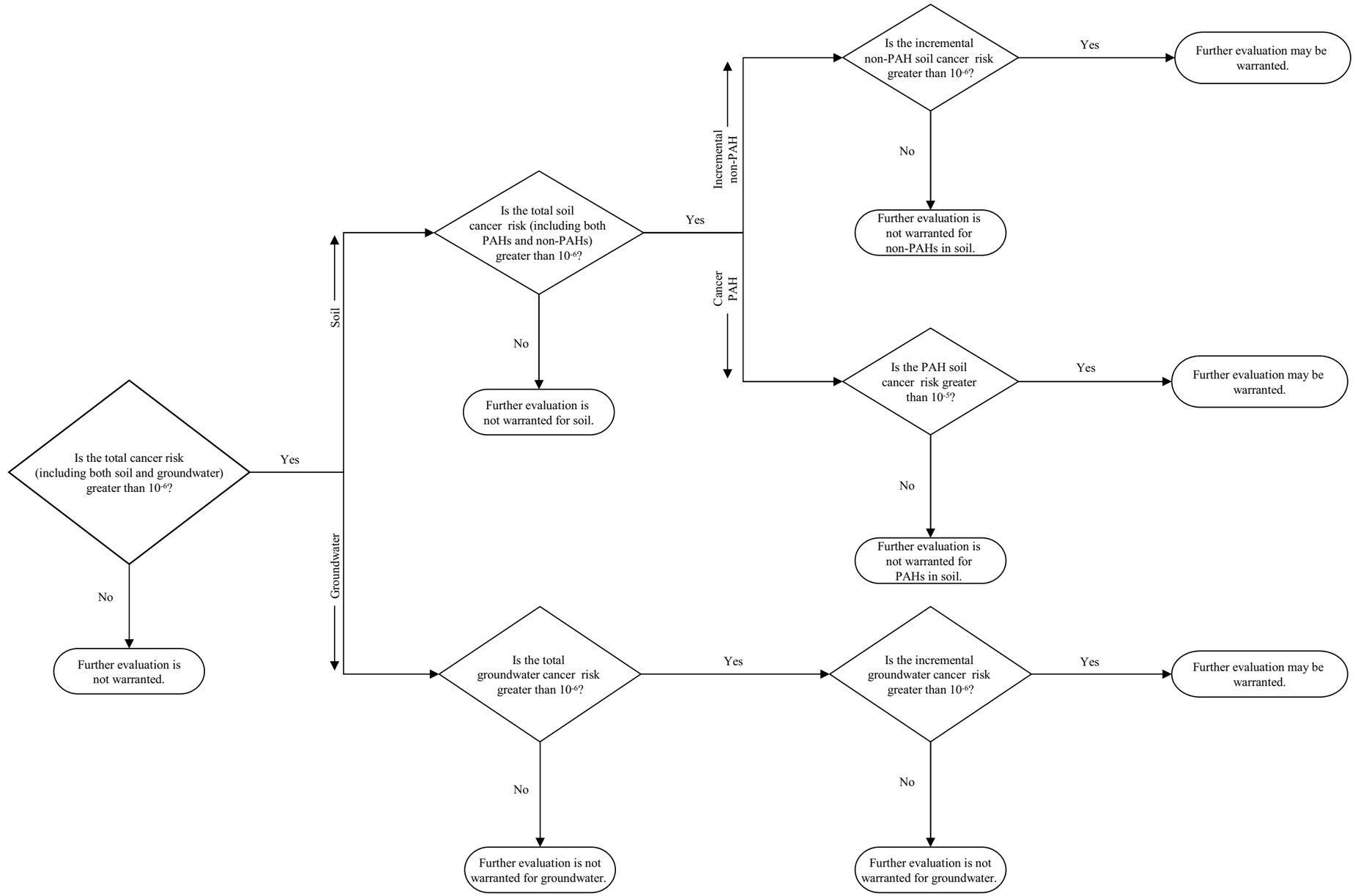
- ● COMPLETE EXPOSURE PATHWAY
- × INCOMPLETE EXPOSURE PATHWAY

NOTES:

FED – FEDERAL AGENCY
SI – SITE INSPECTION
a – DUE TO TDS CONCENTRATIONS IN EXCESS OF 10,000 mg/L, GROUNDWATER CANNOT BE USED AS A SOURCE FOR DRINKING WATER.

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, Figure 5-1, Human Health Conceptual Site Model, 2/27/08

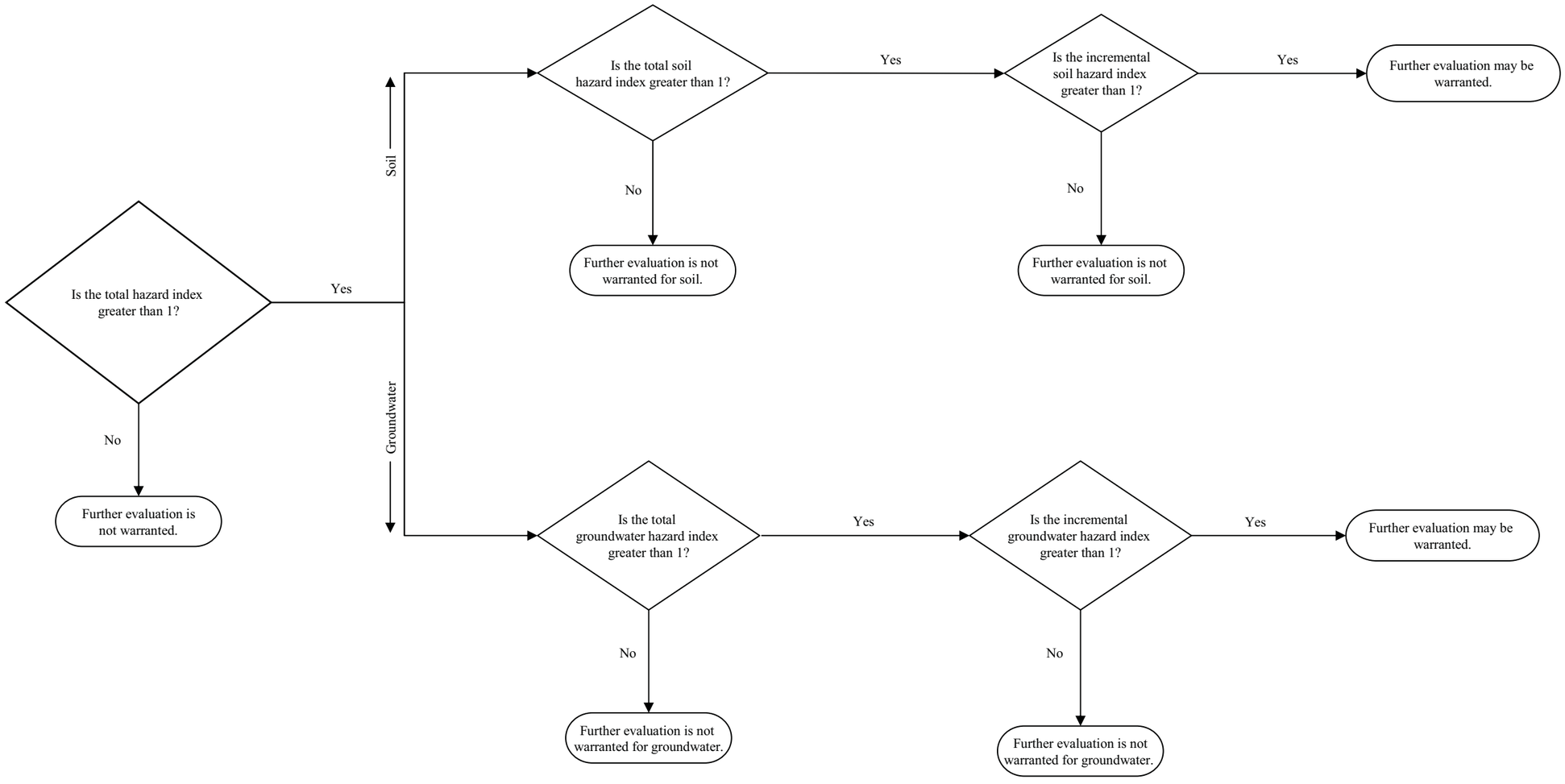
FIGURE 6-1
Human Health Conceptual Site Model
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California



Notes:
FED – federal agency disposal
PAH – polycyclic aromatic hydrocarbon
SI – site inspection

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, Figure 5-2, Human Health Risk Evaulation Decision, Process for Cancer Risk.

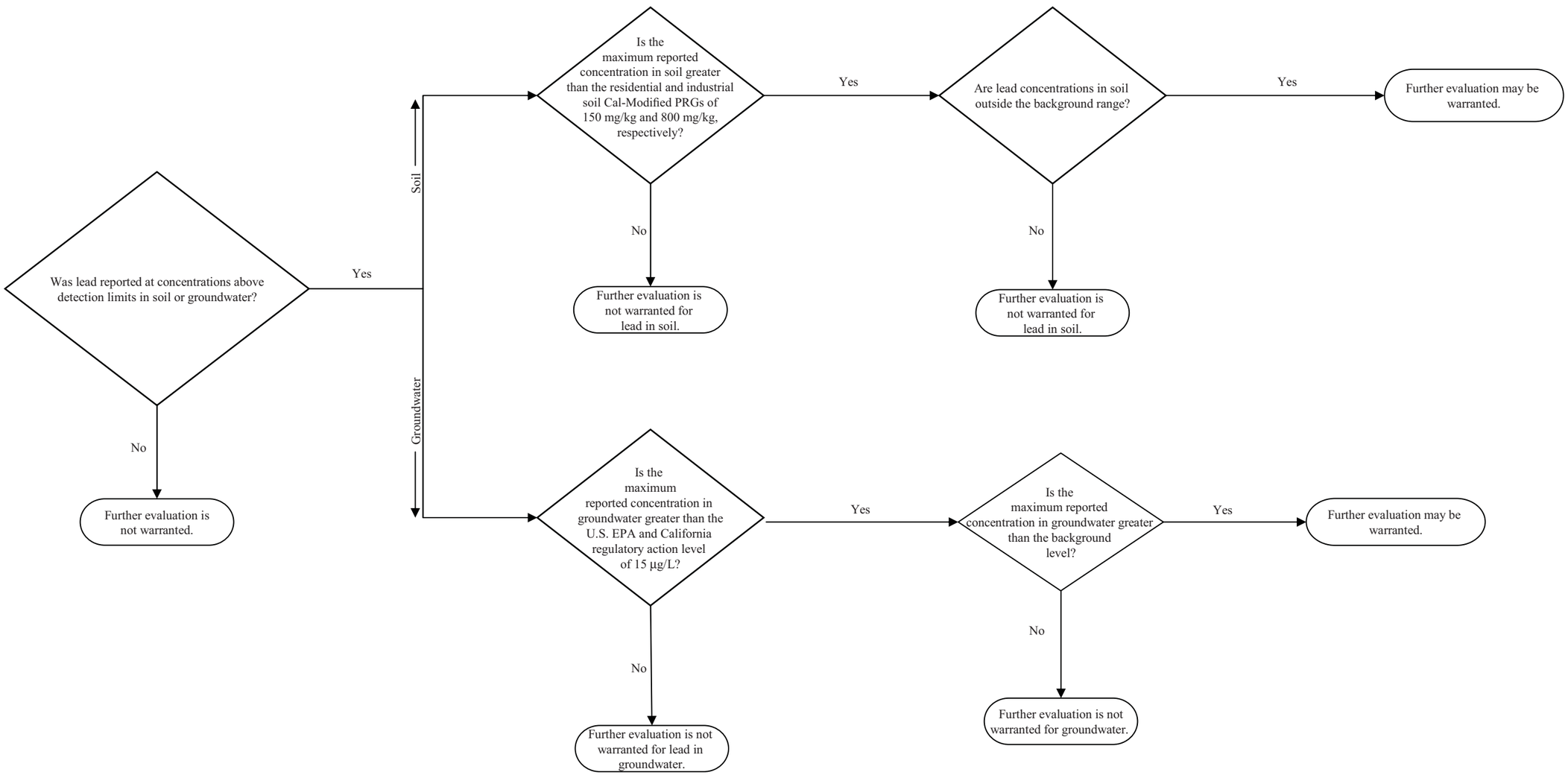
FIGURE 6-2
Human Health Risk Evaluation Decision Process for Cancer Risk
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California



Notes:
FED – federal agency disposal
SI – site inspection

FIGURE 6-3
Human Health Risk Evaluation Decision Process for Noncancer Hazard Index
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, Figure 5-3, Human Health Risk Evaulation Decision, Process for Noncancer Hazard Index.



Notes:
FED – federal agency disposal
mg/kg – milligrams per kilogram
µg/L – micrograms per liter
Cal-Modified PRGs – California Modified Preliminary Remediation Goals
SI – site inspection
U.S. EPA – United States Environmental Protection Agency

FIGURE 6-4
Human Health Risk Evaluation
Decision Process for Lead
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, Figure 5-4, Human Health Risk Evaulation, Decision Process for Lead.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 7-1 – HABITAT AREAS IN TRANSFER PARCEL FED-1A

FOR ADDITIONAL INFORMATION, CONTACT:

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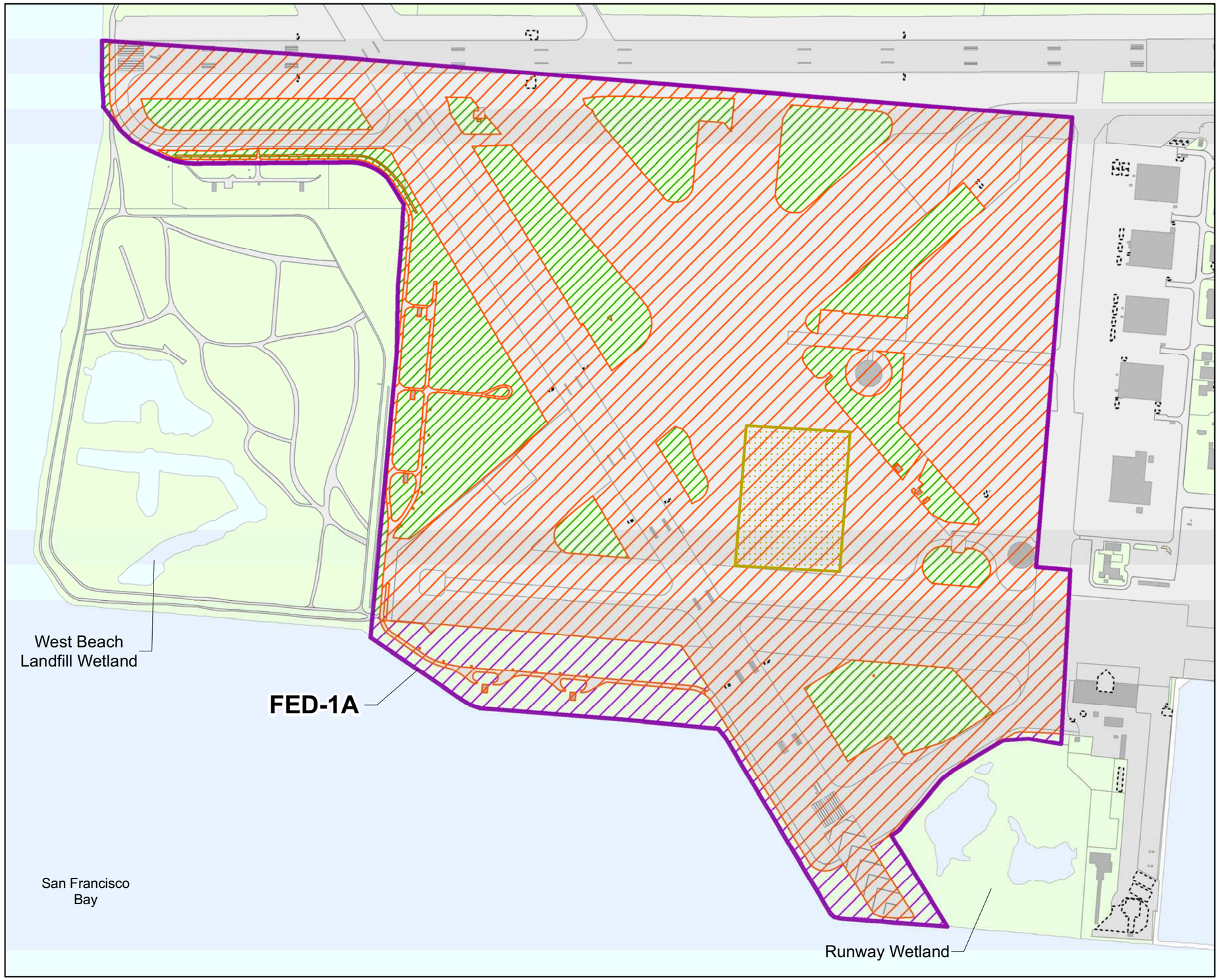
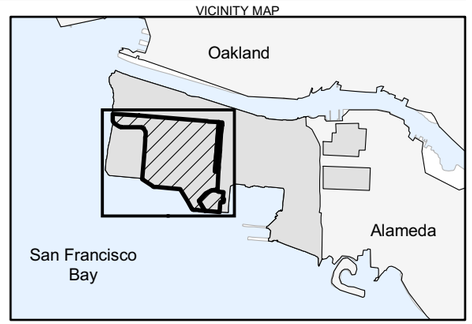
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil





LEGEND

- Transfer Parcel FED-1A Boundary
- Unpaved Area
- Road or Paved Area
- Building or Structure
- Water
- California Least Tern Sanctuary
- Barren Habitat
- Coastal Scrub
- Non-Native Grass

Notes:
EBS - Environmental Baseline Survey
FED - Federal Agency
ERA - Environmental Baseline Survey

Refference For Wetland Locations:
Tetra Tech EM INC. 2001. Wetland Delineation, IR Site 15, Alameda Point. May.

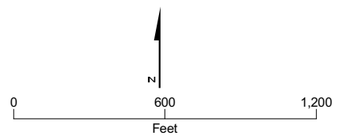


FIGURE 7-1
Habitat Areas in Transfer Parcel FED-1A
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

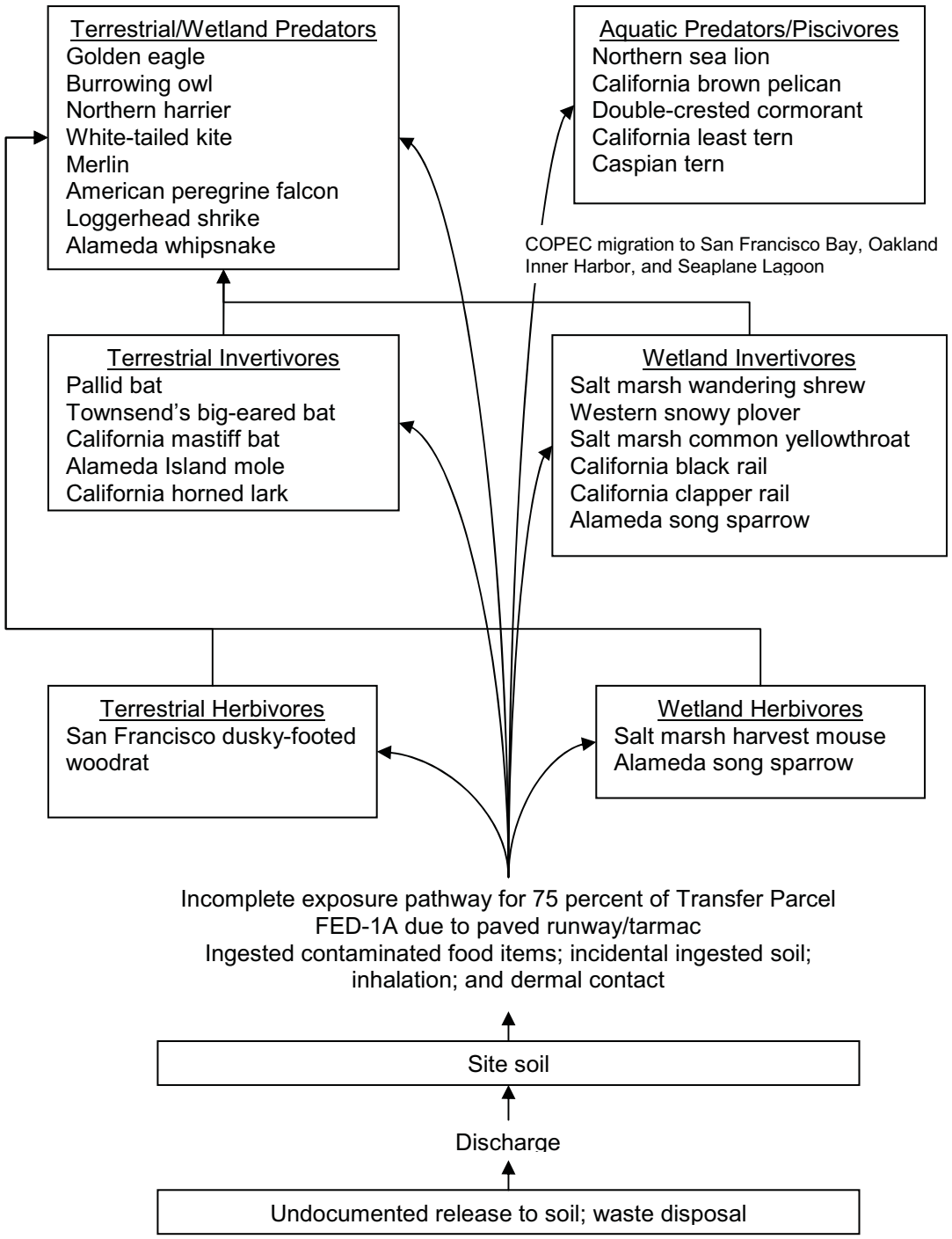


FIGURE 7-2
Conceptual Site Model Using Potentially Occurring Special-Status Species – Transfer Parcel FED-1A
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, File No: fig6-2.doc, 2/14/2008.

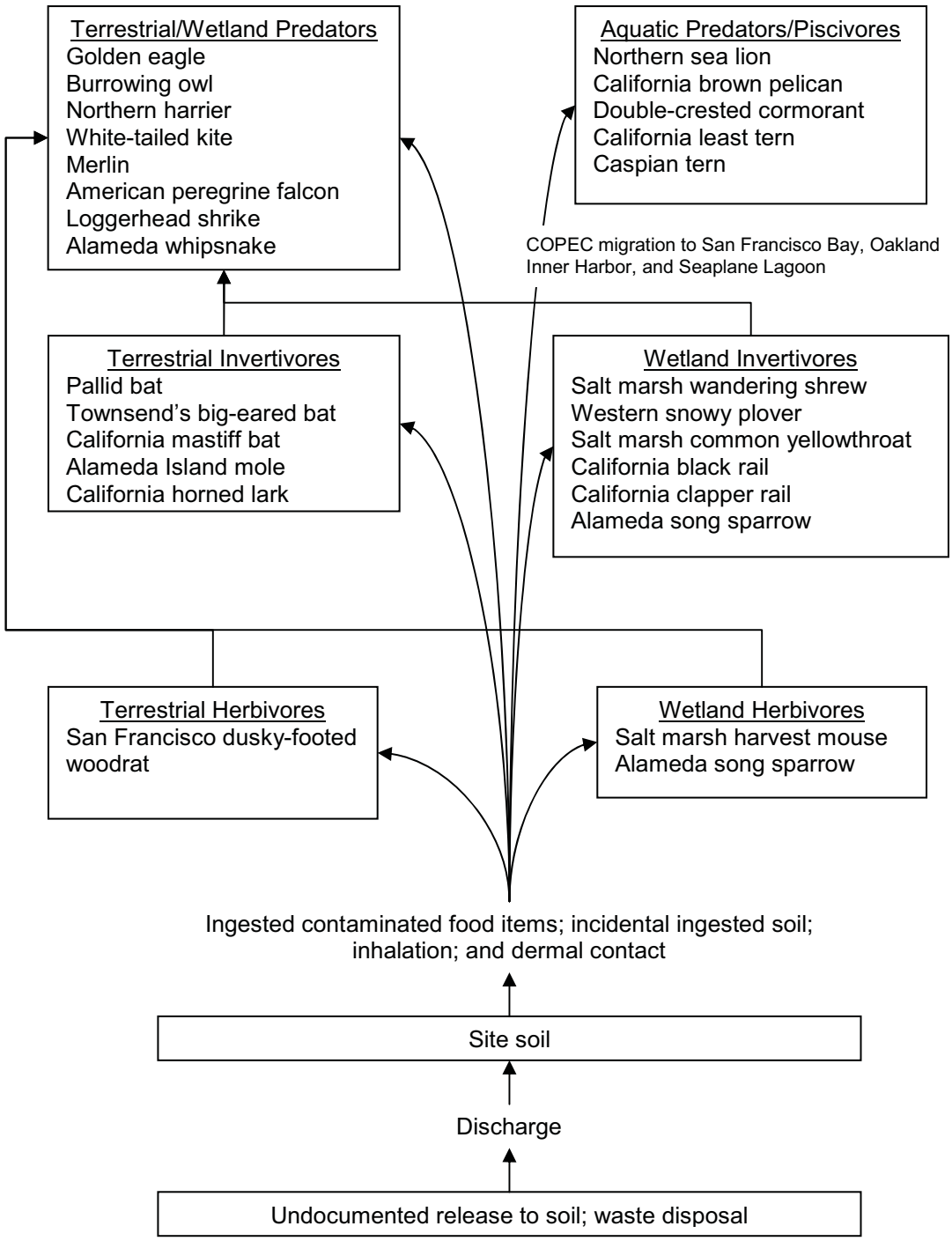


FIGURE 7-3
Conceptual Site Model Using Potentially Occurring Special-Status Species – Transfer Parcel FED-2B
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, File No: fig6-3.doc, 2/14/2008.

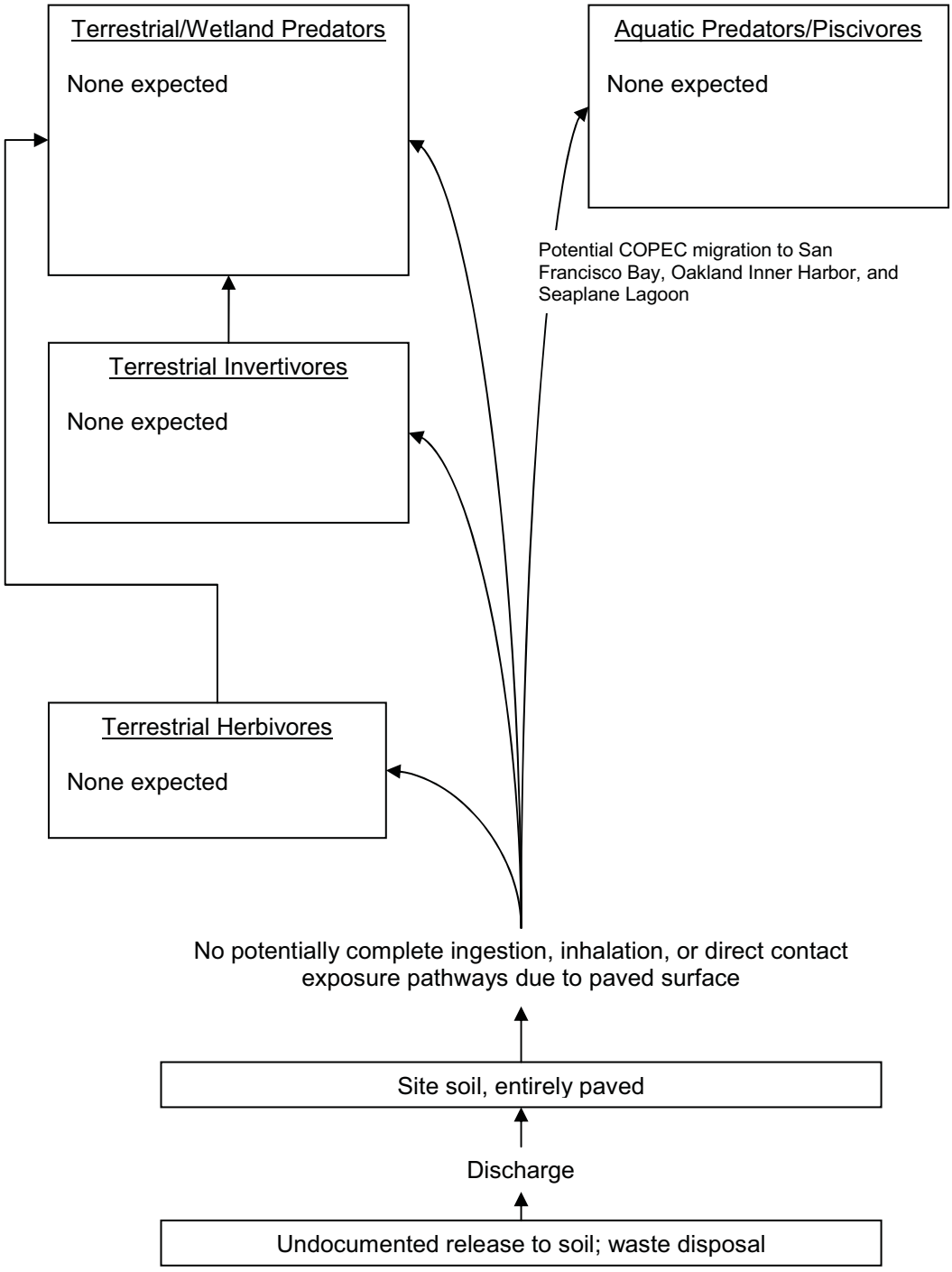


FIGURE 7-4
Conceptual Site Model Using Potentially Occurring Special-Status Species – Transfer Parcel FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Figure from Bechtel Environmental, Inc., CLEAN 3 Program, File No: fig6-4.doc, 11/29/2006.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 8-1 – SAMPLING LOCATIONS RECOMMENDED FOR FURTHER INVESTIGATION TRANSFER PARCELS FED-1A, FED-2B, AND FED-2C

FOR ADDITIONAL INFORMATION, CONTACT:

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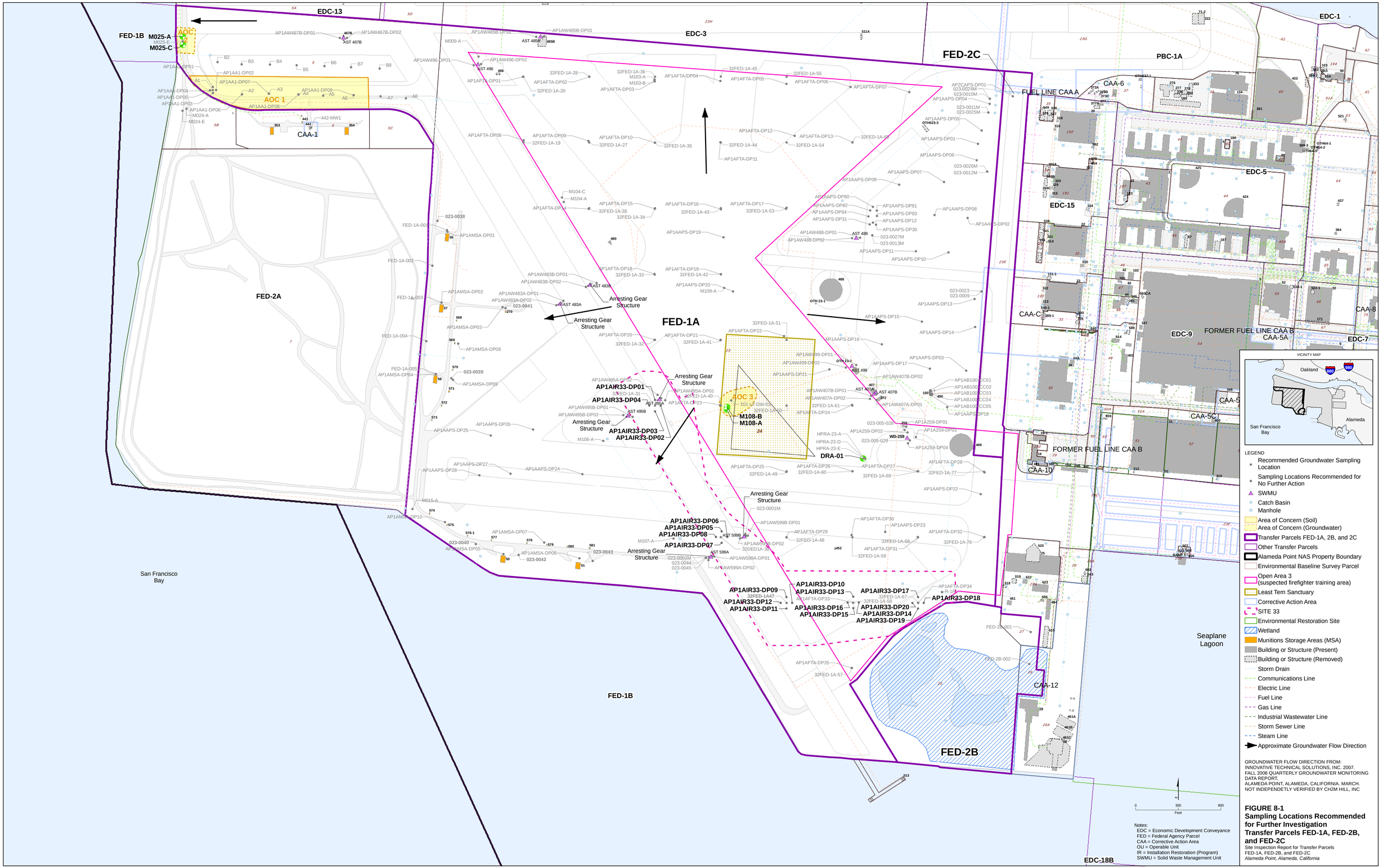

GROUNDWATER FLOW DIRECTION FROM:
INNOVATIVE TECHNICAL SOLUTIONS, INC. 2007. FALL 2006 QUARTERLY GROUNDWATER MONITORING DATA REPORT, ALAMEDA POINT, ALAMEDA, CALIFORNIA. MARCH. NOT INDEPENDETLY VERIFIED BY CH2M HILL, INC

Notes:
EDC = Economic Development Conveyance
FED = Federal Agency Parcel
CAA = Corrective Action Area
OU = Operable Unit
IR = Installation Restoration (Program)
SWMU = Solid Waste Management Unit

FIGURE 8-1
Sampling Locations Recommended for Further Investigation Transfer Parcels FED-1A, FED-2B, and FED-2C
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Appendix A
Analytical Results

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A3 References for Analytical Data Tables A-3

ATTACHMENT A1 - Analytical Data Tables

A1-1 Groundwater Samples (on CD-ROM)

A1-2 Soil Samples (on CD-ROM)

A1-3 Tissue Samples (on CD-ROM)

A1-4 Sediment Samples (on CD-ROM)

A2-1 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds

A2-2 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Pesticides

A2-3 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls

A2-4 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals

A2-5 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans

A2-6 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Explosives

A2-7 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons

A2-8 2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons

A2-9 2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Radionuclides

A2-10 2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds

A2-11 2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls

A2-12 2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals

A2-13 2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons

A2-14 2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons

A2-15 2010 Concrete Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls

Acronyms and Abbreviations

AST	aboveground storage tank
BEI	Bechtel Environmental, Inc.
CSR	chemical data study
DON	Department of the Navy
EBS	Environmental Baseline Survey
ESD	Environment Summary Document
FED	Federal Agency
FS	Feasibility Study
IT	International Technology Corporation
ITSI	Innovative Technical Solutions, Inc.
IWTP	Industrial Waste Treatment Plant
OU	operable unit
PAH	polycyclic aromatic hydrocarbon
PEP	parcel evaluation plan
PRC	PRC Environmental Management, Inc.
RI	Remedial Investigation
Shaw	Shaw Environmental, Inc.
SWAT	solid waste water quality assessment test
SWMU	solid waste management unit
TPH	total petroleum hydrocarbon
TtEMI	Tetra Tech EM Inc.
UST	underground storage tank

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APPENDIX A

Analytical Results

This appendix presents the previous analytical results for samples collected from 1990 to 2007 at Transfer Parcels Federal Agency Disposal (FED)-1A, FED-2B, and FED-2C (Section A1 below) and the additional analytical results for samples collected in 2010 at Transfer Parcels FED-1A, FED-2B, and FED-2C (Section A2).

A1 Analytical Results 1990-2007

The analytical data from Transfer Parcels FED-1A, FED -2B, and FED -2C used in this report have been tabulated and are presented in four tables on compact disk (located on the inside cover of the binder for this report). Table A1-1 presents analytical results from groundwater samples, Table A1-2 presents analytical results from soil samples, Table A1-3 presents analytical results from surface water samples, and Table A1-4 presents analytical results from sediment samples.

A1.1 Attribution and Format

Analytical data from 28 environmental investigations conducted within Transfer Parcel FED-1A, 2B, and 2C (as discussed in Section 3 of the main report) have been included in this appendix. Most of the existing data for Transfer Parcels FED-1A, 2B, and 2C were included from the following sources:

- Environmental baseline survey (EBS) soil, sediment, and groundwater data (polycyclic aromatic hydrocarbon [PAH] soil data were excluded because detection limits were above regulatory criteria) (IT, 2001)
- Soil, sediment, and groundwater results available in the 2004 ArcView Query Station from the investigations discussed in Section 3 of the site main report (TtEMI, 2004)
- Groundwater data from the basewide groundwater monitoring program (only the most recent data for each analyte are presented)
- PAH data from the 2002 PAH investigation (BEI, 2003)
- PAH data from the 2003 PAH investigation (BEI ,2004)
- Radiological data from the 2007 investigation (DON, 2007)

Headings for the data tables contained in this appendix list information pertaining to the sampling location (EBS parcel or decision area), station ID, sample ID, sample type (regular or duplicate), depth interval, sampling date, and a reference citation. A complete reference list is presented below in Section A1-3.

The reference "TtEMI, 2004" is used in the tables in this appendix to indicate data extracted from the Alameda Point ArcView Query Station database; data from this database included analytical results from the following investigations (as discussed in Section 3 of the main report):

- RI/FS Sampling Plan for NAS Alameda (Canonie, 1990)
- Data Summary Report RI/FS, Phases 1 and 2A (PRC and MW, 1993)
- Solid Waste Water Quality Assessment Test and Data Summary Report for RI/FS Phases 5 and 6 (PRC and MW, 1993a)
- EBS Report (ERM-West, 1994a)
- PEPs (ERM-West, 1994b)
- Ecological Assessment (PRC and MW, 1994)
- RI/FS Data Transmittal Memorandum, Sites 1, 2, 3, Runway Areas 6, 7A, 7B, 7C, 9, 10B, 11, 13, 15, 16, and 19 (PRC, 1996a)
- Operable Unit (OU)-4 Ecological Risk Assessment Revision 2 (PRC, 1996b)
- OU-4 Follow-on Ecological Assessment Work Plan/Field Sampling Plan (PRC, 1996c)
- RCRA Part B Permit Closure for Industrial Waste Treatment Plant (IWTP) # 25 (IT, 2000)
- Underground Storage Tank (UST) Summary Report (TtEMI, 2000a)
- Fuel Pipeline Oversight and Sampling (TtEMI and R&M, 2000)
- Storm Sewer Study Report (TtEMI, 2000c)
- EBS Data Evaluation Summary (IT, 2001)
- Environmental Summary Document (ESD) for Transfer Parcel FED-1A (TtEMI, 2001a)
- Storm Sewer Study Report, Total Petroleum Hydrocarbons (TPH) Addendum (TtEMI, 2001b)
- Summary Report, Data Gap Investigation at CAAs (TtEMI, 2001c)
- Data Summary Report, Supplemental RI Data Gap Sampling for OUs 1 and 2 (TtEMI, 2002b)
- Runway Wetland Risk Screening (Neptune, 2002)
- PAH Field Activity Study in the Draft Site Inspection Report of Transfer Parcel FED-1A (BEI, 2003a)
- RI for IR Site 26 (BEI, 2003b)
- Basewide Groundwater Monitoring Program Work Plan (Shaw, 2004a)
- Underground Storage Tank Removal, Least Tern Nesting Site (Shaw, 2005a)
- Final Closure Report for IWTP #25 (Shaw, 2005b)

- SWMU Evaluation Report for Transfer Parcel FED-1A (SulTech, 2005)
- Petroleum ASTs Evaluation and Closure Request (SulTech, 2004)
- Spring 2006 Groundwater Monitoring Report (ITSI, 2006)
- Fall 2006 Groundwater Monitoring Report (ITSI, 2007)

A2 2010 Analytical Results

The 2010 analytical data from Transfer Parcels FED-1A, FED-2B, and FED-2C used in this report have been tabulated and are presented in 15 tables shown in Attachment A1. Tables A2-1 through A2-9 present analytical results from soil samples, Tables A2-10 though A2-14 present analytical results from groundwater samples, and Table A2-15 presents analytical results from concrete samples collected from inside Building 100.

A2.1 Attribution and Format

Analytical data from the environmental investigations conducted within Transfer Parcel FED-1A, FED-2B, and FED-2C during the 2010 investigation (as discussed in Section 4 of the main Site Inspection Report document) have been included in this appendix.

A3 References for Analytical Data Tables

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Attachment A1
Analytical Data Tables

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Table A1-1a

Groundwater Samples: FED-1A EBS 5 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Pont, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HP1-10-A	HP1-10-E	HP1-11-A	HP1-11-E	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-E	M025-E	M025-E	M025-E	M025-E
			Sample_ID	280-S01-244	280-S01-245	280-S01-247	280-S01-248	280-S01-137	M025-A-A1009	M025-A-A1010	M025-A-A5012	M025-A-A6111	M025-A-B2705	M025-A-Q4	M025-A-Q4-DUP	280-S01-140	280-S01-141	280-S01-142	M-025E-Q1	M-025E-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	8 - 8	17 - 17	8 - 8	17 - 17	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	10-Aug-94	09-Aug-94	09-Aug-94	20-Jul-95	01-Jul-02	01-Jul-02	20-Apr-06	22-Mar-07	19-Dec-03	31-Mar-92	31-Mar-92	04-May-95	20-Jul-95	20-Jul-95	28-Jun-91	31-Mar-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
VOC	acetone	67-64-1	UG/L	5 U		8 U						3.8 U								2 U
VOC	benzene	71-43-2	UG/L	1 U	0.5 U	1 U	1 U					0.4 J					0.5 U	0.5 U		
VOC	bromobenzene	108-86-1	UG/L									0.5 U								
VOC	bromochloromethane	74-97-5	UG/L									0.5 U								
VOC	bromodichloromethane	75-27-4	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	bromoform	75-25-2	UG/L	1 U	2 U	1 U	1 U					1 U					1 U	1 U		
VOC	bromomethane	74-83-9	UG/L	2 U	1 U	2 U	2 U					1 U					1 UJ	1 UJ		
VOC	2-butanone	78-93-3	UG/L	12 U		5 U						10 U								2 U
VOC	tert-butyl alcohol	75-65-0	UG/L									10 U								
VOC	n-butylbenzene	104-51-8	UG/L									0.5 UJ								
VOC	sec-butylbenzene	135-98-8	UG/L									0.5 U								
VOC	tert-butylbenzene	98-06-6	UG/L									0.5 UJ								
VOC	carbon disulfide	75-15-0	UG/L	1 U	0.6 J	1 U	1 U					0.5 U					1 U	1 U		
VOC	carbon tetrachloride	56-23-5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U					0.5 U					0.5 U	0.5 U		
VOC	chlorobenzene	108-90-7	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	chlorodibromomethane	124-48-1	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	chloroethane	75-00-3	UG/L	2 U	2 U	2 U	2 U					1 U					2 U	2 U		
VOC	chloroform	67-66-3	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	chloromethane	74-87-3	UG/L	2 U	2 U	2 U	2 U					1 U					2 U	2 U		
VOC	2-chlorotoluene	95-49-8	UG/L									0.5 U								
VOC	4-chlorotoluene	106-43-4	UG/L									0.5 U								
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L									2 U								
VOC	1,2-dibromoethane	106-93-4	UG/L									0.5 U								
VOC	dibromomethane	74-95-3	UG/L									0.5 U								
VOC	1,2-dichlorobenzene	95-50-1	UG/L									0.5 U								
VOC	1,3-dichlorobenzene	541-73-1	UG/L									0.5 U								
VOC	1,4-dichlorobenzene	106-46-7	UG/L									0.5 U								
VOC	dichlorodifluoromethane	75-71-8	UG/L									1 U								
VOC	1,1-dichloroethane	75-34-3	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	1,2-dichloroethane	107-06-2	UG/L	0.5 U	0.5 U	0.5 U	0.5 U					0.2 J					0.5 UJ	0.5 UJ		
VOC	1,1-dichloroethene	75-35-4	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	cis-1,2-dichloroethene	156-59-2	UG/L									0.6								
VOC	trans-1,2-dichloroethene	156-60-5	UG/L									0.5 U							1 U	
VOC	1,2-dichloroethene	540-59-0	UG/L	1	2 U	1 U	1 U	1									1 U	1 U		
VOC	1,2-dichloropropane	78-87-5	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	1,3-dichloropropane	142-28-9	UG/L									0.5 U								
VOC	sec-dichloropropane	594-20-7	UG/L									0.5 U								
VOC	1,1-dichloropropene	563-58-6	UG/L									0.5 U								
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U									0.5 U	0.5 U		
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U									0.5 U	0.5 U		
VOC	diisopropyl ether	108-20-3	UG/L									0.5 U								
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L									0.5 U								
VOC	ethylbenzene	100-41-4	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		
VOC	hexachlorobutadiene	87-68-3	UG/L									0.5 U								
VOC	2-hexanone	591-78-6	UG/L	2 U	2 U	2 U	2 U					10 U					2 U	2 U		
VOC	isopropylbenzene	98-82-8	UG/L									0.03 J								
VOC	p-isopropyltoluene	99-87-6	UG/L									0.5 UJ								
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L									0.5 U								
VOC	methyl tert-butyl ether	1634-04-4	UG/L									0.5 U								
VOC	methylene chloride	75-09-2	UG/L	1 U	2 U	1 U	1 U					0.7 U					1 UJ	1 UJ		
VOC	4-methyl-2-pentanone	108-10-1	UG/L	2 U	2 U	2 U	2 U					10 U					2 U	2 U		
VOC	naphthalene	91-20-3	UG/L									2 UJ								
VOC	n-propylbenzene	103-65-1	UG/L									0.5 U								
VOC	styrene	100-42-5	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U		

Table A1-1a

Groundwater Samples: FED-1A EBS 5 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Pont, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HP1-10-A	HP1-10-E	HP1-11-A	HP1-11-E	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-E	M025-E	M025-E	M025-E	M025-E	M025-E	M025-E
			Sample_ID	280-S01-244	280-S01-245	280-S01-247	280-S01-248	280-S01-137	M025-A-A1009	M025-A-A1010	M025-A-A5012	M025-A-A6111	M025-A-B2705	M-025A-Q4	M-025A-Q4-DUP	280-S01-140	280-S01-141	280-S01-142	M-025E-Q1	M-025E-Q4	
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG		
			Depth	8 - 8	17 - 17	8 - 8	17 - 17	-	-	-	-	-	-	-	-	-	-	-	-	-		
			Collection_Date	09-Aug-94	10-Aug-94	09-Aug-94	09-Aug-94	20-Jul-95	01-Jul-02	01-Jul-02	20-Apr-06	22-Mar-07	19-Dec-03	31-Mar-92	31-Mar-92	04-May-95	20-Jul-95	20-Jul-95	28-Jun-91	31-Mar-92		
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L									0.5 U										
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U				
VOC	tetrachloroethene	127-18-4	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U				
VOC	toluene	108-88-3	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U				
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L									0.5 UJ										
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L									0.5 UJ										
VOC	1,1,1-trichloroethane	71-55-6	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U				
VOC	1,1,2-trichloroethane	79-00-5	UG/L	1 U	2 U	1 U	1 U					0.5 U					1 U	1 U				
VOC	trichloroethene	79-01-6	UG/L	1 U	2 U	1 U	1 U					0.1 J					1 U	1 U				
VOC	trichlorofluoromethane	75-69-4	UG/L									1 U										
VOC	1,2,3-trichloropropane	96-18-4	UG/L									0.5 U										
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L									0.5 U										
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L									0.5 U										
VOC	vinyl acetate	108-05-4	UG/L		2 U									1 U	1 U						1 U	
VOC	vinyl chloride	75-01-4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U					2.1					0.5 U	0.5 U				
VOC	meta-,para-xylene	7816-60-0	UG/L									0.08 J										
VOC	m-, p-xylene	136777-61-2	UG/L										1 U									
VOC	o-xylene	95-47-6	UG/L									0.5 U										
VOC	xylenes, total	1330-20-7	UG/L	1 U	2 U	1 U	1 U	1 U									1 U	1 U				
FUELS	diesel	11-84-7	UG/L						50 UJ	100 UJ												
FUELS	gasoline	8006-61-9	UG/L						17 U	50												
FUELS	jet fuel	94114-58-6	UG/L						50 UJ	100 UJ												
FUELS	motor oil	68476-77-7	UG/L						300 UJ	600 UJ												
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L											650	1550						180 U	
SVOC	acenaphthene	83-32-9	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	acenaphthylene	208-96-8	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	anthracene	120-12-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	benz(a)anthracene	56-55-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	benzo(b)fluoranthene	205-99-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	benzo(k)fluoranthene	207-08-9	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	benzoic acid	65-85-0	UG/L									48 UJ									5 U	
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	benzo(a)pyrene	50-32-8	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	benzyl alcohol	100-51-6	UG/L											2 U	2 U						2 U	
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L									9.5 U										
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L		5 U	10 U	10 U				9.5 U						10 UJ	10 UJ				
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L		5 U	4 U	4 U					9.5 U					4 U	4 U				
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	butyl benzyl phthalate	85-68-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	carbazole	86-74-8	UG/L		5 U	10 U	10 U	10 U									10 U	10 U				
SVOC	4-chloroaniline	106-47-8	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2-chloronaphthalene	91-58-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2-chlorophenol	95-57-8	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	chrysene	218-01-9	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	di-n-butyl phthalate	84-74-2	UG/L		5 U	10 U	10 U					0.46 J					10 U	10 U				
SVOC	dibenzofuran	132-64-9	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	1,2-dichlorobenzene	95-50-1	UG/L		5 U	5 U	5 U					9.5 U					5 U	5 U				
SVOC	1,3-dichlorobenzene	541-73-1	UG/L		5 U	5 U	5 U					9.5 U					5 U	5 U				
SVOC	1,4-dichlorobenzene	106-46-7	UG/L		5 U	5 U	5 U					9.5 U					5 U	5 U				

Table A1-1a

Groundwater Samples: FED-1A EBS 5 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HP1-10-A	HP1-10-E	HP1-11-A	HP1-11-E	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-E	M025-E	M025-E	M025-E	M025-E	M025-E
			Sample_ID	280-S01-244	280-S01-245	280-S01-247	280-S01-248	280-S01-137	M025-A-A1009	M025-A-A1010	M025-A-A5012	M025-A-A6111	M025-A-B2705	M-025A-Q4	M-025A-Q4-DUP	280-S01-140	280-S01-141	280-S01-142	M-025E-Q1	M-025E-Q4	
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG		
			Depth	8 - 8	17 - 17	8 - 8	17 - 17	-	-	-	-	-	-	-	-	-	-	-	-	-		
			Collection_Date	09-Aug-94	10-Aug-94	09-Aug-94	09-Aug-94	20-Jul-95	01-Jul-02	01-Jul-02	20-Apr-06	22-Mar-07	19-Dec-03	31-Mar-92	31-Mar-92	04-May-95	20-Jul-95	20-Jul-95	28-Jun-91	31-Mar-92		
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L		5 U	10 U	10 U					19 U					10 U	10 U				
SVOC	2,4-dichlorophenol	120-83-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	diethyl phthalate	84-66-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 UJ				
SVOC	2,4-dimethylphenol	105-67-9	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	dimethyl phthalate	131-11-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L		12 U	25 U	25 U					19 U					25 U	25 U				
SVOC	2,4-dinitrophenol	51-28-5	UG/L		12 U	25 U	25 U					19 U					25 U	25 U				
SVOC	2,4-dinitrotoluene	121-14-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2,6-dinitrotoluene	606-20-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	di-n-octyl phthalate	117-84-0	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	fluoranthene	206-44-0	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	fluorene	86-73-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	hexachlorobenzene	118-74-1	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	hexachlorobutadiene	87-68-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L		5 U	10 U	10 U					19 U					10 U	10 U				
SVOC	hexachloroethane	67-72-1	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	isophorone	78-59-1	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2-methylnaphthalene	91-57-6	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2-methylphenol	95-48-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	4-methylphenol	106-44-5	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	naphthalene	91-20-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2-nitroaniline	88-74-4	UG/L		12 U	25 U	25 U					19 U					25 U	25 U				
SVOC	3-nitroaniline	99-09-2	UG/L		12 U	25 U	25 U					19 U					25 U	25 U				
SVOC	4-nitroaniline	100-01-6	UG/L		12 U	25 U	25 U					19 U					25 U	25 U				
SVOC	nitrobenzene	98-95-3	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	4-nitrophenol	100-02-7	UG/L		12 U	25 U	25 U					19 U					25 UJ	25 UJ				
SVOC	2-nitrophenol	88-75-5	UG/L		5 U	10 U	10 U					19 U					10 U	10 U				
SVOC	N-nitrosodimethylamine	62-75-9	UG/L									9.5 U										
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	pentachlorophenol	87-86-5	UG/L		12 U	25 U	25 U					19 U					25 U	25 U				
SVOC	phenanthrene	85-01-8	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	phenol	108-95-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	pyrene	129-00-0	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L		12 U	25 U	25 U					9.5 U					25 U	25 U				
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L		5 U	10 U	10 U					9.5 U					10 U	10 U				
PEST/PCB	aldrin	309-00-2	UG/L									0.05 U									0.05 U	
PEST/PCB	Aroclor 1016	12674-11-2	UG/L									0.48 U									0.5 U	
PEST/PCB	Aroclor 1221	11104-28-2	UG/L									0.95 U									0.5 U	
PEST/PCB	Aroclor 1232	11141-16-5	UG/L									0.48 U									0.5 U	
PEST/PCB	Aroclor 1242	53469-21-9	UG/L									0.48 UJ									0.5 U	
PEST/PCB	Aroclor 1248	12672-29-6	UG/L									0.48 UJ									0.5 U	
PEST/PCB	Aroclor 1254	11097-69-1	UG/L									0.48 UJ									0.5 U	
PEST/PCB	Aroclor 1260	11096-82-5	UG/L									0.48 UJ									0.5 U	
PEST/PCB	alpha-BHC	319-84-6	UG/L									0.05 UJ									0.025 U	
PEST/PCB	beta-BHC	319-85-7	UG/L									0.05 U									0.05 U	
PEST/PCB	delta-BHC	319-86-8	UG/L									0.05 UJ									0.05 U	
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L									0.05 UJ									0.025 U	
PEST/PCB	alpha-chlordane	5103-71-9	UG/L									0.05 U									0.05 U	
PEST/PCB	gamma-chlordane	5566-34-7	UG/L									0.05 U									0.05 U	
PEST/PCB	4,4'-DDD	72-54-8	UG/L									0.1 U									0.1 U	
PEST/PCB	4,4'-DDE	72-55-9	UG/L									0.1 U									0.05 U	

Table A1-1a

Groundwater Samples: FED-1A EBS 5 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HP1-10-A	HP1-10-E	HP1-11-A	HP1-11-E	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-E	M025-E	M025-E	M025-E	M025-E	M025-E	M025-E
			Sample_ID	280-S01-244	280-S01-245	280-S01-247	280-S01-248	280-S01-137	M025-A-A1009	M025-A-A1010	M025-A-A5012	M025-A-A6111	M025-A-B2705	M025-A-Q4	M-025A-Q4-DUP	280-S01-140	280-S01-141	280-S01-142	M-025E-Q1	M-025E-Q4	
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG		
			Depth	8 - 8	17 - 17	8 - 8	17 - 17	-	-	-	-	-	-	-	-	-	-	-	-	-		
			Collection_Date	09-Aug-94	10-Aug-94	09-Aug-94	09-Aug-94	20-Jul-95	01-Jul-02	01-Jul-02	20-Apr-06	22-Mar-07	19-Dec-03	31-Mar-92	31-Mar-92	04-May-95	20-Jul-95	20-Jul-95	28-Jun-91	31-Mar-92		
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
PEST/PCB	4,4'-DDT	50-29-3	UG/L									0.1 U								0.1 U		
PEST/PCB	dieldrin	60-57-1	UG/L									0.1 U								0.05 U		
PEST/PCB	endosulfan I	959-98-8	UG/L									0.05 U								0.05 U		
PEST/PCB	endosulfan II	33213-65-9	UG/L									0.1 U								0.1 U		
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L									0.1 U								0.1 U		
PEST/PCB	endrin	72-20-8	UG/L									0.1 U								0.05 U		
PEST/PCB	endrin aldehyde	7421-93-4	UG/L									0.1 U										
PEST/PCB	endrin ketone	53494-70-5	UG/L									0.1 U								0.1 U		
PEST/PCB	heptachlor	76-44-8	UG/L									0.05 U								0.05 U		
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L									0.006 J								0.05 U		
PEST/PCB	methoxychlor	72-43-5	UG/L									0.5 U								0.5 U		
PEST/PCB	toxaphene	8001-35-2	UG/L									1 U								1 U		
METALS	aluminum	7429-90-5	UG/L									8.1 U					53.2 UJ	78 UJ				
METALS	antimony	7440-36-0	UG/L									0.26 U					5.6 U	5.6 U				
METALS	arsenic	7440-38-2	UG/L									0.84 U					13.2 UJ	15 UJ				
METALS	barium	7440-39-3	UG/L									260 J					27.7 J	23 J				
METALS	beryllium	7440-41-7	UG/L									2 U					0.1 U	0.1 U				
METALS	cadmium	7440-43-9	UG/L									5 U					0.3 U	0.3 U				
METALS	calcium	7440-70-2	UG/L									12 J					21200	17800				
METALS	chromium	7440-47-3	UG/L									0.84 U					1 U	1 U				
METALS	cobalt	7440-48-4	UG/L									0.12 J					3.8 U	3.8 U				
METALS	copper	7440-50-8	UG/L									0.7 J					12 U	12 U				
METALS	cyanide	57-12-5	UG/L									0.01 U										
METALS	iron	7439-89-6	UG/L									34 U					468	384				
METALS	lead	7439-92-1	UG/L									3 U					1.1 U	1.1 U				
METALS	magnesium	7439-95-4	UG/L									18					50600	38000				
METALS	manganese	7439-96-5	UG/L									23 J					431	319				
METALS	mercury	7439-97-6	UG/L									0.2 U					0.2 U	0.2 U				
METALS	molybdenum	7439-98-7	UG/L									20 U					7.9 U	7.9 U				
METALS	nickel	7440-02-0	UG/L									20 U					7.5 U	7.5 U				
METALS	potassium	7440-09-7	UG/L									14					34300	28400				
METALS	selenium	7782-49-2	UG/L									5 U					2.4 U	2.4 U				
METALS	silver	7440-22-4	UG/L									5 U					0.9 U	0.9 U				
METALS	sodium	7440-23-5	UG/L									250					831000	657000				
METALS	thallium	7440-28-0	UG/L									5 U					3.4 U	3.4 U				
METALS	vanadium	7440-62-2	UG/L									6.8 J					3.7 U	3.7 U				
METALS	zinc	7440-66-6	UG/L									20 U					27.7	13.6 J				
RAD	actinium-228	14331-83-0	PCI/L									20 U										
RAD	bismuth-212	14913-49-6	PCI/L									50 U										
RAD	bismuth-214	14733-03-0	PCI/L									10										
RAD	cobalt-60	10198-40-0	PCI/L								5 U											
RAD	lead-210	14255-04-0	PCI/L									750 U										
RAD	lead-212	15092-94-1	PCI/L									15 U										
RAD	lead-214	15067-28-4	PCI/L									10 U										
RAD	potassium-40	13966-00-2	PCI/L									100 U										
RAD	protactinium-234	15100-28-4	PCI/L										1740 U									
RAD	radium	7440-14-4	PCI/L										1.6									
RAD	radium-226	13982-63-3	PCI/L									0.5 U					0.19 UJ	0.39 UJ				
RAD	radium-228	15262-20-1	PCI/L									5 U				0.26 UJ						
RAD	total gross alpha	12587-46-1	PCI/L									2.02 J					1.2 UJ	4.89 UJ				
RAD	total gross beta	12587-47-2	PCI/L									4.81					19.5	23.1				
RAD	strontium	7440-24-6	PCI/L									5 U										
RAD	thallium-208	01-00004	PCI/L									10										
RAD	thorium-234	15065-10-8	PCI/L									250 U										

Table A1-1a

Groundwater Samples: FED-1A EBS 5 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Pont, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HP1-10-A	HP1-10-E	HP1-11-A	HP1-11-E	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-A	M025-E	M025-E	M025-E	M025-E	M025-E
			Sample_ID	280-S01-244	280-S01-245	280-S01-247	280-S01-248	280-S01-137	M025-A-A1009	M025-A-A1010	M025-A-A5012	M025-A-A6111	M025-A-B2705	M025A-Q4	M-025A-Q4-DUP	280-S01-140	280-S01-141	280-S01-142	M-025E-Q1	M-025E-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	8 - 8	17 - 17	8 - 8	17 - 17	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	10-Aug-94	09-Aug-94	09-Aug-94	20-Jul-95	01-Jul-02	01-Jul-02	20-Apr-06	22-Mar-07	19-Dec-03	31-Mar-92	31-Mar-92	04-May-95	20-Jul-95	20-Jul-95	28-Jun-91	31-Mar-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
RAD	tritium	10028-17-8	PCI/L									500 U								
RAD	uranium-233	13968-55-3	PCI/L									0.2 U								
RAD	uranium-235	15117-96-1	PCI/L									0.2 U								
RAD	uranium-238	7440-61-1	PCI/L									0.2 U								

Table A1-1b
Groundwater Samples: FED-1A EBS 5 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	HP1-10-D	HP1-11-D	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C
			Sample_ID	280-S01-246	280-S01-249	280-S01-144	M025-C-A1011	M025-C-A5013	M025-C-A6112	M025-C-B2706	M025-C-D4560	M-025C-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	48.7 - 48.7	60 - 60	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	09-Aug-94	11-May-95	01-Jul-02	18-Apr-06	21-Mar-07	19-Dec-03	26-Aug-05	08-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2006	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
VOC	acetone	67-64-1	UG/L		4 U				10 U			
VOC	benzene	71-43-2	UG/L	1 U	1 U				0.5 U			
VOC	bromobenzene	108-86-1	UG/L						0.5 U			
VOC	bromochloromethane	74-97-5	UG/L						0.5 U			
VOC	bromodichloromethane	75-27-4	UG/L	1 U	1 U				0.5 U			
VOC	bromoform	75-25-2	UG/L	1 U	1 U				1 U			
VOC	bromomethane	74-83-9	UG/L	2 U	2 U				1 U			
VOC	2-butanone	78-93-3	UG/L	13 U					10 U			
VOC	tert-butyl alcohol	75-65-0	UG/L						10 U			
VOC	n-butylbenzene	104-51-8	UG/L						0.5 U			
VOC	sec-butylbenzene	135-98-8	UG/L						0.5 U			
VOC	tert-butylbenzene	98-06-6	UG/L						0.5 U			
VOC	carbon disulfide	75-15-0	UG/L	2	1 U				0.5 U			
VOC	carbon tetrachloride	56-23-5	UG/L	0.5 U	0.5 U				0.5 U			
VOC	chlorobenzene	108-90-7	UG/L	1 U	1 U				0.5 U			
VOC	chlorodibromomethane	124-48-1	UG/L	1 U	1 U				0.5 U			
VOC	chloroethane	75-00-3	UG/L	2 U	2 U				1 U			
VOC	chloroform	67-66-3	UG/L	1 U	1 U				0.5 U			
VOC	chloromethane	74-87-3	UG/L	2 U	2 U				1 U			
VOC	2-chlorotoluene	95-49-8	UG/L						0.5 U			
VOC	4-chlorotoluene	106-43-4	UG/L						0.5 U			
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L						2 U			
VOC	1,2-dibromoethane	106-93-4	UG/L						0.5 U			
VOC	dibromomethane	74-95-3	UG/L						0.5 U			
VOC	1,2-dichlorobenzene	95-50-1	UG/L						0.5 U			
VOC	1,3-dichlorobenzene	541-73-1	UG/L						0.5 U			
VOC	1,4-dichlorobenzene	106-46-7	UG/L						0.5 U			
VOC	dichlorodifluoromethane	75-71-8	UG/L						1 U			
VOC	1,1-dichloroethane	75-34-3	UG/L	1 U	1 U				0.5 U			
VOC	1,2-dichloroethane	107-06-2	UG/L	0.5 U	0.5 U				0.5 U			
VOC	1,1-dichloroethene	75-35-4	UG/L	1 U	1 U				0.5 U			
VOC	cis-1,2-dichloroethene	156-59-2	UG/L						0.5 U			
VOC	trans-1,2-dichloroethene	156-60-5	UG/L						0.5 U			
VOC	1,2-dichloroethene	540-59-0	UG/L	1 U	1 U	1 U						
VOC	1,2-dichloropropane	78-87-5	UG/L	1 U	1 U				0.5 U			
VOC	1,3-dichloropropane	142-28-9	UG/L						0.5 U			
VOC	sec-dichloropropane	594-20-7	UG/L						0.5 U			
VOC	1,1-dichloropropene	563-58-6	UG/L						0.5 U			

Table A1-1b
Groundwater Samples: FED-1A EBS 5 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	HP1-10-D	HP1-11-D	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C
			Sample_ID	280-S01-246	280-S01-249	280-S01-144	M025-C-A1011	M025-C-A5013	M025-C-A6112	M025-C-B2706	M025-C-D4560	M-025C-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	48.7 - 48.7	60 - 60	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	09-Aug-94	11-May-95	01-Jul-02	18-Apr-06	21-Mar-07	19-Dec-03	26-Aug-05	08-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2006	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L	0.5 U	0.5 U	0.5 U						
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L	0.5 U	0.5 U	0.5 U						
VOC	diisopropyl ether	108-20-3	UG/L						0.5 U			
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L						0.5 U			
VOC	ethylbenzene	100-41-4	UG/L	1 U	1 U				0.5 U			
VOC	hexachlorobutadiene	87-68-3	UG/L						0.5 U			
VOC	2-hexanone	591-78-6	UG/L	2 U	2 U			10 U				
VOC	isopropylbenzene	98-82-8	UG/L						0.5 U			
VOC	p-isopropyltoluene	99-87-6	UG/L						0.5 U			
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L						0.5 U			
VOC	methyl tert-butyl ether	1634-04-4	UG/L						0.5 U			
VOC	methylene chloride	75-09-2	UG/L	1 U	1 U				10 U			
VOC	4-methyl-2-pentanone	108-10-1	UG/L	2 U	2 U				10 U			
VOC	naphthalene	91-20-3	UG/L						2 U			
VOC	n-propylbenzene	103-65-1	UG/L						0.5 U			
VOC	styrene	100-42-5	UG/L	1 U	1 U				0.5 U			
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L						0.5 U			
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L	1 U	1 U				0.5 U			
VOC	tetrachloroethene	127-18-4	UG/L	1 U	1 U				0.5 U			
VOC	toluene	108-88-3	UG/L	1 U	1 U				0.5 U			
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L						0.5 U			
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L						0.5 U			
VOC	1,1,1-trichloroethane	71-55-6	UG/L	1 U	1 U				0.5 U			
VOC	1,1,2-trichloroethane	79-00-5	UG/L	1 U	1 U				0.5 U			
VOC	trichloroethene	79-01-6	UG/L	1 U	1 U				0.5 U			
VOC	trichlorofluoromethane	75-69-4	UG/L						1 U			
VOC	1,2,3-trichloropropane	96-18-4	UG/L						0.5 U			
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L						0.5 U			
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L						0.5 U			
VOC	vinyl acetate	108-05-4	UG/L									1 U
VOC	vinyl chloride	75-01-4	UG/L	0.5 U	0.5 U				0.5 U			
VOC	meta-,para-xylene	7816-60-0	UG/L						0.5 U			
VOC	m-, p-xylene	136777-61-2	UG/L							1 U		
VOC	o-xylene	95-47-6	UG/L						0.5 U			
VOC	xylenes, total	1330-20-7	UG/L	1 U	1 U	1 U						
FUELS	diesel	11-84-7	UG/L				50 UJ					
FUELS	gasoline	8006-61-9	UG/L				32 U					
FUELS	jet fuel	94114-58-6	UG/L				50 UJ					

Table A1-1b
Groundwater Samples: FED-1A EBS 5 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	HP1-10-D	HP1-11-D	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C
			Sample_ID	280-S01-246	280-S01-249	280-S01-144	M025-C-A1011	M025-C-A5013	M025-C-A6112	M025-C-B2706	M025-C-D4560	M-025C-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	48.7 - 48.7	60 - 60	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	09-Aug-94	11-May-95	01-Jul-02	18-Apr-06	21-Mar-07	19-Dec-03	26-Aug-05	08-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2006	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
FUELS	motor oil	68476-77-7	UG/L				300 UJ					
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L									180 U
SVOC	acenaphthene	83-32-9	UG/L	10 U	10 U						9.6 U	
SVOC	acenaphthylene	208-96-8	UG/L	10 U	10 U						9.6 U	
SVOC	anthracene	120-12-7	UG/L	10 U	10 U						9.6 U	
SVOC	benz(a)anthracene	56-55-3	UG/L	10 U	10 U						9.6 U	
SVOC	benzo(b)fluoranthene	205-99-2	UG/L	10 U	10 U						9.6 U	
SVOC	benzo(k)fluoranthene	207-08-9	UG/L	10 U	10 U						9.6 U	
SVOC	benzoic acid	65-85-0	UG/L								48 U	
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L	10 U	10 U						9.6 U	
SVOC	benzo(a)pyrene	50-32-8	UG/L	10 U	10 U						9.6 U	
SVOC	benzyl alcohol	100-51-6	UG/L									2 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L	10 U	10 U						9.6 U	
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L	10 U	10 U						9.6 U	
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L	10 U	10 U						9.6 U	
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L	4 U	14 U						2.7 J	
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L	10 U	10 U						9.6 U	
SVOC	butyl benzyl phthalate	85-68-7	UG/L	10 U	10 U						9.6 U	
SVOC	carbazole	86-74-8	UG/L	10 U	10 U	10 U						
SVOC	4-chloroaniline	106-47-8	UG/L	10 U	10 U						9.6 U	
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L	10 U	10 U						9.6 U	
SVOC	2-chloronaphthalene	91-58-7	UG/L	10 U	10 U						9.6 U	
SVOC	2-chlorophenol	95-57-8	UG/L	10 U	10 U						9.6 U	
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L	10 U	10 U						9.6 U	
SVOC	chrysene	218-01-9	UG/L	10 U	10 U						9.6 U	
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L	10 U	10 U						9.6 U	
SVOC	di-n-butyl phthalate	84-74-2	UG/L	10 U	10 U						9.6 U	
SVOC	dibenzofuran	132-64-9	UG/L	10 U	10 U						9.6 U	
SVOC	1,2-dichlorobenzene	95-50-1	UG/L	5 U	5 U						9.6 U	
SVOC	1,3-dichlorobenzene	541-73-1	UG/L	5 U	5 U						9.6 U	
SVOC	1,4-dichlorobenzene	106-46-7	UG/L	5 U	5 U						9.6 UJ	
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L	10 U	10 U						19 U	
SVOC	2,4-dichlorophenol	120-83-2	UG/L	10 U	10 U						9.6 U	
SVOC	diethyl phthalate	84-66-2	UG/L	10 U	10 U						9.6 U	
SVOC	2,4-dimethylphenol	105-67-9	UG/L	10 U	10 U						9.6 U	
SVOC	dimethyl phthalate	131-11-3	UG/L	10 U	10 U						9.6 U	
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L	25 U	25 U						19 U	
SVOC	2,4-dinitrophenol	51-28-5	UG/L	25 U	25 U						19 U	

Table A1-1b
Groundwater Samples: FED-1A EBS 5 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	HP1-10-D	HP1-11-D	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C
			Sample_ID	280-S01-246	280-S01-249	280-S01-144	M025-C-A1011	M025-C-A5013	M025-C-A6112	M025-C-B2706	M025-C-D4560	M-025C-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	48.7 - 48.7	60 - 60	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	09-Aug-94	11-May-95	01-Jul-02	18-Apr-06	21-Mar-07	19-Dec-03	26-Aug-05	08-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2006	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
SVOC	2,4-dinitrotoluene	121-14-2	UG/L	10 U	10 U						9.6 U	
SVOC	2,6-dinitrotoluene	606-20-2	UG/L	10 U	10 U						9.6 U	
SVOC	di-n-octyl phthalate	117-84-0	UG/L	10 U	10 U						9.6 U	
SVOC	fluoranthene	206-44-0	UG/L	10 U	10 U						9.6 U	
SVOC	fluorene	86-73-7	UG/L	10 U	10 U						9.6 U	
SVOC	hexachlorobenzene	118-74-1	UG/L	10 U	10 U						9.6 U	
SVOC	hexachlorobutadiene	87-68-3	UG/L	10 U	10 U						9.6 U	
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L	10 U	10 U						19 U	
SVOC	hexachloroethane	67-72-1	UG/L	10 U	10 U						9.6 U	
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L	10 U	10 U						9.6 U	
SVOC	isophorone	78-59-1	UG/L	10 U	5 J						9.6 U	
SVOC	2-methylnaphthalene	91-57-6	UG/L	10 U	10 U						9.6 U	
SVOC	2-methylphenol	95-48-7	UG/L	10 U	10 U						9.6 U	
SVOC	4-methylphenol	106-44-5	UG/L	10 U	10 U						9.6 U	
SVOC	naphthalene	91-20-3	UG/L	10 U	10 U							
SVOC	2-nitroaniline	88-74-4	UG/L	25 U	25 U						19 U	
SVOC	3-nitroaniline	99-09-2	UG/L	25 U	25 U						19 U	
SVOC	4-nitroaniline	100-01-6	UG/L	25 U	25 U						19 U	
SVOC	nitrobenzene	98-95-3	UG/L	10 U	10 U						9.6 U	
SVOC	4-nitrophenol	100-02-7	UG/L	25 U	25 U						19 U	
SVOC	2-nitrophenol	88-75-5	UG/L	10 U	10 U						19 U	
SVOC	N-nitrosodimethylamine	62-75-9	UG/L								9.6 U	
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L	10 U	10 U						9.6 U	
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L	10 U	10 U						9.6 U	
SVOC	pentachlorophenol	87-86-5	UG/L	25 U	25 U						19 U	
SVOC	phenanthrene	85-01-8	UG/L	10 U	10 U						9.6 U	
SVOC	phenol	108-95-2	UG/L	10 U	10 U						9.6 U	
SVOC	pyrene	129-00-0	UG/L	10 U	10 U						9.6 U	
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L	10 U	10 U						9.6 U	
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L	25 U	25 U						9.6 U	
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L	10 U	10 U						9.6 U	
PEST/PCB	aldrin	309-00-2	UG/L									0.05 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/L									0.5 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/L									0.5 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/L									0.5 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/L									0.5 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/L									0.5 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/L									0.5 U

Table A1-1b
Groundwater Samples: FED-1A EBS 5 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	HP1-10-D	HP1-11-D	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C
			Sample_ID	280-S01-246	280-S01-249	280-S01-144	M025-C-A1011	M025-C-A5013	M025-C-A6112	M025-C-B2706	M025-C-D4560	M-025C-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	48.7 - 48.7	60 - 60	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	09-Aug-94	11-May-95	01-Jul-02	18-Apr-06	21-Mar-07	19-Dec-03	26-Aug-05	08-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2006	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
PEST/PCB	Aroclor 1260	11096-82-5	UG/L									0.5 U
PEST/PCB	alpha-BHC	319-84-6	UG/L									0.025 U
PEST/PCB	beta-BHC	319-85-7	UG/L									0.05 U
PEST/PCB	delta-BHC	319-86-8	UG/L									0.05 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L									0.025 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/L									0.05 U
PEST/PCB	gamma-chlordane	5566-34-7	UG/L									0.05 U
PEST/PCB	4,4'-DDD	72-54-8	UG/L									0.1 U
PEST/PCB	4,4'-DDE	72-55-9	UG/L									0.05 U
PEST/PCB	4,4'-DDT	50-29-3	UG/L									0.1 U
PEST/PCB	dieldrin	60-57-1	UG/L									0.05 U
PEST/PCB	endosulfan I	959-98-8	UG/L									0.05 U
PEST/PCB	endosulfan II	33213-65-9	UG/L									0.1 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L									0.1 U
PEST/PCB	endrin	72-20-8	UG/L									0.05 U
PEST/PCB	endrin ketone	53494-70-5	UG/L									0.1 U
PEST/PCB	heptachlor	76-44-8	UG/L									0.05 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L									0.05 U
PEST/PCB	methoxychlor	72-43-5	UG/L									0.5 U
PEST/PCB	toxaphene	8001-35-2	UG/L									1 U
METALS	aluminum	7429-90-5	UG/L						68 J			
METALS	antimony	7440-36-0	UG/L						0.13 U			
METALS	arsenic	7440-38-2	UG/L						3.7 J			
METALS	barium	7440-39-3	UG/L						240			
METALS	beryllium	7440-41-7	UG/L						2 U			
METALS	cadmium	7440-43-9	UG/L						5 U			
METALS	calcium	7440-70-2	UG/L						95			
METALS	chromium	7440-47-3	UG/L						1.5 J			
METALS	cobalt	7440-48-4	UG/L						0.28 J			
METALS	copper	7440-50-8	UG/L						0.4 J			
METALS	iron	7439-89-6	UG/L						5100			
METALS	lead	7439-92-1	UG/L						3 U			
METALS	magnesium	7439-95-4	UG/L						160			
METALS	manganese	7439-96-5	UG/L						1700			
METALS	mercury	7439-97-6	UG/L						0.2 U			
METALS	molybdenum	7439-98-7	UG/L						0.65 J			
METALS	nickel	7440-02-0	UG/L						1 J			
METALS	potassium	7440-09-7	UG/L						62			

Table A1-1b
Groundwater Samples: FED-1A EBS 5 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	HP1-10-D	HP1-11-D	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C	M025-C
			Sample_ID	280-S01-246	280-S01-249	280-S01-144	M025-C-A1011	M025-C-A5013	M025-C-A6112	M025-C-B2706	M025-C-D4560	M-025C-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	48.7 - 48.7	60 - 60	-	-	-	-	-	-	-
			Collection_Date	09-Aug-94	09-Aug-94	11-May-95	01-Jul-02	18-Apr-06	21-Mar-07	19-Dec-03	26-Aug-05	08-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2006	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
METALS	selenium	7782-49-2	UG/L						5 U			
METALS	silver	7440-22-4	UG/L						5 U			
METALS	sodium	7440-23-5	UG/L						1200			
METALS	thallium	7440-28-0	UG/L						5 U			
METALS	vanadium	7440-62-2	UG/L						5.6 J			
METALS	zinc	7440-66-6	UG/L						20 U			
RAD	actinium-228	14331-83-0	PCI/L						20 U			
RAD	bismuth-212	14913-49-6	PCI/L						50 U			
RAD	bismuth-214	14733-03-0	PCI/L						10 U			
RAD	cobalt-60	10198-40-0	PCI/L					5 U				
RAD	lead-210	14255-04-0	PCI/L						750 U			
RAD	lead-212	15092-94-1	PCI/L						15 U			
RAD	lead-214	15067-28-4	PCI/L						10 U			
RAD	potassium-40	13966-00-2	PCI/L						114			
RAD	protactinium-234	15100-28-4	PCI/L							1420 U		
RAD	radium	7440-14-4	PCI/L							0.833 U		
RAD	radium-226	13982-63-3	PCI/L						0.614			
RAD	radium-228	15262-20-1	PCI/L						5 U			
RAD	total gross alpha	12587-46-1	PCI/L						3 U			
RAD	total gross beta	12587-47-2	PCI/L						52.3 J			
RAD	strontium	7440-24-6	PCI/L						5 U			
RAD	thallium-208	01-00004	PCI/L						10 U			
RAD	thorium-234	15065-10-8	PCI/L						250 U			
RAD	tritium	10028-17-8	PCI/L						500 U			
RAD	uranium-233	13968-55-3	PCI/L						0.2 U			
RAD	uranium-235	15117-96-1	PCI/L						0.2 U			
RAD	uranium-238	7440-61-1	PCI/L						0.2 U			

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	023-005-021	023-005-022	023-005-023	023-005-024	023-005-024	023-005-025	023-005-026	023-005-027	023-005-028	023-005-029	HP2-4-A	HP2-4-E	HP2-5-A	HP2-5-E	HP2-5-E	HPRA-20-A	HPRA-20-E
			Sample_ID	023-0038	023-0039	023-0040	023-0041	023-0074	023-0042	023-0043	023-0045	023-0047	023-0049	280-S02-086	280-S02-087	280-S02-089	280-S02-090	280-S02-091	280-RA-149	280-RA-150
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	7 - 8	8 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7.5 - 8.5	8 - 9	8 - 9	8 - 8	8 - 8	8 - 8	22 - 22	22 - 22	8 - 8	20 - 20
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	10-Aug-94	10-Aug-94	19-Aug-94	19-Aug-94	19-Aug-94	16-Aug-94	16-Aug-94
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
VOC	acetone	67-64-1	UG/L								2 U	2 U	2 U	10 U		6 U	5 U	3 U		
VOC	benzene	71-43-2	UG/L								0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U	1 U	1 U	1 U
VOC	bromobenzene	108-86-1	UG/L																	
VOC	bromochloromethane	74-97-5	UG/L																	
VOC	bromodichloromethane	75-27-4	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	bromoform	75-25-2	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	bromomethane	74-83-9	UG/L								1 U	1 U	1 U	1 U	1 U	2 U	2 U	2 U	2 U	2 U
VOC	2-butanone	78-93-3	UG/L								2 U	2 U	2 U	32 J	53 J					7 U
VOC	tert-butyl alcohol	75-65-0	UG/L																	
VOC	n-butylbenzene	104-51-8	UG/L																	
VOC	sec-butylbenzene	135-98-8	UG/L																	
VOC	tert-butylbenzene	98-06-6	UG/L																	
VOC	carbon disulfide	75-15-0	UG/L								1 U	1 U	1 U	2 U	2 U	25	21	22	1 U	8 U
VOC	carbon tetrachloride	56-23-5	UG/L								0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	chlorobenzene	108-90-7	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	chlorodibromomethane	124-48-1	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	chloroethane	75-00-3	UG/L								2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	chloroform	67-66-3	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	chloromethane	74-87-3	UG/L								2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	2-chlorotoluene	95-49-8	UG/L																	
VOC	4-chlorotoluene	106-43-4	UG/L																	
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L																	
VOC	1,2-dibromoethane	106-93-4	UG/L																	
VOC	dibromomethane	74-95-3	UG/L																	
VOC	1,2-dichlorobenzene	95-50-1	UG/L																	
VOC	1,3-dichlorobenzene	541-73-1	UG/L								10 U	10 U	10 U							
VOC	1,4-dichlorobenzene	106-46-7	UG/L								10 U	10 U	10 U							
VOC	dichlorodifluoromethane	75-71-8	UG/L																	
VOC	1,1-dichloroethane	75-34-3	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	1,2-dichloroethane	107-06-2	UG/L								0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	1 U
VOC	1,1-dichloroethene	75-35-4	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	cis-1,2-dichloroethene	156-59-2	UG/L																	
VOC	trans-1,2-dichloroethene	156-60-5	UG/L																	
VOC	1,2-dichloroethene	540-59-0	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	1,2-dichloropropane	78-87-5	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	1,3-dichloropropane	142-28-9	UG/L																	
VOC	sec-dichloropropane	594-20-7	UG/L																	
VOC	1,1-dichloropropene	563-58-6	UG/L																	
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L								0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L								0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	diisopropyl ether	108-20-3	UG/L																	
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L																	
VOC	ethylbenzene	100-41-4	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	hexachlorobutadiene	87-68-3	UG/L																	
VOC	2-hexanone	591-78-6	UG/L								2 U	2 U	2 U			2 U	2 U	2 U	2 U	2 U
VOC	isopropylbenzene	98-82-8	UG/L																	
VOC	p-isopropyltoluene	99-87-6	UG/L																	
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L																	
VOC	methyl tert-butyl ether	1634-04-4	UG/L																	
VOC	methylene chloride	75-09-2	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HPRA-23-A	HPRA-23-E	HPRA-8-A	HPRA-8-E	M009-A	M009-A	M010-A	M010-A	M010-A	M011-A	M011-A	M011-A	M012-A	M012-A	M012-A	M013-A
			Sample_ID	280-RA-152	280-RA-153	280-RA-142	280-RA-143	M-009A-Q1	M-009A-Q4	108-S02-045	M010-A-A6132	M-010A-Q4	M011-A-A5035	M011-A-A6134	M011-A-C5531	M012-A-A5036	M012-A-A6135	M012-A-C5532	M013-A-A5038
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	8 - 8	22 - 22	8 - 8	23 - 23	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Aug-94	18-Aug-94	10-Aug-94	10-Aug-94	16-Jul-91	23-Apr-92	08-May-98	14-Mar-07	08-Apr-92	20-Apr-06	12-Mar-07	10-Oct-06	19-Apr-06	13-Mar-07	10-Oct-06	19-Apr-06
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
VOC	acetone	67-64-1	UG/L	9 U			5 U		10 U		0.7 U			1.6 U			3.5 U		
VOC	benzene	71-43-2	UG/L	1 U	1 U	0.5 U	0.5 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	bromobenzene	108-86-1	UG/L								0.5 U			0.5 U			0.5 U		
VOC	bromochloromethane	74-97-5	UG/L								0.5 U			0.5 U			0.5 U		
VOC	bromodichloromethane	75-27-4	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	bromoform	75-25-2	UG/L	1 U	1 U	2 U	2 U		5 U		1 U			1 U			1 U		
VOC	bromomethane	74-83-9	UG/L	2 U	2 U	1 U	1 U		5 U		1 U			1 U			1 U		
VOC	2-butanone	78-93-3	UG/L	15 U					10 U		10 U			10 U			10 U		
VOC	tert-butyl alcohol	75-65-0	UG/L								10 U			10 U			10 U		
VOC	n-butylbenzene	104-51-8	UG/L								0.5 U			0.5 U			0.5 U		
VOC	sec-butylbenzene	135-98-8	UG/L								0.5 U			0.5 U			0.5 U		
VOC	tert-butylbenzene	98-06-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	carbon disulfide	75-15-0	UG/L	22	10	31 J	10 J		5 U		0.5 U			0.5 U			0.5 U		
VOC	carbon tetrachloride	56-23-5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	chlorobenzene	108-90-7	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	chlorodibromomethane	124-48-1	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	chloroethane	75-00-3	UG/L	2 U	2 U	2 U	2 U		5 U		1 U			1 U			1 U		
VOC	chloroform	67-66-3	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	chloromethane	74-87-3	UG/L	2 U	2 U	2 U	2 U		5 U		1 U			1 U			1 U		
VOC	2-chlorotoluene	95-49-8	UG/L								0.5 U			0.5 U			0.5 U		
VOC	4-chlorotoluene	106-43-4	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L								2 U			2 U			2 U		
VOC	1,2-dibromoethane	106-93-4	UG/L								0.5 U			0.5 U			0.5 U		
VOC	dibromomethane	74-95-3	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,2-dichlorobenzene	95-50-1	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,3-dichlorobenzene	541-73-1	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,4-dichlorobenzene	106-46-7	UG/L								0.5 U			0.2 U			0.5 U		
VOC	dichlorodifluoromethane	75-71-8	UG/L								1 U			1 U			1 U		
VOC	1,1-dichloroethane	75-34-3	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	1,2-dichloroethane	107-06-2	UG/L	1 U	0.5 U	0.5 U	0.5 U		5 U		0.5 U			0.4 J			0.5 U		
VOC	1,1-dichloroethene	75-35-4	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	cis-1,2-dichloroethene	156-59-2	UG/L								0.5 U			0.5 J			0.5 U		
VOC	trans-1,2-dichloroethene	156-60-5	UG/L					1 U			0.5 U			0.5 U			0.5 U		
VOC	1,2-dichloroethene	540-59-0	UG/L	1 U	1 U	2 U	2 U		5 U			1 U								
VOC	1,2-dichloropropane	78-87-5	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	1,3-dichloropropane	142-28-9	UG/L								0.5 U			0.5 U			0.5 U		
VOC	sec-dichloropropane	594-20-7	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,1-dichloropropene	563-58-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L	0.5 U	0.5 U	0.5 U	0.5 U		5 U	0.5 U									
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L	0.5 U	0.5 U	0.5 U	0.5 U		5 U	0.5 U									
VOC	diisopropyl ether	108-20-3	UG/L								0.5 U			0.5 U			0.5 U		
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L								0.5 U			0.5 U			0.5 U		
VOC	ethylbenzene	100-41-4	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	hexachlorobutadiene	87-68-3	UG/L								0.5 U			0.5 U			0.5 U		
VOC	2-hexanone	591-78-6	UG/L	2 U	2 U	2 U	2 U		10 U		10 U			10 U			10 U		
VOC	isopropylbenzene	98-82-8	UG/L								0.5 U			0.5 U			0.5 U		
VOC	p-isopropyltoluene	99-87-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L								0.5 U			0.5 U			0.5 U		
VOC	methyl tert-butyl ether	1634-04-4	UG/L								0.5 U			0.5 U			0.5 U		
VOC	methylene chloride	75-09-2	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			10 U			0.4 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M013-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M015-A	M015-A	M015-A	M103-A	M103-A	M103-A	M103-A
			Sample_ID	M013-A-A6137	M014-A-A1037	M014-A-A5041	M014-A-A6140	M014-A-C3037	M014-A-C3038	M014-A-C5534	M-014A-Q4	M-015A-Q1	M-015A-Q1-DUP	M-015A-Q4	280-RA-065	280-RA-067	M-103A-Q1	M-103A-Q4	M-103A-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	2.74 - 2.75	2.74 - 2.75	-	-	-	-	-	-	-	-	-	-
			Collection_Date	13-Mar-07	02-Jul-02	20-Apr-06	09-Mar-07	06-Apr-04	06-Apr-04	10-Oct-06	07-Apr-92	18-Jul-91	18-Jul-91	07-Apr-92	03-Mar-95	08-Sep-95	16-Jul-91	23-Apr-92	23-Apr-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
VOC	acetone	67-64-1	UG/L	1.7 J			0.9 U							2 U				2 U	2 U
VOC	benzene	71-43-2	UG/L	0.5 U			0.5 U							1 U		0.5 U			
VOC	bromobenzene	108-86-1	UG/L	0.5 U			0.5 U												
VOC	bromochloromethane	74-97-5	UG/L	0.5 U			0.5 U												
VOC	bromodichloromethane	75-27-4	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	bromoform	75-25-2	UG/L	1 U			1 U							1 U		1 U			
VOC	bromomethane	74-83-9	UG/L	1 U			1 U							1 U		1 U			
VOC	2-butanone	78-93-3	UG/L	10 U			10 U							2 U				2 U	2 U
VOC	tert-butyl alcohol	75-65-0	UG/L	10 U			10 U												
VOC	n-butylbenzene	104-51-8	UG/L	0.5 U			0.5 U												
VOC	sec-butylbenzene	135-98-8	UG/L	0.5 U			0.5 U												
VOC	tert-butylbenzene	98-06-6	UG/L	0.5 U			0.5 U												
VOC	carbon disulfide	75-15-0	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	carbon tetrachloride	56-23-5	UG/L	0.5 U			0.5 U							1 U		0.5 U			
VOC	chlorobenzene	108-90-7	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	chlorodibromomethane	124-48-1	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	chloroethane	75-00-3	UG/L	1 U			1 U							1 U		2 U			
VOC	chloroform	67-66-3	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	chloromethane	74-87-3	UG/L	1 U			1 U							1 U		2 U			
VOC	2-chlorotoluene	95-49-8	UG/L	0.5 U			0.5 U												
VOC	4-chlorotoluene	106-43-4	UG/L	0.5 U			0.5 U												
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L	2 U			2 U												
VOC	1,2-dibromoethane	106-93-4	UG/L	0.5 U			0.5 U												
VOC	dibromomethane	74-95-3	UG/L	0.5 U			0.5 U												
VOC	1,2-dichlorobenzene	95-50-1	UG/L	0.5 U			0.5 U												
VOC	1,3-dichlorobenzene	541-73-1	UG/L	0.5 U			0.5 U												
VOC	1,4-dichlorobenzene	106-46-7	UG/L	0.5 U			0.5 U												
VOC	dichlorodifluoromethane	75-71-8	UG/L	1 U			1 U												
VOC	1,1-dichloroethane	75-34-3	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	1,2-dichloroethane	107-06-2	UG/L	0.5 U			0.5 U							1 U		0.5 U			
VOC	1,1-dichloroethene	75-35-4	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	cis-1,2-dichloroethene	156-59-2	UG/L	0.5 U			0.5 U												
VOC	trans-1,2-dichloroethene	156-60-5	UG/L	0.5 U			0.5 U					1 U	1 U				1 U		
VOC	1,2-dichloroethene	540-59-0	UG/L								1 U			1 U		1 U			
VOC	1,2-dichloropropane	78-87-5	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	1,3-dichloropropane	142-28-9	UG/L	0.5 U			0.5 U												
VOC	sec-dichloropropane	594-20-7	UG/L	0.5 U			0.5 U												
VOC	1,1-dichloropropene	563-58-6	UG/L	0.5 U			0.5 U												
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L								1 U			1 U		0.5 U			
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L								1 U			1 U		0.5 U			
VOC	diisopropyl ether	108-20-3	UG/L	0.5 U			0.5 U												
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L	0.5 U			0.5 U												
VOC	ethylbenzene	100-41-4	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	hexachlorobutadiene	87-68-3	UG/L	0.5 U			0.5 U												
VOC	2-hexanone	591-78-6	UG/L	10 U			10 U							2 U		2 U			
VOC	isopropylbenzene	98-82-8	UG/L	0.5 U			0.5 U												
VOC	p-isopropyltoluene	99-87-6	UG/L	0.5 U			0.5 U												
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L	0.5 U			0.5 U												
VOC	methyl tert-butyl ether	1634-04-4	UG/L	0.5 U			0.5 U												
VOC	methylene chloride	75-09-2	UG/L	0.6 U			0.5 U							1 U		1 UJ			

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M104-A	M104-A	M104-A	M104-A	M104-A	M105-A	M105-A	M105-A	M105-A	M105-A	M106-A	M106-A	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	280-RA-072	280-RA-073	280-RA-074	M-104A-Q1	M-104A-Q4	280-RA-077	280-RA-079	280-RA-080	M-105A-Q1	M-105A-Q4	280-RA-085	280-RA-086	280-RA-087	M-106A-Q1	M-106A-Q4	280-RA-090	280-RA-091	M-107A-Q1
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	10-Jul-95	10-Jul-95	08-Sep-95	19-Jul-91	25-Mar-92	08-Dec-94	06-Jul-95	11-Sep-95	26-Jun-91	13-Apr-92	07-Jul-95	11-Sep-95	11-Sep-95	19-Jul-91	17-Apr-92	07-Jul-95	11-Sep-95	17-Jul-91	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
VOC	acetone	67-64-1	UG/L					2 U					2 U					2 U				
VOC	benzene	71-43-2	UG/L			0.5 U					0.5 U				0.5 U	0.5 U				0.5 U		
VOC	bromobenzene	108-86-1	UG/L																			
VOC	bromochloromethane	74-97-5	UG/L																			
VOC	bromodichloromethane	75-27-4	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	bromoform	75-25-2	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	bromomethane	74-83-9	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	2-butanone	78-93-3	UG/L					2 U					2 U					2 U				
VOC	tert-butyl alcohol	75-65-0	UG/L																			
VOC	n-butylbenzene	104-51-8	UG/L																			
VOC	sec-butylbenzene	135-98-8	UG/L																			
VOC	tert-butylbenzene	98-06-6	UG/L																			
VOC	carbon disulfide	75-15-0	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	carbon tetrachloride	56-23-5	UG/L			0.5 U					0.5 U				0.5 U	0.5 U				0.5 U		
VOC	chlorobenzene	108-90-7	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	chlorodibromomethane	124-48-1	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	chloroethane	75-00-3	UG/L			2 U					2 U				2 U	2 U				2 U		
VOC	chloroform	67-66-3	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	chloromethane	74-87-3	UG/L			2 U					2 U				2 U	2 U				2 U		
VOC	2-chlorotoluene	95-49-8	UG/L																			
VOC	4-chlorotoluene	106-43-4	UG/L																			
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L																			
VOC	1,2-dibromoethane	106-93-4	UG/L																			
VOC	dibromomethane	74-95-3	UG/L																			
VOC	1,2-dichlorobenzene	95-50-1	UG/L																			
VOC	1,3-dichlorobenzene	541-73-1	UG/L																			
VOC	1,4-dichlorobenzene	106-46-7	UG/L																			
VOC	dichlorodifluoromethane	75-71-8	UG/L																			
VOC	1,1-dichloroethane	75-34-3	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	1,2-dichloroethane	107-06-2	UG/L			0.5 U					0.5 U				0.5 U	0.5 U				0.5 U		
VOC	1,1-dichloroethene	75-35-4	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	cis-1,2-dichloroethene	156-59-2	UG/L																			
VOC	trans-1,2-dichloroethene	156-60-5	UG/L				1 U					1 U					1 U					1 U
VOC	1,2-dichloroethene	540-59-0	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	1,2-dichloropropane	78-87-5	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	1,3-dichloropropane	142-28-9	UG/L																			
VOC	sec-dichloropropane	594-20-7	UG/L																			
VOC	1,1-dichloropropene	563-58-6	UG/L																			
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L			0.5 U					0.5 U				0.5 U	0.5 U				0.5 U		
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L			0.5 U					0.5 U				0.5 U	0.5 U				0.5 U		
VOC	diisopropyl ether	108-20-3	UG/L																			
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L																			
VOC	ethylbenzene	100-41-4	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	hexachlorobutadiene	87-68-3	UG/L																			
VOC	2-hexanone	591-78-6	UG/L			2 U					2 U				2 U	2 U				2 U		
VOC	isopropylbenzene	98-82-8	UG/L																			
VOC	p-isopropyltoluene	99-87-6	UG/L																			
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L																			
VOC	methyl tert-butyl ether	1634-04-4	UG/L																			
VOC	methylene chloride	75-09-2	UG/L			1 UJ					1 U				1 U	1 U				1 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M107-A	M108-A	M108-A	M108-A	M109-A	M109-A	M109-A	M109-A	M109-A
			Sample_ID	M-107A-Q4	280-RA-093	280-RA-095	M-108A-Q4	280-RA-098	280-RA-101	280-RA-102	M-109A-Q1	M-109A-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Apr-92	05-Mar-95	12-Sep-95	24-Mar-92	13-Oct-94	06-Jul-95	12-Sep-95	16-Jul-91	27-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
VOC	acetone	67-64-1	UG/L	2 U			2 U	10 U				
VOC	benzene	71-43-2	UG/L			0.5 U				0.5 U		
VOC	bromobenzene	108-86-1	UG/L									
VOC	bromochloromethane	74-97-5	UG/L									
VOC	bromodichloromethane	75-27-4	UG/L			1 U				1 U		
VOC	bromoform	75-25-2	UG/L			1 U				1 U		
VOC	bromomethane	74-83-9	UG/L			1 U				1 U		
VOC	2-butanone	78-93-3	UG/L	2 U			2 U					2 U
VOC	tert-butyl alcohol	75-65-0	UG/L									
VOC	n-butylbenzene	104-51-8	UG/L									
VOC	sec-butylbenzene	135-98-8	UG/L									
VOC	tert-butylbenzene	98-06-6	UG/L									
VOC	carbon disulfide	75-15-0	UG/L			1 U				1 U		
VOC	carbon tetrachloride	56-23-5	UG/L			0.5 U				0.5 U		
VOC	chlorobenzene	108-90-7	UG/L			1 U				1 U		
VOC	chlorodibromomethane	124-48-1	UG/L			1 U				1 U		
VOC	chloroethane	75-00-3	UG/L			2 U				2 U		
VOC	chloroform	67-66-3	UG/L			1 U				1 U		
VOC	chloromethane	74-87-3	UG/L			2 U				2 U		
VOC	2-chlorotoluene	95-49-8	UG/L									
VOC	4-chlorotoluene	106-43-4	UG/L									
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L									
VOC	1,2-dibromoethane	106-93-4	UG/L									
VOC	dibromomethane	74-95-3	UG/L									
VOC	1,2-dichlorobenzene	95-50-1	UG/L									
VOC	1,3-dichlorobenzene	541-73-1	UG/L									
VOC	1,4-dichlorobenzene	106-46-7	UG/L									
VOC	dichlorodifluoromethane	75-71-8	UG/L									
VOC	1,1-dichloroethane	75-34-3	UG/L			1 U				1 U		
VOC	1,2-dichloroethane	107-06-2	UG/L			0.5 U				0.5 U		
VOC	1,1-dichloroethene	75-35-4	UG/L			1 U				1 U		
VOC	cis-1,2-dichloroethene	156-59-2	UG/L									
VOC	trans-1,2-dichloroethene	156-60-5	UG/L								1 U	
VOC	1,2-dichloroethene	540-59-0	UG/L			1 U				1 U		
VOC	1,2-dichloropropane	78-87-5	UG/L			1 U				1 U		
VOC	1,3-dichloropropane	142-28-9	UG/L									
VOC	sec-dichloropropane	594-20-7	UG/L									
VOC	1,1-dichloropropene	563-58-6	UG/L									
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L			0.5 U				0.5 U		
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L			0.5 U				0.5 U		
VOC	diisopropyl ether	108-20-3	UG/L									
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L									
VOC	ethylbenzene	100-41-4	UG/L			1 U				1 U		
VOC	hexachlorobutadiene	87-68-3	UG/L									
VOC	2-hexanone	591-78-6	UG/L			2 U				2 U		
VOC	isopropylbenzene	98-82-8	UG/L									
VOC	p-isopropyltoluene	99-87-6	UG/L									
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L									
VOC	methyl tert-butyl ether	1634-04-4	UG/L									
VOC	methylene chloride	75-09-2	UG/L			1 U				1 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	023-005-021	023-005-022	023-005-023	023-005-024	023-005-024	023-005-025	023-005-026	023-005-027	023-005-028	023-005-029	HP2-4-A	HP2-4-E	HP2-5-A	HP2-5-E	HP2-5-E	HPRA-20-A	HPRA-20-E
			Sample_ID	023-0038	023-0039	023-0040	023-0041	023-0074	023-0042	023-0043	023-0045	023-0047	023-0049	280-S02-086	280-S02-087	280-S02-089	280-S02-090	280-S02-091	280-RA-149	280-RA-150
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	7 - 8	8 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7.5 - 8.5	8 - 9	8 - 9	8 - 8	8 - 8	8 - 8	22 - 22	22 - 22	8 - 8	20 - 20
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	10-Aug-94	10-Aug-94	19-Aug-94	19-Aug-94	19-Aug-94	16-Aug-94	16-Aug-94
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
VOC	2-methylnaphthalene	91-57-6	UG/L								10 U	10 U	10 U							
VOC	4-methyl-2-pentanone	108-10-1	UG/L								2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
VOC	naphthalene	91-20-3	UG/L								10 U	10 U	10 U							
VOC	n-propylbenzene	103-65-1	UG/L																	
VOC	styrene	100-42-5	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L																	
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	tetrachloroethene	127-18-4	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	toluene	108-88-3	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L																	
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L								10 U	10 U	10 U							
VOC	1,1,1-trichloroethane	71-55-6	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	1,1,2-trichloroethane	79-00-5	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	trichloroethene	79-01-6	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
VOC	trichlorofluoromethane	75-69-4	UG/L																	
VOC	1,2,3-trichloropropane	96-18-4	UG/L																	
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L																	
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L																	
VOC	vinyl acetate	108-05-4	UG/L																	
VOC	vinyl chloride	75-01-4	UG/L								0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
VOC	meta-,para-xylene	7816-60-0	UG/L																	
VOC	m-, p-xylene	136777-61-2	UG/L																	
VOC	o-xylene	95-47-6	UG/L																	
VOC	xylenes, total	1330-20-7	UG/L								1 U	1 U	1 U	2 U	2 U	1 U	1 U	1 U	1 U	1 U
FUELS	diesel	11-84-7	UG/L								100 U	130 J	140 J							
FUELS	gasoline	8006-61-9	UG/L								50 U	50 U	50 U							
FUELS	jet fuel	94114-58-6	UG/L																	
FUELS	JP-5	21274-30-0	UG/L																	
FUELS	motor oil	68476-77-7	UG/L								200 U	200 U	200 U							
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L																	
SVOC	acenaphthene	83-32-9	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	acenaphthylene	208-96-8	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	2-amino-4,6-dinitrotoluene	35572-78-2	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U										
SVOC	4-amino-2,6-dinitrotoluene	19406-51-0	UG/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U										
SVOC	anthracene	120-12-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	benz(a)anthracene	56-55-3	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	benzoic acid	65-85-0	UG/L																	
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	benzo(a)pyrene	50-32-8	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	benzyl alcohol	100-51-6	UG/L																	
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L																	
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L								10 U	10 U	10 U	5 U	5 U	4 U	4 U	4 U	4 U	4 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	butyl benzyl phthalate	85-68-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	carbazole	86-74-8	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HPRA-23-A	HPRA-23-E	HPRA-8-A	HPRA-8-E	M009-A	M009-A	M010-A	M010-A	M010-A	M011-A	M011-A	M011-A	M012-A	M012-A	M013-A
			Sample_ID	280-RA-152	280-RA-153	280-RA-142	280-RA-143	M-009A-Q1	M-009A-Q4	108-S02-045	M010-A-A6132	M-010A-Q4	M011-A-A5035	M011-A-A6134	M011-A-C5531	M012-A-A5036	M012-A-A6135	M012-A-C5532	M013-A-A5038
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	8 - 8	22 - 22	8 - 8	23 - 23	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Aug-94	18-Aug-94	10-Aug-94	10-Aug-94	16-Jul-91	23-Apr-92	08-May-98	14-Mar-07	08-Apr-92	20-Apr-06	12-Mar-07	10-Oct-06	19-Apr-06	13-Mar-07	10-Oct-06	19-Apr-06
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
VOC	2-methylnaphthalene	91-57-6	UG/L																
VOC	4-methyl-2-pentanone	108-10-1	UG/L	2 U	2 U	2 U	2 U		10 U		10 U			10 U			10 U		
VOC	naphthalene	91-20-3	UG/L								2 U			2 U			2 U		
VOC	n-propylbenzene	103-65-1	UG/L								0.5 U			0.5 U			0.5 U		
VOC	styrene	100-42-5	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	tetrachloroethene	127-18-4	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	toluene	108-88-3	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,1,1-trichloroethane	71-55-6	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	1,1,2-trichloroethane	79-00-5	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	trichloroethene	79-01-6	UG/L	1 U	1 U	2 U	2 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	trichlorofluoromethane	75-69-4	UG/L								1 U			1 U			1 U		
VOC	1,2,3-trichloropropane	96-18-4	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L								0.5 U			0.5 U			0.5 U		
VOC	vinyl acetate	108-05-4	UG/L			2 U	2 U		5 U			1 U							
VOC	vinyl chloride	75-01-4	UG/L	0.5 U	0.5 U	0.5 U	0.5 U		5 U		0.5 U			0.5 U			0.5 U		
VOC	meta-,para-xylene	7816-60-0	UG/L								0.5 U			0.5 U			0.5 U		
VOC	m-, p-xylene	136777-61-2	UG/L																
VOC	o-xylene	95-47-6	UG/L								0.5 U			0.5 U			0.5 U		
VOC	xylenes, total	1330-20-7	UG/L	1 U	1 U	2 U	2 U		5 U	1 U									
FUELS	diesel	11-84-7	UG/L											34 J			50 U		
FUELS	gasoline	8006-61-9	UG/L											48 U			15 U		
FUELS	jet fuel	94114-58-6	UG/L											50 U			50 U		
FUELS	JP-5	21274-30-0	UG/L																
FUELS	motor oil	68476-77-7	UG/L											300 U			300 U		
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L						190 U			190 U							
SVOC	acenaphthene	83-32-9	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		0.95 UJ			0.95 U		
SVOC	acenaphthylene	208-96-8	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		1.9 UJ			1.9 U		
SVOC	2-amino-4,6-dinitrotoluene	35572-78-2	UG/L																
SVOC	4-amino-2,6-dinitrotoluene	19406-51-0	UG/L																
SVOC	anthracene	120-12-7	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		0.1 UJ			0.1 U		
SVOC	benz(a)anthracene	56-55-3	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		0.1 UJ			0.1 U		
SVOC	benzo(b)fluoranthene	205-99-2	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		0.19 UJ			0.19 U		
SVOC	benzo(k)fluoranthene	207-08-9	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		0.003 J			0.1 U		
SVOC	benzoic acid	65-85-0	UG/L						5 U			5 U		47 U			49 U		
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L	10 U	10 U	5 U	5 U		2.5 U			2.5 U		0.06 J			0.19 U		
SVOC	benzo(a)pyrene	50-32-8	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		0.1 UJ			0.1 U		
SVOC	benzyl alcohol	100-51-6	UG/L						2 U			2 U							
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		9.4 U			9.7 U		
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L											9.4 U			9.7 U		
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L	10 U	10 U	5 U	5 U		1 U			1 U							
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L	4 U	4 U	5 U	5 U		4.8 UJ			23 UJ		9.4 U			9.7 U		
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	butyl benzyl phthalate	85-68-7	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		9.4 U			9.7 U		
SVOC	carbazole	86-74-8	UG/L	10 U	10 U	5 U	5 U												

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M013-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M015-A	M015-A	M015-A	M103-A	M103-A	M103-A	M103-A	M103-A
			Sample_ID	M013-A-A6137	M014-A-A1037	M014-A-A5041	M014-A-A6140	M014-A-C3037	M014-A-C3038	M014-A-C5534	M-014A-Q4	M-015A-Q1	M-015A-Q1-DUP	M-015A-Q4	280-RA-065	280-RA-067	M-103A-Q1	M-103A-Q4	M-103A-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	2.74 - 2.75	2.74 - 2.75	-	-	-	-	-	-	-	-	-	-
			Collection_Date	13-Mar-07	02-Jul-02	20-Apr-06	09-Mar-07	06-Apr-04	06-Apr-04	10-Oct-06	07-Apr-92	18-Jul-91	18-Jul-91	07-Apr-92	03-Mar-95	08-Sep-95	16-Jul-91	23-Apr-92	23-Apr-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
VOC	2-methylnaphthalene	91-57-6	UG/L																
VOC	4-methyl-2-pentanone	108-10-1	UG/L	10 U			10 U							2 U		2 U			
VOC	naphthalene	91-20-3	UG/L	2 U			2 U												
VOC	n-propylbenzene	103-65-1	UG/L	0.5 U			0.5 U												
VOC	styrene	100-42-5	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L	0.5 U			0.5 U												
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	tetrachloroethene	127-18-4	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	toluene	108-88-3	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L	0.5 U			0.5 U												
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L	0.5 U			0.5 U												
VOC	1,1,1-trichloroethane	71-55-6	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	1,1,2-trichloroethane	79-00-5	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	trichloroethene	79-01-6	UG/L	0.5 U			0.5 U							1 U		1 U			
VOC	trichlorofluoromethane	75-69-4	UG/L	1 U			1 U												
VOC	1,2,3-trichloropropane	96-18-4	UG/L	0.5 U			0.5 U												
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L	0.5 U			0.5 U												
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L	0.5 U			0.5 U												
VOC	vinyl acetate	108-05-4	UG/L								1 U			1 U				1 U	1 U
VOC	vinyl chloride	75-01-4	UG/L	0.5 U			0.5 U							1 U		0.5 U			
VOC	meta-,para-xylene	7816-60-0	UG/L	0.5 U			0.5 U												
VOC	m-, p-xylene	136777-61-2	UG/L					1 U	1 U										
VOC	o-xylene	95-47-6	UG/L	0.5 U			0.5 U												
VOC	xylenes, total	1330-20-7	UG/L								1 U			1 U		1 U			
FUELS	diesel	11-84-7	UG/L	50 U			50 U												
FUELS	gasoline	8006-61-9	UG/L	15 U			35 U												
FUELS	jet fuel	94114-58-6	UG/L	50 U			50 U												
FUELS	JP-5	21274-30-0	UG/L																
FUELS	motor oil	68476-77-7	UG/L	300 U			300 U												
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L								180 U			180 U				180 U	180 U
SVOC	acenaphthene	83-32-9	UG/L	0.95 U			0.95 U							1 U		10 U			
SVOC	acenaphthylene	208-96-8	UG/L	1.9 U			1.9 U							1 U		10 U			
SVOC	2-amino-4,6-dinitrotoluene	35572-78-2	UG/L																
SVOC	4-amino-2,6-dinitrotoluene	19406-51-0	UG/L																
SVOC	anthracene	120-12-7	UG/L	0.1 U			0.1 U							1 U		10 U			
SVOC	benz(a)anthracene	56-55-3	UG/L	0.1 U			0.1 U							1.5 U		10 U			
SVOC	benzo(b)fluoranthene	205-99-2	UG/L	0.19 U			0.19 U							1.5 U		10 U			
SVOC	benzo(k)fluoranthene	207-08-9	UG/L	0.1 U			0.1 U							1.5 U		10 U			
SVOC	benzoic acid	65-85-0	UG/L	48 U			48 U							5 U				5 U	5 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L	0.19 U			0.19 U							2.5 U		10 U			
SVOC	benzo(a)pyrene	50-32-8	UG/L	0.1 U			0.1 U							2 U		10 U			
SVOC	benzyl alcohol	100-51-6	UG/L								2 U			2 U				2 U	2 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L	9.6 U			9.6 U							1.5 U		10 U			
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L	9.6 U			9.6 U												
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L			9.5 U								1 U		10 U			
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L	9.6 U			9.6 U							5.4 UJ		4 U			
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	butyl benzyl phthalate	85-68-7	UG/L	9.6 U			9.6 U							1.5 U		10 U			
SVOC	carbazole	86-74-8	UG/L													10 U			

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M104-A	M104-A	M104-A	M104-A	M104-A	M105-A	M105-A	M105-A	M105-A	M105-A	M106-A	M106-A	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	280-RA-072	280-RA-073	280-RA-074	M-104A-Q1	M-104A-Q4	280-RA-077	280-RA-079	280-RA-080	M-105A-Q1	M-105A-Q4	280-RA-085	280-RA-086	280-RA-087	M-106A-Q1	M-106A-Q4	280-RA-090	280-RA-091	M-107A-Q1
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	10-Jul-95	10-Jul-95	08-Sep-95	19-Jul-91	25-Mar-92	08-Dec-94	06-Jul-95	11-Sep-95	26-Jun-91	13-Apr-92	07-Jul-95	11-Sep-95	11-Sep-95	19-Jul-91	17-Apr-92	07-Jul-95	11-Sep-95	17-Jul-91
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
VOC	2-methylnaphthalene	91-57-6	UG/L																			
VOC	4-methyl-2-pentanone	108-10-1	UG/L			2 U					2 U				2 U	2 U				2 U		
VOC	naphthalene	91-20-3	UG/L																			
VOC	n-propylbenzene	103-65-1	UG/L																			
VOC	styrene	100-42-5	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L																			
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	tetrachloroethene	127-18-4	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	toluene	108-88-3	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L																			
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L																			
VOC	1,1,1-trichloroethane	71-55-6	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	1,1,2-trichloroethane	79-00-5	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	trichloroethene	79-01-6	UG/L			1 U					1 U				1 U	1 U				1 U		
VOC	trichlorofluoromethane	75-69-4	UG/L																			
VOC	1,2,3-trichloropropane	96-18-4	UG/L																			
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L																			
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L																			
VOC	vinyl acetate	108-05-4	UG/L					1 U					1 U					1 U				
VOC	vinyl chloride	75-01-4	UG/L			0.5 U					0.5 U				0.5 U	0.5 U				0.5 U		
VOC	meta-,para-xylene	7816-60-0	UG/L																			
VOC	m-, p-xylene	136777-61-2	UG/L																			
VOC	o-xylene	95-47-6	UG/L																			
VOC	xylenes, total	1330-20-7	UG/L			1 U					1 U				1 U	1 U				1 U		
FUELS	diesel	11-84-7	UG/L						100 U													
FUELS	gasoline	8006-61-9	UG/L						50 U													
FUELS	jet fuel	94114-58-6	UG/L																			
FUELS	JP-5	21274-30-0	UG/L						100 U													
FUELS	motor oil	68476-77-7	UG/L						500 U													
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L					180 U					190 U					330				
SVOC	acenaphthene	83-32-9	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	acenaphthylene	208-96-8	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-amino-4,6-dinitrotoluene	35572-78-2	UG/L																			
SVOC	4-amino-2,6-dinitrotoluene	19406-51-0	UG/L																			
SVOC	anthracene	120-12-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	benz(a)anthracene	56-55-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	benzo(b)fluoranthene	205-99-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	benzo(k)fluoranthene	207-08-9	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	benzoic acid	65-85-0	UG/L					5 U					5 U					5 U				
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	benzo(a)pyrene	50-32-8	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	benzyl alcohol	100-51-6	UG/L					2 U					2 U					2 U				
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L																			
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L			4 U					6 UJ				4 U	4 UJ				4 U		
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	butyl benzyl phthalate	85-68-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	carbazole	86-74-8	UG/L			10 U					10 U				10 U	10 U				10 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M107-A	M108-A	M108-A	M108-A	M109-A	M109-A	M109-A	M109-A	M109-A
			Sample_ID	M-107A-Q4	280-RA-093	280-RA-095	M-108A-Q4	280-RA-098	280-RA-101	280-RA-102	M-109A-Q1	M-109A-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Apr-92	05-Mar-95	12-Sep-95	24-Mar-92	13-Oct-94	06-Jul-95	12-Sep-95	16-Jul-91	27-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
VOC	2-methylnaphthalene	91-57-6	UG/L									
VOC	4-methyl-2-pentanone	108-10-1	UG/L			2 U				2 U		
VOC	naphthalene	91-20-3	UG/L									
VOC	n-propylbenzene	103-65-1	UG/L									
VOC	styrene	100-42-5	UG/L			1 U				1 U		
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L									
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L			1 U				1 U		
VOC	tetrachloroethene	127-18-4	UG/L			1 U				1 U		
VOC	toluene	108-88-3	UG/L			1 U				1 U		
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L									
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L									
VOC	1,1,1-trichloroethane	71-55-6	UG/L			1 U				1 U		
VOC	1,1,2-trichloroethane	79-00-5	UG/L			1 U				1 U		
VOC	trichloroethene	79-01-6	UG/L			1 U				1 U		
VOC	trichlorofluoromethane	75-69-4	UG/L									
VOC	1,2,3-trichloropropane	96-18-4	UG/L									
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L									
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L									
VOC	vinyl acetate	108-05-4	UG/L	1 U			1 U					1 U
VOC	vinyl chloride	75-01-4	UG/L			0.5 U				0.5 U		
VOC	meta-,para-xylene	7816-60-0	UG/L									
VOC	m-, p-xylene	136777-61-2	UG/L									
VOC	o-xylene	95-47-6	UG/L									
VOC	xylenes, total	1330-20-7	UG/L			1 U				1 U		
FUELS	diesel	11-84-7	UG/L									
FUELS	gasoline	8006-61-9	UG/L									
FUELS	jet fuel	94114-58-6	UG/L									
FUELS	JP-5	21274-30-0	UG/L									
FUELS	motor oil	68476-77-7	UG/L									
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L	180 U			180 U					640
SVOC	acenaphthene	83-32-9	UG/L			10 U				10 U		
SVOC	acenaphthylene	208-96-8	UG/L			10 U				10 U		
SVOC	2-amino-4,6-dinitrotoluene	35572-78-2	UG/L									
SVOC	4-amino-2,6-dinitrotoluene	19406-51-0	UG/L									
SVOC	anthracene	120-12-7	UG/L			10 U				10 U		
SVOC	benz(a)anthracene	56-55-3	UG/L			10 U				10 U		
SVOC	benzo(b)fluoranthene	205-99-2	UG/L			10 U				10 U		
SVOC	benzo(k)fluoranthene	207-08-9	UG/L			10 U				10 U		
SVOC	benzoic acid	65-85-0	UG/L	5 U			5 U					5 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L			10 U				10 U		
SVOC	benzo(a)pyrene	50-32-8	UG/L			10 U				10 U		
SVOC	benzyl alcohol	100-51-6	UG/L	2 U			2 U					2 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L			10 U				10 U		
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L			10 U				10 U		
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L									
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L			10 U				10 U		
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L			4 U				4 U		
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L			10 U				10 U		
SVOC	butyl benzyl phthalate	85-68-7	UG/L			10 U				10 U		
SVOC	carbazole	86-74-8	UG/L			10 U				10 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	023-005-021	023-005-022	023-005-023	023-005-024	023-005-024	023-005-025	023-005-026	023-005-027	023-005-028	023-005-029	HP2-4-A	HP2-4-E	HP2-5-A	HP2-5-E	HP2-5-E	HPRA-20-A	HPRA-20-E	
			Sample_ID	023-0038	023-0039	023-0040	023-0041	023-0074	023-0042	023-0043	023-0045	023-0047	023-0049	280-S02-086	280-S02-087	280-S02-089	280-S02-090	280-S02-091	280-RA-149	280-RA-150	
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	
			Depth	7 - 8	8 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7.5 - 8.5	8 - 9	8 - 9	8 - 8	8 - 8	8 - 8	22 - 22	22 - 22	8 - 8	20 - 20	
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	10-Aug-94	10-Aug-94	19-Aug-94	19-Aug-94	19-Aug-94	16-Aug-94	16-Aug-94	
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																		
SVOC	4-chloroaniline	106-47-8	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	0.7 J	10 U	10 U	10 U	
SVOC	2-chloronaphthalene	91-58-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2-chlorophenol	95-57-8	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	chrysene	218-01-9	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	di-n-butyl phthalate	84-74-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	dibenzofuran	132-64-9	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	1,2-dichlorobenzene	95-50-1	UG/L								10 U	10 U	10 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	
SVOC	1,3-dichlorobenzene	541-73-1	UG/L											5 U	5 U	5 U	5 U	5 U	5 U	5 U	
SVOC	1,4-dichlorobenzene	106-46-7	UG/L											5 U	5 U	5 U	5 U	5 U	5 U	5 U	
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2,4-dichlorophenol	120-83-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	diethyl phthalate	84-66-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2,4-dimethylphenol	105-67-9	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	dimethyl phthalate	131-11-3	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	1,3-dinitrobenzene	99-65-0	UG/L	4 U	4 U	4 U	4 U	4 U	4 U	4 U											
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U	
SVOC	2,4-dinitrophenol	51-28-5	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U	
SVOC	2,4-dinitrotoluene	121-14-2	UG/L	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	5.7 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2,6-dinitrotoluene	606-20-2	UG/L	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	9.4 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	di-n-octyl phthalate	117-84-0	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	fluoranthene	206-44-0	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	fluorene	86-73-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	hexachlorobenzene	118-74-1	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	hexachlorobutadiene	87-68-3	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	hexachloroethane	67-72-1	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	UG/L	14 U	14 U	14 U	14 U	14 U	14 U	14 U											
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	isophorone	78-59-1	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2-methylnaphthalene	91-57-6	UG/L											5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2-methylphenol	95-48-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	4-methylphenol	106-44-5	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	methyl-2,4,6-trinitrophenylnitramine	479-45-8	UG/L	4 U	4 U	4 U	4 U	4 U	4 U	4 U											
SVOC	naphthalene	91-20-3	UG/L											5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2-nitroaniline	88-74-4	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U	
SVOC	3-nitroaniline	99-09-2	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U	
SVOC	4-nitroaniline	100-01-6	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U	
SVOC	nitrobenzene	98-95-3	UG/L	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	4-nitrophenol	100-02-7	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U	
SVOC	2-nitrophenol	88-75-5	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	N-nitrosodimethylamine	62-75-9	UG/L																		
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U	
SVOC	2-nitrotoluene	88-72-2	UG/L	12 U	12 U	12 U	12 U	12 U	12 U	12 U											
SVOC	3-nitrotoluene	99-08-1	UG/L	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U											
SVOC	4-nitrotoluene	99-99-0	UG/L	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U											
SVOC	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691-41-0	UG/L	13 U	4.8 J	13 U	13 U	13 U	13 U	13 U											

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HPRA-23-A	HPRA-23-E	HPRA-8-A	HPRA-8-E	M009-A	M009-A	M010-A	M010-A	M010-A	M011-A	M011-A	M011-A	M012-A	M012-A	M012-A	M013-A
			Sample_ID	280-RA-152	280-RA-153	280-RA-142	280-RA-143	M-009A-Q1	M-009A-Q4	108-S02-045	M010-A-A6132	M-010A-Q4	M011-A-A5035	M011-A-A6134	M011-A-C5531	M012-A-A5036	M012-A-A6135	M012-A-C5532	M013-A-A5038
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	8 - 8	22 - 22	8 - 8	23 - 23	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Aug-94	18-Aug-94	10-Aug-94	10-Aug-94	16-Jul-91	23-Apr-92	08-May-98	14-Mar-07	08-Apr-92	20-Apr-06	12-Mar-07	10-Oct-06	19-Apr-06	13-Mar-07	10-Oct-06	19-Apr-06
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	4-chloroaniline	106-47-8	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		9.4 U			9.7 U		
SVOC	2-chloronaphthalene	91-58-7	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	2-chlorophenol	95-57-8	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	chrysene	218-01-9	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		0.1 UJ			0.1 U		
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L	10 U	10 U	5 U	5 U		2.5 U			2.5 U		0.19 UJ			0.19 U		
SVOC	di-n-butyl phthalate	84-74-2	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	dibenzofuran	132-64-9	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	1,2-dichlorobenzene	95-50-1	UG/L	5 U	5 U	5 U	5 U		1 U					9.4 U			9.7 U		
SVOC	1,3-dichlorobenzene	541-73-1	UG/L	5 U	5 U	5 U	5 U		1 U					9.4 U			9.7 U		
SVOC	1,4-dichlorobenzene	106-46-7	UG/L	5 U	5 U	5 U	5 U		1 U					9.4 U			9.7 U		
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L	10 U	10 U	5 U	5 U		5 U			5 U		19 U			19 U		
SVOC	2,4-dichlorophenol	120-83-2	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	diethyl phthalate	84-66-2	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	2,4-dimethylphenol	105-67-9	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	dimethyl phthalate	131-11-3	UG/L	10 U	10 U	5 U	5 U		2 U			3		9.4 U			9.7 U		
SVOC	1,3-dinitrobenzene	99-65-0	UG/L																
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L	25 U	25 U	12 U	12 U		20 U			20 U		19 U			19 U		
SVOC	2,4-dinitrophenol	51-28-5	UG/L	25 U	25 U	12 U	12 U		30 U			30 U		19 U			19 U		
SVOC	2,4-dinitrotoluene	121-14-2	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	2,6-dinitrotoluene	606-20-2	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	di-n-octyl phthalate	117-84-0	UG/L	10 U	10 U	5 U	5 U		2.4 U			2.4 U		9.4 U			9.7 U		
SVOC	fluoranthene	206-44-0	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		0.19 UJ			0.19 U		
SVOC	fluorene	86-73-7	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		0.19 UJ			0.19 U		
SVOC	hexachlorobenzene	118-74-1	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	hexachlorobutadiene	87-68-3	UG/L	10 U	10 U	5 U	5 U		2 U										
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L	10 U	10 U	5 U	5 U		14 U			14 U		19 U			19 U		
SVOC	hexachloroethane	67-72-1	UG/L	10 U	10 U	5 U	5 U		1.5 U			1.5 U		9.4 U			9.7 U		
SVOC	hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	UG/L																
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L	10 U	10 U	5 U	5 U		2.5 U			2.5 U		0.1 UJ			0.1 U		
SVOC	isophorone	78-59-1	UG/L	10 U	10 U	5 U	1 J		1 U			1 U		9.4 U			9.7 U		
SVOC	2-methylnaphthalene	91-57-6	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	2-methylphenol	95-48-7	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	4-methylphenol	106-44-5	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	methyl-2,4,6-trinitrophenylnitramine	479-45-8	UG/L																
SVOC	naphthalene	91-20-3	UG/L	10 U	10 U	5 U	5 U		1 U					0.95 UJ			0.95 U		
SVOC	2-nitroaniline	88-74-4	UG/L	25 U	25 U	12 U	12 U		2 U			2 U		19 U			19 U		
SVOC	3-nitroaniline	99-09-2	UG/L	25 U	25 U	12 U	12 U		2 U			2 U		19 U			19 U		
SVOC	4-nitroaniline	100-01-6	UG/L	25 U	25 U	12 U	12 U		2 U			2 U		19 U			19 U		
SVOC	nitrobenzene	98-95-3	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	4-nitrophenol	100-02-7	UG/L	25 U	25 U	12 U	12 U		10 U			10 U		19 U			19 U		
SVOC	2-nitrophenol	88-75-5	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		19 U			19 U		
SVOC	N-nitrosodimethylamine	62-75-9	UG/L											9.4 U			9.7 U		
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		9.4 U			9.7 U		
SVOC	2-nitrotoluene	88-72-2	UG/L																
SVOC	3-nitrotoluene	99-08-1	UG/L																
SVOC	4-nitrotoluene	99-99-0	UG/L																
SVOC	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691-41-0	UG/L																

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M013-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M015-A	M015-A	M015-A	M103-A	M103-A	M103-A	M103-A	M103-A
			Sample_ID	M013-A-A6137	M014-A-A1037	M014-A-A5041	M014-A-A6140	M014-A-C3037	M014-A-C3038	M014-A-C5534	M-014A-Q4	M-015A-Q1	M-015A-Q1-DUP	M-015A-Q4	280-RA-065	280-RA-067	M-103A-Q1	M-103A-Q4	M-103A-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	2.74 - 2.75	2.74 - 2.75	-	-	-	-	-	-	-	-	-	-
			Collection_Date	13-Mar-07	02-Jul-02	20-Apr-06	09-Mar-07	06-Apr-04	06-Apr-04	10-Oct-06	07-Apr-92	18-Jul-91	18-Jul-91	07-Apr-92	03-Mar-95	08-Sep-95	16-Jul-91	23-Apr-92	23-Apr-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	4-chloroaniline	106-47-8	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L	9.6 U			9.6 U							1.5 U		10 U			
SVOC	2-chloronaphthalene	91-58-7	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	2-chlorophenol	95-57-8	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	chrysene	218-01-9	UG/L	0.1 U			0.1 U							1.5 U		10 U			
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L	0.19 U			0.19 U							2.5 U		10 U			
SVOC	di-n-butyl phthalate	84-74-2	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	dibenzofuran	132-64-9	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	1,2-dichlorobenzene	95-50-1	UG/L	9.6 U			9.6 U							1 U		5 U			
SVOC	1,3-dichlorobenzene	541-73-1	UG/L	9.6 U			9.6 U							1 U		5 U			
SVOC	1,4-dichlorobenzene	106-46-7	UG/L	9.6 U			9.6 U							1 U		5 U			
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L	19 U			19 U							5 U		10 UJ			
SVOC	2,4-dichlorophenol	120-83-2	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	diethyl phthalate	84-66-2	UG/L	9.6 U			9.6 U							1 U		10 UJ			
SVOC	2,4-dimethylphenol	105-67-9	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	dimethyl phthalate	131-11-3	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	1,3-dinitrobenzene	99-65-0	UG/L																
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L	19 U			19 U							20 U		25 UJ			
SVOC	2,4-dinitrophenol	51-28-5	UG/L	19 U			19 U							30 U	25 U				
SVOC	2,4-dinitrotoluene	121-14-2	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	2,6-dinitrotoluene	606-20-2	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	di-n-octyl phthalate	117-84-0	UG/L	9.6 U			9.6 U							2.4 U		10 U			
SVOC	fluoranthene	206-44-0	UG/L	0.19 U			0.19 U							1 U		10 U			
SVOC	fluorene	86-73-7	UG/L	0.19 U			0.19 U							1 U		10 U			
SVOC	hexachlorobenzene	118-74-1	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	hexachlorobutadiene	87-68-3	UG/L											2 U		10 U			
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L	19 U			19 U							14 U		10 UJ			
SVOC	hexachloroethane	67-72-1	UG/L	9.6 U			9.6 U							1.5 U		10 U			
SVOC	hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	UG/L																
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L	0.1 U			0.1 U							2.5 U		10 U			
SVOC	isophorone	78-59-1	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	2-methylnaphthalene	91-57-6	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	2-methylphenol	95-48-7	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	4-methylphenol	106-44-5	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	methyl-2,4,6-trinitrophenylnitramine	479-45-8	UG/L																
SVOC	naphthalene	91-20-3	UG/L	0.95 U			0.95 U							1 U		10 U			
SVOC	2-nitroaniline	88-74-4	UG/L	19 U			19 U							2 U		25 U			
SVOC	3-nitroaniline	99-09-2	UG/L	19 U			19 U							2 U		25 U			
SVOC	4-nitroaniline	100-01-6	UG/L	19 U			19 U							2 U		25 U			
SVOC	nitrobenzene	98-95-3	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	4-nitrophenol	100-02-7	UG/L	19 U			19 U							10 U		25 UJ			
SVOC	2-nitrophenol	88-75-5	UG/L	19 U			19 U							2 U		10 U			
SVOC	N-nitrosodimethylamine	62-75-9	UG/L	9.6 U			9.6 U												
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	2-nitrotoluene	88-72-2	UG/L																
SVOC	3-nitrotoluene	99-08-1	UG/L																
SVOC	4-nitrotoluene	99-99-0	UG/L																
SVOC	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691-41-0	UG/L																

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M104-A	M104-A	M104-A	M104-A	M104-A	M105-A	M105-A	M105-A	M105-A	M105-A	M106-A	M106-A	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	280-RA-072	280-RA-073	280-RA-074	M-104A-Q1	M-104A-Q4	280-RA-077	280-RA-079	280-RA-080	M-105A-Q1	M-105A-Q4	280-RA-085	280-RA-086	280-RA-087	M-106A-Q1	M-106A-Q4	280-RA-090	280-RA-091	M-107A-Q1
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	10-Jul-95	10-Jul-95	08-Sep-95	19-Jul-91	25-Mar-92	08-Dec-94	06-Jul-95	11-Sep-95	26-Jun-91	13-Apr-92	07-Jul-95	11-Sep-95	11-Sep-95	19-Jul-91	17-Apr-92	07-Jul-95	11-Sep-95	17-Jul-91	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
SVOC	4-chloroaniline	106-47-8	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-chloronaphthalene	91-58-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-chlorophenol	95-57-8	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	chrysene	218-01-9	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	di-n-butyl phthalate	84-74-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	dibenzofuran	132-64-9	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	1,2-dichlorobenzene	95-50-1	UG/L			5 U					5 U				5 U	5 U				5 U		
SVOC	1,3-dichlorobenzene	541-73-1	UG/L			5 U					5 U				5 U	5 U				5 U		
SVOC	1,4-dichlorobenzene	106-46-7	UG/L			5 U					5 U				5 U	5 U				5 U		
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L			10 UJ					10 UJ				10 UJ	10 UJ				10 UJ		
SVOC	2,4-dichlorophenol	120-83-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	diethyl phthalate	84-66-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2,4-dimethylphenol	105-67-9	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	dimethyl phthalate	131-11-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	1,3-dinitrobenzene	99-65-0	UG/L																			
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L			25 UJ					25 UJ				25 UJ	25 UJ				25 UJ		
SVOC	2,4-dinitrophenol	51-28-5	UG/L	25 U	25 U					25 UJ				25 U					25 U			
SVOC	2,4-dinitrotoluene	121-14-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2,6-dinitrotoluene	606-20-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	di-n-octyl phthalate	117-84-0	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	fluoranthene	206-44-0	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	fluorene	86-73-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	hexachlorobenzene	118-74-1	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	hexachlorobutadiene	87-68-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L			10 UJ					10 UJ				10 UJ	10 UJ				10 UJ		
SVOC	hexachloroethane	67-72-1	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	UG/L																			
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	isophorone	78-59-1	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-methylnaphthalene	91-57-6	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-methylphenol	95-48-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	4-methylphenol	106-44-5	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	methyl-2,4,6-trinitrophenylnitramine	479-45-8	UG/L																			
SVOC	naphthalene	91-20-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-nitroaniline	88-74-4	UG/L			25 U					25 U				25 U	25 U				25 U		
SVOC	3-nitroaniline	99-09-2	UG/L			25 U					25 U				25 U	25 U				25 U		
SVOC	4-nitroaniline	100-01-6	UG/L			25 U					25 U				25 U	25 U				25 U		
SVOC	nitrobenzene	98-95-3	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	4-nitrophenol	100-02-7	UG/L			25 UJ					25 UJ				25 UJ	25 UJ				25 UJ		
SVOC	2-nitrophenol	88-75-5	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	N-nitrosodimethylamine	62-75-9	UG/L																			
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2-nitrotoluene	88-72-2	UG/L																			
SVOC	3-nitrotoluene	99-08-1	UG/L																			
SVOC	4-nitrotoluene	99-99-0	UG/L																			
SVOC	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691-41-0	UG/L																			

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M107-A	M108-A	M108-A	M108-A	M109-A	M109-A	M109-A	M109-A	M109-A
			Sample_ID	M-107A-Q4	280-RA-093	280-RA-095	M-108A-Q4	280-RA-098	280-RA-101	280-RA-102	M-109A-Q1	M-109A-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Apr-92	05-Mar-95	12-Sep-95	24-Mar-92	13-Oct-94	06-Jul-95	12-Sep-95	16-Jul-91	27-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
SVOC	4-chloroaniline	106-47-8	UG/L			10 U				10 U		
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L			10 U				10 U		
SVOC	2-chloronaphthalene	91-58-7	UG/L			10 U				10 U		
SVOC	2-chlorophenol	95-57-8	UG/L			10 U				10 U		
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L			10 U				10 U		
SVOC	chrysene	218-01-9	UG/L			10 U				10 U		
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L			10 U				10 U		
SVOC	di-n-butyl phthalate	84-74-2	UG/L			10 U				10 U		
SVOC	dibenzofuran	132-64-9	UG/L			10 U				10 U		
SVOC	1,2-dichlorobenzene	95-50-1	UG/L			5 U				5 U		
SVOC	1,3-dichlorobenzene	541-73-1	UG/L			5 U				5 U		
SVOC	1,4-dichlorobenzene	106-46-7	UG/L			5 U				5 U		
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L			10 UJ				10 UJ		
SVOC	2,4-dichlorophenol	120-83-2	UG/L			10 U				10 U		
SVOC	diethyl phthalate	84-66-2	UG/L			10 UJ				10 U		
SVOC	2,4-dimethylphenol	105-67-9	UG/L			10 U				10 U		
SVOC	dimethyl phthalate	131-11-3	UG/L			10 U				10 U		
SVOC	1,3-dinitrobenzene	99-65-0	UG/L									
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L			25 UJ				25 UJ		
SVOC	2,4-dinitrophenol	51-28-5	UG/L		25 U				25 UJ			
SVOC	2,4-dinitrotoluene	121-14-2	UG/L			10 U				10 U		
SVOC	2,6-dinitrotoluene	606-20-2	UG/L			10 U				10 U		
SVOC	di-n-octyl phthalate	117-84-0	UG/L			10 U				10 U		
SVOC	fluoranthene	206-44-0	UG/L			10 U				10 U		
SVOC	fluorene	86-73-7	UG/L			10 U				10 U		
SVOC	hexachlorobenzene	118-74-1	UG/L			10 U				10 U		
SVOC	hexachlorobutadiene	87-68-3	UG/L			10 UJ				10 UJ		
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L			10 UJ				10 UJ		
SVOC	hexachloroethane	67-72-1	UG/L			10 U				10 U		
SVOC	hexahydro-1,3,5-trinitro-1,3,5-triazine	121-82-4	UG/L									
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L			10 U				10 U		
SVOC	isophorone	78-59-1	UG/L			10 U				10 U		
SVOC	2-methylnaphthalene	91-57-6	UG/L			10 U				10 U		
SVOC	2-methylphenol	95-48-7	UG/L			10 U				10 U		
SVOC	4-methylphenol	106-44-5	UG/L			10 U				10 U		
SVOC	methyl-2,4,6-trinitrophenylnitramine	479-45-8	UG/L									
SVOC	naphthalene	91-20-3	UG/L			10 U				10 U		
SVOC	2-nitroaniline	88-74-4	UG/L			25 U				25 U		
SVOC	3-nitroaniline	99-09-2	UG/L			25 U				25 U		
SVOC	4-nitroaniline	100-01-6	UG/L			25 U				25 U		
SVOC	nitrobenzene	98-95-3	UG/L			10 U				10 U		
SVOC	4-nitrophenol	100-02-7	UG/L			25 UJ				25 UJ		
SVOC	2-nitrophenol	88-75-5	UG/L			10 U				10 U		
SVOC	N-nitrosodimethylamine	62-75-9	UG/L									
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L			10 U				10 U		
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L			10 UJ				10 UJ		
SVOC	2-nitrotoluene	88-72-2	UG/L									
SVOC	3-nitrotoluene	99-08-1	UG/L									
SVOC	4-nitrotoluene	99-99-0	UG/L									
SVOC	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	2691-41-0	UG/L									

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	023-005-021	023-005-022	023-005-023	023-005-024	023-005-024	023-005-025	023-005-026	023-005-027	023-005-028	023-005-029	HP2-4-A	HP2-4-E	HP2-5-A	HP2-5-E	HP2-5-E	HPRA-20-A	HPRA-20-E
			Sample_ID	023-0038	023-0039	023-0040	023-0041	023-0074	023-0042	023-0043	023-0045	023-0047	023-0049	280-S02-086	280-S02-087	280-S02-089	280-S02-090	280-S02-091	280-RA-149	280-RA-150
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	7 - 8	8 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7.5 - 8.5	8 - 9	8 - 9	8 - 8	8 - 8	8 - 8	22 - 22	22 - 22	8 - 8	20 - 20
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	10-Aug-94	10-Aug-94	19-Aug-94	19-Aug-94	19-Aug-94	16-Aug-94	16-Aug-94
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
SVOC	pentachlorophenol	87-86-5	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U
SVOC	phenanthrene	85-01-8	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	phenol	108-95-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	pyrene	129-00-0	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	0.6 J	0.5 J	10 U	10 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L											5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L								25 U	25 U	25 U	12 U	12 U	25 U	25 U	25 U	25 U	25 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L								10 U	10 U	10 U	5 U	5 U	10 U	10 U	10 U	10 U	10 U
SVOC	1,3,5-trinitrobenzene	99-35-4	UG/L	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U	7.3 U										
SVOC	2,4,6-trinitrotoluene	118-96-7	UG/L	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U	6.9 U										
PEST/PCB	aldrin	309-00-2	UG/L																	
PEST/PCB	Aroclor 1016	12674-11-2	UG/L																	
PEST/PCB	Aroclor 1221	11104-28-2	UG/L																	
PEST/PCB	Aroclor 1232	11141-16-5	UG/L																	
PEST/PCB	Aroclor 1242	53469-21-9	UG/L																	
PEST/PCB	Aroclor 1248	12672-29-6	UG/L																	
PEST/PCB	Aroclor 1254	11097-69-1	UG/L																	
PEST/PCB	Aroclor 1260	11096-82-5	UG/L																	
PEST/PCB	alpha-BHC	319-84-6	UG/L																	
PEST/PCB	beta-BHC	319-85-7	UG/L																	
PEST/PCB	delta-BHC	319-86-8	UG/L																	
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L																	
PEST/PCB	alpha-chlordane	5103-71-9	UG/L																	
PEST/PCB	gamma-chlordane	5566-34-7	UG/L																	
PEST/PCB	4,4'-DDD	72-54-8	UG/L																	
PEST/PCB	4,4'-DDE	72-55-9	UG/L																	
PEST/PCB	4,4'-DDT	50-29-3	UG/L																	
PEST/PCB	dieldrin	60-57-1	UG/L																	
PEST/PCB	endosulfan I	959-98-8	UG/L																	
PEST/PCB	endosulfan II	33213-65-9	UG/L																	
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L																	
PEST/PCB	endrin	72-20-8	UG/L																	
PEST/PCB	endrin aldehyde	7421-93-4	UG/L																	
PEST/PCB	endrin ketone	53494-70-5	UG/L																	
PEST/PCB	heptachlor	76-44-8	UG/L																	
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L																	
PEST/PCB	methoxychlor	72-43-5	UG/L																	
PEST/PCB	toxaphene	8001-35-2	UG/L																	
METALS	aluminum	7429-90-5	UG/L																	
METALS	antimony	7440-36-0	UG/L																	
METALS	arsenic	7440-38-2	UG/L																	
METALS	barium	7440-39-3	UG/L																	
METALS	beryllium	7440-41-7	UG/L																	
METALS	cadmium	7440-43-9	UG/L																	
METALS	calcium	7440-70-2	UG/L																	
METALS	chromium	7440-47-3	UG/L																	
METALS	chromium, hexavalent	18540-29-9	UG/L																	
METALS	cobalt	7440-48-4	UG/L																	
METALS	copper	7440-50-8	UG/L																	
METALS	iron	7439-89-6	UG/L																	
METALS	lead	7439-92-1	UG/L																	

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HPRA-23-A	HPRA-23-E	HPRA-8-A	HPRA-8-E	M009-A	M009-A	M010-A	M010-A	M010-A	M011-A	M011-A	M011-A	M012-A	M012-A	M012-A	M013-A
			Sample_ID	280-RA-152	280-RA-153	280-RA-142	280-RA-143	M-009A-Q1	M-009A-Q4	108-S02-045	M010-A-A6132	M-010A-Q4	M011-A-A5035	M011-A-A6134	M011-A-C5531	M012-A-A5036	M012-A-A6135	M012-A-C5532	M013-A-A5038
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	8 - 8	22 - 22	8 - 8	23 - 23	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Aug-94	18-Aug-94	10-Aug-94	10-Aug-94	16-Jul-91	23-Apr-92	08-May-98	14-Mar-07	08-Apr-92	20-Apr-06	12-Mar-07	10-Oct-06	19-Apr-06	13-Mar-07	10-Oct-06	19-Apr-06
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	pentachlorophenol	87-86-5	UG/L	25 U	25 U	12 U	12 U		10 U			10 U		19 U			19 U		
SVOC	phenanthrene	85-01-8	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		0.04 J			0.1 U		
SVOC	phenol	108-95-2	UG/L	10 U	10 U	5 U	5 U		2 U			2 U		9.4 U			9.7 U		
SVOC	pyrene	129-00-0	UG/L	10 U	10 U	5 U	5 U		1 U			1 U		0.1 UJ			0.1 U		
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L	10 U	10 U	5 U	5 U		1 U					9.4 U			9.7 U		
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L	25 U	25 U	12 U	12 U		3 U			3 U		9.4 U			9.7 U		
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L	10 U	10 U	5 U	5 U		4.5 U			4.5 U		9.4 U			9.7 U		
SVOC	1,3,5-trinitrobenzene	99-35-4	UG/L																
SVOC	2,4,6-trinitrotoluene	118-96-7	UG/L																
PEST/PCB	aldrin	309-00-2	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	Aroclor 1016	12674-11-2	UG/L						0.5 U			0.5 U		0.47 U			0.49 U		
PEST/PCB	Aroclor 1221	11104-28-2	UG/L						0.5 U			0.5 U		0.94 U			0.98 U		
PEST/PCB	Aroclor 1232	11141-16-5	UG/L						0.5 U			0.5 U		0.47 U			0.49 U		
PEST/PCB	Aroclor 1242	53469-21-9	UG/L						0.5 U			0.5 U		0.47 U			0.49 U		
PEST/PCB	Aroclor 1248	12672-29-6	UG/L						0.5 U			0.5 U		0.47 U			0.49 U		
PEST/PCB	Aroclor 1254	11097-69-1	UG/L						0.5 U			0.5 U		0.47 U			0.49 U		
PEST/PCB	Aroclor 1260	11096-82-5	UG/L						0.5 U			0.5 U		0.47 U			0.49 U		
PEST/PCB	alpha-BHC	319-84-6	UG/L						0.025 U			0.025 U		0.05 U			0.05 U		
PEST/PCB	beta-BHC	319-85-7	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	delta-BHC	319-86-8	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L						0.025 U			0.025 U		0.05 U			0.05 U		
PEST/PCB	alpha-chlordane	5103-71-9	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	gamma-chlordane	5566-34-7	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	4,4'-DDD	72-54-8	UG/L						0.1 U			0.1 U		0.1 U			0.1 U		
PEST/PCB	4,4'-DDE	72-55-9	UG/L						0.05 U			0.05 U		0.1 U			0.1 U		
PEST/PCB	4,4'-DDT	50-29-3	UG/L						0.1 U			0.1 U		0.1 U			0.1 U		
PEST/PCB	dieldrin	60-57-1	UG/L						0.05 U			0.05 U		0.1 U			0.1 U		
PEST/PCB	endosulfan I	959-98-8	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	endosulfan II	33213-65-9	UG/L						0.1 U			0.1 U		0.1 U			0.1 U		
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L						0.1 U			0.1 U		0.1 U			0.1 U		
PEST/PCB	endrin	72-20-8	UG/L						0.05 U			0.05 U		0.1 U			0.1 U		
PEST/PCB	endrin aldehyde	7421-93-4	UG/L											0.1 U			0.1 U		
PEST/PCB	endrin ketone	53494-70-5	UG/L						0.1 U			0.1 U		0.1 U			0.1 U		
PEST/PCB	heptachlor	76-44-8	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L						0.05 U			0.05 U		0.05 U			0.05 U		
PEST/PCB	methoxychlor	72-43-5	UG/L						0.5 U			0.5 U		0.5 U			0.5 U		
PEST/PCB	toxaphene	8001-35-2	UG/L						1 U			1 U		1 U			1 U		
METALS	aluminum	7429-90-5	UG/L						40.7 U	4530				54 J			64 U		
METALS	antimony	7440-36-0	UG/L						37.5 U	0.85 U				0.87 J			0.25 U		
METALS	arsenic	7440-38-2	UG/L						2.5 U	7				6.6			5.7		
METALS	barium	7440-39-3	UG/L						166	355				340			13		
METALS	beryllium	7440-41-7	UG/L						2.5 U	0.1 U				0.53 J			2 U		
METALS	cadmium	7440-43-9	UG/L						3.9 U	0.55 J				0.41 J			5 U		
METALS	calcium	7440-70-2	UG/L						26900	4360				270			1.8		
METALS	chromium	7440-47-3	UG/L						6.3 U	17.9				1.4 U			2.1 U		
METALS	chromium, hexavalent	18540-29-9	UG/L																
METALS	cobalt	7440-48-4	UG/L						17.2 U	2.1 J				2.8			0.43 J		
METALS	copper	7440-50-8	UG/L						3.8 U	9.9 UJ				10 U			2.4 J		
METALS	iron	7439-89-6	UG/L						42.9 J	5470				13000			140 U		
METALS	lead	7439-92-1	UG/L						2 U	2.2 UJ				0.27 J			0.33 J		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M013-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M015-A	M015-A	M015-A	M103-A	M103-A	M103-A	M103-A
			Sample_ID	M013-A-A6137	M014-A-A1037	M014-A-A5041	M014-A-A6140	M014-A-C3037	M014-A-C3038	M014-A-C5534	M-014A-Q4	M-015A-Q1	M-015A-Q1-DUP	M-015A-Q4	280-RA-065	280-RA-067	M-103A-Q1	M-103A-Q4	M-103A-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	2.74 - 2.75	2.74 - 2.75	-	-	-	-	-	-	-	-	-	-
			Collection_Date	13-Mar-07	02-Jul-02	20-Apr-06	09-Mar-07	06-Apr-04	06-Apr-04	10-Oct-06	07-Apr-92	18-Jul-91	18-Jul-91	07-Apr-92	03-Mar-95	08-Sep-95	16-Jul-91	23-Apr-92	23-Apr-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	pentachlorophenol	87-86-5	UG/L	19 U			19 U							10 U		25 UJ			
SVOC	phenanthrene	85-01-8	UG/L	0.1 U			0.1 U							1 U		10 U			
SVOC	phenol	108-95-2	UG/L	9.6 U			9.6 U							2 U		10 U			
SVOC	pyrene	129-00-0	UG/L	0.1 U			0.1 U							1 U		10 U			
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L	9.6 U			9.6 U							1 U		10 U			
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L	9.6 U			9.6 U							3 U		25 U			
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L	9.6 U			9.6 U							4.5 U		10 U			
SVOC	1,3,5-trinitrobenzene	99-35-4	UG/L																
SVOC	2,4,6-trinitrotoluene	118-96-7	UG/L																
PEST/PCB	aldrin	309-00-2	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/L	0.48 U			0.48 U							0.5 U				0.5 U	0.5 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/L	0.95 U			0.96 U							0.5 U				0.5 U	0.5 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/L	0.48 U			0.48 U							0.5 U				0.5 U	0.5 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/L	0.48 U			0.48 U							0.5 U				0.5 U	0.5 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/L	0.48 U			0.48 U							0.5 U				0.5 U	0.5 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/L	0.48 U			0.48 U							0.5 U				0.5 U	0.5 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/L	0.48 U			0.48 U							0.5 U				0.5 U	0.5 U
PEST/PCB	alpha-BHC	319-84-6	UG/L	0.05 U			0.05 U							0.025 U				0.025 U	0.025 U
PEST/PCB	beta-BHC	319-85-7	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	delta-BHC	319-86-8	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L	0.05 U			0.05 U							0.025 U				0.025 U	0.025 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	gamma-chlordane	5566-34-7	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	4,4'-DDD	72-54-8	UG/L	0.1 U			0.1 U							0.1 U				0.1 U	0.1 U
PEST/PCB	4,4'-DDE	72-55-9	UG/L	0.1 U			0.1 U							0.05 U				0.05 U	0.05 U
PEST/PCB	4,4'-DDT	50-29-3	UG/L	0.1 U			0.1 U							0.1 U				0.1 U	0.1 U
PEST/PCB	dieldrin	60-57-1	UG/L	0.1 U			0.1 U							0.05 U				0.05 U	0.05 U
PEST/PCB	endosulfan I	959-98-8	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	endosulfan II	33213-65-9	UG/L	0.1 U			0.1 U							0.1 U				0.1 U	0.1 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L	0.1 U			0.1 U							0.1 U				0.1 U	0.1 U
PEST/PCB	endrin	72-20-8	UG/L	0.1 U			0.1 U							0.05 U				0.05 U	0.05 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/L	0.1 U			0.1 U												
PEST/PCB	endrin ketone	53494-70-5	UG/L	0.1 U			0.1 U							0.1 U				0.1 U	0.1 U
PEST/PCB	heptachlor	76-44-8	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L	0.05 U			0.05 U							0.05 U				0.05 U	0.05 U
PEST/PCB	methoxychlor	72-43-5	UG/L	0.5 U			0.5 U							0.5 U				0.5 U	0.5 U
PEST/PCB	toxaphene	8001-35-2	UG/L	1 U			1 U							1 U				1 U	1 U
METALS	aluminum	7429-90-5	UG/L	24 U			17 U							1790		9.7 UJ			
METALS	antimony	7440-36-0	UG/L	0.4 U			0.11 U							37.5 U		5.6 U			
METALS	arsenic	7440-38-2	UG/L	15			0.66 J							1.9 U		4.7 J			
METALS	barium	7440-39-3	UG/L	91			15							33.7		15.9 UJ			
METALS	beryllium	7440-41-7	UG/L	2 U			2 U							2.5 U		0.1 U			
METALS	cadmium	7440-43-9	UG/L	0.07 J			5 U							3.9 U		0.3 U			
METALS	calcium	7440-70-2	UG/L	5.8			7.9							5780		3360 J			
METALS	chromium	7440-47-3	UG/L	1.7 U			2.3 J							8.9		1 U			
METALS	chromium, hexavalent	18540-29-9	UG/L		10														
METALS	cobalt	7440-48-4	UG/L	0.14 J			1 U							17.2 U		3.8 U			
METALS	copper	7440-50-8	UG/L	1.4 J			10 U							3.8 U		12 U			
METALS	iron	7439-89-6	UG/L	20 U			31 J							2660		39.8 UJ			
METALS	lead	7439-92-1	UG/L	0.13 U			0.14 U							2 J		1.1 U			

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M104-A	M104-A	M104-A	M104-A	M104-A	M105-A	M105-A	M105-A	M105-A	M105-A	M106-A	M106-A	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	280-RA-072	280-RA-073	280-RA-074	M-104A-Q1	M-104A-Q4	280-RA-077	280-RA-079	280-RA-080	M-105A-Q1	M-105A-Q4	280-RA-085	280-RA-086	280-RA-087	M-106A-Q1	M-106A-Q4	280-RA-090	280-RA-091	M-107A-Q1
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	10-Jul-95	10-Jul-95	08-Sep-95	19-Jul-91	25-Mar-92	08-Dec-94	06-Jul-95	11-Sep-95	26-Jun-91	13-Apr-92	07-Jul-95	11-Sep-95	11-Sep-95	19-Jul-91	17-Apr-92	07-Jul-95	11-Sep-95	17-Jul-91	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
SVOC	pentachlorophenol	87-86-5	UG/L			25 UJ					25 UJ				25 UJ	25 UJ				25 UJ		
SVOC	phenanthrene	85-01-8	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	phenol	108-95-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	pyrene	129-00-0	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L			25 U					25 U				25 U	25 U				25 U		
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L			10 U					10 U				10 U	10 U				10 U		
SVOC	1,3,5-trinitrobenzene	99-35-4	UG/L																			
SVOC	2,4,6-trinitrotoluene	118-96-7	UG/L																			
PEST/PCB	aldrin	309-00-2	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	Aroclor 1016	12674-11-2	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	Aroclor 1221	11104-28-2	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	Aroclor 1232	11141-16-5	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	Aroclor 1242	53469-21-9	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	Aroclor 1248	12672-29-6	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	Aroclor 1254	11097-69-1	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	Aroclor 1260	11096-82-5	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	alpha-BHC	319-84-6	UG/L					0.025 U					0.027 UJ					0.025 UJ				
PEST/PCB	beta-BHC	319-85-7	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	delta-BHC	319-86-8	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L					0.025 U					0.027 UJ					0.025 UJ				
PEST/PCB	alpha-chlordane	5103-71-9	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	gamma-chlordane	5566-34-7	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	4,4'-DDD	72-54-8	UG/L					0.1 U					0.109 UJ					0.1 UJ				
PEST/PCB	4,4'-DDE	72-55-9	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	4,4'-DDT	50-29-3	UG/L					0.1 U					0.109 UJ					0.1 UJ				
PEST/PCB	dieldrin	60-57-1	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	endosulfan I	959-98-8	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	endosulfan II	33213-65-9	UG/L					0.1 U					0.109 UJ					0.1 UJ				
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L					0.1 U					0.109 UJ					0.1 UJ				
PEST/PCB	endrin	72-20-8	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	endrin aldehyde	7421-93-4	UG/L																			
PEST/PCB	endrin ketone	53494-70-5	UG/L					0.1 U					0.109 UJ					0.1 UJ				
PEST/PCB	heptachlor	76-44-8	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L					0.05 U					0.054 UJ					0.05 UJ				
PEST/PCB	methoxychlor	72-43-5	UG/L					0.5 U					0.543 UJ					0.5 UJ				
PEST/PCB	toxaphene	8001-35-2	UG/L					1 U					1.09 UJ					1 UJ				
METALS	aluminum	7429-90-5	UG/L			46.2 UJ					223 UJ				134 UJ	138 UJ				1220		
METALS	antimony	7440-36-0	UG/L			5.6 U					5.6 U				5.6 U	5.6 U				5.6 U		
METALS	arsenic	7440-38-2	UG/L			8.9 J					10.1				2.8 U	2.8 U				6.5 J		
METALS	barium	7440-39-3	UG/L			7.2 U					9.6 UJ				11.9 UJ	10.3 UJ				59.5 J		
METALS	beryllium	7440-41-7	UG/L			0.1 U					0.1 U				0.1 U	0.1 U				0.1 U		
METALS	cadmium	7440-43-9	UG/L			0.3 U					0.3 U				0.3 U	0.3 U				0.32 J		
METALS	calcium	7440-70-2	UG/L			15200 J					2030 J				8350 J	8670 J				6410 J		
METALS	chromium	7440-47-3	UG/L			1 U					1.5 J				1 U	1 U				6.1 J		
METALS	chromium, hexavalent	18540-29-9	UG/L																			
METALS	cobalt	7440-48-4	UG/L			3.8 U					3.8 U				3.8 U	3.8 U				3.8 U		
METALS	copper	7440-50-8	UG/L			12 U					12 U				12 U	12 U				12 U		
METALS	iron	7439-89-6	UG/L			82.5 UJ					202 J				146 J	164 J				1850 J		
METALS	lead	7439-92-1	UG/L			1.1 U					1.1 U				1.1 U	1.6 UJ				2.5 UJ		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M107-A	M108-A	M108-A	M108-A	M109-A	M109-A	M109-A	M109-A	M109-A
			Sample_ID	M-107A-Q4	280-RA-093	280-RA-095	M-108A-Q4	280-RA-098	280-RA-101	280-RA-102	M-109A-Q1	M-109A-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Apr-92	05-Mar-95	12-Sep-95	24-Mar-92	13-Oct-94	06-Jul-95	12-Sep-95	16-Jul-91	27-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
SVOC	pentachlorophenol	87-86-5	UG/L			25 UJ				25 UJ		
SVOC	phenanthrene	85-01-8	UG/L			10 U				10 U		
SVOC	phenol	108-95-2	UG/L			10 U				10 U		
SVOC	pyrene	129-00-0	UG/L			10 U				10 U		
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L			10 U				10 U		
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L			25 U				25 U		
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L			10 U				10 U		
SVOC	1,3,5-trinitrobenzene	99-35-4	UG/L									
SVOC	2,4,6-trinitrotoluene	118-96-7	UG/L									
PEST/PCB	aldrin	309-00-2	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	alpha-BHC	319-84-6	UG/L	0.025 U			0.025 U					0.025 U
PEST/PCB	beta-BHC	319-85-7	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	delta-BHC	319-86-8	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L	0.025 U			0.025 U					0.025 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	gamma-chlordane	5566-34-7	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	4,4'-DDD	72-54-8	UG/L	0.1 U			0.1 U					0.1 U
PEST/PCB	4,4'-DDE	72-55-9	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	4,4'-DDT	50-29-3	UG/L	0.1 U			0.1 U					0.1 U
PEST/PCB	dieldrin	60-57-1	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	endosulfan I	959-98-8	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	endosulfan II	33213-65-9	UG/L	0.1 U			0.1 U					0.1 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L	0.1 U			0.1 U					0.1 U
PEST/PCB	endrin	72-20-8	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/L									
PEST/PCB	endrin ketone	53494-70-5	UG/L	0.1 U			0.1 U					0.1 U
PEST/PCB	heptachlor	76-44-8	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L	0.05 U			0.05 U					0.05 U
PEST/PCB	methoxychlor	72-43-5	UG/L	0.5 U			0.5 U					0.5 U
PEST/PCB	toxaphene	8001-35-2	UG/L	1 U			1 U					1 U
METALS	aluminum	7429-90-5	UG/L			374				13.8 UJ		
METALS	antimony	7440-36-0	UG/L			5.6 U				5.6 U		
METALS	arsenic	7440-38-2	UG/L			6.6 J				8.1 J		
METALS	barium	7440-39-3	UG/L			21.5 UJ				38.2 UJ		
METALS	beryllium	7440-41-7	UG/L			0.1 U				0.1 U		
METALS	cadmium	7440-43-9	UG/L			0.3 U				0.3 U		
METALS	calcium	7440-70-2	UG/L			10200 J				9470 J		
METALS	chromium	7440-47-3	UG/L			1.5 J				1 U		
METALS	chromium, hexavalent	18540-29-9	UG/L									
METALS	cobalt	7440-48-4	UG/L			3.8 U				3.8 U		
METALS	copper	7440-50-8	UG/L			12 U				12 U		
METALS	iron	7439-89-6	UG/L			428 J				15 UJ		
METALS	lead	7439-92-1	UG/L			1.1 U				1.1 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	023-005-021	023-005-022	023-005-023	023-005-024	023-005-024	023-005-025	023-005-026	023-005-027	023-005-028	023-005-029	HP2-4-A	HP2-4-E	HP2-5-A	HP2-5-E	HP2-5-E	HPRA-20-A	HPRA-20-E
			Sample_ID	023-0038	023-0039	023-0040	023-0041	023-0074	023-0042	023-0043	023-0045	023-0047	023-0049	280-S02-086	280-S02-087	280-S02-089	280-S02-090	280-S02-091	280-RA-149	280-RA-150
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	7 - 8	8 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7 - 8	7.5 - 8.5	8 - 9	8 - 9	8 - 8	8 - 8	8 - 8	22 - 22	22 - 22	8 - 8	20 - 20
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	10-Aug-94	10-Aug-94	19-Aug-94	19-Aug-94	19-Aug-94	16-Aug-94	16-Aug-94
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
METALS	magnesium	7439-95-4	UG/L																	
METALS	manganese	7439-96-5	UG/L																	
METALS	mercury	7439-97-6	UG/L																	
METALS	molybdenum	7439-98-7	UG/L																	
METALS	nickel	7440-02-0	UG/L																	
METALS	potassium	7440-09-7	UG/L																	
METALS	selenium	7782-49-2	UG/L																	
METALS	silver	7440-22-4	UG/L																	
METALS	sodium	7440-23-5	UG/L																	
METALS	thallium	7440-28-0	UG/L																	
METALS	vanadium	7440-62-2	UG/L																	
METALS	zinc	7440-66-6	UG/L																	
RAD	actinium-228	14331-83-0	PCI/L																	
RAD	bismuth-212	14913-49-6	PCI/L																	
RAD	bismuth-214	14733-03-0	PCI/L																	
RAD	cesium-137	10045-97-3	PCI/L																	
RAD	cobalt-60	10198-40-0	PCI/L																	
RAD	lead-210	14255-04-0	PCI/L																	
RAD	lead-212	15092-94-1	PCI/L																	
RAD	lead-214	15067-28-4	PCI/L																	
RAD	potassium-40	13966-00-2	PCI/L																	
RAD	protactinium-234	15100-28-4	PCI/L																	
RAD	radium	7440-14-4	PCI/L																	
RAD	radium-226	13982-63-3	PCI/L																	
RAD	radium-228	15262-20-1	PCI/L																	
RAD	total gross alpha	12587-46-1	PCI/L																	
RAD	total gross beta	12587-47-2	PCI/L																	
RAD	strontium	7440-24-6	PCI/L																	
RAD	thallium-208	01-00004	PCI/L																	
RAD	thorium-234	15065-10-8	PCI/L																	
RAD	tritium	10028-17-8	PCI/L																	
RAD	uranium-233	13968-55-3	PCI/L																	
RAD	uranium-235	15117-96-1	PCI/L																	
RAD	uranium-238	7440-61-1	PCI/L																	

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	HPRA-23-A	HPRA-23-E	HPRA-8-A	HPRA-8-E	M009-A	M009-A	M010-A	M010-A	M010-A	M011-A	M011-A	M011-A	M012-A	M012-A	M012-A	M013-A
			Sample_ID	280-RA-152	280-RA-153	280-RA-142	280-RA-143	M-009A-Q1	M-009A-Q4	108-S02-045	M010-A-A6132	M-010A-Q4	M011-A-A5035	M011-A-A6134	M011-A-C5531	M012-A-A5036	M012-A-A6135	M012-A-C5532	M013-A-A5038
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	8 - 8	22 - 22	8 - 8	23 - 23	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Aug-94	18-Aug-94	10-Aug-94	10-Aug-94	16-Jul-91	23-Apr-92	08-May-98	14-Mar-07	08-Apr-92	20-Apr-06	12-Mar-07	10-Oct-06	19-Apr-06	13-Mar-07	10-Oct-06	19-Apr-06
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
METALS	magnesium	7439-95-4	UG/L						27300	4650				350			1.3		
METALS	manganese	7439-96-5	UG/L						331	94.6				7400			50		
METALS	mercury	7439-97-6	UG/L						0.2 U	0.1 U				0.2 U			0.2 U		
METALS	molybdenum	7439-98-7	UG/L							10.7				5 J			5.3 J		
METALS	nickel	7440-02-0	UG/L						13.2 U	19.3				6 J			5 J		
METALS	potassium	7440-09-7	UG/L						22800	15100 J				59			3.6		
METALS	selenium	7782-49-2	UG/L						2 UJ	0.85 UJ				0.63 J			5 U		
METALS	silver	7440-22-4	UG/L						4.8 U	0.3 U				0.37 J			5 U		
METALS	sodium	7440-23-5	UG/L						693000	280000				2400			98		
METALS	thallium	7440-28-0	UG/L						1.7 U	1.4 UJ				0.57 J			5 U		
METALS	vanadium	7440-62-2	UG/L						6 U	12.2 J				6.2 J			8.5 U		
METALS	zinc	7440-66-6	UG/L						17.3 J	226				20 J			9.5 J		
RAD	actinium-228	14331-83-0	PCI/L											20 U			20 U		
RAD	bismuth-212	14913-49-6	PCI/L											50 U			50 U		
RAD	bismuth-214	14733-03-0	PCI/L											17.4				10 U	
RAD	cesium-137	10045-97-3	PCI/L										5 U			5 U			5 U
RAD	cobalt-60	10198-40-0	PCI/L										5 U			5 U			5 U
RAD	lead-210	14255-04-0	PCI/L											750 U			750 U		
RAD	lead-212	15092-94-1	PCI/L												15 U		15 U		
RAD	lead-214	15067-28-4	PCI/L											16.2			10 U		
RAD	potassium-40	13966-00-2	PCI/L											77.1 J			100 U		
RAD	protactinium-234	15100-28-4	PCI/L																
RAD	radium	7440-14-4	PCI/L																
RAD	radium-226	13982-63-3	PCI/L						0.4			0.5 UJ		1.5			0.5 U		
RAD	radium-228	15262-20-1	PCI/L						0.3 U			0.5		5 U			5 U		
RAD	total gross alpha	12587-46-1	PCI/L						5.3			23.5		3 U			1.24 J		
RAD	total gross beta	12587-47-2	PCI/L						24.2			47		66.6			4.06		
RAD	strontium	7440-24-6	PCI/L											5 U			5 U		
RAD	thallium-208	01-00004	PCI/L											10 U			10 U		
RAD	thorium-234	15065-10-8	PCI/L											250 U			250 U		
RAD	tritium	10028-17-8	PCI/L											500 U			500 U		
RAD	uranium-233	13968-55-3	PCI/L											0.2 U			0.165 J		
RAD	uranium-235	15117-96-1	PCI/L											0.2 U			0.2 U		
RAD	uranium-238	7440-61-1	PCI/L											0.2 U			0.2 U		

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M013-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M014-A	M015-A	M015-A	M015-A	M103-A	M103-A	M103-A	M103-A	M103-A
			Sample_ID	M013-A-A6137	M014-A-A1037	M014-A-A5041	M014-A-A6140	M014-A-C3037	M014-A-C3038	M014-A-C5534	M-014A-Q4	M-015A-Q1	M-015A-Q1-DUP	M-015A-Q4	280-RA-065	280-RA-067	M-103A-Q1	M-103A-Q4	M-103A-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	2.74 - 2.75	2.74 - 2.75	-	-	-	-	-	-	-	-	-	-
			Collection_Date	13-Mar-07	02-Jul-02	20-Apr-06	09-Mar-07	06-Apr-04	06-Apr-04	10-Oct-06	07-Apr-92	18-Jul-91	18-Jul-91	07-Apr-92	03-Mar-95	08-Sep-95	16-Jul-91	23-Apr-92	23-Apr-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
METALS	magnesium	7439-95-4	UG/L	9.9			8.1							4730		3300 J			
METALS	manganese	7439-96-5	UG/L	1 J			8.6 J							40.3		53.3 J			
METALS	mercury	7439-97-6	UG/L	0.2 U			0.2 U							0.2 U		0.2 U			
METALS	molybdenum	7439-98-7	UG/L	0.4 J			20 U									7.9 U			
METALS	nickel	7440-02-0	UG/L	1.4 J			1.2 J							13.2 U		7.5 U			
METALS	potassium	7440-09-7	UG/L	7			3.2							3250		7450			
METALS	selenium	7782-49-2	UG/L	5 U			5 U							2 U		2.4 U			
METALS	silver	7440-22-4	UG/L	5 U			5 U							4.8 U		0.9 U			
METALS	sodium	7440-23-5	UG/L	49			17							97300		48900			
METALS	thallium	7440-28-0	UG/L	5 U			5 U							1.7 UJ		3.4 U			
METALS	vanadium	7440-62-2	UG/L	23			7.7 J							6 UJ		3.7 U			
METALS	zinc	7440-66-6	UG/L	5.3 J			30							7.8		13.1 U			
RAD	actinium-228	14331-83-0	PCI/L	20 U			20 U												
RAD	bismuth-212	14913-49-6	PCI/L	50 U			50 U												
RAD	bismuth-214	14733-03-0	PCI/L	18.4						10 U									
RAD	cesium-137	10045-97-3	PCI/L					3.28 U	2.15 U										
RAD	cobalt-60	10198-40-0	PCI/L			5 U													
RAD	lead-210	14255-04-0	PCI/L	750 U			750 U												
RAD	lead-212	15092-94-1	PCI/L	15 U			15 U												
RAD	lead-214	15067-28-4	PCI/L	15.5			10 U												
RAD	potassium-40	13966-00-2	PCI/L	100 U						100 U									
RAD	protactinium-234	15100-28-4	PCI/L					350 U	304 U										
RAD	radium	7440-14-4	PCI/L					0.032 U	0.005 U										
RAD	radium-226	13982-63-3	PCI/L	0.5 U			0.5 U							0.9 UJ		0.48 UJ			
RAD	radium-228	15262-20-1	PCI/L	5 U			5 U							0.6		0.15 J			
RAD	total gross alpha	12587-46-1	PCI/L	3 U			3 U							3.4		3.22			
RAD	total gross beta	12587-47-2	PCI/L	7.74			3.24							7.4		8.05			
RAD	strontium	7440-24-6	PCI/L	5 U			5 U												
RAD	thallium-208	01-00004	PCI/L	10 U			10 U												
RAD	thorium-234	15065-10-8	PCI/L	250 U			250 U												
RAD	tritium	10028-17-8	PCI/L	500 U			18400												
RAD	uranium-233	13968-55-3	PCI/L	0.2 U			0.0444 J												
RAD	uranium-235	15117-96-1	PCI/L	0.2 U			0.2 U												
RAD	uranium-238	7440-61-1	PCI/L	0.2 U			0.2 U												

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M104-A	M104-A	M104-A	M104-A	M104-A	M105-A	M105-A	M105-A	M105-A	M105-A	M106-A	M106-A	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	280-RA-072	280-RA-073	280-RA-074	M-104A-Q1	M-104A-Q4	280-RA-077	280-RA-079	280-RA-080	M-105A-Q1	M-105A-Q4	280-RA-085	280-RA-086	280-RA-087	M-106A-Q1	M-106A-Q4	280-RA-090	280-RA-091	M-107A-Q1
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	10-Jul-95	10-Jul-95	08-Sep-95	19-Jul-91	25-Mar-92	08-Dec-94	06-Jul-95	11-Sep-95	26-Jun-91	13-Apr-92	07-Jul-95	11-Sep-95	11-Sep-95	19-Jul-91	17-Apr-92	07-Jul-95	11-Sep-95	17-Jul-91	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
METALS	magnesium	7439-95-4	UG/L			13400 J					2060 J				3870 J	4150 J				5160 J		
METALS	manganese	7439-96-5	UG/L			36 J					3.5 J				5.6 J	5.3 J				183 J		
METALS	mercury	7439-97-6	UG/L			0.2 U					0.2 U				0.2 U	0.2 U				0.2 U		
METALS	molybdenum	7439-98-7	UG/L			7.9 U					7.9 U				7.9 U	7.9 U				7.9 U		
METALS	nickel	7440-02-0	UG/L			7.5 U					7.5 U				7.5 U	7.5 U				10 UJ		
METALS	potassium	7440-09-7	UG/L			17200					5960				5300	5130				6220		
METALS	selenium	7782-49-2	UG/L			2.4 U					2.4 U				2.4 U	2.6 J				2.4 U		
METALS	silver	7440-22-4	UG/L			0.9 U					0.9 U				0.9 U	0.9 U				0.9 U		
METALS	sodium	7440-23-5	UG/L			262000					91000				12900	12200				177000		
METALS	thallium	7440-28-0	UG/L			3.4 U					3.4 U				3.4 U	3.4 U				3.4 U		
METALS	vanadium	7440-62-2	UG/L			3.7 U					16 UJ				10.6 UJ	10.6 UJ				14.2 UJ		
METALS	zinc	7440-66-6	UG/L			13.9 J					20.7				15.7 J	13.3 J				16.3 J		
RAD	actinium-228	14331-83-0	PCI/L																			
RAD	bismuth-212	14913-49-6	PCI/L																			
RAD	bismuth-214	14733-03-0	PCI/L																			
RAD	cesium-137	10045-97-3	PCI/L																			
RAD	cobalt-60	10198-40-0	PCI/L																			
RAD	lead-210	14255-04-0	PCI/L																			
RAD	lead-212	15092-94-1	PCI/L																			
RAD	lead-214	15067-28-4	PCI/L																			
RAD	potassium-40	13966-00-2	PCI/L																			
RAD	protactinium-234	15100-28-4	PCI/L																			
RAD	radium	7440-14-4	PCI/L																			
RAD	radium-226	13982-63-3	PCI/L			0.11 UJ					0.25 UJ				0.39 UJ	0.1 UJ				0.2 UJ		
RAD	radium-228	15262-20-1	PCI/L			0.79 UJ					0.67 UJ				0.64 UJ	1.22 UJ				1.52 UJ		
RAD	total gross alpha	12587-46-1	PCI/L			1.08 UJ					2.55				0.48 UJ	0.24 UJ				3.26		
RAD	total gross beta	12587-47-2	PCI/L			7.8					5.1				4.72	5.07				5.23		
RAD	strontium	7440-24-6	PCI/L																			
RAD	thallium-208	01-00004	PCI/L																			
RAD	thorium-234	15065-10-8	PCI/L																			
RAD	tritium	10028-17-8	PCI/L																			
RAD	uranium-233	13968-55-3	PCI/L																			
RAD	uranium-235	15117-96-1	PCI/L																			
RAD	uranium-238	7440-61-1	PCI/L																			

Table A1-1c

Groundwater Samples: FED-1A EBS 23 First WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23
			WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
			Station_ID	M107-A	M108-A	M108-A	M108-A	M109-A	M109-A	M109-A	M109-A	M109-A
			Sample_ID	M-107A-Q4	280-RA-093	280-RA-095	M-108A-Q4	280-RA-098	280-RA-101	280-RA-102	M-109A-Q1	M-109A-Q4
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-
			Collection_Date	17-Apr-92	05-Mar-95	12-Sep-95	24-Mar-92	13-Oct-94	06-Jul-95	12-Sep-95	16-Jul-91	27-Apr-92
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units									
METALS	magnesium	7439-95-4	UG/L			2500 J				5950 J		
METALS	manganese	7439-96-5	UG/L			8.5 J				2.1 J		
METALS	mercury	7439-97-6	UG/L			0.2 U				0.2 U		
METALS	molybdenum	7439-98-7	UG/L			7.9 U				7.9 U		
METALS	nickel	7440-02-0	UG/L			1.7 UJ				7.5 U		
METALS	potassium	7440-09-7	UG/L			2000 UJ				13300		
METALS	selenium	7782-49-2	UG/L			2.4 U				2.4 U		
METALS	silver	7440-22-4	UG/L			0.9 U				0.9 U		
METALS	sodium	7440-23-5	UG/L			25200				280000		
METALS	thallium	7440-28-0	UG/L			3.4 U				3.4 U		
METALS	vanadium	7440-62-2	UG/L			19.5 UJ				21.3 J		
METALS	zinc	7440-66-6	UG/L			13.2 J				13.1 U		
RAD	actinium-228	14331-83-0	PCI/L									
RAD	bismuth-212	14913-49-6	PCI/L									
RAD	bismuth-214	14733-03-0	PCI/L									
RAD	cesium-137	10045-97-3	PCI/L									
RAD	cobalt-60	10198-40-0	PCI/L									
RAD	lead-210	14255-04-0	PCI/L									
RAD	lead-212	15092-94-1	PCI/L									
RAD	lead-214	15067-28-4	PCI/L									
RAD	potassium-40	13966-00-2	PCI/L									
RAD	protactinium-234	15100-28-4	PCI/L									
RAD	radium	7440-14-4	PCI/L									
RAD	radium-226	13982-63-3	PCI/L			0.28			0.2 UJ			
RAD	radium-228	15262-20-1	PCI/L			3.45 UJ				0.95 UJ		
RAD	total gross alpha	12587-46-1	PCI/L			3.12				7.42		
RAD	total gross beta	12587-47-2	PCI/L			4.18				8.1		
RAD	strontium	7440-24-6	PCI/L									
RAD	thallium-208	01-00004	PCI/L									
RAD	thorium-234	15065-10-8	PCI/L									
RAD	tritium	10028-17-8	PCI/L									
RAD	uranium-233	13968-55-3	PCI/L									
RAD	uranium-235	15117-96-1	PCI/L									
RAD	uranium-238	7440-61-1	PCI/L									

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	DRA-01	DRA-01	HP2-4-D	HP2-5-D	HPRA-20-D	HPRA-23-D	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M012-B
			Sample_ID	280-RA-219	280-RA-253	280-S02-088	280-S02-092	280-RA-151	280-RA-154	280-S02-016	M010-B-A1030	M010-B-A5034	M010-B-A6133	M010-B-B2731	M010-B-C5562	M-010B-Q4	280-S02-023
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	4 - 4	38 - 38	47 - 47	44 - 44	-	-	-	-	-	-	-	-
			Collection_Date	22-Sep-95	07-Mar-95	10-Aug-94	19-Aug-94	16-Aug-94	17-Aug-94	24-May-95	11-Jul-02	20-Apr-06	13-Mar-07	17-Dec-03	10-Oct-06	10-Apr-92	31-May-95
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/L			6 U	4 U	13 U	15 U				10 U				
VOC	benzene	71-43-2	UG/L	0.5 U		0.5 U	1 U	1 U	1 U				0.5 U				
VOC	bromobenzene	108-86-1	UG/L										0.5 U				
VOC	bromochloromethane	74-97-5	UG/L										0.5 U				
VOC	bromodichloromethane	75-27-4	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	bromoform	75-25-2	UG/L	1 U		2 U	1 U	1 U	1 U				1 U				
VOC	bromomethane	74-83-9	UG/L	1 U		1 U	2 U	2 U	2 U				1 U				
VOC	2-butanone	78-93-3	UG/L				57 J	12 U	15 U				10 U				
VOC	tert-butyl alcohol	75-65-0	UG/L										10 U				
VOC	n-butylbenzene	104-51-8	UG/L										0.5 U				
VOC	sec-butylbenzene	135-98-8	UG/L										0.5 U				
VOC	tert-butylbenzene	98-06-6	UG/L										0.5 U				
VOC	carbon disulfide	75-15-0	UG/L	1 UJ		2 J	20	210	300				0.5 U				
VOC	carbon tetrachloride	56-23-5	UG/L	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U				0.5 U				
VOC	chlorobenzene	108-90-7	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	chlorodibromomethane	124-48-1	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	chloroethane	75-00-3	UG/L	2 U		2 U	2 U	2 U	2 U				1 U				
VOC	chloroform	67-66-3	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	chloromethane	74-87-3	UG/L	2 U		2 U	2 U	2 U	2 U				1 U				
VOC	2-chlorotoluene	95-49-8	UG/L										0.5 U				
VOC	4-chlorotoluene	106-43-4	UG/L										0.5 U				
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L										2 U				
VOC	1,2-dibromoethane	106-93-4	UG/L										0.5 U				
VOC	dibromomethane	74-95-3	UG/L										0.5 U				
VOC	1,2-dichlorobenzene	95-50-1	UG/L										0.5 U				
VOC	1,3-dichlorobenzene	541-73-1	UG/L										0.5 U				
VOC	1,4-dichlorobenzene	106-46-7	UG/L										0.5 U				
VOC	dichlorodifluoromethane	75-71-8	UG/L										1 U				
VOC	1,1-dichloroethane	75-34-3	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	1,2-dichloroethane	107-06-2	UG/L	0.5 U		0.5 U	0.5 U	1 U	0.5 U				0.5 U				
VOC	1,1-dichloroethene	75-35-4	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	cis-1,2-dichloroethene	156-59-2	UG/L										0.5 U				
VOC	trans-1,2-dichloroethene	156-60-5	UG/L										0.5 U				
VOC	1,2-dichloroethene	540-59-0	UG/L	1 U		2 U	1 U	1 U	1 U	1 U							
VOC	1,2-dichloropropane	78-87-5	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	1,3-dichloropropane	142-28-9	UG/L										0.5 U				
VOC	sec-dichloropropane	594-20-7	UG/L										0.5 U				
VOC	1,1-dichloropropene	563-58-6	UG/L										0.5 U				
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							
VOC	diisopropyl ether	108-20-3	UG/L										0.5 U				
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L										0.5 U				
VOC	ethylbenzene	100-41-4	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	hexachlorobutadiene	87-68-3	UG/L										0.5 U				
VOC	2-hexanone	591-78-6	UG/L	2 U			2 U	2 U	2 U				10 U				
VOC	isopropylbenzene	98-82-8	UG/L										0.5 U				

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M012-B	M012-B	M012-B	M013-C	M013-C	M013-C	M013-C	M013-C	M014-B	M014-B	M014-B
			Sample_ID	M012-B-A5037	M012-B-A6136	M012-B-C5563	280-S02-026	M013-C-A5039	M013-C-A5040	M013-C-A6138	M013-C-A6139	280-S02-028	M014-B-A1038	M014-B-A5042
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	FD	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	19-Apr-06	13-Mar-07	10-Oct-06	24-May-95	19-Apr-06	19-Apr-06	09-Mar-07	09-Mar-07	31-May-95	10-Jul-02	24-Apr-06
			REFERENCE	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2006
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
VOC	acetone	67-64-1	UG/L		0.5 J					1.3 U	1.1 U			
VOC	benzene	71-43-2	UG/L		0.5 U					0.5 U	0.5 U			
VOC	bromobenzene	108-86-1	UG/L		0.5 U					0.5 U	0.5 U			
VOC	bromochloromethane	74-97-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	bromodichloromethane	75-27-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	bromoform	75-25-2	UG/L		1 U					1 U	1 U			
VOC	bromomethane	74-83-9	UG/L		1 U					1 U	1 U			
VOC	2-butanone	78-93-3	UG/L		10 U					10 U	10 U			
VOC	tert-butyl alcohol	75-65-0	UG/L		10 U					10 U	10 U			
VOC	n-butylbenzene	104-51-8	UG/L		0.5 U					0.5 U	0.5 U			
VOC	sec-butylbenzene	135-98-8	UG/L		0.5 U					0.5 U	0.5 U			
VOC	tert-butylbenzene	98-06-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	carbon disulfide	75-15-0	UG/L		0.5 U					0.5 U	0.5 U			
VOC	carbon tetrachloride	56-23-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	chlorobenzene	108-90-7	UG/L		0.5 U					0.5 U	0.5 U			
VOC	chlorodibromomethane	124-48-1	UG/L		0.5 U					0.5 U	0.5 U			
VOC	chloroethane	75-00-3	UG/L		1 U					1 U	1 U			
VOC	chloroform	67-66-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	chloromethane	74-87-3	UG/L		1 U					1 U	1 U			
VOC	2-chlorotoluene	95-49-8	UG/L		0.5 U					0.5 U	0.5 U			
VOC	4-chlorotoluene	106-43-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L		2 U					2 U	2 U			
VOC	1,2-dibromoethane	106-93-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	dibromomethane	74-95-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2-dichlorobenzene	95-50-1	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,3-dichlorobenzene	541-73-1	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,4-dichlorobenzene	106-46-7	UG/L		0.5 U					0.5 U	0.5 U			
VOC	dichlorodifluoromethane	75-71-8	UG/L		1 U					1 U	1 U			
VOC	1,1-dichloroethane	75-34-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2-dichloroethane	107-06-2	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,1-dichloroethene	75-35-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	cis-1,2-dichloroethene	156-59-2	UG/L		0.5 U					0.5 U	0.5 U			
VOC	trans-1,2-dichloroethene	156-60-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2-dichloroethene	540-59-0	UG/L									1 U		
VOC	1,2-dichloropropane	78-87-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,3-dichloropropane	142-28-9	UG/L		0.5 U					0.5 U	0.5 U			
VOC	sec-dichloropropane	594-20-7	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,1-dichloropropene	563-58-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L									0.5 U		
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L									0.5 U		
VOC	diisopropyl ether	108-20-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	ethylbenzene	100-41-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	hexachlorobutadiene	87-68-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	2-hexanone	591-78-6	UG/L		10 U					10 U	10 U			
VOC	isopropylbenzene	98-82-8	UG/L		0.5 U					0.5 U	0.5 U			

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M014-B	M014-B	M014-B	M014-B	M105-B	M105-B	M105-B	M105-B	M108-B	M108-B	M108-B
			Sample_ID	M014-B-A6141	M014-B-B2739	M014-B-C5565	M-014B-Q4	280-RA-081	280-RA-082	M-105B-Q1	M-105B-Q4	280-RA-096	M-108B-Q4	M-108B-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Mar-07	17-Dec-03	10-Oct-06	22-Apr-92	10-Oct-94	06-Jul-95	27-Jun-91	13-Apr-92	11-Oct-94	25-Mar-92	25-Mar-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
VOC	acetone	67-64-1	UG/L	1.5 U							2 U		2.4 UJ	2 U
VOC	benzene	71-43-2	UG/L	0.5 U					0.5 U			1 U		
VOC	bromobenzene	108-86-1	UG/L	0.5 U										
VOC	bromochloromethane	74-97-5	UG/L	0.5 U										
VOC	bromodichloromethane	75-27-4	UG/L	0.5 U					1 U			1 U		
VOC	bromoform	75-25-2	UG/L	1 U					1 U			1 U		
VOC	bromomethane	74-83-9	UG/L	1 U					1 U			2 U		
VOC	2-butanone	78-93-3	UG/L	10 U							2 U		2 U	2 U
VOC	tert-butyl alcohol	75-65-0	UG/L	10 U										
VOC	n-butylbenzene	104-51-8	UG/L	0.5 U										
VOC	sec-butylbenzene	135-98-8	UG/L	0.5 U										
VOC	tert-butylbenzene	98-06-6	UG/L	0.5 U										
VOC	carbon disulfide	75-15-0	UG/L	0.5 U					1 UJ			1 U		
VOC	carbon tetrachloride	56-23-5	UG/L	0.5 U					0.5 U			0.5 U		
VOC	chlorobenzene	108-90-7	UG/L	0.5 U					1 U			1 U		
VOC	chlorodibromomethane	124-48-1	UG/L	0.5 U					1 U			1 U		
VOC	chloroethane	75-00-3	UG/L	1 U					2 U			2 U		
VOC	chloroform	67-66-3	UG/L	0.5 U					1 U			1 U		
VOC	chloromethane	74-87-3	UG/L	1 U					2 U			2 U		
VOC	2-chlorotoluene	95-49-8	UG/L	0.5 U										
VOC	4-chlorotoluene	106-43-4	UG/L	0.5 U										
VOC	1,2-dibromo-3-chloropropane	96-12-8	UG/L	2 U										
VOC	1,2-dibromoethane	106-93-4	UG/L	0.5 U										
VOC	dibromomethane	74-95-3	UG/L	0.5 U										
VOC	1,2-dichlorobenzene	95-50-1	UG/L	0.5 U										
VOC	1,3-dichlorobenzene	541-73-1	UG/L	0.5 U										
VOC	1,4-dichlorobenzene	106-46-7	UG/L	0.5 U										
VOC	dichlorodifluoromethane	75-71-8	UG/L	1 U										
VOC	1,1-dichloroethane	75-34-3	UG/L	0.5 U					1 U			1 U		
VOC	1,2-dichloroethane	107-06-2	UG/L	0.5 U					0.5 UJ			0.7 U		
VOC	1,1-dichloroethene	75-35-4	UG/L	0.5 U					1 U			1 U		
VOC	cis-1,2-dichloroethene	156-59-2	UG/L	0.5 U										
VOC	trans-1,2-dichloroethene	156-60-5	UG/L	0.5 U						1 U				
VOC	1,2-dichloroethene	540-59-0	UG/L						1 U			1 U		
VOC	1,2-dichloropropane	78-87-5	UG/L	0.5 U					1 U			1 U		
VOC	1,3-dichloropropane	142-28-9	UG/L	0.5 U										
VOC	sec-dichloropropane	594-20-7	UG/L	0.5 U										
VOC	1,1-dichloropropene	563-58-6	UG/L	0.5 U										
VOC	cis-1,3-dichloropropene	10061-01-5	UG/L						0.5 U			0.5 U		
VOC	trans-1,3-dichloropropene	10061-02-6	UG/L						0.5 U			0.5 U		
VOC	diisopropyl ether	108-20-3	UG/L	0.5 U										
VOC	2-ethoxy-2-methylpropane	637-92-3	UG/L	0.5 U										
VOC	ethylbenzene	100-41-4	UG/L	0.5 U					1 U			1 U		
VOC	hexachlorobutadiene	87-68-3	UG/L	0.5 U										
VOC	2-hexanone	591-78-6	UG/L	10 U					2 U			2 U		
VOC	isopropylbenzene	98-82-8	UG/L	0.5 U										

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	DRA-01	DRA-01	HP2-4-D	HP2-5-D	HPRA-20-D	HPRA-23-D	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M012-B
			Sample_ID	280-RA-219	280-RA-253	280-S02-088	280-S02-092	280-RA-151	280-RA-154	280-S02-016	M010-B-A1030	M010-B-A5034	M010-B-A6133	M010-B-B2731	M010-B-C5562	M-010B-Q4	280-S02-023
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	4 - 4	38 - 38	47 - 47	44 - 44	-	-	-	-	-	-	-	-
			Collection_Date	22-Sep-95	07-Mar-95	10-Aug-94	19-Aug-94	16-Aug-94	17-Aug-94	24-May-95	11-Jul-02	20-Apr-06	13-Mar-07	17-Dec-03	10-Oct-06	10-Apr-92	31-May-95
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	p-isopropyltoluene	99-87-6	UG/L										0.5 U				
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L										0.5 U				
VOC	methyl tert-butyl ether	1634-04-4	UG/L										0.5 U				
VOC	methylene chloride	75-09-2	UG/L	1 U		2 U	1 U	1 U	1 U				10 U				
VOC	4-methyl-2-pentanone	108-10-1	UG/L	2 U		2 U	2 U	2 U	2 U				10 U				
VOC	naphthalene	91-20-3	UG/L										2 U				
VOC	n-propylbenzene	103-65-1	UG/L										0.5 U				
VOC	styrene	100-42-5	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L										0.5 U				
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	tetrachloroethene	127-18-4	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	toluene	108-88-3	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L										0.5 U				
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L										0.5 U				
VOC	1,1,1-trichloroethane	71-55-6	UG/L	1 UJ		2 U	1 U	1 U	1 U				0.5 U				
VOC	1,1,2-trichloroethane	79-00-5	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	trichloroethene	79-01-6	UG/L	1 U		2 U	1 U	1 U	1 U				0.5 U				
VOC	trichlorofluoromethane	75-69-4	UG/L										1 U				
VOC	1,2,3-trichloropropane	96-18-4	UG/L										0.5 U				
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L										0.5 U				
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L										0.5 U				
VOC	vinyl acetate	108-05-4	UG/L													1 U	
VOC	vinyl chloride	75-01-4	UG/L	0.5 U		0.5 U	0.5 U	0.5 U	0.5 U				0.5 U				
VOC	meta-,para-xylene	7816-60-0	UG/L										0.5 U				
VOC	m-, p-xylene	136777-61-2	UG/L											1 U			
VOC	o-xylene	95-47-6	UG/L										0.5 U				
VOC	xylenes, total	1330-20-7	UG/L	1 U		2 U	1 U	1 U	1 U	1 U							
FUELS	diesel	11-84-7	UG/L	230 J									50 U				
FUELS	gasoline	8006-61-9	UG/L	50 UJ									17 U				
FUELS	jet fuel	94114-58-6	UG/L										50 U				
FUELS	JP-5	21274-30-0	UG/L	100 U													
FUELS	motor oil	68476-77-7	UG/L	500 U									300 U				
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L													200 U	
SVOC	acenaphthene	83-32-9	UG/L	10 U		5 U	10 U	10 U	10 U				0.95 U				
SVOC	acenaphthylene	208-96-8	UG/L	10 U		5 U	10 U	10 U	10 U				1.9 U				
SVOC	anthracene	120-12-7	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	benz(a)anthracene	56-55-3	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	benzo(b)fluoranthene	205-99-2	UG/L	10 U		5 U	10 U	10 U	10 U				0.19 U				
SVOC	benzo(k)fluoranthene	207-08-9	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	benzoic acid	65-85-0	UG/L										47 U				
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L	10 U		5 U	10 U	10 U	10 U				0.19 U				
SVOC	benzo(a)pyrene	50-32-8	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	benzyl alcohol	100-51-6	UG/L													2 U	
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L										9.4 U				

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M012-B	M012-B	M012-B	M013-C	M013-C	M013-C	M013-C	M013-C	M014-B	M014-B	M014-B
			Sample_ID	M012-B-A5037	M012-B-A6136	M012-B-C5563	280-S02-026	M013-C-A5039	M013-C-A5040	M013-C-A6138	M013-C-A6139	280-S02-028	M014-B-A1038	M014-B-A5042
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	FD	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	19-Apr-06	13-Mar-07	10-Oct-06	24-May-95	19-Apr-06	19-Apr-06	09-Mar-07	09-Mar-07	31-May-95	10-Jul-02	24-Apr-06
			REFERENCE	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2006
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
VOC	p-isopropyltoluene	99-87-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L		0.5 U					0.5 U	0.5 U			
VOC	methyl tert-butyl ether	1634-04-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	methylene chloride	75-09-2	UG/L		10 U					0.5 U	0.5 U			
VOC	4-methyl-2-pentanone	108-10-1	UG/L		10 U					10 U	10 U			
VOC	naphthalene	91-20-3	UG/L		2 U					2 U	2 U			
VOC	n-propylbenzene	103-65-1	UG/L		0.5 U					0.5 U	0.5 U			
VOC	styrene	100-42-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	tetrachloroethene	127-18-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	toluene	108-88-3	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,1,1-trichloroethane	71-55-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,1,2-trichloroethane	79-00-5	UG/L		0.5 U					0.5 U	0.5 U			
VOC	trichloroethene	79-01-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	trichlorofluoromethane	75-69-4	UG/L		1 U					1 U	1 U			
VOC	1,2,3-trichloropropane	96-18-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L		0.5 U					0.5 U	0.5 U			
VOC	vinyl acetate	108-05-4	UG/L											
VOC	vinyl chloride	75-01-4	UG/L		0.5 U					0.5 U	0.5 U			
VOC	meta-,para-xylene	7816-60-0	UG/L		0.5 U					0.5 U	0.5 U			
VOC	m-, p-xylene	136777-61-2	UG/L											
VOC	o-xylene	95-47-6	UG/L		0.5 U					0.5 U	0.5 U			
VOC	xylenes, total	1330-20-7	UG/L									1 U		
FUELS	diesel	11-84-7	UG/L		50 U					50 U	50 U			
FUELS	gasoline	8006-61-9	UG/L		19 U					50 U	22 U			
FUELS	jet fuel	94114-58-6	UG/L		50 U					50 U	50 U			
FUELS	JP-5	21274-30-0	UG/L											
FUELS	motor oil	68476-77-7	UG/L		300 U					300 U	300 U			
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L											
SVOC	acenaphthene	83-32-9	UG/L		0.97 U					0.95 U	0.95 U			
SVOC	acenaphthylene	208-96-8	UG/L		1.9 U					1.9 U	1.9 U			
SVOC	anthracene	120-12-7	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	benz(a)anthracene	56-55-3	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	benzo(b)fluoranthene	205-99-2	UG/L		0.19 U					0.19 U	0.19 U			
SVOC	benzo(k)fluoranthene	207-08-9	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	benzoic acid	65-85-0	UG/L		48 U					50 U	51 U			
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L		0.19 U					0.19 U	0.19 U			
SVOC	benzo(a)pyrene	50-32-8	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	benzyl alcohol	100-51-6	UG/L											
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L		9.5 U					10 U	10 U			
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L		9.5 U					10 U	10 U			
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L		9.5 U					10 U	10 U			

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M014-B	M014-B	M014-B	M014-B	M105-B	M105-B	M105-B	M105-B	M108-B	M108-B	M108-B
			Sample_ID	M014-B-A6141	M014-B-B2739	M014-B-C5565	M-014B-Q4	280-RA-081	280-RA-082	M-105B-Q1	M-105B-Q4	280-RA-096	M-108B-Q4	M-108B-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Mar-07	17-Dec-03	10-Oct-06	22-Apr-92	10-Oct-94	06-Jul-95	27-Jun-91	13-Apr-92	11-Oct-94	25-Mar-92	25-Mar-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
VOC	p-isopropyltoluene	99-87-6	UG/L	0.5 U										
VOC	2-methoxy-2-methylbutane	994-05-8	UG/L	0.5 U										
VOC	methyl tert-butyl ether	1634-04-4	UG/L	0.5 U										
VOC	methylene chloride	75-09-2	UG/L	0.5 U					1 U			1 U		
VOC	4-methyl-2-pentanone	108-10-1	UG/L	10 U					2 U			2 U		
VOC	naphthalene	91-20-3	UG/L	2 U										
VOC	n-propylbenzene	103-65-1	UG/L	0.5 U										
VOC	styrene	100-42-5	UG/L	0.5 U					1 U			1 U		
VOC	1,1,1,2-tetrachloroethane	630-20-6	UG/L	0.5 U										
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/L	0.5 U					1 U			1 U		
VOC	tetrachloroethene	127-18-4	UG/L	0.5 U					1 U			1 U		
VOC	toluene	108-88-3	UG/L	0.5 U					1 U			1 U		
VOC	1,2,3-trichlorobenzene	87-61-6	UG/L	0.5 U										
VOC	1,2,4-trichlorobenzene	120-82-1	UG/L	0.5 U										
VOC	1,1,1-trichloroethane	71-55-6	UG/L	0.5 U					1 U			1 U		
VOC	1,1,2-trichloroethane	79-00-5	UG/L	0.5 U					1 U			1 U		
VOC	trichloroethene	79-01-6	UG/L	0.5 U					1 U			1 U		
VOC	trichlorofluoromethane	75-69-4	UG/L	1 U										
VOC	1,2,3-trichloropropane	96-18-4	UG/L	0.5 U										
VOC	1,2,4-trimethylbenzene	95-63-6	UG/L	0.5 U										
VOC	1,3,5-trimethylbenzene	108-67-8	UG/L	0.5 U										
VOC	vinyl acetate	108-05-4	UG/L				1 U				1 U		1 U	1 U
VOC	vinyl chloride	75-01-4	UG/L	0.5 U					0.5 UJ			0.5 U		
VOC	meta-,para-xylene	7816-60-0	UG/L	0.5 U										
VOC	m-, p-xylene	136777-61-2	UG/L		1 U									
VOC	o-xylene	95-47-6	UG/L	0.5 U										
VOC	xylenes, total	1330-20-7	UG/L						1 U			1 U		
FUELS	diesel	11-84-7	UG/L	50 U										
FUELS	gasoline	8006-61-9	UG/L	39 U										
FUELS	jet fuel	94114-58-6	UG/L	50 U										
FUELS	JP-5	21274-30-0	UG/L											
FUELS	motor oil	68476-77-7	UG/L	300 U										
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/L				190 U				190 U		180 U	180 U
SVOC	acenaphthene	83-32-9	UG/L	0.98 U					10 U			10 U		
SVOC	acenaphthylene	208-96-8	UG/L	2 U					10 U			10 U		
SVOC	anthracene	120-12-7	UG/L	0.1 U					10 U			10 U		
SVOC	benz(a)anthracene	56-55-3	UG/L	0.1 U					10 U			10 U		
SVOC	benzo(b)fluoranthene	205-99-2	UG/L	0.2 U					10 U			10 U		
SVOC	benzo(k)fluoranthene	207-08-9	UG/L	0.1 U					10 U			10 U		
SVOC	benzoic acid	65-85-0	UG/L	48 U							5 U		5 U	5 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/L	0.2 U					10 U			10 U		
SVOC	benzo(a)pyrene	50-32-8	UG/L	0.1 U					10 U			10 U		
SVOC	benzyl alcohol	100-51-6	UG/L				2 U				2 U		2 U	2 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/L	9.5 U					10 U			10 U		
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/L	9.5 U					10 U			10 U		
SVOC	bis(2-chloroisopropyl)ether	39638-32-9	UG/L	9.5 U										

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	DRA-01	DRA-01	HP2-4-D	HP2-5-D	HPRA-20-D	HPRA-23-D	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M012-B
			Sample_ID	280-RA-219	280-RA-253	280-S02-088	280-S02-092	280-RA-151	280-RA-154	280-S02-016	M010-B-A1030	M010-B-A5034	M010-B-A6133	M010-B-B2731	M010-B-C5562	M-010B-Q4	280-S02-023
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	4 - 4	38 - 38	47 - 47	44 - 44	-	-	-	-	-	-	-	-
			Collection_Date	22-Sep-95	07-Mar-95	10-Aug-94	19-Aug-94	16-Aug-94	17-Aug-94	24-May-95	11-Jul-02	20-Apr-06	13-Mar-07	17-Dec-03	10-Oct-06	10-Apr-92	31-May-95
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L	10 UJ		5 U	10 U	10 U	10 U			9.6 U					
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L	4 U		5 U	4 U	4 U	7 U				9.4 U				
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	butyl benzyl phthalate	85-68-7	UG/L	10 UJ		5 U	10 U	10 U	10 U				9.4 U				
SVOC	carbazole	86-74-8	UG/L	10 U		5 U	10 U	10 U	10 U	10 U							
SVOC	4-chloroaniline	106-47-8	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	2-chloronaphthalene	91-58-7	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	2-chlorophenol	95-57-8	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	chrysene	218-01-9	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L	10 U		5 U	10 U	10 U	10 U				0.19 U				
SVOC	di-n-butyl phthalate	84-74-2	UG/L	10 UJ		5 U	10 U	10 U	10 U				9.4 U				
SVOC	dibenzofuran	132-64-9	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	1,2-dichlorobenzene	95-50-1	UG/L	5 U		5 U	5 U	5 U	5 U				9.4 U				
SVOC	1,3-dichlorobenzene	541-73-1	UG/L	5 U		5 U	5 U	5 U	5 U				9.4 U				
SVOC	1,4-dichlorobenzene	106-46-7	UG/L	5 U		5 U	5 U	5 U	5 U				9.4 U				
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L	10 U		5 U	10 U	10 U	10 U				19 U				
SVOC	2,4-dichlorophenol	120-83-2	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	diethyl phthalate	84-66-2	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	2,4-dimethylphenol	105-67-9	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	dimethyl phthalate	131-11-3	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L	25 U		12 U	25 U	25 U	25 U				19 U				
SVOC	2,4-dinitrophenol	51-28-5	UG/L	25 UJ		12 U	25 U	25 U	25 U				19 U				
SVOC	2,4-dinitrotoluene	121-14-2	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	2,6-dinitrotoluene	606-20-2	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	di-n-octyl phthalate	117-84-0	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	fluoranthene	206-44-0	UG/L	10 U		5 U	10 U	10 U	10 U				0.19 U				
SVOC	fluorene	86-73-7	UG/L	10 U		5 U	10 U	10 U	10 U				0.19 U				
SVOC	hexachlorobenzene	118-74-1	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	hexachlorobutadiene	87-68-3	UG/L	10 U		5 U	10 U	10 U	10 U								
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L	10 U		5 U	10 U	10 U	10 U				19 U				
SVOC	hexachloroethane	67-72-1	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	isophorone	78-59-1	UG/L	10 U		5 U	10 U	10 U	1 J				9.4 U				
SVOC	2-methylnaphthalene	91-57-6	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	2-methylphenol	95-48-7	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	4-methylphenol	106-44-5	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	naphthalene	91-20-3	UG/L	10 U		5 U	10 U	10 U	10 U				0.95 U				
SVOC	2-nitroaniline	88-74-4	UG/L	25 U		12 U	25 U	25 U	25 U				19 U				
SVOC	3-nitroaniline	99-09-2	UG/L	25 U		12 U	25 U	25 U	25 U				19 U				
SVOC	4-nitroaniline	100-01-6	UG/L	25 U		12 U	25 U	25 U	25 U				19 U				
SVOC	nitrobenzene	98-95-3	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	4-nitrophenol	100-02-7	UG/L	25 U		12 U	25 U	25 U	25 U				19 U				
SVOC	2-nitrophenol	88-75-5	UG/L	10 U		5 U	10 U	10 U	10 U				19 U				
SVOC	N-nitrosodimethylamine	62-75-9	UG/L										9.4 U				

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M012-B	M012-B	M012-B	M013-C	M013-C	M013-C	M013-C	M013-C	M014-B	M014-B	M014-B
			Sample_ID	M012-B-A5037	M012-B-A6136	M012-B-C5563	280-S02-026	M013-C-A5039	M013-C-A5040	M013-C-A6138	M013-C-A6139	280-S02-028	M014-B-A1038	M014-B-A5042
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	FD	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	19-Apr-06	13-Mar-07	10-Oct-06	24-May-95	19-Apr-06	19-Apr-06	09-Mar-07	09-Mar-07	31-May-95	10-Jul-02	24-Apr-06
			REFERENCE	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2006
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L											9.4 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L		9.5 U					10 U	10 U			
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L		9.5 U					10 U	10 U			
SVOC	butyl benzyl phthalate	85-68-7	UG/L		9.5 U					10 U	10 U			
SVOC	carbazole	86-74-8	UG/L									10 U		
SVOC	4-chloroaniline	106-47-8	UG/L		9.5 U					10 U	10 U			
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L		9.5 U					10 U	10 U			
SVOC	2-chloronaphthalene	91-58-7	UG/L		9.5 U					10 U	10 U			
SVOC	2-chlorophenol	95-57-8	UG/L		9.5 U					10 U	10 U			
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L		9.5 U					10 U	10 U			
SVOC	chrysene	218-01-9	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L		0.19 U					0.19 U	0.19 U			
SVOC	di-n-butyl phthalate	84-74-2	UG/L		9.5 U					10 U	10 U			
SVOC	dibenzofuran	132-64-9	UG/L		9.5 U					10 U	10 U			
SVOC	1,2-dichlorobenzene	95-50-1	UG/L		9.5 U					10 U	10 U			
SVOC	1,3-dichlorobenzene	541-73-1	UG/L		9.5 U					10 U	10 U			
SVOC	1,4-dichlorobenzene	106-46-7	UG/L		9.5 U					10 U	10 U			
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L		19 U					20 U	21 U			
SVOC	2,4-dichlorophenol	120-83-2	UG/L		9.5 U					10 U	10 U			
SVOC	diethyl phthalate	84-66-2	UG/L		9.5 U					10 U	10 U			
SVOC	2,4-dimethylphenol	105-67-9	UG/L		9.5 U					10 U	10 U			
SVOC	dimethyl phthalate	131-11-3	UG/L		9.5 U					10 U	10 U			
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L		19 U					20 U	21 U			
SVOC	2,4-dinitrophenol	51-28-5	UG/L		19 U					20 U	21 U			
SVOC	2,4-dinitrotoluene	121-14-2	UG/L		9.5 U					10 U	10 U			
SVOC	2,6-dinitrotoluene	606-20-2	UG/L		9.5 U					10 U	10 U			
SVOC	di-n-octyl phthalate	117-84-0	UG/L		9.5 U					10 U	10 U			
SVOC	fluoranthene	206-44-0	UG/L		0.19 U					0.19 U	0.19 U			
SVOC	fluorene	86-73-7	UG/L		0.19 U					0.19 U	0.19 U			
SVOC	hexachlorobenzene	118-74-1	UG/L		9.5 U					10 U	10 U			
SVOC	hexachlorobutadiene	87-68-3	UG/L											
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L		19 U					20 U	21 U			
SVOC	hexachloroethane	67-72-1	UG/L		9.5 U					10 U	10 U			
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	isophorone	78-59-1	UG/L		9.5 U					10 U	10 U			
SVOC	2-methylnaphthalene	91-57-6	UG/L		9.5 U					10 U	10 U			
SVOC	2-methylphenol	95-48-7	UG/L		9.5 U					10 U	10 U			
SVOC	4-methylphenol	106-44-5	UG/L		9.5 U					10 U	10 U			
SVOC	naphthalene	91-20-3	UG/L		0.97 U					0.95 U	0.95 U			
SVOC	2-nitroaniline	88-74-4	UG/L		19 U					20 U	21 U			
SVOC	3-nitroaniline	99-09-2	UG/L		19 U					20 U	21 U			
SVOC	4-nitroaniline	100-01-6	UG/L		19 U					20 U	21 U			
SVOC	nitrobenzene	98-95-3	UG/L		9.5 U					10 U	10 U			
SVOC	4-nitrophenol	100-02-7	UG/L		19 U					20 U	21 U			
SVOC	2-nitrophenol	88-75-5	UG/L		19 U					20 U	21 U			
SVOC	N-nitrosodimethylamine	62-75-9	UG/L		9.5 U					10 U	10 U			

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M014-B	M014-B	M014-B	M014-B	M105-B	M105-B	M105-B	M105-B	M108-B	M108-B	M108-B
			Sample_ID	M014-B-A6141	M014-B-B2739	M014-B-C5565	M-014B-Q4	280-RA-081	280-RA-082	M-105B-Q1	M-105B-Q4	280-RA-096	M-108B-Q4	M-108B-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Mar-07	17-Dec-03	10-Oct-06	22-Apr-92	10-Oct-94	06-Jul-95	27-Jun-91	13-Apr-92	11-Oct-94	25-Mar-92	25-Mar-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/L						10 U			10 U		
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/L	9.5 U					4 UJ			14 U		
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/L	9.5 U					10 U			10 U		
SVOC	butyl benzyl phthalate	85-68-7	UG/L	9.5 U					10 U			10 U		
SVOC	carbazole	86-74-8	UG/L						10 U			10 U		
SVOC	4-chloroaniline	106-47-8	UG/L	9.5 U					10 U			10 U		
SVOC	4-chloro-3-methylphenol	59-50-7	UG/L	9.5 U					10 U			10 U		
SVOC	2-chloronaphthalene	91-58-7	UG/L	9.5 U					10 U			10 U		
SVOC	2-chlorophenol	95-57-8	UG/L	9.5 U					10 U			10 U		
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/L	9.5 U					10 U			10 U		
SVOC	chrysene	218-01-9	UG/L	0.1 U					10 U			10 U		
SVOC	dibenz(a,h)anthracene	53-70-3	UG/L	0.2 U					10 U			10 U		
SVOC	di-n-butyl phthalate	84-74-2	UG/L	9.5 U					10 UJ			10 U		
SVOC	dibenzofuran	132-64-9	UG/L	9.5 U					10 U			10 U		
SVOC	1,2-dichlorobenzene	95-50-1	UG/L	9.5 U					5 U			5 U		
SVOC	1,3-dichlorobenzene	541-73-1	UG/L	9.5 U					5 U			5 U		
SVOC	1,4-dichlorobenzene	106-46-7	UG/L	9.5 U					5 U			5 U		
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/L	19 U					10 U			10 U		
SVOC	2,4-dichlorophenol	120-83-2	UG/L	9.5 U					10 U			10 U		
SVOC	diethyl phthalate	84-66-2	UG/L	9.5 U					10 U			10 U		
SVOC	2,4-dimethylphenol	105-67-9	UG/L	9.5 U					10 U			10 U		
SVOC	dimethyl phthalate	131-11-3	UG/L	9.5 U					10 U			10 U		
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/L	19 U					25 U			25 U		
SVOC	2,4-dinitrophenol	51-28-5	UG/L	19 U					25 UJ			25 U		
SVOC	2,4-dinitrotoluene	121-14-2	UG/L	9.5 U					10 U			10 U		
SVOC	2,6-dinitrotoluene	606-20-2	UG/L	9.5 U					10 U			10 U		
SVOC	di-n-octyl phthalate	117-84-0	UG/L	9.5 U					10 U			10 U		
SVOC	fluoranthene	206-44-0	UG/L	0.2 U					10 U			10 U		
SVOC	fluorene	86-73-7	UG/L	0.2 U					10 U			10 U		
SVOC	hexachlorobenzene	118-74-1	UG/L	9.5 U					10 U			10 U		
SVOC	hexachlorobutadiene	87-68-3	UG/L						10 U			10 U		
SVOC	hexachlorocyclopentadiene	77-47-4	UG/L	19 U					10 UJ			10 U		
SVOC	hexachloroethane	67-72-1	UG/L	9.5 U					10 U			10 U		
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/L	0.1 U					10 U			10 U		
SVOC	isophorone	78-59-1	UG/L	9.5 U					10 U			10 U		
SVOC	2-methylnaphthalene	91-57-6	UG/L	9.5 U					10 U			10 U		
SVOC	2-methylphenol	95-48-7	UG/L	9.5 U					10 U			10 U		
SVOC	4-methylphenol	106-44-5	UG/L	9.5 U					10 U			10 U		
SVOC	naphthalene	91-20-3	UG/L	0.98 U					10 U			10 U		
SVOC	2-nitroaniline	88-74-4	UG/L	19 U					25 U			25 U		
SVOC	3-nitroaniline	99-09-2	UG/L	19 U					25 U			25 U		
SVOC	4-nitroaniline	100-01-6	UG/L	19 U					25 U			25 U		
SVOC	nitrobenzene	98-95-3	UG/L	9.5 U					10 U			10 U		
SVOC	4-nitrophenol	100-02-7	UG/L	19 U					25 UJ			25 U		
SVOC	2-nitrophenol	88-75-5	UG/L	19 U					10 U			10 U		
SVOC	N-nitrosodimethylamine	62-75-9	UG/L	9.5 U										

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	DRA-01	DRA-01	HP2-4-D	HP2-5-D	HPRA-20-D	HPRA-23-D	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M012-B
			Sample_ID	280-RA-219	280-RA-253	280-S02-088	280-S02-092	280-RA-151	280-RA-154	280-S02-016	M010-B-A1030	M010-B-A5034	M010-B-A6133	M010-B-B2731	M010-B-C5562	M-010B-Q4	280-S02-023
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	4 - 4	38 - 38	47 - 47	44 - 44	-	-	-	-	-	-	-	-
			Collection_Date	22-Sep-95	07-Mar-95	10-Aug-94	19-Aug-94	16-Aug-94	17-Aug-94	24-May-95	11-Jul-02	20-Apr-06	13-Mar-07	17-Dec-03	10-Oct-06	10-Apr-92	31-May-95
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L	10 UJ		5 U	10 U	10 U	10 U				9.4 U				
SVOC	pentachlorophenol	87-86-5	UG/L	25 U		12 U	25 U	25 U	25 U				19 U				
SVOC	phenanthrene	85-01-8	UG/L	10 U		5 U	10 U	10 U	10 U				0.1 U				
SVOC	phenol	108-95-2	UG/L	10 UJ		5 U	10 U	10 U	10 U				9.4 U				
SVOC	pyrene	129-00-0	UG/L	10 UJ		5 U	10 U	10 U	10 U				0.1 U				
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L	25 U		12 U	25 U	25 U	25 U				9.4 U				
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L	10 U		5 U	10 U	10 U	10 U				9.4 U				
PEST/PCB	aldrin	309-00-2	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	Aroclor 1016	12674-11-2	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	Aroclor 1221	11104-28-2	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	Aroclor 1232	11141-16-5	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	Aroclor 1242	53469-21-9	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	Aroclor 1248	12672-29-6	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	Aroclor 1254	11097-69-1	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	Aroclor 1260	11096-82-5	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	alpha-BHC	319-84-6	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	beta-BHC	319-85-7	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	delta-BHC	319-86-8	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	alpha-chlordane	5103-71-9	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	gamma-chlordane	5566-34-7	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	4,4'-DDD	72-54-8	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	4,4'-DDE	72-55-9	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	4,4'-DDT	50-29-3	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	dieldrin	60-57-1	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	endosulfan I	959-98-8	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	endosulfan II	33213-65-9	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	endrin	72-20-8	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	endrin aldehyde	7421-93-4	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	endrin ketone	53494-70-5	UG/L							0.1 UJ							0.1 UJ
PEST/PCB	heptachlor	76-44-8	UG/L							0.05 UJ							0.05 UJ
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L							0.01 UJ							0.01 UJ
PEST/PCB	methoxychlor	72-43-5	UG/L							0.5 UJ							0.5 UJ
PEST/PCB	toxaphene	8001-35-2	UG/L							3 UJ							3 UJ
METALS	aluminum	7429-90-5	UG/L	198 J									17 U				
METALS	antimony	7440-36-0	UG/L	33.6 U									0.2 U				
METALS	arsenic	7440-38-2	UG/L	16.8 U									3.3 J				
METALS	barium	7440-39-3	UG/L	1110									32				
METALS	beryllium	7440-41-7	UG/L	0.42 UJ									3				
METALS	cadmium	7440-43-9	UG/L	3.4 J									5 U				
METALS	calcium	7440-70-2	UG/L	438000									110				
METALS	chromium	7440-47-3	UG/L	6 U									2.2 U				
METALS	chromium, hexavalent	18540-29-9	UG/L								10						

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M012-B	M012-B	M012-B	M013-C	M013-C	M013-C	M013-C	M013-C	M014-B	M014-B	M014-B
			Sample_ID	M012-B-A5037	M012-B-A6136	M012-B-C5563	280-S02-026	M013-C-A5039	M013-C-A5040	M013-C-A6138	M013-C-A6139	280-S02-028	M014-B-A1038	M014-B-A5042
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	FD	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	19-Apr-06	13-Mar-07	10-Oct-06	24-May-95	19-Apr-06	19-Apr-06	09-Mar-07	09-Mar-07	31-May-95	10-Jul-02	24-Apr-06
			REFERENCE	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2006
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L		9.5 U					10 U	10 U			
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L		9.5 U					10 U	10 U			
SVOC	pentachlorophenol	87-86-5	UG/L		19 U					20 U	21 U			
SVOC	phenanthrene	85-01-8	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	phenol	108-95-2	UG/L		9.5 U					10 U	10 U			
SVOC	pyrene	129-00-0	UG/L		0.1 U					0.1 U	0.1 U			
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L		9.5 U					10 U	10 U			
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L		9.5 U					10 U	10 U			
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L		9.5 U					10 U	10 U			
PEST/PCB	aldrin	309-00-2	UG/L				0.05 U					0.05 UJ		
PEST/PCB	Aroclor 1016	12674-11-2	UG/L				0.5 U					0.5 UJ		
PEST/PCB	Aroclor 1221	11104-28-2	UG/L				0.5 U					0.5 UJ		
PEST/PCB	Aroclor 1232	11141-16-5	UG/L				0.5 U					0.5 UJ		
PEST/PCB	Aroclor 1242	53469-21-9	UG/L				0.5 U					0.5 UJ		
PEST/PCB	Aroclor 1248	12672-29-6	UG/L				0.5 U					0.5 UJ		
PEST/PCB	Aroclor 1254	11097-69-1	UG/L				0.5 U					0.5 UJ		
PEST/PCB	Aroclor 1260	11096-82-5	UG/L				0.5 U					0.5 UJ		
PEST/PCB	alpha-BHC	319-84-6	UG/L				0.05 U					0.05 UJ		
PEST/PCB	beta-BHC	319-85-7	UG/L				0.05 U					0.05 UJ		
PEST/PCB	delta-BHC	319-86-8	UG/L				0.05 U					0.05 UJ		
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L				0.05 U					0.05 UJ		
PEST/PCB	alpha-chlordane	5103-71-9	UG/L				0.05 U					0.05 UJ		
PEST/PCB	gamma-chlordane	5566-34-7	UG/L				0.05 U					0.05 UJ		
PEST/PCB	4,4'-DDD	72-54-8	UG/L				0.1 UJ					0.1 UJ		
PEST/PCB	4,4'-DDE	72-55-9	UG/L				0.1 U					0.1 UJ		
PEST/PCB	4,4'-DDT	50-29-3	UG/L				0.1 U							
PEST/PCB	dieldrin	60-57-1	UG/L				0.1 U					0.1 UJ		
PEST/PCB	endosulfan I	959-98-8	UG/L				0.05 U					0.05 UJ		
PEST/PCB	endosulfan II	33213-65-9	UG/L				0.1 U					0.1 UJ		
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L				0.1 U					0.1 UJ		
PEST/PCB	endrin	72-20-8	UG/L				0.1 U					0.1 UJ		
PEST/PCB	endrin aldehyde	7421-93-4	UG/L				0.1 U					0.1 UJ		
PEST/PCB	endrin ketone	53494-70-5	UG/L				0.1 U					0.1 UJ		
PEST/PCB	heptachlor	76-44-8	UG/L				0.05 U					0.05 UJ		
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L				0.01 U					0.01 UJ		
PEST/PCB	methoxychlor	72-43-5	UG/L				0.5 U					0.5 UJ		
PEST/PCB	toxaphene	8001-35-2	UG/L				3 U					3 UJ		
METALS	aluminum	7429-90-5	UG/L		28 U					16 U	16 U			
METALS	antimony	7440-36-0	UG/L		0.58 U					0.1 U	0.12 U			
METALS	arsenic	7440-38-2	UG/L		4 J					1.1 J	1.1 J			
METALS	barium	7440-39-3	UG/L		63					47	45			
METALS	beryllium	7440-41-7	UG/L		0.26 J					2 U	2 U			
METALS	cadmium	7440-43-9	UG/L		0.75 J					0.7 J	0.73 J			
METALS	calcium	7440-70-2	UG/L		610					620	670			
METALS	chromium	7440-47-3	UG/L		2.6 J					0.56 U	0.57 U			
METALS	chromium, hexavalent	18540-29-9	UG/L										10 UJ	

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M014-B	M014-B	M014-B	M014-B	M105-B	M105-B	M105-B	M105-B	M108-B	M108-B	M108-B
			Sample_ID	M014-B-A6141	M014-B-B2739	M014-B-C5565	M-014B-Q4	280-RA-081	280-RA-082	M-105B-Q1	M-105B-Q4	280-RA-096	M-108B-Q4	M-108B-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Mar-07	17-Dec-03	10-Oct-06	22-Apr-92	10-Oct-94	06-Jul-95	27-Jun-91	13-Apr-92	11-Oct-94	25-Mar-92	25-Mar-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
SVOC	N-nitrosodiphenylamine	86-30-6	UG/L	9.5 U					10 U			10 U		
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/L	9.5 U					10 U			10 U		
SVOC	pentachlorophenol	87-86-5	UG/L	19 U					25 UJ			25 U		
SVOC	phenanthrene	85-01-8	UG/L	0.1 U					10 U			10 U		
SVOC	phenol	108-95-2	UG/L	9.5 U					10 U			10 U		
SVOC	pyrene	129-00-0	UG/L	0.1 U					10 U			10 U		
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/L	9.5 U					10 U			10 U		
SVOC	2,4,5-trichlorophenol	95-95-4	UG/L	9.5 U					25 U			25 U		
SVOC	2,4,6-trichlorophenol	88-06-2	UG/L	9.5 U					10 U			10 U		
PEST/PCB	aldrin	309-00-2	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	alpha-BHC	319-84-6	UG/L								0.025 U		0.025 U	0.025 U
PEST/PCB	beta-BHC	319-85-7	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	delta-BHC	319-86-8	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/L								0.025 U		0.025 U	0.025 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	gamma-chlordane	5566-34-7	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	4,4'-DDD	72-54-8	UG/L								0.1 U		0.1 U	0.1 U
PEST/PCB	4,4'-DDE	72-55-9	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	4,4'-DDT	50-29-3	UG/L								0.1 U		0.1 U	0.1 U
PEST/PCB	dieldrin	60-57-1	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	endosulfan I	959-98-8	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	endosulfan II	33213-65-9	UG/L								0.1 U		0.1 U	0.1 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/L								0.1 U		0.1 U	0.1 U
PEST/PCB	endrin	72-20-8	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/L											
PEST/PCB	endrin ketone	53494-70-5	UG/L								0.1 U		0.1 U	0.1 U
PEST/PCB	heptachlor	76-44-8	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/L								0.05 U		0.05 U	0.05 U
PEST/PCB	methoxychlor	72-43-5	UG/L								0.5 U		0.5 U	0.5 U
PEST/PCB	toxaphene	8001-35-2	UG/L								1 U		1 U	1 U
METALS	aluminum	7429-90-5	UG/L	170					116 UJ			282 U		
METALS	antimony	7440-36-0	UG/L	0.1 U					32 U			50.8 U		
METALS	arsenic	7440-38-2	UG/L	1.3 J					20 U			27.2 U		
METALS	barium	7440-39-3	UG/L	82					57 UJ			83 U		
METALS	beryllium	7440-41-7	UG/L	2 U					0.7 U			10 U		
METALS	cadmium	7440-43-9	UG/L	0.16 J					1.5 U			1.1 J		
METALS	calcium	7440-70-2	UG/L	490					377000 J			408000		
METALS	chromium	7440-47-3	UG/L	0.59 U					3.5 U			15.8 U		
METALS	chromium, hexavalent	18540-29-9	UG/L											

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	DRA-01	DRA-01	HP2-4-D	HP2-5-D	HPRA-20-D	HPRA-23-D	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M010-B	M012-B
			Sample_ID	280-RA-219	280-RA-253	280-S02-088	280-S02-092	280-RA-151	280-RA-154	280-S02-016	M010-B-A1030	M010-B-A5034	M010-B-A6133	M010-B-B2731	M010-B-C5562	M-010B-Q4	280-S02-023
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	-	-	4 - 4	38 - 38	47 - 47	44 - 44	-	-	-	-	-	-	-	-
			Collection_Date	22-Sep-95	07-Mar-95	10-Aug-94	19-Aug-94	16-Aug-94	17-Aug-94	24-May-95	11-Jul-02	20-Apr-06	13-Mar-07	17-Dec-03	10-Oct-06	10-Apr-92	31-May-95
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	ITSI 2006	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	ITSI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
METALS	cobalt	7440-48-4	UG/L	7.6 U									0.34 J				
METALS	copper	7440-50-8	UG/L	24 U									0.46 U				
METALS	iron	7439-89-6	UG/L	4690									1200				
METALS	lead	7439-92-1	UG/L	6.6 U									0.14 U				
METALS	magnesium	7439-95-4	UG/L	1070000									490				
METALS	manganese	7439-96-5	UG/L	1950									37				
METALS	mercury	7439-97-6	UG/L	0.2 U									0.2 U				
METALS	molybdenum	7439-98-7	UG/L	15.8 U									3.2 J				
METALS	nickel	7440-02-0	UG/L	15 U									0.79 J				
METALS	potassium	7440-09-7	UG/L	137000									150				
METALS	selenium	7782-49-2	UG/L	14.4 U									5 U				
METALS	silver	7440-22-4	UG/L	5.4 U									5 U				
METALS	sodium	7440-23-5	UG/L	6340000									2600				
METALS	thallium	7440-28-0	UG/L	20.4 U									5 U				
METALS	vanadium	7440-62-2	UG/L	7.4 U									5.5 J				
METALS	zinc	7440-66-6	UG/L	26.2 U									37				
RAD	actinium-228	14331-83-0	PCI/L												20 U		
RAD	bismuth-212	14913-49-6	PCI/L										50 U				
RAD	bismuth-214	14733-03-0	PCI/L												10 U		
RAD	cesium-137	10045-97-3	PCI/L														
RAD	cobalt-60	10198-40-0	PCI/L									5 U					
RAD	lead-210	14255-04-0	PCI/L										750 U				
RAD	lead-212	15092-94-1	PCI/L										15 U				
RAD	lead-214	15067-28-4	PCI/L												10 U		
RAD	potassium-40	13966-00-2	PCI/L										146				
RAD	protactinium-234	15100-28-4	PCI/L											1400 U			
RAD	radium	7440-14-4	PCI/L											1.45 U			
RAD	radium-226	13982-63-3	PCI/L		2 J								0.5 U				
RAD	radium-228	15262-20-1	PCI/L		3 J								5 U				
RAD	total gross alpha	12587-46-1	PCI/L		0.7 UJ								3 U				
RAD	total gross beta	12587-47-2	PCI/L		110								122				
RAD	strontium	7440-24-6	PCI/L										5 U				
RAD	thallium-208	01-00004	PCI/L										10 U				
RAD	thorium-234	15065-10-8	PCI/L										250 U				
RAD	tritium	10028-17-8	PCI/L										500 U				
RAD	uranium-233	13968-55-3	PCI/L										0.2 U				
RAD	uranium-235	15117-96-1	PCI/L										0.2 U				
RAD	uranium-238	7440-61-1	PCI/L										0.2 U				

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M012-B	M012-B	M012-B	M013-C	M013-C	M013-C	M013-C	M013-C	M014-B	M014-B	M014-B
			Sample_ID	M012-B-A5037	M012-B-A6136	M012-B-C5563	280-S02-026	M013-C-A5039	M013-C-A5040	M013-C-A6138	M013-C-A6139	280-S02-028	M014-B-A1038	M014-B-A5042
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	FD	REG	REG	REG
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	19-Apr-06	13-Mar-07	10-Oct-06	24-May-95	19-Apr-06	19-Apr-06	09-Mar-07	09-Mar-07	31-May-95	10-Jul-02	24-Apr-06
			REFERENCE	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	ITSI 2007	TtEMI 2004	TtEMI 2004	ITSI 2006
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
METALS	cobalt	7440-48-4	UG/L		12					5.6	5.1			
METALS	copper	7440-50-8	UG/L		2.5 J					10 U	10 U			
METALS	iron	7439-89-6	UG/L		51 J					25 J	25 J			
METALS	lead	7439-92-1	UG/L		1.7 U					0.21 U	3 U			
METALS	magnesium	7439-95-4	UG/L		1300					1100	1300			
METALS	manganese	7439-96-5	UG/L		9200					9700	10000			
METALS	mercury	7439-97-6	UG/L		0.48					0.2 U	0.2 U			
METALS	molybdenum	7439-98-7	UG/L		3.7 J					2 J	1.8 J			
METALS	nickel	7440-02-0	UG/L		15 J					6.5 J	5.5 J			
METALS	potassium	7440-09-7	UG/L		150					97	92			
METALS	selenium	7782-49-2	UG/L		2.8 J					5 U	0.29 J			
METALS	silver	7440-22-4	UG/L		0.27 J					5 U	5 U			
METALS	sodium	7440-23-5	UG/L		7300					6700 J	6500 J			
METALS	thallium	7440-28-0	UG/L		1 J					5 U	5 U			
METALS	vanadium	7440-62-2	UG/L		8.4 J					6 U	7.5 J			
METALS	zinc	7440-66-6	UG/L		1.8 J					6.2 U	5 U			
RAD	actinium-228	14331-83-0	PCI/L		20 U					20 U	20 U			
RAD	bismuth-212	14913-49-6	PCI/L		50 U					50 U	50 U			
RAD	bismuth-214	14733-03-0	PCI/L			10 U				5.79 J	10 U			
RAD	cesium-137	10045-97-3	PCI/L	5 U				5 U	5 U					
RAD	cobalt-60	10198-40-0	PCI/L	5 U				5 U	5 U					5 U
RAD	lead-210	14255-04-0	PCI/L			750 U				750 U	750 U			
RAD	lead-212	15092-94-1	PCI/L		15 U					15 U	15 U			
RAD	lead-214	15067-28-4	PCI/L			10 U				10 U				
RAD	potassium-40	13966-00-2	PCI/L		140					96.8 J	120			
RAD	protactinium-234	15100-28-4	PCI/L											
RAD	radium	7440-14-4	PCI/L											
RAD	radium-226	13982-63-3	PCI/L		3.24					1.83	1.88			
RAD	radium-228	15262-20-1	PCI/L		5 U					2.57 J	1.99 J			
RAD	total gross alpha	12587-46-1	PCI/L		3 U					3 U	3 U			
RAD	total gross beta	12587-47-2	PCI/L		160					130	287			
RAD	strontium	7440-24-6	PCI/L		5 U					5 U	5 U			
RAD	thallium-208	01-00004	PCI/L		10 U					10 U	10 U			
RAD	thorium-234	15065-10-8	PCI/L		250 U					250 U				
RAD	tritium	10028-17-8	PCI/L		500 U					500 U	2280			
RAD	uranium-233	13968-55-3	PCI/L		3.37					7.07	6.68			
RAD	uranium-235	15117-96-1	PCI/L		0.2 U					0.231	0.379			
RAD	uranium-238	7440-61-1	PCI/L		2.17					5.49	5.01			

Table A1-1d
Groundwater Samples: FED-1A EBS 23 Second WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND	SECOND
			Station_ID	M014-B	M014-B	M014-B	M014-B	M105-B	M105-B	M105-B	M105-B	M108-B	M108-B	M108-B
			Sample_ID	M014-B-A6141	M014-B-B2739	M014-B-C5565	M-014B-Q4	280-RA-081	280-RA-082	M-105B-Q1	M-105B-Q4	280-RA-096	M-108B-Q4	M-108B-Q4-DUP
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	-	-	-	-	-	-	-	-	-	-	-
			Collection_Date	09-Mar-07	17-Dec-03	10-Oct-06	22-Apr-92	10-Oct-94	06-Jul-95	27-Jun-91	13-Apr-92	11-Oct-94	25-Mar-92	25-Mar-92
			REFERENCE	ITSI 2007	TtEMI 2004	ITSI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units											
METALS	cobalt	7440-48-4	UG/L	7.2					4.6 UJ			77 U		
METALS	copper	7440-50-8	UG/L	10 U					4.2 U			20 U		
METALS	iron	7439-89-6	UG/L	110					528			90 U		
METALS	lead	7439-92-1	UG/L	3 U					6.5 U			3 U		
METALS	magnesium	7439-95-4	UG/L	790					841000 J			1100000		
METALS	manganese	7439-96-5	UG/L	8400					6820 J			11100		
METALS	mercury	7439-97-6	UG/L	0.2 U					0.2 U			0.2 U		
METALS	molybdenum	7439-98-7	UG/L	0.82 U					9.8 U			127 U		
METALS	nickel	7440-02-0	UG/L	6 J					9.3 U			93 U		
METALS	potassium	7440-09-7	UG/L	68					146000			157000		
METALS	selenium	7782-49-2	UG/L	5 U					13 U			6 U		
METALS	silver	7440-22-4	UG/L	5 U					4.5 U			26.7 J		
METALS	sodium	7440-23-5	UG/L	6400 J					6720000			8010000		
METALS	thallium	7440-28-0	UG/L	5 U					14.5 U			8.1 U		
METALS	vanadium	7440-62-2	UG/L	4.7 U					7.2 U			70 U		
METALS	zinc	7440-66-6	UG/L	7 U					8.1 UJ			40 U		
RAD	actinium-228	14331-83-0	PCI/L	20 U										
RAD	bismuth-212	14913-49-6	PCI/L	50 U										
RAD	bismuth-214	14733-03-0	PCI/L			10 U								
RAD	cesium-137	10045-97-3	PCI/L											
RAD	cobalt-60	10198-40-0	PCI/L											
RAD	lead-210	14255-04-0	PCI/L			750 U								
RAD	lead-212	15092-94-1	PCI/L	15 U										
RAD	lead-214	15067-28-4	PCI/L	10 U										
RAD	potassium-40	13966-00-2	PCI/L			82.6 J								
RAD	protactinium-234	15100-28-4	PCI/L		2120 U									
RAD	radium	7440-14-4	PCI/L		1.87 U									
RAD	radium-226	13982-63-3	PCI/L	1.27					1.51 J			4.29		
RAD	radium-228	15262-20-1	PCI/L	5 U				0.99 U				6.66 J		
RAD	total gross alpha	12587-46-1	PCI/L	3 U				57.8 U					27.1	41.5
RAD	total gross beta	12587-47-2	PCI/L	128					92.3			80.9		
RAD	strontium	7440-24-6	PCI/L	5 U										
RAD	thallium-208	01-00004	PCI/L	10 U										
RAD	thorium-234	15065-10-8	PCI/L	250 U										
RAD	tritium	10028-17-8	PCI/L	500 U										
RAD	uranium-233	13968-55-3	PCI/L	6.57										
RAD	uranium-235	15117-96-1	PCI/L	0.194 J										
RAD	uranium-238	7440-61-1	PCI/L	5.04										

Table A1-1e

Groundwater Samples: FED-1A EBS 23 Aquitard WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
WBZ	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**
Station ID	**HPRA-8-D**	**M103-B**	**M103-B**	**M103-B**	**M103-B**	**M104-C**	**M104-C**	**M104-C**
Sample ID	**280-RA-144**	**280-RA-068**	**280-RA-069**	**M-103B-Q1**	**M-103B-Q4**	**280-RA-076**	**M-104C-Q1**	**M-104C-Q4**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**42 - 46**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**10-Aug-94**	**10-Oct-94**	**07-Jul-95**	**16-Jul-91**	**23-Apr-92**	**10-Jul-95**	**19-Jul-91**	**25-Mar-92**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**
Volatile Organic Compounds (µg/L)								
acetone	3 U		*		17 UJ			2 U
benzene	0.5 U		0.5 U			0.5 U		
bromodichloromethane	2 U		1 U			1 U		
bromoform	2 U		1 U			1 U		
bromomethane	1 U		1 U			1 U		
2-butanone					3.6 UJ			2 U
carbon disulfide	2 J		1 U			1 U		
carbon tetrachloride	0.5 U		0.5 U			0.5 U		
chlorobenzene	2 U		1 U			1 U		
chlorodibromomethane	2 U		1 U			1 U		
chloroethane	2 U		2 U			2 U		
chloroform	2 U		1 U			1 U		
chloromethane	2 U		2 U			2 U		
1,1-dichloroethane	2 U		1 U			1 U		
1,2-dichloroethane	0.5 U		0.5 UJ			0.5 UJ		
1,1-dichloroethene	2 U		1 U			1 U		
trans-1,2-dichloroethene				1 U			1 U	
1,2-dichloroethene	2 U		1 U			1 U		
1,2-dichloropropane	2 U		1 U			1 U		
cis-1,3-dichloropropene	0.5 U		0.5 U			0.5 U		
trans-1,3-dichloropropene	0.5 U		0.5 U			0.5 U		
ethylbenzene	2 U		1 U			1 U		
2-hexanone	2 U		2 U			2 U		
methylene chloride	2 U		1 U			1 U		
4-methyl-2-pentanone	2 U		2 U			2 U		
styrene	2 U		1 U			1 U		
1,1,2,2-tetrachloroethane	2 U		1 U			1 U		
tetrachloroethene	2 U		1 U			1 U		
toluene	2 U		1 U			1 U		
1,1,1-trichloroethane	2 U		1 U			1 UJ		
1,1,2-trichloroethane	2 U		1 U			1 U		
trichloroethene	2 U		1 U			1 U		
vinyl acetate	2 U				1 U			1 U
vinyl chloride	0.5 U		0.5 UJ			0.5 U		
xylenes, total	2 U		1 U			1 U		
Petroleum Hydrocarbons (µg/L)								
total recoverable petroleum hydrocarbons					180 U			180 U
Semivolatile Organic Compounds (µg/L)								
acenaphthene	5 U		10 U			10 U		
acenaphthylene	5 U		10 U			10 U		
anthracene	5 U		10 U			10 U		
benz(a)anthracene	5 U		10 U			10 U		
benzo(b)fluoranthene	5 U		10 U			10 U		

Table A1-1e

Groundwater Samples: FED-1A EBS 23 Aquitard WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	23	23	23	23	23	23	23	23
WBZ	AQUITARD	AQUITARD	AQUITARD	AQUITARD	AQUITARD	AQUITARD	AQUITARD	AQUITARD
Station ID	HPRA-8-D	M103-B	M103-B	M103-B	M103-B	M104-C	M104-C	M104-C
Sample ID	280-RA-144	280-RA-068	280-RA-069	M-103B-Q1	M-103B-Q4	280-RA-076	M-104C-Q1	M-104C-Q4
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	42 - 46	-	-	-	-	-	-	-
Sample Date	10-Aug-94	10-Oct-94	07-Jul-95	16-Jul-91	23-Apr-92	10-Jul-95	19-Jul-91	25-Mar-92
Reference	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
benzo(k)fluoranthene	5 U		10 U			10 U		
benzoic acid					5 U			5 U
benzo(g,h,i)perylene	5 U		10 U			10 U		
benzo(a)pyrene	5 U		10 U			10 U		
benzyl alcohol					2 U			2 U
bis(2-chloroethoxy)methane	5 U		10 U			10 U		
bis(2-chloroethyl)ether	5 U		10 U			10 U		
bis(2-chloro-1-methylethyl)ether	5 U		10 U			10 U		
bis(2-ethylhexyl)phthalate	5 U		4 UJ			4 UJ		
4-bromophenyl phenyl ether	5 U		10 U			10 U		
butyl benzyl phthalate	5 U		10 U			10 U		
carbazole	5 U		10 U			10 U		
4-chloroaniline	5 U		10 U			10 U		
4-chloro-3-methylphenol	5 U		10 U			10 U		
2-chloronaphthalene	5 U		10 U			10 U		
2-chlorophenol	5 U		10 U			10 U		
4-chlorophenyl phenyl ether	5 U		10 U			10 U		
chrysene	5 U		10 U			10 U		
dibenz(a,h)anthracene	5 U		10 U			10 U		
di-n-butyl phthalate	5 U		10 U			10 UJ		
dibenzofuran	5 U		10 U			10 U		
1,2-dichlorobenzene	5 U		5 U			5 U		
1,3-dichlorobenzene	5 U		5 U			5 U		
1,4-dichlorobenzene	5 U		5 U			5 U		
3,3'-dichlorobenzidine	5 U		10 U			10 U		
2,4-dichlorophenol	5 U		10 U			10 U		
diethyl phthalate	5 U		10 U			10 U		
2,4-dimethylphenol	5 U		10 U			10 U		
dimethyl phthalate	5 U		10 UJ			10 U		
4,6-dinitro-2-methylphenol	12 U		25 U			25 U		
2,4-dinitrophenol	12 U		25 U			25 U		
2,4-dinitrotoluene	5 U		10 U			10 U		
2,6-dinitrotoluene	5 U		10 U			10 U		
di-n-octyl phthalate	5 U		10 U			10 U		
fluoranthene	5 U		10 U			10 U		
fluorene	5 U		10 U			10 U		
hexachlorobenzene	5 U		10 U			10 U		
hexachlorobutadiene	5 U		10 U			10 U		
hexachlorocyclopentadiene	5 U		10 U			10 U		
hexachloroethane	5 U		10 U			10 U		
indeno(1,2,3-cd)pyrene	5 U		10 U			10 U		
isophorone	2 J		10 U			10 U		
2-methylnaphthalene	5 U		10 U			10 U		
2-methylphenol	5 U		10 U			10 U		

Table A1-1e

Groundwater Samples: FED-1A EBS 23 Aquitard WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
WBZ	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**
Station ID	**HPRA-8-D**	**M103-B**	**M103-B**	**M103-B**	**M103-B**	**M104-C**	**M104-C**	**M104-C**
Sample ID	**280-RA-144**	**280-RA-068**	**280-RA-069**	**M-103B-Q1**	**M-103B-Q4**	**280-RA-076**	**M-104C-Q1**	**M-104C-Q4**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**42 - 46**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**10-Aug-94**	**10-Oct-94**	**07-Jul-95**	**16-Jul-91**	**23-Apr-92**	**10-Jul-95**	**19-Jul-91**	**25-Mar-92**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**
4-methylphenol	5 U		10 U			10 U		
naphthalene	5 U		10 U			10 U		
2-nitroaniline	12 U		25 U			25 U		
3-nitroaniline	12 U		25 U			25 U		
4-nitroaniline	12 U		25 U			25 U		
nitrobenzene	5 U		10 U			10 U		
4-nitrophenol	12 U		25 U			25 U		
2-nitrophenol	5 U		10 U			10 U		
N-nitrosodiphenylamine	5 U		10 U			10 U		
N-nitroso-di-n-propylamine	5 U		10 U			10 U		
pentachlorophenol	12 U		25 U			25 U		
phenanthrene	5 U		10 U			10 U		
phenol	5 U		10 U			10 U		
pyrene	5 U		10 U			10 U		
1,2,4-trichlorobenzene	5 U		10 U			10 U		
2,4,5-trichlorophenol	12 U		25 U			25 U		
2,4,6-trichlorophenol	5 U		10 U			10 U		
Pesticides/Polychlorinated Biphenyls (µg/L)								
aldrin					0.05 U			0.05 U
Aroclor 1016					0.5 U			0.5 U
Aroclor 1221					0.5 U			0.5 U
Aroclor 1232					0.5 U			0.5 U
Aroclor 1242					0.5 U			0.5 U
Aroclor 1248					0.5 U			0.5 U
Aroclor 1254					0.5 U			0.5 U
Aroclor 1260					0.5 U			0.5 U
alpha-BHC					0.025 U			0.025 U
beta-BHC					0.05 U			0.05 U
delta-BHC					0.05 U			0.05 U
gamma-BHC (lindane)					0.025 U			0.025 U
alpha-chlordane					0.05 U			0.05 U
gamma-chlordane					0.05 U			0.05 U
4,4'-DDD					0.1 U			0.1 U
4,4'-DDE					0.05 U			0.05 U
4,4'-DDT					0.1 U			0.1 U
dieldrin					0.05 U			0.05 U
endosulfan I					0.05 U			0.05 U
endosulfan II					0.1 U			0.1 U
endosulfan sulfate					0.1 U			0.1 U
endrin					0.05 U			0.05 U
endrin ketone					0.1 U			0.1 U
heptachlor					0.05 U			0.05 U
heptachlor epoxide					0.05 U			0.05 U
methoxychlor					0.5 U			0.5 U

Table A1-1e

Groundwater Samples: FED-1A EBS 23 Aquitard WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
WBZ	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**
Station ID	**HPRA-8-D**	**M103-B**	**M103-B**	**M103-B**	**M103-B**	**M104-C**	**M104-C**	**M104-C**
Sample ID	**280-RA-144**	**280-RA-068**	**280-RA-069**	**M-103B-Q1**	**M-103B-Q4**	**280-RA-076**	**M-104C-Q1**	**M-104C-Q4**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**42 - 46**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**10-Aug-94**	**10-Oct-94**	**07-Jul-95**	**16-Jul-91**	**23-Apr-92**	**10-Jul-95**	**19-Jul-91**	**25-Mar-92**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**
toxaphene					1 U			1 U
Metals (µg/L)								
aluminum			41.4 U			20.7 U		
antimony			28 U			25.9 UJ		
arsenic			14 U			8.5 UJ		
barium			62.7 J			98.1 J		
beryllium			1.4 U			0.7 U		
cadmium			3 J			2.5 J		
calcium			243000			135000		
chromium			5.8 J			6.3 J		
cobalt			9.2 U			4.6 U		
copper			8.4 U			4.2 U		
iron			14.6 UJ			1690		
lead			5.5 U			2.2 U		
magnesium			1250000			600000		
manganese			27.8 J			617		
mercury			0.2 U			0.2 U		
molybdenum			19.6 U			9.8 U		
nickel			18.6 U			9.3 U		
potassium			251000			222000		
selenium			12 U			4.8 U		
silver			4.5 U			1.8 U		
sodium			8160000			5530000		
thallium			17 U			11.1 J		
vanadium			14.4 U			7.2 U		
zinc			42.9			5.3 U		
Radionuclide (PCI/L)								
radium-226			0.82 J			0.8 J		
radium-228			1.12			0.93		
total gross alpha		11.7 U						68.5
total gross beta			181			135		

Note:

* blank indicates sample not analyzed for a particular compound

Acronyms/Abbreviations:

bgs – below ground surface

BHC – benzene hexachloride

DDD – dichlorodiphenyldichloroethane

DDE – dichlorodiphenyldichloroethene

DDT – dichlorodiphenyltrichloroethane

EBS – environmental baseline survey

FD – field duplicate

ID – identification

Table A1-1e

Groundwater Samples: FED-1A EBS 23 Aquitard WBZ

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	**23**	**23**	**23**	**23**	**23**	**23**	**23**	**23**
WBZ	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**	**AQUITARD**
Station ID	**HPRA-8-D**	**M103-B**	**M103-B**	**M103-B**	**M103-B**	**M104-C**	**M104-C**	**M104-C**
Sample ID	**280-RA-144**	**280-RA-068**	**280-RA-069**	**M-103B-Q1**	**M-103B-Q4**	**280-RA-076**	**M-104C-Q1**	**M-104C-Q4**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**42 - 46**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**10-Aug-94**	**10-Oct-94**	**07-Jul-95**	**16-Jul-91**	**23-Apr-92**	**10-Jul-95**	**19-Jul-91**	**25-Mar-92**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**

µg/L – micrograms per liter

PCI/L – picocuries per liter

REG – regular

Review Qualifiers:

J – indicates an estimated value

U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit

UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-1f
Groundwater Samples: FED-1A EBS 24 First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**
WBZ	**FIRST**
Station ID	**GW EXCAV PIT-DAY 2**
Sample ID	**101-LT-GW-03**
Sample Type	
Depth Interval (feet bgs)	**-**
Sample Date	**31-Mar-05**
Reference	**Shaw 2005**
Volatile Organic Compounds (µg/L)	
acetone	18 J
benzene	0.5 U
bromobenzene	0.5 U
bromochloromethane	0.5 U
bromodichloromethane	0.5 U
bromoform	0.5 U
bromomethane	0.5 U
2-butanone	5 J
tert-butyl alcohol	50 U
n-butylbenzene	0.5 U
sec-butylbenzene	0.4 J
tert-butylbenzene	0.5 U
carbon disulfide	50 U
carbon tetrachloride	0.5 U
chlorobenzene	0.5 U
chlorodibromomethane	0.5 U
chloroethane	0.5 U
chloroform	0.5 U
chloromethane	0.5 U
2-chlorotoluene	0.5 U
4-chlorotoluene	0.5 U
1,2-dibromo-3-chloropropane	2 U
1,2-dibromoethane	2 U
dibromomethane	0.5 U
1,2-dichlorobenzene	0.5 U
1,3-dichlorobenzene	0.5 U
1,4-dichlorobenzene	0.5 U
dichlorodifluoromethane	0.5 U
1,1-dichloroethane	0.5 U
1,2-dichloroethane	0.5 U
1,1-dichloroethene	0.5 U
cis-1,2-dichloroethene	0.5 U
trans-1,2-dichloroethene	0.5 U
1,2-dichloroethene	
1,2-dichloropropane	0.5 U
1,3-dichloropropane	0.5 U
sec-dichloropropane	0.5 U
1,1-dichloropropene	0.5 U
cis-1,3-dichloropropene	
trans-1,3-dichloropropene	
diisopropyl ether	5 U
2-ethoxy-2-methylpropane	
ethylbenzene	0.5 U
hexachlorobutadiene	0.5 U
2-hexanone	50 U
isopropylbenzene	0.5 U
p-isopropyltoluene	1.3
2-methoxy-2-methylbutane	
methyl tert-butyl ether	0.5 U
methylene chloride	5 U
2-methylnaphthalene	
4-methyl-2-pentanone	50 U
naphthalene	58.1
n-propylbenzene	0.5 U
styrene	0.5 U
1,1,1,2-tetrachloroethane	0.5 U
1,1,2,2-tetrachloroethane	0.5 U
tetrachloroethene	0.5 U
toluene	0.5 U
1,2,3-trichlorobenzene	0.5 U
1,2,4-trichlorobenzene	0.5 U
1,1,1-trichloroethane	0.5 U
1,1,2-trichloroethane	0.5 U
trichloroethene	0.5 U
trichlorofluoromethane	0.5 U

Table A1-1f
Groundwater Samples: FED-1A EBS 24 First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**
WBZ	**FIRST**
Station ID	**GW EXCAV PIT-DAY 2**
Sample ID	**101-LT-GW-03**
Sample Type	
Depth Interval (feet bgs)	**-**
Sample Date	**31-Mar-05**
Reference	**Shaw 2005**
1,2,3-trichloropropane	0.5 U
1,2,4-trimethylbenzene	13.6
1,3,5-trimethylbenzene	3.6
vinyl acetate	
vinyl chloride	0.5 U
meta-,para-xylene	
m-, p-xylene	
o-xylene	
xylenes, total	2
Petroleum Hydrocarbons (µg/L)	
diesel	12.9
gasoline	0.21
jet fuel	
JP-5	0.48 U
motor oil	4.8 U
total recoverable petroleum hydrocarbons	
Semivolatile Organic Compounds (µg/L)	
acenaphthene	0.19 U
acenaphthylene	0.19 U
2-amino-4,6-dinitrotoluene	
4-amino-2,6-dinitrotoluene	
anthracene	0.19 U
benz(a)anthracene	0.19 U
benzo(b)fluoranthene	0.096 U
benzo(k)fluoranthene	0.096 U
benzoic acid	
benzo(g,h,i)perylene	0.096 U
benzo(a)pyrene	0.19 U
benzyl alcohol	
bis(2-chloroethoxy)methane	
bis(2-chloroethyl)ether	
bis(2-chloro-1-methylethyl)ether	
bis(2-ethylhexyl)phthalate	
4-bromophenyl phenyl ether	
butyl benzyl phthalate	
carbazole	
4-chloroaniline	
4-chloro-3-methylphenol	
2-chloronaphthalene	
2-chlorophenol	
4-chlorophenyl phenyl ether	
chrysene	0.096 U
dibenz(a,h)anthracene	0.096 U
di-n-butyl phthalate	
dibenzofuran	
1,2-dichlorobenzene	
1,3-dichlorobenzene	
1,4-dichlorobenzene	
3,3'-dichlorobenzidine	
2,4-dichlorophenol	
diethyl phthalate	
2,4-dimethylphenol	
dimethyl phthalate	
1,3-dinitrobenzene	
4,6-dinitro-2-methylphenol	
2,4-dinitrophenol	
2,4-dinitrotoluene	
2,6-dinitrotoluene	
di-n-octyl phthalate	
fluoranthene	0.096 U
fluorene	0.3
hexachlorobenzene	
hexachlorobutadiene	
hexachlorocyclopentadiene	
hexachloroethane	
hexahydro-1,3,5-trinitro-1,3,5-triazine	
indeno(1,2,3-cd)pyrene	0.096 U

Table A1-1f
Groundwater Samples: FED-1A EBS 24 First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**
WBZ	**FIRST**
Station ID	**GW EXCAV PIT-DAY 2**
Sample ID	**101-LT-GW-03**
Sample Type	
Depth Interval (feet bgs)	**-**
Sample Date	**31-Mar-05**
Reference	**Shaw 2005**
isophorone	
2-methylnaphthalene	0.096 U
2-methylphenol	
4-methylphenol	
methyl-2,4,6-trinitrophenylnitramine	
naphthalene	0.096 U
2-nitroaniline	
3-nitroaniline	
4-nitroaniline	
nitrobenzene	
4-nitrophenol	
2-nitrophenol	
N-nitrosodimethylamine	
N-nitrosodiphenylamine	
N-nitroso-di-n-propylamine	
2-nitrotoluene	
3-nitrotoluene	
4-nitrotoluene	
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	
pentachlorophenol	
phenanthrene	0.62
phenol	
pyrene	0.19 U
1,2,4-trichlorobenzene	
2,4,5-trichlorophenol	
2,4,6-trichlorophenol	
1,3,5-trinitrobenzene	
2,4,6-trinitrotoluene	
Pesticides/Polychlorinated Biphenyls (µg/L)	
aldrin	
Aroclor 1016	
Aroclor 1221	
Aroclor 1232	
Aroclor 1242	
Aroclor 1248	
Aroclor 1254	
Aroclor 1260	
alpha-BHC	
beta-BHC	
delta-BHC	
gamma-BHC (lindane)	
alpha-chlordane	
gamma-chlordane	
4,4'-DDD	
4,4'-DDE	
4,4'-DDT	
dieldrin	
endosulfan I	
endosulfan II	
endosulfan sulfate	
endrin	
endrin aldehyde	
endrin ketone	
heptachlor	
heptachlor epoxide	
methoxychlor	
toxaphene	
Metals (µg/L)	
aluminum	
antimony	
arsenic	
barium	
beryllium	
cadmium	
calcium	
chromium	
chromium, hexavalent	

Table A1-1f
Groundwater Samples: FED-1A EBS 24 First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**
WBZ	**FIRST**
Station ID	**GW EXCAV PIT-DAY 2**
Sample ID	**101-LT-GW-03**
Sample Type	
Depth Interval (feet bgs)	**-**
Sample Date	**31-Mar-05**
Reference	**Shaw 2005**
cobalt	
copper	
iron	
lead	68.7
magnesium	
manganese	
mercury	
molybdenum	
nickel	
potassium	
selenium	
silver	
sodium	
thallium	
vanadium	
zinc	
Radionuclide (PCI/L)	
actinium-228	
bismuth-212	
bismuth-214	
cesium-137	
cobalt-60	
lead-210	
lead-212	
lead-214	
potassium-40	
protactinium-234	
radium	
radium-226	
radium-228	
total gross alpha	
total gross beta	
strontium	
thallium-208	
thorium-234	
tritium	
uranium-233	
uranium-235	
uranium-238	

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
EBS – environmental baseline survey
FD – field duplicate
ID – identification
JP-5 – jet propellant grade 5
µg/L – micrograms per liter
PCI/L – picocuries per liter
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit;

Table A1-1g
Groundwater Samples: FED-2B EBS 25 Pore Water
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**
WBZ	**PORE WATER**	**PORE WATER**	**PORE WATER**
Station ID	**RW002**	**RW003**	**RW004**
Sample ID	**013-RWW-004**	**013-RWW-008**	**013-RWW-012**
Sample Type	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**
Sample Date	**18-Feb-97**	**18-Feb-97**	**19-Feb-97**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**
Petroleum Hydrocarbons (µg/L)			
diesel	100 U	100 U	100 U
gasoline	50 U	50 U	50 U
motor oil	160 J	240 J	1900 J
Semivolatile Organic Compounds (µg/L)			
acenaphthene	5 U	5 U	5 U
acenaphthylene	5 U	5 U	5 U
anthracene	5 U	5 U	5 U
benz(a)anthracene	5 U	5 U	5 U
benzo(b)fluoranthene	5 U	5 U	5 U
benzo(k)fluoranthene	5 U	5 U	5 U
benzo(g,h,i)perylene	5 U	5 U	5 U
benzo(a)pyrene	5 U	5 U	5 U
bis(2-chloroethoxy)methane	5 U	5 U	5 U
bis(2-chloroethyl)ether	5 U	5 U	5 U
bis(2-chloro-1-methylethyl)ether	5 U	5 U	5 U
bis(2-ethylhexyl)phthalate	4 U	4 U	4 U
4-bromophenyl phenyl ether	5 U	5 U	5 U
butyl benzyl phthalate	5 U	5 U	5 U
carbazole	5 U	5 U	5 U
4-chloroaniline	5 UJ	5 UJ	5 UJ
4-chloro-3-methylphenol	5 U	5 U	5 U
2-chloronaphthalene	5 U	5 U	5 U
2-chlorophenol	5 U	5 U	5 U
4-chlorophenyl phenyl ether	5 U	5 U	5 U
chrysene	5 U	5 U	5 U
dibenz(a,h)anthracene	5 U	5 U	5 U
di-n-butyl phthalate	5 U	5 U	5 U
dibenzofuran	5 U	5 U	5 U
1,2-dichlorobenzene	5 U	5 U	5 U
1,3-dichlorobenzene	5 U	5 U	5 U
1,4-dichlorobenzene	5 U	5 U	5 U
3,3'-dichlorobenzidine	5 UJ	5 UJ	5 UJ
2,4-dichlorophenol	5 U	5 U	5 U
diethyl phthalate	5 U	5 U	5 U
2,4-dimethylphenol	5 U	5 U	5 U
dimethyl phthalate	5 U	5 U	5 U
4,6-dinitro-2-methylphenol	20 U	20 U	20 U
2,4-dinitrophenol	20 U	20 U	20 U
2,4-dinitrotoluene	5 U	5 U	5 U
2,6-dinitrotoluene	5 U	5 U	5 U
di-n-octyl phthalate	5 U	5 U	5 U
fluoranthene	5 U	5 U	5 U
fluorene	5 U	5 U	5 U
hexachlorobenzene	5 U	5 U	5 U
hexachlorobutadiene	5 U	5 U	5 U
hexachlorocyclopentadiene	5 U	5 U	5 U
hexachloroethane	5 U	5 U	5 U
indeno(1,2,3-cd)pyrene	5 U	5 U	5 U
isophorone	5 U	5 U	5 U
2-methylnaphthalene	5 U	5 U	5 U
2-methylphenol	5 U	5 U	5 U
4-methylphenol	5 U	5 U	5 U
naphthalene	5 U	5 U	5 U
2-nitroaniline	20 U	20 U	20 U
3-nitroaniline	20 UJ	20 UJ	20 UJ
4-nitroaniline	20 UJ	20 UJ	20 UJ
nitrobenzene	5 U	5 U	5 U
4-nitrophenol	20 U	20 U	20 U
2-nitrophenol	5 U	5 U	5 U
N-nitrosodiphenylamine	5 UJ	5 UJ	5 UJ
N-nitroso-di-n-propylamine	5 U	5 U	5 U
pentachlorophenol	20 U	20 U	20 U
phenanthrene	5 U	5 U	5 U
phenol	5 U	5 U	5 U
pyrene	5 U	5 U	5 U
1,2,4-trichlorobenzene	5 U	5 U	5 U
2,4,5-trichlorophenol	20 U	20 U	20 U
2,4,6-trichlorophenol	5 U	5 U	5 U
Pesticides/Polychlorinated Biphenyls (µg/L)			
Aroclor 1016	0.2 U	0.2 UJ	0.2 U
Aroclor 1221	0.2 U	0.2 UJ	0.2 U
Aroclor 1232	0.2 U	0.2 UJ	0.2 U
Aroclor 1242	0.2 U	0.2 UJ	0.2 U
Aroclor 1248	0.2 U	0.2 UJ	0.2 U
Aroclor 1254	0.2 U	0.2 UJ	0.2 U
Aroclor 1260	0.2 U	0.2 UJ	0.2 U
Organotn (µg/L)			
dibutyltin	0.038 U	0.038 U	0.038 U
monobutyltin	0.031 U	0.031 U	0.031 U
tetrabutyltin	0.05 U	0.05 U	0.05 U
tributyltin	0.044 U	0.044 U	0.044 U
Metals (µg/L)			
aluminum	230 UJ	196 UJ	105 UJ
antimony	2.1 U	2.1 U	10.5 UJ
arsenic	19.5	13.5 J	9.5 U
barium	53.9 J	39.3 J	53.5 J
beryllium	0.04 UJ	0.05 UJ	0.1 UJ
cadmium	0.13 UJ	0.1 U	0.5 U
calcium	181000	150000	173000
chromium	2.1 J	1.6 J	2 U
cobalt	5.1 J	6 J	2 U
copper	22.5 J	21.5 J	2.5 U
iron	2620	3460	5410
lead	10.6	11	5.5 U
magnesium	876000	722000	514000
manganese	7110	3830	3080
mercury	0.86	0.6	0.12 J
molybdenum	19.3	7.9 J	11.9 J
nickel	17.7	15.6 J	4.7 J
potassium	216000	161000	182000
selenium	2.5 J	2.9 J	2.1 U
silver	0.5 U	0.5 U	2.5 U
sodium	6370000	5090000	4350000
thallium	1.3 U	2 UJ	6.5 U
vanadium	7.1	6.9	3 U
zinc	27.8 UJ	26 UJ	26.9 UJ

Table A1-1g
Groundwater Samples: FED-2B EBS 25 Pore Water
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**
WBZ	**PORE WATER**	**PORE WATER**	**PORE WATER**
Station ID	**RW002**	**RW003**	**RW004**
Sample ID	**013-RWW-004**	**013-RWW-008**	**013-RWW-012**
Sample Type	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**
Sample Date	**18-Feb-97**	**18-Feb-97**	**19-Feb-97**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
EBS – environmental baseline survey
FD – field duplicate
ID – identification
µg/L – micrograms per liter
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1
Sample ID	PRC93DMT0024	PRC93DMT0025	PRC93DMT0026	PRC93DMT0050	PRC93PES0024	PRC93PES0025	PRC93PES0026	PRC93PES0050	PRC93TBT0024	PRC93TBT0025	PRC93TBT0026	PRC93TBT0050
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-93	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
Petroleum Hydrocarbons (µg/L)												
diesel	*											
gasoline												
motor oil												
total recoverable petroleum hydrocarbons												
Semivolatile Organic Compounds (µg/L)												
acenaphthene												
acenaphthylene												
anthracene												
benz(a)anthracene												
benzidine												
benzo(b)fluoranthene												
benzo(k)fluoranthene												
benzoic acid												
benzo(g,h,i)perylene												
benzo(a)pyrene												
benzyl alcohol												
bis(2-chloroethoxy)methane												
bis(2-chloroethyl)ether												
bis(2-chloro-1-methylethyl)ether												
bis(2-ethylhexyl)phthalate												
4-bromophenyl phenyl ether												
butyl benzyl phthalate												
carbazole												
4-chloroaniline												
4-chloro-3-methylphenol												
2-chloronaphthalene												
2-chlorophenol												
4-chlorophenyl phenyl ether												
chrysene												
dibenz(a,h)anthracene												
di-n-butyl phthalate												
dibenzofuran												
1,2-dichlorobenzene												
1,3-dichlorobenzene												
1,4-dichlorobenzene												
3,3'-dichlorobenzidine												
2,4-dichlorophenol												
diethyl phthalate												
2,4-dimethylphenol												
dimethyl phthalate												
4,6-dinitro-2-methylphenol												
2,4-dinitrophenol												
2,4-dinitrotoluene												
2,6-dinitrotoluene												
di-n-octyl phthalate												
fluoranthene												
fluorene												
hexachlorobenzene												
hexachlorobutadiene												
hexachlorocyclopentadiene												
hexachloroethane												
indeno(1,2,3-cd)pyrene												
isophorone												
2-methylnaphthalene												
2-methylphenol												
4-methylphenol												
naphthalene												
2-nitroaniline												

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R2
Sample ID	PRC93TMT0024	PRC93TMT0025	PRC93TMT0026	PRC93TMT0050	PRC93TPH0024	PRC93TPH0025	PRC93TPH0026	PRC93TPH0050	PRC94SVL0214	PRC94SVL0215	PRC94SVL0216	PRC93DMT0027
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	20-Apr-94	20-Apr-94	20-Apr-94	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
Petroleum Hydrocarbons (µg/L)												
diesel												
gasoline												
motor oil												
total recoverable petroleum hydrocarbons					500 U	500 U	500 U	500 U				
Semivolatile Organic Compounds (µg/L)												
acenaphthene									1 U	1 U	1 U	
acenaphthylene									1 U	1 U	1 U	
anthracene									1 U	1 U	1 U	
benz(a)anthracene									1 U	1 U	1 U	
benzidine									10 U	10 U	10 U	
benzo(b)fluoranthene									1 U	1 U	1 U	
benzo(k)fluoranthene									1 U	1 U	1 U	
benzoic acid									10 U	10 U	10 U	
benzo(g,h,i)perylene									1 U	1 U	1 U	
benzo(a)pyrene									1 U	1 U	1 U	
benzyl alcohol									5 U	5 U	5 U	
bis(2-chloroethoxy)methane									1 U	1 U	1 U	
bis(2-chloroethyl)ether									1 U	1 U	1 U	
bis(2-chloro-1-methylethyl)ether									1 U	1 U	1 U	
bis(2-ethylhexyl)phthalate									1 U	1 U	1 U	
4-bromophenyl phenyl ether									1 U	1 U	1 U	
butyl benzyl phthalate									1 U	1 U	1 U	
carbazole												
4-chloroaniline									3 U	3 U	3 U	
4-chloro-3-methylphenol									2 U	2 U	2 U	
2-chloronaphthalene									1 U	1 U	1 U	
2-chlorophenol									1 U	1 U	1 U	
4-chlorophenyl phenyl ether									1 U	1 U	1 U	
chrysene									1 U	1 U	1 U	
dibenz(a,h)anthracene									1 U	1 U	1 U	
di-n-butyl phthalate									1 U	1 U	4 U	
dibenzofuran									1 U	1 U	1 U	
1,2-dichlorobenzene									1 U	1 U	1 U	
1,3-dichlorobenzene									1 U	1 U	1 U	
1,4-dichlorobenzene									1 U	1 U	1 U	
3,3'-dichlorobenzidine									1 U	1 U	1 U	
2,4-dichlorophenol									3 U	3 U	3 U	
diethyl phthalate									1 U	1 U	1 U	
2,4-dimethylphenol									2 U	2 U	2 U	
dimethyl phthalate									1 U	1 U	1 U	
4,6-dinitro-2-methylphenol									10 U	10 U	10 U	
2,4-dinitrophenol									5 U	5 U	5 U	
2,4-dinitrotoluene									5 U	5 U	5 U	
2,6-dinitrotoluene									5 U	5 U	5 U	
di-n-octyl phthalate									1 U	1 U	1 U	
fluoranthene									1 U	1 U	1 U	
fluorene									1 U	1 U	1 U	
hexachlorobenzene									1 U	1 U	1 U	
hexachlorobutadiene									2 U	2 U	2 U	
hexachlorocyclopentadiene									5 U	5 U	5 U	
hexachloroethane									2 U	2 U	2 U	
indeno(1,2,3-cd)pyrene									1 U	1 U	1 U	
isophorone									1 U	1 U	1 U	
2-methylnaphthalene									1 U	1 U	1 U	
2-methylphenol									1 U	1 U	1 U	
4-methylphenol									1 U	1 U	1 U	
naphthalene									1 U	1 U	1 U	
2-nitroaniline									5 U	5 U	5 U	

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25
WBZ	SURFACE WATER	SURFACE WATER
Station ID	R2	R2
Sample ID	PRC93DMT0028	PRC93DMT0029
Sample Type	REG	REG
Depth Interval (feet bgs)	-	-
Sample Date	13-Apr-93	13-Apr-93
Reference	PRC	PRC
Petroleum Hydrocarbons (µg/L)		
diesel		
gasoline		
motor oil		
total recoverable petroleum hydrocarbons		
Semivolatile Organic Compounds (µg/L)		
acenaphthene		
acenaphthylene		
anthracene		
benz(a)anthracene		
benzidine		
benzo(b)fluoranthene		
benzo(k)fluoranthene		
benzoic acid		
benzo(g,h,i)perylene		
benzo(a)pyrene		
benzyl alcohol		
bis(2-chloroethoxy)methane		
bis(2-chloroethyl)ether		
bis(2-chloro-1-methylethyl)ether		
bis(2-ethylhexyl)phthalate		
4-bromophenyl phenyl ether		
butyl benzyl phthalate		
carbazole		
4-chloroaniline		
4-chloro-3-methylphenol		
2-chloronaphthalene		
2-chlorophenol		
4-chlorophenyl phenyl ether		
chrysene		
dibenz(a,h)anthracene		
di-n-butyl phthalate		
dibenzofuran		
1,2-dichlorobenzene		
1,3-dichlorobenzene		
1,4-dichlorobenzene		
3,3'-dichlorobenzidine		
2,4-dichlorophenol		
diethyl phthalate		
2,4-dimethylphenol		
dimethyl phthalate		
4,6-dinitro-2-methylphenol		
2,4-dinitrophenol		
2,4-dinitrotoluene		
2,6-dinitrotoluene		
di-n-octyl phthalate		
fluoranthene		
fluorene		
hexachlorobenzene		
hexachlorobutadiene		
hexachlorocyclopentadiene		
hexachloroethane		
indeno(1,2,3-cd)pyrene		
isophorone		
2-methylnaphthalene		
2-methylphenol		
4-methylphenol		
naphthalene		
2-nitroaniline		

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2
Sample ID	PRC93PES0027	PRC93PES0028	PRC93PES0029	PRC93TBT0027	PRC93TBT0028	PRC93TBT0029	PRC93TMT0027	PRC93TMT0028	PRC93TMT0029	PRC93TPH0027
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
Petroleum Hydrocarbons (µg/L)										
diesel										
gasoline										
motor oil										
total recoverable petroleum hydrocarbons										500 U
Semivolatile Organic Compounds (µg/L)										
acenaphthene										
acenaphthylene										
anthracene										
benz(a)anthracene										
benzidine										
benzo(b)fluoranthene										
benzo(k)fluoranthene										
benzoic acid										
benzo(g,h,i)perylene										
benzo(a)pyrene										
benzyl alcohol										
bis(2-chloroethoxy)methane										
bis(2-chloroethyl)ether										
bis(2-chloro-1-methylethyl)ether										
bis(2-ethylhexyl)phthalate										
4-bromophenyl phenyl ether										
butyl benzyl phthalate										
carbazole										
4-chloroaniline										
4-chloro-3-methylphenol										
2-chloronaphthalene										
2-chlorophenol										
4-chlorophenyl phenyl ether										
chrysene										
dibenz(a,h)anthracene										
di-n-butyl phthalate										
dibenzofuran										
1,2-dichlorobenzene										
1,3-dichlorobenzene										
1,4-dichlorobenzene										
3,3'-dichlorobenzidine										
2,4-dichlorophenol										
diethyl phthalate										
2,4-dimethylphenol										
dimethyl phthalate										
4,6-dinitro-2-methylphenol										
2,4-dinitrophenol										
2,4-dinitrotoluene										
2,6-dinitrotoluene										
di-n-octyl phthalate										
fluoranthene										
fluorene										
hexachlorobenzene										
hexachlorobutadiene										
hexachlorocyclopentadiene										
hexachloroethane										
indeno(1,2,3-cd)pyrene										
isophorone										
2-methylnaphthalene										
2-methylphenol										
4-methylphenol										
naphthalene										
2-nitroaniline										

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R2	R2	R2	R2	R2	RW002	RW006
Sample ID	PRC93TPH0028	PRC93TPH0029	PRC94SVL0217	PRC94SVL0218	PRC94SVL0219	013-RWW-019	013-RWW-020
Sample Type	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	0 - 0	0 - 0
Sample Date	13-Apr-93	13-Apr-93	20-Apr-94	20-Apr-94	20-Apr-94	18-Feb-97	19-Feb-97
Reference	PRC	PRC	PRC	PRC	PRC	TtEMI 2004	TtEMI 2004
Petroleum Hydrocarbons (µg/L)							
diesel						100 U	100 U
gasoline						50 U	50 U
motor oil						270 J	280 J
total recoverable petroleum hydrocarbons	500 U	500 U					
Semivolatile Organic Compounds (µg/L)							
acenaphthene			1 U	1 U	1 U	5 U	5 U
acenaphthylene			1 U	1 U	1 U	5 U	5 U
anthracene			1 U	1 U	1 U	5 U	5 U
benz(a)anthracene			1 U	1 U	1 U	5 U	5 U
benzidine			10 U	10 U	10 U		
benzo(b)fluoranthene			1 U	1 U	1 U	5 U	5 U
benzo(k)fluoranthene			1 U	1 U	1 U	5 U	5 U
benzoic acid			10 U	10 U	10 U		
benzo(g,h,i)perylene			1 U	1 U	1 U	5 U	5 U
benzo(a)pyrene			1 U	1 U	1 U	5 U	5 U
benzyl alcohol			5 U	5 U	5 U		
bis(2-chloroethoxy)methane			1 U	1 U	1 U	5 U	5 U
bis(2-chloroethyl)ether			1 U	1 U	1 U	5 U	5 U
bis(2-chloro-1-methylethyl)ether			1 U	1 U	1 U	5 U	5 U
bis(2-ethylhexyl)phthalate			1 U	1 U	2.1	4 U	4 U
4-bromophenyl phenyl ether			1 U	1 U	1 U	5 U	5 U
butyl benzyl phthalate			1 U	1 U	1 U	5 U	5 U
carbazole						5 U	5 U
4-chloroaniline			3 U	3 U	3 U	5 UJ	5 UJ
4-chloro-3-methylphenol			2 U	2 U	2 U	5 U	5 U
2-chloronaphthalene			1 U	1 U	1 U	5 U	5 U
2-chlorophenol			1 U	1 U	1 U	5 U	5 U
4-chlorophenyl phenyl ether			1 U	1 U	1 U	5 U	5 U
chrysene			1 U	1 U	1 U	5 U	5 U
dibenz(a,h)anthracene			1 U	1 U	1 U	5 U	5 U
di-n-butyl phthalate			1 U	1 U	7.7 U	5 U	5 U
dibenzofuran			1 U	1 U	1 U	5 U	5 U
1,2-dichlorobenzene			1 U	1 U	1 U	5 U	5 U
1,3-dichlorobenzene			1 U	1 U	1 U	5 U	5 U
1,4-dichlorobenzene			1 U	1 U	1 U	5 U	5 U
3,3'-dichlorobenzidine			1 U	1 U	1 U	5 UJ	5 UJ
2,4-dichlorophenol			3 U	3 U	3 U	5 U	5 U
diethyl phthalate			1 U	1 U	1.7	5 U	5 U
2,4-dimethylphenol			2 U	2 U	2 U	5 U	5 U
dimethyl phthalate			1 U	1 U	1 U	5 U	5 U
4,6-dinitro-2-methylphenol			10 U	10 U	10 U	20 U	20 U
2,4-dinitrophenol			5 U	5 U	5 U	20 U	20 U
2,4-dinitrotoluene			5 U	5 U	5 U	5 U	5 U
2,6-dinitrotoluene			5 U	5 U	5 U	5 U	5 U
di-n-octyl phthalate			1 U	1 U	1 U	5 U	5 U
fluoranthene			1 U	1 U	1 U	5 U	5 U
fluorene			1 U	1 U	1 U	5 U	5 U
hexachlorobenzene			1 U	1 U	1 U	5 U	5 U
hexachlorobutadiene			2 U	2 U	2 U	5 U	5 U
hexachlorocyclopentadiene			5 U	5 U	5 U	5 U	5 U
hexachloroethane			2 U	2 U	2 U	5 U	5 U
indeno(1,2,3-cd)pyrene			1 U	1 U	1 U	5 U	5 U
isophorone			1 U	1 U	1 U	5 U	5 U
2-methylnaphthalene			1 U	1 U	1 U	5 U	5 U
2-methylphenol			1 U	1 U	1 U	5 U	5 U
4-methylphenol			1 U	1 U	1 U	5 U	5 U
naphthalene			1 U	1 U	1 U	5 U	5 U
2-nitroaniline			5 U	5 U	5 U	20 U	20 U

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1
Sample ID	PRC93DMT0024	PRC93DMT0025	PRC93DMT0026	PRC93DMT0050	PRC93PES0024	PRC93PES0025	PRC93PES0026	PRC93PES0050	PRC93TBT0024	PRC93TBT0025	PRC93TBT0026	PRC93TBT0050
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-93	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
3-nitroaniline												
4-nitroaniline												
nitrobenzene												
4-nitrophenol												
2-nitrophenol												
N-nitrosodiphenylamine												
N-nitroso-di-n-propylamine												
pentachlorophenol												
phenanthrene												
phenol												
pyrene												
1,2,4-trichlorobenzene												
2,4,5-trichlorophenol												
2,4,6-trichlorophenol												
Pesticides/Polychlorinated Biphenyls (µg/L)												
aldrin					0.05 U	0.05 U	0.05 U	0.05 U				
Aroclor 1016					1 U	1 U	1 U	1 U				
Aroclor 1221					2 U	2 U	2 U	2 U				
Aroclor 1232					1 U	1 U	1 U	1 U				
Aroclor 1242					1 U	1 U	1 U	1 U				
Aroclor 1248					1 U	1 U	1 U	1 U				
Aroclor 1254					1 U	1 U	1 U	1 U				
Aroclor 1260					1 U	1 U	1 U	1 U				
alpha-BHC					0.05 U	0.05 U	0.05 U	0.05 U				
beta-BHC					0.05 U	0.05 U	0.05 U	0.05 U				
delta-BHC					0.05 U	0.05 U	0.05 U	0.05 U				
gamma-BHC (lindane)					0.05 U	0.05 U	0.05 U	0.05 U				
alpha-chlordane					0.5 U	0.5 U	0.5 U	0.5 U				
gamma-chlordane					0.5 U	0.5 U	0.5 U	0.5 U				
4,4'-DDD					0.1 U	0.1 U	0.1 U	0.1 U				
4,4'-DDE					0.1 U	0.1 U	0.1 U	0.1 U				
4,4'-DDT					0.1 U	0.1 U	0.1 U	0.1 U				
dieldrin					0.1 U	0.1 U	0.1 U	0.1 U				
endosulfan I					0.1 U	0.1 U	0.1 U	0.1 U				
endosulfan II					0.1 U	0.1 U	0.1 U	0.1 U				
endosulfan sulfate					0.1 U	0.1 U	0.1 U	0.1 U				
endrin					0.1 U	0.1 U	0.1 U	0.1 U				
endrin aldehyde					0.1 U	0.1 U	0.1 U	0.1 U				
endrin ketone					0.1 U	0.1 U	0.1 U	0.1 U				
heptachlor					0.05 U	0.05 U	0.05 U	0.05 U				
heptachlor epoxide					0.05 U	0.05 U	0.05 U	0.05 U				
methoxychlor					0.5 U	0.5 U	0.5 U	0.5 U				
toxaphene					2 U	2 U	2 U	2 U				
Organotn (µg/L)												
dibutyltin									0.005 U	0.005 U	0.005 U	0.006
monobutyltin									0.005 U	0.005 U	0.005 U	0.005 U
tetrabutyltin									0.005 U	0.005 U	0.005 U	0.005 U
tributyltin									0.005 U	0.005 U	0.005 U	0.024
Metals (µg/L)												
aluminum												
antimony	3 U	3 U	3 U	3 U								
arsenic	10 U	10 U	10 U	11								
barium												
beryllium	5 U	5 U	5 U	5 U								
cadmium	5 U	5 U	5 U	5 U								
calcium												
chromium	10 U	10 U	73	10 U								
cobalt												

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R2
Sample ID	PRC93TMT0024	PRC93TMT0025	PRC93TMT0026	PRC93TMT0050	PRC93TPH0024	PRC93TPH0025	PRC93TPH0026	PRC93TPH0050	PRC94SVL0214	PRC94SVL0215	PRC94SVL0216	PRC93DMT0027
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	20-Apr-94	20-Apr-94	20-Apr-94	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
3-nitroaniline									5 U	5 U	5 U	
4-nitroaniline									5 U	5 U	5 U	
nitrobenzene									1 U	1 U	1 U	
4-nitrophenol									5 U	5 U	5 U	
2-nitrophenol									5 U	5 U	5 U	
N-nitrosodiphenylamine									1 U	1 U	1 U	
N-nitroso-di-n-propylamine									1 U	1 U	1 U	
pentachlorophenol									5 U	5 U	5 U	
phenanthrene									1 U	1 U	1 U	
phenol									2 U	2 U	2 U	
pyrene									1 U	1 U	1 U	
1,2,4-trichlorobenzene									1 U	1 U	1 U	
2,4,5-trichlorophenol									5 U	5 U	5 U	
2,4,6-trichlorophenol									5 U	5 U	5 U	
Pesticides/Polychlorinated Biphenyls (µg/L)												
aldrin												
Aroclor 1016												
Aroclor 1221												
Aroclor 1232												
Aroclor 1242												
Aroclor 1248												
Aroclor 1254												
Aroclor 1260												
alpha-BHC												
beta-BHC												
delta-BHC												
gamma-BHC (lindane)												
alpha-chlordane												
gamma-chlordane												
4,4'-DDD												
4,4'-DDE												
4,4'-DDT												
dieldrin												
endosulfan I												
endosulfan II												
endosulfan sulfate												
endrin												
endrin aldehyde												
endrin ketone												
heptachlor												
heptachlor epoxide												
methoxychlor												
toxaphene												
Organotn (µg/L)												
dibutyltin												
monobutyltin												
tetrabutyltin												
tributyltin												
Metals (µg/L)												
aluminum												
antimony	3 U	3 U	3 U	3 U							3 U	
arsenic	10 U	10 U	10 U	11							10 U	
barium												
beryllium	5 U	5 U	5 U	5 U							5 U	
cadmium	5 U	5 U	5 U	5 U							5 U	
calcium												
chromium	10 U	10 U	10 U	10 U							10 U	
cobalt												

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**
WBZ	**SURFACE WATER**	**SURFACE WATER**
Station ID	**R2**	**R2**
Sample ID	**PRC93DMT0028**	**PRC93DMT0029**
Sample Type	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**
Sample Date	**13-Apr-93**	**13-Apr-93**
Reference	**PRC**	**PRC**
3-nitroaniline		
4-nitroaniline		
nitrobenzene		
4-nitrophenol		
2-nitrophenol		
N-nitrosodiphenylamine		
N-nitroso-di-n-propylamine		
pentachlorophenol		
phenanthrene		
phenol		
pyrene		
1,2,4-trichlorobenzene		
2,4,5-trichlorophenol		
2,4,6-trichlorophenol		
Pesticides/Polychlorinated Biphenyls (µg/L)		
aldrin		
Aroclor 1016		
Aroclor 1221		
Aroclor 1232		
Aroclor 1242		
Aroclor 1248		
Aroclor 1254		
Aroclor 1260		
alpha-BHC		
beta-BHC		
delta-BHC		
gamma-BHC (lindane)		
alpha-chlordane		
gamma-chlordane		
4,4'-DDD		
4,4'-DDE		
4,4'-DDT		
dieldrin		
endosulfan I		
endosulfan II		
endosulfan sulfate		
endrin		
endrin aldehyde		
endrin ketone		
heptachlor		
heptachlor epoxide		
methoxychlor		
toxaphene		
Organotn (µg/L)		
dibutyltin		
monobutyltin		
tetrabutyltin		
tributyltin		
Metals (µg/L)		
aluminum		
antimony	3 U	3 U
arsenic	10 U	10 U
barium		
beryllium	5 U	5 U
cadmium	5 U	5 U
calcium		
chromium	10 U	10 U
cobalt		

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2
Sample ID	PRC93PES0027	PRC93PES0028	PRC93PES0029	PRC93TBT0027	PRC93TBT0028	PRC93TBT0029	PRC93TMT0027	PRC93TMT0028	PRC93TMT0029	PRC93TPH0027
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
3-nitroaniline										
4-nitroaniline										
nitrobenzene										
4-nitrophenol										
2-nitrophenol										
N-nitrosodiphenylamine										
N-nitroso-di-n-propylamine										
pentachlorophenol										
phenanthrene										
phenol										
pyrene										
1,2,4-trichlorobenzene										
2,4,5-trichlorophenol										
2,4,6-trichlorophenol										
Pesticides/Polychlorinated Biphenyls (µg/L)										
aldrin	0.05 U	0.05 U	0.05 U							
Aroclor 1016	1 U	1 U	1 U							
Aroclor 1221	2 U	2 U	2 U							
Aroclor 1232	1 U	1 U	1 U							
Aroclor 1242	1 U	1 U	1 U							
Aroclor 1248	1 U	1 U	1 U							
Aroclor 1254	1 U	1 U	1 U							
Aroclor 1260	1 U	1 U	1 U							
alpha-BHC	0.05 U	0.05 U	0.05 U							
beta-BHC	0.05 U	0.05 U	0.05 U							
delta-BHC	0.05 U	0.05 U	0.05 U							
gamma-BHC (lindane)	0.05 U	0.05 U	0.05 U							
alpha-chlordane	0.5 U	0.5 U	0.5 U							
gamma-chlordane	0.5 U	0.5 U	0.5 U							
4,4'-DDD	0.1 U	0.1 U	0.1 U							
4,4'-DDE	0.1 U	0.1 U	0.1 U							
4,4'-DDT	0.1 U	0.1 U	0.1 U							
dieldrin	0.1 U	0.1 U	0.1 U							
endosulfan I	0.1 U	0.1 U	0.1 U							
endosulfan II	0.1 U	0.1 U	0.1 U							
endosulfan sulfate	0.1 U	0.1 U	0.1 U							
endrin	0.1 U	0.1 U	0.1 U							
endrin aldehyde	0.1 U	0.1 U	0.1 U							
endrin ketone	0.1 U	0.1 U	0.1 U							
heptachlor	0.05 U	0.05 U	0.05 U							
heptachlor epoxide	0.05 U	0.05 U	0.05 U							
methoxychlor	0.5 U	0.5 U	0.5 U							
toxaphene	2 U	2 U	2 U							
Organotn (µg/L)										
dibutyltin				0.005 U	0.005 U	0.005 U				
monobutyltin				0.005 U	0.005 U	0.005 U				
tetrabutyltin				0.005 U	0.005 U	0.005 U				
tributyltin				0.005 U	0.005 U	0.005 U				
Metals (µg/L)										
aluminum										
antimony							3 U	3 U	3 U	
arsenic							10 U	10 U	10 U	
barium										
beryllium							5 U	5 U	5 U	
cadmium							5 U	5 U	5 U	
calcium										
chromium							10 U	10 U	10 U	
cobalt										

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**
WBZ	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**
Station ID	**R2**	**R2**	**R2**	**R2**	**R2**	**RW002**	**RW006**
Sample ID	**PRC93TPH0028**	**PRC93TPH0029**	**PRC94SVL0217**	**PRC94SVL0218**	**PRC94SVL0219**	**013-RWW-019**	**013-RWW-020**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**0 - 0**	**0 - 0**
Sample Date	**13-Apr-93**	**13-Apr-93**	**20-Apr-94**	**20-Apr-94**	**20-Apr-94**	**18-Feb-97**	**19-Feb-97**
Reference	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**TtEMI 2004**	**TtEMI 2004**
3-nitroaniline			5 U	5 U	5 U	20 UJ	20 UJ
4-nitroaniline			5 U	5 U	5 U	20 UJ	20 UJ
nitrobenzene			1 U	1 U	1 U	5 U	5 U
4-nitrophenol			5 U	5 U	5 U	20 U	20 U
2-nitrophenol			5 U	5 U	5 U	5 U	5 U
N-nitrosodiphenylamine			1 U	1 U	1 U	5 UJ	5 UJ
N-nitroso-di-n-propylamine			1 U	1 U	1 U	5 U	5 U
pentachlorophenol			5 U	5 U	5 U	20 U	20 U
phenanthrene			1 U	1 U	1 U	5 U	5 U
phenol			2 U	2 U	2 U	5 U	5 U
pyrene			1 U	1 U	1 U	5 U	5 U
1,2,4-trichlorobenzene			1 U	1 U	1 U	5 U	5 U
2,4,5-trichlorophenol			5 U	5 U	5 U	20 U	20 U
2,4,6-trichlorophenol			5 U	5 U	5 U	5 U	5 U
Pesticides/Polychlorinated Biphenyls (µg/L)							
aldrin							
Aroclor 1016						0.2 U	0.2 U
Aroclor 1221						0.2 U	0.2 U
Aroclor 1232						0.2 U	0.2 U
Aroclor 1242						0.2 U	0.2 U
Aroclor 1248						0.2 U	0.2 U
Aroclor 1254						0.2 U	0.2 U
Aroclor 1260						0.2 U	0.2 U
alpha-BHC							
beta-BHC							
delta-BHC							
gamma-BHC (lindane)							
alpha-chlordane							
gamma-chlordane							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
dieldrin							
endosulfan I							
endosulfan II							
endosulfan sulfate							
endrin							
endrin aldehyde							
endrin ketone							
heptachlor							
heptachlor epoxide							
methoxychlor							
toxaphene							
Organotn (µg/L)							
dibutyltin						0.038 U	0.038 U
monobutyltin						0.031 U	0.031 U
tetrabutyltin						0.05 U	0.05 U
tributyltin						0.044 U	0.044 U
Metals (µg/L)							
aluminum						418	480
antimony						2.1 U	2.1 U
arsenic						2.2 J	3.7 J
barium						25.9 J	47.6 J
beryllium						0.02 UJ	0.02 UJ
cadmium						0.39 UJ	0.28 UJ
calcium						82300	70000
chromium						2.1 J	3.4 J
cobalt						1.2 J	1.4 J

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1
Sample ID	PRC93DMT0024	PRC93DMT0025	PRC93DMT0026	PRC93DMT0050	PRC93PES0024	PRC93PES0025	PRC93PES0026	PRC93PES0050	PRC93TBT0024	PRC93TBT0025	PRC93TBT0026	PRC93TBT0050
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-93	13-Apr-93	13-Apr-93	13-Apr-93	02-Jun-95
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
copper	25 U	25 U	25 U	25 U								
iron												
lead	3 U	3 U	3 U	3 U								
magnesium												
manganese												
mercury	0.5 U	0.5 U	0.5 U	0.5 U								
molybdenum												
nickel	40 U	40 U	190	40 U								
potassium												
selenium	5 U	5 U	5 U	5 U								
silver	10 U	10 U	10 U	10 U								
sodium												
thallium	10 U	10 U	10 U									
titanium				10 U								
vanadium												
zinc	150	28	49	20 U								

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
EBS – environmental baseline survey
FD – field duplicate
ID – identification
µg/L – micrograms per liter
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
WBZ	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**	**SURFACE WATER**
Station ID	**R1**	**R1**	**R1**	**R1**	**R1**	**R1**	**R1**	**R1**	**R1**	**R1**	**R1**	**R2**
Sample ID	**PRC93TMT0024**	**PRC93TMT0025**	**PRC93TMT0026**	**PRC93TMT0050**	**PRC93TPH0024**	**PRC93TPH0025**	**PRC93TPH0026**	**PRC93TPH0050**	**PRC94SVL0214**	**PRC94SVL0215**	**PRC94SVL0216**	**PRC93DMT0027**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**13-Apr-93**	**13-Apr-93**	**13-Apr-93**	**02-Jun-95**	**13-Apr-93**	**13-Apr-93**	**13-Apr-93**	**02-Jun-95**	**20-Apr-94**	**20-Apr-94**	**20-Apr-94**	**13-Apr-93**
Reference	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**
copper	25 U	25 U	25 U	25 U								25 U
iron												
lead	3 U	3 U	3 U	3 U								3 U
magnesium												
manganese												
mercury	0.5 U	0.5 U	0.5 U	0.5 U								0.5 U
molybdenum												
nickel	40 U	40 U	40 U	40 U								40 U
potassium												
selenium	5 U	5 U	5 U	5 U								5 U
silver	10 U	10 U	10 U	10 U								10 U
sodium												
thallium	10 U	10 U	10 U									10 U
titanium				10 U								
vanadium												
zinc	20 U	20 U	20 U	20 U								140

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**
WBZ	**SURFACE WATER**	**SURFACE WATER**
Station ID	**R2**	**R2**
Sample ID	**PRC93DMT0028**	**PRC93DMT0029**
Sample Type	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**
Sample Date	**13-Apr-93**	**13-Apr-93**
Reference	**PRC**	**PRC**
copper	25 U	25 U
iron		
lead	3 U	3 U
magnesium		
manganese		
mercury	0.5 U	0.5 U
molybdenum		
nickel	40 U	40 U
potassium		
selenium	5 U	5 U
silver	10 U	10 U
sodium		
thallium	10 U	10 U
titanium		
vanadium		
zinc	100	58

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R2	R2	R2	R2	R2	R2	R2	R2	R2	R2
Sample ID	PRC93PES0027	PRC93PES0028	PRC93PES0029	PRC93TBT0027	PRC93TBT0028	PRC93TBT0029	PRC93TMT0027	PRC93TMT0028	PRC93TMT0029	PRC93TPH0027
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
copper							25 U	25 U	25 U	
iron										
lead							3 U	4.6	3 U	
magnesium										
manganese										
mercury							0.5 U	0.5 U	0.5 U	
molybdenum										
nickel							40 U	40 U	40 U	
potassium										
selenium							5 U	5 U	5 U	
silver							10 U	10 U	10 U	
sodium										
thallium							10 U	10 U	10 U	
titanium										
vanadium										
zinc							20 U	20 U	20 U	

Table A1-1h
Surface Water Samples: FED-2B EBS 25
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25
WBZ	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER	SURFACE WATER
Station ID	R2	R2	R2	R2	R2	RW002	RW006
Sample ID	PRC93TPH0028	PRC93TPH0029	PRC94SVL0217	PRC94SVL0218	PRC94SVL0219	013-RWW-019	013-RWW-020
Sample Type	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	0 - 0	0 - 0
Sample Date	13-Apr-93	13-Apr-93	20-Apr-94	20-Apr-94	20-Apr-94	18-Feb-97	19-Feb-97
Reference	PRC	PRC	PRC	PRC	PRC	TtEMI 2004	TtEMI 2004
copper						7.9 J	7.6 J
iron						1040	982
lead						4.9	6.4
magnesium						262000	167000
manganese						94.2	378
mercury						0.1 U	0.1 U
molybdenum						2.7 UJ	2.7 UJ
nickel						9.2 J	10.8 J
potassium						101000	66900
selenium						2.1 U	2.5 J
silver						0.5 U	0.5 U
sodium						2220000	1410000
thallium						1.3 U	1.3 U
titanium							
vanadium						3	6.6
zinc						26 UJ	28.4 UJ

Table A1-1i
Groundwater Samples: FED-2B EBS 27 First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Pont, Alameda, California

EBS Parcel	**27**
WBZ	**FIRST**
Station ID	**027-IWTP-004**
Sample ID	**027T-0008**
Sample Type	**REG**
Depth Interval (feet bgs)	**4 - 8**
Sample Date	**13-Jul-99**
Reference	**IT 2001**
Volatile Organic Compounds (µg/L)	
acetone	10 U
benzene	10 U
bromodichloromethane	10 U
bromoform	10 U
bromomethane	10 U
2-butanone	10 UJ
carbon disulfide	1 J
carbon tetrachloride	10 U
chlorobenzene	10 U
chlorodibromomethane	10 U
chloroethane	10 U
chloroform	0.5 J
chloromethane	10 U
1,3-dichlorobenzene	5 U
1,4-dichlorobenzene	5 U
1,1-dichloroethane	10 U
1,2-dichloroethane	10 U
1,1-dichloroethene	10 U
1,2-dichloroethene	10 U
1,2-dichloropropane	10 U
cis-1,3-dichloropropene	10 U
trans-1,3-dichloropropene	10 U
ethylbenzene	10 U
2-hexanone	10 U
methylene chloride	10 U
2-methylnaphthalene	10 U
4-methyl-2-pentanone	10 U
naphthalene	10 U
styrene	10 U
1,1,2,2-tetrachloroethane	10 U
tetrachloroethene	10 U
toluene	10 U
1,2,4-trichlorobenzene	10 U
1,1,1-trichloroethane	10 U
1,1,2-trichloroethane	10 U
trichloroethene	10 U
vinyl chloride	10 U
xylenes, total	10 U
Semivolatile Organic Compounds (µg/L)	
acenaphthene	10 U
acenaphthylene	10 U
anthracene	10 U
benz(a)anthracene	10 U
benzo(b)fluoranthene	10 U
benzo(k)fluoranthene	10 U
benzo(g,h,i)perylene	10 U
benzo(a)pyrene	10 U
bis(2-chloroethoxy)methane	10 U
bis(2-chloroethyl)ether	10 U
bis(2-chloro-1-methylethyl)ether	10 U
bis(2-ethylhexyl)phthalate	4 U
4-bromophenyl phenyl ether	10 U
butyl benzyl phthalate	10 U
carbazole	10 U
4-chloroaniline	10 U
4-chloro-3-methylphenol	10 U
2-chloronaphthalene	10 U
2-chlorophenol	10 U
4-chlorophenyl phenyl ether	10 U
chrysene	10 U
dibenz(a,h)anthracene	10 U
di-n-butyl phthalate	10 U
dibenzofuran	10 U
1,2-dichlorobenzene	5 U
3,3'-dichlorobenzidine	10 U
2,4-dichlorophenol	10 U
diethyl phthalate	10 U
2,4-dimethylphenol	10 U
dimethyl phthalate	10 U
4,6-dinitro-2-methylphenol	25 U
2,4-dinitrophenol	25 U
2,4-dinitrotoluene	10 U
2,6-dinitrotoluene	10 U
di-n-octyl phthalate	10 U

Table A1-1i
Groundwater Samples: FED-2B EBS 27 First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Pont, Alameda, California

EBS Parcel	**27**
WBZ	**FIRST**
Station ID	**027-IWTP-004**
Sample ID	**027T-0008**
Sample Type	**REG**
Depth Interval (feet bgs)	**4 - 8**
Sample Date	**13-Jul-99**
Reference	**IT 2001**
fluoranthene	10 U
fluorene	10 U
hexachlorobenzene	10 U
hexachlorobutadiene	10 U
hexachlorocyclopentadiene	10 U
hexachloroethane	10 U
indeno(1,2,3-cd)pyrene	10 U
isophorone	10 U
2-methylphenol	10 U
4-methylphenol	10 U
2-nitroaniline	25 U
3-nitroaniline	25 U
4-nitroaniline	25 U
nitrobenzene	10 U
4-nitrophenol	25 U
2-nitrophenol	10 U
N-nitrosodiphenylamine	10 U
N-nitroso-di-n-propylamine	10 U
pentachlorophenol	25 U
phenanthrene	10 U
phenol	10 U
pyrene	10 U
2,4,5-trichlorophenol	25 U
2,4,6-trichlorophenol	10 U
Metals (µg/L)	
aluminum	500 U
antimony	60 U
arsenic	100 U
barium	118 J
beryllium	40 U
cadmium	50 U
calcium	53700
chromium	100 U
chromium trioxide	10 U
cobalt	500 U
copper	250 U
iron	226 J
lead	30 U
magnesium	67200
manganese	1110
mercury	0.2 U
molybdenum	20.1 J
nickel	17.7 J
potassium	56800 J
silver	100 U
sodium	1090000
thallium	20 UJ
vanadium	500 U
zinc	200 U

Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
EBS – environmental baseline survey
FD – field duplicate
ID – identification
µg/L – micrograms per liter
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit;

Table A1-1j
Groundwater Samples: FED-2C EBS 23E First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E
WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
Station ID	030-Z06-038	190-Z06-011	26B28	26B28	26B28	26B29	26B29	26B40	26B40	26SW02	26SW02
Sample ID	030-0047	190-0014	C014G023	C014G024	C014G025	C014G026	C014G027	C014G051	C014G052	C014G058	C014G085
Sample Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	8.5 - 8.5	7.5 - 8.5	6 - 6	15 - 15	15 - 15	6 - 6	15 - 15	6 - 6	15 - 15	6.2 - 16.2	6.2 - 16.2
Sample Date	16-Oct-95	04-Oct-95	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	25-Mar-02	25-Mar-02	21-May-02	29-Aug-02
Reference	IT 2001	IT 2001	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a
Volatile Organic Compounds (µg/L)											
acetone	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 UJ	10 UJ	5 UJ	
benzene	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.4 U
bromobenzene	*										0.3 U
bromochloromethane											0.4 U
bromodichloromethane	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
bromoform	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
bromomethane	1 U	1 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 U		0.5 U
2-butanone	2 UJ	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5 UJ	
n-butylbenzene											0.5 U
sec-butylbenzene											0.5 U
tert-butylbenzene											0.5 U
carbon disulfide	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	
carbon tetrachloride	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
chlorobenzene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.4 U
chlorodibromomethane	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
chloroethane	2 U	2 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
chloroform	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.3 U
1-chlorohexane											0.5 U
chloromethane	2 U	2 U	3 U	1 J	3 U	3 U	3 U	3 U	3 U		0.5 U
2-chlorotoluene											0.4 U
4-chlorotoluene											0.5 U
1,2-dibromo-3-chloropropane											2 UJ
1,2-dibromoethane											0.5 U
dibromomethane											0.5 U
1,2-dichlorobenzene											0.3 U
1,3-dichlorobenzene											0.5 U

Table A1-1j
Groundwater Samples: FED-2C EBS 23E First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E
WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
Station ID	030-Z06-038	190-Z06-011	26B28	26B28	26B28	26B29	26B29	26B40	26B40	26SW02	26SW02
Sample ID	030-0047	190-0014	C014G023	C014G024	C014G025	C014G026	C014G027	C014G051	C014G052	C014G058	C014G085
Sample Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	8.5 - 8.5	7.5 - 8.5	6 - 6	15 - 15	15 - 15	6 - 6	15 - 15	6 - 6	15 - 15	6.2 - 16.2	6.2 - 16.2
Sample Date	16-Oct-95	04-Oct-95	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	25-Mar-02	25-Mar-02	21-May-02	29-Aug-02
Reference	IT 2001	IT 2001	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a
1,4-dichlorobenzene											0.3 U
dichlorodifluoromethane			3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
1,1-dichloroethane	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.4 U
1,2-dichloroethane	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
1,1-dichloroethene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
cis-1,2-dichloroethene			3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
trans-1,2-dichloroethene			3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
1,2-dichloroethene	5 U	1 U									
1,2-dichloropropane	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.4 U
1,3-dichloropropane											0.4 U
sec-dichloropropane											1 U
1,1-dichloropropene											0.5 U
cis-1,3-dichloropropene	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
trans-1,3-dichloropropene	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
2,3-dimethylbutane										14 NJ	
2,4-dimethylhexane											3.3 NJ
2,5-dimethylhexane										15 NJ	
ethylbenzene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
hexachlorobutadiene											0.5 U
2-hexanone	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5 U	
isopropylbenzene											42
p-isopropyltoluene											0.5 U
methylene chloride	1 U	1 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 U		1 U
4-methyl-2-pentanone	2 U	2 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	5 U	
naphthalene											0.5 U
n-propylbenzene											0.49
styrene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.4 U

Table A1-1j
Groundwater Samples: FED-2C EBS 23E First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E
WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
Station ID	030-Z06-038	190-Z06-011	26B28	26B28	26B28	26B29	26B29	26B40	26B40	26SW02	26SW02
Sample ID	030-0047	190-0014	C014G023	C014G024	C014G025	C014G026	C014G027	C014G051	C014G052	C014G058	C014G085
Sample Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	8.5 - 8.5	7.5 - 8.5	6 - 6	15 - 15	15 - 15	6 - 6	15 - 15	6 - 6	15 - 15	6.2 - 16.2	6.2 - 16.2
Sample Date	16-Oct-95	04-Oct-95	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	25-Mar-02	25-Mar-02	21-May-02	29-Aug-02
Reference	IT 2001	IT 2001	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a
1,1,1,2-tetrachloroethane											0.5 U
1,1,2,2-tetrachloroethane	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.4 U
tetrachloroethene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
toluene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
1,2,3-trichlorobenzene											0.5 UJ
1,2,4-trichlorobenzene											0.5 U
1,1,1-trichloroethane	1 U	1 U	3 UJ	3 UJ	3 UJ	3 UJ	3 UJ	3 U	3 U		0.5 U
1,1,2-trichloroethane	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
trichloroethene	1 U	1 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
trichlorofluoromethane			3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
1,2,3-trichloropropane											2 U
1,2,4-trimethylbenzene											0.5 U
1,3,5-trimethylbenzene											0.5 U
1,1,3-trimethylcyclohexane										12 NJ	
1,1,3-trimethylcyclopentane											2.8 NJ
1,2,4-trimethylcyclopentane										20 NJ	
2,2,5-trimethylhexane											7.1 NJ
2,2,4-trimethylpentane										120 NJ	
2,3,3-trimethylpentane											13 NJ
2,3,4-trimethylpentane											9.5 NJ
vinyl chloride	0.5 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
meta-,para-xylene			3 U	3 U	3 U	3 U	3 U	3 U	3 U	0.5 U	
m-, p-xylene											0.5 U
o-xylene			3 U	3 U	3 U	3 U	3 U	3 U	3 U		0.5 U
xylenes, total	1 U	1 U									
Petroleum Hydrocarbons (µg/L)											
diesel	100 U	100 U									

Table A1-1j
Groundwater Samples: FED-2C EBS 23E First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E
WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
Station ID	030-Z06-038	190-Z06-011	26B28	26B28	26B28	26B29	26B29	26B40	26B40	26SW02	26SW02
Sample ID	030-0047	190-0014	C014G023	C014G024	C014G025	C014G026	C014G027	C014G051	C014G052	C014G058	C014G085
Sample Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	8.5 - 8.5	7.5 - 8.5	6 - 6	15 - 15	15 - 15	6 - 6	15 - 15	6 - 6	15 - 15	6.2 - 16.2	6.2 - 16.2
Sample Date	16-Oct-95	04-Oct-95	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	25-Mar-02	25-Mar-02	21-May-02	29-Aug-02
Reference	IT 2001	IT 2001	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a
gasoline	50 U	50 U									
motor oil	200 U	200 U									
Metals (µg/L)											
aluminum											100 U
antimony											5 U
arsenic											10.5
barium											15.6
beryllium											2 U
cadmium											5 U
calcium											12300
chromium											5 U
chromium, hexavalent											0.02 U
cobalt											5 U
copper											5 U
iron											85.3
lead											5 U
magnesium											3260
manganese											20.9
mercury											0.2 U
nickel											5 U
potassium											7460 J
selenium											5 U
silver											1 U
sodium											44300
thallium											5 U
vanadium											5 U
zinc											50 U

Table A1-1j
Groundwater Samples: FED-2C EBS 23E First WBZ
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E	23E
WBZ	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST	FIRST
Station ID	030-Z06-038	190-Z06-011	26B28	26B28	26B28	26B29	26B29	26B40	26B40	26SW02	26SW02
Sample ID	030-0047	190-0014	C014G023	C014G024	C014G025	C014G026	C014G027	C014G051	C014G052	C014G058	C014G085
Sample Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	8.5 - 8.5	7.5 - 8.5	6 - 6	15 - 15	15 - 15	6 - 6	15 - 15	6 - 6	15 - 15	6.2 - 16.2	6.2 - 16.2
Sample Date	16-Oct-95	04-Oct-95	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	28-Feb-02	25-Mar-02	25-Mar-02	21-May-02	29-Aug-02
Reference	IT 2001	IT 2001	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a	BEI 2003a
BIOLOGICAL(MPN/100ML)											
coliform											2
fecal coliform											2 U

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
EBS – environmental baseline survey
FD – field duplicate
ID – identification
MPN –
µg/L – micrograms per liter
ML – mililiter
REG – regular
Review Qualifiers:
J – indicates an estimated value
NJ –
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit;

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	005-003-006	32FED-1A-1	32FED-1A-1	32FED-1A-1	32FED-1A-1	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-4	32FED-1A-4	32FED-1A-4	32FED-1A-4	A-1	A-2	A-3
			Sample_ID	005-0006M	C032C037	C032C038	C032C039	C032C040	C032C041	C032C042	C032C043	C032C044	C032C045	C032C046	C032C047	C032C048	C032C049	C032C050	C032C051	C032C052	C032C053	A1 [0.0-0.0]	A2 [0.0-0.0]	A3 [0.0-0.0]
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 1	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
			Collection_Date	13-Apr-95	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	03-May-90	03-May-90	03-May-90	03-May-90
			REFERENCE	IT 2001	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																							
VOC	acetone	67-64-1	UG/KG																							
VOC	benzene	71-43-2	UG/KG																							
VOC	bromodichloromethane	75-27-4	UG/KG																							
VOC	bromoform	75-25-2	UG/KG																							
VOC	bromomethane	74-83-9	UG/KG																							
VOC	2-butanone	78-93-3	UG/KG																							
VOC	carbon disulfide	75-15-0	UG/KG																							
VOC	carbon tetrachloride	56-23-5	UG/KG																							
VOC	chlorobenzene	108-90-7	UG/KG																							
VOC	chlorodibromomethane	124-48-1	UG/KG																							
VOC	chloroethane	75-00-3	UG/KG																							
VOC	chloroform	67-66-3	UG/KG																							
VOC	chloromethane	74-87-3	UG/KG																							
VOC	1,1-dichloroethane	75-34-3	UG/KG																							
VOC	1,2-dichloroethane	107-06-2	UG/KG																							
VOC	1,1-dichloroethene	75-35-4	UG/KG																							
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG																							
VOC	1,2-dichloropropane	78-87-5	UG/KG																							
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG																							
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG																							
VOC	ethylbenzene	100-41-4	UG/KG																							
VOC	2-hexanone	591-78-6	UG/KG																							
VOC	methylene chloride	75-09-2	UG/KG																							
VOC	4-methyl-2-pentanone	108-10-1	UG/KG																							
VOC	styrene	100-42-5	UG/KG																							
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG																							
VOC	tetrachloroethene	127-18-4	UG/KG																							
VOC	toluene	108-88-3	UG/KG																							
VOC	1,1,1-trichloroethane	71-55-6	UG/KG																							
VOC	1,1,2-trichloroethane	79-00-5	UG/KG																							
VOC	trichloroethene	79-01-6	UG/KG																							
VOC	vinyl acetate	108-05-4	UG/KG																							
VOC	vinyl chloride	75-01-4	UG/KG																							
VOC	xylenes, total	1330-20-7	UG/KG																							
FUELS	diesel	11-84-7	MG/KG	1 U																						
FUELS	gasoline	8006-61-9	MG/KG	0.5 U																						
FUELS	JP-5	21274-30-0	MG/KG																							
FUELS	motor oil	68476-77-7	MG/KG	27 U																						
FUELS	oil and grease	10-30-0	MG/KG																							
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG																							
SVOC	acenaphthene	83-32-9	UG/KG		5.3 U	1.6 J	2.9 J	8.6	25 U	5.3 U	11 U	6 U	5.6 U	5.8 U	5.8 U	6.1 U	6.1 U	59 U	5.7 U	12 U	6.1 U	1400 U	680 U	670 U
SVOC	acenaphthylene	208-96-8	UG/KG		1.9 J	3.6 J	6.5	2.7 J	25 U	5.3 U	11 U	6 U	5.6 U	5.8 U	5.8 U	6.1 U	6.1 U	59 U	5.7 U	12 U	6.1 U	1400 U	680 U	670 U
SVOC	anthracene	120-12-7	UG/KG		2.9 J	9.7	21	4.6 J	25 U	5.3 U	11 U	6 U	5.6 U	5.8 U	5.8 U	6.1 U	6.1 U	5.5 J	5.7 U	12 U	6.1 U	1400 U	680 U	670 U
SVOC	benz(a)anthracene	56-55-3	UG/KG		17	24	30	16	7.3 J	0.92 J	2 J	0.56 J	7.8	5.8 U	5.8 U	6.1 U	6.1 U	22 J	0.35 J	3 J	0.85 J	1400 U	680 U	670 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG		32	43	55	22	16 J	1.4 J	7 J	0.76 J	15	5.8 U	5.8 U	1.5 J	6.1 U	54 J	0.65 J	8.1 J	0.9 J	1400 U	680 U	670 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG		15	11	18	14	17 J	1.2 J	3.3 J	0.83 J	8.3	5.8 U	5.8 U	6.1 U	6.1 U	49 J	0.46 J	8.3 J	1.1 J	1400 U	680 U	670 U
SVOC	benzoic acid	65-85-0	UG/KG																			1400 U	680 U	670 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG		88	38	53	29	41	1.7 J	8.8 J	0.96 J	30	5.8 U	5.8 U	1.9 J	6.1 U	56 J	0.89 J	10 J	0.88 J	1400 U	680 U	670 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG		33	33	53	21	19 J	1.2 J	5.6 J	1.1 J	14	5.8 U	5.8 U	6.1 U	6.1 U	45 J	0.66 J	6.7 J	1.4 J	1400 U	680 U	670 U
SVOC	benzyl alcohol	100-51-6	UG/KG																			1400 U	680 U	670 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG																			1400 U	680 U	670 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG																			1400 U	680 U	670 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG																			1400 U	680 U	670 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG																			1400 U	680 U	670 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG																			1400 U	680 U	670 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG																			1400 U	680 U	670 U
SVOC	carbazole	86-74-8	UG/KG																					
SVOC	4-chloroaniline	106-47-8	UG/KG																			1400 U	680 U	670 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG																			1400 U	680 U	670 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG																			1400 U	680 U	670 U
SVOC	2-chlorophenol	95-57-8	UG/KG																			1400 U	680 U	670 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG																			1400 U	680 U	670 U
SVOC	chrysene	218-01-9	UG/KG		82	34	43	42	42	1.6 J	12	0.74 J	26	5.8 U	5.8 U	2.3 J	6.1 U	82	0.46 J	10 J	0.87 J	1400 U	680 U	670 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG		18	6.5	8.1	4.4 J	13 J	0.72 J	3.7 J	6 U	6.5	5.8 U	5.8 U	6.1 U	6.1 U	16 J	5.7 U	12 U	6.1 U	1400 U	680 U	670 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG																			1400 U	680 U	670 U
SVOC	dibenzofuran	132-64-9	UG/KG																			6600 U	3300 U	3200 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG																			1400 U	680 U	670 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG																			1400 U	680 U	670 U
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG																			1400 U	680 U	670 U
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG																			2700 U	1400 U	1300 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG																			1400 U	680 U	670 U
SVOC	diethyl phthalate	84-66-2	UG/KG																			1400 U	680 U	670 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG																			6600 U	3300 U	3200 U

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	A-4	A-5	A-6	A-7	A-8	B-2	B-3	B-4	B-5	B-6	B-7	B-8	M025-A	M025-A	M025-A	M025-A	M025-C	M025-E	M025-E	M025-E	M025-E	M025-E	SS1-RA-20
			Sample_ID	A4 [0.0-0.0]	A5 [0.0-0.0]	A6 [0.0-0.0]	A7 [0.0-0.0]	A8 [0.0-0.0]	B2 [0.0-0.0]	B3 [0.0-0.0]	B4 [0.0-0.0]	B5 [0.0-0.0]	B6 [0.0-0.0]	B7 [0.0-0.0]	B8 [0.0-0.0]	15-270	15-271	M-025A-004	M-025C-080	M025C-0	15-272	15-273	M-020E-03	M-025E-02	280-S01-21
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0.5	2 - 2.5	4 - 4	80 - 80	0 - 0	0 - 0.5	2 - 2.5	32 - 33	21.5 - 22.8	0 - 0.5
			Collection_Date	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	29-Oct-07	29-Oct-07	24-May-91	22-May-91	25-Apr-91	29-Oct-07	29-Oct-07	########	########	12-Jul-94
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																							
VOC	acetone	67-64-1	UG/KG															330 UJ	230 UJ				230	220	
VOC	benzene	71-43-2	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	bromodichloromethane	75-27-4	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	bromoform	75-25-2	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	bromomethane	74-83-9	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	2-butanone	78-93-3	UG/KG															54 U	59 U				12 U	12 U	
VOC	carbon disulfide	75-15-0	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	carbon tetrachloride	56-23-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	chlorobenzene	108-90-7	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	chlorodibromomethane	124-48-1	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	chloroethane	75-00-3	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	chloroform	67-66-3	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	chloromethane	74-87-3	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,1-dichloroethane	75-34-3	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,2-dichloroethane	107-06-2	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,1-dichloroethene	75-35-4	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,2-dichloropropane	78-87-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	ethylbenzene	100-41-4	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	2-hexanone	591-78-6	UG/KG															54 U	59 U				12 U	12 U	
VOC	methylene chloride	75-09-2	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															54 U	59 U				12 U	12 U	
VOC	styrene	100-42-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	tetrachloroethene	127-18-4	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	toluene	108-88-3	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	trichloroethene	79-01-6	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	vinyl acetate	108-05-4	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	vinyl chloride	75-01-4	UG/KG															27 U	29 U				6.1 U	6.2 U	
VOC	xylenes, total	1330-20-7	UG/KG															27 U	29 U				6.1 U	6.2 U	
FUELS	diesel	11-84-7	MG/KG																						10 U
FUELS	gasoline	8006-61-9	MG/KG																						0.520 U
FUELS	JP-5	21274-30-0	MG/KG																						10 U
FUELS	motor oil	68476-77-7	MG/KG																						41 J
FUELS	oil and grease	10-30-0	MG/KG																	2570					
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG				230	390	240	110										910					
SVOC	acenaphthene	83-32-9	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	acenaphthylene	208-96-8	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	anthracene	120-12-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U
SVOC	benzoic acid	65-85-0	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			910 U	980 U	4600 U			1000 U	1000 U	
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			170 U	190 U	870 U			200 U	200 U	340 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U
SVOC	benzyl alcohol	100-51-6	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 UJ	480 UJ	540 U			1100	210 UJ	340 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U
SVOC	carbazole	86-74-8	UG/KG																						340 U
SVOC	4-chloroaniline	106-47-8	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			320 U	350 U	1600 U			370 U	370 U	340 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	2-chlorophenol	95-57-8	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U
SVOC	chrysene	218-01-9	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			170 U	190 U	870 U			200 U	200 U	340 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG	930 U	2000 U	1400 U	700 U	1100 U	660 U	1100 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	dibenzofuran	132-64-9	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			130 U	140 U	650 U			150 U	150 U	340 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG	1400 U	1400 U	2900 U	1400 U	1300 U	1300 U	1400 U	1400 U	1400 U	1500 U	1500 U	6900 U			540 U	590 U	2700 U			610 U	620 U	340 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U
SVOC	diethyl phthalate	84-66-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			540 U	590 U	2700 U			610 U	620 U	340 U

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A
			EBS_PARCEL	5
			WBZ	SOIL
			Station_ID	SS1-RA-21
			Sample_ID	280-S01-274
			Sample_Type	REG
			Depth	0 - 0.5
			Collection_Date	12-Jul-94
			REFERENCE	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units	
VOC	acetone	67-64-1	UG/KG	
VOC	benzene	71-43-2	UG/KG	
VOC	bromodichloromethane	75-27-4	UG/KG	
VOC	bromoform	75-25-2	UG/KG	
VOC	bromomethane	74-83-9	UG/KG	
VOC	2-butanone	78-93-3	UG/KG	
VOC	carbon disulfide	75-15-0	UG/KG	
VOC	carbon tetrachloride	56-23-5	UG/KG	
VOC	chlorobenzene	108-90-7	UG/KG	
VOC	chlorodibromomethane	124-48-1	UG/KG	
VOC	chloroethane	75-00-3	UG/KG	
VOC	chloroform	67-66-3	UG/KG	
VOC	chloromethane	74-87-3	UG/KG	
VOC	1,1-dichloroethane	75-34-3	UG/KG	
VOC	1,2-dichloroethane	107-06-2	UG/KG	
VOC	1,1-dichloroethene	75-35-4	UG/KG	
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG	
VOC	1,2-dichloropropane	78-87-5	UG/KG	
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG	
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG	
VOC	ethylbenzene	100-41-4	UG/KG	
VOC	2-hexanone	591-78-6	UG/KG	
VOC	methylene chloride	75-09-2	UG/KG	
VOC	4-methyl-2-pentanone	108-10-1	UG/KG	
VOC	styrene	100-42-5	UG/KG	
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG	
VOC	tetrachloroethene	127-18-4	UG/KG	
VOC	toluene	108-88-3	UG/KG	
VOC	1,1,1-trichloroethane	71-55-6	UG/KG	
VOC	1,1,2-trichloroethane	79-00-5	UG/KG	
VOC	trichloroethene	79-01-6	UG/KG	
VOC	vinyl acetate	108-05-4	UG/KG	
VOC	vinyl chloride	75-01-4	UG/KG	
VOC	xylenes, total	1330-20-7	UG/KG	
FUELS	diesel	11-84-7	MG/KG	110 U
FUELS	gasoline	8006-61-9	MG/KG	0.560 U
FUELS	JP-5	21274-30-0	MG/KG	110 U
FUELS	motor oil	68476-77-7	MG/KG	220 J
FUELS	oil and grease	10-30-0	MG/KG	
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG	
SVOC	acenaphthene	83-32-9	UG/KG	370 U
SVOC	acenaphthylene	208-96-8	UG/KG	370 U
SVOC	anthracene	120-12-7	UG/KG	370 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	370 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	370 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	370 U
SVOC	benzoic acid	65-85-0	UG/KG	
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	370 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	370 U
SVOC	benzyl alcohol	100-51-6	UG/KG	
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG	370 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG	370 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG	370 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG	370 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG	370 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG	370 U
SVOC	carbazole	86-74-8	UG/KG	370 U
SVOC	4-chloroaniline	106-47-8	UG/KG	370 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG	370 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG	370 U
SVOC	2-chlorophenol	95-57-8	UG/KG	370 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG	370 U
SVOC	chrysene	218-01-9	UG/KG	370 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	370 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG	370 U
SVOC	dibenzofuran	132-64-9	UG/KG	370 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG	370 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG	370 U
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG	370 U
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG	370 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG	370 U
SVOC	diethyl phthalate	84-66-2	UG/KG	370 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG	370 U

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	005-003-006	32FED-1A-1	32FED-1A-1	32FED-1A-1	32FED-1A-1	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-4	32FED-1A-4	32FED-1A-4	32FED-1A-4	A-1	A-2	A-3
			Sample_ID	005-0006M	C032C037	C032C038	C032C039	C032C040	C032C041	C032C042	C032C043	C032C044	C032C045	C032C046	C032C047	C032C048	C032C049	C032C050	C032C051	C032C052	C032C053	A1 [0.0-0.0]	A2 [0.0-0.0]	A3 [0.0-0.0]
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 1	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0	0 - 0	0 - 0
			Collection_Date	13-Apr-95	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	03-May-90	03-May-90	03-May-90
			REFERENCE	IT 2001	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																							
SVOC	dimethyl phthalate	131-11-3	UG/KG																				1400 U	680 U	670 U
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG																				6600 U	3300 U	3200 U
SVOC	2,4-dinitrophenol	51-28-5	UG/KG																				6600 U	3300 U	3200 U
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG																				1400 U	680 U	670 U
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG																				1400 U	680 U	670 U
SVOC	di-n-octyl phthalate	117-84-0	UG/KG																				1400 U	680 U	670 U
SVOC	fluoranthene	206-44-0	UG/KG		24	44	58	32	19 J	2.2 J	8.6 J	0.71 J	21	5.8 U	5.8 U	6.1 U	6.1 U	82	0.68 J	7 J	0.55 J	1400 U	680 U	670 U
SVOC	fluorene	86-73-7	UG/KG		2.4 J	3.2 J	4.4 J	17	25 U	5.3 U	11 U	6 U	5.6 U	5.8 U	5.8 U	6.1 U	6.1 U	59 U	5.7 U	12 U	6.1 U	1400 U	680 U	670 U
SVOC	hexachlorobenzene	118-74-1	UG/KG																				1400 U	680 U	670 U
SVOC	hexachlorobutadiene	87-68-3	UG/KG																				1400 U	680 U	670 U
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG																				1400 U	680 U	670 U
SVOC	hexachloroethane	67-72-1	UG/KG																				1400 U	680 U	670 U
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG		29	35	52	19	16 J	1.3 J	5.4 J	0.99 J	9.7	0.63 J	5.8 U	1.2 J	6.1 U	37 J	0.81 J	6 J	0.9 J	1400 U	680 U	670 U
SVOC	isophorone	78-59-1	UG/KG																				1400 U	680 U	670 U
SVOC	2-methylnaphthalene	91-57-6	UG/KG		7.3	4.8 J	2.9 J	23	2.5 J	0.62 J	1 J	6 U	5.6 U	5.8 U	5.8 U	6.1 U	6.1 U	13 J	5.7 U	0.85 J	6.1 U	1400 U	680 U	670 U
SVOC	2-methylphenol	95-48-7	UG/KG																				1400 U	680 U	670 U
SVOC	4-methylphenol	106-44-5	UG/KG																				1400 U	680 U	670 U
SVOC	naphthalene	91-20-3	UG/KG		3.3 J	4.9 J	4.4 J	34	2.1 J	0.55 J	1.1 J	6 U	5.6 U	5.8 U	5.8 U	6.1 U	6.1 U	12 J	5.7 U	0.79 J	6.1 U	1400 U	680 U	670 U
SVOC	2-nitroaniline	88-74-4	UG/KG																				6600 U	3300 U	3200 U
SVOC	3-nitroaniline	99-09-2	UG/KG																				6600 U	3300 U	3200 U
SVOC	4-nitroaniline	100-01-6	UG/KG																				6600 U	3300 U	3200 U
SVOC	nitrobenzene	98-95-3	UG/KG																				1400 U	680 U	670 U
SVOC	4-nitrophenol	100-02-7	UG/KG																				6600 U	3300 U	3200 U
SVOC	2-nitrophenol	88-75-5	UG/KG																				1400 U	680 U	670 U
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG																				1400 U	680 U	670 U
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG																				1400 U	680 U	670 U
SVOC	pentachlorophenol	87-86-5	UG/KG																				6600 U	3300 U	3200 U
SVOC	phenanthrene	85-01-8	UG/KG		14	24	24	40	7.1 J	1.4 J	3.6 J	6 U	9.9	5.8 U	5.8 U	6.1 U	6.1 U	37 J	0.45 J	3.4 J	6.1 U	1400 U	680 U	670 U
SVOC	phenol	108-95-2	UG/KG																				1400 U	680 U	670 U
SVOC	pyrene	129-00-0	UG/KG		40	48	74	53	19 J	2.1 J	8.7 J	1.1 J	20	5.8 U	5.8 U	6.1 U	6.1 U	83	0.88 J	7.9 J	0.97 J	1400 U	680 U	670 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG																				1400 U	680 U	670 U
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG																				6600 U	3300 U	3200 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG																				1400 U	680 U	670 U
PEST/PCB	aldrin	309-00-2	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG																				130 U	260 U	250 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG																				130 U	260 U	250 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG																				130 U	260 U	250 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG																				130 U	260 U	250 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG																				130 U	260 U	250 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG																				260 U	510 U	500 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG																				370	510 U	500 U
PEST/PCB	alpha-BHC	319-84-6	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	beta-BHC	319-85-7	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	delta-BHC	319-86-8	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	chlordane	57-74-9	UG/KG																				51 U	100 U	100 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG																						
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG																						
PEST/PCB	4,4'-DDD	72-54-8	UG/KG																				10 U	21 U	20 U
PEST/PCB	4,4'-DDE	72-55-9	UG/KG																				10 U	21 U	20 U
PEST/PCB	4,4'-DDT	50-29-3	UG/KG																				10 U	21 U	20 U
PEST/PCB	dieldrin	60-57-1	UG/KG																				10 U	21 U	20 U
PEST/PCB	endosulfan I	959-98-8	UG/KG																				10 U	21 U	20 U
PEST/PCB	endosulfan II	33213-65-9	UG/KG																				10 U	21 U	20 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG																				10 U	21 U	20 U
PEST/PCB	endrin	72-20-8	UG/KG																				10 U	21 U	20 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG																				10 U	21 U	20 U
PEST/PCB	endrin ketone	53494-70-5	UG/KG																						
PEST/PCB	heptachlor	76-44-8	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG																				5.1 U	10 U	10 U
PEST/PCB	methoxychlor	72-43-5	UG/KG																				26 U	51 U	50 U
PEST/PCB	toxaphene	8001-35-2	UG/KG																				260 U	510 U	500 U
METALS	aluminum	7429-90-5	MG/KG																					4590	4710
METALS	antimony	7440-36-0	MG/KG																				6.2 U	6.2 U	6 U
METALS	arsenic	7440-38-2	MG/KG																				10 U	10 U	10 U
METALS	barium	7440-39-3	MG/KG																				47	25	27
METALS	beryllium	7440-41-7	MG/KG																				1 U	1 U	1 U
METALS	cadmium	7440-43-9	MG/KG																				3.1	1 U	1 U
METALS	calcium	7440-70-2	MG/KG																				3600	2900	2800
METALS	chromium	7440-47-3	MG/KG																				37	31	31
METALS	cobalt	7440-48-4	MG/KG																				5.4	5.1 U	5 U
METALS	copper	7440-50-8	MG/KG																				27	11	11
METALS	iron	7439-89-6	MG/KG																				11300	7900	8420

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

		TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
		EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Station_ID	A-4	A-5	A-6	A-7	A-8	B-2	B-3	B-4	B-5	B-6	B-7	B-8	M025-A	M025-A	M025-A	M025-A	M025-C	M025-E	M025-E	M025-E	M025-E	M025-E	M025-E	SS1-RA-20		
		Sample_ID	A4 [0.0-0.0]	A5 [0.0-0.0]	A6 [0.0-0.0]	A7 [0.0-0.0]	A8 [0.0-0.0]	B2 [0.0-0.0]	B3 [0.0-0.0]	B4 [0.0-0.0]	B5 [0.0-0.0]	B6 [0.0-0.0]	B7 [0.0-0.0]	B8 [0.0-0.0]	15-270	15-271	M-025A-004	M-025C-080	M025C-0	15-272	15-273	M-020E-03	M-025E-02	280-S01-21				
		Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG				
		Depth	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0.5	2 - 2.5	4 - 4	80 - 80	0 - 0	0 - 0.5	2 - 2.5	32 - 33	21.5 - 22.8	0 - 0.5				
		Collection_Date	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	29-Oct-07	29-Oct-07	24-May-91	22-May-91	25-Apr-91	29-Oct-07	29-Oct-07	########	########	12-Jul-94				
		REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004				
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																									
SVOC	dimethyl phthalate	131-11-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			1100 U	1200 U	5400 U			1200 U	1200 U	820 U				
SVOC	2,4-dinitrophenol	51-28-5	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			1500 U	1600 U	7600 U			1700 U	1700 U	820 U				
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	di-n-octyl phthalate	117-84-0	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	fluoranthene	206-44-0	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	fluorene	86-73-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	hexachlorobenzene	118-74-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U				
SVOC	hexachlorobutadiene	87-68-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			1100 U	1200 U	5400 U			1200 U	1200 U	340 U				
SVOC	hexachloroethane	67-72-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U				
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			170 U	190 U	870 U			200 U	200 U	340 U				
SVOC	isophorone	78-59-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	2-methylnaphthalene	91-57-6	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U				
SVOC	2-methylphenol	95-48-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	4-methylphenol	106-44-5	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	naphthalene	91-20-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	2-nitroaniline	88-74-4	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			170 U	190 U	870 U			200 U	200 U	820 U				
SVOC	3-nitroaniline	99-09-2	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			320 U	350 U	1600 U			370 U	370 U	820 U				
SVOC	4-nitroaniline	100-01-6	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			170 U	190 U	870 U			200 U	200 U	820 U				
SVOC	nitrobenzene	98-95-3	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	4-nitrophenol	100-02-7	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			540 U	590 U	2700 U			610 U	620 U	820 U				
SVOC	2-nitrophenol	88-75-5	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U				
SVOC	pentachlorophenol	87-86-5	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			540 U	590 U	2700 UJ			610 UJ	620 U	820 U				
SVOC	phenanthrene	85-01-8	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 U	440 U			98 U	99 U	340 U				
SVOC	phenol	108-95-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			150 U	160 U	760 U			170 U	170 U	340 U				
SVOC	pyrene	129-00-0	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			86 U	94 UJ	440 U			98 U	99 U	340 U				
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			110 U	120 U	540 U			120 U	120 U	340 U				
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG	3400 U	3400 U	6900 U	3300 U	3300 U	3200 U	3300 U	3300 U	3400 U	3600 U	3500 U	17000 U			320 U	350 U	1600 U			370 U	370 U	820 U				
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG	700 U	700 U	1400 U	680 U	670 U	660 U	680 U	670 U	700 U	740 U	730 U	3400 U			320 U	350 U	1600 U			370 U	370 U	340 U				
PEST/PCB	aldrin	309-00-2	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG	130 U	27 U	140 U	26 U	26 U	25 U	26 U	26 U	26 U	28 U	28 U	26 U			36 U	39 U	36.3 U			40.8 U	41.3 U	34 U				
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG	130 U	27 U	140 U	26 U	26 U	25 U	26 U	26 U	26 U	28 U	28 U	26 U			36 U	39 U	36 U			41 U	41 U	69 U				
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG	130 U	27 U	140 U	26 U	26 U	25 U	26 U	26 U	26 U	28 U	28 U	26 U			36 U	39 U	36 U			41 U	41 U	34 U				
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG	130 U	27 U	140 U	26 U	26 U	25 U	26 U	26 U	26 U	28 U	28 U	26 U			36 U	39 U	36 U			41 U	41 U	34 U				
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG	130 U	27 U	140 U	26 U	26 U	25 U	26 U	26 U	26 U	28 U	28 U	26 U			36 U	39 U	36 U			41 U	41 U	34 U				
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG	260 U	53 U	270 U	51 U	51 U	50 U	51 U	51 U	53 U	56 U	55 U	52 U			36 U	39 U	36 U			41 U	41 U	34 U				
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG	260 U	53 U	270 U	51 U	51 U	50 U	51 U	51 U	53 U	56 U	55 U	52 U			36 U	39 U	120			41 U	41 U	34 U				
PEST/PCB	alpha-BHC	319-84-6	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			1.8 U	2 U	1.8 U			2 U	2.1 U	1.8 U				
PEST/PCB	beta-BHC	319-85-7	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	delta-BHC	319-86-8	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			1.8 U	2 U	1.8 U			2 U	2.1 U	1.8 U				
PEST/PCB	chlordane	57-74-9	UG/KG	53 U	11 U	54 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	4,4'-DDD	72-54-8	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			7.2 U	7.8 U	7.3 U			8.2 U	8.3 U	3.4 U				
PEST/PCB	4,4'-DDE	72-55-9	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	3.4 U				
PEST/PCB	4,4'-DDT	50-29-3	UG/KG	11 U	2.1 U	11 U	2 U	2 U	3	3.3	2 U	2.1 U	2.3 U	2.2 U	2 U			7.2 U	7.8 U	7.3 U			8.2 U	8.3 U	1.6 J				
PEST/PCB	dieldrin	60-57-1	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	3.4 U				
PEST/PCB	endosulfan I	959-98-8	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	endosulfan II	33213-65-9	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			7.2 U	7.8 U	7.3 U			8.2 U	8.3 U	3.4 U				
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			7.2 U	7.8 U	7.3 U			8.2 U	8.3 U	1.7 J				
PEST/PCB	endrin	72-20-8	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	3.4 U				
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG	11 U	2.1 U	11 U	2 U	2 U	2 U	2 U	2 U	2.1 U	2.3 U	2.2 U	2 U										3.4 U				
PEST/PCB	endrin ketone	53494-70-5	UG/KG															7.2 U	7.8 U	7.3 U			8.2 U	8.3 U	3.4 U				
PEST/PCB	heptachlor	76-44-8	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG	5.3 U	1 U	5.4 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			3.6 U	3.9 U	3.6 U			4.1 U	4.1 U	1.8 U				
PEST/PCB	methoxychlor	72-43-5	UG/KG	26 U	5.3 U	27 U	5.1 U	5 U	5 U	5.4 U	5.1 U	5.3 U	5.6 U	5.5 U	5.2 U			36 U	39 U	36.3 U			40.8 U	41.3 U	18 U				
PEST/PCB	toxaphene	8001-35-2	UG/KG	260 U	53 U	270 U	51 U	51 U	50 U	51 U	51 U	53 U	56 U	55 U	52 U			72.1 U	78.1 U	72.6 U			81.6 U	82.5 U	180 U				
METALS	aluminum	7429-90-5	MG/KG	4850	4980	5810	5520	5220	5490	4240	4380	4870	4880	4160	4380			6350 J	17400 J	3540 J			5220 J	5720 J	3150				
METALS	antimony	7440-36-0	MG/KG	6.3 U	6.4 U	6.5 U	6.2 U	6.1 U	6 U	6.2 U	6.1 U	6.3 U	6.8 U	6.6 U	6.2 U			2.6 UJ	3.5	2.7 U			3 UJ	2.8 J	0.71 U				
METALS	arsenic	7440-38-2	MG/KG	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	11	11 U	11 U	10 U			1.74	13.4	3.51			1.85	1.28	2.3 U				
METALS	barium	7440-39-3	MG/KG	26	32	30	35	29	22	22	22	21 U	27	22 U	27			42 J	82.6 J	68.3			17.9	57.4 J	31.6 J				
METALS	beryllium	7440-41-7	MG/KG	1.1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			0.968 J	2.15	0.644			0.36	1.1 J	0.22 U				
METALS	cadmium	7440-43-9	MG/KG	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1 U	1.1 U	1 U			0.595	0.302 U	1.11 J			0.363 U	0.307 U	0.27 J				
METALS	calcium	7440-70-2	MG/KG	3200	2800	4300	3000	3000	3300	3100	3000	3000	3200	2600	2800			3690 J	3180 J	2630 J			2280 J	2300 J	1440 J				
METALS	chromium	7440-47-3	MG/KG	32	31	31	31	32	35	27	29	34	33	29	26			36.2 J	70.8 J	17.4 J			32.7 J	34.7 J	29 J				
METALS	cobalt	7440-48-4	MG/KG	5.3 U	5.3 U	5.4 U	5.1 U	5 U	5 U	5.1 U	5.1 U	5.3 U	5.6 U	5.5 U	5.2 U			5.84	12.7	4.28			6.05	5.84	1.4 J				
METALS	copper	7440-50-8	MG/KG	9.8	7.8	12	14	13	10	8.7	7.8	6.1	7.3	5.5 U	7.6			19.4	39.9 J	21.9 J			5.23 J	6.33	20.3 J				
METALS	iron	7439-89-6	MG/KG	8470	8680	9420	9400	9050	8920	7780	7950	8090	8140	7360	7150			11600 J	26500 J	6810 J			9500 J	10100 J	6610				

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

TRANSFER_PARCEL	FED-1A
EBS_PARCEL	5
WBZ	SOIL
Station_ID	SS1-RA-21
Sample_ID	280-S01-274
Sample_Type	REG
Depth	0 - 0.5
Collection_Date	12-Jul-94
REFERENCE	TtEMI 2004

PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units	
SVOC	dimethyl phthalate	131-11-3	UG/KG	370 U
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG	890 U
SVOC	2,4-dinitrophenol	51-28-5	UG/KG	890 U
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG	370 U
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG	370 U
SVOC	di-n-octyl phthalate	117-84-0	UG/KG	370 U
SVOC	fluoranthene	206-44-0	UG/KG	370 U
SVOC	fluorene	86-73-7	UG/KG	370 U
SVOC	hexachlorobenzene	118-74-1	UG/KG	370 U
SVOC	hexachlorobutadiene	87-68-3	UG/KG	370 U
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG	370 U
SVOC	hexachloroethane	67-72-1	UG/KG	370 U
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	370 U
SVOC	isophorone	78-59-1	UG/KG	370 U
SVOC	2-methylnaphthalene	91-57-6	UG/KG	370 U
SVOC	2-methylphenol	95-48-7	UG/KG	370 U
SVOC	4-methylphenol	106-44-5	UG/KG	370 U
SVOC	naphthalene	91-20-3	UG/KG	370 U
SVOC	2-nitroaniline	88-74-4	UG/KG	890 U
SVOC	3-nitroaniline	99-09-2	UG/KG	890 U
SVOC	4-nitroaniline	100-01-6	UG/KG	890 U
SVOC	nitrobenzene	98-95-3	UG/KG	370 U
SVOC	4-nitrophenol	100-02-7	UG/KG	890 U
SVOC	2-nitrophenol	88-75-5	UG/KG	370 U
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG	370 U
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG	370 U
SVOC	pentachlorophenol	87-86-5	UG/KG	890 U
SVOC	phenanthrene	85-01-8	UG/KG	370 U
SVOC	phenol	108-95-2	UG/KG	370 U
SVOC	pyrene	129-00-0	UG/KG	370 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG	370 U
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG	890 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG	370 U
PEST/PCB	aldrin	309-00-2	UG/KG	1.9 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG	37 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG	74 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG	37 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG	37 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG	37 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG	37 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG	37 U
PEST/PCB	alpha-BHC	319-84-6	UG/KG	1.9 U
PEST/PCB	beta-BHC	319-85-7	UG/KG	1.9 U
PEST/PCB	delta-BHC	319-86-8	UG/KG	1.9 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG	1.9 U
PEST/PCB	chlordane	57-74-9	UG/KG	
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG	1.9 U
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG	1.9 U
PEST/PCB	4,4'-DDD	72-54-8	UG/KG	3.7 U
PEST/PCB	4,4'-DDE	72-55-9	UG/KG	3.7 U
PEST/PCB	4,4'-DDT	50-29-3	UG/KG	3.7 U
PEST/PCB	dieldrin	60-57-1	UG/KG	3.7 U
PEST/PCB	endosulfan I	959-98-8	UG/KG	1.9 U
PEST/PCB	endosulfan II	33213-65-9	UG/KG	3.7 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG	3.7 U
PEST/PCB	endrin	72-20-8	UG/KG	3.7 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG	3.7 U
PEST/PCB	endrin ketone	53494-70-5	UG/KG	3.7 U
PEST/PCB	heptachlor	76-44-8	UG/KG	1.9 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG	1.9 U
PEST/PCB	methoxychlor	72-43-5	UG/KG	19 U
PEST/PCB	toxaphene	8001-35-2	UG/KG	190 U
METALS	aluminum	7429-90-5	MG/KG	4210
METALS	antimony	7440-36-0	MG/KG	0.5 U
METALS	arsenic	7440-38-2	MG/KG	2 U
METALS	barium	7440-39-3	MG/KG	20.5 J
METALS	beryllium	7440-41-7	MG/KG	0.24 U
METALS	cadmium	7440-43-9	MG/KG	0.16 J
METALS	calcium	7440-70-2	MG/KG	2260 J
METALS	chromium	7440-47-3	MG/KG	26.4 J
METALS	cobalt	7440-48-4	MG/KG	4.2 J
METALS	copper	7440-50-8	MG/KG	5.1 U
METALS	iron	7439-89-6	MG/KG	6720

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	005-003-006	32FED-1A-1	32FED-1A-1	32FED-1A-1	32FED-1A-1	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-2	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-3	32FED-1A-4	32FED-1A-4	32FED-1A-4	32FED-1A-4	A-1	A-2	A-3
			Sample_ID	005-0006M	C032C037	C032C038	C032C039	C032C040	C032C041	C032C042	C032C043	C032C044	C032C045	C032C046	C032C047	C032C048	C032C049	C032C050	C032C051	C032C052	C032C053	A1 [0.0-0.0]	A2 [0.0-0.0]	A3 [0.0-0.0]
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 1	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0	0 - 0	0 - 0
			Collection_Date	13-Apr-95	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	03-May-90	03-May-90	03-May-90
			REFERENCE	IT 2001	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2004	TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																							
METALS	lead	7439-92-1	MG/KG																					62	9.2	12
METALS	magnesium	7439-95-4	MG/KG																					2800	1900	2200
METALS	manganese	7439-96-5	MG/KG																					150	94	100
METALS	mercury	7439-97-6	MG/KG																							
METALS	molybdenum	7439-98-7	MG/KG																					5.1 U	5.1 U	5 U
METALS	nickel	7440-02-0	MG/KG																					33	22	23
METALS	potassium	7440-09-7	MG/KG																					810	670	640
METALS	selenium	7782-49-2	MG/KG																					10 U	10 U	10 U
METALS	silver	7440-22-4	MG/KG																					5.1 U	10	5 U
METALS	sodium	7440-23-5	MG/KG																					510 U	510 U	500 U
METALS	thallium	7440-28-0	MG/KG																					10 U	10 U	10 U
METALS	titanium	7440-32-6	MG/KG																					400	440	430
METALS	vanadium	7440-62-2	MG/KG																					25	21	21
METALS	zinc	7440-66-6	MG/KG																					83	24	29
RAD	americium-241	14596-10-2	pCi/g																							
RAD	cesium-137	10045-97-3	pCi/g																							
RAD	cobalt-60	10198-40-0	pCi/g																							
RAD	europium-152	14683-23-9	pCi/g																							
RAD	europium-154	15585-10-1	pCi/g																							
RAD	potassium-40	13966-00-2	pCi/g																							
RAD	radium-226	13982-63-3	pCi/g																							
RAD	thorium	7440-29-1	pCi/g																							

Table A1-2a
Soil Samples: FED-1A EBS 5
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

		TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
		EBS_PARCEL	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
		WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
		Station_ID	A-4	A-5	A-6	A-7	A-8	B-2	B-3	B-4	B-5	B-6	B-7	B-8	M025-A	M025-A	M025-A	M025-A	M025-C	M025-E	M025-E	M025-E	M025-E	SS1-RA-20			
		Sample_ID	A4 [0.0-0.0]	A5 [0.0-0.0]	A6 [0.0-0.0]	A7 [0.0-0.0]	A8 [0.0-0.0]	B2 [0.0-0.0]	B3 [0.0-0.0]	B4 [0.0-0.0]	B5 [0.0-0.0]	B6 [0.0-0.0]	B7 [0.0-0.0]	B8 [0.0-0.0]	15-270	15-271	M-025A-004	M-025C-080	M025C-0	15-272	15-273	M-020E-03	M-025E-02	280-S01-21			
		Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
		Depth	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0.5	2 - 2.5	4 - 4	80 - 80	0 - 0	0 - 0.5	2 - 2.5	32 - 33	21.5 - 22.8	0 - 0.5			
		Collection_Date	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	03-May-90	29-Oct-07	29-Oct-07	24-May-91	22-May-91	25-Apr-91	29-Oct-07	29-Oct-07	########	########	12-Jul-94			
		REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004			
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																								
METALS	lead	7439-92-1	MG/KG	21	14	27	34	23	29	28	13	21	23	9.5	28			27.5	5.65	31.3 J			2.29	3.74	20		
METALS	magnesium	7439-95-4	MG/KG	2300	2300	2600	2600	2600	2300	1900	2000	2100	2100	2000	2000			3290	9070	2330			3220	3390	1770		
METALS	manganese	7439-96-5	MG/KG	110	92	140	98	120	97	140	94	93	99	80	84			160 J	210 J	172 J			109	121 J	85.8		
METALS	mercury	7439-97-6	MG/KG															0.165	0.145	0.195			0.117 UJ	0.058 U	0.15 U		
METALS	molybdenum	7439-98-7	MG/KG	5.3 U	5.3 U	5.4 U	5.1 U	5 U	5 U	5.1 U	5.1 U	5.3 U	5.6 U	5.5 U	5.2 U										2.8 U		
METALS	nickel	7440-02-0	MG/KG	24	26	27	28	25	24	22	22	22	23	20	20			31	58	19.6			31.6 J	31.1	19.3		
METALS	potassium	7440-09-7	MG/KG	620	690	890	870	840	940	700	660	620	660	640	750			951	3330	713			794	974	752 J		
METALS	selenium	7782-49-2	MG/KG	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U			0.199 U	0.234 UJ	0.203 UJ			0.253 UJ	0.258 U	0.54 U		
METALS	silver	7440-22-4	MG/KG	5.3 U	5.3 U	5.4 U	5.1 U	5 U	5 U	5.1 U	5.1 U	5.3 U	5.6 U	5.5 U	5.2 U			0.665	0.558	0.52 U			0.619	0.593	0.18 U		
METALS	sodium	7440-23-5	MG/KG	530 U	530 U	540 U	510 U	510 U	660	510 U	510 U	530 U	560 U	550 U	520 U			851	1300	293			709 J	1260	1920		
METALS	thallium	7440-28-0	MG/KG	11 U	11 U	11 U	10 U	10 U	10 U	10 U	10 U	10 U	11 U	11 U	10 U			0.255 U	0.301 U	0.261 U			0.326 U	0.332 U	0.4 U		
METALS	titanium	7440-32-6	MG/KG	450	450	450	440	450	565	390	410	500	510	450	440												
METALS	vanadium	7440-62-2	MG/KG	22	21	24	23	22	24	21	20	22	21	19	20			26.3	54	13.6			21.7	23.9	15.5		
METALS	zinc	7440-66-6	MG/KG	32	68	43	61	37	35	32	23	26	28	21	28			57.5	69.7	52.2 J			24.3 J	23.1	30.9 U		
RAD	americium-241	14596-10-2	pCi/g													-0.0007 U	0.043 U				0.044 U	-0.03 U					
RAD	cesium-137	10045-97-3	pCi/g													-0.000004 U	0.0004 U				-0.02 U	-0.009 U					
RAD	cobalt-60	10198-40-0	pCi/g													-0.005 U	0 U				-0.013 U	0.009 U					
RAD	europium-152	14683-23-9	pCi/g													0 U	0.14 U				-0.03 U	-0.005 U					
RAD	europium-154	15585-10-1	pCi/g													-0.11 U	-0.14 U				0 U	0 U					
RAD	potassium-40	13966-00-2	pCi/g													8.5	8.7				9.5	7.8					
RAD	radium-226	13982-63-3	pCi/g													0.37 J	0.47 J				0.45	0.46					
RAD	thorium	7440-29-1	pCi/g													0.41	0.35 U				0.28 U	0.13 U					

Table A1-2a

Soil Samples: FED-1A EBS 5

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

TRANSFER_PARCEL	FED-1A
EBS_PARCEL	5
WBZ	SOIL
Station_ID	SS1-RA-21
Sample_ID	280-S01-274
Sample_Type	REG
Depth	0 - 0.5
Collection_Date	12-Jul-94
REFERENCE	TtEMI 2004

PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units	
METALS	lead	7439-92-1	MG/KG	16.9
METALS	magnesium	7439-95-4	MG/KG	2040
METALS	manganese	7439-96-5	MG/KG	88
METALS	mercury	7439-97-6	MG/KG	0.17 U
METALS	molybdenum	7439-98-7	MG/KG	3.1 U
METALS	nickel	7440-02-0	MG/KG	21.2
METALS	potassium	7440-09-7	MG/KG	592 J
METALS	selenium	7782-49-2	MG/KG	0.59 U
METALS	silver	7440-22-4	MG/KG	0.2 U
METALS	sodium	7440-23-5	MG/KG	465 J
METALS	thallium	7440-28-0	MG/KG	0.44 U
METALS	titanium	7440-32-6	MG/KG	
METALS	vanadium	7440-62-2	MG/KG	18.9
METALS	zinc	7440-66-6	MG/KG	26
RAD	americium-241	14596-10-2	pCi/g	
RAD	cesium-137	10045-97-3	pCi/g	
RAD	cobalt-60	10198-40-0	pCi/g	
RAD	europium-152	14683-23-9	pCi/g	
RAD	europium-154	15585-10-1	pCi/g	
RAD	potassium-40	13966-00-2	pCi/g	
RAD	radium-226	13982-63-3	pCi/g	
RAD	thorium	7440-29-1	pCi/g	

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-001-001	023-001-002	023-003-009	023-003-009	023-003-009	023-003-009	023-003-010	023-003-010	023-003-011	023-003-011	023-003-012	023-003-012	023-003-013	023-003-013	023-005-023
			Sample_ID	023-0001M	023-0002M	023-0009	023-0009M	023-0023	023-0023M	023-0010M	023-0024M	023-0011M	023-0025M	023-0012M	023-0026M	023-0013M	023-0027M	023-0075
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	0 - 0.5	0 - 0.5	1 - 1.5	1 - 1.5	4 - 4.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	7 - 8
			Collection_Date	11-Jul-95	11-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	07-Nov-95
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG					11 U	23 U		24 U		24 U		24 U		24 U	15 J
VOC	benzene	71-43-2	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	bromodichloromethane	75-27-4	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	bromoform	75-25-2	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	bromomethane	74-83-9	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	2-butanone	78-93-3	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	carbon disulfide	75-15-0	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	carbon tetrachloride	56-23-5	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	chlorobenzene	108-90-7	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	chlorodibromomethane	124-48-1	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	chloroethane	75-00-3	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	chloroform	67-66-3	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	chloromethane	74-87-3	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															540 U
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															540 U
VOC	1,1-dichloroethane	75-34-3	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	1,2-dichloroethane	107-06-2	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	1,1-dichloroethene	75-35-4	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG						5.7 U		5.9 U		6 U		6.1 U		5.9 U	
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG						5.7 U		5.9 U		6 U		6.1 U		5.9 U	
VOC	1,2-dichloroethene	540-59-0	UG/KG					11 U										11 U
VOC	1,2-dichloropropane	78-87-5	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	ethylbenzene	100-41-4	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	n-hexane	110-54-3	UG/KG						5.7 U		5.9 U		6 U		6.1 U		5.9 U	
VOC	2-hexanone	591-78-6	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG					11 U	23 U		24 U		24 U		24 U		24 U	5 J
VOC	4-methyl-2-pentanone	108-10-1	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	styrene	100-42-5	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	tetrachloroethene	127-18-4	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	toluene	108-88-3	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															540 U
VOC	1,1,1-trichloroethane	71-55-6	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	1,1,2-trichloroethane	79-00-5	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	trichloroethene	79-01-6	UG/KG					11 U	5.7 U		5.9 U		6 U		6.1 U		5.9 U	11 U
VOC	trichlorofluoromethane	75-69-4	UG/KG						5.7 U		5.9 U		6 U		6.1 U		5.9 U	
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG						57 U		59 U		60 U		61 U		59 U	
VOC	vinyl chloride	75-01-4	UG/KG					11 U	11 U		12 U		12 U		12 U		12 U	11 U
VOC	meta-,para-xylene	7816-60-0	UG/KG						5.7 U		5.9 U		6 U		6.1 U		5.9 U	
VOC	o-xylene	95-47-6	UG/KG						5.7 U		5.9 U		6 U		6.1 U		5.9 U	
VOC	xylenes, total	1330-20-7	UG/KG					11 U										11 U
FUELS	diesel	11-84-7	MG/KG	7	96	11 U	1.1 U	11 U	1.1 U	1.2 U	1.2 U	1.2 U	1.2 U	27	1.2 U	1.2 U	9.3	27 U
FUELS	gasoline	8006-61-9	MG/KG	0.5 U	0.5 U	0.5 U	0.53 U	0.6 U	0.570 U	0.59 U	0.59 U	0.6 U	0.6 U	0.56 U	0.61	0.6 U	0.59 U	0.560 U
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG	330	1000	22 U	26 U	23 U	28 U	29 U	29 U	30 U	30 U	28 U	30 U	30 U	140	27 U
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG															
SVOC	acenaphthene	83-32-9	UG/KG															
SVOC	acenaphthylene	208-96-8	UG/KG															
SVOC	aniline	62-53-3	UG/KG															

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-005-023	023-005-027	023-005-027	023-005-028	023-005-028	023-005-029	023-005-029	023-SS-003	023-SS-003	025-001-001	030-FLI-120	32FED-1A-10	32FED-1A-10	32FED-1A-10	32FED-1A-10
			Sample_ID	023-0075RE	023-0044	023-0044RE	023-0046	023-0046RE	023-0048	023-0048RE	023M-003	023M-003M	025-0001	030-FLI-120	C032C076	C032C077	C032C078	C032C079
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	7 - 8	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	4 - 4.5	4 - 4.5	0 - 0.5	0 - 4.5	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	06-Apr-95	06-Apr-95	09-May-95	04-Dec-98	15-May-02	15-May-02	15-May-02	15-May-02
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG		18 J		11 U		11 U			24 U						
VOC	benzene	71-43-2	UG/KG		12 U		11 U		11 U			5.9 U		6 U				
VOC	bromodichloromethane	75-27-4	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	bromoform	75-25-2	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	bromomethane	74-83-9	UG/KG		12 U		11 U		11 U			12 U						
VOC	2-butanone	78-93-3	UG/KG		12 U		11 U		11 U			12 U						
VOC	carbon disulfide	75-15-0	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	carbon tetrachloride	56-23-5	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	chlorobenzene	108-90-7	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	chlorodibromomethane	124-48-1	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	chloroethane	75-00-3	UG/KG		12 U		11 U		11 U			12 U						
VOC	chloroform	67-66-3	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	chloromethane	74-87-3	UG/KG		12 U		11 U		11 U			12 U						
VOC	1,3-dichlorobenzene	541-73-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
VOC	1,4-dichlorobenzene	106-46-7	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
VOC	1,1-dichloroethane	75-34-3	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	1,2-dichloroethane	107-06-2	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	1,1-dichloroethene	75-35-4	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG									5.9 U						
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG									5.9 U						
VOC	1,2-dichloroethene	540-59-0	UG/KG		12 U		11 U		11 U									
VOC	1,2-dichloropropane	78-87-5	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	ethylbenzene	100-41-4	UG/KG		12 U		11 U		11 U			5.9 U		6 U				
VOC	n-hexane	110-54-3	UG/KG									5.9 U						
VOC	2-hexanone	591-78-6	UG/KG		12 U		11 U		11 U			12 U						
VOC	methyl tert-butyl ether	1634-04-4	UG/KG											30 U				
VOC	methylene chloride	75-09-2	UG/KG		12 U		11 U		11 U			24 U						
VOC	4-methyl-2-pentanone	108-10-1	UG/KG		12 U		11 U		11 U			12 U						
VOC	styrene	100-42-5	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	tetrachloroethene	127-18-4	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	toluene	108-88-3	UG/KG		12 U		11 U		11 U			5.9 U		6 U				
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
VOC	1,1,1-trichloroethane	71-55-6	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	1,1,2-trichloroethane	79-00-5	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	trichloroethene	79-01-6	UG/KG		12 U		11 U		11 U			5.9 U						
VOC	trichlorofluoromethane	75-69-4	UG/KG									5.9 U						
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG									59 U						
VOC	vinyl chloride	75-01-4	UG/KG		12 U		11 U		11 U			12 U						
VOC	meta-,para-xylene	7816-60-0	UG/KG									5.9 U						
VOC	o-xylene	95-47-6	UG/KG									5.9 U						
VOC	xylenes, total	1330-20-7	UG/KG		12 U		11 U		11 U					12 U				
FUELS	diesel	11-84-7	MG/KG						28 U			1.2 U	11 U	12 U				
FUELS	gasoline	8006-61-9	MG/KG		0.590 U		0.560 U		0.580 U			0.59 U	0.6 U	1.2 U				
FUELS	JP-5	21274-30-0	MG/KG											12 U				
FUELS	motor oil	68476-77-7	MG/KG						28 U			30 U	41 J	12 U				
FUELS	oil and grease	10-30-0	MG/KG								160 J							
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG															
SVOC	acenaphthene	83-32-9	UG/KG												5.1 U	5.6 U	5.8 U	6.1 U
SVOC	acenaphthylene	208-96-8	UG/KG												5.1 U	5.6 U	5.8 U	6.1 U
SVOC	aniline	62-53-3	UG/KG															

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-10	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13
			Sample_ID	C032C080	C032C081	C032C082	C032C083	C032C084	C032C085	C032C086	C032C087	C032C088	C032C089	C032C090	C032C091	C032C092	C032C093
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	6.2 U	5.3 U	5.7 U	5.6 U	6.1 U	1.2 J	54 U	11 U	5.8 U	2.5 J	5.3 U	5.3 U	5.7 U	6.1 U
SVOC	acenaphthylene	208-96-8	UG/KG	6.2 U	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	5.2 U	54 U	11 U	5.8 U	5.2 U	5.3 U	5.3 U	5.7 U	6.1 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-17
			Sample_ID	C032C094	C032C095	C032C096	C032C097	C032C098	C032C099	C032C100	C032C101	C032C102	C032C103	C032C104	C032C105	C032C106	C032C107
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	27 U	5.2 U	5.3 U	5.6 U	5.4 UJ	5.3 UJ	5.3 UJ	5.7 UJ	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	acenaphthylene	208-96-8	UG/KG	27 U	5.2 U	5.3 U	5.6 U	5.4 UJ	5.3 UJ	5.3 UJ	5.7 UJ	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-17	32FED-1A-17	32FED-1A-17	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-20	32FED-1A-20
			Sample_ID	C032C108	C032C109	C032C110	C032C111	C032C112	C032C113	C032C114	C032C115	C032C116	C032C117	C032C118	C032C119	C032C120	C032C121
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	5.6 U	5.8 U	6.2 U	53 UJ	53 UJ	53 UJ	5.5 UJ	5.7 UJ	5.7 U	5.7 U	6 U	6.2 U	3.6 J	5.8 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.6 U	5.8 U	6.2 U						5.7 U	5.7 U	6 U	6.2 U	2 J	5.8 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-20	32FED-1A-20	32FED-1A-20	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-23	32FED-1A-23	32FED-1A-23
			Sample_ID	C032C122	C032C123	C032C124	C032C125	C032C126	C032C127	C032C128	C032C129	C032C130	C032C131	C032C132	C032C133	C032C134	C032C135
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2
			Collection_Date	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	6 U	5.9 U	5.9 U	1.4 J	5.2 U	5.5 U	6.2 U	5.3 U	5.3 U	5.4 U	6 U	5.2 UJ	5.5 UJ	5.5 UJ
SVOC	acenaphthylene	208-96-8	UG/KG	6 U	5.9 U	5.9 U	5.1 U	5.2 U	5.5 U	6.2 U	5.3 U	5.3 U	5.4 U	6 U	5.2 UJ	5.5 UJ	5.5 UJ
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-23	32FED-1A-23	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-26	32FED-1A-26	32FED-1A-26
			Sample_ID	C032C136	C032C137	C032C138	C032C139	C032C140	C032C141	C032C142	C032C143	C032C144	C032C145	C032C146	C032C147	C032C148	C032C149
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	5.6 U	600 U	11	5.3 U	5.7 U	5.8 U	5.3 U	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.6 U	600 U	5.4 U	5.3 U	5.7 U	5.8 U	5.3 U	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-26	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-29	32FED-1A-29	32FED-1A-29	32FED-1A-29
			Sample_ID	C032C150	C032C151	C032C152	C032C153	C032C154	C032C155	C032C156	C032C157	C032C158	C032C159	C032C160	C032C161	C032C162	C032C163
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	6 U	2.6 J	5.6 U	5.7 U	6.1 U	53 U	5.6 U	5.5 U	28 U	6 U	1.5 J	5.4 UJ	5.6 UJ	6.5 UJ
SVOC	acenaphthylene	208-96-8	UG/KG	6 U	5.2 U	5.6 U	5.7 U	6.1 U	53 U	5.6 U	5.5 U	28 U	6 U	5.2 UJ	5.4 UJ	5.6 UJ	6.5 UJ
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-33
			Sample_ID	C032C164	C032C165	C032C166	C032C167	C032C168	C032C169	C032C170	C032C171	C032C172	C032C173	C032C174	C032C175	C032C176	C032C177
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	24-May-02	24-May-02	24-May-02	24-May-02	23-May-02	23-May-02	23-May-02	23-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	5.3 UJ	5.4 UJ	5.7 UJ	5.9 UJ	5.8 UJ	27	5.3 U	5.4 U	5.9 U	5.2 UJ	5.2 U	0.99 J	5.8 U	26 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.3 UJ	5.4 UJ	5.7 UJ	5.9 UJ	5.8 UJ	5.4 U	3.6 J	5.4 U	5.9 U	5.2 UJ	5.2 U	5.3 UJ	5.8 U	26 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-36
			Sample_ID	C032C178	C032C179	C032C180	C032C181	C032C182	C032C183	C032C184	C032C185	C032C186	C032C187	C032C188	C032C189	C032C190	C032C191
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	5.2 U	5.2 U	5.3 U	5.8 U	5.3 UJ	5.5 UJ	5.6 UJ	6.1 UJ	54 U	5.7 U	6.9	6.1 U	6.1 U	5.1 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.2 U	5.2 U	5.3 U	5.8 U	5.3 U	5.5 U	3.1 J	6.1 U	54 UJ	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	5.1 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-36	32FED-1A-36	32FED-1A-36	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-39	32FED-1A-39
			Sample_ID	C032C192	C032C193	C032C194	C032C195	C032C196	C032C197	C032C198	C032C199	C032C200	C032C201	C032C202	C032C203	C032C001	C032C002
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	5.4 U	5.5 U	6.1 U	5.4 U	5.6 U	5.7 U	6 U	670	5.5	3.2 J	37	5.7 U	2.6 J	5.7 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.4 U	5.5 U	6.1 U	2.2 J	5.6 U	5.7 U	6 U	4.4 J	5.4 U	5.5 U	5.7 U	5.7 U	5.9 U	5.7 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-39	32FED-1A-39	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-42	32FED-1A-42
			Sample_ID	C032C003	C032C004	C032C005	C032C006	C032C007	C032C008	C032C009	C032C010	C032C011	C032C012	C032C013	C032C022	C032C204	C032C205
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	12	6.1 U	27	6.3 U	2.3 J	6 U	9.4	6.2 U	5.6 U	5.4 U	5.8 U	5.7 U	100 U	5.2 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.5 U	6.1 U	5.1 U	6.3 U	5.7 U	6 U	5.1 U	6.2 U	5.6 U	5.4 U	5.8 U	5.7 U	100 U	5.2 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-42	32FED-1A-42	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-45	32FED-1A-45	32FED-1A-45
			Sample_ID	C032C206	C032C207	C032C208	C032C209	C032C210	C032C211	C032C212	C032C213	C032C214	C032C215	C032C216	C032C217	C032C218	C032C219
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	100 U	5.4 U	3.5 J	5.7 U	5.8 U	5.9 U	6.2 U	100 U	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	acenaphthylene	208-96-8	UG/KG	100 U	5.4 U	3.4 J	5.7 U	5.8 U	5.9 U	6.2 U	100 U	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-45	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-48	32FED-1A-48	32FED-1A-48	32FED-1A-48
			Sample_ID	C032C220	C032C221	C032C222	C032C223	C032C224	C032C225	C032C226	C032C227	C032C228	C032C229	C032C230	C032C231	C032C232	C032C233
			Sample_Type	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG														
VOC	benzene	71-43-2	UG/KG														
VOC	bromodichloromethane	75-27-4	UG/KG														
VOC	bromoform	75-25-2	UG/KG														
VOC	bromomethane	74-83-9	UG/KG														
VOC	2-butanone	78-93-3	UG/KG														
VOC	carbon disulfide	75-15-0	UG/KG														
VOC	carbon tetrachloride	56-23-5	UG/KG														
VOC	chlorobenzene	108-90-7	UG/KG														
VOC	chlorodibromomethane	124-48-1	UG/KG														
VOC	chloroethane	75-00-3	UG/KG														
VOC	chloroform	67-66-3	UG/KG														
VOC	chloromethane	74-87-3	UG/KG														
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG														
VOC	1,2-dichloroethane	107-06-2	UG/KG														
VOC	1,1-dichloroethene	75-35-4	UG/KG														
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG														
VOC	1,2-dichloroethene	540-59-0	UG/KG														
VOC	1,2-dichloropropane	78-87-5	UG/KG														
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG														
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG														
VOC	ethylbenzene	100-41-4	UG/KG														
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG														
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG														
VOC	4-methyl-2-pentanone	108-10-1	UG/KG														
VOC	styrene	100-42-5	UG/KG														
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG														
VOC	tetrachloroethene	127-18-4	UG/KG														
VOC	toluene	108-88-3	UG/KG														
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG														
VOC	1,1,2-trichloroethane	79-00-5	UG/KG														
VOC	trichloroethene	79-01-6	UG/KG														
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														
VOC	vinyl acetate	108-05-4	UG/KG														
VOC	vinyl chloride	75-01-4	UG/KG														
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG														
FUELS	diesel	11-84-7	MG/KG														
FUELS	gasoline	8006-61-9	MG/KG														
FUELS	JP-5	21274-30-0	MG/KG														
FUELS	motor oil	68476-77-7	MG/KG														
FUELS	oil and grease	10-30-0	MG/KG														
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG														
SVOC	acenaphthene	83-32-9	UG/KG	6 U	2.3 J	5.3 U	5.3 U	5.6 U	6.4 U	84	5.3 U	5.4 U	6.1 U	5.4 UJ	5.5 U	5.8 U	6 U
SVOC	acenaphthylene	208-96-8	UG/KG	6 U	5.3 U	5.3 U	5.3 U	5.6 U	6.4 U	54 UJ	5.3 UJ	5.4 UJ	6.1 UJ	3.8 J	5.5 U	5.8 U	6 U
SVOC	aniline	62-53-3	UG/KG														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-48	32FED-1A-49	32FED-1A-49	32FED-1A-49	32FED-1A-49
			Sample_ID	C032C234	C032C014	C032C015	C032C016	C032C017
			Sample_Type	FD	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units					
VOC	acetone	67-64-1	UG/KG					
VOC	benzene	71-43-2	UG/KG					
VOC	bromodichloromethane	75-27-4	UG/KG					
VOC	bromoform	75-25-2	UG/KG					
VOC	bromomethane	74-83-9	UG/KG					
VOC	2-butanone	78-93-3	UG/KG					
VOC	carbon disulfide	75-15-0	UG/KG					
VOC	carbon tetrachloride	56-23-5	UG/KG					
VOC	chlorobenzene	108-90-7	UG/KG					
VOC	chlorodibromomethane	124-48-1	UG/KG					
VOC	chloroethane	75-00-3	UG/KG					
VOC	chloroform	67-66-3	UG/KG					
VOC	chloromethane	74-87-3	UG/KG					
VOC	1,3-dichlorobenzene	541-73-1	UG/KG					
VOC	1,4-dichlorobenzene	106-46-7	UG/KG					
VOC	1,1-dichloroethane	75-34-3	UG/KG					
VOC	1,2-dichloroethane	107-06-2	UG/KG					
VOC	1,1-dichloroethene	75-35-4	UG/KG					
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG					
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG					
VOC	1,2-dichloroethene	540-59-0	UG/KG					
VOC	1,2-dichloropropane	78-87-5	UG/KG					
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG					
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG					
VOC	ethylbenzene	100-41-4	UG/KG					
VOC	n-hexane	110-54-3	UG/KG					
VOC	2-hexanone	591-78-6	UG/KG					
VOC	methyl tert-butyl ether	1634-04-4	UG/KG					
VOC	methylene chloride	75-09-2	UG/KG					
VOC	4-methyl-2-pentanone	108-10-1	UG/KG					
VOC	styrene	100-42-5	UG/KG					
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG					
VOC	tetrachloroethene	127-18-4	UG/KG					
VOC	toluene	108-88-3	UG/KG					
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG					
VOC	1,1,1-trichloroethane	71-55-6	UG/KG					
VOC	1,1,2-trichloroethane	79-00-5	UG/KG					
VOC	trichloroethene	79-01-6	UG/KG					
VOC	trichlorofluoromethane	75-69-4	UG/KG					
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG					
VOC	vinyl acetate	108-05-4	UG/KG					
VOC	vinyl chloride	75-01-4	UG/KG					
VOC	meta-,para-xylene	7816-60-0	UG/KG					
VOC	o-xylene	95-47-6	UG/KG					
VOC	xylenes, total	1330-20-7	UG/KG					
FUELS	diesel	11-84-7	MG/KG					
FUELS	gasoline	8006-61-9	MG/KG					
FUELS	JP-5	21274-30-0	MG/KG					
FUELS	motor oil	68476-77-7	MG/KG					
FUELS	oil and grease	10-30-0	MG/KG					
FUELS	total recoverable petroleum hydrocarbons	10-90-2	UG/KG					
SVOC	acenaphthene	83-32-9	UG/KG	5.9 U	7.4	5.5 U	4.7 J	6.2 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.9 U	5.2 U	5.5 U	5.5 U	6.2 U
SVOC	aniline	62-53-3	UG/KG					

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-001-001	023-001-002	023-003-009	023-003-009	023-003-009	023-003-009	023-003-010	023-003-010	023-003-011	023-003-011	023-003-012	023-003-012	023-003-013	023-003-013	023-005-023
			Sample_ID	023-0001M	023-0002M	023-0009	023-0009M	023-0023	023-0023M	023-0010M	023-0024M	023-0011M	023-0025M	023-0012M	023-0026M	023-0013M	023-0027M	023-0075
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	0 - 0.5	0 - 0.5	1 - 1.5	1 - 1.5	4 - 4.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	7 - 8
			Collection_Date	11-Jul-95	11-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	07-Nov-95
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	anthracene	120-12-7	UG/KG															
SVOC	benz(a)anthracene	56-55-3	UG/KG															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG															
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG															
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG															
SVOC	benzo(a)pyrene	50-32-8	UG/KG															
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															540 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															540 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															540 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															540 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															540 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															120 J
SVOC	carbazole	86-74-8	UG/KG															540 U
SVOC	4-chloroaniline	106-47-8	UG/KG															540 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															540 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG															540 U
SVOC	2-chlorophenol	95-57-8	UG/KG															540 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															540 U
SVOC	chrysene	218-01-9	UG/KG															
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG															
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															540 UJ
SVOC	dibenzofuran	132-64-9	UG/KG															540 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															540 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															540 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															540 U
SVOC	diethyl phthalate	84-66-2	UG/KG															540 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															540 U
SVOC	dimethyl phthalate	131-11-3	UG/KG															540 U
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															1300 U
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															1300 U
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															540 U
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															540 U
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															540 U
SVOC	fluoranthene	206-44-0	UG/KG															
SVOC	fluorene	86-73-7	UG/KG															
SVOC	hexachlorobenzene	118-74-1	UG/KG															540 U
SVOC	hexachlorobutadiene	87-68-3	UG/KG															540 U
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															540 U
SVOC	hexachloroethane	67-72-1	UG/KG															540 U
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG															
SVOC	isophorone	78-59-1	UG/KG															540 U
SVOC	2-methylnaphthalene	91-57-6	UG/KG															
SVOC	2-methylphenol	95-48-7	UG/KG															540 U
SVOC	4-methylphenol	106-44-5	UG/KG															540 U
SVOC	naphthalene	91-20-3	UG/KG															
SVOC	2-nitroaniline	88-74-4	UG/KG															1300 U
SVOC	3-nitroaniline	99-09-2	UG/KG															1300 U
SVOC	4-nitroaniline	100-01-6	UG/KG															1300 U
SVOC	nitrobenzene	98-95-3	UG/KG															540 U
SVOC	4-nitrophenol	100-02-7	UG/KG															1300 U

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-005-023	023-005-027	023-005-027	023-005-028	023-005-028	023-005-029	023-005-029	023-SS-003	023-SS-003	025-001-001	030-FLI-120	32FED-1A-10	32FED-1A-10	32FED-1A-10	32FED-1A-10
			Sample_ID	023-0075RE	023-0044	023-0044RE	023-0046	023-0046RE	023-0048	023-0048RE	023M-003	023M-003M	025-0001	030-FLI-120	C032C076	C032C077	C032C078	C032C079
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	7 - 8	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	4 - 4.5	4 - 4.5	0 - 0.5	0 - 4.5	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	06-Apr-95	06-Apr-95	09-May-95	04-Dec-98	15-May-02	15-May-02	15-May-02	15-May-02
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	anthracene	120-12-7	UG/KG												5.1 U	5.6 U	5.8 U	6.1 U
SVOC	benz(a)anthracene	56-55-3	UG/KG												3 J	5.6 UJ	5.8 UJ	6.1 UJ
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG												5.5	5.6 U	5.8 U	6.1 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG												4.7 J	5.6 U	5.8 U	6.1 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG												6.1	5.6 U	5.8 U	6.1 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG												4.7 J	5.6 U	5.8 U	6.1 U
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG	360 U	390 U	47 J	370 U	60 J	66 J	370 U	390 U		38 J					
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	butyl benzyl phthalate	85-68-7	UG/KG	360 U	390 U	390 U	39 J	370 U	270 J	370 U	39 J		370 U					
SVOC	carbazole	86-74-8	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	4-chloroaniline	106-47-8	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	2-chloronaphthalene	91-58-7	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	2-chlorophenol	95-57-8	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	chrysene	218-01-9	UG/KG												5.9 J	5.6 UJ	5.8 UJ	6.1 UJ
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG												5.1 U	5.6 U	5.8 U	6.1 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG	360 U	390 UJ	390 U	370 UJ	370 U	380 UJ	370 U	390 U		19 J					
SVOC	dibenzofuran	132-64-9	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	2,4-dichlorophenol	120-83-2	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	diethyl phthalate	84-66-2	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	2,4-dimethylphenol	105-67-9	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	dimethyl phthalate	131-11-3	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 U					
SVOC	2,4-dinitrophenol	51-28-5	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 UJ					
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	di-n-octyl phthalate	117-84-0	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		390 U					
SVOC	fluoranthene	206-44-0	UG/KG												6.7	5.6 U	5.8 U	6.1 U
SVOC	fluorene	86-73-7	UG/KG												5.1 UJ	5.6 UJ	5.8 UJ	6.1 UJ
SVOC	hexachlorobenzene	118-74-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	hexachlorobutadiene	87-68-3	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	hexachloroethane	67-72-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG												4.7 J	5.6 U	0.65 J	6.1 U
SVOC	isophorone	78-59-1	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	2-methylnaphthalene	91-57-6	UG/KG												5.1 U	5.6 U	5.8 U	6.1 U
SVOC	2-methylphenol	95-48-7	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	4-methylphenol	106-44-5	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	naphthalene	91-20-3	UG/KG												5.1 U	5.6 U	5.8 U	6.1 U
SVOC	2-nitroaniline	88-74-4	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 U					
SVOC	3-nitroaniline	99-09-2	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 U					
SVOC	4-nitroaniline	100-01-6	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 U					
SVOC	nitrobenzene	98-95-3	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	4-nitrophenol	100-02-7	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 U					

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-10	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13
			Sample_ID	C032C080	C032C081	C032C082	C032C083	C032C084	C032C085	C032C086	C032C087	C032C088	C032C089	C032C090	C032C091	C032C092	C032C093
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	6.2 U	5.3 U	5.7 U	5.6 U	6.1 U	6	54 U	11 U	5.8 U	5.4	5.3 U	5.3 U	5.7 U	6.1 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	6.2 UJ	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	20	54 U	1.3 J	0.41 J	110	19	22	18	4.2 J
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	6.2 U	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	31	54 U	1.8 J	0.6 J	200	35	37	35	5.4 J
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	6.2 U	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	5.2 U	54 U	1.6 J	0.72 J	140	27	26	24	4.4 J
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	6.2 U	4.8 J	1.7 J	6.3 J	6.1 UJ	67	13 J	5.6 J	1.2 J	150	21	29	34	7.5
SVOC	benzo(a)pyrene	50-32-8	UG/KG	6.2 U	5.3 UJ	5.7 UJ	2.9 J	6.1 UJ	10	54 U	3.4 J	0.56 J	190	26	27	29	7.9
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	6.2 UJ	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	58	16 J	3.1 J	0.41 J	150	28	30	30	5.6 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	6.2 U	5.3 U	5.7 U	5.6 U	6.1 U	6.4	8.4 J	11 U	5.8 U	28 J	5.4 J	4.9 J	3.4 J	6.1 UJ
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	6.2 U	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	17	54 U	1.1 J	0.53 J	140	27	35	33	9.6
SVOC	fluorene	86-73-7	UG/KG	6.2 UJ	5.3 U	5.7 U	5.6 U	6.1 U	53	54 U	11 U	5.8 U	5.2 U	5.3 U	5.3 U	5.7 U	6.1 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	6.2 U	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	7.1	54 U	11 U	0.92 J	160	25	28	28	6.4
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	6.2 U	5.3 U	5.7 U	6.5	6.1 U	85	54 U	1.2 J	0.44 J	5.2 U	5.3 U	5.3 U	5.7 U	6.1 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	6.2 U	5.3 U	5.7 U	5.5 J	6.1 U	55	54 U	1.5 J	5.8 U	5.4	5.3 U	5.3 U	5.7 U	6.1 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-17
			Sample_ID	C032C094	C032C095	C032C096	C032C097	C032C098	C032C099	C032C100	C032C101	C032C102	C032C103	C032C104	C032C105	C032C106	C032C107
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	27 U	5.2 U	5.3 U	5.6 U	0.79 J	5.3 UJ	0.53 J	5.7 UJ	5.7 UJ	3.6 J	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	27 U	5.2 U	5.3 U	5.6 U	3 J	0.35 J	5.3 UJ	1.1 J	0.52 J	2.1 J	5.5 U	5.5 U	6.1 U	3.1 J
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	27 U	5.2 U	5.3 U	5.6 U	7.6 J	5.3 UJ	2.6 J	1.4 J	5.7 UJ	3.5 J	5.5 U	5.5 U	6.1 U	9.4
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	27 U	5.2 U	5.3 U	5.6 U	4.1 J	5.3 UJ	2.3 J	0.77 J	5.7 UJ	2.8 J	5.5 U	5.5 U	6.1 U	2.7 J
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	26 J	5.2 U	3.1 J	5.6 U	5.4 UJ	5.3 UJ	14 J	5.7 UJ	5.7 UJ	3.3 J	5.5 U	5.5 U	6.1 U	2.8 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	27 U	5.2 U	5.3 U	5.6 U	20 J	5.3 UJ	6 J	1 J	5.7 UJ	3.2 J	5.5 U	5.5 U	1.6 J	5.3
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	27 U	5.2 U	5.3 U	5.6 U	26 J	0.92 J	12 J	1.8 J	5.7 UJ	3.7 J	5.5 U	5.5 U	6.1 U	25
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	27 U	5.2 U	5.3 U	5.6 U	5.4 UJ	5.3 UJ	3.7 J	5.7 UJ	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	27 U	5.2 U	5.3 U	5.6 U	1.2 J	0.32 J	0.53 J	3.4 J	5.7 UJ	5.3 J	5.5 U	5.5 U	6.1 U	3.3 J
SVOC	fluorene	86-73-7	UG/KG	27 U	5.2 U	5.3 U	5.6 U	5.4 UJ	5.3 UJ	5.3 UJ	5.7 UJ	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	27 U	5.2 U	5.3 U	5.6 U	5.4 UJ	5.3 UJ	5.3 UJ	5.7 UJ	5.7 UJ	2.3 J	5.5 U	5.5 U	6.1 U	0.75 J
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	27 U	5.2 U	5.3 U	5.6 U	1.3 J	0.33 J	0.93 J	5.7 UJ	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	27 U	5.2 U	5.3 U	5.6 U	0.83 J	5.3 UJ	0.41 J	5.7 UJ	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	5.2 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-17	32FED-1A-17	32FED-1A-17	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-20	32FED-1A-20
			Sample_ID	C032C108	C032C109	C032C110	C032C111	C032C112	C032C113	C032C114	C032C115	C032C116	C032C117	C032C118	C032C119	C032C120	C032C121
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	5.6 U	5.8 U	6.2 U						5.7 U	5.7 U	6 U	6.2 U	3.3 J	5.8 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.6 U	5.8 U	6.2 U	21 J	44 J	61	11	5.7 U	0.77 J	1.1 J	0.5 J	6.2 U	11	5.8 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.6 U	2.9 J	6.2 U	26 J	28 J	31 J	8.1	5.7 U	2.2 J	1.4 J	6 U	6.2 U	36	5.8 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.6 U	5.8 U	6.2 U	5.6 J	16 J	16 J	4 J	5.7 U	1.6 J	1.4 J	6 U	6.2 U	9.2	5.8 U
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	5.6 U	6.4	6.2 U	46 J	18 J	28 J	7.2	5.7 U	2.8 J	1.7 J	0.67 J	6.2 U	83	5.8 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.6 U	5.8 U	6.2 U	21 J	33 J	33 J	7.8	5.7 U	1.4 J	1.4 J	6 U	6.2 U	22	5.8 U
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	5.6 U	8.8	6.2 U	74	120	160	27	5.7 U	2.2 J	1.7 J	0.59 J	6.2 U	51	5.8 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.6 U	5.8 U	6.2 U	16 J			2.9 J		5.7 U	5.7 U	6 U	6.2 U	25	5.8 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	5.6 UJ	1.8 J	6.2 U	7 J	14 J	16 J	4.5 J	5.7 U	1.4 J	2 J	0.98 J	6.2 U	6	5.8 U
SVOC	fluorene	86-73-7	UG/KG	5.6 U	5.8 U	6.2 U	18 J	53 UJ	53 UJ	5.5 UJ	5.7 UJ	5.7 U	5.7 U	6 U	6.2 U	7.1	5.8 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.6 U	1.1 J	6.2 U	53 U	53 U	53 U	2.9 J	5.7 U	1.2 J	1.4 J	6 U	6.2 U	16	0.89 J
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.6 U	5.8 U	6.2 U	18 J	53 UJ	53 UJ	1.3 J	5.7 UJ	5.7 U	5.7 U	6 U	6.2 U	4.3 J	5.8 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	5.6 U	5.8 U	6.2 U	12 J	53 UJ	3.4 J	1.2 J	5.7 UJ	5.7 U	5.7 U	6 UJ	6.2 UJ	5.5 U	5.8 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-20	32FED-1A-20	32FED-1A-20	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-23	32FED-1A-23	32FED-1A-23
			Sample_ID	C032C122	C032C123	C032C124	C032C125	C032C126	C032C127	C032C128	C032C129	C032C130	C032C131	C032C132	C032C133	C032C134	C032C135
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2
			Collection_Date	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	6 U	5.9 U	5.9 U	1.7 J	5.2 U	1.4 J	6.2 U	5.3 U	5.3 U	5.4 U	6 U	5.2 UJ	5.5 UJ	5.5 UJ
SVOC	benz(a)anthracene	56-55-3	UG/KG	1.5 J	5.9 U	5.9 U	26	5.2 U	23	6.2 U	5.3 U	5.3 U	5.4 U	6 U	2 J	1.3 J	1.5 J
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	2.6 J	5.9 U	5.9 U	45	5.2 U	39	6.2 U	3.6 J	5.3 U	5.4 U	6 U	4.5 J	1.3 J	1.2 J
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	6 U	5.9 U	5.9 U	33	5.2 U	27	6.2 U	5.3 U	5.3 U	5.4 U	6 U	2 J	0.96 J	0.93 J
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	6.1	5.9 U	5.9 U	30	5.2 U	26	6.2 U	19	2 J	2.1 J	6 U	2.3 J	1.4 J	1.1 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	6 U	5.9 U	5.9 U	40	5.2 U	34	1.8 J	5.3 U	5.3 U	5.4 U	6 U	4.7 J	1.3 J	1.2 J
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	3.8 J	5.9 U	5.9 U	37	5.2 U	32	6.2 U	5.5	5.3 U	5.4 U	6 U	4.1 J	1.5 J	1.8 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	6 U	5.9 U	5.9 U	9.4	5.2 U	7.7	6.2 U	3.3 J	5.3 U	5.4 U	6 U	0.47 J	5.5 UJ	0.29 J
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	6 U	5.9 U	5.9 U	38	5.2 U	32	6.2 U	5.3 U	5.3 U	5.4 U	6 U	3 J	1.8 J	1.1 J
SVOC	fluorene	86-73-7	UG/KG	1.5 J	5.9 U	5.9 U	5.1 U	5.2 U	5.5 U	6.2 U	5.3 U	5.3 U	5.4 U	6 U	5.2 UJ	5.5 UJ	5.5 UJ
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	2 J	0.65 J	5.9 U	24	5.2 U	22	6.2 U	5.3 U	1.3 J	0.85 J	0.64 J	2.5 J	1.5 J	1.2 J
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	6 U	5.9 U	5.9 U	5.1 U	5.2 U	5.5 U	6.2 U	5.3 U	5.3 U	5.4 U	6 U	0.44 J	0.32 J	0.34 J
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	6 U	5.9 U	5.9 U	5.1 U	5.2 U	5.5 U	6.2 U	5.3 U	5.3 U	5.4 U	6 U	5.2 UJ	5.5 UJ	0.36 J
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-23	32FED-1A-23	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-26	32FED-1A-26	32FED-1A-26
			Sample_ID	C032C136	C032C137	C032C138	C032C139	C032C140	C032C141	C032C142	C032C143	C032C144	C032C145	C032C146	C032C147	C032C148	C032C149
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	0.47 J	600 U	8	5.3 U	5.7 U	5.8 U	5.3 U	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	4.7 J	14 J	36	5.3 U	3.8 J	5.8 U	2.4 J	5.4 U	5.7 U	6.1 U	5.9 U	5.2 UJ	5.6 UJ	2.9 J
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	8.6	21 J	61	2.4 J	9.8	5.8 U	4.9 J	5.4 U	1.6 J	6.1 U	5.9 U	2.4 J	5.6 UJ	3.8 J
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	8.2	24 J	5.4 U	5.3 U	5.7 U	5.8 U	2.5 J	5.4 U	5.7 U	6.1 U	5.9 U	1.9 J	5.6 UJ	5.7 UJ
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	11	85 J	62	4 J	11	5.8 U	3.1 J	3.3 J	8.9	6.1 U	5.9 U	2.6 J	5.6 U	2.9 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	6.2	190 J	33	5.3 U	3.8 J	5.8 U	3.6 J	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	3 J
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	18	160 J	160	3 J	21	5.8 U	8.9	5.4 U	3.7 J	6.1 U	5.9 U	2.7 J	5.6 U	3.5 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	2.6 J	34 J	25	5.3 U	3.3 J	5.8 U	5.3 U	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	7.8	600 U	37	5.3 U	3.8 J	2.2 J	3.1 J	5.4 UJ	5.7 UJ	6.1 UJ	5.9 UJ	2.7 J	5.6 U	6.4
SVOC	fluorene	86-73-7	UG/KG	5.6 U	600 U	16	5.3 U	2.3 J	5.8 U	5.3 U	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.7 J	600 U	13	1.6 J	2.3 J	1.4 J	0.87 J	5.4 U	5.7 U	6.1 U	5.9 U	1.9 J	0.76 J	3.2 J
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	0.99 J	600 U	22	5.3 U	7.8	5.8 U	5.6	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	1 J	600 U	2.9 J	5.3 U	5.5 J	5.8 U	2.1 J	5.4 U	5.7 U	6.1 U	5.9 U	5.2 U	5.6 U	5.7 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-26	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-29	32FED-1A-29	32FED-1A-29	32FED-1A-29
			Sample_ID	C032C150	C032C151	C032C152	C032C153	C032C154	C032C155	C032C156	C032C157	C032C158	C032C159	C032C160	C032C161	C032C162	C032C163
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	6 U	3.4 J	5.6 U	5.7 U	6.1 U	53 U	5.6 U	5.5 U	28 U	6 U	2.5 J	5.4 UJ	5.6 UJ	6.5 UJ
SVOC	benz(a)anthracene	56-55-3	UG/KG	6 UJ	7.6 J	5.6 UJ	5.7 UJ	6.1 UJ	53 U	0.46 J	0.83 J	28 U	6 U	48 J	3.4 J	7.8 J	6.5 UJ
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	6 UJ	15	5.6 U	5.7 U	6.1 U	53 U	0.63 J	0.9 J	28 U	6 U	88 J	4.7 J	14 J	6.5 UJ
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	6 UJ	2.2 J	5.6 U	5.7 U	6.1 U	53 U	0.43 J	1.1 J	28 U	6 U	65 J	3.6 J	9.9 J	6.5 UJ
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	6 U	36	5.6 U	3 J	6.1 U	59	0.68 J	0.75 J	9.6 J	6 U	56 J	3.3 J	10 J	0.59 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	6 U	8.9	5.6 U	5.7 U	6.1 U	53 U	0.54 J	0.82 J	28 U	6 U	83 J	4.8 J	14 J	6.5 UJ
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	6 U	44 J	5.6 UJ	2.6 J	6.1 UJ	20 J	0.45 J	1.2 J	7 J	6 U	75 J	4.2 J	12 J	0.61 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	6 U	12	5.6 U	5.7 U	6.1 U	53 U	5.6 U	5.5 U	28 U	6 U	22 J	1.1 J	3.4 J	6.5 UJ
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	6 U	7.8	5.6 U	5.7 U	6.1 U	53 U	0.71 J	1.6 J	28 U	6 U	74 J	5 J	12 J	0.51 J
SVOC	fluorene	86-73-7	UG/KG	6 U	16 J	5.6 UJ	5.7 UJ	6.1 UJ	53 U	5.6 U	5.5 U	28 U	6 U	5.2 UJ	5.4 UJ	5.6 UJ	6.5 UJ
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	6 U	5.6	5.6 U	0.88 J	6.1 U	53 U	0.74 J	0.56 J	28 U	6 U	66 J	4.1 J	12 J	6.5 UJ
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	6 U	3.9 J	5.6 U	5.7 U	6.1 U	53 U	5.6 U	5.5 U	28 U	6 U	0.64 J	5.4 UJ	5.6 UJ	6.5 UJ
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	6 U	5.2 U	5.6 U	5.7 U	6.1 U	53 U	5.6 U	5.5 U	28 U	6 U	1.3 J	5.4 UJ	5.6 UJ	6.5 UJ
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-33
			Sample_ID	C032C164	C032C165	C032C166	C032C167	C032C168	C032C169	C032C170	C032C171	C032C172	C032C173	C032C174	C032C175	C032C176	C032C177
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	24-May-02	24-May-02	24-May-02	24-May-02	23-May-02	23-May-02	23-May-02	23-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	5.3 UJ	0.47 J	5.7 UJ	5.9 UJ	5.8 UJ	30	6.3	2.1 J	5.9 U	0.6 J	5.2 UJ	1.1 J	5.8 UJ	26 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.3 UJ	4.8 J	2.3 J	2.6 J	1.7 J	970	8.9	13	5.9 U	2.8 J	1.1 J	18 J	0.94 J	26 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.3 UJ	7.3 J	0.59 J	1.2 J	1.3 J	1900	23	28	5.9 U	5.5 J	0.64 J	39 J	5.8 UJ	35
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.3 UJ	5.6 J	0.36 J	2.1 J	0.92 J	900	7.2	10	5.9 U	2.3 J	0.52 J	35 J	5.8 UJ	26 U
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	24 J	7.2 J	5.7 UJ	5.9 UJ	5.8 UJ	1400	23	30	5.9 U	98 J	2.2 J	13 J	5.8 UJ	28
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.3 UJ	10 J	5.7 UJ	5.9 UJ	5.8 UJ	1800	17	21	5.9 U	1.9 J	0.65 J	32 J	5.8 UJ	19 J
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	4.9 J	27 J	0.69 J	9.9 J	5.5 J	1200	15	16	5.9 U	4.2 J	0.74 J	23 J	5.8 UJ	41
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.3 UJ	5.4 UJ	5.7 UJ	5.9 UJ	5.8 UJ	320	2.9 J	5.9	5.9 U	14 J	5.2 UJ	3.7 J	5.8 UJ	11 J
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	0.58 J	2.8 J	0.74 J	0.81 J	0.64 J	750	14	15	5.9 U	1.5 J	0.47 J	24 J	5.8 UJ	26 U
SVOC	fluorene	86-73-7	UG/KG	5.3 UJ	5.4 UJ	5.7 UJ	5.9 UJ	5.8 UJ	13	5.3 U	5.4 U	5.9 U	5.2 UJ	5.2 U	5.3 UJ	5.8 U	26 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.3 UJ	5.4 UJ	5.7 UJ	5.9 UJ	5.8 UJ	1500	16	20	1 J	6.2 J	5.2 UJ	14 J	5.8 UJ	26 U
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	0.89 J	0.35 J	5.7 UJ	0.4 J	5.8 UJ	6.6	5.3 U	5.4 U	5.9 U	1.4 J	5.2 U	0.62 J	5.8 U	26 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	0.49 J	5.4 UJ	5.7 UJ	5.9 UJ	5.8 UJ	19	5.3 U	5.4 U	5.9 U	0.59 J	5.2 U	0.67 J	5.8 U	26 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-36
			Sample_ID	C032C178	C032C179	C032C180	C032C181	C032C182	C032C183	C032C184	C032C185	C032C186	C032C187	C032C188	C032C189	C032C190	C032C191
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	5.2 U	2.9 J	5.3 U	5.8 U	5.3 UJ	5.5 UJ	3.2 J	6.1 UJ	54 U	5.7 U	13	6.1 U	6.1 U	5.1 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.2 U	5.2 U	3.1 J	5.8 U	5.3 U	5.5 U	13	6.1 U	54 UJ	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	3.7 J
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.2 U	3.1 J	15	5.8 U	5.3 U	5.5 U	13	6.1 U	54 UJ	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	9
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.2 U	2.7 J	5.3 U	5.8 U	5.3 U	5.5 U	11	6.1 U	54 UJ	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	6.7
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	5.2 U	5.4	8.7	5.8 U	5.3 U	2.7 J	16	6.1 U	83 J	2.9 J	9.4 J	6.1 UJ	6.1 UJ	9.6
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.2 U	3.3 J	5.3 U	5.8 U	5.3 U	5.5 U	19	1.8 J	28 J	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	6.1
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	1.6 J	1.7 J	25	5.8 U	5.3 U	5.5 U	15	6.1 U	28 J	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	11
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.2 U	5.3	3.8 J	5.8 U	5.3 U	5.5 U	2.7 J	6.1 U	16 J	5.7 U	5.8 U	6.1 U	6.1 U	5.1 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	5.2 U	5.2 U	5.3 U	5.8 U	5.3 U	5.5 U	31	6.1 U	54 UJ	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	13
SVOC	fluorene	86-73-7	UG/KG	5.2 U	5.2 U	5.3 U	5.8 U	5.3 UJ	5.5 UJ	1.6 J	6.1 UJ	54 U	5.7 U	4.6 J	6.1 U	6.1 U	5.1 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.2 U	5.7	1.7 J	5.8 U	5.3 U	3 J	12	6.1 U	14 J	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	6.6
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.2 U	5.2 U	0.9 J	5.8 U	5.3 UJ	5.5 UJ	5.6 UJ	6.1 UJ	24 J	5.7 U	8.9	6.1 U	6.1 U	5.1 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	5.2 U	5.2 U	5.3 U	5.8 U	5.3 UJ	5.5 UJ	5.6 UJ	6.1 UJ	54 U	5.7 U	2.9 J	6.1 U	6.1 U	5.1 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-36	32FED-1A-36	32FED-1A-36	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-39	32FED-1A-39
			Sample_ID	C032C192	C032C193	C032C194	C032C195	C032C196	C032C197	C032C198	C032C199	C032C200	C032C201	C032C202	C032C203	C032C001	C032C002
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	5.4 U	5.5 U	6.1 U	2.2 J	5.6 U	2.5 J	6 U	710	9.8	5.3 J	35	5.7 U	9.2	5.7 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.4 U	1.3 J	6.1 U	17	4.9 J	15	6 U	35000	140	110	560	1.4 J	19	5.7 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.4 U	2.7 J	6.1 U	51	8	19	6 U	87000	300	240	1300	3.9 J	38	5.7 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.4 U	2.7 J	6.1 U	5.4 U	2.4 J	11	6 U	31000	110	79	620	5.7 U	5.9 U	5.7 U
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	5.4 U	3.5 J	6.1 U	58	8.2	27	6 U	36000	150	130	580	3.8 J	32 J	3.2 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.4 U	2.5 J	6.1 U	31	8.4	24	6 U	72000	250	200	1100	5.7 U	26	5.7 U
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	5.4 U	3.3 J	6.1 U	85	5.1 J	25	6 U	43000	180	130	820	7	75	2.4 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.4 U	5.5 U	6.1 U	24	5.6 U	3.6 J	6 U	12000	39	33	340	5.7 U	14 J	5.7 UJ
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	5.4 U	3.9 J	6.1 U	18	11	27	6 U	22000	170	110	490	1.7 J	11	5.7 U
SVOC	fluorene	86-73-7	UG/KG	5.4 U	5.5 U	6.1 U	2.2 J	5.6 U	5.7 U	6 U	310	3.8 J	2.5 J	150	4.5 J	11	5.7 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	0.59 J	2.6 J	6.1 U	34	8.3	20	1.1 J	52000	210	170	840	2.4 J	5.8 J	0.86 J
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.4 U	5.5 U	6.1 U	5.4 U	5.6 U	5.7 U	6 U	170	3.8 J	3.2 J	200	5.7 U	5.4 J	5.7 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	5.4 U	5.5 U	6.1 U	5.4 U	5.6 U	5.7 U	6 U	360	3.7 J	2.6 J	38	5.7 U	5.9 U	5.7 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-39	32FED-1A-39	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-42	32FED-1A-42
			Sample_ID	C032C003	C032C004	C032C005	C032C006	C032C007	C032C008	C032C009	C032C010	C032C011	C032C012	C032C013	C032C022	C032C204	C032C205
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	6.3	6.1 U	5.6	6.3 U	5.7 U	6 U	5.1 U	6.2 U	2 J	5.4 U	5.8 U	5.7 U	43 J	5.2 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	22	6.1 U	26	2.6 J	2.8 J	6 U	41	6.2 U	5.6 U	3.7 J	2.4 J	3.1 J	25 J	5.2 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	41	6.1 U	140	16	8.5	6 U	190	3.1 J	2.4 J	7.8	6.4	9.7	61 J	0.67 J
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.5 U	6.1 U	51 U	6.3 U	5.7 U	6 U	5.1 U	6.2 U	5.6 U	5.4 U	5.8 U	5.7 U	32 J	0.63 J
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	24 J	6.1 UJ	92	27 J	3.8 J	6 UJ	87 J	6.5	4.3 J	5 J	8	5.9 J	88 J	5.2 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	24	6.1 U	50	8.6	3.6 J	6 U	73	6.2 U	5.6 U	3.1 J	3.7 J	5.7 U	33 J	1.2 J
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	88	6.1 U	280	23	19	6 U	410	5.8 J	4.6 J	25	19	22	240	1.6 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	12 J	6.1 UJ	44	10 J	2.3 J	6 UJ	56 J	2.1 J	5.6 U	2.2 J	3 J	3.3 J	37 J	5.2 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	15	6.1 U	13	6.3 U	5.7 U	6 U	40	6.2 U	1.7 J	4.7 J	3.8 J	4.4 J	13 J	0.49 J
SVOC	fluorene	86-73-7	UG/KG	47	6.1 U	89	2.1 J	6.7	6 U	5.1 U	6.2 U	5.6 U	5.4 U	5.8 U	5.7 U	100 U	5.2 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	6.4	6.1 U	51 U	5.4 J	5.7 U	0.71 J	12	1.1 J	0.73 J	1.1 J	1.6 J	5.7 U	100 U	5.2 U
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	77	6.1 U	1000	26	76	6 U	350	6.2 U	5.6 U	32	22	26	320	0.36 J
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	10	6.1 U	290	7.6	21	6 U	29	6.2 U	5.6 U	2.2 J	5.8 U	2.2 J	35 J	0.35 J
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-42	32FED-1A-42	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-45	32FED-1A-45	32FED-1A-45
			Sample_ID	C032C206	C032C207	C032C208	C032C209	C032C210	C032C211	C032C212	C032C213	C032C214	C032C215	C032C216	C032C217	C032C218	C032C219
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	100 U	5.4 U	3 J	5.7 U	5.8 U	5.9 U	6.2 U	100 U	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	benz(a)anthracene	56-55-3	UG/KG	10 J	5.4 U	3.7 J	0.95 J	5.8 U	5.9 U	0.52 J	100 U	5.4 U	28 U	6.1 U	4 J	52 UJ	52 UJ
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	25 J	5.4 U	7.2 J	0.94 J	5.8 UJ	5.9 UJ	0.64 J	100 UJ	5.4 UJ	28 UJ	0.73 J	51 UJ	52 UJ	52 UJ
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	100 U	5.4 U	5.3 J	0.9 J	5.8 U	5.9 U	0.66 J	100 U	5.4 U	28 U	0.66 J	51 UJ	52 UJ	52 UJ
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	17 J	5.4 U	22 J	1.4 J	1.4 J	5.9 U	0.8 J	110	2.8 J	28 U	6.1 U	63 J	18 J	20 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	8.2 J	5.4 U	6.1 J	1 J	5.8 U	5.9 U	0.71 J	100 U	5.4 U	28 U	0.73 J	51 UJ	52 UJ	6.3 J
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	83 J	5.4 U	5.5 J	1.3 J	0.8 J	0.46 J	0.68 J	47 J	5.4 U	4.3 J	6.1 U	14 J	52 UJ	6 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.9 J	5.4 U	3.5 J	0.27 J	0.54 J	5.9 U	6.2 U	100 U	5.4 U	28 U	6.1 U	9.8 J	52 UJ	52 UJ
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	6 J	5.4 U	3.5 J	1.8 J	5.8 U	5.9 U	0.72 J	100 U	5.4 U	28 U	0.4 J	51 UJ	52 UJ	52 UJ
SVOC	fluorene	86-73-7	UG/KG	100 U	5.4 U	4 J	5.7 U	5.8 U	5.9 U	6.2 U	100 U	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	100 U	5.4 U	7.2 J	1.1 J	0.64 J	5.9 U	0.64 J	100 U	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	240	0.31 J	4.8 J	5.7 U	5.8 U	5.9 U	6.2 U	100 U	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	19 J	5.4 U	2.6 J	5.7 U	5.8 U	5.9 U	6.2 U	12 J	5.4 U	28 U	6.1 U	51 UJ	52 UJ	52 UJ
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-45	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-48	32FED-1A-48	32FED-1A-48	32FED-1A-48
			Sample_ID	C032C220	C032C221	C032C222	C032C223	C032C224	C032C225	C032C226	C032C227	C032C228	C032C229	C032C230	C032C231	C032C232	C032C233
			Sample_Type	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	anthracene	120-12-7	UG/KG	6 U	4.7 J	5.3 U	5.3 U	5.6 U	1.6 J	130	5.3 U	5.4 U	6.1 U	3.1 J	5.5 UJ	5.8 UJ	6 UJ
SVOC	benz(a)anthracene	56-55-3	UG/KG	6 U	49 J	5.3 UJ	5.3 UJ	5.6 UJ	5.7 J	1300	2.6 J	14	1.7 J	21 J	2.3 J	1.6 J	6 UJ
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	6 U	80	5.3 U	5.3 U	5.6 U	7.9	2100	4.4 J	27	6.1 U	43 J	1.5 J	2 J	6 UJ
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	6 U	75	5.3 U	5.3 U	5.6 U	7.9	1100	3.1 J	20	6.1 U	25 J	1.3 J	1.3 J	6 UJ
SVOC	benzoic acid	65-85-0	UG/KG														
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	0.79 J	200	37	21	14	17	1100	4.6 J	24	2.7 J	85 J	3.2 J	5.3 J	6 UJ
SVOC	benzo(a)pyrene	50-32-8	UG/KG	0.5 J	99	3.9 J	3.4 J	3.2 J	12	1800	4.8 J	28	2.8 J	37 J	1.8 J	1.3 J	6 UJ
SVOC	benzyl alcohol	100-51-6	UG/KG														
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG														
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG														
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG														
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG														
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG														
SVOC	butyl benzyl phthalate	85-68-7	UG/KG														
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG														
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG														
SVOC	2-chloronaphthalene	91-58-7	UG/KG														
SVOC	2-chlorophenol	95-57-8	UG/KG														
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG														
SVOC	chrysene	218-01-9	UG/KG	6 U	59	5.3 U	5.3 U	5.6 U	6.2 J	1700	3.6 J	21	1.9 J	98 J	1.5 J	5.8 J	6 UJ
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	0.35 J	82	10	4.3 J	5.6 U	6.4 U	380	5.3 U	7.5	6.1 U	26 J	0.3 J	1.7 J	6 UJ
SVOC	di-n-butyl phthalate	84-74-2	UG/KG														
SVOC	dibenzofuran	132-64-9	UG/KG														
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG														
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG														
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG														
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG														
SVOC	2,4-dichlorophenol	120-83-2	UG/KG														
SVOC	diethyl phthalate	84-66-2	UG/KG														
SVOC	2,4-dimethylphenol	105-67-9	UG/KG														
SVOC	dimethyl phthalate	131-11-3	UG/KG														
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG														
SVOC	2,4-dinitrophenol	51-28-5	UG/KG														
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG														
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG														
SVOC	di-n-octyl phthalate	117-84-0	UG/KG														
SVOC	fluoranthene	206-44-0	UG/KG	6 U	73	4.3 J	3.4 J	5.6 U	11	1800	5.3 U	14	2.6 J	8.4 J	1.3 J	0.59 J	6 UJ
SVOC	fluorene	86-73-7	UG/KG	6 U	1.2 J	5.3 U	5.3 U	5.6 U	6.4 U	49 J	5.3 U	5.4 U	6.1 U	5.4 UJ	5.5 U	5.8 U	6 U
SVOC	hexachlorobenzene	118-74-1	UG/KG														
SVOC	hexachlorobutadiene	87-68-3	UG/KG														
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG														
SVOC	hexachloroethane	67-72-1	UG/KG														
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	0.76 J	230	29	15	8.7	13	920	3.6 J	20	2.4 J	30 J	1.7 J	1.5 J	6 UJ
SVOC	isophorone	78-59-1	UG/KG														
SVOC	2-methylnaphthalene	91-57-6	UG/KG	6 U	5.3 U	5.3 U	5.3 U	5.6 U	6.4 U	16 J	5.3 U	5.4 U	6.1 U	1.1 J	5.5 U	3.6 J	6 U
SVOC	2-methylphenol	95-48-7	UG/KG														
SVOC	4-methylphenol	106-44-5	UG/KG														
SVOC	naphthalene	91-20-3	UG/KG	6 U	2.3 J	5.3 U	5.3 U	5.6 U	6.4 U	80	5.3 U	5.4 U	6.1 U	5.4 UJ	5.5 U	1.6 J	6 U
SVOC	2-nitroaniline	88-74-4	UG/KG														
SVOC	3-nitroaniline	99-09-2	UG/KG														
SVOC	4-nitroaniline	100-01-6	UG/KG														
SVOC	nitrobenzene	98-95-3	UG/KG														
SVOC	4-nitrophenol	100-02-7	UG/KG														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-48	32FED-1A-49	32FED-1A-49	32FED-1A-49	32FED-1A-49
			Sample_ID	C032C234	C032C014	C032C015	C032C016	C032C017
			Sample_Type	FD	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units					
SVOC	anthracene	120-12-7	UG/KG	5.9 UJ	9.7	5.5 U	2.7 J	6.2 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.9 UJ	37	5.5 U	11	6.2 U
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.9 UJ	76	2 J	18	6.2 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.9 UJ	5.2 U	5.5 U	3.2 J	6.2 U
SVOC	benzoic acid	65-85-0	UG/KG					
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	5.9 UJ	51 J	13	22	6.2 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.9 UJ	41	5.5 U	9	6.2 U
SVOC	benzyl alcohol	100-51-6	UG/KG					
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG					
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG					
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG					
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG					
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG					
SVOC	butyl benzyl phthalate	85-68-7	UG/KG					
SVOC	carbazole	86-74-8	UG/KG					
SVOC	4-chloroaniline	106-47-8	UG/KG					
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG					
SVOC	2-chloronaphthalene	91-58-7	UG/KG					
SVOC	2-chlorophenol	95-57-8	UG/KG					
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG					
SVOC	chrysene	218-01-9	UG/KG	5.9 UJ	180	4.4 J	59	6.2 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.9 UJ	31 J	2.8 J	9.5	6.2 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG					
SVOC	dibenzofuran	132-64-9	UG/KG					
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG					
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG					
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG					
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG					
SVOC	2,4-dichlorophenol	120-83-2	UG/KG					
SVOC	diethyl phthalate	84-66-2	UG/KG					
SVOC	2,4-dimethylphenol	105-67-9	UG/KG					
SVOC	dimethyl phthalate	131-11-3	UG/KG					
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG					
SVOC	2,4-dinitrophenol	51-28-5	UG/KG					
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG					
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG					
SVOC	di-n-octyl phthalate	117-84-0	UG/KG					
SVOC	fluoranthene	206-44-0	UG/KG	5.9 UJ	47	5.5 U	14	6.2 U
SVOC	fluorene	86-73-7	UG/KG	5.9 U	5.2 U	5.5 U	3.8 J	6.2 U
SVOC	hexachlorobenzene	118-74-1	UG/KG					
SVOC	hexachlorobutadiene	87-68-3	UG/KG					
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG					
SVOC	hexachloroethane	67-72-1	UG/KG					
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.9 UJ	9.1 J	1.8 J	3.3 J	6.2 U
SVOC	isophorone	78-59-1	UG/KG					
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.9 U	250	3.1 J	140	6.2 U
SVOC	2-methylphenol	95-48-7	UG/KG					
SVOC	4-methylphenol	106-44-5	UG/KG					
SVOC	naphthalene	91-20-3	UG/KG	5.9 U	17	5.5 U	11	6.2 U
SVOC	2-nitroaniline	88-74-4	UG/KG					
SVOC	3-nitroaniline	99-09-2	UG/KG					
SVOC	4-nitroaniline	100-01-6	UG/KG					
SVOC	nitrobenzene	98-95-3	UG/KG					
SVOC	4-nitrophenol	100-02-7	UG/KG					

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-001-001	023-001-002	023-003-009	023-003-009	023-003-009	023-003-009	023-003-010	023-003-010	023-003-011	023-003-011	023-003-012	023-003-012	023-003-013	023-003-013	023-005-023
			Sample_ID	023-0001M	023-0002M	023-0009	023-0009M	023-0023	023-0023M	023-0010M	023-0024M	023-0011M	023-0025M	023-0012M	023-0026M	023-0013M	023-0027M	023-0075
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	0 - 0.5	0 - 0.5	1 - 1.5	1 - 1.5	4 - 4.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	7 - 8
			Collection_Date	11-Jul-95	11-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	07-Nov-95
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	2-nitrophenol	88-75-5	UG/KG															540 U
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															540 U
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															540 U
SVOC	pentachlorophenol	87-86-5	UG/KG															1300 U
SVOC	phenanthrene	85-01-8	UG/KG															
SVOC	phenol	108-95-2	UG/KG															540 U
SVOC	pyrene	129-00-0	UG/KG															
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															1300 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															540 U
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG	22 U	21 U													
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG	22 U	21 U													
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG	22 U	21 U													
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG	22 U	21 U													
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG	22 U	21 U													
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG	22 U	21 U													
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG	22 U	21 U													
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-005-023	023-005-027	023-005-027	023-005-028	023-005-028	023-005-029	023-005-029	023-SS-003	023-SS-003	025-001-001	030-FLI-120	32FED-1A-10	32FED-1A-10	32FED-1A-10	32FED-1A-10
			Sample_ID	023-0075RE	023-0044	023-0044RE	023-0046	023-0046RE	023-0048	023-0048RE	023M-003	023M-003M	025-0001	030-FLI-120	C032C076	C032C077	C032C078	C032C079
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	7 - 8	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	4 - 4.5	4 - 4.5	0 - 0.5	0 - 4.5	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	06-Apr-95	06-Apr-95	09-May-95	04-Dec-98	15-May-02	15-May-02	15-May-02	15-May-02
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	2-nitrophenol	88-75-5	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
SVOC	pentachlorophenol	87-86-5	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	35 J		890 U					
SVOC	phenanthrene	85-01-8	UG/KG												3.5 J	5.6 UJ	5.8 UJ	6.1 UJ
SVOC	phenol	108-95-2	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		20 J					
SVOC	pyrene	129-00-0	UG/KG												6.7 J	5.6 UJ	5.8 UJ	6.1 UJ
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG	880 U	940 U	940 U	890 U	890 U	910 U	910 U	950 U		890 U					
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG	360 U	390 U	390 U	370 U	370 U	380 U	370 U	390 U		370 U					
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG								39 U							
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG								80 U							
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG								39 U							
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG								39 U							
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG								39 U							
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG								39 U							
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG								39 U							
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-10	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13
			Sample_ID	C032C080	C032C081	C032C082	C032C083	C032C084	C032C085	C032C086	C032C087	C032C088	C032C089	C032C090	C032C091	C032C092	C032C093
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	6.2 UJ	5.3 UJ	5.7 UJ	5.6 UJ	6.1 UJ	230	3.8 J	5.9 J	5.8 U	30	6.2	8.4	7.4	2.6 J
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	6.2 UJ	5.3 UJ	5.7 UJ	3.8 J	6.1 UJ	71	54 U	2.6 J	0.9 J	160	35	38	40	15
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-17
			Sample_ID	C032C094	C032C095	C032C096	C032C097	C032C098	C032C099	C032C100	C032C101	C032C102	C032C103	C032C104	C032C105	C032C106	C032C107
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	27 U	5.2 U	5.3 U	5.6 U	1.8 J	0.38 J	0.99 J	2.1 J	5.7 UJ	5.5 U	5.5 U	5.5 U	6.1 U	1.8 J
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	27 U	5.2 U	5.3 U	5.6 U	7.3 J	0.75 J	2.6 J	3.9 J	5.7 UJ	5 J	5.5 U	5.5 U	6.1 U	9
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-17	32FED-1A-17	32FED-1A-17	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-20	32FED-1A-20
			Sample_ID	C032C108	C032C109	C032C110	C032C111	C032C112	C032C113	C032C114	C032C115	C032C116	C032C117	C032C118	C032C119	C032C120	C032C121
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	5.6 UJ	5.8 UJ	6.2 U	74	4.6 J	5.1 J	3.6 J	5.7 U	0.94 J	0.94 J	0.53 J	6.2 U	15	5.8 U
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	5.6 U	3.5 J	6.2 U	34 J	62	83	17	5.7 U	2.8 J	2.1 J	1.3 J	6.2 U	17	5.8 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-20	32FED-1A-20	32FED-1A-20	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-23	32FED-1A-23	32FED-1A-23
			Sample_ID	C032C122	C032C123	C032C124	C032C125	C032C126	C032C127	C032C128	C032C129	C032C130	C032C131	C032C132	C032C133	C032C134	C032C135
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2
			Collection_Date	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	2.8 J	5.9 U	5.9 U	11	5.2 U	9.4	6.2 U	2.4 J	5.3 U	5.4 U	6 U	1.3 J	0.65 J	0.64 J
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	2.7 J	5.9 U	5.9 U	39	5.2 U	37	6.2 U	2.4 J	5.3 U	5.4 U	6 U	3 J	2 J	1.3 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-23	32FED-1A-23	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-26	32FED-1A-26	32FED-1A-26
			Sample_ID	C032C136	C032C137	C032C138	C032C139	C032C140	C032C141	C032C142	C032C143	C032C144	C032C145	C032C146	C032C147	C032C148	C032C149
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	4.9 J	600 U	170	1.9 J	20	5.8 U	7.1 J	5.4 UJ	3.6 J	6.1 UJ	5.9 UJ	1.6 J	5.6 U	1.9 J
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	9.6	600 U	79	5.3 U	10	2.5 J	4.9 J	5.4 U	2.2 J	6.1 U	5.9 U	3.3 J	5.6 U	6.7
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-26	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-29	32FED-1A-29	32FED-1A-29	32FED-1A-29
			Sample_ID	C032C150	C032C151	C032C152	C032C153	C032C154	C032C155	C032C156	C032C157	C032C158	C032C159	C032C160	C032C161	C032C162	C032C163
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	6 U	50 J	5.6 UJ	3 J	6.1 UJ	9.5 J	0.43 J	0.81 J	5 J	6 U	15 J	1.1 J	2.6 J	6.5 UJ
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	6 U	16 J	5.6 UJ	2.2 J	6.1 UJ	8.4 J	0.74 J	2 J	2.6 J	6 U	61 J	4.8 J	11 J	0.56 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-33
			Sample_ID	C032C164	C032C165	C032C166	C032C167	C032C168	C032C169	C032C170	C032C171	C032C172	C032C173	C032C174	C032C175	C032C176	C032C177
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	24-May-02	24-May-02	24-May-02	24-May-02	23-May-02	23-May-02	23-May-02	23-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	2.5 J	4.3 J	5.7 UJ	2 J	1 J	110	5.7	6.8	5.9 U	1.2 J	5.2 UJ	6.9 J	5.8 UJ	36
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	1 J	7.9 J	1.1 J	2.7 J	1.6 J	780	18	16	5.9 U	1.9 J	0.6 J	26 J	5.8 UJ	23 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-36
			Sample_ID	C032C178	C032C179	C032C180	C032C181	C032C182	C032C183	C032C184	C032C185	C032C186	C032C187	C032C188	C032C189	C032C190	C032C191
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	1.8 J	1.9 J	34	5.8 U	5.3 UJ	5.5 UJ	5.6 UJ	6.1 UJ	54 UJ	5.7 U	5.8 UJ	6.1 UJ	6.1 UJ	7.5
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	1.8 J	5.2 U	12	5.8 U	5.3 U	5.5 U	39	6.1 U	54 UJ	5.7 U	3.7 J	6.1 UJ	6.1 UJ	13
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-36	32FED-1A-36	32FED-1A-36	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-39	32FED-1A-39
			Sample_ID	C032C192	C032C193	C032C194	C032C195	C032C196	C032C197	C032C198	C032C199	C032C200	C032C201	C032C202	C032C203	C032C001	C032C002
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	5.4 U	2.2 J	6.1 U	28	4 J	13	6 U	2800	43	25	380	9	49	5.7 U
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	5.4 U	4 J	6.1 U	38	15	41	6 U	25000	160	110	600	3.9 J	30	5.7 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-39	32FED-1A-39	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-42	32FED-1A-42
			Sample_ID	C032C003	C032C004	C032C005	C032C006	C032C007	C032C008	C032C009	C032C010	C032C011	C032C012	C032C013	C032C022	C032C204	C032C205
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	120	6.1 U	110	2.9 J	7.3	2.1 J	1400	3.2 J	6.1	120	63	86	660	2.5 J
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	31	6.1 U	63	5.3 J	4.9 J	6 U	150	6.2 U	2.3 J	8.9	6.6	8.6	93 J	0.98 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-42	32FED-1A-42	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-45	32FED-1A-45	32FED-1A-45
			Sample_ID	C032C206	C032C207	C032C208	C032C209	C032C210	C032C211	C032C212	C032C213	C032C214	C032C215	C032C216	C032C217	C032C218	C032C219
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	370	1 J	3.1 J	1.3 J	5.8 U	5.9 U	6.2 U	8.9 J	5.4 U	28 U	6.1 U	3.3 J	52 UJ	52 UJ
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	25 J	0.48 J	3.9 J	2.5 J	0.52 J	0.47 J	1 J	100 U	5.4 U	28 U	0.62 J	51 UJ	52 UJ	52 UJ
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-45	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-48	32FED-1A-48	32FED-1A-48	32FED-1A-48
			Sample_ID	C032C220	C032C221	C032C222	C032C223	C032C224	C032C225	C032C226	C032C227	C032C228	C032C229	C032C230	C032C231	C032C232	C032C233
			Sample_Type	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	2-nitrophenol	88-75-5	UG/KG														
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG														
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG														
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG														
SVOC	pentachlorophenol	87-86-5	UG/KG														
SVOC	phenanthrene	85-01-8	UG/KG	6 U	22 J	5.3 UJ	5.3 UJ	5.6 UJ	4.1 J	640	5.3 U	3 J	6.1 U	7.2 J	0.52 J	2.3 J	6 UJ
SVOC	phenol	108-95-2	UG/KG														
SVOC	pyrene	129-00-0	UG/KG	0.43 J	68	5.5	4.6 J	3.5 J	18	1900	4 J	16	3.9 J	16 J	1.8 J	1.9 J	6 UJ
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG														
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG														
PEST/PCB	aldrin	309-00-2	UG/KG														
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG														
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG														
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG														
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG														
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG														
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG														
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG														
PEST/PCB	azinphos-methyl	86-50-0	UG/KG														
PEST/PCB	alpha-BHC	319-84-6	UG/KG														
PEST/PCB	beta-BHC	319-85-7	UG/KG														
PEST/PCB	delta-BHC	319-86-8	UG/KG														
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG														
PEST/PCB	bolstar	35400-43-2	UG/KG														
PEST/PCB	chlordane	57-74-9	UG/KG														
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG														
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG														
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG														
PEST/PCB	coumaphos	56-72-4	UG/KG														
PEST/PCB	4,4'-DDD	72-54-8	UG/KG														
PEST/PCB	O,P'-DDD	53-19-0	UG/KG														
PEST/PCB	4,4'-DDE	72-55-9	UG/KG														
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG														
PEST/PCB	4,4'-DDT	50-29-3	UG/KG														
PEST/PCB	O,P'-DDT	789-02-6	UG/KG														
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG														
PEST/PCB	diazinon	333-41-5	UG/KG														
PEST/PCB	dichlorvos	62-73-7	UG/KG														
PEST/PCB	dieldrin	60-57-1	UG/KG														
PEST/PCB	dimethoate	60-51-5	UG/KG														
PEST/PCB	disulfoton	298-04-4	UG/KG														
PEST/PCB	endosulfan I	959-98-8	UG/KG														
PEST/PCB	endosulfan II	33213-65-9	UG/KG														
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG														
PEST/PCB	endrin	72-20-8	UG/KG														
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG														
PEST/PCB	endrin ketone	53494-70-5	UG/KG														
PEST/PCB	EPN	2104-64-5	UG/KG														
PEST/PCB	ethion	563-12-2	UG/KG														
PEST/PCB	ethoprop	13194-48-4	UG/KG														
PEST/PCB	ethyl parathion	56-38-2	UG/KG														
PEST/PCB	fensulfothion	115-90-2	UG/KG														
PEST/PCB	fenthion	55-38-9	UG/KG														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-48	32FED-1A-49	32FED-1A-49	32FED-1A-49	32FED-1A-49
			Sample_ID	C032C234	C032C014	C032C015	C032C016	C032C017
			Sample_Type	FD	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units					
SVOC	2-nitrophenol	88-75-5	UG/KG					
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG					
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG					
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG					
SVOC	pentachlorophenol	87-86-5	UG/KG					
SVOC	phenanthrene	85-01-8	UG/KG	5.9 UJ	560	7.9	170	4.4 J
SVOC	phenol	108-95-2	UG/KG					
SVOC	pyrene	129-00-0	UG/KG	5.9 UJ	94	2.1 J	25	6.2 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG					
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG					
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG					
PEST/PCB	aldrin	309-00-2	UG/KG					
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG					
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG					
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG					
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG					
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG					
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG					
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG					
PEST/PCB	azinphos-methyl	86-50-0	UG/KG					
PEST/PCB	alpha-BHC	319-84-6	UG/KG					
PEST/PCB	beta-BHC	319-85-7	UG/KG					
PEST/PCB	delta-BHC	319-86-8	UG/KG					
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG					
PEST/PCB	bolstar	35400-43-2	UG/KG					
PEST/PCB	chlordane	57-74-9	UG/KG					
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG					
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG					
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG					
PEST/PCB	coumaphos	56-72-4	UG/KG					
PEST/PCB	4,4'-DDD	72-54-8	UG/KG					
PEST/PCB	O,P'-DDD	53-19-0	UG/KG					
PEST/PCB	4,4'-DDE	72-55-9	UG/KG					
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG					
PEST/PCB	4,4'-DDT	50-29-3	UG/KG					
PEST/PCB	O,P'-DDT	789-02-6	UG/KG					
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG					
PEST/PCB	diazinon	333-41-5	UG/KG					
PEST/PCB	dichlorvos	62-73-7	UG/KG					
PEST/PCB	dieldrin	60-57-1	UG/KG					
PEST/PCB	dimethoate	60-51-5	UG/KG					
PEST/PCB	disulfoton	298-04-4	UG/KG					
PEST/PCB	endosulfan I	959-98-8	UG/KG					
PEST/PCB	endosulfan II	33213-65-9	UG/KG					
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG					
PEST/PCB	endrin	72-20-8	UG/KG					
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG					
PEST/PCB	endrin ketone	53494-70-5	UG/KG					
PEST/PCB	EPN	2104-64-5	UG/KG					
PEST/PCB	ethion	563-12-2	UG/KG					
PEST/PCB	ethoprop	13194-48-4	UG/KG					
PEST/PCB	ethyl parathion	56-38-2	UG/KG					
PEST/PCB	fensulfothion	115-90-2	UG/KG					
PEST/PCB	fenthion	55-38-9	UG/KG					

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-001-001	023-001-002	023-003-009	023-003-009	023-003-009	023-003-009	023-003-010	023-003-010	023-003-011	023-003-011	023-003-012	023-003-012	023-003-013	023-003-013	023-005-023
			Sample_ID	023-0001M	023-0002M	023-0009	023-0009M	023-0023	023-0023M	023-0010M	023-0024M	023-0011M	023-0025M	023-0012M	023-0026M	023-0013M	023-0027M	023-0075
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	0 - 0.5	0 - 0.5	1 - 1.5	1 - 1.5	4 - 4.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	7 - 8
			Collection_Date	11-Jul-95	11-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	07-Nov-95
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG			4870 J		4270 J										
METALS	antimony	7440-36-0	MG/KG			1.2 UJ	3.1 U	1.3 UJ	3.3 U	3.4 U	3.5 U	3.5 U	3.6 U	3.3 U	3.6 U	3.5 U	3.4 U	
METALS	arsenic	7440-38-2	MG/KG			1.4	1.8	1	1.5	1.9	1.5	1.7	1.6	1.4	1.5	1.3	1.6	
METALS	barium	7440-39-3	MG/KG			23.8	28	30.7	25	30	34	26	34	21	40	34	56	
METALS	beryllium	7440-41-7	MG/KG			0.39 J	0.23	0.33 J	0.23	0.27	0.22	0.26	0.25	0.22	0.22	0.24	0.27	
METALS	cadmium	7440-43-9	MG/KG			0.06 U	0.33	0.07 U	0.27	0.57	0.26	0.31	0.29	0.3	0.28	0.3	0.37	
METALS	calcium	7440-70-2	MG/KG			2250 J		2320 J										
METALS	chromium	7440-47-3	MG/KG			30.1	30	27.5	27	30	27	33	29	27	29	29	33	
METALS	cobalt	7440-48-4	MG/KG			4.1	21	3.2	4.2	11	4.2	4.8	4.5	4.3	4.3	4.7	5.2	
METALS	copper	7440-50-8	MG/KG			5.3	6.5	9.3	5.2	6.9	4.8	5.6	5.4	8.2	6	5.6	7.5	
METALS	iron	7439-89-6	MG/KG			8170 J		7270 J										
METALS	lead	7439-92-1	MG/KG			2.1	2	1.8 U	1.5	13	2	2	1.7	1.7	1.5	2	6.1	
METALS	magnesium	7439-95-4	MG/KG			2490		2170										
METALS	manganese	7439-96-5	MG/KG			84.5 J		89.3 J										
METALS	mercury	7439-97-6	MG/KG			0.16 U	0.11 U	0.17 U	0.11 U	0.12 U	0.12 U	0.12 U	0.12 U	0.11 U	0.12 U	0.12 U	0.12 U	
METALS	molybdenum	7439-98-7	MG/KG			1.7 U	1 U	1.8 U	1.1 U	1.1 U	1.2 U	1.2 U	1.2 U	1.1 U	1.2 U	1.2 U	1.1 U	
METALS	nickel	7440-02-0	MG/KG			23.6	25	22.1	21	24	22	25	23	21	24	24	26	
METALS	potassium	7440-09-7	MG/KG			728		564										
METALS	selenium	7782-49-2	MG/KG			0.72	0.26 U	0.55 U	0.28 U	0.28 U	0.29 U	0.29 U	0.3 U	0.28 U	0.3 U	0.29 U	0.29 U	
METALS	silver	7440-22-4	MG/KG			0.19 UJ	0.52 U	0.2 UJ	0.55 U	0.57 U	0.58 U	0.58 U	0.6 U	0.55 U	0.61 U	0.58 U	0.57 U	
METALS	sodium	7440-23-5	MG/KG			77.3		97.4										
METALS	thallium	7440-28-0	MG/KG			2.8	0.26 U	2.4	0.28 U	0.28 U	0.29 U	0.29 U	0.3 U	0.28 U	0.3 U	0.29 U	0.29 U	
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG			19.6	19	19.7	19	22	18	21	20	19	19	19	23	
METALS	zinc	7440-66-6	MG/KG			17.7	13	20	12	15	12	14	13	14	13	14	15	
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-005-023	023-005-027	023-005-027	023-005-028	023-005-028	023-005-029	023-005-029	023-SS-003	023-SS-003	025-001-001	030-FLI-120	32FED-1A-10	32FED-1A-10	32FED-1A-10	32FED-1A-10
			Sample_ID	023-0075RE	023-0044	023-0044RE	023-0046	023-0046RE	023-0048	023-0048RE	023M-003	023M-003M	025-0001	030-FLI-120	C032C076	C032C077	C032C078	C032C079
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	7 - 8	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	4 - 4.5	4 - 4.5	0 - 0.5	0 - 4.5	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	06-Apr-95	06-Apr-95	09-May-95	04-Dec-98	15-May-02	15-May-02	15-May-02	15-May-02
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG								0.001 UJ							
ORGANOTN	monobutyltin	1118-46-3	MG/KG								0.001 UJ							
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG								0.001 UJ							
ORGANOTN	tributyltin	688-73-3	MG/KG								0.001 UJ							
METALS	aluminum	7429-90-5	MG/KG										4940					
METALS	antimony	7440-36-0	MG/KG									3.5 U	1.4 UJ					
METALS	arsenic	7440-38-2	MG/KG									1.4	1.6 J					
METALS	barium	7440-39-3	MG/KG									29	26.9 J					
METALS	beryllium	7440-41-7	MG/KG									0.27	0.29					
METALS	cadmium	7440-43-9	MG/KG									1.4	0.1 J					
METALS	calcium	7440-70-2	MG/KG										2130					
METALS	chromium	7440-47-3	MG/KG									30	24.9 J					
METALS	cobalt	7440-48-4	MG/KG									4.5	4 U					
METALS	copper	7440-50-8	MG/KG									7.1	7.7					
METALS	iron	7439-89-6	MG/KG										9260 J					
METALS	lead	7439-92-1	MG/KG									4.4	15.5 J					
METALS	magnesium	7439-95-4	MG/KG										3080					
METALS	manganese	7439-96-5	MG/KG										144					
METALS	mercury	7439-97-6	MG/KG									0.12 U	0.16 U					
METALS	molybdenum	7439-98-7	MG/KG									1.2 U	2.2 U					
METALS	nickel	7440-02-0	MG/KG									24	23.5					
METALS	potassium	7440-09-7	MG/KG										832					
METALS	selenium	7782-49-2	MG/KG									0.29 U	0.57 UJ					
METALS	silver	7440-22-4	MG/KG									0.59 U	0.2 UJ					
METALS	sodium	7440-23-5	MG/KG										1850					
METALS	thallium	7440-28-0	MG/KG									0.36	1.6					
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG									19	21.4					
METALS	zinc	7440-66-6	MG/KG									16	26.9					
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-10	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13
			Sample_ID	C032C080	C032C081	C032C082	C032C083	C032C084	C032C085	C032C086	C032C087	C032C088	C032C089	C032C090	C032C091	C032C092	C032C093
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-17
			Sample_ID	C032C094	C032C095	C032C096	C032C097	C032C098	C032C099	C032C100	C032C101	C032C102	C032C103	C032C104	C032C105	C032C106	C032C107
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-17	32FED-1A-17	32FED-1A-17	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-20	32FED-1A-20
			Sample_ID	C032C108	C032C109	C032C110	C032C111	C032C112	C032C113	C032C114	C032C115	C032C116	C032C117	C032C118	C032C119	C032C120	C032C121
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-20	32FED-1A-20	32FED-1A-20	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-23	32FED-1A-23	32FED-1A-23
			Sample_ID	C032C122	C032C123	C032C124	C032C125	C032C126	C032C127	C032C128	C032C129	C032C130	C032C131	C032C132	C032C133	C032C134	C032C135
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2
			Collection_Date	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-23	32FED-1A-23	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-26	32FED-1A-26	32FED-1A-26
			Sample_ID	C032C136	C032C137	C032C138	C032C139	C032C140	C032C141	C032C142	C032C143	C032C144	C032C145	C032C146	C032C147	C032C148	C032C149
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-26	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-29	32FED-1A-29	32FED-1A-29	32FED-1A-29
			Sample_ID	C032C150	C032C151	C032C152	C032C153	C032C154	C032C155	C032C156	C032C157	C032C158	C032C159	C032C160	C032C161	C032C162	C032C163
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-33
			Sample_ID	C032C164	C032C165	C032C166	C032C167	C032C168	C032C169	C032C170	C032C171	C032C172	C032C173	C032C174	C032C175	C032C176	C032C177
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	24-May-02	24-May-02	24-May-02	24-May-02	23-May-02	23-May-02	23-May-02	23-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-36
			Sample_ID	C032C178	C032C179	C032C180	C032C181	C032C182	C032C183	C032C184	C032C185	C032C186	C032C187	C032C188	C032C189	C032C190	C032C191
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-36	32FED-1A-36	32FED-1A-36	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-39	32FED-1A-39
			Sample_ID	C032C192	C032C193	C032C194	C032C195	C032C196	C032C197	C032C198	C032C199	C032C200	C032C201	C032C202	C032C203	C032C001	C032C002
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-39	32FED-1A-39	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-42	32FED-1A-42
			Sample_ID	C032C003	C032C004	C032C005	C032C006	C032C007	C032C008	C032C009	C032C010	C032C011	C032C012	C032C013	C032C022	C032C204	C032C205
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-42	32FED-1A-42	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-45	32FED-1A-45	32FED-1A-45
			Sample_ID	C032C206	C032C207	C032C208	C032C209	C032C210	C032C211	C032C212	C032C213	C032C214	C032C215	C032C216	C032C217	C032C218	C032C219
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b
Soil Samples: FED-1A EBS 23 Part 1
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-45	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-48	32FED-1A-48	32FED-1A-48	32FED-1A-48
			Sample_ID	C032C220	C032C221	C032C222	C032C223	C032C224	C032C225	C032C226	C032C227	C032C228	C032C229	C032C230	C032C231	C032C232	C032C233
			Sample_Type	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	heptachlor	76-44-8	UG/KG														
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG														
PEST/PCB	malathion	121-75-5	UG/KG														
PEST/PCB	merphos	150-50-5	UG/KG														
PEST/PCB	methoxychlor	72-43-5	UG/KG														
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG														
PEST/PCB	methyl parathion	298-00-0	UG/KG														
PEST/PCB	mevinphos	7786-34-7	UG/KG														
PEST/PCB	naled	300-76-5	UG/KG														
PEST/PCB	phorate	298-02-2	UG/KG														
PEST/PCB	ronnel	299-84-3	UG/KG														
PEST/PCB	sulfotep	3689-24-5	UG/KG														
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG														
PEST/PCB	tokuthion	34643-46-4	UG/KG														
PEST/PCB	toxaphene	8001-35-2	UG/KG														
PEST/PCB	trichloronate	327-98-0	UG/KG														
HERB	2,4'-DB	94-82-6	UG/KG														
HERB	dicamba	1918-00-9	UG/KG														
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG														
HERB	dichloroprop	120-36-5	UG/KG														
HERB	dinoseb	88-85-7	UG/KG														
HERB	2,4,5-T	93-76-5	UG/KG														
HERB	2,4,5-TP	93-72-1	UG/KG														
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG														
METALS	antimony	7440-36-0	MG/KG														
METALS	arsenic	7440-38-2	MG/KG														
METALS	barium	7440-39-3	MG/KG														
METALS	beryllium	7440-41-7	MG/KG														
METALS	cadmium	7440-43-9	MG/KG														
METALS	calcium	7440-70-2	MG/KG														
METALS	chromium	7440-47-3	MG/KG														
METALS	cobalt	7440-48-4	MG/KG														
METALS	copper	7440-50-8	MG/KG														
METALS	iron	7439-89-6	MG/KG														
METALS	lead	7439-92-1	MG/KG														
METALS	magnesium	7439-95-4	MG/KG														
METALS	manganese	7439-96-5	MG/KG														
METALS	mercury	7439-97-6	MG/KG														
METALS	molybdenum	7439-98-7	MG/KG														
METALS	nickel	7440-02-0	MG/KG														
METALS	potassium	7440-09-7	MG/KG														
METALS	selenium	7782-49-2	MG/KG														
METALS	silver	7440-22-4	MG/KG														
METALS	sodium	7440-23-5	MG/KG														
METALS	thallium	7440-28-0	MG/KG														
METALS	titanium	7440-32-6	MG/KG														
METALS	vanadium	7440-62-2	MG/KG														
METALS	zinc	7440-66-6	MG/KG														
RAD	americium-241	14596-10-2	pCi/g														
RAD	cesium-137	10045-97-3	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-48	32FED-1A-49	32FED-1A-49	32FED-1A-49	32FED-1A-49
			Sample_ID	C032C234	C032C014	C032C015	C032C016	C032C017
			Sample_Type	FD	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units					
PEST/PCB	heptachlor	76-44-8	UG/KG					
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG					
PEST/PCB	malathion	121-75-5	UG/KG					
PEST/PCB	merphos	150-50-5	UG/KG					
PEST/PCB	methoxychlor	72-43-5	UG/KG					
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG					
PEST/PCB	methyl parathion	298-00-0	UG/KG					
PEST/PCB	mevinphos	7786-34-7	UG/KG					
PEST/PCB	naled	300-76-5	UG/KG					
PEST/PCB	phorate	298-02-2	UG/KG					
PEST/PCB	ronnel	299-84-3	UG/KG					
PEST/PCB	sulfotep	3689-24-5	UG/KG					
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG					
PEST/PCB	tokuthion	34643-46-4	UG/KG					
PEST/PCB	toxaphene	8001-35-2	UG/KG					
PEST/PCB	trichloronate	327-98-0	UG/KG					
HERB	2,4'-DB	94-82-6	UG/KG					
HERB	dicamba	1918-00-9	UG/KG					
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG					
HERB	dichloroprop	120-36-5	UG/KG					
HERB	dinoseb	88-85-7	UG/KG					
HERB	2,4,5-T	93-76-5	UG/KG					
HERB	2,4,5-TP	93-72-1	UG/KG					
ORGANOTN	dibutyltin	683-18-1	MG/KG					
ORGANOTN	monobutyltin	1118-46-3	MG/KG					
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG					
ORGANOTN	tributyltin	688-73-3	MG/KG					
METALS	aluminum	7429-90-5	MG/KG					
METALS	antimony	7440-36-0	MG/KG					
METALS	arsenic	7440-38-2	MG/KG					
METALS	barium	7440-39-3	MG/KG					
METALS	beryllium	7440-41-7	MG/KG					
METALS	cadmium	7440-43-9	MG/KG					
METALS	calcium	7440-70-2	MG/KG					
METALS	chromium	7440-47-3	MG/KG					
METALS	cobalt	7440-48-4	MG/KG					
METALS	copper	7440-50-8	MG/KG					
METALS	iron	7439-89-6	MG/KG					
METALS	lead	7439-92-1	MG/KG					
METALS	magnesium	7439-95-4	MG/KG					
METALS	manganese	7439-96-5	MG/KG					
METALS	mercury	7439-97-6	MG/KG					
METALS	molybdenum	7439-98-7	MG/KG					
METALS	nickel	7440-02-0	MG/KG					
METALS	potassium	7440-09-7	MG/KG					
METALS	selenium	7782-49-2	MG/KG					
METALS	silver	7440-22-4	MG/KG					
METALS	sodium	7440-23-5	MG/KG					
METALS	thallium	7440-28-0	MG/KG					
METALS	titanium	7440-32-6	MG/KG					
METALS	vanadium	7440-62-2	MG/KG					
METALS	zinc	7440-66-6	MG/KG					
RAD	americium-241	14596-10-2	pCi/g					
RAD	cesium-137	10045-97-3	pCi/g					

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-001-001	023-001-002	023-003-009	023-003-009	023-003-009	023-003-009	023-003-010	023-003-010	023-003-011	023-003-011	023-003-012	023-003-012	023-003-013	023-003-013	023-005-023
			Sample_ID	023-0001M	023-0002M	023-0009	023-0009M	023-0023	023-0023M	023-0010M	023-0024M	023-0011M	023-0025M	023-0012M	023-0026M	023-0013M	023-0027M	023-0075
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	0 - 0.5	0 - 0.5	1 - 1.5	1 - 1.5	4 - 4.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	1 - 1.5	4 - 4.5	7 - 8
			Collection_Date	11-Jul-95	11-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	12-Jul-95	07-Nov-95
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	023-005-023	023-005-027	023-005-027	023-005-028	023-005-028	023-005-029	023-005-029	023-SS-003	023-SS-003	025-001-001	030-FLI-120	32FED-1A-10	32FED-1A-10	32FED-1A-10	32FED-1A-10
			Sample_ID	023-0075RE	023-0044	023-0044RE	023-0046	023-0046RE	023-0048	023-0048RE	023M-003	023M-003M	025-0001	030-FLI-120	C032C076	C032C077	C032C078	C032C079
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	7 - 8	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	3 - 4	4 - 4.5	4 - 4.5	0 - 0.5	0 - 4.5	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	07-Nov-95	06-Apr-95	06-Apr-95	09-May-95	04-Dec-98	15-May-02	15-May-02	15-May-02	15-May-02
			REFERENCE	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001	TtEMI 2004	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-10	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-11	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-12	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13	32FED-1A-13
			Sample_ID	C032C080	C032C081	C032C082	C032C083	C032C084	C032C085	C032C086	C032C087	C032C088	C032C089	C032C090	C032C091	C032C092	C032C093
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-14	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-15	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-16	32FED-1A-17
			Sample_ID	C032C094	C032C095	C032C096	C032C097	C032C098	C032C099	C032C100	C032C101	C032C102	C032C103	C032C104	C032C105	C032C106	C032C107
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-17	32FED-1A-17	32FED-1A-17	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-18	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-19	32FED-1A-20	32FED-1A-20
			Sample_ID	C032C108	C032C109	C032C110	C032C111	C032C112	C032C113	C032C114	C032C115	C032C116	C032C117	C032C118	C032C119	C032C120	C032C121
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-20	32FED-1A-20	32FED-1A-20	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-21	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-22	32FED-1A-23	32FED-1A-23	32FED-1A-23
			Sample_ID	C032C122	C032C123	C032C124	C032C125	C032C126	C032C127	C032C128	C032C129	C032C130	C032C131	C032C132	C032C133	C032C134	C032C135
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2
			Collection_Date	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-23	32FED-1A-23	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-24	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-25	32FED-1A-26	32FED-1A-26	32FED-1A-26
			Sample_ID	C032C136	C032C137	C032C138	C032C139	C032C140	C032C141	C032C142	C032C143	C032C144	C032C145	C032C146	C032C147	C032C148	C032C149
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-26	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-27	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-28	32FED-1A-29	32FED-1A-29	32FED-1A-29	32FED-1A-29
			Sample_ID	C032C150	C032C151	C032C152	C032C153	C032C154	C032C155	C032C156	C032C157	C032C158	C032C159	C032C160	C032C161	C032C162	C032C163
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	13-May-02	13-May-02	13-May-02	13-May-02	13-May-02	21-May-02	21-May-02	21-May-02	21-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-30	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-31	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-32	32FED-1A-33
			Sample_ID	C032C164	C032C165	C032C166	C032C167	C032C168	C032C169	C032C170	C032C171	C032C172	C032C173	C032C174	C032C175	C032C176	C032C177
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	24-May-02	24-May-02	24-May-02	24-May-02	23-May-02	23-May-02	23-May-02	23-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-33	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-34	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-35	32FED-1A-36
			Sample_ID	C032C178	C032C179	C032C180	C032C181	C032C182	C032C183	C032C184	C032C185	C032C186	C032C187	C032C188	C032C189	C032C190	C032C191
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-36	32FED-1A-36	32FED-1A-36	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-37	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-38	32FED-1A-39	32FED-1A-39
			Sample_ID	C032C192	C032C193	C032C194	C032C195	C032C196	C032C197	C032C198	C032C199	C032C200	C032C201	C032C202	C032C203	C032C001	C032C002
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-39	32FED-1A-39	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-40	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-41	32FED-1A-42	32FED-1A-42
			Sample_ID	C032C003	C032C004	C032C005	C032C006	C032C007	C032C008	C032C009	C032C010	C032C011	C032C012	C032C013	C032C022	C032C204	C032C205
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	FD	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-42	32FED-1A-42	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-43	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-44	32FED-1A-45	32FED-1A-45	32FED-1A-45
			Sample_ID	C032C206	C032C207	C032C208	C032C209	C032C210	C032C211	C032C212	C032C213	C032C214	C032C215	C032C216	C032C217	C032C218	C032C219
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-45	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-46	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-47	32FED-1A-48	32FED-1A-48	32FED-1A-48	32FED-1A-48
			Sample_ID	C032C220	C032C221	C032C222	C032C223	C032C224	C032C225	C032C226	C032C227	C032C228	C032C229	C032C230	C032C231	C032C232	C032C233
			Sample_Type	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	cobalt-60	10198-40-0	pCi/g														
RAD	europium-152	14683-23-9	pCi/g														
RAD	europium-154	15585-10-1	pCi/g														
RAD	potassium-40	13966-00-2	pCi/g														
RAD	radium-226	13982-63-3	pCi/g														
RAD	thorium	7440-29-1	pCi/g														

Table A1-2b

Soil Samples: FED-1A EBS 23 Part 1

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-48	32FED-1A-49	32FED-1A-49	32FED-1A-49	32FED-1A-49
			Sample_ID	C032C234	C032C014	C032C015	C032C016	C032C017
			Sample_Type	FD	REG	REG	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units					
RAD	cobalt-60	10198-40-0	pCi/g					
RAD	europium-152	14683-23-9	pCi/g					
RAD	europium-154	15585-10-1	pCi/g					
RAD	potassium-40	13966-00-2	pCi/g					
RAD	radium-226	13982-63-3	pCi/g					
RAD	thorium	7440-29-1	pCi/g					

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-52	32FED-1A-52
			Sample_ID	C032C054	C032C055	C032C056	C032C057	C032C058	C032C018	C032C019	C032C020	C032C021	C032C023	C032C024	C032C025	C032C026	C032C235	C032C236
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	7	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	5.2 U	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.4 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	5.2 U	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	14	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	5.2 U	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	230	1.6 J	5 J	5.9 U	5.9 U	3.7 J	5.8 U	6.2 U	6.2 U	2.5 J	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-52	32FED-1A-52	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-55	32FED-1A-55	32FED-1A-55	32FED-1A-55
			Sample_ID	C032C237	C032C238	C032C239	C032C240	C032C241	C032C242	C032C243	C032C244	C032C245	C032C246	C032C247	C032C248	C032C249	C032C250	C032C251
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	5.7 U	6 U	27 UJ	5.8 UJ	5.7 UJ	6 UJ	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.7 U	6 U	27 U	5.8 U	5.7 U	6 U	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	5.7 U	6 U	27 UJ	5.8 UJ	5.7 UJ	6 UJ	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.7 U	6 U	27 U	5.8 U	2.2 J	6 U	5.3 UJ	5.7 UJ	5.7 UJ	5.9 UJ	6 UJ	3.2 J	5.4 U	5.6 U	6.1 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-59	32FED-1A-59
			Sample_ID	C032C252	C032C253	C032C254	C032C255	C032C256	C032C257	C032C258	C032C259	C032C260	C032C261	C032C262	C032C263	C032C264	C032C265	C032C266
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	5.3 U	5.4 U	5.6 U	4.8 J	2 J	5.4 U	5.7 U	5.8 U	6.1 U	60	3.5 J	580 J	210	5.7 U	5.9 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.3 U	2.3 J	5.6 U	5.9 U	5.9 U	5.4 U	5.7 U	5.8 U	6.1 U	36	5.5 U	1100 U	2.7 J	5.7 U	5.9 U
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	5.3 U	6	5.6 U	1.2 J	0.47 J	1.8 J	5.7 U	5.8 U	6.1 U	64	5.3 J	470 J	220	5.7 U	5.9 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	2.2 J	12	2.9 J	3.3 J	1.4 J	50	10	14	2.7 J	550 J	95 J	12000 J	4700 J	5.7 U	5.9 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-59	32FED-1A-59	32FED-1A-59	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-61	32FED-1A-61	32FED-1A-61	32FED-1A-61
			Sample_ID	C032C267	C032C268	C032C269	C032C059	C032C060	C032C061	C032C062	C032C027	C032C028	C032C029	C032C030	C032C031	C032C032	C032C033	C032C034
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4
			Collection_Date	23-May-02	23-May-02	23-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	5.9 U	6 U	6 U	5.2 UJ	5.2 UJ	5.2 UJ	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	52	6.3 U	5.9 U	4.4 J
SVOC	acenaphthylene	208-96-8	UG/KG	5.9 U	6 U	6 U	5.2 UJ	5.2 UJ	5.2 UJ	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	5.4 U	6.3 U	5.9 U	1.8 J
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	5.9 U	6 U	6 U	5.2 UJ	5.2 UJ	5.2 UJ	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	43	6.3 U	5.9 U	2.9 J
SVOC	benz(a)anthracene	56-55-3	UG/KG	5.9 U	6 U	6 U	1 J	1.4 J	0.78 J	0.53 J	1.5 J	6.1 U	1.8 J	6.1 U	150	2.7 J	2.2 J	11

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-61	32FED-1A-61	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-64	32FED-1A-64	32FED-1A-64	32FED-1A-64
			Sample_ID	C032C035	C032C036	C032C270	C032C271	C032C272	C032C273	C032C274	C032C275	C032C276	C032C277	C032C278	C032C279	C032C280	C032C281	C032C282
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	27-Apr-02	27-Apr-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	acenaphthylene	208-96-8	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	3.1 J	6 U	6 U	5.9 UJ	5.8 UJ	6 UJ	6 UJ

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-68	32FED-1A-68
			Sample_ID	C032C283	C032C284	C032C285	C032C286	C032C287	C032C288	C032C289	C032C290	C032C291	C032C292	C032C293	C032C294	C032C295	C032C296	C032C297
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	52 UJ	5.6 U	5.6 U	57 U	6.2 U	5.2 U	2.4 J	13	6.2 U	27 UJ	5.6 UJ
SVOC	acenaphthylene	208-96-8	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	52 UJ	5.6 U	5.6 U	57 U	6.2 U	5.2 UJ	5.3 UJ	5.8 UJ	6.2 UJ	27 UJ	5.6 UJ
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	52 UJ	5.6 U	5.6 U	57 U	6.2 U	5.2 U	1.3 J	10	6.2 U	27 UJ	5.6 UJ
SVOC	benz(a)anthracene	56-55-3	UG/KG	53 UJ	5.6 U	6.3 J	0.99 J	5.9 J	5.6 U	0.47 J	57 U	6.2 U	5.2 U	62	230	11	27 UJ	0.44 J

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-68	32FED-1A-68	32FED-1A-68	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-70	32FED-1A-70	32FED-1A-70	32FED-1A-70
			Sample_ID	C032C298	C032C299	C032C300	C032C301	C032C302	C032C303	C032C304	C032C063	C032C064	C032C065	C032C066	C032C305	C032C306	C032C307	C032C308
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	20-May-02	20-May-02	20-May-02	20-May-02	24-May-02	24-May-02	24-May-02	24-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	19 J	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	acenaphthylene	208-96-8	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	21 J	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	30 U	0.45 J	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	0.87 J	6 U	0.52 J	6.2 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-74
			Sample_ID	C032C309	C032C310	C032C311	C032C312	C032C313	C032C314	C032C315	C032C316	C032C317	C032C318	C032C319	C032C320	C032C321	C032C322	C032C323
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	24-May-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	5.3 U	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	100 UJ
SVOC	acenaphthylene	208-96-8	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	5.3 U	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	38 J
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	5.3 U	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	56 J
SVOC	benz(a)anthracene	56-55-3	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	0.46 J	0.65 J	0.55 J	5.9 U	5.9 UJ	6.1 UJ	6.2 UJ	6 UJ	6.1 UJ	230 J

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-74	32FED-1A-74	32FED-1A-74	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-77	32FED-1A-77	32FED-1A-77
			Sample_ID	C032C324	C032C325	C032C326	C032C327	C032C328	C032C329	C032C330	C032C331	C032C332	C032C333	C032C334	C032C335	C032C336	C032C337	C032C338
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	29 UJ	59 U	6.2 U	1.6 J	5.5 U	5.7 U	6.2 U	5.6 U	6 U	6 U	5.9 U	6 U	29 UJ	6 UJ	29 UJ
SVOC	acenaphthylene	208-96-8	UG/KG	29 UJ	59 U	6.2 U	1.8 J	5.5 U	5.7 U	6.2 U	5.6 U	6 U	6 U	5.9 U	6 U	29 UJ	6 UJ	29 UJ
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	29 UJ	59 U	6.2 U	3.9 J	5.5 U	5.7 U	2.8 J	5.6 U	6 U	6 U	5.9 U	6 U	29 UJ	6 UJ	29 UJ
SVOC	benz(a)anthracene	56-55-3	UG/KG	3 J	33 J	6.2 U	4.4 J	5.5 U	5.7 U	8.7	5.6 U	2.3 J	6 U	5.9 U	6 U	6 J	1 J	5.7 J

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-77	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8
			Sample_ID	C032C339	C032C340	C032C341	C032C342	C032C343	C032C344	C032C345	C032C346	C032C347	C032C348	C032C067	C032C068	C032C069	C032C070	C032C071
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	14-May-02	14-May-02	14-May-02	14-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
VOC	acetone	67-64-1	UG/KG															
VOC	benzene	71-43-2	UG/KG															
VOC	bromodichloromethane	75-27-4	UG/KG															
VOC	bromoform	75-25-2	UG/KG															
VOC	bromomethane	74-83-9	UG/KG															
VOC	2-butanone	78-93-3	UG/KG															
VOC	carbon disulfide	75-15-0	UG/KG															
VOC	carbon tetrachloride	56-23-5	UG/KG															
VOC	chlorobenzene	108-90-7	UG/KG															
VOC	chlorodibromomethane	124-48-1	UG/KG															
VOC	chloroethane	75-00-3	UG/KG															
VOC	chloroform	67-66-3	UG/KG															
VOC	chloromethane	74-87-3	UG/KG															
VOC	1,3-dichlorobenzene	541-73-1	UG/KG															
VOC	1,4-dichlorobenzene	106-46-7	UG/KG															
VOC	1,1-dichloroethane	75-34-3	UG/KG															
VOC	1,2-dichloroethane	107-06-2	UG/KG															
VOC	1,1-dichloroethene	75-35-4	UG/KG															
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG															
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG															
VOC	1,2-dichloroethene	540-59-0	UG/KG															
VOC	1,2-dichloropropane	78-87-5	UG/KG															
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG															
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG															
VOC	ethylbenzene	100-41-4	UG/KG															
VOC	n-hexane	110-54-3	UG/KG															
VOC	2-hexanone	591-78-6	UG/KG															
VOC	methyl tert-butyl ether	1634-04-4	UG/KG															
VOC	methylene chloride	75-09-2	UG/KG															
VOC	4-methyl-2-pentanone	108-10-1	UG/KG															
VOC	styrene	100-42-5	UG/KG															
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG															
VOC	tetrachloroethene	127-18-4	UG/KG															
VOC	toluene	108-88-3	UG/KG															
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
VOC	1,1,1-trichloroethane	71-55-6	UG/KG															
VOC	1,1,2-trichloroethane	79-00-5	UG/KG															
VOC	trichloroethene	79-01-6	UG/KG															
VOC	trichlorofluoromethane	75-69-4	UG/KG															
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG															
VOC	vinyl acetate	108-05-4	UG/KG															
VOC	vinyl chloride	75-01-4	UG/KG															
VOC	meta-,para-xylene	7816-60-0	UG/KG															
VOC	o-xylene	95-47-6	UG/KG															
VOC	xylenes, total	1330-20-7	UG/KG															
FUELS	diesel	11-84-7	MG/KG															
FUELS	gasoline	8006-61-9	MG/KG															
FUELS	JP-5	21274-30-0	MG/KG															
FUELS	motor oil	68476-77-7	MG/KG															
FUELS	oil and grease	10-30-0	MG/KG															
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG															
SVOC	acenaphthene	83-32-9	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	acenaphthylene	208-96-8	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	aniline	62-53-3	UG/KG															
SVOC	anthracene	120-12-7	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	0.42 J	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-9	32FED-1A-9	32FED-1A-9	32FED-1A-9	M009-A	M009-A	M009-A	M009-A	M010-B	M014-B	M015-A	M015-A	M015-A	M103-A	M103-B	M104-A	M104-A	M104-A	M104-A
			Sample_ID	C032C072	C032C073	C032C074	C032C075	15-255	15-256	M-009A-0	M-009A-003	M10-B	M14-B	15-262	15-263	M-015A-005	M103-A	M103-B	15-258	15-259	15-259	15-259
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 2.5	2 - 2.5	0 - 0	2 - 3.3	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 4.8	5 - 6.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 2.5	2 - 2.5
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	29-Oct-07	29-Oct-07	16-May-91	30-May-91	28-Nov-90	01-Dec-90	29-Oct-07	29-Oct-07	28-May-91	12-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	29-Oct-07	29-Oct-07
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2007	TtEMI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
VOC	acetone	67-64-1	UG/KG								65 UJ					11 U	10 U					
VOC	benzene	71-43-2	UG/KG								5.7 U					5.3 U	5 U					
VOC	bromodichloromethane	75-27-4	UG/KG								5.7 U					5.3 U	5 U					
VOC	bromoform	75-25-2	UG/KG								5.7 U					5.3 U	5 U					
VOC	bromomethane	74-83-9	UG/KG								5.7 U					5.3 U	10 U					
VOC	2-butanone	78-93-3	UG/KG								11 U					11 U	100 U					
VOC	carbon disulfide	75-15-0	UG/KG								5.7 U					5.3 U	5 U					
VOC	carbon tetrachloride	56-23-5	UG/KG								5.7 U					5.3 U	5 U					
VOC	chlorobenzene	108-90-7	UG/KG								5.7 U					5.3 U	5 U					
VOC	chlorodibromomethane	124-48-1	UG/KG								5.7 U					5.3 U	5 U					
VOC	chloroethane	75-00-3	UG/KG								5.7 U					5.3 U	10 U					
VOC	chloroform	67-66-3	UG/KG								5.7 U					5.3 U	5 U					
VOC	chloromethane	74-87-3	UG/KG								5.7 U					5.3 U	10 U					
VOC	1,3-dichlorobenzene	541-73-1	UG/KG																			
VOC	1,4-dichlorobenzene	106-46-7	UG/KG																			
VOC	1,1-dichloroethane	75-34-3	UG/KG								5.7 U					5.3 U	5 U					
VOC	1,2-dichloroethane	107-06-2	UG/KG								5.7 U					5.3 U	5 U					
VOC	1,1-dichloroethene	75-35-4	UG/KG								5.7 U					5.3 U	5 U					
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG																			
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG								5.7 U					5.3 U						
VOC	1,2-dichloroethene	540-59-0	UG/KG														5 U					
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG								5.7 U					5.3 U	5 U					
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG								5.7 U					5.3 U	5 U					
VOC	ethylbenzene	100-41-4	UG/KG								5.7 U					5.3 U	5 U					
VOC	n-hexane	110-54-3	UG/KG																			
VOC	2-hexanone	591-78-6	UG/KG								11 U					11 U	50 U					
VOC	methyl tert-butyl ether	1634-04-4	UG/KG																			
VOC	methylene chloride	75-09-2	UG/KG								5.7 U					5.3 U	5 U					
VOC	4-methyl-2-pentanone	108-10-1	UG/KG								11 U					11 U	50 U					
VOC	styrene	100-42-5	UG/KG								5.7 U					5.3 U	5 U					
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG								5.7 U					5.3 U	5 U					
VOC	tetrachloroethene	127-18-4	UG/KG								5.7 U					5.3 U	5 U					
VOC	toluene	108-88-3	UG/KG								5.7 U					5.3 U	10 U					
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG																			
VOC	1,1,1-trichloroethane	71-55-6	UG/KG								5.7 U					5.3 U	5 U					
VOC	1,1,2-trichloroethane	79-00-5	UG/KG								5.7 U					5.3 U	5 U					
VOC	trichloroethene	79-01-6	UG/KG								5.7 U					5.3 U	5 U					
VOC	trichlorofluoromethane	75-69-4	UG/KG																			
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG														5 U					
VOC	vinyl acetate	108-05-4	UG/KG								5.7 U					5.3 U	50 U					
VOC	vinyl chloride	75-01-4	UG/KG								5.7 U					5.3 U	10 U					
VOC	meta-,para-xylene	7816-60-0	UG/KG																			
VOC	o-xylene	95-47-6	UG/KG																			
VOC	xylenes, total	1330-20-7	UG/KG								5.7 U					5.3 U	5 U					
FUELS	diesel	11-84-7	MG/KG																			
FUELS	gasoline	8006-61-9	MG/KG																			
FUELS	JP-5	21274-30-0	MG/KG																			
FUELS	motor oil	68476-77-7	MG/KG																			
FUELS	oil and grease	10-30-0	MG/KG							9570												
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG							3450												
SVOC	acenaphthene	83-32-9	UG/KG	5.1 UJ	5.2 UJ	5.5 UJ	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	acenaphthylene	208-96-8	UG/KG	5.1 UJ	5.2 UJ	5.5 UJ	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	aniline	62-53-3	UG/KG									170 U	170 U				170 U	170 U				
SVOC	anthracene	120-12-7	UG/KG	0.77 J	5.2 UJ	5.5 UJ	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	benz(a)anthracene	56-55-3	UG/KG	3.8 J	0.79 J	1.1 J	6.1 UJ			110 U	110 U	170 U	170 U			110 U	170 U	170 U				

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	M104-A	M104-A	M104-C	M104-C	M104-C	M104-C	M104-C	M105-A	M105-B	M106-A	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	M-104A-002	M-104A-002-DUP	15-260	15-261	M-104C-0	M-104C-062	M-104C-0-DUP	M105-A	M105-B	15-266	15-267	M-106A-0	M-106A-003	15-264	15-265	M-107A-0
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	0.5 - 2	0 - 0.5	2 - 2.5	0 - 0	60 - 62	0 - 0	5.5 - 7	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	2 - 3	0 - 0.5	2 - 2.5	0 - 0
			Collection_Date	30-May-91	30-May-91	29-Oct-07	29-Oct-07	16-May-91	29-May-91	16-May-91	10-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	16-May-91	03-Jun-91	29-Oct-07	29-Oct-07	16-May-91
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
VOC	acetone	67-64-1	UG/KG	11 U	53 UJ				30 UJ		10 UJ					54 UJ			
VOC	benzene	71-43-2	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	bromodichloromethane	75-27-4	UG/KG	5.6 U	5.8 U				6.1 U		50 UJ					6.1 U			
VOC	bromoform	75-25-2	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	bromomethane	74-83-9	UG/KG	5.6 U	5.8 U				6.1 U		10 UJ					6.1 U			
VOC	2-butanone	78-93-3	UG/KG	11 U	12 U				12 U		100 UJ					12 U			
VOC	carbon disulfide	75-15-0	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	carbon tetrachloride	56-23-5	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	chlorobenzene	108-90-7	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	chlorodibromomethane	124-48-1	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	chloroethane	75-00-3	UG/KG	5.6 U	5.8 U				6.1 U		10 UJ					6.1 U			
VOC	chloroform	67-66-3	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	chloromethane	74-87-3	UG/KG	5.6 U	5.8 U				6.1 U		10 UJ					6.1 U			
VOC	1,3-dichlorobenzene	541-73-1	UG/KG																
VOC	1,4-dichlorobenzene	106-46-7	UG/KG																
VOC	1,1-dichloroethane	75-34-3	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	1,2-dichloroethane	107-06-2	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	1,1-dichloroethene	75-35-4	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG																
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG	5.6 U	5.8 U				6.1 U							6.1 U			
VOC	1,2-dichloropropane	78-87-5	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	ethylbenzene	100-41-4	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	n-hexane	110-54-3	UG/KG																
VOC	2-hexanone	591-78-6	UG/KG	11 U	12 U				12 U		50 UJ					12 U			
VOC	methyl tert-butyl ether	1634-04-4	UG/KG																
VOC	methylene chloride	75-09-2	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	4-methyl-2-pentanone	108-10-1	UG/KG	11 U	12 U				12 U		50 UJ					12 U			
VOC	styrene	100-42-5	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	tetrachloroethene	127-18-4	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	toluene	108-88-3	UG/KG	5.6 U	5.8 U				6.1 U		10 UJ					6.1 U			
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG																
VOC	1,1,1-trichloroethane	71-55-6	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	1,1,2-trichloroethane	79-00-5	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	trichloroethene	79-01-6	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	trichlorofluoromethane	75-69-4	UG/KG																
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG								5 UJ								
VOC	vinyl acetate	108-05-4	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
VOC	vinyl chloride	75-01-4	UG/KG	5.6 U	5.8 U				6.1 U		10 UJ					6.1 U			
VOC	meta-,para-xylene	7816-60-0	UG/KG																
VOC	o-xylene	95-47-6	UG/KG																
VOC	xylenes, total	1330-20-7	UG/KG	5.6 U	5.8 U				6.1 U		5 UJ					6.1 U			
FUELS	diesel	11-84-7	MG/KG																
FUELS	gasoline	8006-61-9	MG/KG																
FUELS	JP-5	21274-30-0	MG/KG																
FUELS	motor oil	68476-77-7	MG/KG																
FUELS	oil and grease	10-30-0	MG/KG					7690		10600					11600				502
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG					2000		3450					965				147
SVOC	acenaphthene	83-32-9	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	acenaphthylene	208-96-8	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	aniline	62-53-3	UG/KG								170 U	170 U							
SVOC	anthracene	120-12-7	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	benz(a)anthracene	56-55-3	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A		FED-1A	FED-1A	
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23		23	23	
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		SOIL	SOIL	
			Station_ID	M107-A	M108-A	M108-B	M108-B	M109-A	M109-A	M109-A	M109-A	SS2-2	WB-3		WB-3	WB-3	
			Sample_ID	M-107A-002	M108-A	M108-B	M-37	15-268	15-269	M-109A-0	M-109A-007	280-S02-002	WB-3 [0.0-0.5]		WB-3 [15.0-15.5]	WB-3 [15.5-16.0]	
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG		REG	REG	
			Depth	0.5 - 2	5 - 6.5	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	5.5 - 6.3	0 - 0	0 - 0.5		15 - 15.5	15.5 - 16	
			Collection_Date	03-Jun-91	11-Dec-90	27-Nov-90	27-Nov-90	29-Oct-07	29-Oct-07	16-May-91	30-May-91	12-Jul-94	22-May-90		22-May-90	22-May-90	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
VOC	acetone	67-64-1	UG/KG	77 UJ	10 UJ						24 UJ				12 U		
VOC	benzene	71-43-2	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	bromodichloromethane	75-27-4	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	bromoform	75-25-2	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	bromomethane	74-83-9	UG/KG	5.2 U	10 UJ						5.2 U				12 U		
VOC	2-butanone	78-93-3	UG/KG	10 U	10 UJ						10 U				12 U		
VOC	carbon disulfide	75-15-0	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	carbon tetrachloride	56-23-5	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	chlorobenzene	108-90-7	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	chlorodibromomethane	124-48-1	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	chloroethane	75-00-3	UG/KG	5.2 U	10 UJ						5.2 U				12 U		
VOC	chloroform	67-66-3	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	chloromethane	74-87-3	UG/KG	5.2 U	10 UJ						5.2 U				12 U		
VOC	1,3-dichlorobenzene	541-73-1	UG/KG														
VOC	1,4-dichlorobenzene	106-46-7	UG/KG														
VOC	1,1-dichloroethane	75-34-3	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	1,2-dichloroethane	107-06-2	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	1,1-dichloroethene	75-35-4	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG														
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG	5.2 U							5.2 U						
VOC	1,2-dichloroethene	540-59-0	UG/KG		5 UJ										6.2 U		
VOC	1,2-dichloropropane	78-87-5	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	ethylbenzene	100-41-4	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	n-hexane	110-54-3	UG/KG														
VOC	2-hexanone	591-78-6	UG/KG	10 U	50 UJ						10 U				12 U		
VOC	methyl tert-butyl ether	1634-04-4	UG/KG														
VOC	methylene chloride	75-09-2	UG/KG	5.2 U	5 UJ						5.2 U				25 U		
VOC	4-methyl-2-pentanone	108-10-1	UG/KG	10 U	50 UJ						10 U				6.2 U		
VOC	styrene	100-42-5	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	tetrachloroethene	127-18-4	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	toluene	108-88-3	UG/KG	5.2 U	10 UJ						5.2 U				6.2 U		
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG														
VOC	1,1,1-trichloroethane	71-55-6	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	1,1,2-trichloroethane	79-00-5	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	trichloroethene	79-01-6	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
VOC	trichlorofluoromethane	75-69-4	UG/KG														
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG		5 UJ												
VOC	vinyl acetate	108-05-4	UG/KG	5.2 U	50 UJ						5.2 U				12 U		
VOC	vinyl chloride	75-01-4	UG/KG	5.2 U	10 UJ						5.2 U				12 U		
VOC	meta-,para-xylene	7816-60-0	UG/KG														
VOC	o-xylene	95-47-6	UG/KG														
VOC	xylenes, total	1330-20-7	UG/KG	5.2 U	5 UJ						5.2 U				6.2 U		
FUELS	diesel	11-84-7	MG/KG									10 U					
FUELS	gasoline	8006-61-9	MG/KG									0.51 U					
FUELS	JP-5	21274-30-0	MG/KG									10 U					
FUELS	motor oil	68476-77-7	MG/KG									48 J					
FUELS	oil and grease	10-30-0	MG/KG							7200							
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG							2410							
SVOC	acenaphthene	83-32-9	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	acenaphthylene	208-96-8	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	aniline	62-53-3	UG/KG		170 U	3400 U	3400 U										
SVOC	anthracene	120-12-7	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	benz(a)anthracene	56-55-3	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		2500			410 U	

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A		FED-1A	FED-1A		FED-1A		FED-1A	FED-1A		FED-1A	FED-1A
			EBS_PARCEL	23	23		23	23		23		23	23		23	23
			WBZ	SOIL	SOIL		SOIL	SOIL		SOIL		SOIL	SOIL		SOIL	SOIL
			Station_ID	WB-3	WB-3		WB-3	WB-3		WB-4		WB-4	WB-4		WB-4	WB-4
			Sample_ID	WB-3 [35.0-35.5]	WB-3 [35.5-36.0]		WB-3 [45.0-45.5]	WB-3 [45.5-46.0]		WB-4 [0.0-0.5]		WB-4 [10.0-10.5]	WB-4 [10.5-11.0]		WB-4 [30.0-30.5]	WB-4 [35.0-35.5]
			Sample_Type	REG	REG		REG	REG		REG		REG	REG		REG	REG
			Depth	35 - 35.5	35.5 - 36		45 - 45.5	45.5 - 46		0 - 0.5		10 - 10.5	10.5 - 11		30 - 30.5	35 - 35.5
			Collection_Date	22-May-90	22-May-90		22-May-90	22-May-90		21-May-90		21-May-90	21-May-90		21-May-90	21-May-90
			REFERENCE	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units													
VOC	acetone	67-64-1	UG/KG	13 U			12 U					13 U			13 U	
VOC	benzene	71-43-2	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	bromodichloromethane	75-27-4	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	bromoform	75-25-2	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	bromomethane	74-83-9	UG/KG	13 U			12 U					13 U			13 U	
VOC	2-butanone	78-93-3	UG/KG	13 U			12 U					13 U			13 U	
VOC	carbon disulfide	75-15-0	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	carbon tetrachloride	56-23-5	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	chlorobenzene	108-90-7	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	chlorodibromomethane	124-48-1	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	chloroethane	75-00-3	UG/KG	13 U			12 U					13 U			13 U	
VOC	chloroform	67-66-3	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	chloromethane	74-87-3	UG/KG	13 U			12 U					13 U			13 U	
VOC	1,3-dichlorobenzene	541-73-1	UG/KG													
VOC	1,4-dichlorobenzene	106-46-7	UG/KG													
VOC	1,1-dichloroethane	75-34-3	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	1,2-dichloroethane	107-06-2	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	1,1-dichloroethene	75-35-4	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG													
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG													
VOC	1,2-dichloroethene	540-59-0	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	1,2-dichloropropane	78-87-5	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	ethylbenzene	100-41-4	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	n-hexane	110-54-3	UG/KG													
VOC	2-hexanone	591-78-6	UG/KG	13 U			12 U					13 U			13 U	
VOC	methyl tert-butyl ether	1634-04-4	UG/KG													
VOC	methylene chloride	75-09-2	UG/KG	23 U			21 U					25 U			16 U	
VOC	4-methyl-2-pentanone	108-10-1	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	styrene	100-42-5	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	tetrachloroethene	127-18-4	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	toluene	108-88-3	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG													
VOC	1,1,1-trichloroethane	71-55-6	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	1,1,2-trichloroethane	79-00-5	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	trichloroethene	79-01-6	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
VOC	trichlorofluoromethane	75-69-4	UG/KG													
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG													
VOC	vinyl acetate	108-05-4	UG/KG	13 U			12 U					13 U			13 U	
VOC	vinyl chloride	75-01-4	UG/KG	13 U			12 U					13 U			13 U	
VOC	meta-,para-xylene	7816-60-0	UG/KG													
VOC	o-xylene	95-47-6	UG/KG													
VOC	xylenes, total	1330-20-7	UG/KG	6.7 U			6.3 U					6.4 U			6.7 U	
FUELS	diesel	11-84-7	MG/KG													
FUELS	gasoline	8006-61-9	MG/KG													
FUELS	JP-5	21274-30-0	MG/KG													
FUELS	motor oil	68476-77-7	MG/KG													
FUELS	oil and grease	10-30-0	MG/KG													
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG													
SVOC	acenaphthene	83-32-9	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	acenaphthylene	208-96-8	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	aniline	62-53-3	UG/KG													
SVOC	anthracene	120-12-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	benz(a)anthracene	56-55-3	UG/KG		400 U			410 U		690 U			860 U			830 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL		FED-1A	FED-1A
			EBS_PARCEL		23	23
			WBZ		SOIL	SOIL
			Station_ID		WB-4	WB-4
			Sample_ID		WB-4 [50.0-50.5]	WB-4 [50.5-51.0]
			Sample_Type		REG	REG
			Depth		50 - 50.5	50.5 - 51
			Collection_Date		21-May-90	21-May-90
			REFERENCE		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units			
VOC	acetone	67-64-1	UG/KG		13 U	
VOC	benzene	71-43-2	UG/KG		6.4 U	
VOC	bromodichloromethane	75-27-4	UG/KG		6.4 U	
VOC	bromoform	75-25-2	UG/KG		6.4 U	
VOC	bromomethane	74-83-9	UG/KG		13 U	
VOC	2-butanone	78-93-3	UG/KG		13 U	
VOC	carbon disulfide	75-15-0	UG/KG		6.4 U	
VOC	carbon tetrachloride	56-23-5	UG/KG		6.4 U	
VOC	chlorobenzene	108-90-7	UG/KG		6.4 U	
VOC	chlorodibromomethane	124-48-1	UG/KG		6.4 U	
VOC	chloroethane	75-00-3	UG/KG		13 U	
VOC	chloroform	67-66-3	UG/KG		6.4 U	
VOC	chloromethane	74-87-3	UG/KG		13 U	
VOC	1,3-dichlorobenzene	541-73-1	UG/KG			
VOC	1,4-dichlorobenzene	106-46-7	UG/KG			
VOC	1,1-dichloroethane	75-34-3	UG/KG		6.4 U	
VOC	1,2-dichloroethane	107-06-2	UG/KG		6.4 U	
VOC	1,1-dichloroethene	75-35-4	UG/KG		6.4 U	
VOC	cis-1,2-dichloroethene	156-59-2	UG/KG			
VOC	trans-1,2-dichloroethene	156-60-5	UG/KG			
VOC	1,2-dichloroethene	540-59-0	UG/KG		6.4 U	
VOC	1,2-dichloropropane	78-87-5	UG/KG		6.4 U	
VOC	cis-1,3-dichloropropene	10061-01-5	UG/KG		6.4 U	
VOC	trans-1,3-dichloropropene	10061-02-6	UG/KG		6.4 U	
VOC	ethylbenzene	100-41-4	UG/KG		6.4 U	
VOC	n-hexane	110-54-3	UG/KG			
VOC	2-hexanone	591-78-6	UG/KG		13 U	
VOC	methyl tert-butyl ether	1634-04-4	UG/KG			
VOC	methylene chloride	75-09-2	UG/KG		17 U	
VOC	4-methyl-2-pentanone	108-10-1	UG/KG		6.4 U	
VOC	styrene	100-42-5	UG/KG		6.4 U	
VOC	1,1,2,2-tetrachloroethane	79-34-5	UG/KG		6.4 U	
VOC	tetrachloroethene	127-18-4	UG/KG		6.4 U	
VOC	toluene	108-88-3	UG/KG		6.4 U	
VOC	1,2,4-trichlorobenzene	120-82-1	UG/KG			
VOC	1,1,1-trichloroethane	71-55-6	UG/KG		6.4 U	
VOC	1,1,2-trichloroethane	79-00-5	UG/KG		6.4 U	
VOC	trichloroethene	79-01-6	UG/KG		6.4 U	
VOC	trichlorofluoromethane	75-69-4	UG/KG			
VOC	1,1,2-trichloro-1,2,2-trifluoroethane	76-13-1	UG/KG			
VOC	vinyl acetate	108-05-4	UG/KG		13 U	
VOC	vinyl chloride	75-01-4	UG/KG		13 U	
VOC	meta-,para-xylene	7816-60-0	UG/KG			
VOC	o-xylene	95-47-6	UG/KG			
VOC	xylenes, total	1330-20-7	UG/KG		6.4 U	
FUELS	diesel	11-84-7	MG/KG			
FUELS	gasoline	8006-61-9	MG/KG			
FUELS	JP-5	21274-30-0	MG/KG			
FUELS	motor oil	68476-77-7	MG/KG			
FUELS	oil and grease	10-30-0	MG/KG			
FUELS	total recoverable petroleum hydrocarbons	10-90-2	MG/KG			
SVOC	acenaphthene	83-32-9	UG/KG			850 U
SVOC	acenaphthylene	208-96-8	UG/KG			850 U
SVOC	aniline	62-53-3	UG/KG			
SVOC	anthracene	120-12-7	UG/KG			850 U
SVOC	benz(a)anthracene	56-55-3	UG/KG			850 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-52	32FED-1A-52
			Sample_ID	C032C054	C032C055	C032C056	C032C057	C032C058	C032C018	C032C019	C032C020	C032C021	C032C023	C032C024	C032C025	C032C026	C032C235	C032C236
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	450	3.5 J	11	5.9 U	5.9 U	18	5.8 U	7.3	6.2 U	13	6.3 U	1.5 J	5.7 U	5 J	5.5 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	250	3.2 J	7.1	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	5.2 U	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	230	16	16	2.2 J	5.9 U	11 J	1.9 J	8 J	6.2 UJ	42	12	13	5.7 U	4.2 J	2 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	370	3.1 J	9.1	5.9 U	5.9 U	8.4	5.8 U	4.4 J	6.2 U	6.8	6.3 U	5.5 U	5.7 U	3.4 J	5.5 U
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	310	2.5 J	7.9	5.9 U	5.9 U	30	5.8 U	18	6.2 U	18	6.3 U	5.5 U	5.7 U	12	5.5 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	65 J	1.9 J	2.1 J	5.9 UJ	5.9 UJ	4.5 J	5.8 UJ	3 J	6.2 UJ	13	6.3 U	2.8 J	5.7 U	5.1 U	5.5 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	280	1.8 J	5.9	5.9 U	5.9 U	6.4	5.8 U	2 J	6.2 U	3.6 J	6.3 U	1.6 J	5.7 U	2.1 J	1.7 J
SVOC	fluorene	86-73-7	UG/KG	2.5 J	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	5.2 U	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	260	3.7 J	8.4	5.9 U	5.9 U	4 J	2.7 J	6.2 U	6.2 U	5.4	1.7 J	2.3 J	5.7 U	0.72 J	1.3 J
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.4 U	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	3.1 J	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	4 J	5.3 U	5.3 U	5.9 U	5.9 U	5.2 U	5.8 U	6.2 U	6.2 U	5.2 U	6.3 U	5.5 U	5.7 U	5.1 U	5.5 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-52	32FED-1A-52	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-55	32FED-1A-55	32FED-1A-55	32FED-1A-55
			Sample_ID	C032C237	C032C238	C032C239	C032C240	C032C241	C032C242	C032C243	C032C244	C032C245	C032C246	C032C247	C032C248	C032C249	C032C250	C032C251
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	3.1 J	6 U	27 U	5.8 U	8 J	6 U	3.1 J	5.7 U	5.7 U	5.9 U	6 U	5.6	5.4 U	1.7 J	6.1 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.7 U	6 U	27 U	5.8 U	5.7 UJ	6 U	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1	5.4 U	5.6 U	6.1 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	2.6 J	6 U	35 J	2.5 J	8.6 J	6 U	60	3 J	3.8 J	3.2 J	6 U	7.5	3.3 J	3 J	6.1 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	2.4 J	6 U	27 U	2.8 J	4 J	6 U	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1 J	5.4 U	5.6 U	6.1 U
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	7.4	6 U	27 U	1.8 J	9.9	6 U	6.3 J	5.7 UJ	5.7 UJ	5.9 UJ	6 UJ	6.4	5.4 U	2.1 J	6.1 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.7 U	6 U	27 U	5.8 U	2.2 J	6 U	7.1	5.7 U	5.7 U	5.9 U	6 U	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	1.7 J	6 UJ	27 U	2.5 J	5.7 U	6 U	2.1 J	5.7 U	5.7 U	5.9 U	6 U	7.7	1.9 J	2.6 J	6.1 U
SVOC	fluorene	86-73-7	UG/KG	5.7 U	6 U	27 UJ	5.8 UJ	5.7 UJ	6 UJ	5.3 UJ	5.7 UJ	5.7 UJ	5.9 UJ	6 UJ	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	0.78 J	6 U	27 U	1.8 J	1.5 J	6 U	5.9	5.7 U	5.7 U	5.9 U	6 U	5.1 J	1 J	1.5 J	6.1 U
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.7 U	6 U	27 UJ	5.8 UJ	0.9 J	6 UJ	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	5.7 U	6 U	27 UJ	5.8 UJ	5.7 UJ	6 UJ	5.3 U	5.7 U	5.7 U	5.9 U	6 U	5.1 U	5.4 U	5.6 U	6.1 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-59	32FED-1A-59
			Sample_ID	C032C252	C032C253	C032C254	C032C255	C032C256	C032C257	C032C258	C032C259	C032C260	C032C261	C032C262	C032C263	C032C264	C032C265	C032C266
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.2 J	9.7	6.3	7.1	3.9 J	120	22	29	4.4 J	1100	150	22000	10000	5.7 U	5.9 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	4.8 J	12	4.6 J	6.7	3.4 J	39	6.8	9.2	4.1 J	770	170	29000	7700	5.7 U	5.9 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	8.7 UJ	8 UJ	6.5 UJ	6.5 UJ	5.9 UJ	94	15	22	6.3	530	92	11000 J	3800 J	22	5.9 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	4 J	14	5.8	8.4	4.4 J	99	17	23	6.1	890	170	27000	9000	5.7 U	5.9 U
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	5.4	14	3.9 J	4.3 J	2 J	66	13	18	3.2 J	710	130	16000	6200	5.7 U	5.9 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	3.4 J	2.9 J	1.8 J	1.5 J	5.9 U	17	2.6 J	3.4 J	6.1 U	230	27	6700	2200	5.7 U	5.9 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	3.3 J	20 J	3.3 J	7 J	3.3 J	49	14	18	5.4 J	560	120	7400	3600	5.7 U	5.9 U
SVOC	fluorene	86-73-7	UG/KG	5.3 U	1.8 J	5.6 U	5.9 U	5.9 U	5.4 U	5.7 U	5.8 U	6.1 U	50	1.2 J	360 J	100	5.7 U	5.9 U
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	6.2	8.8	7.2	7.3	4.9 J	99	17	23	5.5 J	640	120	16000	5300	5.7 U	5.9 U
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	0.62 J	0.58 J	0.37 J	0.59 J	0.46 J	5.4 U	5.7 U	5.8 U	6.1 U	31	5.5 U	1100 U	48	5.7 U	5.9 U
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	0.37 J	0.6 J	0.37 J	0.91 J	5.9 U	5.4 U	5.7 U	5.8 U	6.1 U	28	2.2 J	570 J	180	5.7 U	5.9 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-59	32FED-1A-59	32FED-1A-59	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-61	32FED-1A-61	32FED-1A-61	32FED-1A-61
			Sample_ID	C032C267	C032C268	C032C269	C032C059	C032C060	C032C061	C032C062	C032C027	C032C028	C032C029	C032C030	C032C031	C032C032	C032C033	C032C034
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4
			Collection_Date	23-May-02	23-May-02	23-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.9 U	2.9 J	6 U	5.2 UJ	0.84 J	0.59 J	5.5 UJ	3.6 J	6.1 U	6.4	6.1 U	230	9.6	5.4 J	23
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.9 U	6 U	6 U	5.2 UJ	0.79 J	0.4 J	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	54 U	6.3 U	5.9 U	5.9 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	5.9 U	9.6	6 U	0.79 J	1 J	0.8 J	5.5 UJ	28	2.3 J	19	6.1 U	140	28 J	27 J	30 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.9 U	6 U	6 U	5.2 UJ	1.3 J	0.74 J	5.5 UJ	2.7 J	6.1 U	3.4 J	6.1 U	100	6.4	4 J	12
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	5.9 U	6.4	6 U	1.9 J	1.9 J	1.5 J	1.1 J	5.2	6.1 U	15	6.1 U	610	21	12	51
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.9 U	2.4 J	6 U	0.19 J	5.2 UJ	5.2 UJ	5.5 UJ	5 J	6.1 U	5.3 J	6.1 U	82	6.6 J	6.2 J	10 J
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	5.9 U	6 U	6 U	5.2 UJ	1.3 J	0.88 J	5.5 UJ	2.4 J	6.1 U	2.2 J	6.1 U	110	4.9 J	3.3 J	12
SVOC	fluorene	86-73-7	UG/KG	5.9 U	6 U	6 U	5.2 UJ	5.2 UJ	5.2 UJ	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	200	2.5 J	1.6 J	17
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.9 U	3.2 J	6 U	5.2 UJ	1.1 J	0.66 J	5.5 UJ	3.1 J	6.1 U	2.7 J	6.1 U	29 J	3.3 J	4.2 J	6.4 J
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.9 U	6 U	6 U	5.2 UJ	5.2 UJ	5.2 UJ	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	370	6.3 U	5.9 U	16
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	5.9 U	6 U	6 U	5.2 UJ	5.2 UJ	5.2 UJ	5.5 UJ	5.2 U	6.1 U	5.6 U	6.1 U	38	6.3 U	5.9 U	5.9 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-61	32FED-1A-61	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-64	32FED-1A-64	32FED-1A-64	32FED-1A-64
			Sample_ID	C032C035	C032C036	C032C270	C032C271	C032C272	C032C273	C032C274	C032C275	C032C276	C032C277	C032C278	C032C279	C032C280	C032C281	C032C282
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	27-Apr-02	27-Apr-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	6.2 U	5.9 U	3.7 J	5.8 U	5.9 U	6 U	5.2 U	5.4 U	3.3 J	6 U	6 U	2.4 J	5.8 UJ	6 UJ	6 UJ
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	2.9 J	6 U	6 U	5.9 UJ	5.8 UJ	6 UJ	6 UJ
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	6.2 UJ	5.9 U	4.5 J	5.8 U	5.9 U	6 U	6.7	5.4 U	4.9 J	6 U	6 U	23	5.8 U	6 U	6 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	4.8 J	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	6.2 U	5.9 U	7.9	5.8 U	5.9 U	6 U	5.2 U	5.4 U	3.8 J	6 U	6 U	2.6 J	5.8 U	6 U	6 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	6.2 UJ	5.9 U	2.1 J	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	6.8	6 U	6 U	2.1 J	5.8 U	6 U	6 U
SVOC	fluorene	86-73-7	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	0.78 J	5.9 U	2.5 J	5.8 U	5.9 U	6 U	5.2 U	5.4 U	3.3 J	6 U	6 U	2.3 J	5.8 U	6 U	6 U
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	5.2 U	5.4 U	5.9 U	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-68	32FED-1A-68
			Sample_ID	C032C283	C032C284	C032C285	C032C286	C032C287	C032C288	C032C289	C032C290	C032C291	C032C292	C032C293	C032C294	C032C295	C032C296	C032C297
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	53 UJ	5.6 U	63 U	1.3 J	8.6 J	5.6 U	0.63 J	57 U	6.2 U	5.2 U	120	500	17	27 UJ	5.6 UJ
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	53 UJ	0.67 J	5.9 J	1.7 J	52 UJ	0.53 J	0.65 J	57 U	6.2 U	5.2 U	100	270	14	27 UJ	5.6 UJ
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	52 J	1.6 J	18 J	1.4 J	26 J	1.4 J	0.75 J	13 J	6.2 U	4.4 J	96	340	13	35 J	0.77 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	53 UJ	5.6 U	9 J	1.7 J	4.6 J	0.46 J	0.7 J	57 U	6.2 U	2 J	120	450	17	27 UJ	5.6 UJ
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	5.3 J	5.6 U	6.2 J	1.1 J	32 J	0.62 J	1.2 J	7.7 J	6.2 U	6	88	340	14	27 UJ	1 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	53 UJ	5.6 U	4.2 J	5.8 U	6.1 J	0.47 J	5.6 U	8.3 J	6.2 U	5.2 U	34	110	4.7 J	27 UJ	5.6 UJ
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	53 UJ	0.42 J	63 UJ	0.87 J	52 UJ	0.52 J	0.54 J	57 U	6.2 U	5.2 U	40	200	12	27 UJ	5.6 UJ
SVOC	fluorene	86-73-7	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	52 UJ	5.6 U	5.6 U	57 U	6.2 U	5.2 U	5.3 U	7.1	6.2 U	27 UJ	5.6 UJ
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	53 UJ	0.63 J	8.4 J	1.3 J	52 UJ	0.75 J	5.6 U	7.3 J	6.2 U	1.5 J	87	320	12	27 UJ	0.63 J
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	15 J	5.6 U	5.6 U	19 J	6.2 U	5.2 U	5.3 U	4.6 J	6.2 U	27 UJ	5.6 UJ
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	4.7 J	5.6 U	5.6 U	3.9 J	6.2 U	5.2 U	2.5 J	13	6.2 U	27 UJ	5.6 UJ
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-68	32FED-1A-68	32FED-1A-68	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-70	32FED-1A-70	32FED-1A-70	32FED-1A-70
			Sample_ID	C032C298	C032C299	C032C300	C032C301	C032C302	C032C303	C032C304	C032C063	C032C064	C032C065	C032C066	C032C305	C032C306	C032C307	C032C308
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	20-May-02	20-May-02	20-May-02	20-May-02	24-May-02	24-May-02	24-May-02	24-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	30 U	6 UJ	5.9 UJ	1.9 J	5.7 U	5.8 U	6 U	22 J	5.2 U	5.5 U	6.2 U	1.7 J	0.71 J	0.86 J	6.2 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	1.2 J	0.44 J	0.91 J	6.2 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	10 J	0.59 J	5.9 UJ	32	5.7 U	5.8 U	6 U	34	1.6 J	2.3 J	6.2 U	1.1 J	0.57 J	6 U	6.2 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	12 J	1.4 J	5.5 U	6.2 U	2 J	1.1 J	2.1 J	2.6 J
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	30 U	6 UJ	5.9 UJ	2.1 J	5.7 U	5.8 U	6 U	15 J	5.2 U	5.5 U	6.2 U	1.7 J	6 U	1 J	6.2 UJ
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	1 J	0.5 J	0.74 J	6.2 U
SVOC	fluorene	86-73-7	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	9 J	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	1.4 J	0.66 J	6 U	6.2 U
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	7.1 J	5.2 U	5.5 U	6.2 U	0.37 J	6 U	6 U	6.2 U
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-74
			Sample_ID	C032C309	C032C310	C032C311	C032C312	C032C313	C032C314	C032C315	C032C316	C032C317	C032C318	C032C319	C032C320	C032C321	C032C322	C032C323
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	24-May-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	0.58 J	0.65 J	0.82 J	5.9 U	5.9 UJ	6.1 UJ	6.2 UJ	6 UJ	6.1 UJ	430 J
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	0.36 J	6.2 U	0.38 J	6.3 U	6.2 U	0.76 J	1.3 J	0.49 J	5.9 U	5.9 UJ	6.1 UJ	6.2 UJ	6 UJ	6.1 UJ	460 J
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	1.4 J	2.9 J	1.8 J	0.51 J	5.9 U	6.1 U	6.2 U	6 U	6.1 U	360 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	1 J	1.1 J	1.4 J	1.3 J	0.88 J	0.86 J	1.5 J	0.94 J	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	480 J
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	0.57 J	6.2 UJ	6 UJ	6.3 UJ	6.2 UJ	1.1 J	0.91 J	0.48 J	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	560 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	5.3 U	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	160 J
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	0.55 J	6.2 U	0.46 J	6.3 U	6.2 U	1 J	1.1 J	1.2 J	5.9 U	2.3 J	6.1 U	6.2 U	6 U	6.1 U	290 J
SVOC	fluorene	86-73-7	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	5.3 U	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	100 UJ
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	0.82 J	1.9 J	0.96 J	5.9 U	0.93 J	6.1 U	6.2 U	6 U	6.1 U	440 J
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	5.3 U	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	100 UJ
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	6 U	6.2 U	6 U	6.3 U	6.2 U	0.43 J	5.8 U	5.7 U	5.9 U	5.9 U	6.1 U	6.2 U	6 U	6.1 U	100 UJ
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-74	32FED-1A-74	32FED-1A-74	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-77	32FED-1A-77	32FED-1A-77
			Sample_ID	C032C324	C032C325	C032C326	C032C327	C032C328	C032C329	C032C330	C032C331	C032C332	C032C333	C032C334	C032C335	C032C336	C032C337	C032C338
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	3.4 J	47 J	6.2 U	13 J	5.5 U	1.5 J	7.5	5.6 U	3.9 J	6 U	5.9 U	6 U	7.2 J	1.3 J	2.9 J
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	3.4 J	62	6.2 U	27 U	5.5 U	5.7 U	9	5.6 U	6 U	6 U	5.9 U	6 U	11 J	0.73 J	8.7 J
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	5.6 J	37 J	6.2 U	79	9.7	8.2	11	18	3.3 J	6 U	4.9 J	6 U	24 J	1.5 J	7.7 J
SVOC	benzo(a)pyrene	50-32-8	UG/KG	4.7 J	56 J	6.2 U	27 U	5.5 U	5.7 U	13	5.6 U	4.1 J	6 U	5.9 U	6 U	7 J	0.93 J	7 J
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	4.1 J	63	6.2 U	34	2.2 J	2.2 J	9.6	5.6 U	2.2 J	6 U	5.9 U	6 U	40 J	2.3 J	31 J
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	29 UJ	8.1 J	6.2 U	12 J	5.5 U	5.7 U	6.2 U	3.8 J	6 U	6 U	5.9 U	6 U	9.2 J	6 UJ	4.1 J
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	3.9 J	30 J	6.2 U	7.3	5.5 U	1.9 J	25	5.6 U	4.5 J	6 U	5.9 U	6 U	29 UJ	0.99 J	29 UJ
SVOC	fluorene	86-73-7	UG/KG	29 UJ	59 U	6.2 U	5.3 U	5.5 U	5.7 U	6.2 U	5.6 U	6 U	6 U	5.9 U	6 U	29 UJ	6 UJ	13 J
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	4.6 J	40 J	6.2 U	5.3 J	1.3 J	1.6 J	9	4.8 J	3.8 J	6 U	0.71 J	6 U	29 UJ	0.93 J	29 UJ
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	29 UJ	59 U	6.2 U	17	5.5 U	5.7 U	6.2 U	5.6 U	6 U	6 U	5.9 U	6 U	19 J	0.95 J	70 J
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	29 UJ	59 U	6.2 U	3.2 J	5.5 U	5.7 U	6.2 U	5.6 U	6 U	6 U	5.9 U	6 U	9.8 J	0.71 J	33 J
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-77	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8
			Sample_ID	C032C339	C032C340	C032C341	C032C342	C032C343	C032C344	C032C345	C032C346	C032C347	C032C348	C032C067	C032C068	C032C069	C032C070	C032C071
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	14-May-02	14-May-02	14-May-02	14-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	2.4 J	5.5 U	5.6 U	1.4 J	6.1 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	benzoic acid	65-85-0	UG/KG															
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	0.74 J	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	1.8 J	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	benzyl alcohol	100-51-6	UG/KG															
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG															
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG															
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG															
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG															
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG															
SVOC	butyl benzyl phthalate	85-68-7	UG/KG															
SVOC	carbazole	86-74-8	UG/KG															
SVOC	4-chloroaniline	106-47-8	UG/KG															
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG															
SVOC	2-chloronaphthalene	91-58-7	UG/KG															
SVOC	2-chlorophenol	95-57-8	UG/KG															
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG															
SVOC	chrysene	218-01-9	UG/KG	1 J	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	2.1 J	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG															
SVOC	dibenzofuran	132-64-9	UG/KG															
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG															
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG															
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG															
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG															
SVOC	2,4-dichlorophenol	120-83-2	UG/KG															
SVOC	diethyl phthalate	84-66-2	UG/KG															
SVOC	2,4-dimethylphenol	105-67-9	UG/KG															
SVOC	dimethyl phthalate	131-11-3	UG/KG															
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG															
SVOC	2,4-dinitrophenol	51-28-5	UG/KG															
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG															
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG															
SVOC	di-n-octyl phthalate	117-84-0	UG/KG															
SVOC	fluoranthene	206-44-0	UG/KG	5.9 UJ	5.3 UJ	5.9 UJ	5.8 UJ	6 UJ	6 UJ	5.7 U	5.9 U	6 U	6.2 U	2.9 J	5.5 U	5.6 U	2.4 J	6.1 U
SVOC	fluorene	86-73-7	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	hexachlorobenzene	118-74-1	UG/KG															
SVOC	hexachlorobutadiene	87-68-3	UG/KG															
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG															
SVOC	hexachloroethane	67-72-1	UG/KG															
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	1.7 J	5.5 U	5.6 U	1 J	6.1 U
SVOC	isophorone	78-59-1	UG/KG															
SVOC	2-methylnaphthalene	91-57-6	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	2-methylphenol	95-48-7	UG/KG															
SVOC	4-methylphenol	106-44-5	UG/KG															
SVOC	naphthalene	91-20-3	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	2-nitroaniline	88-74-4	UG/KG															
SVOC	3-nitroaniline	99-09-2	UG/KG															
SVOC	4-nitroaniline	100-01-6	UG/KG															
SVOC	nitrobenzene	98-95-3	UG/KG															
SVOC	4-nitrophenol	100-02-7	UG/KG															
SVOC	2-nitrophenol	88-75-5	UG/KG															
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG															
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG															
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-9	32FED-1A-9	32FED-1A-9	32FED-1A-9	M009-A	M009-A	M009-A	M009-A	M010-B	M014-B	M015-A	M015-A	M015-A	M103-A	M103-B	M104-A	M104-A	M104-A	M104-A
			Sample_ID	C032C072	C032C073	C032C074	C032C075	15-255	15-256	M-009A-0	M-009A-003	M10-B	M14-B	15-262	15-263	M-015A-005	M103-A	M103-B	15-258	15-259	15-259	15-259
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 2.5	2 - 2.5	0 - 0	2 - 3.3	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 4.8	5 - 6.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 2.5	2 - 2.5
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	29-Oct-07	29-Oct-07	16-May-91	30-May-91	28-Nov-90	01-Dec-90	29-Oct-07	29-Oct-07	28-May-91	12-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	29-Oct-07	29-Oct-07
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2007	TtEMI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	7.9 J	1.5 J	2.1 J	6.1 UJ			110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	6 J	1.2 J	1.7 J	6.1 UJ			110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	benzoic acid	65-85-0	UG/KG							320 U	950 U	850 U	850 U			890 U	850 UJ	850 U				
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	7.6 J	1.8 J	2.1 J	6.1 UJ			170 U	180 U	170 U	170 U			170 U	170 U	170 U				
SVOC	benzo(a)pyrene	50-32-8	UG/KG	8.8 J	1.7 J	2.3 J	6.1 UJ			150 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	benzyl alcohol	100-51-6	UG/KG							320 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG							130 UJ	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG							150 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	butyl benzyl phthalate	85-68-7	UG/KG							110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	carbazole	86-74-8	UG/KG																			
SVOC	4-chloroaniline	106-47-8	UG/KG							320 U	340 U	170 U	170 U			320 U	170 U	170 U				
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG							150 U	160 U	170 U	170 U			150 U	170 UJ	170 U				
SVOC	2-chloronaphthalene	91-58-7	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	2-chlorophenol	95-57-8	UG/KG							150 U	160 U	170 U	170 U			150 U	170 UJ	170 U				
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG							110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	chrysene	218-01-9	UG/KG	8.4 J	1.6 J	2.3 J	6.1 UJ			110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	2.7 J	0.88 J	0.89 J	6.1 UJ			170 U	180 U	170 U	170 U			170 U	170 U	170 U				
SVOC	di-n-butyl phthalate	84-74-2	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	dibenzofuran	132-64-9	UG/KG							130 U	140 U	170 U	170 U			130 U	170 U	170 U				
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG							530 U	570 U	340 U	340 U			530 U	340 U	340 U				
SVOC	2,4-dichlorophenol	120-83-2	UG/KG							150 U	160 U	170 U	170 U			150 U	170 UJ	170 U				
SVOC	diethyl phthalate	84-66-2	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	2,4-dimethylphenol	105-67-9	UG/KG							530 U	570 U	170 U	170 U			530 U	170 UJ	170 U				
SVOC	dimethyl phthalate	131-11-3	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG							1100 U	1100 U	850 U	850 U			1100 U	850 UJ	850 U				
SVOC	2,4-dinitrophenol	51-28-5	UG/KG							1400 U	1600 U	850 U	850 U			1500 U	850 UJ	850 U				
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG							150 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG							150 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	di-n-octyl phthalate	117-84-0	UG/KG							150 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	fluoranthene	206-44-0	UG/KG	8.5 J	1.3 J	1.9 J	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	fluorene	86-73-7	UG/KG	5.1 UJ	5.2 UJ	5.5 UJ	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	hexachlorobenzene	118-74-1	UG/KG							110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	hexachlorobutadiene	87-68-3	UG/KG							150 U	160 U	170 U	170 U			150 U	170 U	170 U				
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG							1100 U	1100 U	170 U	170 U			1100 U	170 U	170 U				
SVOC	hexachloroethane	67-72-1	UG/KG							110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	6.5 J	1.8 J	2 J	6.1 UJ			170 U	180 U	170 U	170 U			170 U	170 U	170 U				
SVOC	isophorone	78-59-1	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	2-methylnaphthalene	91-57-6	UG/KG	0.62 J	5.2 UJ	0.4 J	6.1 UJ			110 U	110 U	170 U	170 U			110 U	170 U	170 U				
SVOC	2-methylphenol	95-48-7	UG/KG							320 U	160 U	170 U	170 U			150 U	170 UJ	170 U				
SVOC	4-methylphenol	106-44-5	UG/KG							320 U	160 U	170 U	170 U			150 U	170 UJ	170 U				
SVOC	naphthalene	91-20-3	UG/KG	0.69 J	5.2 UJ	0.44 J	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	2-nitroaniline	88-74-4	UG/KG							160 U	180 U	850 U	850 U			170 U	850 U	850 U				
SVOC	3-nitroaniline	99-09-2	UG/KG							320 U	340 U	850 U	850 U			320 U	850 U	850 U				
SVOC	4-nitroaniline	100-01-6	UG/KG							160 U	180 U	850 U	850 U			170 U	850 U	850 U				
SVOC	nitrobenzene	98-95-3	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	4-nitrophenol	100-02-7	UG/KG							530 U	570 U	850 U	850 U			530 U	850 UJ	850 U				
SVOC	2-nitrophenol	88-75-5	UG/KG							150 U	160 U	170 U	170 U			150 U	170 UJ	170 U				
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG									170 U	170 U				170 U	170 U				
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG							75 U	91 U	170 U	170 U			85 U	170 U	170 U				
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG							110 UJ	110 U	170 U	170 U			110 U	170 U	170 U				

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	M104-A	M104-A	M104-C	M104-C	M104-C	M104-C	M104-C	M105-A	M105-B	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	M-104A-002	M-104A-002-DUP	15-260	15-261	M-104C-0	M-104C-062	M-104C-0-DUP	M105-A	M105-B	15-266	15-267	M-106A-0	M-106A-003	15-264	15-265	M-107A-0
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	0.5 - 2	0 - 0.5	2 - 2.5	0 - 0	60 - 62	0 - 0	5.5 - 7	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	2 - 3	0 - 0.5	2 - 2.5	0 - 0
			Collection_Date	30-May-91	30-May-91	29-Oct-07	29-Oct-07	16-May-91	29-May-91	16-May-91	10-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	16-May-91	03-Jun-91	29-Oct-07	29-Oct-07	16-May-91
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	benzoic acid	65-85-0	UG/KG	940 U	970 U			310 U	370 U	310 U	850 UJ	850 U			300 U	360 U			300 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	180 U	180 U			160 U	200 U	160 U	170 U	170 U			160 U	190 U			160 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG	160 U	160 U			140 U	170 U	140 U	170 U	170 U			140 U	170 U			140 U
SVOC	benzyl alcohol	100-51-6	UG/KG	160 U	160 U			310 U	370 U	310 U	170 U	170 U			300 U	360 U			300 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG	150 UJ	120 U			170 UJ	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG	160 U	160 U			140 U	170 U	140 U	170 U	170 U			140 U	170 U			140 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	carbazole	86-74-8	UG/KG																
SVOC	4-chloroaniline	106-47-8	UG/KG	340 U	350 U			310 U	370 U	310 U	170 U	170 U			300 U	360 U			300 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG	160 U	160 U			140 U	170 U	140 U	170 UJ	170 U			140 U	170 U			140 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	2-chlorophenol	95-57-8	UG/KG	160 U	160 U			140 U	170 U	140 U	170 UJ	170 U			140 U	170 U			140 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	chrysene	218-01-9	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	180 U	180 U			160 U	200 U	160 U	170 U	170 U			160 U	190 U			160 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	dibenzofuran	132-64-9	UG/KG	130 U	140 U			120 U	150 U	120 U	850 U	170 U			120 U	150 U			120 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG	560 U	580 U			510 U	610 U	510 U	340 U	340 U			500 U	610 U			510 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG	160 U	160 U			140 U	170 U	140 U	170 UJ	170 U			140 U	170 U			140 U
SVOC	diethyl phthalate	84-66-2	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG	560 U	580 U			510 U	610 U	510 U	170 UJ	170 U			500 U	610 U			510 U
SVOC	dimethyl phthalate	131-11-3	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG	1100 U	1200 U			1000 U	1200 U	1000 U	850 UJ	850 U			1000 U	1200 U			1000 U
SVOC	2,4-dinitrophenol	51-28-5	UG/KG	1600 U	1600 U			1300 U	1600 U	1300 U	170 UJ	850 U			1300 U	1600 U			1300 U
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG	160 U	160 U			140 U	170 U	140 U	170 U	170 U			140 U	170 U			140 U
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG	160 U	160 U			140 U	170 U	140 U	170 U	170 U			140 U	170 U			140 U
SVOC	di-n-octyl phthalate	117-84-0	UG/KG	160 U	160 U			140 U	170 U	140 U	170 U	170 U			140 U	170 U			140 U
SVOC	fluoranthene	206-44-0	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	fluorene	86-73-7	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	hexachlorobenzene	118-74-1	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	hexachlorobutadiene	87-68-3	UG/KG	160 U	160 U			140 U	170 U	140 U	170 U	170 U			140 U	170 U			140 U
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG	1100 U	1200 U			1000 U	1200 U	1000 U	170 U	170 U			1000 U	1200 U			1000 U
SVOC	hexachloroethane	67-72-1	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	180 U	180 U			160 U	200 U	160 U	170 U	170 U			160 U	190 U			160 U
SVOC	isophorone	78-59-1	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	2-methylnaphthalene	91-57-6	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	2-methylphenol	95-48-7	UG/KG	160 U	160 U			310 U	370 U	310 U	170 UJ	170 U			300 U	360 U			300 U
SVOC	4-methylphenol	106-44-5	UG/KG	160 U	160 U			310 U	370 U	310 U	170 UJ	170 U			300 U	360 U			300 U
SVOC	naphthalene	91-20-3	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	2-nitroaniline	88-74-4	UG/KG	180 U	180 U			150 U	180 U	150 U	850 U	850 U			150 U	180 U			150 U
SVOC	3-nitroaniline	99-09-2	UG/KG	340 U	350 U			310 U	370 U	310 U	850 U	850 U			300 U	360 U			300 U
SVOC	4-nitroaniline	100-01-6	UG/KG	180 U	180 U			150 U	180 U	150 U	850 U	850 U			150 U	180 U			150 U
SVOC	nitrobenzene	98-95-3	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	4-nitrophenol	100-02-7	UG/KG	560 U	580 U			510 U	610 U	510 U	850 UJ	850 U			500 U	610 U			510 U
SVOC	2-nitrophenol	88-75-5	UG/KG	160 U	160 U			140 U	170 U	140 U	170 UJ	170 U			140 U	170 U			140 U
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG								170 U	170 U							
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG	110 U	120 U			100 UJ	120 U	100 UJ	170 U	170 U			100 UJ	120 U			100 UJ

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A		FED-1A	FED-1A	
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23		23	23	
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		SOIL	SOIL	
			Station_ID	M107-A	M108-A	M108-B	M108-B	M109-A	M109-A	M109-A	M109-A	SS2-2	WB-3		WB-3	WB-3	
			Sample_ID	M-107A-002	M108-A	M108-B	M-37	15-268	15-269	M-109A-0	M-109A-007	280-S02-002	WB-3 [0.0-0.5]		WB-3 [15.0-15.5]	WB-3 [15.5-16.0]	
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG		REG	REG	
			Depth	0.5 - 2	5 - 6.5	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	5.5 - 6.3	0 - 0	0 - 0.5		15 - 15.5	15.5 - 16	
			Collection_Date	03-Jun-91	11-Dec-90	27-Nov-90	27-Nov-90	29-Oct-07	29-Oct-07	16-May-91	30-May-91	12-Jul-94	22-May-90		22-May-90	22-May-90	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		8300			410 U	
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		3400			410 U	
SVOC	benzoic acid	65-85-0	UG/KG	310 U	850 UJ	17000 U	17000 U			320 U	880 U		3300 U			2000 U	
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG	170 U	170 U	3400 U	3400 U			170 U	170 U		4800			410 U	
SVOC	benzo(a)pyrene	50-32-8	UG/KG	140 U	170 U	3400 U	3400 U			150 U	150 U		5000			410 U	
SVOC	benzyl alcohol	100-51-6	UG/KG	310 U	170 U	3400 U	3400 U			320 U	150 U		690 U			410 U	
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U						
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG	100 U	170 U	3400 U	3400 U			110 U	250 UJ		690 U			410 U	
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG	140 U	170 U	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	butyl benzyl phthalate	85-68-7	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		690 U			410 U	
SVOC	carbazole	86-74-8	UG/KG														
SVOC	4-chloroaniline	106-47-8	UG/KG	310 U	170 U	3400 U	3400 U			320 U	310 U		690 U			410 U	
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG	140 U	170 UJ	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	2-chloronaphthalene	91-58-7	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	2-chlorophenol	95-57-8	UG/KG	140 U	170 UJ	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		690 U			410 U	
SVOC	chrysene	218-01-9	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		3300			410 U	
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG	170 U	170 U	3400 U	3400 U			170 U	170 U		690 U			410 U	
SVOC	di-n-butyl phthalate	84-74-2	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	dibenzofuran	132-64-9	UG/KG	120 U	170 U	3400 U	3400 U			130 U	130 U		690 U			410 U	
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG	520 U	340 U	6800 U	6800 U			530 U	520 U		1400 U			830 U	
SVOC	2,4-dichlorophenol	120-83-2	UG/KG	140 U	170 UJ	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	diethyl phthalate	84-66-2	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	2,4-dimethylphenol	105-67-9	UG/KG	520 U	170 UJ	3400 U	3400 U			530 U	520 U		690 U			410 U	
SVOC	dimethyl phthalate	131-11-3	UG/KG	72 U	850 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG	1000 U	850 UJ	17000 U	17000 U			1100 U	1000 U		3300 U			2000 U	
SVOC	2,4-dinitrophenol	51-28-5	UG/KG	1300 U	850 UJ	17000 U	17000 U			1400 U	1500 U		3300 U			2000 U	
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG	140 U	170 U	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG	140 U	170 U	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	di-n-octyl phthalate	117-84-0	UG/KG	140 U	170 U	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	fluoranthene	206-44-0	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		2300			410 U	
SVOC	fluorene	86-73-7	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	hexachlorobenzene	118-74-1	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		690 U			410 U	
SVOC	hexachlorobutadiene	87-68-3	UG/KG	140 U	170 U	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG	1000 U	170 U	3400 U	3400 U			1100 U	1000 U		690 U			410 U	
SVOC	hexachloroethane	67-72-1	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		690 U			410 U	
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG	170 U	170 U	3400 U	3400 U			170 U	170 U		2800			410 U	
SVOC	isophorone	78-59-1	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	2-methylnaphthalene	91-57-6	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		690 U			410 U	
SVOC	2-methylphenol	95-48-7	UG/KG	310 U	170 UJ	3400 U	3400 U			320 U	150 U		690 U			410 U	
SVOC	4-methylphenol	106-44-5	UG/KG	310 U	170 UJ	3400 U	3400 U			320 U	150 U		690 U			410 U	
SVOC	naphthalene	91-20-3	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	2-nitroaniline	88-74-4	UG/KG	150 U	170 U	17000 U	17000 U			160 U	170 U		3300 U			2000 U	
SVOC	3-nitroaniline	99-09-2	UG/KG	310 U	850 U	17000 U	17000 U			320 U	310 U		3300 U			2000 U	
SVOC	4-nitroaniline	100-01-6	UG/KG	150 U	850 U	17000 U	17000 U			160 U	170 U		3300 U			2000 U	
SVOC	nitrobenzene	98-95-3	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	4-nitrophenol	100-02-7	UG/KG	520 U	850 UJ	17000 U	17000 U			530 U	520 U		3300 U			2000 U	
SVOC	2-nitrophenol	88-75-5	UG/KG	140 U	170 UJ	3400 U	3400 U			150 U	150 U		690 U			410 U	
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG		170 U	3400 U	3400 U										
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG	100 U	170 U	3400 U	3400 U			110 UJ	100 U		690 U			410 U	

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A		FED-1A	FED-1A		FED-1A		FED-1A	FED-1A		FED-1A	FED-1A
			EBS_PARCEL	23	23		23	23		23		23	23		23	23
			WBZ	SOIL	SOIL		SOIL	SOIL		SOIL		SOIL	SOIL		SOIL	SOIL
			Station_ID	WB-3	WB-3		WB-3	WB-3		WB-4		WB-4	WB-4		WB-4	WB-4
			Sample_ID	WB-3 [35.0-35.5]	WB-3 [35.5-36.0]		WB-3 [45.0-45.5]	WB-3 [45.5-46.0]		WB-4 [0.0-0.5]		WB-4 [10.0-10.5]	WB-4 [10.5-11.0]		WB-4 [30.0-30.5]	WB-4 [35.0-35.5]
			Sample_Type	REG	REG		REG	REG		REG		REG	REG		REG	REG
			Depth	35 - 35.5	35.5 - 36		45 - 45.5	45.5 - 46		0 - 0.5		10 - 10.5	10.5 - 11		30 - 30.5	35 - 35.5
			Collection_Date	22-May-90	22-May-90		22-May-90	22-May-90		21-May-90		21-May-90	21-May-90		21-May-90	21-May-90
			REFERENCE	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units													
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	benzoic acid	65-85-0	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	benzyl alcohol	100-51-6	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG													
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	carbazole	86-74-8	UG/KG													
SVOC	4-chloroaniline	106-47-8	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2-chlorophenol	95-57-8	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	chrysene	218-01-9	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	dibenzofuran	132-64-9	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG		790 U			820 U		1400 U			1700 U			1700 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	diethyl phthalate	84-66-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	dimethyl phthalate	131-11-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	2,4-dinitrophenol	51-28-5	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	di-n-octyl phthalate	117-84-0	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	fluoranthene	206-44-0	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	fluorene	86-73-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	hexachlorobenzene	118-74-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	hexachlorobutadiene	87-68-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	hexachloroethane	67-72-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	isophorone	78-59-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2-methylnaphthalene	91-57-6	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2-methylphenol	95-48-7	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	4-methylphenol	106-44-5	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	naphthalene	91-20-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2-nitroaniline	88-74-4	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	3-nitroaniline	99-09-2	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	4-nitroaniline	100-01-6	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	nitrobenzene	98-95-3	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	4-nitrophenol	100-02-7	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	2-nitrophenol	88-75-5	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG													
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG		400 U			410 U		690 U			860 U			830 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL		FED-1A	FED-1A
			EBS_PARCEL		23	23
			WBZ		SOIL	SOIL
			Station_ID		WB-4	WB-4
			Sample_ID		WB-4 [50.0-50.5]	WB-4 [50.5-51.0]
			Sample_Type		REG	REG
			Depth		50 - 50.5	50.5 - 51
			Collection_Date		21-May-90	21-May-90
			REFERENCE		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units			
SVOC	benzo(b)fluoranthene	205-99-2	UG/KG			850 U
SVOC	benzo(k)fluoranthene	207-08-9	UG/KG			850 U
SVOC	benzoic acid	65-85-0	UG/KG			4100 U
SVOC	benzo(g,h,i)perylene	191-24-2	UG/KG			850 U
SVOC	benzo(a)pyrene	50-32-8	UG/KG			850 U
SVOC	benzyl alcohol	100-51-6	UG/KG			850 U
SVOC	bis(2-chloroethoxy)methane	111-91-1	UG/KG			850 U
SVOC	bis(2-chloroethyl)ether	111-44-4	UG/KG			850 U
SVOC	bis(2-chloro-1-methylethyl)ether	108-60-1	UG/KG			
SVOC	bis(2-ethylhexyl)phthalate	117-81-7	UG/KG			850 U
SVOC	4-bromophenyl phenyl ether	101-55-3	UG/KG			850 U
SVOC	butyl benzyl phthalate	85-68-7	UG/KG			850 U
SVOC	carbazole	86-74-8	UG/KG			
SVOC	4-chloroaniline	106-47-8	UG/KG			850 U
SVOC	4-chloro-3-methylphenol	59-50-7	UG/KG			850 U
SVOC	2-chloronaphthalene	91-58-7	UG/KG			850 U
SVOC	2-chlorophenol	95-57-8	UG/KG			850 U
SVOC	4-chlorophenyl phenyl ether	7005-72-3	UG/KG			850 U
SVOC	chrysene	218-01-9	UG/KG			850 U
SVOC	dibenz(a,h)anthracene	53-70-3	UG/KG			850 U
SVOC	di-n-butyl phthalate	84-74-2	UG/KG			850 U
SVOC	dibenzofuran	132-64-9	UG/KG			850 U
SVOC	1,2-dichlorobenzene	95-50-1	UG/KG			850 U
SVOC	1,3-dichlorobenzene	541-73-1	UG/KG			850 U
SVOC	1,4-dichlorobenzene	106-46-7	UG/KG			850 U
SVOC	3,3'-dichlorobenzidine	91-94-1	UG/KG			1700 U
SVOC	2,4-dichlorophenol	120-83-2	UG/KG			850 U
SVOC	diethyl phthalate	84-66-2	UG/KG			850 U
SVOC	2,4-dimethylphenol	105-67-9	UG/KG			850 U
SVOC	dimethyl phthalate	131-11-3	UG/KG			850 U
SVOC	4,6-dinitro-2-methylphenol	534-52-1	UG/KG			4100 U
SVOC	2,4-dinitrophenol	51-28-5	UG/KG			4100 U
SVOC	2,4-dinitrotoluene	121-14-2	UG/KG			850 U
SVOC	2,6-dinitrotoluene	606-20-2	UG/KG			850 U
SVOC	di-n-octyl phthalate	117-84-0	UG/KG			850 U
SVOC	fluoranthene	206-44-0	UG/KG			850 U
SVOC	fluorene	86-73-7	UG/KG			850 U
SVOC	hexachlorobenzene	118-74-1	UG/KG			850 U
SVOC	hexachlorobutadiene	87-68-3	UG/KG			850 U
SVOC	hexachlorocyclopentadiene	77-47-4	UG/KG			850 U
SVOC	hexachloroethane	67-72-1	UG/KG			850 U
SVOC	indeno(1,2,3-cd)pyrene	193-39-5	UG/KG			850 U
SVOC	isophorone	78-59-1	UG/KG			850 U
SVOC	2-methylnaphthalene	91-57-6	UG/KG			850 U
SVOC	2-methylphenol	95-48-7	UG/KG			850 U
SVOC	4-methylphenol	106-44-5	UG/KG			850 U
SVOC	naphthalene	91-20-3	UG/KG			850 U
SVOC	2-nitroaniline	88-74-4	UG/KG			4100 U
SVOC	3-nitroaniline	99-09-2	UG/KG			4100 U
SVOC	4-nitroaniline	100-01-6	UG/KG			4100 U
SVOC	nitrobenzene	98-95-3	UG/KG			850 U
SVOC	4-nitrophenol	100-02-7	UG/KG			4100 U
SVOC	2-nitrophenol	88-75-5	UG/KG			850 U
SVOC	N-nitrosodimethylamine	62-75-9	UG/KG			
SVOC	N-nitrosodiphenylamine	86-30-6	UG/KG			850 U
SVOC	N-nitroso-di-n-propylamine	621-64-7	UG/KG			850 U

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-52	32FED-1A-52
			Sample_ID	C032C054	C032C055	C032C056	C032C057	C032C058	C032C018	C032C019	C032C020	C032C021	C032C023	C032C024	C032C025	C032C026	C032C235	C032C236
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	65	5.3 U	5.3 U	5.9 U	5.9 U	3.3 J	5.8 U	6.2 U	6.2 U	15	6.3 U	5.5 U	5.7 U	1.8 J	5.5 UJ
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	350	2.4 J	7.4	5.9 U	2.6 J	16	5.8 U	8.3	6.2 U	5.9	2 J	5.5 U	5.7 U	3.2 J	2.6 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-52	32FED-1A-52	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-55	32FED-1A-55	32FED-1A-55	32FED-1A-55
			Sample_ID	C032C237	C032C238	C032C239	C032C240	C032C241	C032C242	C032C243	C032C244	C032C245	C032C246	C032C247	C032C248	C032C249	C032C250	C032C251
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	5.7 UJ	6 UJ	27 UJ	5.8 UJ	5.7 UJ	6 UJ	2 J	5.7 UJ	5.7 UJ	5.9 UJ	6 UJ	3.7 J	5.4 U	5.6 U	6.1 U
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	2.8 J	6 U	27 U	3.6 J	6	6 U	3.6 J	5.7 UJ	5.7 UJ	5.9 UJ	6 UJ	8.9	2.1 J	3 J	6.1 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-59	32FED-1A-59
			Sample_ID	C032C252	C032C253	C032C254	C032C255	C032C256	C032C257	C032C258	C032C259	C032C260	C032C261	C032C262	C032C263	C032C264	C032C265	C032C266
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	2.2 J	17 J	1.1 J	2.3 J	1.1 J	8.2	3.2 J	4.7 J	6.1 U	130 J	28 J	1200 J	720 J	5.7 U	5.9 U
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	4.6 J	26 J	4.3 J	13 J	7.1 J	49	14	18	11	600	130	8600	3800	5.7 U	5.9 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-59	32FED-1A-59	32FED-1A-59	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-61	32FED-1A-61	32FED-1A-61	32FED-1A-61
			Sample_ID	C032C267	C032C268	C032C269	C032C059	C032C060	C032C061	C032C062	C032C027	C032C028	C032C029	C032C030	C032C031	C032C032	C032C033	C032C034
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4
			Collection_Date	23-May-02	23-May-02	23-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	pentachlorophenol	87-86-5	UG/KG																
SVOC	phenanthrene	85-01-8	UG/KG	5.9 U	3.1 J	6 U	0.38 J	0.46 J	0.47 J	5.5 UJ	2.5 J	6.1 U	4.5 J	6.1 U	910	11	6.6	67
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	5.9 U	3.2 J	6 U	0.45 J	2 J	1.1 J	5.5 UJ	3.6 J	6.1 U	3.9 J	6.1 U	290	7.1	4.8 J	22
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-61	32FED-1A-61	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-64	32FED-1A-64	32FED-1A-64	32FED-1A-64
			Sample_ID	C032C035	C032C036	C032C270	C032C271	C032C272	C032C273	C032C274	C032C275	C032C276	C032C277	C032C278	C032C279	C032C280	C032C281	C032C282
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	27-Apr-02	27-Apr-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	6.2 U	5.9 U	5.7 U	5.8 U	5.9 U	6 U	1.4 J	5.4 U	3.8 J	6 U	6 U	5.9 U	5.8 U	6 U	6 U
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	6.2 U	5.9 U	2.9 J	5.8 U	5.9 U	6 U	2.7 J	5.4 U	8.1	6 U	6 U	2.1 J	5.8 U	6 U	6 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-68	32FED-1A-68
			Sample_ID	C032C283	C032C284	C032C285	C032C286	C032C287	C032C288	C032C289	C032C290	C032C291	C032C292	C032C293	C032C294	C032C295	C032C296	C032C297
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	53 UJ	5.6 U	63 UJ	5.8 U	22 J	0.39 J	0.58 J	14 J	6.2 U	1.5 J	6	49	2.9 J	27 UJ	5.6 UJ
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	53 UJ	0.63 J	6.6 J	1.2 J	7.8 J	0.7 J	1 J	6.4 J	6.2 U	2.8 J	50	240	12	27 UJ	0.44 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-68	32FED-1A-68	32FED-1A-68	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-70	32FED-1A-70	32FED-1A-70	32FED-1A-70
			Sample_ID	C032C298	C032C299	C032C300	C032C301	C032C302	C032C303	C032C304	C032C063	C032C064	C032C065	C032C066	C032C305	C032C306	C032C307	C032C308
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	20-May-02	20-May-02	20-May-02	20-May-02	24-May-02	24-May-02	24-May-02	24-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	6 U	6 U	6 U	6.2 U
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	30 U	6 UJ	5.9 UJ	5.4 U	5.7 U	5.8 U	6 U	26 U	5.2 U	5.5 U	6.2 U	1.7 J	0.68 J	0.92 J	6.2 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-74
			Sample_ID	C032C309	C032C310	C032C311	C032C312	C032C313	C032C314	C032C315	C032C316	C032C317	C032C318	C032C319	C032C320	C032C321	C032C322	C032C323
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	24-May-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	0.52 J	6.2 U	6 U	6.3 U	6.2 U	1.1 J	0.45 J	0.59 J	5.9 U	1.7 J	6.1 U	6.2 U	6 U	6.1 U	59 J
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	0.9 J	0.45 J	0.85 J	6.3 U	6.2 U	1.5 J	1.7 J	1.4 J	5.9 U	2.1 J	6.1 U	6.2 U	6 U	6.1 U	300 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-74	32FED-1A-74	32FED-1A-74	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-77	32FED-1A-77	32FED-1A-77
			Sample_ID	C032C324	C032C325	C032C326	C032C327	C032C328	C032C329	C032C330	C032C331	C032C332	C032C333	C032C334	C032C335	C032C336	C032C337	C032C338
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	29 UJ	6.1 J	6.2 U	63	5.5 U	2.7 J	16	5.6 U	6 U	6 U	5.9 U	6 U	12 J	1.3 J	28 J
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	4.9 J	42 J	6.2 U	16	5.5 U	2.7 J	30	5.6 U	6.5	6 U	5.9 U	6 U	11 J	2 J	6.4 J
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-77	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8
			Sample_ID	C032C339	C032C340	C032C341	C032C342	C032C343	C032C344	C032C345	C032C346	C032C347	C032C348	C032C067	C032C068	C032C069	C032C070	C032C071
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	14-May-02	14-May-02	14-May-02	14-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
SVOC	pentachlorophenol	87-86-5	UG/KG															
SVOC	phenanthrene	85-01-8	UG/KG	5.9 UJ	5.3 UJ	5.9 UJ	5.8 UJ	6 UJ	6 UJ	5.7 U	5.9 U	6 U	6.2 U	5.2 U	5.5 U	5.6 U	5.7 U	6.1 U
SVOC	phenol	108-95-2	UG/KG															
SVOC	pyrene	129-00-0	UG/KG	5.9 UJ	5.3 U	5.9 U	5.8 U	6 U	6 U	5.7 U	5.9 U	6 U	6.2 U	2.6 J	5.5 U	5.6 U	1.9 J	6.1 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG															
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG															
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG															
PEST/PCB	aldrin	309-00-2	UG/KG															
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG															
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG															
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG															
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG															
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG															
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG															
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG															
PEST/PCB	azinphos-methyl	86-50-0	UG/KG															
PEST/PCB	alpha-BHC	319-84-6	UG/KG															
PEST/PCB	beta-BHC	319-85-7	UG/KG															
PEST/PCB	delta-BHC	319-86-8	UG/KG															
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG															
PEST/PCB	bolstar	35400-43-2	UG/KG															
PEST/PCB	chlordane	57-74-9	UG/KG															
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG															
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG															
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG															
PEST/PCB	coumaphos	56-72-4	UG/KG															
PEST/PCB	4,4'-DDD	72-54-8	UG/KG															
PEST/PCB	O,P'-DDD	53-19-0	UG/KG															
PEST/PCB	4,4'-DDE	72-55-9	UG/KG															
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG															
PEST/PCB	4,4'-DDT	50-29-3	UG/KG															
PEST/PCB	O,P'-DDT	789-02-6	UG/KG															
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG															
PEST/PCB	diazinon	333-41-5	UG/KG															
PEST/PCB	dichlorvos	62-73-7	UG/KG															
PEST/PCB	dieldrin	60-57-1	UG/KG															
PEST/PCB	dimethoate	60-51-5	UG/KG															
PEST/PCB	disulfoton	298-04-4	UG/KG															
PEST/PCB	endosulfan I	959-98-8	UG/KG															
PEST/PCB	endosulfan II	33213-65-9	UG/KG															
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG															
PEST/PCB	endrin	72-20-8	UG/KG															
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG															
PEST/PCB	endrin ketone	53494-70-5	UG/KG															
PEST/PCB	EPN	2104-64-5	UG/KG															
PEST/PCB	ethion	563-12-2	UG/KG															
PEST/PCB	ethoprop	13194-48-4	UG/KG															
PEST/PCB	ethyl parathion	56-38-2	UG/KG															
PEST/PCB	fensulfothion	115-90-2	UG/KG															
PEST/PCB	fenthion	55-38-9	UG/KG															
PEST/PCB	heptachlor	76-44-8	UG/KG															
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG															
PEST/PCB	malathion	121-75-5	UG/KG															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-9	32FED-1A-9	32FED-1A-9	32FED-1A-9	M009-A	M009-A	M009-A	M009-A	M010-B	M014-B	M015-A	M015-A	M015-A	M103-A	M103-B	M104-A	M104-A
			Sample_ID	C032C072	C032C073	C032C074	C032C075	15-255	15-256	M-009A-0	M-009A-003	M10-B	M14-B	15-262	15-263	M-015A-005	M103-A	M103-B	15-258	15-259
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 2.5	2 - 2.5	0 - 0	2 - 3.3	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 4.8	5 - 6.5	0 - 0.5	0 - 0.5	2 - 2.5
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	29-Oct-07	29-Oct-07	16-May-91	30-May-91	28-Nov-90	01-Dec-90	29-Oct-07	29-Oct-07	28-May-91	12-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
SVOC	pentachlorophenol	87-86-5	UG/KG							530 UJ	570 U	850 U	850 U			530 U	850 UJ	850 U		
SVOC	phenanthrene	85-01-8	UG/KG	4.1 J	0.53 J	1 J	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U		
SVOC	phenol	108-95-2	UG/KG							150 UJ	160 U	170 U	170 U			150 U	170 UJ	170 U		
SVOC	pyrene	129-00-0	UG/KG	8.3 J	1.4 J	2 J	6.1 UJ			75 U	91 U	170 U	170 U			85 U	170 U	170 U		
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG							110 U	110 U	170 U	170 U			110 U	170 U	170 U		
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG							320 U	340 U	850 U	850 U			320 U	850 UJ	850 U		
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG							320 U	340 U	170 U	170 U			320 U	170 UJ	170 U		
PEST/PCB	aldrin	309-00-2	UG/KG							3.6 U	3.8 U	5 U	5 U			3.6 U	5 U	5 U		
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG							35.5 U	37.8 U	50 U	50 U			35.5 U	50 U	50 U		
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG							35 U	38 U	50 U	50 U			35 U	50 U	50 U		
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG							35 U	38 U	50 U	50 U			35 U	50 U	50 U		
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG							35 U	38 U	50 U	50 U			35 U	50 U	50 U		
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG							35 U	38 U	50 U	50 U			35 U	50 U	50 U		
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG							35 U	38 U	50 U	50 U			35 U	50 U	50 U		
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG							35 U	38 U	50 U	50 U			35 U	50 U	50 U		
PEST/PCB	azinphos-methyl	86-50-0	UG/KG									130 U	130 U				67 U	130 U		
PEST/PCB	alpha-BHC	319-84-6	UG/KG							1.8 U	1.9 U	5 U	5 U			1.8 U	5 U	5 U		
PEST/PCB	beta-BHC	319-85-7	UG/KG							3.6 U	3.8 U	5 U	5 U			3.6 U	5 U	5 U		
PEST/PCB	delta-BHC	319-86-8	UG/KG							3.6 U	3.8 U	5 U	5 U			3.6 U	5 U	5 U		
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG							1.8 U	1.9 U	5 U	5 U			1.8 U	5 U	5 U		
PEST/PCB	bolstar	35400-43-2	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	chlordane	57-74-9	UG/KG									50 U	50 U				50 U	50 U		
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG							3.6 U	3.8 U					3.6 U				
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG							3.6 U	3.8 U					3.6 U				
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	coumaphos	56-72-4	UG/KG									67 U	67 U				67 U	67 U		
PEST/PCB	4,4'-DDD	72-54-8	UG/KG							7.1 U	7.6 U	10 U	10 U			9.5	10 U	10 U		
PEST/PCB	O,P'-DDD	53-19-0	UG/KG									10 U	10 U				10 U	10 U		
PEST/PCB	4,4'-DDE	72-55-9	UG/KG							3.6 U	3.8 U	10 U	10 U			3.6 U	10 U	10 U		
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG									10 U	10 U				10 U	10 U		
PEST/PCB	4,4'-DDT	50-29-3	UG/KG							7.1 U	7.6 U	10 U	10 U			7.1 U	10 U	10 U		
PEST/PCB	O,P'-DDT	789-02-6	UG/KG									10 U	10 U				10 U	10 U		
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG									67 U	67 U				67 U	67 U		
PEST/PCB	diazinon	333-41-5	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	dichlorvos	62-73-7	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	dieldrin	60-57-1	UG/KG							3.6 U	3.8 U	10 U	10 U			3.6 U	10 U	10 U		
PEST/PCB	dimethoate	60-51-5	UG/KG									130 U	130 U				33 U	130 U		
PEST/PCB	disulfoton	298-04-4	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	endosulfan I	959-98-8	UG/KG							3.6 U	3.8 U	5 U	5 U			3.6 U	5 U	5 U		
PEST/PCB	endosulfan II	33213-65-9	UG/KG							7.1 U	7.6 U	10 U	10 U			7.1 U	10 U	10 U		
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG							7.1 U	7.6 U	10 U	10 U			7.1 U	10 U	10 U		
PEST/PCB	endrin	72-20-8	UG/KG							3.6 U	3.8 U	10 U	10 U			3.6 U	10 U	10 U		
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG																	
PEST/PCB	endrin ketone	53494-70-5	UG/KG							7.1 U	7.6 U	10 U	10 U			7.1 U	10 U	10 U		
PEST/PCB	EPN	2104-64-5	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	ethion	563-12-2	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	ethoprop	13194-48-4	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	ethyl parathion	56-38-2	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	fensulfothion	115-90-2	UG/KG									67 U	67 U				67 U	67 U		
PEST/PCB	fenthion	55-38-9	UG/KG									33 U	33 U				33 U	33 U		
PEST/PCB	heptachlor	76-44-8	UG/KG							3.6 U	3.8 U	5 U	5 U			3.6 U	5 U	5 U		
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG							3.6 U	3.8 U	5 U	5 U			3.6 U	5 U	5 U		
PEST/PCB	malathion	121-75-5	UG/KG									33 U	33 U				33 U	33 U		

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	M104-A	M104-A	M104-C	M104-C	M104-C	M104-C	M104-C	M105-A	M105-B	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	M-104A-002	M-104A-002-DUP	15-260	15-261	M-104C-0	M-104C-062	M-104C-0-DUP	M105-A	M105-B	15-266	15-267	M-106A-0	M-106A-003	15-264	15-265	M-107A-0
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	0.5 - 2	0 - 0.5	2 - 2.5	0 - 0	60 - 62	0 - 0	5.5 - 7	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	2 - 3	0 - 0.5	2 - 2.5	0 - 0
			Collection_Date	30-May-91	30-May-91	29-Oct-07	29-Oct-07	16-May-91	29-May-91	16-May-91	10-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	16-May-91	03-Jun-91	29-Oct-07	29-Oct-07	16-May-91
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
SVOC	pentachlorophenol	87-86-5	UG/KG	560 U	580 UJ			510 UJ	610 UJ	510 UJ	850 UJ	850 U			500 UJ	610 UJ			510 UJ
SVOC	phenanthrene	85-01-8	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	phenol	108-95-2	UG/KG	160 U	160 U			140 UJ	170 U	140 UJ	170 UJ	170 U			140 UJ	170 U			140 UJ
SVOC	pyrene	129-00-0	UG/KG	89 U	92 U			72 U	86 U	71 U	170 U	170 U			70 U	85 U			71 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG	110 U	120 U			100 U	120 U	100 U	170 U	170 U			100 U	120 U			100 U
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG	340 U	350 U			310 U	370 U	310 U	850 UJ	850 U			300 U	360 U			300 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG	340 U	350 U			310 U	370 U	310 U	170 UJ	170 U			300 U	360 U			300 U
PEST/PCB	aldrin	309-00-2	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	5 U	5 U			3.4 U	4 U			3.4 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG	37.3 U	38.4 U			34.3 U	41 U	34 U	50 U	50 U			33.5 U	40.4 U			33.8 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG	37 U	38 U			34 U	41 U	34 U	50 U	50 U			34 U	40 U			34 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG	37 U	38 U			34 U	41 U	34 U	50 U	50 U			34 U	40 U			34 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG	37 U	38 U			34 U	41 U	34 U	50 U	50 U			34 U	40 U			34 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG	37 U	38 U			34 U	41 U	34 U	50 U	50 U			34 U	40 U			34 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG	37 U	38 U			34 U	41 U	34 U	50 U	50 U			34 U	40 U			34 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG	37 U	38 U			34 U	41 U	34 U	50 U	50 U			34 U	40 U			34 U
PEST/PCB	azinphos-methyl	86-50-0	UG/KG								67 U	130 U							
PEST/PCB	alpha-BHC	319-84-6	UG/KG	1.9 U	1.9 U			1.7 U	2.1 U	1.7 U	5 U	5 U			1.7 U	2 U			1.7 U
PEST/PCB	beta-BHC	319-85-7	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	5 U	5 U			3.4 U	4 U			3.4 U
PEST/PCB	delta-BHC	319-86-8	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	5 U	5 U			3.4 U	4 U			3.4 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG	1.9 U	1.9 U			1.7 U	2.1 U	1.7 U	5 U	5 U			1.7 U	2 U			1.7 U
PEST/PCB	bolstar	35400-43-2	UG/KG								33 U	33 U							
PEST/PCB	chlordane	57-74-9	UG/KG								50 U	50 U							
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U					3.4 U	4 U			3.4 U
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U					3.4 U	4 U			3.4 U
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG								33 U	33 U							
PEST/PCB	coumaphos	56-72-4	UG/KG								67 U	67 U							
PEST/PCB	4,4'-DDD	72-54-8	UG/KG	7.5 U	7.7 U			6.9 U	8.2 U	6.8 U	10 U	10 U			6.7 U	8.1 U			6.8 U
PEST/PCB	O,P'-DDD	53-19-0	UG/KG								10 U	10 U							
PEST/PCB	4,4'-DDE	72-55-9	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	10 U	10 U			3.4 U	4 U			3.4 U
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG								10 U	10 U							
PEST/PCB	4,4'-DDT	50-29-3	UG/KG	7.5 U	7.7 U			6.9 U	8.2 U	6.8 U	10 U	10 U			6.7 U	8.1 U			6.8 U
PEST/PCB	O,P'-DDT	789-02-6	UG/KG								10 U	10 U							
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG								67 U	67 U							
PEST/PCB	diazinon	333-41-5	UG/KG								33 U	33 U							
PEST/PCB	dichlorvos	62-73-7	UG/KG								33 U	33 U							
PEST/PCB	dieldrin	60-57-1	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	10 U	10 U			3.4 U	4 U			3.4 U
PEST/PCB	dimethoate	60-51-5	UG/KG								33 U	130 U							
PEST/PCB	disulfoton	298-04-4	UG/KG								33 U	33 U							
PEST/PCB	endosulfan I	959-98-8	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	5 U	5 U			3.4 U	4 U			3.4 U
PEST/PCB	endosulfan II	33213-65-9	UG/KG	7.5 U	7.7 U			6.9 U	8.2 U	6.8 U	10 U	10 U			6.7 U	8.1 U			6.8 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG	7.5 U	7.7 U			6.9 U	8.2 U	6.8 U	10 U	10 U			6.7 U	8.1 U			6.8 U
PEST/PCB	endrin	72-20-8	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	10 U	10 U			3.4 U	4 U			3.4 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG																
PEST/PCB	endrin ketone	53494-70-5	UG/KG	7.5 U	7.7 U			6.9 U	8.2 U	6.8 U	10 U	10 U			6.7 U	8.1 U			6.8 U
PEST/PCB	EPN	2104-64-5	UG/KG								33 U	33 U							
PEST/PCB	ethion	563-12-2	UG/KG								33 U	33 U							
PEST/PCB	ethoprop	13194-48-4	UG/KG								33 U	33 U							
PEST/PCB	ethyl parathion	56-38-2	UG/KG								33 U	33 U							
PEST/PCB	fensulfothion	115-90-2	UG/KG								67 U	67 U							
PEST/PCB	fenthion	55-38-9	UG/KG								33 U	33 U							
PEST/PCB	heptachlor	76-44-8	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	5 U	5 U			3.4 U	4 U			3.4 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG	3.7 U	3.8 U			3.4 U	4.1 U	3.4 U	5 U	5 U			3.4 U	4 U			3.4 U
PEST/PCB	malathion	121-75-5	UG/KG								33 U	33 U							

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A		FED-1A	FED-1A	
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23		23	23	
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		SOIL	SOIL	
			Station_ID	M107-A	M108-A	M108-B	M108-B	M109-A	M109-A	M109-A	M109-A	SS2-2	WB-3		WB-3	WB-3	
			Sample_ID	M-107A-002	M108-A	M108-B	M-37	15-268	15-269	M-109A-0	M-109A-007	280-S02-002	WB-3 [0.0-0.5]		WB-3 [15.0-15.5]	WB-3 [15.5-16.0]	
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG		REG	REG	
			Depth	0.5 - 2	5 - 6.5	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	5.5 - 6.3	0 - 0	0 - 0.5		15 - 15.5	15.5 - 16	
			Collection_Date	03-Jun-91	11-Dec-90	27-Nov-90	27-Nov-90	29-Oct-07	29-Oct-07	16-May-91	30-May-91	12-Jul-94	22-May-90		22-May-90	22-May-90	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
SVOC	pentachlorophenol	87-86-5	UG/KG	520 UJ	850 UJ	17000 U	17000 U			530 UJ	520 U		3300 U			2000 U	
SVOC	phenanthrene	85-01-8	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		690 U			410 U	
SVOC	phenol	108-95-2	UG/KG	140 U	170 UJ	3400 U	3400 U			150 UJ	150 U		690 U			410 U	
SVOC	pyrene	129-00-0	UG/KG	72 U	170 U	3400 U	3400 U			74 U	84 U		2700			410 U	
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG	100 U	170 U	3400 U	3400 U			110 U	100 U		690 U			410 U	
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG	310 U	850 UJ	17000 U	17000 U			320 U	310 U		3300 U			2000 U	
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG	310 U	170 UJ	3400 U	3400 U			320 U	310 U		690 U			410 U	
PEST/PCB	aldrin	309-00-2	UG/KG	3.4 U	5 U	5 U	5 U			3.5 U	3.5 U		10 U			12 U	
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG	34.4 U	50 U	50 U	50 U			35.2 U	35 U		260 U			310 U	
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG	34 U	50 U	50 U	50 U			35 U	35 U		260 U			310 U	
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG	34 U	50 U	50 U	50 U			35 U	35 U		260 U			310 U	
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG	34 U	50 U	50 U	50 U			35 U	35 U		260 U			310 U	
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG	34 U	50 U	50 U	50 U			35 U	35 U		260 U			310 U	
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG	34 U	50 U	50 U	50 U			35 U	35 U		520 U			630 U	
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG	34 U	50 U	50 U	50 U			35 U	35 U		520 U			630 U	
PEST/PCB	azinphos-methyl	86-50-0	UG/KG		67 U	130 U	130 U										
PEST/PCB	alpha-BHC	319-84-6	UG/KG	1.7 U	5 U	5 U	5 U			1.8 U	1.8 U		10 U			12 U	
PEST/PCB	beta-BHC	319-85-7	UG/KG	3.4 U	5 U	5 U	5 U			3.5 U	3.5 U		10 U			12 U	
PEST/PCB	delta-BHC	319-86-8	UG/KG	3.4 U	5 U	5 U	5 U			3.5 U	3.5 U		10 U			12 U	
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG	1.7 U	5 U	5 U	5 U			1.8 U	1.8 U		10 U			12 U	
PEST/PCB	bolstar	35400-43-2	UG/KG		33 U	33 U	33 U										
PEST/PCB	chlordane	57-74-9	UG/KG		50 U	50 U	50 U						100 U			120 U	
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG	3.4 U						3.5 U	3.5 U						
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG	3.4 U						3.5 U	3.5 U						
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG		33 U	33 U	33 U										
PEST/PCB	coumaphos	56-72-4	UG/KG		67 U	67 U	67 U										
PEST/PCB	4,4'-DDD	72-54-8	UG/KG	6.9 U	10 U	10 U	10 U			7 U	7 U		21 U			25 U	
PEST/PCB	O,P'-DDD	53-19-0	UG/KG		10 U	10 U	10 U										
PEST/PCB	4,4'-DDE	72-55-9	UG/KG	3.4 U	10 U	10 U	10 U			3.5 U	3.5 U		21 U			25 U	
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG		10 U	10 U	10 U										
PEST/PCB	4,4'-DDT	50-29-3	UG/KG	6.9 U	10 U	10 U	10 U			7 U	7 U		21 U			25 U	
PEST/PCB	O,P'-DDT	789-02-6	UG/KG		10 U	10 U	10 U										
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG		67 U	67 U	67 U										
PEST/PCB	diazinon	333-41-5	UG/KG		33 U	33 U	33 U										
PEST/PCB	dichlorvos	62-73-7	UG/KG		33 U	33 U	33 U										
PEST/PCB	dieldrin	60-57-1	UG/KG	3.4 U	10 U	10 U	10 U			3.5 U	3.5 U		21 U			25 U	
PEST/PCB	dimethoate	60-51-5	UG/KG		33 U	130 U	130 U										
PEST/PCB	disulfoton	298-04-4	UG/KG		33 U	33 U	33 U										
PEST/PCB	endosulfan I	959-98-8	UG/KG	3.4 U	5 U	5 U	5 U			3.5 U	3.5 U		21 U			25 U	
PEST/PCB	endosulfan II	33213-65-9	UG/KG	6.9 U	10 U	10 U	10 U			7 U	7 U		21 U			25 U	
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG	6.9 U	10 U	10 U	10 U			7 U	7 U		21 U			25 U	
PEST/PCB	endrin	72-20-8	UG/KG	3.4 U	10 U	10 U	10 U			3.5 U	3.5 U		21 U			25 U	
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG										21 U			25 U	
PEST/PCB	endrin ketone	53494-70-5	UG/KG	6.9 U	10 U	10 U	10 U			7 U	7 U						
PEST/PCB	EPN	2104-64-5	UG/KG		33 U	33 U	33 U										
PEST/PCB	ethion	563-12-2	UG/KG		33 U	33 U	33 U										
PEST/PCB	ethoprop	13194-48-4	UG/KG		33 U	33 U	33 U										
PEST/PCB	ethyl parathion	56-38-2	UG/KG		33 U	33 U	33 U										
PEST/PCB	fensulfothion	115-90-2	UG/KG		67 U	67 U	67 U										
PEST/PCB	fenthion	55-38-9	UG/KG		33 U	33 U	33 U										
PEST/PCB	heptachlor	76-44-8	UG/KG	3.4 U	5 U	5 U	5 U			3.5 U	3.5 U		10 U			12 U	
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG	3.4 U	5 U	5 U	5 U			3.5 U	3.5 U		10 U			12 U	
PEST/PCB	malathion	121-75-5	UG/KG		33 U	33 U	33 U										

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A		FED-1A	FED-1A		FED-1A		FED-1A	FED-1A		FED-1A	FED-1A
			EBS_PARCEL	23	23		23	23		23		23	23		23	23
			WBZ	SOIL	SOIL		SOIL	SOIL		SOIL		SOIL	SOIL		SOIL	SOIL
			Station_ID	WB-3	WB-3		WB-3	WB-3		WB-4		WB-4	WB-4		WB-4	WB-4
			Sample_ID	WB-3 [35.0-35.5]	WB-3 [35.5-36.0]		WB-3 [45.0-45.5]	WB-3 [45.5-46.0]		WB-4 [0.0-0.5]		WB-4 [10.0-10.5]	WB-4 [10.5-11.0]		WB-4 [30.0-30.5]	WB-4 [35.0-35.5]
			Sample_Type	REG	REG		REG	REG		REG		REG	REG		REG	REG
			Depth	35 - 35.5	35.5 - 36		45 - 45.5	45.5 - 46		0 - 0.5		10 - 10.5	10.5 - 11		30 - 30.5	35 - 35.5
			Collection_Date	22-May-90	22-May-90		22-May-90	22-May-90		21-May-90		21-May-90	21-May-90		21-May-90	21-May-90
			REFERENCE	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units													
SVOC	pentachlorophenol	87-86-5	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	phenanthrene	85-01-8	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	phenol	108-95-2	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	pyrene	129-00-0	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG		400 U			410 U		690 U			860 U			830 U
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG		1900 U			2000 U		3300 U			4200 U			4000 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG		400 U			410 U		690 U			860 U			830 U
PEST/PCB	aldrin	309-00-2	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG		300 U			310 U		260 U			320 U			320 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG		300 U			310 U		260 U			320 U			320 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG		300 U			310 U		260 U			320 U			320 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG		300 U			310 U		260 U			320 U			320 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG		300 U			310 U		260 U			320 U			320 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG		600 U			620 U		520 U			650 U			630 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG		600 U			620 U		520 U			650 U			630 U
PEST/PCB	azinphos-methyl	86-50-0	UG/KG													
PEST/PCB	alpha-BHC	319-84-6	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	beta-BHC	319-85-7	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	delta-BHC	319-86-8	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	bolstar	35400-43-2	UG/KG													
PEST/PCB	chlordane	57-74-9	UG/KG		120 U			120 U		100 U			130 U			130 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG													
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG													
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG													
PEST/PCB	coumaphos	56-72-4	UG/KG													
PEST/PCB	4,4'-DDD	72-54-8	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	O,P'-DDD	53-19-0	UG/KG													
PEST/PCB	4,4'-DDE	72-55-9	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG													
PEST/PCB	4,4'-DDT	50-29-3	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	O,P'-DDT	789-02-6	UG/KG													
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG													
PEST/PCB	diazinon	333-41-5	UG/KG													
PEST/PCB	dichlorvos	62-73-7	UG/KG													
PEST/PCB	dieldrin	60-57-1	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	dimethoate	60-51-5	UG/KG													
PEST/PCB	disulfoton	298-04-4	UG/KG													
PEST/PCB	endosulfan I	959-98-8	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	endosulfan II	33213-65-9	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	endrin	72-20-8	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG		24 U			25 U		21 U			26 U			25 U
PEST/PCB	endrin ketone	53494-70-5	UG/KG													
PEST/PCB	EPN	2104-64-5	UG/KG													
PEST/PCB	ethion	563-12-2	UG/KG													
PEST/PCB	ethoprop	13194-48-4	UG/KG													
PEST/PCB	ethyl parathion	56-38-2	UG/KG													
PEST/PCB	fensulfothion	115-90-2	UG/KG													
PEST/PCB	fenthion	55-38-9	UG/KG													
PEST/PCB	heptachlor	76-44-8	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG		12 U			12 U		10 U			13 U			13 U
PEST/PCB	malathion	121-75-5	UG/KG													

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL		FED-1A	FED-1A
			EBS_PARCEL		23	23
			WBZ		SOIL	SOIL
			Station_ID		WB-4	WB-4
			Sample_ID		WB-4 [50.0-50.5]	WB-4 [50.5-51.0]
			Sample_Type		REG	REG
			Depth		50 - 50.5	50.5 - 51
			Collection_Date		21-May-90	21-May-90
			REFERENCE		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units			
SVOC	pentachlorophenol	87-86-5	UG/KG			4100 U
SVOC	phenanthrene	85-01-8	UG/KG			850 U
SVOC	phenol	108-95-2	UG/KG			850 U
SVOC	pyrene	129-00-0	UG/KG			850 U
SVOC	1,2,4-trichlorobenzene	120-82-1	UG/KG			850 U
SVOC	2,4,5-trichlorophenol	95-95-4	UG/KG			4100 U
SVOC	2,4,6-trichlorophenol	88-06-2	UG/KG			850 U
PEST/PCB	aldrin	309-00-2	UG/KG			6.4 U
PEST/PCB	Aroclor 1016	12674-11-2	UG/KG			160 U
PEST/PCB	Aroclor 1221	11104-28-2	UG/KG			160 U
PEST/PCB	Aroclor 1232	11141-16-5	UG/KG			160 U
PEST/PCB	Aroclor 1242	53469-21-9	UG/KG			160 U
PEST/PCB	Aroclor 1248	12672-29-6	UG/KG			160 U
PEST/PCB	Aroclor 1254	11097-69-1	UG/KG			320 U
PEST/PCB	Aroclor 1260	11096-82-5	UG/KG			320 U
PEST/PCB	azinphos-methyl	86-50-0	UG/KG			
PEST/PCB	alpha-BHC	319-84-6	UG/KG			6.4 U
PEST/PCB	beta-BHC	319-85-7	UG/KG			6.4 U
PEST/PCB	delta-BHC	319-86-8	UG/KG			6.4 U
PEST/PCB	gamma-BHC (lindane)	58-89-9	UG/KG			6.4 U
PEST/PCB	bolstar	35400-43-2	UG/KG			
PEST/PCB	chlordane	57-74-9	UG/KG			64 U
PEST/PCB	alpha-chlordane	5103-71-9	UG/KG			
PEST/PCB	gamma-chlordane	5566-34-7	UG/KG			
PEST/PCB	chlorpyrifos	2921-88-2	UG/KG			
PEST/PCB	coumaphos	56-72-4	UG/KG			
PEST/PCB	4,4'-DDD	72-54-8	UG/KG			13 U
PEST/PCB	O,P'-DDD	53-19-0	UG/KG			
PEST/PCB	4,4'-DDE	72-55-9	UG/KG			13 U
PEST/PCB	O,P'-DDE	3424-82-6	UG/KG			
PEST/PCB	4,4'-DDT	50-29-3	UG/KG			13 U
PEST/PCB	O,P'-DDT	789-02-6	UG/KG			
PEST/PCB	demeton (demeton o + demeton s)	8065-48-3	UG/KG			
PEST/PCB	diazinon	333-41-5	UG/KG			
PEST/PCB	dichlorvos	62-73-7	UG/KG			
PEST/PCB	dieldrin	60-57-1	UG/KG			13 U
PEST/PCB	dimethoate	60-51-5	UG/KG			
PEST/PCB	disulfoton	298-04-4	UG/KG			
PEST/PCB	endosulfan I	959-98-8	UG/KG			13 U
PEST/PCB	endosulfan II	33213-65-9	UG/KG			13 U
PEST/PCB	endosulfan sulfate	1031-07-8	UG/KG			13 U
PEST/PCB	endrin	72-20-8	UG/KG			13 U
PEST/PCB	endrin aldehyde	7421-93-4	UG/KG			13 U
PEST/PCB	endrin ketone	53494-70-5	UG/KG			
PEST/PCB	EPN	2104-64-5	UG/KG			
PEST/PCB	ethion	563-12-2	UG/KG			
PEST/PCB	ethoprop	13194-48-4	UG/KG			
PEST/PCB	ethyl parathion	56-38-2	UG/KG			
PEST/PCB	fensulfothion	115-90-2	UG/KG			
PEST/PCB	fenthion	55-38-9	UG/KG			
PEST/PCB	heptachlor	76-44-8	UG/KG			6.4 U
PEST/PCB	heptachlor epoxide	1024-57-3	UG/KG			6.4 U
PEST/PCB	malathion	121-75-5	UG/KG			

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-52	32FED-1A-52
			Sample_ID	C032C054	C032C055	C032C056	C032C057	C032C058	C032C018	C032C019	C032C020	C032C021	C032C023	C032C024	C032C025	C032C026	C032C235	C032C236
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-52	32FED-1A-52	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-55	32FED-1A-55	32FED-1A-55	32FED-1A-55
			Sample_ID	C032C237	C032C238	C032C239	C032C240	C032C241	C032C242	C032C243	C032C244	C032C245	C032C246	C032C247	C032C248	C032C249	C032C250	C032C251
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-59	32FED-1A-59
			Sample_ID	C032C252	C032C253	C032C254	C032C255	C032C256	C032C257	C032C258	C032C259	C032C260	C032C261	C032C262	C032C263	C032C264	C032C265	C032C266
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-59	32FED-1A-59	32FED-1A-59	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-61	32FED-1A-61	32FED-1A-61	32FED-1A-61
			Sample_ID	C032C267	C032C268	C032C269	C032C059	C032C060	C032C061	C032C062	C032C027	C032C028	C032C029	C032C030	C032C031	C032C032	C032C033	C032C034
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4
			Collection_Date	23-May-02	23-May-02	23-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-61	32FED-1A-61	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-64	32FED-1A-64	32FED-1A-64	32FED-1A-64
			Sample_ID	C032C035	C032C036	C032C270	C032C271	C032C272	C032C273	C032C274	C032C275	C032C276	C032C277	C032C278	C032C279	C032C280	C032C281	C032C282
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	27-Apr-02	27-Apr-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-68	32FED-1A-68
			Sample_ID	C032C283	C032C284	C032C285	C032C286	C032C287	C032C288	C032C289	C032C290	C032C291	C032C292	C032C293	C032C294	C032C295	C032C296	C032C297
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-68	32FED-1A-68	32FED-1A-68	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-70	32FED-1A-70	32FED-1A-70	32FED-1A-70
			Sample_ID	C032C298	C032C299	C032C300	C032C301	C032C302	C032C303	C032C304	C032C063	C032C064	C032C065	C032C066	C032C305	C032C306	C032C307	C032C308
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	20-May-02	20-May-02	20-May-02	20-May-02	24-May-02	24-May-02	24-May-02	24-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-74
			Sample_ID	C032C309	C032C310	C032C311	C032C312	C032C313	C032C314	C032C315	C032C316	C032C317	C032C318	C032C319	C032C320	C032C321	C032C322	C032C323
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	24-May-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-74	32FED-1A-74	32FED-1A-74	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-77	32FED-1A-77	32FED-1A-77
			Sample_ID	C032C324	C032C325	C032C326	C032C327	C032C328	C032C329	C032C330	C032C331	C032C332	C032C333	C032C334	C032C335	C032C336	C032C337	C032C338
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-77	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8
			Sample_ID	C032C339	C032C340	C032C341	C032C342	C032C343	C032C344	C032C345	C032C346	C032C347	C032C348	C032C067	C032C068	C032C069	C032C070	C032C071
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	FD	REG	REG
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	14-May-02	14-May-02	14-May-02	14-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
PEST/PCB	merphos	150-50-5	UG/KG															
PEST/PCB	methoxychlor	72-43-5	UG/KG															
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG															
PEST/PCB	methyl parathion	298-00-0	UG/KG															
PEST/PCB	mevinphos	7786-34-7	UG/KG															
PEST/PCB	naled	300-76-5	UG/KG															
PEST/PCB	phorate	298-02-2	UG/KG															
PEST/PCB	ronnel	299-84-3	UG/KG															
PEST/PCB	sulfotep	3689-24-5	UG/KG															
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG															
PEST/PCB	tokuthion	34643-46-4	UG/KG															
PEST/PCB	toxaphene	8001-35-2	UG/KG															
PEST/PCB	trichloronate	327-98-0	UG/KG															
HERB	2,4'-DB	94-82-6	UG/KG															
HERB	dicamba	1918-00-9	UG/KG															
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															
HERB	dichloroprop	120-36-5	UG/KG															
HERB	dinoseb	88-85-7	UG/KG															
HERB	2,4,5-T	93-76-5	UG/KG															
HERB	2,4,5-TP	93-72-1	UG/KG															
ORGANOTN	dibutyltin	683-18-1	MG/KG															
ORGANOTN	monobutyltin	1118-46-3	MG/KG															
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG															
ORGANOTN	tributyltin	688-73-3	MG/KG															
METALS	aluminum	7429-90-5	MG/KG															
METALS	antimony	7440-36-0	MG/KG															
METALS	arsenic	7440-38-2	MG/KG															
METALS	barium	7440-39-3	MG/KG															
METALS	beryllium	7440-41-7	MG/KG															
METALS	cadmium	7440-43-9	MG/KG															
METALS	calcium	7440-70-2	MG/KG															
METALS	chromium	7440-47-3	MG/KG															
METALS	cobalt	7440-48-4	MG/KG															
METALS	copper	7440-50-8	MG/KG															
METALS	iron	7439-89-6	MG/KG															
METALS	lead	7439-92-1	MG/KG															
METALS	magnesium	7439-95-4	MG/KG															
METALS	manganese	7439-96-5	MG/KG															
METALS	mercury	7439-97-6	MG/KG															
METALS	molybdenum	7439-98-7	MG/KG															
METALS	nickel	7440-02-0	MG/KG															
METALS	potassium	7440-09-7	MG/KG															
METALS	selenium	7782-49-2	MG/KG															
METALS	silver	7440-22-4	MG/KG															
METALS	sodium	7440-23-5	MG/KG															
METALS	thallium	7440-28-0	MG/KG															
METALS	titanium	7440-32-6	MG/KG															
METALS	vanadium	7440-62-2	MG/KG															
METALS	zinc	7440-66-6	MG/KG															
RAD	americium-241	14596-10-2	pCi/g															
RAD	cesium-137	10045-97-3	pCi/g															
RAD	cobalt-60	10198-40-0	pCi/g															
RAD	europium-152	14683-23-9	pCi/g															
RAD	europium-154	15585-10-1	pCi/g															
RAD	potassium-40	13966-00-2	pCi/g															
RAD	radium-226	13982-63-3	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-9	32FED-1A-9	32FED-1A-9	32FED-1A-9	M009-A	M009-A	M009-A	M009-A	M010-B	M014-B	M015-A	M015-A	M015-A	M103-A	M103-B	M104-A	M104-A		
			Sample_ID	C032C072	C032C073	C032C074	C032C075	15-255	15-256	M-009A-0	M-009A-003	M10-B	M14-B	15-262	15-263	M-015A-005	M103-A	M103-B	15-258	15-259		
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG		
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 2.5	2 - 2.5	0 - 0	2 - 3.3	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 4.8	5 - 6.5	0 - 0.5	0 - 0.5	2 - 2.5		
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	29-Oct-07	29-Oct-07	16-May-91	30-May-91	28-Nov-90	01-Dec-90	29-Oct-07	29-Oct-07	28-May-91	12-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07		
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007		
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																			
PEST/PCB	merphos	150-50-5	UG/KG									67 U	67 U				67 U	67 U				
PEST/PCB	methoxychlor	72-43-5	UG/KG							35.5 U	37.8 U	50 U	50 U			35.5 U	50 U	50 U				
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	methyl parathion	298-00-0	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	mevinphos	7786-34-7	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	naled	300-76-5	UG/KG									330 U	330 U				330 U	330 U				
PEST/PCB	phorate	298-02-2	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	ronnel	299-84-3	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	sulfotep	3689-24-5	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG									33 U	33 U				33 U	33 U				
PEST/PCB	tokuthion	34643-46-4	UG/KG									67 U	67 U				67 U	67 U				
PEST/PCB	toxaphene	8001-35-2	UG/KG							71 U	75.6 U	100 U	100 U			70.9 U	100 U	100 U				
PEST/PCB	trichloronate	327-98-0	UG/KG									33 U	33 U				33 U	33 U				
HERB	2,4'-DB	94-82-6	UG/KG															4 U				
HERB	dicamba	1918-00-9	UG/KG															4 U				
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG															4 U				
HERB	dichloroprop	120-36-5	UG/KG															4 U				
HERB	dinoseb	88-85-7	UG/KG															4 U				
HERB	2,4,5-T	93-76-5	UG/KG															2 U				
HERB	2,4,5-TP	93-72-1	UG/KG															2 U				
ORGANOTN	dibutyltin	683-18-1	MG/KG																			
ORGANOTN	monobutyltin	1118-46-3	MG/KG																			
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG																			
ORGANOTN	tributyltin	688-73-3	MG/KG																			
METALS	aluminum	7429-90-5	MG/KG							6550 J	4180 J	4380	3590			5030 J						
METALS	antimony	7440-36-0	MG/KG							2.7 UJ	2.8 UJ	1.9 U	1.8 U			2.5 UJ						
METALS	arsenic	7440-38-2	MG/KG							2.25	1.1	4.5	4.9			0.936						
METALS	barium	7440-39-3	MG/KG							97	49.9 J	34.2	25.8			36 J						
METALS	beryllium	7440-41-7	MG/KG							0.499	0.676 J	0.16 U	0.15 U			0.517 J						
METALS	cadmium	7440-43-9	MG/KG							0.435	0.329 U	0.37 U	0.72			0.302 U						
METALS	calcium	7440-70-2	MG/KG							4260 J	2370 J	1830	2020			2070 J						
METALS	chromium	7440-47-3	MG/KG							31.5 J	28 J	32.1	27.3			28.9 J						
METALS	cobalt	7440-48-4	MG/KG							5.97	4.08	5.5	4.4			5.14						
METALS	copper	7440-50-8	MG/KG							18.1 J	5.96	5.7	7.9			5.21						
METALS	iron	7439-89-6	MG/KG							10600 J	7800 J	8530	6730			8400 J						
METALS	lead	7439-92-1	MG/KG							34.3	5.61	5.9	48.2			2.2						
METALS	magnesium	7439-95-4	MG/KG							3320	1970	2620	2070			2640						
METALS	manganese	7439-96-5	MG/KG							204	90.3 J	111	100			96.9 J						
METALS	mercury	7439-97-6	MG/KG							0.217 J	0.21	0.07 U	0.067 U			0.051 U						
METALS	molybdenum	7439-98-7	MG/KG																			
METALS	nickel	7440-02-0	MG/KG							28.7 J	21.8	28.6	21.8			26.4						
METALS	potassium	7440-09-7	MG/KG							1140	609	723	489			854						
METALS	selenium	7782-49-2	MG/KG							0.217 UJ	0.213 U	1.1 U	1.1 U			0.198 U						
METALS	silver	7440-22-4	MG/KG							0.661	0.582	0.9	0.7 U			0.493 U						
METALS	sodium	7440-23-5	MG/KG							516 J	241	381	295			624						
METALS	thallium	7440-28-0	MG/KG							0.279 U	0.273 UJ	0.12 U	0.12 U			0.255 U						
METALS	titanium	7440-32-6	MG/KG																			
METALS	vanadium	7440-62-2	MG/KG							27	19.7	18.3	17.2			20						
METALS	zinc	7440-66-6	MG/KG							53.2 J	16.1	24.3	42.1			17.5						
RAD	americium-241	14596-10-2	pCi/g					-0.0007 U	-0.02 U					0.033 U	0.3 U				-0.01 U	-0.03 U		
RAD	cesium-137	10045-97-3	pCi/g					0.121 J	-0.007 U					0.117 J	0.008 U				0.045 U	0.093 U		
RAD	cobalt-60	10198-40-0	pCi/g					0.002 U	0.0006 U					-0.0004 U	-0.013 U				0.001 U	-0.017 U		
RAD	europium-152	14683-23-9	pCi/g					-0.05 U	-0.02 U					0.08 U	-0.015 U				0.039 U	-0.02 U		
RAD	europium-154	15585-10-1	pCi/g					0.003 U	-0.1 U					-0.0004 U	0 U				0.06 U	-0.08 U		
RAD	potassium-40	13966-00-2	pCi/g					8.2	10.4					14.8	10				9.6	7.4		
RAD	radium-226	13982-63-3	pCi/g					0.39 J	0.45					0.52 J	0.51				0.51 J	0.3		

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	M104-A	M104-A	M104-C	M104-C	M104-C	M104-C	M104-C	M105-A	M105-B	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	M-104A-002	M-104A-002-DUP	15-260	15-261	M-104C-0	M-104C-062	M-104C-0-DUP	M105-A	M105-B	15-266	15-267	M-106A-0	M-106A-003	15-264	15-265	M-107A-0
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	0.5 - 2	0 - 0.5	2 - 2.5	0 - 0	60 - 62	0 - 0	5.5 - 7	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	2 - 3	0 - 0.5	2 - 2.5	0 - 0
			Collection_Date	30-May-91	30-May-91	29-Oct-07	29-Oct-07	16-May-91	29-May-91	16-May-91	10-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	16-May-91	03-Jun-91	29-Oct-07	29-Oct-07	16-May-91
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
PEST/PCB	merphos	150-50-5	UG/KG								67 U	67 U							
PEST/PCB	methoxychlor	72-43-5	UG/KG	37.3 U	38.4 U			34.3 U	41 U	34 U	50 U	50 U			33.5 U	40.4 U			33.8 U
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG								33 U	33 U							
PEST/PCB	methyl parathion	298-00-0	UG/KG								33 U	33 U							
PEST/PCB	mevinphos	7786-34-7	UG/KG								33 U	33 U							
PEST/PCB	naled	300-76-5	UG/KG								330 U	330 U							
PEST/PCB	phorate	298-02-2	UG/KG								33 U	33 U							
PEST/PCB	ronnel	299-84-3	UG/KG								33 U	33 U							
PEST/PCB	sulfotep	3689-24-5	UG/KG								33 U	33 U							
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG								33 U	33 U							
PEST/PCB	tokuthion	34643-46-4	UG/KG								67 U	67 U							
PEST/PCB	toxaphene	8001-35-2	UG/KG	74.6 U	76.9 U			68.5 U	81.9 U	68 U	100 U	100 U			67 U	80.7 U			67.6 U
PEST/PCB	trichloronate	327-98-0	UG/KG								33 U	33 U							
HERB	2,4'-DB	94-82-6	UG/KG								5 U	4 U							
HERB	dicamba	1918-00-9	UG/KG								5 U	4 U							
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG								5 U	4 U							
HERB	dichloroprop	120-36-5	UG/KG								5 U	4 U							
HERB	dinoseb	88-85-7	UG/KG								5 U	4 U							
HERB	2,4,5-T	93-76-5	UG/KG								2 U	2 U							
HERB	2,4,5-TP	93-72-1	UG/KG								2 U	2 U							
ORGANOTN	dibutyltin	683-18-1	MG/KG																
ORGANOTN	monobutyltin	1118-46-3	MG/KG																
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG																
ORGANOTN	tributyltin	688-73-3	MG/KG																
METALS	aluminum	7429-90-5	MG/KG																
METALS	antimony	7440-36-0	MG/KG																
METALS	arsenic	7440-38-2	MG/KG																
METALS	barium	7440-39-3	MG/KG																
METALS	beryllium	7440-41-7	MG/KG																
METALS	cadmium	7440-43-9	MG/KG																
METALS	calcium	7440-70-2	MG/KG																
METALS	chromium	7440-47-3	MG/KG																
METALS	cobalt	7440-48-4	MG/KG																
METALS	copper	7440-50-8	MG/KG																
METALS	iron	7439-89-6	MG/KG																
METALS	lead	7439-92-1	MG/KG																
METALS	magnesium	7439-95-4	MG/KG																
METALS	manganese	7439-96-5	MG/KG																
METALS	mercury	7439-97-6	MG/KG																
METALS	molybdenum	7439-98-7	MG/KG																
METALS	nickel	7440-02-0	MG/KG																
METALS	potassium	7440-09-7	MG/KG																
METALS	selenium	7782-49-2	MG/KG																
METALS	silver	7440-22-4	MG/KG																
METALS	sodium	7440-23-5	MG/KG																
METALS	thallium	7440-28-0	MG/KG																
METALS	titanium	7440-32-6	MG/KG																
METALS	vanadium	7440-62-2	MG/KG																
METALS	zinc	7440-66-6	MG/KG																
RAD	americium-241	14596-10-2	pCi/g			0.04 U	-0.0009 U						0.0233 U	-0.25 U			-0.04 U	-0.009 U	
RAD	cesium-137	10045-97-3	pCi/g			0.018 U	0 U						-0.013 U	-0.0002 U			0.009 U	0.044 U	
RAD	cobalt-60	10198-40-0	pCi/g			-0.01 U	-0.003 U						0 U	-0.012 U			-0.004 U	0.017 U	
RAD	europium-152	14683-23-9	pCi/g			-0.04 U	-0.001 U						0.035 U	-0.02 U			-0.01 U	-0.007 U	
RAD	europium-154	15585-10-1	pCi/g			-0.07 U	0.003 U						-0.04 U	0 U			0.07 U	0 U	
RAD	potassium-40	13966-00-2	pCi/g			8.6	7.3						10.5	9			10.3	9.4	
RAD	radium-226	13982-63-3	pCi/g			0.52	0.24 R						0.26	0.44 J			0.54 J	0.26	

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A		FED-1A	FED-1A	
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23		23	23	
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		SOIL	SOIL	
			Station_ID	M107-A	M108-A	M108-B	M108-B	M109-A	M109-A	M109-A	M109-A	SS2-2	WB-3		WB-3	WB-3	
			Sample_ID	M-107A-002	M108-A	M108-B	M-37	15-268	15-269	M-109A-0	M-109A-007	280-S02-002	WB-3 [0.0-0.5]		WB-3 [15.0-15.5]	WB-3 [15.5-16.0]	
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG		REG	REG	
			Depth	0.5 - 2	5 - 6.5	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	5.5 - 6.3	0 - 0	0 - 0.5		15 - 15.5	15.5 - 16	
			Collection_Date	03-Jun-91	11-Dec-90	27-Nov-90	27-Nov-90	29-Oct-07	29-Oct-07	16-May-91	30-May-91	12-Jul-94	22-May-90		22-May-90	22-May-90	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
PEST/PCB	merphos	150-50-5	UG/KG		67 U	67 U	67 U										
PEST/PCB	methoxychlor	72-43-5	UG/KG	34.4 U	50 U	50 U	50 U			35.2 U	35 U		52 U			63 U	
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG		33 U	33 U	33 U										
PEST/PCB	methyl parathion	298-00-0	UG/KG		33 U	33 U	33 U										
PEST/PCB	mevinphos	7786-34-7	UG/KG		33 U	33 U	33 U										
PEST/PCB	naled	300-76-5	UG/KG		330 U	330 U	330 U										
PEST/PCB	phorate	298-02-2	UG/KG		33 U	33 U	33 U										
PEST/PCB	ronnel	299-84-3	UG/KG		33 U	33 U	33 U										
PEST/PCB	sulfotep	3689-24-5	UG/KG		33 U	33 U	33 U										
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG		33 U	33 U	33 U										
PEST/PCB	tokuthion	34643-46-4	UG/KG		67 U	67 U	67 U										
PEST/PCB	toxaphene	8001-35-2	UG/KG	68.8 U	100 U	100 U	100 U			70.4 U	70 U		520 U			630 U	
PEST/PCB	trichloronate	327-98-0	UG/KG		33 U	33 U	33 U										
HERB	2,4'-DB	94-82-6	UG/KG		5 U	4 U	4 U										
HERB	dicamba	1918-00-9	UG/KG		5 U	4 U	4 U										
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG		5 U	4 U	4 U										
HERB	dichloroprop	120-36-5	UG/KG		5 U	4 U	4 U										
HERB	dinoseb	88-85-7	UG/KG		5 U	4 U	4 U										
HERB	2,4,5-T	93-76-5	UG/KG		2 U	2 U	2 U										
HERB	2,4,5-TP	93-72-1	UG/KG		2 U	2 U	2 U										
ORGANOTN	dibutyltin	683-18-1	MG/KG														
ORGANOTN	monobutyltin	1118-46-3	MG/KG														
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG														
ORGANOTN	tributyltin	688-73-3	MG/KG														
METALS	aluminum	7429-90-5	MG/KG										4440			4430	
METALS	antimony	7440-36-0	MG/KG										6.2 U			7.5 U	
METALS	arsenic	7440-38-2	MG/KG										10			12 U	
METALS	barium	7440-39-3	MG/KG										31			25 U	
METALS	beryllium	7440-41-7	MG/KG										1 U			1.2 U	
METALS	cadmium	7440-43-9	MG/KG										5.1			1.2 U	
METALS	calcium	7440-70-2	MG/KG										2500			2200	
METALS	chromium	7440-47-3	MG/KG										27			28	
METALS	cobalt	7440-48-4	MG/KG										5.2 U			6.3 U	
METALS	copper	7440-50-8	MG/KG										15			19	
METALS	iron	7439-89-6	MG/KG										7940			7460	
METALS	lead	7439-92-1	MG/KG										15			6.3 U	
METALS	magnesium	7439-95-4	MG/KG										2100			2000	
METALS	manganese	7439-96-5	MG/KG										110			81	
METALS	mercury	7439-97-6	MG/KG										0.21 U			0.25 U	
METALS	molybdenum	7439-98-7	MG/KG										5.2 U			6.3 U	
METALS	nickel	7440-02-0	MG/KG										28			22	
METALS	potassium	7440-09-7	MG/KG										770			630	
METALS	selenium	7782-49-2	MG/KG										10 U			12 U	
METALS	silver	7440-22-4	MG/KG										5.2 U			6.3 U	
METALS	sodium	7440-23-5	MG/KG										520 U			630 U	
METALS	thallium	7440-28-0	MG/KG										10 U			12 U	
METALS	titanium	7440-32-6	MG/KG										410			440	
METALS	vanadium	7440-62-2	MG/KG										19			19	
METALS	zinc	7440-66-6	MG/KG										30			25	
RAD	americium-241	14596-10-2	pCi/g					0.004 U	0.027 U								
RAD	cesium-137	10045-97-3	pCi/g					-0.04 U	-0.001 U								
RAD	cobalt-60	10198-40-0	pCi/g					0.007 U	0 U								
RAD	europium-152	14683-23-9	pCi/g					-0.02 U	-0.0238 U								
RAD	europium-154	15585-10-1	pCi/g					0 U	0.13 U								
RAD	potassium-40	13966-00-2	pCi/g					10.4	8.8								
RAD	radium-226	13982-63-3	pCi/g					0.45	0.51 J								

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A		FED-1A	FED-1A		FED-1A		FED-1A	FED-1A		FED-1A	FED-1A
			EBS_PARCEL	23	23		23	23		23		23	23		23	23
			WBZ	SOIL	SOIL		SOIL	SOIL		SOIL		SOIL	SOIL		SOIL	SOIL
			Station_ID	WB-3	WB-3		WB-3	WB-3		WB-4		WB-4	WB-4		WB-4	WB-4
			Sample_ID	WB-3 [35.0-35.5]	WB-3 [35.5-36.0]		WB-3 [45.0-45.5]	WB-3 [45.5-46.0]		WB-4 [0.0-0.5]		WB-4 [10.0-10.5]	WB-4 [10.5-11.0]		WB-4 [30.0-30.5]	WB-4 [35.0-35.5]
			Sample_Type	REG	REG		REG	REG		REG		REG	REG		REG	REG
			Depth	35 - 35.5	35.5 - 36		45 - 45.5	45.5 - 46		0 - 0.5		10 - 10.5	10.5 - 11		30 - 30.5	35 - 35.5
			Collection_Date	22-May-90	22-May-90		22-May-90	22-May-90		21-May-90		21-May-90	21-May-90		21-May-90	21-May-90
			REFERENCE	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units													
PEST/PCB	merphos	150-50-5	UG/KG													
PEST/PCB	methoxychlor	72-43-5	UG/KG		60 U			62 U		52 U			65 U			63 U
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG													
PEST/PCB	methyl parathion	298-00-0	UG/KG													
PEST/PCB	mevinphos	7786-34-7	UG/KG													
PEST/PCB	naled	300-76-5	UG/KG													
PEST/PCB	phorate	298-02-2	UG/KG													
PEST/PCB	ronnel	299-84-3	UG/KG													
PEST/PCB	sulfotep	3689-24-5	UG/KG													
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG													
PEST/PCB	tokuthion	34643-46-4	UG/KG													
PEST/PCB	toxaphene	8001-35-2	UG/KG		600 U			620 U		520 U			650 U			630 U
PEST/PCB	trichloronate	327-98-0	UG/KG													
HERB	2,4'-DB	94-82-6	UG/KG													
HERB	dicamba	1918-00-9	UG/KG													
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG													
HERB	dichloroprop	120-36-5	UG/KG													
HERB	dinoseb	88-85-7	UG/KG													
HERB	2,4,5-T	93-76-5	UG/KG													
HERB	2,4,5-TP	93-72-1	UG/KG													
ORGANOTN	dibutyltin	683-18-1	MG/KG													
ORGANOTN	monobutyltin	1118-46-3	MG/KG													
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG													
ORGANOTN	tributyltin	688-73-3	MG/KG													
METALS	aluminum	7429-90-5	MG/KG		6800			10300		5400			7190			9460
METALS	antimony	7440-36-0	MG/KG		7.2 U			7.5 U		6.3 U			7.8 U			7.6 U
METALS	arsenic	7440-38-2	MG/KG		19			26		10 U			13 U			13 U
METALS	barium	7440-39-3	MG/KG		28			31		34			46			25 U
METALS	beryllium	7440-41-7	MG/KG		1.2 U			1.2 U		1 U			1.3 U			1.3 U
METALS	cadmium	7440-43-9	MG/KG		1.2 U			1.2 U		1 U			1.3 U			1.3 U
METALS	calcium	7440-70-2	MG/KG		2400			2200		2600			3100			2100
METALS	chromium	7440-47-3	MG/KG		34			50		34			36			38
METALS	cobalt	7440-48-4	MG/KG		6 U			7.4		5.2 U			6.5 U			8.3
METALS	copper	7440-50-8	MG/KG		26			31		12			25			18
METALS	iron	7439-89-6	MG/KG		11900			15700		8680			10300			14500
METALS	lead	7439-92-1	MG/KG		6 U			6.2		9.7			6.5 U			6.3 U
METALS	magnesium	7439-95-4	MG/KG		2800			3200		2200			2900			4200
METALS	manganese	7439-96-5	MG/KG		120			140		100			120			110
METALS	mercury	7439-97-6	MG/KG		0.24 U			0.25 U		0.21 U			0.26 U			0.25 U
METALS	molybdenum	7439-98-7	MG/KG		6 U			6.2 U		5.2 U			6.5 U			6.3 U
METALS	nickel	7440-02-0	MG/KG		29			52		23			33			30
METALS	potassium	7440-09-7	MG/KG		1100			1200		750			1100			1800
METALS	selenium	7782-49-2	MG/KG		24 U			25 U		10 U			13 U			13 U
METALS	silver	7440-22-4	MG/KG		6 U			6.2 U		5.2 U			6.5 U			6.3 U
METALS	sodium	7440-23-5	MG/KG		1100			2700		520 U			650 U			1800
METALS	thallium	7440-28-0	MG/KG		12 U			12 U		10 U			13 U			13 U
METALS	titanium	7440-32-6	MG/KG		520			600		513			659			500
METALS	vanadium	7440-62-2	MG/KG		28			30		23			27			28
METALS	zinc	7440-66-6	MG/KG		32			57		28			30			31
RAD	americium-241	14596-10-2	pCi/g													
RAD	cesium-137	10045-97-3	pCi/g													
RAD	cobalt-60	10198-40-0	pCi/g													
RAD	europium-152	14683-23-9	pCi/g													
RAD	europium-154	15585-10-1	pCi/g													
RAD	potassium-40	13966-00-2	pCi/g													
RAD	radium-226	13982-63-3	pCi/g													

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL		FED-1A	FED-1A
			EBS_PARCEL		23	23
			WBZ		SOIL	SOIL
			Station_ID		WB-4	WB-4
			Sample_ID		WB-4 [50.0-50.5]	WB-4 [50.5-51.0]
			Sample_Type		REG	REG
			Depth		50 - 50.5	50.5 - 51
			Collection_Date		21-May-90	21-May-90
			REFERENCE		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units			
PEST/PCB	merphos	150-50-5	UG/KG			
PEST/PCB	methoxychlor	72-43-5	UG/KG			32 U
PEST/PCB	methyl chlorpyrifos	5598-13-0	UG/KG			
PEST/PCB	methyl parathion	298-00-0	UG/KG			
PEST/PCB	mevinphos	7786-34-7	UG/KG			
PEST/PCB	naled	300-76-5	UG/KG			
PEST/PCB	phorate	298-02-2	UG/KG			
PEST/PCB	ronnel	299-84-3	UG/KG			
PEST/PCB	sulfotep	3689-24-5	UG/KG			
PEST/PCB	tetrachlorvinphos	961-11-5	UG/KG			
PEST/PCB	tokuthion	34643-46-4	UG/KG			
PEST/PCB	toxaphene	8001-35-2	UG/KG			320 U
PEST/PCB	trichloronate	327-98-0	UG/KG			
HERB	2,4'-DB	94-82-6	UG/KG			
HERB	dicamba	1918-00-9	UG/KG			
HERB	dichlorophenoxyacetic acid	94-75-7	UG/KG			
HERB	dichloroprop	120-36-5	UG/KG			
HERB	dinoseb	88-85-7	UG/KG			
HERB	2,4,5-T	93-76-5	UG/KG			
HERB	2,4,5-TP	93-72-1	UG/KG			
ORGANOTN	dibutyltin	683-18-1	MG/KG			
ORGANOTN	monobutyltin	1118-46-3	MG/KG			
ORGANOTN	tetrabutyltin	1461-25-2	MG/KG			
ORGANOTN	tributyltin	688-73-3	MG/KG			
METALS	aluminum	7429-90-5	MG/KG			15500
METALS	antimony	7440-36-0	MG/KG			7.7 U
METALS	arsenic	7440-38-2	MG/KG			18
METALS	barium	7440-39-3	MG/KG			27
METALS	beryllium	7440-41-7	MG/KG			1.3 U
METALS	cadmium	7440-43-9	MG/KG			1.3 U
METALS	calcium	7440-70-2	MG/KG			2300
METALS	chromium	7440-47-3	MG/KG			49
METALS	cobalt	7440-48-4	MG/KG			10
METALS	copper	7440-50-8	MG/KG			100
METALS	iron	7439-89-6	MG/KG			21600
METALS	lead	7439-92-1	MG/KG			13
METALS	magnesium	7439-95-4	MG/KG			6700
METALS	manganese	7439-96-5	MG/KG			190
METALS	mercury	7439-97-6	MG/KG			0.26 U
METALS	molybdenum	7439-98-7	MG/KG			6.4 U
METALS	nickel	7440-02-0	MG/KG			52
METALS	potassium	7440-09-7	MG/KG			2600
METALS	selenium	7782-49-2	MG/KG			13 U
METALS	silver	7440-22-4	MG/KG			6.4 U
METALS	sodium	7440-23-5	MG/KG			1200
METALS	thallium	7440-28-0	MG/KG			13 U
METALS	titanium	7440-32-6	MG/KG			677
METALS	vanadium	7440-62-2	MG/KG			44
METALS	zinc	7440-66-6	MG/KG			62
RAD	americium-241	14596-10-2	pCi/g			
RAD	cesium-137	10045-97-3	pCi/g			
RAD	cobalt-60	10198-40-0	pCi/g			
RAD	europium-152	14683-23-9	pCi/g			
RAD	europium-154	15585-10-1	pCi/g			
RAD	potassium-40	13966-00-2	pCi/g			
RAD	radium-226	13982-63-3	pCi/g			

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-5	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-50	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-51	32FED-1A-52	32FED-1A-52
			Sample_ID	C032C054	C032C055	C032C056	C032C057	C032C058	C032C018	C032C019	C032C020	C032C021	C032C023	C032C024	C032C025	C032C026	C032C235	C032C236
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	21-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	17-May-02	17-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-52	32FED-1A-52	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-53	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-54	32FED-1A-55	32FED-1A-55	32FED-1A-55	32FED-1A-55
			Sample_ID	C032C237	C032C238	C032C239	C032C240	C032C241	C032C242	C032C243	C032C244	C032C245	C032C246	C032C247	C032C248	C032C249	C032C250	C032C251
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	15-May-02	15-May-02	15-May-02	15-May-02	15-May-02	14-May-02	14-May-02	14-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-56	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-57	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-58	32FED-1A-59	32FED-1A-59
			Sample_ID	C032C252	C032C253	C032C254	C032C255	C032C256	C032C257	C032C258	C032C259	C032C260	C032C261	C032C262	C032C263	C032C264	C032C265	C032C266
			Sample_Type	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-59	32FED-1A-59	32FED-1A-59	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-6	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-60	32FED-1A-61	32FED-1A-61	32FED-1A-61	32FED-1A-61	32FED-1A-61
			Sample_ID	C032C267	C032C268	C032C269	C032C059	C032C060	C032C061	C032C062	C032C027	C032C028	C032C029	C032C030	C032C031	C032C032	C032C033	C032C034
			Sample_Type	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	
			Collection_Date	23-May-02	23-May-02	23-May-02	21-May-02	21-May-02	21-May-02	21-May-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02	27-Apr-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
RAD	thorium	7440-29-1	pCi/g																

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-61	32FED-1A-61	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-62	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-63	32FED-1A-64	32FED-1A-64	32FED-1A-64	32FED-1A-64
			Sample_ID	C032C035	C032C036	C032C270	C032C271	C032C272	C032C273	C032C274	C032C275	C032C276	C032C277	C032C278	C032C279	C032C280	C032C281	C032C282
			Sample_Type	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG
			Depth	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	27-Apr-02	27-Apr-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-65	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-66	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-67	32FED-1A-68	32FED-1A-68
			Sample_ID	C032C283	C032C284	C032C285	C032C286	C032C287	C032C288	C032C289	C032C290	C032C291	C032C292	C032C293	C032C294	C032C295	C032C296	C032C297
			Sample_Type	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	22-May-02	22-May-02	22-May-02	22-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-68	32FED-1A-68	32FED-1A-68	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-69	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-7	32FED-1A-70	32FED-1A-70	32FED-1A-70	32FED-1A-70
			Sample_ID	C032C298	C032C299	C032C300	C032C301	C032C302	C032C303	C032C304	C032C063	C032C064	C032C065	C032C066	C032C305	C032C306	C032C307	C032C308
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8
			Collection_Date	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	20-May-02	20-May-02	20-May-02	20-May-02	24-May-02	24-May-02	24-May-02	24-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-71	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-72	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-73	32FED-1A-74
			Sample_ID	C032C309	C032C310	C032C311	C032C312	C032C313	C032C314	C032C315	C032C316	C032C317	C032C318	C032C319	C032C320	C032C321	C032C322	C032C323
			Sample_Type	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG
			Depth	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5
			Collection_Date	24-May-02	24-May-02	24-May-02	24-May-02	24-May-02	17-May-02	17-May-02	17-May-02	17-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	16-May-02	14-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
RAD	thorium	7440-29-1	pCi/g																

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-74	32FED-1A-74	32FED-1A-74	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-75	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-76	32FED-1A-77	32FED-1A-77	32FED-1A-77
			Sample_ID	C032C324	C032C325	C032C326	C032C327	C032C328	C032C329	C032C330	C032C331	C032C332	C032C333	C032C334	C032C335	C032C336	C032C337	C032C338
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG
			Depth	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	2 - 4
			Collection_Date	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	14-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02	23-May-02
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
RAD	thorium	7440-29-1	pCi/g																

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-77	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-78	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-79	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8	32FED-1A-8
			Sample_ID	C032C339	C032C340	C032C341	C032C342	C032C343	C032C344	C032C345	C032C346	C032C347	C032C348	C032C067	C032C068	C032C069	C032C070	C032C071	
			Sample_Type	REG	REG	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	FD	REG	REG	
			Depth	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	4 - 8	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	4 - 8	
			Collection_Date	23-May-02	17-May-02	17-May-02	17-May-02	17-May-02	17-May-02	14-May-02	14-May-02	14-May-02	14-May-02	20-May-02	20-May-02	20-May-02	20-May-02	20-May-02	
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
RAD	thorium	7440-29-1	pCi/g																

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	32FED-1A-9	32FED-1A-9	32FED-1A-9	32FED-1A-9	M009-A	M009-A	M009-A	M009-A	M010-B	M014-B	M015-A	M015-A	M015-A	M103-A	M103-B	M104-A	M104-A
			Sample_ID	C032C072	C032C073	C032C074	C032C075	15-255	15-256	M-009A-0	M-009A-003	M10-B	M14-B	15-262	15-263	M-015A-005	M103-A	M103-B	15-258	15-259
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0 - 0.5	0.5 - 2	2 - 4	4 - 8	0 - 2.5	2 - 2.5	0 - 0	2 - 3.3	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	2 - 4.8	5 - 6.5	0 - 0.5	0 - 0.5	2 - 2.5
			Collection_Date	20-May-02	20-May-02	20-May-02	20-May-02	29-Oct-07	29-Oct-07	16-May-91	30-May-91	28-Nov-90	01-Dec-90	29-Oct-07	29-Oct-07	28-May-91	12-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07
			REFERENCE	BEI 2004b	BEI 2004b	BEI 2004b	BEI 2004b	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																	
RAD	thorium	7440-29-1	pCi/g					0.36	0.38					0.52	0.35 U				0.4	0.4

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
			Station_ID	M104-A	M104-A	M104-C	M104-C	M104-C	M104-C	M104-C	M105-A	M105-B	M106-A	M106-A	M106-A	M106-A	M107-A	M107-A	M107-A
			Sample_ID	M-104A-002	M-104A-002-DUP	15-260	15-261	M-104C-0	M-104C-062	M-104C-0-DUP	M105-A	M105-B	15-266	15-267	M-106A-0	M-106A-003	15-264	15-265	M-107A-0
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
			Depth	0.5 - 2	0.5 - 2	0 - 0.5	2 - 2.5	0 - 0	60 - 62	0 - 0	5.5 - 7	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	2 - 3	0 - 0.5	2 - 2.5	0 - 0
			Collection_Date	30-May-91	30-May-91	29-Oct-07	29-Oct-07	16-May-91	29-May-91	16-May-91	10-Dec-90	28-Nov-90	29-Oct-07	29-Oct-07	16-May-91	03-Jun-91	29-Oct-07	29-Oct-07	16-May-91
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units																
RAD	thorium	7440-29-1	pCi/g			0.24 U	0.35						0.4	0.16 U			0.32 U	0.13 U	

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A	FED-1A		FED-1A	FED-1A	
			EBS_PARCEL	23	23	23	23	23	23	23	23	23	23		23	23	
			WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL		SOIL	SOIL	
			Station_ID	M107-A	M108-A	M108-B	M108-B	M109-A	M109-A	M109-A	M109-A	SS2-2	WB-3		WB-3	WB-3	
			Sample_ID	M-107A-002	M108-A	M108-B	M-37	15-268	15-269	M-109A-0	M-109A-007	280-S02-002	WB-3 [0.0-0.5]		WB-3 [15.0-15.5]	WB-3 [15.5-16.0]	
			Sample_Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG		REG	REG	
			Depth	0.5 - 2	5 - 6.5	0 - 0.5	0 - 0.5	0 - 0.5	2 - 2.5	0 - 0	5.5 - 6.3	0 - 0	0 - 0.5		15 - 15.5	15.5 - 16	
			Collection_Date	03-Jun-91	11-Dec-90	27-Nov-90	27-Nov-90	29-Oct-07	29-Oct-07	16-May-91	30-May-91	12-Jul-94	22-May-90		22-May-90	22-May-90	
			REFERENCE	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2007	TtEMI 2007	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004	
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units														
RAD	thorium	7440-29-1	pCi/g					0.28	0.29								

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL	FED-1A	FED-1A		FED-1A	FED-1A		FED-1A		FED-1A	FED-1A		FED-1A	FED-1A		
			EBS_PARCEL	23	23		23	23		23		23	23		23	23		
			WBZ	SOIL	SOIL		SOIL	SOIL		SOIL		SOIL	SOIL		SOIL	SOIL		
			Station_ID	WB-3	WB-3		WB-3	WB-3		WB-4		WB-4	WB-4		WB-4	WB-4		
			Sample_ID	WB-3 [35.0-35.5]	WB-3 [35.5-36.0]		WB-3 [45.0-45.5]	WB-3 [45.5-46.0]		WB-4 [0.0-0.5]		WB-4 [10.0-10.5]	WB-4 [10.5-11.0]		WB-4 [30.0-30.5]	WB-4 [35.0-35.5]		
			Sample_Type	REG	REG		REG	REG		REG		REG	REG		REG	REG		
			Depth	35 - 35.5	35.5 - 36		45 - 45.5	45.5 - 46		0 - 0.5		10 - 10.5	10.5 - 11		30 - 30.5	35 - 35.5		
			Collection_Date	22-May-90	22-May-90		22-May-90	22-May-90		21-May-90		21-May-90	21-May-90		21-May-90	21-May-90		
			REFERENCE	TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004		TtEMI 2004	TtEMI 2004		TtEMI 2004	TtEMI 2004		
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units															
RAD	thorium	7440-29-1	pCi/g															

Table A1-2c
Soil Samples: FED-1A EBS 23 Part 2
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			TRANSFER_PARCEL		FED-1A	FED-1A
			EBS_PARCEL		23	23
			WBZ		SOIL	SOIL
			Station_ID		WB-4	WB-4
			Sample_ID		WB-4 [50.0-50.5]	WB-4 [50.5-51.0]
			Sample_Type		REG	REG
			Depth		50 - 50.5	50.5 - 51
			Collection_Date		21-May-90	21-May-90
			REFERENCE		TtEMI 2004	TtEMI 2004
PARAMETER_CODE	Analyte_Name	Analyte_ID	Result_Units			
RAD	thorium	7440-29-1	pCi/g			

Table A1-2d
Soil Samples: FED-1A EBS 24
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	24	24	24	24	24	24	24
WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Station ID	EAST OVER EXC-BOTTOM	EAST OVER EXC-BOTTOM	EASTERN SIDEWALL	MIDDLE OVER EXC-BTTM	NORTHERN SIDEWALL	SOUTHERN SIDEWALL	WESTERN SIDEWALL
Sample ID	101-LT-SO-10	101-LT-SO-11	101-LT-SO-07	101-LT-SO-09	101-LT-SO-06	101-LT-SO-08	101-LT-SO-05
Sample Type							
Depth Interval (feet bgs)	-	-	-	-	-	-	-
Sample Date	31-Mar-05	31-Mar-05	31-Mar-05	31-Mar-05	31-Mar-05	31-Mar-05	31-Mar-05
Reference	Shaw 2005	Shaw 2005	Shaw 2005	Shaw 2005	Shaw 2005	Shaw 2005	Shaw 2005
Volatile Organic Compounds (µg/Kg)							
acetone	69 U	74 U	63 U	78 U	86 U	59 U	89 U
benzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
bromobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
bromochloromethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
bromodichloromethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
bromoform	14 U	15 U	13 U	16 U	17 U	12 U	18 U
bromomethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
2-butanone	69 U	74 U	63 U	78 U	86 U	59 U	89 U
tert-butyl alcohol	69 U	74 U	63 U	78 U	86 U	59 U	89 U
n-butylbenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
sec-butylbenzene	6.9 U	7.4 U	3 J	7.8 U	8.6 U	5.9 U	8.9 U
tert-butylbenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
carbon disulfide	69 U	74 U	63 U	78 U	86 U	59 U	89 U
carbon tetrachloride	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
chlorobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
chlorodibromomethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
chloroethane	14 U	15 U	13 U	16 U	17 U	12 U	18 U
chloroform	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
chloromethane	14 U	15 U	13 U	16 U	17 U	12 U	18 U
2-chlorotoluene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
4-chlorotoluene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2-dibromo-3-chloropropane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2-dibromoethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
dibromomethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2-dichlorobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,3-dichlorobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,4-dichlorobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
dichlorodifluoromethane	14 U	15 U	13 U	16 U	17 U	12 U	18 U
1,1-dichloroethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2-dichloroethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,1-dichloroethene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
cis-1,2-dichloroethene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
trans-1,2-dichloroethene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2-dichloropropane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,3-dichloropropane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
sec-dichloropropane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,1-dichloropropene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
diisopropyl ether	4 J	5 J	3 J	5 J	5 J	3 J	8 J
ethylbenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
hexachlorobutadiene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
2-hexanone	69 U	74 U	63 U	78 U	86 U	59 U	89 U
isopropylbenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
p-isopropyltoluene	6.9 U	7.4 U	10	7.8 U	8.6 U	5.9 U	8.9 U
methyl tert-butyl ether	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
methylene chloride	6 J	7 J	7	7 J	9	6 J	10
4-methyl-2-pentanone	69 U	74 U	63 U	78 U	86 U	59 U	89 U
naphthalene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	0.8 J	8.9 U
n-propylbenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
styrene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,1,1,2-tetrachloroethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,1,2,2-tetrachloroethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
tetrachloroethene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
toluene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2,3-trichlorobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2,4-trichlorobenzene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U

Table A1-2d
Soil Samples: FED-1A EBS 24
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**	**24**	**24**	**24**	**24**	**24**	**24**
WBZ	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Station ID	**EAST OVER EXC-BOTTOM**	**EAST OVER EXC-BOTTOM**	**EASTERN SIDEWALL**	**MIDDLE OVER EXC-BTTM**	**NORTHERN SIDEWALL**	**SOUTHERN SIDEWALL**	**WESTERN SIDEWALL**
Sample ID	**101-LT-SO-10**	**101-LT-SO-11**	**101-LT-SO-07**	**101-LT-SO-09**	**101-LT-SO-06**	**101-LT-SO-08**	**101-LT-SO-05**
Sample Type							
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**
Reference	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**
1,1,1-trichloroethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,1,2-trichloroethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
trichloroethene	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
trichlorofluoromethane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2,3-trichloropropane	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
1,2,4-trimethylbenzene	6.9 U	7.4 U	9	7.8 U	1 J	5.9 U	8.9 U
1,3,5-trimethylbenzene	6.9 U	7.4 U	16	7.8 U	8.6 U	5.9 U	8.9 U
vinyl chloride	14 U	15 U	13 U	16 U	17 U	12 U	18 U
xylenes, total	6.9 U	7.4 U	6.3 U	7.8 U	8.6 U	5.9 U	8.9 U
Petroleum Hydrocarbons (mg/Kg)							
diesel	0.4 J	0.4 J	2000	6 J	56	12 J	200
gasoline	0.02 J	0.01 J	0.4 J	0.66 U	0.03 J	0.03 J	0.02 J
JP-5	12 U	11 U	110 U	11 U	12 U	12 U	12 U
motor oil	5 J	5 J	220 J	0.9 J	15 J	2 J	21 J
oil and grease							
total recoverable petroleum hydrocarbons							
Semivolatile Organic Compounds (µg/Kg)							
acenaphthene	5.8 U	5.4 U	56 U	5.6 U	5.9 U	5.9 U	10
acenaphthylene	5.8 U	5.4 U	56 U	5.6 U	5.9 U	5.9 U	5.8 U
anthracene	5.8 U	5.4 U	27 J	5.6 U	1 J	5.9 U	5 J
benz(a)anthracene	1 J	1 J	29 J	5.6 U	1 J	0.9 J	6 J
benzo(b)fluoranthene	2 J	5.4 U	40 J	2 J	1 J	1 J	8
benzo(k)fluoranthene	5.8 U	5.4 U	13 J	0.7 J	0.6 J	0.7 J	4 J
benzoic acid							
benzo(g,h,i)perylene	0.9 J	5.4 U	9 J	2 J	0.9 J	1 J	3 J
benzo(a)pyrene	1 J	5.4 U	16 J	1 J	5.9 U	0.9 J	6 J
benzyl alcohol							
bis(2-chloroethoxy)methane							
bis(2-chloroethyl)ether							
bis(2-chloro-1-methylethyl)ether							
bis(2-ethylhexyl)phthalate							
4-bromophenyl phenyl ether							
butyl benzyl phthalate							
carbazole							
4-chloroaniline							
4-chloro-3-methylphenol							
2-chloronaphthalene							
2-chlorophenol							
4-chlorophenyl phenyl ether							
chrysene	1 J	5.4 U	60	5.6 U	1 J	1 J	9
dibenz(a,h)anthracene	5.8 U	5.4 U	56 U	5.6 U	5.9 U	5.9 U	5.8 U
di-n-butyl phthalate							
dibenzofuran							
1,2-dichlorobenzene							
1,3-dichlorobenzene							
1,4-dichlorobenzene							
3,3'-dichlorobenzidine							
2,4-dichlorophenol							
diethyl phthalate							
2,4-dimethylphenol							
dimethyl phthalate							
4,6-dinitro-2-methylphenol							
2,4-dinitrophenol							
2,4-dinitrotoluene							
2,6-dinitrotoluene							
di-n-octyl phthalate							

Table A1-2d
Soil Samples: FED-1A EBS 24
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**	**24**	**24**	**24**	**24**	**24**	**24**
WBZ	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Station ID	**EAST OVER EXC-BOTTOM**	**EAST OVER EXC-BOTTOM**	**EASTERN SIDEWALL**	**MIDDLE OVER EXC-BTTM**	**NORTHERN SIDEWALL**	**SOUTHERN SIDEWALL**	**WESTERN SIDEWALL**
Sample ID	**101-LT-SO-10**	**101-LT-SO-11**	**101-LT-SO-07**	**101-LT-SO-09**	**101-LT-SO-06**	**101-LT-SO-08**	**101-LT-SO-05**
Sample Type							
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**
Reference	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**
fluoranthene	1 J	5.4 U	70	1 J	2 J	1 J	10
fluorene	5.8 U	5.4 U	100	0.8 J	5 J	5.9 U	18
hexachlorobenzene							
hexachlorobutadiene							
hexachlorocyclopentadiene							
hexachloroethane							
indeno(1,2,3-cd)pyrene	5.8 U	3 J	56 U	5.6 U	5.9 U	5.9 U	2 J
isophorone							
2-methylnaphthalene	1 J	5.4 U	70	5.6 U	6 J	1 J	6
2-methylphenol							
4-methylphenol							
naphthalene	5.8 U	5.4 U	12 J	5.6 U	5.9 U	5.9 U	3 J
2-nitroaniline							
3-nitroaniline							
4-nitroaniline							
nitrobenzene							
4-nitrophenol							
2-nitrophenol							
N-nitrosodiphenylamine							
N-nitroso-di-n-propylamine							
pentachlorophenol							
phenanthrene	2 J	5.4 U	620	3 J	18	2 J	43
phenol							
pyrene	2 J	0.8 J	100	2 J	3 J	2 J	14
1,2,4-trichlorobenzene							
2,4,5-trichlorophenol							
2,4,6-trichlorophenol							
Pesticides/Polychlorinated Biphenyls (µg/Kg)							
aldrin							
Aroclor 1016							
Aroclor 1221							
Aroclor 1232							
Aroclor 1242							
Aroclor 1248							
Aroclor 1254							
Aroclor 1260							
alpha-BHC							
beta-BHC							
delta-BHC							
gamma-BHC (lindane)							
chlordane							
alpha-chlordane							
gamma-chlordane							
4,4'-DDD							
4,4'-DDE							
4,4'-DDT							
dieldrin							
endosulfan I							
endosulfan II							
endosulfan sulfate							
endrin							
endrin aldehyde							
endrin ketone							
heptachlor							
heptachlor epoxide							
methoxychlor							

Table A1-2d
Soil Samples: FED-1A EBS 24
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**24**	**24**	**24**	**24**	**24**	**24**	**24**
WBZ	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**	**SOIL**
Station ID	**EAST OVER EXC-BOTTOM**	**EAST OVER EXC-BOTTOM**	**EASTERN SIDEWALL**	**MIDDLE OVER EXC-BTTM**	**NORTHERN SIDEWALL**	**SOUTHERN SIDEWALL**	**WESTERN SIDEWALL**
Sample ID	**101-LT-SO-10**	**101-LT-SO-11**	**101-LT-SO-07**	**101-LT-SO-09**	**101-LT-SO-06**	**101-LT-SO-08**	**101-LT-SO-05**
Sample Type							
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**	**31-Mar-05**
Reference	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**	**Shaw 2005**
toxaphene							
Metals (mg/Kg)							
aluminum							
antimony							
arsenic							
barium							
beryllium							
cadmium							
calcium							
chromium							
cobalt							
copper							
iron							
lead	1.7	1.8	5.9	1.5	1.4	1.6	1.6
magnesium							
manganese							
mercury							
molybdenum							
nickel							
potassium							
selenium							
silver							
sodium							
thallium							
titanium							
vanadium							
zinc							
Radionuclide (PCI/G)							
radium-226							
radium-228							
total gross alpha							
total gross beta							

Table A1-2e
Soil Samples: FED-2B EBS 27
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**27**	**27**
WBZ	**SOIL**	**SOIL**
Station ID	**027-IWTP-004**	**027-IWTP-004**
Sample ID	**027T-0007**	**IWTP25-033**
Sample Type	**REG**	**REG**
Depth Interval (feet bgs)	**4 - 6**	**4 - 6**
Sample Date	**13-Jul-99**	**18-Jun-04**
Reference	**IT 2001**	**TtEMI 2004**
Volatile Organic Compounds (µg/Kg)		
acetone	12 U	55 UJ
benzene	12 U	5.5 U
bromobenzene		5.5 U
bromochloromethane		5.5 U
bromodichloromethane	12 U	5.5 U
bromoform	12 U	11 U
bromomethane	12 UJ	5.5 U
2-butanone	12 U	55 U
n-butylbenzene		5.5 U
sec-butylbenzene		5.5 U
tert-butylbenzene		5.5 U
carbon disulfide	12 U	11 U
carbon tetrachloride	12 U	5.5 U
chlorobenzene	12 U	5.5 U
chlorodibromomethane	12 U	5.5 U
chloroethane	12 U	11 U
chloroform	12 U	5.5 U
chloromethane	12 U	11 U
4-chlorotoluene		5.5 U
1,2-dibromo-3-chloropropane		5.5 U
1,2-dibromoethane		5.5 U
1,2-dichlorobenzene		5.5 U
1,3-dichlorobenzene	180 U	5.5 U
1,4-dichlorobenzene	180 U	5.5 U
dichlorodifluoromethane		11 U
1,1-dichloroethane	12 U	5.5 U
1,2-dichloroethane	12 U	5.5 U
1,1-dichloroethene	12 U	5.5 U
cis-1,2-dichloroethene		5.5 U
trans-1,2-dichloroethene		5.5 U
1,2-dichloroethene	12 U	
1,2-dichloropropane	12 U	5.5 U
1,3-dichloropropane		5.5 U
cis-1,3-dichloropropene	12 U	
trans-1,3-dichloropropene	12 U	
ethylbenzene	12 U	5.5 U
hexachlorobutadiene		5.5 U
2-hexanone	12 U	55 U
isopropylbenzene		5.5 U
methyl tert-butyl ether		5.5 U
methylene chloride	12 U	5.5 U
4-methyl-2-pentanone	12 U	55 U
naphthalene		5.5 U
n-propylbenzene		5.5 U
styrene	12 U	5.5 U
1,1,1,2-tetrachloroethane		5.5 U
1,1,2,2-tetrachloroethane	12 U	5.5 U
tetrachloroethene	12 U	5.5 U
toluene	12 U	5.5 U
1,2,4-trichlorobenzene	380 U	5.5 U
1,1,1-trichloroethane	12 U	5.5 U
1,1,2-trichloroethane	12 U	5.5 U
trichloroethene	12 U	5.5 U
trichlorofluoromethane		5.5 U
1,2,3-trichloropropane		5.5 U
1,1,2-trichloro-1,2,2-trifluoroethane		5.5 U
1,2,4-trimethylbenzene		5.5 U
1,3,5-trimethylbenzene		5.5 U
vinyl chloride	12 U	11 U
xylenes, total	12 U	5.5 U
Semivolatile Organic Compounds (µg/Kg)		
bis(2-chloroethoxy)methane	380 U	
bis(2-chloroethyl)ether	380 U	
bis(2-chloro-1-methylethyl)ether	380 U	
bis(2-ethylhexyl)phthalate	150 U	
4-bromophenyl phenyl ether	380 U	
butyl benzyl phthalate	380 U	
carbazole	380 U	
4-chloroaniline	380 U	
4-chloro-3-methylphenol	380 U	
2-chloronaphthalene	380 U	
2-chlorophenol	380 U	
4-chlorophenyl phenyl ether	380 U	
di-n-butyl phthalate	380 U	

Table A1-2e
Soil Samples: FED-2B EBS 27
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**27**	**27**
WBZ	**SOIL**	**SOIL**
Station ID	**027-IWTP-004**	**027-IWTP-004**
Sample ID	**027T-0007**	**IWTP25-033**
Sample Type	**REG**	**REG**
Depth Interval (feet bgs)	**4 - 6**	**4 - 6**
Sample Date	**13-Jul-99**	**18-Jun-04**
Reference	**IT 2001**	**TtEMI 2004**
dibenzofuran	380 U	
1,2-dichlorobenzene	180 U	
3,3'-dichlorobenzidine	380 U	
2,4-dichlorophenol	380 U	
diethyl phthalate	380 U	
2,4-dimethylphenol	380 U	
dimethyl phthalate	380 U	
4,6-dinitro-2-methylphenol	950 U	
2,4-dinitrophenol	950 U	
2,4-dinitrotoluene	380 U	
2,6-dinitrotoluene	380 U	
di-n-octyl phthalate	380 U	
hexachlorobenzene	380 U	
hexachlorobutadiene	380 U	
hexachlorocyclopentadiene	380 U	
hexachloroethane	380 U	
isophorone	380 U	
2-methylphenol	380 U	
4-methylphenol	380 U	
2-nitroaniline	950 U	
3-nitroaniline	950 U	
4-nitroaniline	950 U	
nitrobenzene	380 U	
4-nitrophenol	950 U	
2-nitrophenol	380 U	
N-nitrosodiphenylamine	380 U	
N-nitroso-di-n-propylamine	380 U	
pentachlorophenol	950 U	
phenol	380 U	
2,4,5-trichlorophenol	950 U	
2,4,6-trichlorophenol	380 UJ	
Metals (MG/Kg)		
aluminum	4960	
antimony	0.56 J	
arsenic	0.94 J	
barium	29 J	
beryllium	0.92 U	
cadmium	0.1 J	
calcium	2890	
chromium	43	
chromium trioxide	0.058 U	
cobalt	6.4 J	
copper	5.4	
iron	11300	
lead	3	
magnesium	2450	
manganese	120	
mercury	0.12 U	
molybdenum	0.19 J	
nickel	27.4	
potassium	580 U	
selenium	1.2 U	
silver	0.46 U	
sodium	1150 U	
thallium	0.46 U	
vanadium	28.1	
zinc	20.6	

Table A1-2f
Soil Samples: FED-2C EBS 23E
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23E	23E	23E	23E	23E	23E
WBZ	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Station ID	030-FLI-121	030-Z06-038	030-Z06-038	030-Z06-038	190-Z06-011	190-Z06-011
Sample ID	030-FLI-121	030-0048	030-0048RS	030-0049	190-0015	190-0015RS
Sample Type	REG	REG	REG	FD	REG	REG
Depth Interval (feet bgs)	0 - 4	2.5 - 4.5	3.5 - 4.5	2.5 - 4.5	4 - 4.5	4 - 4.5
Sample Date	04-Dec-98	31-Aug-95	16-Oct-95	16-Oct-95	31-Aug-95	04-Oct-95
Reference	TtEMI 2004	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
Volatile Organic Compounds (µg/Kg)						
acetone		11 J		10 J	12 U	
benzene	5.9 U	11 U		11 U	12 U	
bromodichloromethane		11 U		11 U	12 U	
bromoform		11 U		11 U	12 U	
bromomethane		11 U		11 U	12 U	
2-butanone		11 U		11 U	12 U	
carbon disulfide		11 U		11 U	12 U	
carbon tetrachloride		11 U		11 U	12 U	
chlorobenzene		11 U		11 U	12 U	
chlorodibromomethane		11 U		11 U	12 U	
chloroethane		11 U		11 U	12 U	
chloroform		11 U		11 U	12 U	
chloromethane		11 U		11 U	12 U	
1,3-dichlorobenzene		380 U				
1,4-dichlorobenzene		380 U				
1,1-dichloroethane		11 U		11 U	12 U	
1,2-dichloroethane		11 U		11 U	12 U	
1,1-dichloroethene		11 U		11 U	12 U	
1,2-dichloroethene		11 U		11 U	12 U	
1,2-dichloropropane		11 U		11 U	12 U	
cis-1,3-dichloropropene		11 U		11 U	12 U	
trans-1,3-dichloropropene		11 U		11 U	12 U	
ethylbenzene	5.9 U	11 U		11 U	12 U	
2-hexanone		11 U		11 U	12 U	
methyl tert-butyl ether	30 U					
methylene chloride		11 U		11 U	12 U	
4-methyl-2-pentanone		11 U		11 U	12 U	
styrene		11 U		11 U	12 U	
1,1,2,2-tetrachloroethane		11 U		11 U	12 U	
tetrachloroethene		11 U		11 U	12 U	
toluene	5.9 U	11 U		11 U	12 U	
1,2,4-trichlorobenzene		380 U				
1,1,1-trichloroethane		11 U		11 U	12 U	
1,1,2-trichloroethane		11 U		11 U	12 U	
trichloroethene		11 U		11 U	12 U	
vinyl chloride		11 U		11 U	12 U	
xylenes, total	12 U	11 U		11 U	12 U	
Petroleum Hydrocarbons (mg/Kg)						
diesel	12 U		25 U	26 U		11 U
gasoline	1.2 U	0.57 UJ		0.92 J	0.6 U	
JP-5	12 U					
motor oil	12 U		25 U	26 U		21 U
Semivolatile Organic Compounds (µg/Kg)						
bis(2-chloroethoxy)methane		380 U				
bis(2-chloroethyl)ether		380 U				
bis(2-chloro-1-methylethyl)ether		380 U				
bis(2-ethylhexyl)phthalate		380 U				
4-bromophenyl phenyl ether		380 U				
butyl benzyl phthalate		380 U				
carbazole		380 U				
4-chloroaniline		380 U				
4-chloro-3-methylphenol		380 U				
2-chloronaphthalene		380 U				
2-chlorophenol		380 U				
4-chlorophenyl phenyl ether		380 U				
di-n-butyl phthalate		380 U				
dibenzofuran		380 U				
1,2-dichlorobenzene		380 U				
3,3'-dichlorobenzidine		380 U				
2,4-dichlorophenol		380 U				
diethyl phthalate		380 U				
2,4-dimethylphenol		380 U				
dimethyl phthalate		380 U				
4,6-dinitro-2-methylphenol		920 U				
2,4-dinitrophenol		920 U				
2,4-dinitrotoluene		380 U				
2,6-dinitrotoluene		380 U				
di-n-octyl phthalate		380 U				
hexachlorobenzene		380 U				
hexachlorobutadiene		380 U				
hexachlorocyclopentadiene		380 U				
hexachloroethane		380 U				
isophorone		380 U				
2-methylphenol		380 U				
4-methylphenol		380 U				
2-nitroaniline		920 U				
3-nitroaniline		920 U				
4-nitroaniline		920 U				
nitrobenzene		380 U				
4-nitrophenol		920 U				
2-nitrophenol		380 U				
N-nitrosodiphenylamine		380 U				
N-nitroso-di-n-propylamine		380 U				
pentachlorophenol		920 U				
phenol		380 U				
2,4,5-trichlorophenol		920 U				
2,4,6-trichlorophenol		380 U				

Table A1-3a
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**23**
Station ID	**RWW-R01**
Sample ID	**124-RWW-002**
Sample Type	**REG**
Depth Interval (feet bgs)	**-**
Sample Date	**08-Sep-98**
Reference	**TtEMI 2004**
Pesticides/Polychlorinated Biphenyls (µg/Kg)	
aldrin	1 U
alpha-BHC	1 U
beta-BHC	4.1 J
delta-BHC	1 U
gamma-BHC (lindane)	1 U
chlordane	25 U
alpha-chlordane	2 U
gamma-chlordane	1 U
4,4'-DDD	2 U
O,P'-DDD	1 U
4,4'-DDE	1.9 J
O,P'-DDE	1 U
4,4'-DDT	1 UJ
O,P'-DDT	1 U
decachlorobiphenyl	0.5 UJ
dieldrin	1 U
endosulfan I	1 U
endosulfan II	1 U
endosulfan sulfate	1 U
endrin	1 U
endrin aldehyde	1 U
endrin ketone	1 U
heptachlor	1 UJ
heptachlor epoxide	2.1 J
hexachlorobenzene	1 U
methoxychlor	1 U
mirex	1 UJ
trans-nonachlor	1 U
PCB-28	0.5 UJ
PCB-44	0.5 UJ
PCB-52	0.5 UJ
PCB-66	0.5 UJ
PCB-105	0.6 J
PCB-118	0.1 J
PCB-128	0.5 UJ
PCB-138	0.6 J
PCB-153	1 J
PCB-170	0.1 J
PCB-180	0.5 J
PCB-187	0.4 J
PCB-195	0.5 UJ
PCB-206	0.5 UJ
toxaphene	50 U

Table A1-3a
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**23**
Station ID	**RWW-R01**
Sample ID	**124-RWW-002**
Sample Type	**REG**
Depth Interval (feet bgs)	**-**
Sample Date	**08-Sep-98**
Reference	**TtEMI 2004**
Organotin (µg/Kg)	
dibutyltin	5 U
monobutyltin	5 U
tetrabutyltin	5 UJ
tributyltin	5 U

Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
ID – identification
EBS – environmental baseline survey
µg/kg – micrograms per kilogram
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-3b
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25
Station ID	R3	R3	R3	R3	R3	R3	R3	R3	R3	R3	RW001	RW001
Sample ID	PRC93BIO0050	PRC93BIO0051	PRC93BIO0052	PRC93BIO0053	PRC93BIO0054	R3 REP 1	R3 REP 2	R3 REP 3	R3 REP 4	R3 REP 5	013-RWW-001	013-RWW-002
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	15-Apr-93	15-Apr-93	15-Apr-93	15-Apr-93	15-Apr-93	06-May-94	06-May-94	06-May-94	06-May-94	06-May-94	19-Feb-97	18-Feb-97
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	TtEMI 2004	TtEMI 2004
Semivolatile Organic Compounds (µg/Kg)												
acenaphthene	*					610 U	610 U	610 U	610 U	610 U		
acenaphthylene						610 U	610 U	610 U	610 U	610 U		
anthracene						610 U	610 U	610 U	610 U	610 U		
benz(a)anthracene						610 U	610 U	610 U	610 U	610 U		
benzidine						6100 U	6100 U	6100 U	6100 U	6100 U		
benzo(b)fluoranthene						610 U	610 U	610 U	610 U	610 U		
benzo(k)fluoranthene						610 U	610 U	610 U	610 U	610 U		
benzoic acid						6100 U	6100 U	6100 U	6100 U	6100 U		
benzo(g,h,i)perylene						610 U	610 U	610 U	610 U	610 U		
benzo(a)pyrene						610 U	610 U	610 U	610 U	610 U		
benzyl alcohol						3000 U	3000 U	3000 U	3000 U	3000 U		
bis(2-chloroethoxy)methane						610 U	610 U	610 U	610 U	610 U		
bis(2-chloroethyl)ether						610 U	610 U	610 U	610 U	610 U		
bis(2-chloro-1-methylethyl)ether						610 U	610 U	610 U	610 U	610 U		
bis(2-ethylhexyl)phthalate						6100 U	6100 U	6100 U	6100 U	6100 U		
4-bromophenyl phenyl ether						610 U	610 U	610 U	610 U	610 U		
butyl benzyl phthalate						31000 U	31000 U	31000 U	31000 U	31000 U		
4-chloroaniline						1800 U	1800 U	1800 U	1800 U	1800 U		
4-chloro-3-methylphenol						1200 U	1200 U	1200 U	1200 U	1200 U		
2-chloronaphthalene						610 U	610 U	610 U	610 U	610 U		
2-chlorophenol						610 U	610 U	610 U	610 U	610 U		
4-chlorophenyl phenyl ether						610 U	610 U	610 U	610 U	610 U		
chrysene						610 U	610 U	610 U	610 U	610 U		
dibenz(a,h)anthracene						610 U	610 U	610 U	610 U	610 U		
di-n-butyl phthalate						610 U	800 U	610 U	2100 U	1100 U		
dibenzofuran						610 U	610 U	610 U	610 U	610		
1,2-dichlorobenzene						610 U	610 U	610 U	610 U	610 U		
1,3-dichlorobenzene						610 U	610 U	610 U	610 U	610 U		
1,4-dichlorobenzene						610 U	610 U	610 U	610 U	610 U		
3,3'-dichlorobenzidine						610 U	610 U	610 U	610 U	610 U		
2,4-dichlorophenol						1800 U	1800 U	1800 U	1800 U	1800 U		
diethyl phthalate						610 U	610 U	610 U	610 U	630		
2,4-dimethylphenol						1200 U	1200 U	1200 U	1200 U	1200 U		
dimethyl phthalate						610 U	610 U	610 U	610 U	610 U		
4,6-dinitro-2-methylphenol						6100 U	6100 U	6100 U	6100 U	6100 U		
2,4-dinitrophenol						3000 U	3000 U	3000 U	3000 U	3000 U		
2,4-dinitrotoluene						3000 U	3000 U	3000 U	3000 U	3000 U		
2,6-dinitrotoluene						3000 U	3000 U	3000 U	3000 U	3000 U		
di-n-octyl phthalate						610 U	610 U	610 U	610 U	610 U		
fluoranthene						610 U	610 U	610 U	610 U	610 U		
fluorene						320 U	320 U	320 U	320 U	320 U		
hexachlorobenzene						610 U	610 U	610 U	610 U	610 U		
hexachlorobutadiene						1200 U	1200 U	1200 U	1200 U	1200 U		
hexachlorocyclopentadiene						3000 U	3000 U	3000 U	3000 U	3000 U		
hexachloroethane						1200 U	1200 U	1200 U	1200 U	1200 U		
indeno(1,2,3-cd)pyrene						610 U	610 U	610 U	610 U	610 U		
isophorone						610 U	610 U	610 U	610 U	610 U		
2-methylnaphthalene						610 U	610 U	610 U	610 U	610 U		
2-methylphenol						610 U	610 U	610 U	610 U	610 U		
4-methylphenol						610 U	610 U	610 U	610 U	610 U		
naphthalene						610 U	610 U	610 U	610 U	610 U		
2-nitroaniline						3000 U	3000 U	3000 U	3000 U	3000 U		
3-nitroaniline						3000 U	3000 U	3000 U	3000 U	3000 U		
4-nitroaniline						3000 U	3000 U	3000 U	3000 U	3000 U		
nitrobenzene						610 U	610 U	610 U	610 U	610 U		
4-nitrophenol						3000 U	3000 U	3000 U	3000 U	3000 U		
2-nitrophenol						3000 U	3000 U	3000 U	3000 U	3000 U		
N-nitrosodiphenylamine						610 U	610 U	610 U	610 U	610 U		
N-nitroso-di-n-propylamine						610 U	610 U	610 U	610 U	610 U		
pentachlorophenol						3000 U	3000 U	3000 U	3000 U	3000 U		
phenanthrene						610 U	610 U	610 U	610 U	610 U		
phenol						1300 U	1200 U	1200 U	1200 U	1200 U		

Table A1-3b
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25
Station ID	RW005	RW006	RWW-R02	RWW-R03	RWW-R04	RWW-R05	RWW-R05	RWW-R06	RWW-R07	RWW-R07
Sample ID	013-RWW-016	013-RWW-018	124-RWW-004	124-RWW-006	124-RWW-008	124-RWW-010	124-RWW-016	124-RWW-012	124-RWW-013	124-RWW-014
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-
Sample Date	21-Feb-97	21-Feb-97	08-Sep-98	08-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98
Reference	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
Semivolatile Organic Compounds (µg/Kg)										
acenaphthene										
acenaphthylene										
anthracene										
benz(a)anthracene										
benzidine										
benzo(b)fluoranthene										
benzo(k)fluoranthene										
benzoic acid										
benzo(g,h,i)perylene										
benzo(a)pyrene										
benzyl alcohol										
bis(2-chloroethoxy)methane										
bis(2-chloroethyl)ether										
bis(2-chloro-1-methylethyl)ether										
bis(2-ethylhexyl)phthalate										
4-bromophenyl phenyl ether										
butyl benzyl phthalate										
4-chloroaniline										
4-chloro-3-methylphenol										
2-chloronaphthalene										
2-chlorophenol										
4-chlorophenyl phenyl ether										
chrysene										
dibenz(a,h)anthracene										
di-n-butyl phthalate										
dibenzofuran										
1,2-dichlorobenzene										
1,3-dichlorobenzene										
1,4-dichlorobenzene										
3,3'-dichlorobenzidine										
2,4-dichlorophenol										
diethyl phthalate										
2,4-dimethylphenol										
dimethyl phthalate										
4,6-dinitro-2-methylphenol										
2,4-dinitrophenol										
2,4-dinitrotoluene										
2,6-dinitrotoluene										
di-n-octyl phthalate										
fluoranthene										
fluorene										
hexachlorobenzene										
hexachlorobutadiene										
hexachlorocyclopentadiene										
hexachloroethane										
indeno(1,2,3-cd)pyrene										
isophorone										
2-methylnaphthalene										
2-methylphenol										
4-methylphenol										
naphthalene										
2-nitroaniline										
3-nitroaniline										
4-nitroaniline										
nitrobenzene										
4-nitrophenol										
2-nitrophenol										
N-nitrosodiphenylamine										
N-nitroso-di-n-propylamine										
pentachlorophenol										
phenanthrene										
phenol										

Table A1-3b
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
Station ID	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**RW001**	**RW001**
Sample ID	**PRC93BIO0050**	**PRC93BIO0051**	**PRC93BIO0052**	**PRC93BIO0053**	**PRC93BIO0054**	**R3 REP 1**	**R3 REP 2**	**R3 REP 3**	**R3 REP 4**	**R3 REP 5**	**013-RWW-001**	**013-RWW-002**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**15-Apr-93**	**15-Apr-93**	**15-Apr-93**	**15-Apr-93**	**15-Apr-93**	**06-May-94**	**06-May-94**	**06-May-94**	**06-May-94**	**06-May-94**	**19-Feb-97**	**18-Feb-97**
Reference	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**TtEMI 2004**	**TtEMI 2004**
pyrene						610 U	610 U	610 U	610 U	610 U		
1,2,4-trichlorobenzene						610 U	610 U	610 U	610 U	610 U		
2,4,5-trichlorophenol						3000 U	3000 U	3000 U	3000 U	3000 U		
2,4,6-trichlorophenol						3000 U	3000 U	3000 U	3000 U	3000 U		
Pesticides/Polychlorinated Biphenyls (µg/Kg)												
aldrin	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
aldrin												
Aroclor 1016	180 U	200 U	180 U	170 U	200 U						19 U	17 U
Aroclor 1221	360 U	400 U	360 U	330 U	400 U						38 U	33 U
Aroclor 1232	180 U	200 U	180 U	170 U	200 U						19 U	17 U
Aroclor 1242	180 U	200 U	180 U	170 U	200 U						19 U	17 U
Aroclor 1248	180 U	200 U	180 U	170 U	200 U						19 U	17 U
Aroclor 1254	180 U	200 U	180 U	340 J	200 J						18 J	16 J
Aroclor 1260	180 U	200 U	180 U	170 U	200 U						19 U	12 J
alpha-BHC	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
alpha-BHC												
beta-BHC	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
beta-BHC												
delta-BHC	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
delta-BHC												
gamma-BHC (lindane)	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
gamma-BHC (lindane)												
chlordane												
alpha-chlordane	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.6 J
alpha-chlordane												
gamma-chlordane	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
gamma-chlordane												
4,4'-DDD	18 U	20 U	18 U	60 J	54 J						2 U	1 J
4,4'-DDD												
O,P'-DDD												
4,4'-DDE	18 U	20 U	18 U	30 J	20 U						4	4
4,4'-DDE												
O,P'-DDE												
4,4'-DDT	18 U	20 U	18 U	17 U	20 U						2 J	1 J
4,4'-DDT												
O,P'-DDT												
decachlorobiphenyl												
dieldrin	9.1 U	10 U	9.1 U	8.3 U	10 U						2 U	2 U
dieldrin												
endosulfan I	9.1 U	10 U	9.1 U	8.3 U	10 U						1 U	0.8 U
endosulfan I												
endosulfan II	9.1 U	10 U	9.1 U	8.3 U	10 U						2 U	2 U
endosulfan II												
endosulfan sulfate	9.1 U	10 U	9.1 U	8.3 U	10 U						2 U	2 U
endosulfan sulfate												
endrin	9.1 U	10 U	23 J	8.3 U	10 U						2 U	2 U
endrin												
endrin aldehyde	18 U	20 U	18 U	17 U	20 U						2 U	1 J
endrin aldehyde												
endrin ketone	23 U	25 U	23 U	21 U	25 U						2 U	2 U
endrin ketone												
heptachlor	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
heptachlor												
heptachlor epoxide	4.5 U	5 U	4.5 U	4.2 U	5 U						1 U	0.8 U
heptachlor epoxide												
hexachlorobenzene												
methoxychlor	9.1 U	10 U	9.1 U	8.3 U	10 U						10 U	8 U
methoxychlor												
mirex												
trans-nonachlor												
PCB-8												
PCB-18												
PCB-28												

Table A1-3b
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
Station ID	**RW005**	**RW006**	**RWW-R02**	**RWW-R03**	**RWW-R04**	**RWW-R05**	**RWW-R05**	**RWW-R06**	**RWW-R07**	**RWW-R07**
Sample ID	**013-RWW-016**	**013-RWW-018**	**124-RWW-004**	**124-RWW-006**	**124-RWW-008**	**124-RWW-010**	**124-RWW-016**	**124-RWW-012**	**124-RWW-013**	**124-RWW-014**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**21-Feb-97**	**21-Feb-97**	**08-Sep-98**	**08-Sep-98**	**10-Sep-98**	**10-Sep-98**	**10-Sep-98**	**10-Sep-98**	**10-Sep-98**	**10-Sep-98**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**
pyrene										
1,2,4-trichlorobenzene										
2,4,5-trichlorophenol										
2,4,6-trichlorophenol										
Pesticides/Polychlorinated Biphenyls (µg/Kg)										
aldrin	0.8 U	0.8 U								
aldrin			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
Aroclor 1016	17 U	17 U								
Aroclor 1221	33 U	33 U								
Aroclor 1232	17 U	17 U								
Aroclor 1242	17 U	17 U								
Aroclor 1248	17 U	17 U								
Aroclor 1254	27 J	22 J								
Aroclor 1260	22 J	18								
alpha-BHC	0.8 U	0.8 U								
alpha-BHC			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
beta-BHC	0.8 U	0.8 U								
beta-BHC			1 U	3 U	1 U	2 U	1 UJ	2 UJ	1.3 U	5 U
delta-BHC	0.8 U	0.8 U								
delta-BHC			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
gamma-BHC (lindane)	0.8 U	0.8 U								
gamma-BHC (lindane)			0.6	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
chlordane			25 U	25 U	25 U	25 U	25 UJ	50 UJ	10 U	100 U
alpha-chlordane	1 J	1 J								
alpha-chlordane			1 U	1 U	1 U	3	3 J	6 J	0.5 U	5 U
gamma-chlordane	0.9	0.7 J								
gamma-chlordane			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
4,4'-DDD	4	3								
4,4'-DDD			1 U	1 U	1 U	2 U	7 UJ	3 UJ	2.3 U	4.9
O,P'-DDD			1 U	1 U	1 U	2 U	1 UJ	2 UJ	2.6	7.2
4,4'-DDE	7	6 J								
4,4'-DDE			1 U	2.1	0.6 J	2 U	1 UJ	2 UJ	4.3 J	8.9 J
O,P'-DDE			1 U	1 U	1 U	2 U	2 UJ	4 UJ	2.3	5 U
4,4'-DDT	2 J	2 J								
4,4'-DDT			4 UJ	2 UJ	2 U	2 U	4 UJ	7 UJ	1.1	5 U
O,P'-DDT			1 U	1 U	8 U	4 U	6 J	3 UJ	1.3	5 U
decachlorobiphenyl			0.5 UJ	0.5 UJ	0.5 U		0.5 U		0.5 U	
dieldrin	2 U	2 U								
dieldrin			1 U	1 U	1 J	1 J	0.8 J	2 J	4.1 U	6 U
endosulfan I	0.8 U	0.8 U								
endosulfan I			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
endosulfan II	2 U	2 U								
endosulfan II			1 U	1 U	1 U	2 U	0.6 J	2 UJ	1.2 U	5 U
endosulfan sulfate	2 U	2 U								
endosulfan sulfate			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
endrin	2 U	2 U								
endrin			1 U	1 U	1	2 U	1 UJ	2 UJ	0.5 U	5 U
endrin aldehyde	2 J	1 J								
endrin aldehyde			1 U	1 U	2 U	2 U	1 UJ	2 UJ	0.5 U	5 U
endrin ketone	2 U	2 U								
endrin ketone			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
heptachlor	0.8 U	0.8 U								
heptachlor			1 UJ	1 UJ	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
heptachlor epoxide	0.8 U	0.8 U								
heptachlor epoxide			3.1	3 U	3	2 J	2 UJ	4 UJ	1.4 U	5 U
hexachlorobenzene			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.8 U	5 U
methoxychlor	8 U	8 U								
methoxychlor			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	5 U
mirex			1 UJ	1 UJ	1 UJ	2 UJ	0.5 UJ	2 UJ	0.5 U	5 U
trans-nonachlor			1 U	1 U	1 U	2 U	1 UJ	2 UJ	0.5 U	1.7 J
PCB-8					0.1 J		0.5 UJ		0.5 UJ	
PCB-18					0.5 UJ		0.5 UJ		0.1 J	
PCB-28			0.5 UJ	0.5 UJ	0.5 UJ		0.5 U		0.4 J	

Table A1-3b
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
Station ID	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**RW001**	**RW001**
Sample ID	**PRC93BIO0050**	**PRC93BIO0051**	**PRC93BIO0052**	**PRC93BIO0053**	**PRC93BIO0054**	**R3 REP 1**	**R3 REP 2**	**R3 REP 3**	**R3 REP 4**	**R3 REP 5**	**013-RWW-001**	**013-RWW-002**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**15-Apr-93**	**15-Apr-93**	**15-Apr-93**	**15-Apr-93**	**15-Apr-93**	**06-May-94**	**06-May-94**	**06-May-94**	**06-May-94**	**06-May-94**	**19-Feb-97**	**18-Feb-97**
Reference	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**TtEMI 2004**	**TtEMI 2004**
PCB-44												
PCB-52												
PCB-66												
PCB-101												
PCB-105												
PCB-118												
PCB-128												
PCB-138												
PCB-153												
PCB-170												
PCB-180												
PCB-187												
PCB-195												
PCB-206												
toxaphene	360 U	400 U	360 U	330 U	400 U						95 U	83 U
toxaphene												
Organotin (µg/Kg)												
dibutyltin	5 U	5 U	5 U	5 U	5 U							2 U
dibutyltin												
monobutyltin	5 U	5 U	5 U	5 U	5 U							1 U
monobutyltin												
tetrabutyltin	5 U	5 U	5 U	5 U	5 U							4 U
tetrabutyltin												
tributyltin	5 U	5 U	5 U	5 U	5 U							2 J
tributyltin												
Metals (mg/Kg)												
antimony	1 U	1 U	1 U	1 U	1 U							
arsenic	24	26	26	23	23							
beryllium	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U							
cadmium	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U							
chromium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							
copper	10	12	12	11 J	11							
lead	2.9 J	3.4 J	3.4 J	2.9	2.1 J							
mercury	0.15	0.15	0.17	0.15	0.2							
nickel	6.1	5.5	7.1	6	0.5 U							
selenium	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U							
silver	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							
thallium	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U							
zinc	74	85	94	98	89							

Table A1-3b
Tissue Samples: FED-2B EBS 25 Animal
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25
Station ID	RW005	RW006	RWW-R02	RWW-R03	RWW-R04	RWW-R05	RWW-R05	RWW-R06	RWW-R07	RWW-R07
Sample ID	013-RWW-016	013-RWW-018	124-RWW-004	124-RWW-006	124-RWW-008	124-RWW-010	124-RWW-016	124-RWW-012	124-RWW-013	124-RWW-014
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-
Sample Date	21-Feb-97	21-Feb-97	08-Sep-98	08-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98	10-Sep-98
Reference	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
PCB-44			0.5 UJ	0.5 UJ	1.3 UJ		0.07 U		0.6	
PCB-52			0.5 UJ	0.5 UJ	1.4 UJ		0.5 U		0.6	
PCB-66			0.5 UJ	0.5 UJ	1.2 UJ		0.5 UJ		1.6	
PCB-101					0.7 UJ		1.4 UJ		3 U	
PCB-105			0.5 UJ	0.09 J	0.5 UJ		0.5 UJ		1.5	
PCB-118			0.5 UJ	0.2 J	0.5 UJ		1.1 UJ		3.4	
PCB-128			0.5 UJ	0.1 J	0.5 U		0.1 J		1	
PCB-138			0.3 J	0.7 J	0.6 U		2.2 U		5.3	
PCB-153			0.2 J	1.4 J	0.8 U		8.4 U		5.4 J	
PCB-170			0.5 UJ	0.5 UJ	0.5 U		1.1 U		1.3 J	
PCB-180			0.2 J	1 J	0.4 J		3.5 U		2.1	
PCB-187			0.07 J	0.7 J	0.2 J		3.4 U		1.6	
PCB-195			0.5 UJ	0.5 UJ	0.5 U		0.5 U		0.5 UJ	
PCB-206			0.5 UJ	0.08 J	0.5 U		0.2 J		0.2 J	
toxaphene	83 U	83 U								
toxaphene			.050 U	50 U	50 U	50 U	50 UJ	100 UJ	30 U	300 U
Organotin (µg/Kg)										
dibutyltin	3 U	2 U								
dibutyltin			25 U	5 U	8 U	8 U	5 U		4 J	2 J
monobutyltin	2 U	1 U								
monobutyltin			25 U	5 U	8 J	3 J	5 U		25 U	5 U
tetrabutyltin	4 U	3 U								
tetrabutyltin			25 UJ	5 UJ	3 J	8 U	5 U		25 U	5 U
tributyltin	5 J	5 J								
tributyltin			25 U	5 U	8 U	8 U	5 U		25 U	2 J
Metals (mg/Kg)										
antimony										
arsenic										
beryllium										
cadmium										
chromium										
copper										
lead										
mercury										
nickel										
selenium										
silver										
thallium										
zinc										

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
ID – identification
EBS – environmental baseline survey
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-3c

Tissue Samples: FED-1A EBS 23 Plant

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	**23**
Station ID	**RWW-R01**
Sample ID	**124-RWW-001**
Sample Type	**REG**
Depth Interval (feet bgs)	**0 - 0**
Sample Date	**01-Sep-98**
Reference	**TtEMI 2004**
Pesticides/Polychlorinated Biphenyls (µg/Kg)	
aldrin	0.2 U
alpha-BHC	0.2 UJ
beta-BHC	0.2 U
delta-BHC	0.2 UJ
gamma-BHC (lindane)	0.2 UJ
chlordane	10 U
alpha-chlordane	0.2 U
gamma-chlordane	0.2 U
4,4'-DDD	0.2 U
O,P'-DDD	0.2 U
4,4'-DDE	0.2 U
O,P'-DDE	0.2 U
4,4'-DDT	0.2 U
O,P'-DDT	0.2 U
decachlorobiphenyl	0.08 UJ
dieldrin	0.2 U
endosulfan I	0.2 U
endosulfan II	0.2 U
endosulfan sulfate	0.2 U
endrin	0.2 U
endrin aldehyde	0.2 U
endrin ketone	0.2 U
heptachlor	0.2 U
heptachlor epoxide	0.2 U
hexachlorobenzene	0.2 U
methoxychlor	0.2 U
mirex	0.2 U
trans-nonachlor	0.2 U
PCB-8	0.1 U
PCB-18	0.1 U
PCB-28	0.07 UJ
PCB-44	0.08 J
PCB-52	0.1 J
PCB-66	0.3 J
PCB-101	0.3 J
PCB-105	0.1 J
PCB-118	0.4 J
PCB-128	0.1 U
PCB-138	0.5
PCB-153	0.3 J
PCB-170	0.09 U
PCB-180	0.1 J
PCB-187	0.07 U
PCB-195	0.1 U
PCB-206	0.08 U
toxaphene	20 U
Organotin (µg/Kg)	
dibutyltin	2 U
monobutyltin	4 U
tetrabutyltin	2 U
tributyltin	9

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
ID – identification
EBS – environmental baseline survey
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-3d

Tissue Samples: FED-2B EBS 25 Plant

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25
Station ID	RWW-R02	RWW-R03	RWW-R04	RWW-R05	RWW-R06	RWW-R07
Sample ID	124-RWW-003	124-RWW-005	124-RWW-007	124-RWW-009	124-RWW-011	124-RWW-015
Sample Type	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0	0 - 0
Sample Date	01-Sep-98	01-Sep-98	01-Sep-98	01-Sep-98	01-Sep-98	04-Sep-98
Reference	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004	TtEMI 2004
Pesticides/Polychlorinated Biphenyls (µg/Kg)						
aldrin	0.3 J	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
alpha-BHC	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
beta-BHC	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
delta-BHC	0.2 UJ	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
gamma-BHC (lindane)	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	
chlordane	10 U	10 U	10 U	10 J	10 U	10 U
alpha-chlordane	0.2 U	0.4 UJ	0.9 UJ	0.5 UJ	0.6 UJ	0.2 U
gamma-chlordane	0.2 U	0.2 U	0.2 U	0.2 J	0.2 U	0.2 U
4,4'-DDD	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.3 J
O,P'-DDD	0.2 U	0.2 U	0.2 U	0.3 J	0.2 U	1.3
4,4'-DDE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
O,P'-DDE	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
4,4'-DDT	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	
O,P'-DDT	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
decachlorobiphenyl	0.08 UJ	0.08 UJ	0.08 UJ	0.08 UJ	0.08 UJ	0.08 UJ
dieldrin	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
endosulfan I	0.2 U	0.2 U	0.2 U	0.2 U	0.4 J	0.2 U
endosulfan II	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
endosulfan sulfate	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
endrin	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
endrin aldehyde	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U
endrin ketone	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
heptachlor	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 UJ
heptachlor epoxide	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
hexachlorobenzene	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
methoxychlor	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
mirex	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
trans-nonachlor	0.2 U	0.2 U	0.5 J	0.6	0.2 U	0.2 U
PCB-8	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
PCB-18	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
PCB-28	0.07 UJ	0.07 UJ	0.07 UJ	0.07 UJ	0.07 UJ	
PCB-44	0.07 U	0.07 U	0.1 J	0.09 J	0.07 U	
PCB-52	0.07 U	0.07 UJ	0.1 J	0.1 J	0.07 U	0.1 J
PCB-66	0.2 J	0.07 UJ	0.3 J	0.2 J	0.2 J	0.2 J
PCB-101	0.2 J	0.05 UJ	0.3 J	0.2 J	0.2 J	0.3 J
PCB-105	0.09 J	0.08 UJ	0.1 J	0.1 J	0.08 UJ	0.1 J
PCB-118	0.2 J	0.08 UJ	0.3 J	0.3 J	0.2 J	0.3 J
PCB-128	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
PCB-138	0.3 J	0.2 UJ	0.5 J	0.4 J	0.2 J	0.6 J
PCB-153	0.2 J	0.07 UJ	0.3 J	0.2 J	0.1 J	0.4 J
PCB-170	0.09 U	0.09 U	0.09 U	0.09 U	0.09 U	0.1 J
PCB-180	0.08 J	0.07 UJ	0.1 J	0.1 J	0.07 U	0.2 J
PCB-187	0.07 U	0.07 UJ	0.07 U	0.07 U	0.07 U	0.1 J
PCB-195	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	
PCB-206	0.08 U	0.08 U	0.08 U	0.08 U	0.08 U	
toxaphene	20 U	20 U	20 U	20 U	20 U	20 U

Table A1-3d

Tissue Samples: FED-2B EBS 25 Plant

Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**
Station ID	**RWW-R02**	**RWW-R03**	**RWW-R04**	**RWW-R05**	**RWW-R06**	**RWW-R07**
Sample ID	**124-RWW-003**	**124-RWW-005**	**124-RWW-007**	**124-RWW-009**	**124-RWW-011**	**124-RWW-015**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**0 - 0**	**0 - 0**	**0 - 0**	**0 - 0**	**0 - 0**	**0 - 0**
Sample Date	**01-Sep-98**	**01-Sep-98**	**01-Sep-98**	**01-Sep-98**	**01-Sep-98**	**04-Sep-98**
Reference	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**	**TtEMI 2004**
Organotin (µg/Kg)						
dibutyltin	3 J	2 U	2 U	2 U	2 U	3 J
monobutyltin	4 U	12	4 U	4 U	4 U	4 U
tetrabutyltin	2 U	2 U	2 U	2 U	2 U	2 U
tributyltin	12	4 U	4 U	6	4 U	4 U

Note:

* blank indicates sample not analyzed for a particular compound

Acronyms/Abbreviations:

bgs – below ground surface

BHC – benzene hexachloride

DDD – dichlorodiphenyldichloroethane

DDE – dichlorodiphenyldichloroethene

DDT – dichlorodiphenyltrichloroethane

ID – identification

EBS – environmental baseline survey

µg/kg – micrograms per kilogram

REG – regular

Review Qualifiers:

J – indicates an estimated value

U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit

UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-4a
Sediment Samples: FED-1A EBS 5 Manhole
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

	5	5
WBZ	**MANHOLE**	**MANHOLE**
Station ID	**HH-IT001**	**HH-IT001**
Sample ID	**HH-IT001-01**	**HH-IT001-02**
Sample Type	**REG**	**FD**
Depth Interval (feet bgs)	**5.8 - 6.2**	**5.8 - 6.2**
Sample Date	**34661**	**34661**
Reference	**IT 2001**	**IT 2001**
Volatile Organic Compounds (µg/Kg)		
acetone	34 J	21 UJ
benzene	12 U	12 U
bromodichloromethane	12 U	12 U
bromoform	12 U	12 U
bromomethane	12 U	12 U
2-butanone	11 J	6 J
carbon disulfide	12 U	12 U
carbon tetrachloride	12 U	12 U
chlorobenzene	12 U	12 U
chlorodibromomethane	12 U	12 U
chloroethane	12 U	12 U
chloroform	12 U	12 U
chloromethane	12 U	12 U
1,3-dichlorobenzene	390 U	390 U
1,4-dichlorobenzene	390 U	390 U
1,1-dichloroethane	12 U	12 U
1,2-dichloroethane	12 U	12 U
1,1-dichloroethene	12 U	12 U
1,2-dichloroethene	12 U	12 U
1,2-dichloropropane	12 U	12 U
cis-1,3-dichloropropene	12 U	12 U
trans-1,3-dichloropropene	12 U	12 U
ethylbenzene	12 U	12 U
2-hexanone	12 U	12 U
methylene chloride	11 J	1 J
2-methylnaphthalene	390 U	390 U
4-methyl-2-pentanone	12 U	12 U
naphthalene	390 U	390 U
styrene	12 U	12 U
1,1,2,2-tetrachloroethane	12 U	12 U
tetrachloroethene	12 U	12 U
toluene	12 U	12 U
1,2,4-trichlorobenzene	390 U	390 U
1,1,1-trichloroethane	12 U	12 U
1,1,2-trichloroethane	12 U	12 U
trichloroethene	12 U	12 U
vinyl chloride	12 U	12 U
xylenes, total	12 U	12 U
Petroleum Hydrocarbons (µg/Kg)		
diesel	24000 U	60000 U
gasoline	590 U	600 U
motor oil	350000 J	540000 J
oil and grease	2070000 J	1040000 J
Semivolatile Organic Compounds (µg/Kg)		
acenaphthene	390 U	93 J
acenaphthylene	390 U	390 U
anthracene	390 U	60 J
benz(a)anthracene	390 U	390 U
benzo(b)fluoranthene	390 U	72 J
benzo(k)fluoranthene	390 U	390 U
benzo(g,h,i)perylene	390 U	36 J
benzo(a)pyrene	390 U	390 U
bis(2-chloroethoxy)methane	390 U	390 U
bis(2-chloroethyl)ether	390 U	390 U
bis(2-chloro-1-methylethyl)ether	390 U	390 U
bis(2-ethylhexyl)phthalate	390 U	390 U
4-bromophenyl phenyl ether	390 U	390 U
butyl benzyl phthalate	390 U	390 U
carbazole	390 U	390 U
4-chloroaniline	390 U	390 U
4-chloro-3-methylphenol	390 U	390 U
2-chloronaphthalene	390 U	390 U
2-chlorophenol	390 U	390 U
4-chlorophenyl phenyl ether	390 U	390 U
chrysene	83 J	130 J
dibenz(a,h)anthracene	390 U	390 U
di-n-butyl phthalate	58 J	25 J
dibenzofuran	390 U	390 U
1,2-dichlorobenzene	390 U	390 U
3,3'-dichlorobenzidine	390 U	390 U
2,4-dichlorophenol	390 U	390 U
diethyl phthalate	390 U	390 U
2,4-dimethylphenol	390 U	390 U
dimethyl phthalate	390 U	390 U

Table A1-4a
Sediment Samples: FED-1A EBS 5 Manhole
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

	5	5
WBZ	**MANHOLE**	**MANHOLE**
Station ID	**HH-IT001**	**HH-IT001**
Sample ID	**HH-IT001-01**	**HH-IT001-02**
Sample Type	**REG**	**FD**
Depth Interval (feet bgs)	**5.8 - 6.2**	**5.8 - 6.2**
Sample Date	**34661**	**34661**
Reference	**IT 2001**	**IT 2001**
Semivolatile Organic Compounds (µg/Kg) (continued)		
4,6-dinitro-2-methylphenol	940 U	950 U
2,4-dinitrophenol	940 U	950 U
2,4-dinitrotoluene	390 U	390 U
2,6-dinitrotoluene	390 U	390 U
di-n-octyl phthalate	390 U	390 U
fluoranthene	100 J	390 J
fluorene	390 U	390 U
hexachlorobenzene	390 U	390 U
hexachlorobutadiene	390 U	390 U
hexachlorocyclopentadiene	390 U	390 U
hexachloroethane	390 U	390 U
indeno(1,2,3-cd)pyrene	390 U	390 U
isophorone	390 U	390 U
2-methylphenol	390 U	390 U
4-methylphenol	390 U	390 U
2-nitroaniline	940 U	950 U
3-nitroaniline	940 U	950 U
4-nitroaniline	940 U	950 U
nitrobenzene	390 U	390 U
4-nitrophenol	940 U	950 U
2-nitrophenol	390 U	390 U
N-nitrosodiphenylamine	390 U	390 U
N-nitroso-di-n-propylamine	390 U	390 U
pentachlorophenol	940 U	950 U
phenanthrene	21 J	30 J
phenol	390 U	390 U
pyrene	78 J	230 J
2,4,5-trichlorophenol	940 U	950 U
2,4,6-trichlorophenol	390 U	390 U
Pesticides/Polychlorinated Biphenyls (µg/Kg)		
aldrin	2 UJ	20 UJ
Aroclor 1016	39 UJ	390 UJ
Aroclor 1221	79 UJ	800 UJ
Aroclor 1232	39 UJ	390 UJ
Aroclor 1242	39 UJ	390 UJ
Aroclor 1248	39 UJ	390 UJ
Aroclor 1254	31 J	390 UJ
Aroclor 1260	110 J	390 UJ
azinphos-methyl	190 U	200 U
alpha-BHC	2 UJ	20 UJ
beta-BHC	2 UJ	20 UJ
delta-BHC	2 UJ	20 UJ
gamma-BHC (lindane)	2 UJ	20 UJ
alpha-chlordane	2 UJ	20 UJ
gamma-chlordane	2 UJ	20 UJ
4,4'-DDD	3.9 UJ	39 UJ
4,4'-DDE	3.9 UJ	39 UJ
4,4'-DDT	3.9 UJ	39 UJ
demeton (demeton o + demeton s)	190 U	200 U
diazinon	190 U	200 U
dieldrin	3.9 UJ	39 UJ
disulfoton	190 U	200 U
endosulfan I	2 UJ	20 UJ
endosulfan II	3.9 UJ	39 UJ
endosulfan sulfate	3.9 UJ	39 UJ
endrin	3.9 UJ	39 UJ
endrin aldehyde	3.9 UJ	39 UJ
endrin ketone	3.9 UJ	39 UJ
ethion	190 U	200 U
ethyl parathion	190 U	200 U
heptachlor	2 UJ	20 UJ
heptachlor epoxide	2 UJ	20 UJ
malathion	190 U	200 U
methoxychlor	20 UJ	200 UJ
methyl parathion	190 U	200 U
toxaphene	200 UJ	2000 UJ
Herbicides (µg/Kg)		
2,4'-DB	590 U	5950 U
dalapon	590 U	5950 U
dicamba	590 U	5950 U
dichlorophenoxyacetic acid	590 U	5950 U
dichloroprop	590 U	5950 U

Table A1-4a
Sediment Samples: FED-1A EBS 5 Manhole
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

	5	5
WBZ	**MANHOLE**	**MANHOLE**
Station ID	**HH-IT001**	**HH-IT001**
Sample ID	**HH-IT001-01**	**HH-IT001-02**
Sample Type	**REG**	**FD**
Depth Interval (feet bgs)	**5.8 - 6.2**	**5.8 - 6.2**
Sample Date	**34661**	**34661**
Reference	**IT 2001**	**IT 2001**
Herbicides (µg/Kg) (continued)		
dinoseb	590 U	5950 U
MCPA	29400 U	298000 U
MCPP	29400 U	298000 U
2,4,5-T	590 U	5950 U
2,4,5-TP	590 U	5950 U
Organotin (mg/Kg)		
dibutyltin	0.001 UJ	0.001 J
monobutyltin	0.001 UJ	0.001 UJ
tetrabutyltin	0.001 UJ	0.001 UJ
tributyltin	0.001 J	0.003 J
Metals (mg/Kg)		
aluminum	5450 J	5030 J
antimony	4.5 J	2.2 J
arsenic	24.6 J	14.1 J
barium	366 J	89.4 J
beryllium	0.29	0.29
cadmium	0.48	0.43
calcium	3160	3310
chromium	33.6 J	22.4 J
cobalt	13.7	8.8
copper	356 J	113 J
iron	67600	42800
lead	39.9 J	20.6 J
tetraethyllead	0.65 J	0.59 UJ
magnesium	3320	3360
manganese	376	409
mercury	0.18	0.18 U
molybdenum	4.9	4.5
nickel	45.8 J	29.9 J
potassium	1060 J	939 J
selenium	0.7 U	0.7 U
silver	0.33 U	0.33 U
sodium	668	482
thallium	0.54 UJ	0.54 UJ
vanadium	32.7	27.6
zinc	303 J	118 J

Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
2,4´-DB – 4-(2,4-dichlorophenoxyl)butyric acid
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
ID – identification
EBS – environmental baseline survey
FD – field duplicate
MCPA – 2-methyl-4-chlorophenoxyacetic acid
MCPP – 2-(2-methyl-4-chlorophenoxy)-propionic acid
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
REG – regular
T – trichlorophenoxyacetic acid
TP – trichlorophenoxypropionic acid
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-4b
Sediment Samples: FED-1A EBS 23 Manhole
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	23	23	23	23	23
WBZ	MANHOLE	MANHOLE	MANHOLE	MANHOLE	MANHOLE
Station ID	R-1R	S-1S	S-2S	T-IT001	U-1U-1
Sample ID	R-1R-01	S-1S-01	S-2S-01	T-IT001-01	U-1U-1-01
Sample Type	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	6 - 6.5	5.3 - 5.6	6 - 6.6	4.5 - 5	7 - 8
Sample Date	34687	34667	34667	34668	34669
Reference	IT 2001	IT 2001	IT 2001	IT 2001	IT 2001
Volatile Organic Compounds (µg/Kg)					
acetone	12 U	13 U	10 U	12 U	13 U
benzene	12 U	13 U	10 U	12 U	13 U
bromodichloromethane	12 U	13 U	10 U	12 U	13 U
bromoform	12 U	13 U	10 U	12 U	13 U
bromomethane	12 U	13 U	10 U	12 U	13 U
2-butanone	12 U	13 U	10 U	12 U	13 U
carbon disulfide	12 U	13 U	10 U	12 U	13 U
carbon tetrachloride	12 U	13 U	10 U	12 U	13 U
chlorobenzene	12 U	13 U	10 U	12 U	13 U
chlorodibromomethane	12 U	13 U	10 U	12 U	13 U
chloroethane	12 U	13 U	10 U	12 U	13 U
chloroform	12 U	13 U	10 U	12 U	13 U
chloromethane	12 U	13 U	10 U	12 U	13 U
1,3-dichlorobenzene	400 U	420 U	1000 U	390 U	440 U
1,4-dichlorobenzene	400 U	420 U	1000 U	390 U	440 U
1,1-dichloroethane	12 U	13 U	10 U	12 U	13 U
1,2-dichloroethane	12 U	13 U	10 U	12 U	13 U
1,1-dichloroethene	12 U	13 U	10 U	12 U	13 U
1,2-dichloroethene	12 U	13 U	10 U	12 U	13 U
1,2-dichloropropane	12 U	13 U	10 U	12 U	13 U
cis-1,3-dichloropropene	12 U	13 U	10 U	12 U	13 U
trans-1,3-dichloropropene	12 U	13 U	10 U	12 U	13 U
ethylbenzene	12 U	13 U	10 U	12 U	13 U
2-hexanone	12 U	13 U	10 U	12 U	13 U
methylene chloride	12 U	13 U	10 U	12 U	13 UJ
2-methylnaphthalene	400 U	420 U	1000 U	390 U	440 U
4-methyl-2-pentanone	12 U	13 U	10 U	12 U	13 U
naphthalene	400 U	420 U	250 J	390 U	26 J
styrene	12 U	13 U	10 U	12 U	13 U
1,1,2,2-tetrachloroethane	12 U	13 U	10 U	12 U	13 U
tetrachloroethene	12 U	13 U	10 U	12 U	13 U
toluene	12 U	13 U	10 U	12 U	13 U
1,2,4-trichlorobenzene	400 U	420 U	1000 U	390 U	440 U
1,1,1-trichloroethane	12 U	13 U	10 U	12 U	13 U
1,1,2-trichloroethane	12 U	13 U	10 U	12 U	13 U
trichloroethene	12 U	13 U	10 U	12 U	13 U
vinyl chloride	12 U	13 U	10 U	12 U	13 U
xylenes, total	12 U	13 U	10 U	12 U	13 U
Petroleum Hydrocarbons (µg/Kg)					
diesel	12000 U	13000 U	50000 U	12000 U	13000 U
gasoline	600 U	630 U	510 U	600 U	670 U
motor oil	85000 J	65000 J	610000 J	24000 U	150000 J
oil and grease	515000	888000	1220000	120000 U	483000
Semivolatile Organic Compounds (µg/Kg)					
acenaphthene	400 U	420 U	110 J	390 U	100 J
acenaphthylene	400 U	420 U	1000 U	390 U	440 U
anthracene	400 U	420 U	75 J	390 U	71 J
benz(a)anthracene	400 U	28 J	3300	390 U	280 J
benzo(b)fluoranthene	400 U	420 U	6100	390 U	360 J
benzo(k)fluoranthene	400 U	420 U	6700	390 U	440 U
benzo(g,h,i)perylene	400 U	420 U	850 J	390 U	110 J
benzo(a)pyrene	400 U	22 J	3400	390 U	220 J
bis(2-chloroethoxy)methane	400 U	420 U	1000 U	390 U	440 U
bis(2-chloroethyl)ether	400 U	420 U	1000 U	390 U	440 U
bis(2-chloro-1-methylethyl)ether	400 U	420 U	1000 U	390 U	440 U
bis(2-ethylhexyl)phthalate	140 J	230 J	1000 U	390 U	53 J
4-bromophenyl phenyl ether	400 U	420 U	1000 U	390 U	440 U
butyl benzyl phthalate	400 U	420 U	1000 U	390 U	440 U
carbazole	400 U	420 U	62 J	390 U	39 J
4-chloroaniline	400 U	420 U	1000 U	390 U	440 U
4-chloro-3-methylphenol	400 U	420 U	1000 U	390 U	440 U
2-chloronaphthalene	400 U	420 U	1000 U	390 U	440 U
2-chlorophenol	400 U	420 U	1000 U	390 U	440 U
4-chlorophenyl phenyl ether	400 U	420 U	1000 U	390 U	440 U
chrysene	400 U	45 J	5000	390 U	310 J
dibenz(a,h)anthracene	400 U	420 U	1200	390 U	45 J
di-n-butyl phthalate	400 U	58 J	1000 U	26 J	26 J
dibenzofuran	400 U	420 U	1000 U	390 U	27 J
1,2-dichlorobenzene	400 U	420 U	1000 U	390 U	440 U
3,3'-dichlorobenzidine	400 U	420 U	1000 U	390 U	440 U
2,4-dichlorophenol	400 U	420 U	1000 U	390 U	440 U
diethyl phthalate	400 U	52 J	330 J	390 U	440 U
2,4-dimethylphenol	400 U	420 U	1000 U	390 U	440 U
dimethyl phthalate	400 U	420 U	1000 U	390 U	440 U
4,6-dinitro-2-methylphenol	960 U	1000 U	2400 U	950 U	1100 U
2,4-dinitrophenol	960 U	1000 U	2400 U	950 U	1100 U
2,4-dinitrotoluene	400 U	420 U	1000 U	390 U	440 U
2,6-dinitrotoluene	400 U	420 U	1000 U	390 U	440 U
di-n-octyl phthalate	400 U	420 U	1000 U	390 U	440 U

Table A1-4b
Sediment Samples: FED-1A EBS 23 Manhole
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**23**	**23**	**23**	**23**	**23**
WBZ	**MANHOLE**	**MANHOLE**	**MANHOLE**	**MANHOLE**	**MANHOLE**
Station ID	**R-1R**	**S-1S**	**S-2S**	**T-IT001**	**U-1U-1**
Sample ID	**R-1R-01**	**S-1S-01**	**S-2S-01**	**T-IT001-01**	**U-1U-1-01**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**6 - 6.5**	**5.3 - 5.6**	**6 - 6.6**	**4.5 - 5**	**7 - 8**
Sample Date	**34687**	**34667**	**34667**	**34668**	**34669**
Reference	**IT 2001**	**IT 2001**	**IT 2001**	**IT 2001**	**IT 2001**
Semivolatile Organic Compounds (µg/Kg) (continued)					
fluoranthene	400 U	58 J	2400	390 U	590
fluorene	400 U	420 U	1000 U	390 U	44 J
hexachlorobenzene	400 U	420 U	1000 U	390 U	440 U
hexachlorobutadiene	400 U	420 U	1000 U	390 U	440 U
hexachlorocyclopentadiene	400 U	420 U	1000 U	390 U	440 U
hexachloroethane	400 U	420 U	1000 U	390 U	440 U
indeno(1,2,3-cd)pyrene	400 U	26 J	4300	390 U	160 J
isophorone	400 U	420 U	1000 U	390 U	440 U
2-methylphenol	400 U	420 U	1000 U	390 U	440 U
4-methylphenol	400 U	420 U	1000 U	390 U	440 U
2-nitroaniline	960 U	1000 U	2400 U	950 U	1100 U
3-nitroaniline	960 U	1000 U	2400 U	950 U	1100 U
4-nitroaniline	960 U	1000 U	2400 U	950 U	1100 U
nitrobenzene	400 U	420 U	1000 U	390 U	440 U
4-nitrophenol	960 U	1000 U	2400 U	950 U	1100 U
2-nitrophenol	400 U	420 U	1000 U	390 U	440 U
N-nitrosodiphenylamine	400 U	420 U	1000 U	390 U	440 U
N-nitroso-di-n-propylamine	400 U	420 U	1000 U	390 U	440 U
pentachlorophenol	960 U	1000 U	2400 U	950 U	1100 U
phenanthrene	400 U	420 U	340 J	390 U	530
phenol	400 U	420 U	1000 U	390 U	440 U
pyrene	400 U	71 J	2600	390 U	570
2,4,5-trichlorophenol	960 U	1000 U	2400 U	950 U	1100 U
2,4,6-trichlorophenol	400 U	420 U	1000 U	390 U	440 U
Pesticides/Polychlorinated Biphenyls (µg/Kg)					
aldrin	2 U	110 U	87 U	10 U	2.3 U
Aroclor 1016	40 U	2100 U	1700 U	200 U	44 U
Aroclor 1221	81 U	4200 U	3400 U	400 U	89 U
Aroclor 1232	40 U	2100 U	1700 U	200 U	44 U
Aroclor 1242	40 U	2100 U	1700 U	200 U	44 U
Aroclor 1248	40 U	2100 U	1700 U	200 U	44 U
Aroclor 1254	40 U	2100 U	1700 U	200 U	44 U
Aroclor 1260	40 U	12000	18000	590	44 U
azinphos-methyl	200 U	210 U	170 U	200 UJ	220 U
alpha-BHC	2 U	110 U	87 U	10 U	2.3 U
beta-BHC	2 U	110 U	87 U	10 U	2.3 U
delta-BHC	2 U	110 U	87 U	10 U	2.3 U
gamma-BHC (lindane)	2 U	110 U	87 U	10 U	2.3 U
alpha-chlordane	2 U	110 U	87 U	10 U	2.3 U
gamma-chlordane	2 U	110 U	87 U	10 U	2.3 U
4,4'-DDD	4 U	210 U	170 U	20 U	4.4 U
4,4'-DDE	4 U	210 U	170 U	20 U	4.4 U
4,4'-DDT	4 U	210 U	170 U	20 U	4.4 U
demeton (demeton o + demeton s)	200 U	210 U	170 U	200 UJ	220 U
diazinon	200 U	210 U	170 U	200 UJ	220 U
dieldrin	4 U	210 U	170 U	20 U	4.4 U
disulfoton	200 U	210 U	170 U	200 UJ	220 U
endosulfan I	2 U	110 U	87 U	10 U	2.3 U
endosulfan II	4 U	210 U	170 U	20 U	4.4 U
endosulfan sulfate	4 U	210 U	170 U	20 U	4.4 U
endrin	4 U	210 U	170 U	20 U	4.4 U
endrin aldehyde	4 U	210 U	170 U	20 U	4.4 U
endrin ketone	4 U	210 U	170 U	20 U	4.4 U
ethion	200 U	210 U	170 U	200 UJ	220 U
ethyl parathion	200 U	210 U	170 U	200 UJ	220 U
heptachlor	2 U	110 U	87 U	10 U	2.3 U
heptachlor epoxide	2 U	110 U	87 U	10 U	2.3 U
malathion	200 U	210 U	170 U	200 UJ	220 U
methoxychlor	20 U	1100 U	870 U	100 U	23 U
methyl parathion	200 U	210 U	170 U	200 UJ	220 U
toxaphene	200 U	11000 U	8700 U	1000 U	230 U
Herbicides (µg/Kg)					
2,4'-DB	600 U	1270 U	1020 U	602 U	1330 U
dalapon	600 U	1270 U	1020 U	602 U	1330 U
dicamba	600 U	1270 U	1020 U	602 U	1330 U
dichlorophenoxyacetic acid	600 U	1270 U	1020 U	602 U	1330 U
dichloroprop	600 U	1270 U	1020 U	602 U	1330 U
dinoseb	600 U	1270 U	1020 U	602 U	1330 U
MCPA	30100 U	63300 U	51000 U	30100 U	66700 U
MCPP	30100 U	63300 U	51000 U	30100 U	66700 U
2,4,5-T	600 U	1270 U	1020 U	602 U	1330 U
2,4,5-TP	600 U	1270 U	1020 U	602 U	1330 U
Organotin (mg/Kg)					
dibutyltin	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ
monobutyltin	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ
tetrabutyltin	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ	0.001 UJ
tributyltin	0.001 UJ	0.002 J	0.002 J	0.001 UJ	0.001 UJ

Table A1-4b
Sediment Samples: FED-1A EBS 23 Manhole
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**23**	**23**	**23**	**23**	**23**
WBZ	**MANHOLE**	**MANHOLE**	**MANHOLE**	**MANHOLE**	**MANHOLE**
Station ID	**R-1R**	**S-1S**	**S-2S**	**T-IT001**	**U-1U-1**
Sample ID	**R-1R-01**	**S-1S-01**	**S-2S-01**	**T-IT001-01**	**U-1U-1-01**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**
Depth Interval (feet bgs)	**6 - 6.5**	**5.3 - 5.6**	**6 - 6.6**	**4.5 - 5**	**7 - 8**
Sample Date	**34687**	**34667**	**34667**	**34668**	**34669**
Reference	**IT 2001**	**IT 2001**	**IT 2001**	**IT 2001**	**IT 2001**
Metals (mg/Kg)					
aluminum	4110 J	3770	7640	4120	6610
antimony	0.86 J	1.8	3.6	0.82 J	0.84 UJ
arsenic	1.3	2.4	2.8	1.7	1.6
barium	17.2 J	2540	7160	24.8	47.7
beryllium	0.23 U	0.62 J	0.61 J	0.24	0.45
cadmium	0.2 J	0.15	0.44	0.07 U	0.09
calcium	2550 J	2060	4890	2530 J	2540 J
chromium	30.6 J	21.3	23.8	29.5	36.3
cobalt	4.7	7.4	16.5	3.9	6.2
copper	61.7	100	54.1	68.5	191
iron	7160	9110	14700	7460	10800
lead	5.9 J	11.7	33.3	5	4.9
tetraethyllead	0.6 U	0.63 U	0.51 U	0.6 U	0.66 U
magnesium	2100	2520	4770	2350	3340
manganese	247	152	209	105 J	121 J
mercury	0.18 U	0.19 U	0.15 U	0.18 U	0.2 U
molybdenum	3 UJ	3.1 U	2.5 U	3 U	3.2 U
nickel	20.4 J	20.4	30.3	18.8	32.9
potassium	628	658	912	658	1210
selenium	0.7 U	0.72 U	0.6 U	0.7 U	0.77 U
silver	0.33 UJ	0.35 U	0.31 U	0.33 U	0.36 U
sodium	1440	1890	1150	1980	1710
thallium	0.54 UJ	0.55 U	0.46 U	0.53 U	0.59 U
vanadium	18.4	17.2	22.2	21.1	25.3
zinc	89.6 J	546	1410	52.8	159

Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
2,4´-DB – 4-(2,4-dichlorophenoxyl)butyric acid
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
ID – identification
EBS – environmental baseline survey
FD – field duplicate
MCPA – 2-methyl-4-chlorophenoxyacetic acid
MCPP – 2-(2-methyl-4-chlorophenoxy)-propionic acid
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
REG – regular
T – trichlorophenoxyacetic acid
TP – trichlorophenoxypropionic acid
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R2	R2	R2	R2
Sample ID	PRC93SAB0039	PRC93SAB0040	PRC93SAB0041	PRC93SAB0044	PRC93SED0039	PRC93SED0040	PRC93SED0041	PRC93SED0044	PRC94SVL0119	PRC94SVL0120	PRC94SVL0121	PRC93SAB0045	PRC93SAB0046	PRC93SAB0047	PRC93SED0045
Sample Type	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	07-Apr-94	07-Apr-94	07-Apr-94	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
Petroleum Hydrocarbons (µg/Kg)															
diesel	*														
gasoline															
motor oil															
oil and grease					20000 U	20000 U	25000	20000 U							22000
Semivolatile Organic Compounds (µg/Kg)															
acenaphthene									93 U	99 U	91 U				
acenaphthylene									93 U	99 U	91 U				
anthracene									93 U	99 U	91 U				
benz(a)anthracene									93 U	99 U	91 U				
benzidine									930 U	990 U	910 U				
benzo(b)fluoranthene									93 U	99 U	91 U				
benzo(k)fluoranthene									93 U	99 U	91 U				
benzoic acid									930 U	990 U	910 U				
benzo(g,h,i)perylene									93 U	99 U	91 U				
benzo(a)pyrene									93 U	99 U	91 U				
benzyl alcohol									460 U	490 U	450 U				
bis(2-chloroethoxy)methane									93 U	99 U	91 U				
bis(2-chloroethyl)ether									93 U	99 U	91 U				
bis(2-chloro-1-methylethyl)ether									93 U	99 U	91 U				
bis(2-ethylhexyl)phthalate									93 U	99 U	91 U				
4-bromophenyl phenyl ether									93 U	99 U	91 U				
butyl benzyl phthalate									93 U	99 U	91 U				
carbazole															
4-chloroaniline									280 U	290 U	270 U				
4-chloro-3-methylphenol									180 U	190 U	180 U				
2-chloronaphthalene									93 U	99 U	91 U				
2-chlorophenol									93 U	99 U	91 U				
4-chlorophenyl phenyl ether									93 U	99 U	91 U				
chrysene									93 U	99 U	91 U				
dibenz(a,h)anthracene									93 U	99 U	91 U				
di-n-butyl phthalate									250 U	290 U	190 U				
dibenzofuran									93 U	99 U	91 U				
1,2-dichlorobenzene									93 U	99 U	91 U				
1,3-dichlorobenzene									93 U	99 U	91 U				
1,4-dichlorobenzene									93 U	99 U	91 U				
3,3'-dichlorobenzidine									93 U	99 U	91 U				
2,4-dichlorophenol									280 U	290 U	270 U				
diethyl phthalate									93 U	99 U	91 U				
2,4-dimethylphenol									180 U	190 U	180 U				
dimethyl phthalate									93 U	99 U	91 U				
4,6-dinitro-2-methylphenol									930 U	990 U	910 U				
2,4-dinitrophenol									460 U	490 U	450 U				
2,4-dinitrotoluene									460 U	490 U	450 U				
2,6-dinitrotoluene									460 U	490 U	450 U				
di-n-octyl phthalate									93 U	99 U	91 U				
fluoranthene									93 U	99 U	95				
fluorene									49 U	51 U	47 U				
hexachlorobenzene									93 U	99 U	91 U				
hexachlorobutadiene									180 U	190 U	180 U				
hexachlorocyclopentadiene									460 U	490 U	450 U				
hexachloroethane									180 U	190 U	180 U				
indeno(1,2,3-cd)pyrene									93 U	99 U	91 U				
isophorone									93 U	99 U	91 U				
2-methylnaphthalene									93 U	99 U	91 U				

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
WBZ	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**
Station ID	**R2**	**R2**	**R2**	**R2**	**R2**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**
Sample ID	**PRC93SED0046**	**PRC93SED0047**	**PRC94SVL0122**	**PRC94SVL0123**	**PRC94SVL0124**	**PRC93SAB0050**	**PRC93SAB0051**	**PRC93SAB0052**	**PRC93SAB0055**	**PRC93SED0050**	**PRC93SED0051**	**PRC93SED0052**	**PRC93SED0055**	**PRC94SVL1061**	**PRC94SVL1062**	**PRC94SVL1063**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**FD**	**REG**	**REG**	**REG**	**FD**	**REG**	**FD**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**13-Apr-93**	**13-Apr-93**	**07-Apr-94**	**07-Apr-94**	**07-Apr-94**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**31-Mar-94**	**31-Mar-94**	**31-Mar-94**
Reference	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**
Petroleum Hydrocarbons (µg/Kg)																
diesel																
gasoline																
motor oil																
oil and grease	28000	20000 U								73000	90000	77000	79000			
Semivolatile Organic Compounds (µg/Kg)																
acenaphthene			91 U	92 U	88 U									140 U	130 U	120 U
acenaphthylene			91 U	92 U	88 U									140 U	130 U	120 U
anthracene			91 U	92 U	88 U									140 U	130 U	120 U
benz(a)anthracene			91 U	92 U	88 U									140 U	130 U	160
benzidine			910 U	920 U	880 U									1400 U	1300 U	1200 U
benzo(b)fluoranthene			91 U	92 U	88 U									290	230	330
benzo(k)fluoranthene			91 U	92 U	88 U									140 U	130 U	150
benzoic acid			910 U	920 U	880 U									1400 U	1300 U	1200 U
benzo(g,h,i)perylene			91 U	92 U	88 U									140 U	140	450
benzo(a)pyrene			91 U	92 U	88 U									140 U	130 U	120 U
benzyl alcohol			450 U	450 U	430 U									670 U	630 U	570 U
bis(2-chloroethoxy)methane			91 U	92 U	88 U									140 U	130 U	120 U
bis(2-chloroethyl)ether			91 U	92 U	88 U									140 U	130 U	120 U
bis(2-chloro-1-methylethyl)ether			91 U	92 U	88 U									140 U	130 U	120 U
bis(2-ethylhexyl)phthalate			91 U	92 U	88 U									310	230	170
4-bromophenyl phenyl ether			91 U	92 U	88 U									140 U	130 U	120 U
butyl benzyl phthalate			91 U	92 U	88 U									140 U	130 U	120 U
carbazole																
4-chloroaniline			270 U	270 U	260 U									410 U	380 U	340 U
4-chloro-3-methylphenol			180 U	180 U	170 U									270 U	250 U	220 U
2-chloronaphthalene			91 U	92 U	88 U									140 U	130 U	120 U
2-chlorophenol			91 U	92 U	88 U									140 U	130	120 U
4-chlorophenyl phenyl ether			91 U	92 U	88 U									140 U	130 U	120 U
chrysene			91 U	92 U	88 U									160	140	240
dibenz(a,h)anthracene			91 U	92 U	88 U									140 U	130 U	120
di-n-butyl phthalate			110 U	180 U	130 U									140 U	140	190
dibenzofuran			91 U	92 U	88 U									140 U	130 U	120 U
1,2-dichlorobenzene			91 U	92 U	88 U									140 U	130 U	120 U
1,3-dichlorobenzene			91 U	92 U	88 U									140 U	130 U	120 U
1,4-dichlorobenzene			91 U	92 U	88 U									140 U	130 U	120 U
3,3'-dichlorobenzidine			91 U	92 U	88 U									140 U	130 U	120 U
2,4-dichlorophenol			270 U	270 U	260 U									410 U	380 U	340 U
diethyl phthalate			91 U	92 U	88 U									140 U	130 U	120
2,4-dimethylphenol			180 U	180 U	170 U									270 U	250 U	220 U
dimethyl phthalate			91 U	92 U	88 U									140 U	130 U	120 U
4,6-dinitro-2-methylphenol			910 U	920 U	880 U									1400 U	1300 U	1200 U
2,4-dinitrophenol			450 U	450 U	430 U									670 U	630 U	570 U
2,4-dinitrotoluene			450 U	450 U	430 U									670 U	630 U	570 U
2,6-dinitrotoluene			450 U	450 U	430 U									670 U	630 U	570 U
di-n-octyl phthalate			91 U	92 U	88 U									140 U	130 U	120 U
fluoranthene			91 U	120	88 U									170	130 U	210
fluorene			47 U	48 U	46 U									71 U	67 U	60 U
hexachlorobenzene			91 U	92 U	88 U									140 U	130 U	120 U
hexachlorobutadiene			180 U	180 U	170 U									270 U	250 U	220 U
hexachlorocyclopentadiene			450 U	450 U	430 U									670 U	630 U	570 U
hexachloroethane			180 U	180 U	170 U									270 U	250 U	220 U
indeno(1,2,3-cd)pyrene			91 U	92 U	88 U									190	210	400
isophorone			91 U	92 U	88 U									140 U	130 U	120 U
2-methylnaphthalene			91 U	92 U	88 U									140 U	130 U	120 U

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R3	R4	R4	R4	R4	R4	R4	R4	R4	R4	RW002	RW003	RW004
Sample ID	PRC94SVL1064	PRC93SAB0056	PRC93SAB0057	PRC93SAB0058	PRC93SED0056	PRC93SED0057	PRC93SED0058	PRC94SVL1175	PRC94SVL1176	PRC94SVL1177	013-RWW-003	013-RWW-007	013-RWW-011
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	0 - 0.5	0 - 0.5	0 - 0.5
Sample Date	31-Mar-94	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	02-May-94	02-May-94	02-May-94	18-Feb-97	18-Feb-97	19-Feb-97
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	TtEMI 2004	TtEMI 2004	TtEMI 2004
Petroleum Hydrocarbons (µg/Kg)													
diesel											25000 U	30000 U	13000 U
gasoline											1000 U	2000 UJ	600 U
motor oil											84000 J	64000 J	18000 J
oil and grease					20000 U	20000 U	20000 U						
Semivolatile Organic Compounds (µg/Kg)													
acenaphthene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
acenaphthylene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
anthracene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
benz(a)anthracene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
benzidine	1100 U							800 U	830 U	850 U			
benzo(b)fluoranthene	180							80 U	83 U	85 U	400 U	430 U	260 U
benzo(k)fluoranthene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
benzoic acid	1100 U							800 U	830 U	850 U			
benzo(g,h,i)perylene	230							80 U	83 U	85 U	400 U	430 U	260 U
benzo(a)pyrene	150							80 U	83 U	85 U	400 U	430 U	260 U
benzyl alcohol	550 U							390 U	410 U	420 U			
bis(2-chloroethoxy)methane	110 U							80 U	83 U	85 U	400 U	430 U	260 U
bis(2-chloroethyl)ether	110 U							80 U	83 U	85 U	400 UJ	430 U	260 U
bis(2-chloro-1-methylethyl)ether	110 U							80 U	83 U	85 U	400 U	430 U	260 U
bis(2-ethylhexyl)phthalate	110 U							80 U	83 U	85 U	320 U	340 U	200 U
4-bromophenyl phenyl ether	110 U							80 U	83 U	85 U	400 U	430 U	260 U
butyl benzyl phthalate	110 U							80 U	83 U	85 U	400 U	430 U	260 U
carbazole											400 U	430 U	260 U
4-chloroaniline	330 U							240 U	250 U	250 U	400 U	430 UJ	260 UJ
4-chloro-3-methylphenol	220 U							150 U	160 U	160 U	400 U	430 U	260 U
2-chloronaphthalene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
2-chlorophenol	110 U							80 U	83 U	85 U	400 U	430 U	260 U
4-chlorophenyl phenyl ether	110 U							80 U	83 U	85 U	400 U	430 U	260 U
chrysene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
dibenz(a,h)anthracene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
di-n-butyl phthalate	110 U							260 U	120 U	160 U	400 U	430 U	260 U
dibenzofuran	110 U							80 U	83 U	85 U	400 U	430 U	260 U
1,2-dichlorobenzene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
1,3-dichlorobenzene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
1,4-dichlorobenzene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
3,3'-dichlorobenzidine	110 U							80 U	83 U	85 U	400 U	430 UJ	260 UJ
2,4-dichlorophenol	330 U							240 U	250 U	250 U	400 U	430 U	260 U
diethyl phthalate	110 U							80 U	83 U	85 U	400 U	430 U	260 U
2,4-dimethylphenol	220 U							150 U	160 U	160 U	400 U	430 U	260 U
dimethyl phthalate	110 U							80 U	83 U	85 U	400 U	430 U	260 U
4,6-dinitro-2-methylphenol	1100 U							800 U	830 U	850 U	980 U	1000 UJ	620 UJ
2,4-dinitrophenol	550 U							390 U	410 U	420 U	980 UJ	1000 UJ	620 UJ
2,4-dinitrotoluene	550 U							390 U	410 U	420 U	400 U	430 U	260 U
2,6-dinitrotoluene	550 U							390 U	410 U	420 U	400 U	430 U	260 U
di-n-octyl phthalate	110 U							80 U	83 U	85 U	400 U	430 U	260 U
fluoranthene	110							80 U	83 U	85 U	400 U	430 U	260 U
fluorene	58 U							42 U	43 U	44 U	400 U	430 U	260 U
hexachlorobenzene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
hexachlorobutadiene	220 U							150 U	160 U	160 U	400 U	430 U	260 U
hexachlorocyclopentadiene	550 U							390 U	410 U	420 U	400 UJ	430 UJ	260 UJ
hexachloroethane	220 U							150 U	160 U	160 U	400 U	430 U	260 U
indeno(1,2,3-cd)pyrene	180							80 U	83 U	85 U	400 U	430 U	260 U
isophorone	110 U							80 U	83 U	85 U	400 U	430 U	260 U
2-methylnaphthalene	110 U							80 U	83 U	85 U	400 U	430 U	260 U

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R2	R2	R2	R2
Sample ID	PRC93SAB0039	PRC93SAB0040	PRC93SAB0041	PRC93SAB0044	PRC93SED0039	PRC93SED0040	PRC93SED0041	PRC93SED0044	PRC94SVL0119	PRC94SVL0120	PRC94SVL0121	PRC93SAB0045	PRC93SAB0046	PRC93SAB0047	PRC93SED0045
Sample Type	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	07-Apr-94	07-Apr-94	07-Apr-94	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
2-methylphenol									93 U	99 U	91 U				
4-methylphenol									93 U	99 U	91 U				
naphthalene									93 U	99 U	91 U				
2-nitroaniline									460 U	490 U	450 U				
3-nitroaniline									460 U	490 U	450 U				
4-nitroaniline									460 U	490 U	450 U				
nitrobenzene									93 U	99 U	91 U				
4-nitrophenol									460 U	540	450 U				
2-nitrophenol									460 U	490 U	450 U				
N-nitrosodiphenylamine									93 U	99 U	91 U				
N-nitroso-di-n-propylamine									93 U	99 U	91 U				
pentachlorophenol									460 U	490 U	450 U				
phenanthrene									93 U	99 U	91 U				
phenol									180 U	190 U	180 U				
pyrene									93 U	160	110				
1,2,4-trichlorobenzene									93 U	99 U	91 U				
2,4,5-trichlorophenol									460 U	490 U	450 U				
2,4,6-trichlorophenol									460 U	490 U	450 U				
Pesticides/Polychlorinated Biphenyls (µg/Kg)															
aldrin					0.6 U	0.7 U	0.7 U	0.6 U							0.7 U
Aroclor 1016					25 U	26 U	27 U	26 U							29 U
Aroclor 1221					50 U	53 U	54 U	51 U							58 U
Aroclor 1232					25 U	26 U	27 U	26 U							29 U
Aroclor 1242					25 U	26 U	27 U	26 U							29 U
Aroclor 1248					25 U	26 U	27 U	26 U							29 U
Aroclor 1254					25 U	26 U	27 U	26 U							29 U
Aroclor 1260					25 U	26 U	27 U	26 U							29 U
alpha-BHC					0.6 U	0.7 U	0.7 U	0.6 U							0.7 U
beta-BHC					63 U	66 U	68 U	64 U							72 U
delta-BHC					63 U	66 U	68 U	64 U							72 U
gamma-BHC (lindane)					0.6 U	0.7 U	0.7 U	0.6 U							0.7 U
alpha-chlordane					0.6 U	0.7 U	0.7 U	0.6 U							0.7 U
gamma-chlordane					0.6 U	0.7 U	0.7 U	0.6 U							0.7 U
4,4'-DDD					2.5 U	2.6 U	2.7 U	2.6 U							2.9 U
4,4'-DDE					2.5 U	2.6 U	2.7 U	2.6 U							2.9 U
4,4'-DDT					2.5 U	2.6 U	2.7 U	2.6 U							2.9 U
dieldrin					1.3 U	1.3 U	1.4 U	1.3 U							1.4 U
endosulfan I					1.3 U	1.3 U	1.4 U	1.3 U							1.4 U
endosulfan II					1.3 U	1.3 U	1.4 U	1.3 U							1.4 U
endosulfan sulfate					1.3 U	1.3 U	1.4 U	1.3 U							1.4 U
endrin					1.3 U	1.3 U	1.4 U	1.3 U							1.4 U
endrin aldehyde					2.5 U	2.6 U	2.7 U	2.6 U							2.9 U
endrin ketone					3.1 U	3.3 U	3.4 U	3.2 U							3.6 U
heptachlor					63 U	66 U	68 U	64 U							72 U
heptachlor epoxide					0.6 U	0.7 U	0.7 U	0.6 U							0.7 U
methoxychlor					1.3 U	1.3 U	1.4 U	1.3 U							1.4 U
toxaphene					50 U	53 U	54 U	51 U							58 U
Organotin (mg/Kg)															
dibutyltin					0.005 U	0.005 U	0.005 U	0.005 U							0.005 U
monobutyltin					0.005 U	0.005 U	0.005 U	0.005 U							0.005 U
tetrabutyltin					0.005 U	0.005 U	0.005 U	0.005 U							0.005 U
tributyltin					0.005 U	0.005 U	0.005 U	0.005 U							0.005 U

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R2	R2	R2	R2	R2	R3	R3	R3	R3	R3	R3	R3	R3	R3	R3	R3
Sample ID	PRC93SED0046	PRC93SED0047	PRC94SVL0122	PRC94SVL0123	PRC94SVL0124	PRC93SAB0050	PRC93SAB0051	PRC93SAB0052	PRC93SAB0055	PRC93SED0050	PRC93SED0051	PRC93SED0052	PRC93SED0055	PRC94SVL1061	PRC94SVL1062	PRC94SVL1063
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	FD	REG	REG	REG	FD	REG	FD	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	13-Apr-93	13-Apr-93	07-Apr-94	07-Apr-94	07-Apr-94	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	31-Mar-94	31-Mar-94	31-Mar-94
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
2-methylphenol			91 U	92 U	88 U									140 U	130 U	120 U
4-methylphenol			91 U	92 U	88 U									140 U	130 U	120 U
naphthalene			91 U	92 U	88 U									140 U	130 U	120 U
2-nitroaniline			450 U	450 U	430 U									670 U	630 U	570 U
3-nitroaniline			450 U	450 U	430 U									670 U	630 U	570 U
4-nitroaniline			450 U	450 U	430 U									670 U	630 U	570 U
nitrobenzene			91 U	92 U	88 U									140 U	130 U	120 U
4-nitrophenol			450 U	450 U	430 U									670 U	630 U	570 U
2-nitrophenol			450 U	450 U	430 U									670 U	630 U	570 U
N-nitrosodiphenylamine			91 U	92 U	88 U									140 U	130 U	120 U
N-nitroso-di-n-propylamine			91 U	92 U	88 U									140 U	130 U	120 U
pentachlorophenol			450 U	450 U	430 U									670 U	630 U	570 U
phenanthrene			91 U	92 U	88 U									140 U	130 U	120 U
phenol			180 U	180 U	170 U									270 U	250 U	220 U
pyrene			91 U	130	88 U									220	270	240
1,2,4-trichlorobenzene			91 U	92 U	88 U									140 U	130 U	120 U
2,4,5-trichlorophenol			450 U	450 U	430 U									670 U	630 U	570 U
2,4,6-trichlorophenol			450 U	450 U	430 U									670 U	630 U	570 U
Pesticides/Polychlorinated Biphenyls (µg/Kg)																
aldrin	0.7 U	0.6 U								0.9 U	0.9 U	0.9 U	0.9 U			
Aroclor 1016	28 U	26 U								37 U	37 U	38 U	38 U			
Aroclor 1221	56 U	52 U								74 U	74 U	75 U	75 U			
Aroclor 1232	28 U	26 U								37 U	37 U	38 U	38 U			
Aroclor 1242	28 U	26 U								37 U	37 U	38 U	38 U			
Aroclor 1248	28 U	26 U								37 U	37 U	38 U	38 U			
Aroclor 1254	28 U	26 U								69	180	110	130			
Aroclor 1260	28 U	26 U								37 U	37 U	38 U	38 U			
alpha-BHC	0.7 U	0.6 U								0.9 U	0.9 U	0.9 U	0.9 U			
beta-BHC	69 U	65 U								93 U	93 U	94 U	94 U			
delta-BHC	69 U	65 U								93 U	93 U	94 U	94 U			
gamma-BHC (lindane)	0.7 U	0.6 U								0.9 U	0.9 U	0.9 U	0.9 U			
alpha-chlordane	0.7 U	0.6 U								1.1	2.2	1.1	1.3			
gamma-chlordane	0.7 U	0.6 U								1.9	3.9	3.8	0.9 U			
4,4'-DDD	2.8 U	2.6 U								41 J	31 J	3.8 U	98 J			
4,4'-DDE	2.8 U	2.6 U								4.1	8	7	7.2			
4,4'-DDT	2.8 U	2.6 U								3.7 U	56	3.8 U	3.8 U			
dieldrin	1.4 U	1.3 U								1.9 U	1.9 U	1.9 U	1.9 U			
endosulfan I	1.4 U	1.3 U								1.9 U	1.9 U	1.9 U	1.9 U			
endosulfan II	1.4 U	1.3 U								1.9 U	1.9 U	1.9 U	1.9 U			
endosulfan sulfate	1.4 U	1.3 U								1.9 U	1.9 U	1.9 U	1.9 U			
endrin	1.4 U	1.3 U								1.9 U	1.9 U	1.9 U	1.9 U			
endrin aldehyde	2.8 U	2.6 U								3.7 U	3.7 U	3.8 U	3.8 U			
endrin ketone	3.5 U	3.2 U								4.6 U	4.6 U	4.7 U	4.7 U			
heptachlor	69 U	65 U								93 U	93 U	94 U	94 U			
heptachlor epoxide	0.7 U	0.6 U								0.9 U	0.9 U	0.9 U	0.9 U			
methoxychlor	1.4 U	1.3 U								1.9 U	1.9 U	1.9 U	1.9 U			
toxaphene	56 U	52 U								74 U	74 U	75 U	75 U			
Organotin (mg/Kg)																
dibutyltin	0.005 U	0.005 U								0.005 U	0.005 U	0.005 U	0.005 U			
monobutyltin	0.005 U	0.005 U								0.005 U	0.005 U	0.005 U	0.005 U			
tetrabutyltin	0.005 U	0.005 U								0.005 U	0.005 U	0.005 U	0.005 U			
tributyltin	0.005 U	0.005 U								0.005 U	0.005 U	0.025	0.005 U			

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R3	R4	R4	R4	R4	R4	R4	R4	R4	R4	RW002	RW003	RW004
Sample ID	PRC94SVL1064	PRC93SAB0056	PRC93SAB0057	PRC93SAB0058	PRC93SED0056	PRC93SED0057	PRC93SED0058	PRC94SVL1175	PRC94SVL1176	PRC94SVL1177	013-RWW-003	013-RWW-007	013-RWW-011
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	0 - 0.5	0 - 0.5	0 - 0.5
Sample Date	31-Mar-94	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	02-May-94	02-May-94	02-May-94	18-Feb-97	18-Feb-97	19-Feb-97
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	TtEMI 2004	TtEMI 2004	TtEMI 2004
2-methylphenol	110 U							80 U	83 U	85 U	400 U	430 U	260 U
4-methylphenol	110 U							80 U	83 U	85 U	400 U	430 U	260 U
naphthalene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
2-nitroaniline	550 U							390 U	410 U	420 U	980 U	1000 U	620 U
3-nitroaniline	550 U							390 U	410 U	420 U	980 U	1000 U	620 U
4-nitroaniline	550 U							390 U	410 U	420 U	980 U	1000 U	620 U
nitrobenzene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
4-nitrophenol	550 U							390 U	410 U	420 U	980 UJ	1000 UJ	620 UJ
2-nitrophenol	550 U							390 U	410 U	420 U	400 U	430 U	260 U
N-nitrosodiphenylamine	110 U							80 U	83 U	85 U	400 U	430 U	260 U
N-nitroso-di-n-propylamine	110 U							80 U	83 U	85 U	400 U	430 U	260 U
pentachlorophenol	550 U							390 U	410 U	420 U	980 U	1000 U	620 U
phenanthrene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
phenol	220 U							150 U	160 U	160 U	400 U	430 U	260 U
pyrene	180							80 U	83 U	85 U	400 U	430 U	260 U
1,2,4-trichlorobenzene	110 U							80 U	83 U	85 U	400 U	430 U	260 U
2,4,5-trichlorophenol	550 U							390 U	410 U	420 U	980 U	1000 U	620 U
2,4,6-trichlorophenol	550 U							390 U	410 U	420 U	400 U	430 U	260 U
Pesticides/Polychlorinated Biphenyls (µg/Kg)													
aldrin					0.6 U	0.6 U	0.6 U				2.1 U	2.2 U	1.3 U
Aroclor 1016					24 U	25 U	25 U				40 U	43 U	26 U
Aroclor 1221					49 U	49 U	49 U				82 U	88 U	52 U
Aroclor 1232					24 U	25 U	25 U				40 U	43 U	26 U
Aroclor 1242					24 U	25 U	25 U				40 U	43 U	26 U
Aroclor 1248					24 U	25 U	25 U				40 U	43 U	26 U
Aroclor 1254					24 U	25 U	25 U				65	75 J	26 U
Aroclor 1260					24 U	25 U	25 U				54	76	26 U
alpha-BHC					0.6 U	0.6 U	0.6 U				2.1 U	2.2 U	1.3 U
beta-BHC					61 U	62 U	62 U				2.1 U	1.6 J	1.3 U
delta-BHC					61 U	62 U	62 U				2.1 U	2.2 U	1.3 U
gamma-BHC (lindane)					0.6 U	0.6 U	0.6 U				2.1 U	2.2 U	1.3 U
alpha-chlordane					0.6 U	0.6 U	0.6 U				2.1 U	2.2 U	0.7 J
gamma-chlordane					0.6 U	0.6 U	0.6 U				2.6	2.8 J	0.7 J
4,4'-DDD					2.4 U	2.5 U	2.5 U				8	17	2.6 U
4,4'-DDE					2.4 U	2.5 U	2.5 U				5.1	7.6	2.6 U
4,4'-DDT					2.4 U	2.5 U	2.5 U				4 U	6.8 J	2.6 U
dieldrin					1.2 U	1.2 U	1.2 U				4 U	4.3 U	2.6 U
endosulfan I					1.2 U	1.2 U	1.2 U				2.1 U	4 J	1.3 U
endosulfan II					1.2 U	1.2 U	1.2 U				4 U	4.3 U	2.6 U
endosulfan sulfate					1.2 U	1.2 U	1.2 U				4 U	4.3 U	2.6 U
endrin					1.2 U	1.2 U	1.2 U				4 U	4.3 U	2.6 U
endrin aldehyde					2.4 U	2.5 U	2.5 U				4 U	13	2.6 U
endrin ketone					3 U	3.1 U	3.1 U				4 U	4.3 U	2.6 U
heptachlor					61 U	62 U	62 U				2.1 U	2.2 U	1.3 U
heptachlor epoxide					0.6 U	0.6 U	0.6 U				2.1 U	2.2 U	1.3 U
methoxychlor					1.2 U	1.2 U	1.2 U				21 U	22 U	13 U
toxaphene					49 U	49 U	49 U				210 U	220 U	130 U
Organotin (mg/Kg)													
dibutyltin					0.005 U	0.005 U	0.005 U				0.003 U	0.004 U	0.002 U
monobutyltin					0.005 U	0.005 U	0.005 U				0.003 U	0.003 U	
tetrabutyltin					0.005 U	0.005 U	0.005 U				0.004 U	0.005 U	0.002 U
tributyltin					0.005 U	0.005 U	0.005 U				0.004 U	0.004 U	0.002 U

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R1	R2	R2	R2	R2
Sample ID	PRC93SAB0039	PRC93SAB0040	PRC93SAB0041	PRC93SAB0044	PRC93SED0039	PRC93SED0040	PRC93SED0041	PRC93SED0044	PRC94SVL0119	PRC94SVL0120	PRC94SVL0121	PRC93SAB0045	PRC93SAB0046	PRC93SAB0047	PRC93SED0045
Sample Type	REG	REG	REG	FD	REG	REG	REG	FD	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sample Date	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	14-Apr-93	07-Apr-94	07-Apr-94	07-Apr-94	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC
Metals (mg/Kg)															
antimony					1 U	1 U	1 U	1 U							1 U
arsenic					2.2	2.9	2.9	2.3							3.6
beryllium					0.25 U	0.25 U	0.25 U	0.25 U							0.25 U
cadmium					0.25 U	0.25 U	0.25 U	0.25 U							0.25 U
chromium					55	80	74	58							83
copper					7.6	9.3	9.8	7.2							12
lead					8.4	13	18	11							15
mercury					0.05	0.09	0.09	0.05							0.14
nickel					38	42	42	35							49
selenium					0.25 U	0.25 U	0.25 U	0.25 U							0.25 U
silver					0.5 U	0.5 U	0.5 U	0.5 U							0.5 U
thallium					0.5 U	0.5 J	0.5 J	0.5 J							0.5 U
zinc					29	48	49	32							62
Radionuclide (PCI/L)															
total gross alpha	1 U	1.2	2	2								1.6	1 U	1.3	
total gross beta	3	1.4	2	1								2.5	4	1.8	

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**	**25**
WBZ	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**	**SEDIMENT**
Station ID	**R2**	**R2**	**R2**	**R2**	**R2**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**	**R3**
Sample ID	**PRC93SED0046**	**PRC93SED0047**	**PRC94SVL0122**	**PRC94SVL0123**	**PRC94SVL0124**	**PRC93SAB0050**	**PRC93SAB0051**	**PRC93SAB0052**	**PRC93SAB0055**	**PRC93SED0050**	**PRC93SED0051**	**PRC93SED0052**	**PRC93SED0055**	**PRC94SVL1061**	**PRC94SVL1062**	**PRC94SVL1063**
Sample Type	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**REG**	**FD**	**REG**	**REG**	**REG**	**FD**	**REG**	**FD**	**REG**
Depth Interval (feet bgs)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Sample Date	**13-Apr-93**	**13-Apr-93**	**07-Apr-94**	**07-Apr-94**	**07-Apr-94**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**14-Apr-93**	**31-Mar-94**	**31-Mar-94**	**31-Mar-94**
Reference	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**	**PRC**
Metals (mg/Kg)																
antimony	1 U	1 U								1 U	1 U	1 U	1 U			
arsenic	3.2	2.7								7.6	8.4	12	13			
beryllium	0.25 U	0.25 U								0.48	0.51	0.51	0.59			
cadmium	0.25 U	0.25 U								1.3	0.68	0.62	0.87			
chromium	72	64								150	150	150	150			
copper	12	8.1								51	45	46	40			
lead	13	12								52	30	45	51			
mercury	0.14	0.06								0.52	0.51	0.53	0.56			
nickel	48	38								110	100	110	110			
selenium	0.25 U	0.25 U								0.26	0.28	0.31	0.28			
silver	0.5 U	1.6								1.3	0.5 U	0.5 U	0.5 U			
thallium	0.5 U	0.5 U								0.5 U	0.5 U	0.5 U	0.5 U			
zinc	60	46								190	180	180	170			
Radionuclide (PCI/L)																
total gross alpha						1.5	3	1 U	1 U							
total gross beta						6	6.8	0.8	6							

Table A1-4c
Sediment Samples, FED-2B EBS 25 Sediment
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

EBS Parcel	25	25	25	25	25	25	25	25	25	25	25	25	25
WBZ	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT	SEDIMENT
Station ID	R3	R4	R4	R4	R4	R4	R4	R4	R4	R4	RW002	RW003	RW004
Sample ID	PRC94SVL1064	PRC93SAB0056	PRC93SAB0057	PRC93SAB0058	PRC93SED0056	PRC93SED0057	PRC93SED0058	PRC94SVL1175	PRC94SVL1176	PRC94SVL1177	013-RWW-003	013-RWW-007	013-RWW-011
Sample Type	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG	REG
Depth Interval (feet bgs)	-	-	-	-	-	-	-	-	-	-	0 - 0.5	0 - 0.5	0 - 0.5
Sample Date	31-Mar-94	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	13-Apr-93	02-May-94	02-May-94	02-May-94	18-Feb-97	18-Feb-97	19-Feb-97
Reference	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	PRC	TtEMI 2004	TtEMI 2004	TtEMI 2004
Metals (mg/Kg)													
antimony					1 U	1 U	1 U						
arsenic					2.6	1.9	2						
beryllium					0.25 U	0.25 U	0.25 U						
cadmium					0.25 U	0.25 U	0.25 U						
chromium					57	49	56						
copper					6.7	4.8	5.7						
lead					13	9.7	9.8						
mercury					0.07	0.05	0.13						
nickel					33	31	33						
selenium					0.25 U	0.25 U	0.25 U						
silver					0.5 U	0.5 U	0.5 U						
thallium					0.5 U	0.5 U	0.5 U						
zinc					47	43	43						
Radionuclide (PCI/L)													
total gross alpha		1 U	2.8	1 U									
total gross beta		1.3	6	1.2									

Note:
* blank indicates sample not analyzed for a particular compound
Acronyms/Abbreviations:
bgs – below ground surface
BHC – benzene hexachloride
DDD – dichlorodiphenyldichloroethane
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
ID – identification
EBS – environmental baseline survey
FD – field duplicate
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
REG – regular
Review Qualifiers:
J – indicates an estimated value
U – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated detection limit; the detection limit, in this case, is an estimated value

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**8,700,000**	**560**	**1,100**	**3,300**	**240,000**	**5**	**22,000**	**62,000**	**34**	**5.4**	**1,900,000**	**430**	**890**	**780,000**	**NE**	**2,400**	**28,000,000**	**210,000**	**5,300,000**
Industrial Regional Screening Levels [b]				**38,000,000**	**2,800**	**5,300**	**17,000**	**1,100,000**	**95**	**99,000**	**260,000**	**170**	**69**	**9,800,000**	**2,200**	**4,500**	**10,000,000**	**NE**	**12,000**	**200,000,000**	**1,400,000**	**53,000,000**
Residential ESLs [c]				**98,000**	**9.1**	**32**	**320**	**8,900**	**NE**	**380**	**NE**	**7.3**	**NE**	**8,900**	**25**	**51**	**NE**	**NE**	**46**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**230,000**	**25**	**89**	**890**	**21,000**	**NE**	**1,000**	**NE**	**20**	**NE**	**21,000**	**70**	**140**	**NE**	**NE**	**130**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1a																					
AP1A259-DP01	03/31/10	0-0.5	N	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (2.01)	ND (3.62)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (10.1)	ND (10.1)	ND (10.1)
	03/31/10	1.75-2.25	N	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (2.03)	ND (3.65)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (10.1)	ND (10.1)	ND (10.1)
AP1A259-DP03	03/31/10	0-0.5	N	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (2.04)	ND (3.66)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (10.2)	ND (10.2)	ND (10.2)
	03/31/10	0-0.5	FD	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	0.387 J	ND (1.93)	ND (3.47)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (9.63)	ND (9.63)	ND (9.63)
	03/31/10	2.25-2.75	N	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (2.33)	ND (4.2)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (11.7)	ND (11.7)	ND (11.7)
AP1A259-DP04	03/31/10	0-0.5	N	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	0.254 J	0.524 J	ND (1.77) J	ND (3.18) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (8.84) J	ND (8.84) J	ND (8.84) J
	03/31/10	1.25-1.75	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (2.02)	ND (3.63)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (10.1)	ND (10.1)	ND (10.1)
AP1AAPS-DP01	04/06/10	0-0.75	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (10.1)	ND (10.1)	ND (10.1)
	04/06/10	0-0.75	FD	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (10.7)	ND (10.7)	ND (10.7)
	04/06/10	0.75-1.25	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (10.9)	ND (10.9)	ND (10.9)
AP1AAPS-DP02	04/06/10	0-0.75	N	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68) J	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (11.4)	ND (11.4)	ND (11.4)
	04/06/10	0.75-1.25	N	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (11.5)	ND (11.5)	ND (11.5)
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (2.25) J	ND (4.05) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (11.3) J	ND (11.3) J	ND (11.3) J
AP1AAPS-DP04	04/12/10	0-0.5	N	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83) J	ND (5.83)	ND (2.33)	ND (4.19)	ND (5.83) J	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83) J	ND (5.83) J	ND (11.7)	ND (11.7)	ND (11.7)
	04/12/10	1.5-2	N	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (2.09)	ND (3.76)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (10.5)	ND (10.5)	ND (10.5)
	04/12/10	3.5-4	N	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (1.99)	ND (3.58)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (9.95)	ND (9.95)	ND (9.95)
AP1AAPS-DP05	04/09/10	0-1	N	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99) J	5.78 J	ND (2)	ND (3.59)	ND (4.99) J	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99) J	ND (9.98)	ND (9.98)	ND (9.98)
	04/09/10	2-3	N	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (2.19)	ND (3.94)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (10.9)	ND (10.9)	ND (10.9)
	04/09/10	2-3	FD	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (2.07)	ND (3.72)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (10.3)	ND (10.3)	ND (10.3)
AP1AAPS-DP06	04/12/10	0-0.5	N	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (2.06)	ND (3.72)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (10.3)	ND (10.3)	ND (10.3)
	04/12/10	1-1.5	N	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (1.99)	ND (3.58)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (9.95)	ND (9.95)	ND (9.95)
	04/12/10	2-2.5	N	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (1.98)	ND (3.57)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (9.91)	ND (9.91)	ND (9.91)
AP1AAPS-DP07	04/12/10	0-0.5	N	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92) J	ND (4.92)	ND (1.97)	ND (3.55)	ND (4.92) J	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (9.85)	ND (9.85)	ND (9.85)
	04/12/10	1.5-2	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (2.02)	ND (3.63)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (10.1)	ND (10.1)	ND (10.1)
AP1AAPS-DP08	04/12/10	0-0.5	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (2.05)	ND (3.69)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (10.2)	ND (10.2)	ND (10.2)
	04/12/10	1.5-2	N	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (101)	ND (182)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (506)	ND (506)	ND (506)
AP1AAPS-DP09	04/12/10	0-0.5	N	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (2.1)	ND (3.79)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (10.5)	ND (10.5)	ND (10.5)
	04/12/10	1.5-2	N	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (1.94)	ND (3.5)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (9.71)	ND (9.71)	ND (9.71)
AP1AAPS-DP10	04/06/10	0-0.5	N	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (2.31)	ND (4.16)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (11.6)	ND (11.6)	ND (11.6)
	04/06/10	2-2.5	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (10.8)	ND (10.8)	ND (10.8)
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (10.7)	ND (10.7)	ND (10.7)
	04/06/10	1.5-2	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (10.9)	ND (10.9)	ND (10.9)
AP1AAPS-DP12	04/07/10	0-0.75	N	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (104)	ND (188)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (522)	ND (522)	ND (522)
	04/07/10	0-0.75	FD	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (104)	ND (188)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (521)	ND (521)	ND (521)
	04/07/10	1.5-2	N	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (2.25)	ND (4.05)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (11.3)	ND (11.3)	ND (11.3)
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (2.1)	ND (3.79)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (10.5)	ND (10.5)	ND (10.5)
	04/01/10	3.25-3.75	N	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (10.2)	ND (10.2)	ND (10.2)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**8,700,000**	**560**	**1,100**	**3,300**	**240,000**	**5**	**22,000**	**62,000**	**34**	**5.4**	**1,900,000**	**430**	**890**	**780,000**	**NE**	**2,400**	**28,000,000**	**210,000**	**5,300,000**
Industrial Regional Screening Levels [b]				**38,000,000**	**2,800**	**5,300**	**17,000**	**1,100,000**	**95**	**99,000**	**260,000**	**170**	**69**	**9,800,000**	**2,200**	**4,500**	**10,000,000**	**NE**	**12,000**	**200,000,000**	**1,400,000**	**53,000,000**
Residential ESLs [c]				**98,000**	**9.1**	**32**	**320**	**8,900**	**NE**	**380**	**NE**	**7.3**	**NE**	**8,900**	**25**	**51**	**NE**	**NE**	**46**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**230,000**	**25**	**89**	**890**	**21,000**	**NE**	**1,000**	**NE**	**20**	**NE**	**21,000**	**70**	**140**	**NE**	**NE**	**130**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1a																					
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	0.457 J	ND (2.18)	ND (3.93)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (10.9)	ND (10.9)	ND (10.9)
	04/01/10	3.5-4	N	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (1.82)	ND (3.28)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (9.1)	ND (9.1)	ND (9.1)
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (2.17)	ND (3.9)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (10.8)	ND (10.8)	ND (10.8)
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (2.55)	ND (4.59)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (12.8)	ND (12.8)	ND (12.8)
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (1.12)	ND (2.01)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (5.58)	ND (5.58)	ND (5.58)
AP1AAPS-DP18	03/31/10	0-0.5	N	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (2.31)	ND (4.16)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (11.6)	ND (11.6)	ND (11.6)
	03/31/10	1.5-2	N	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (2.51)	ND (4.53)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (12.6)	ND (12.6)	ND (12.6)
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (1.98) J	ND (3.56) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (9.88) J	ND (9.88) J	ND (9.88) J
	04/02/10	3.5-4	N	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (2.16) J	ND (3.89) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (10.8) J	ND (10.8) J	ND (10.8) J
AP1AAPS-DP20	04/05/10	0-0.5	N	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (9.8)	ND (9.8)	ND (9.8)
	04/05/10	3.5-4	N	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (2.42)	ND (4.36)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (12.1)	ND (12.1)	ND (12.1)
	04/05/10	5-5.5	N	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (2.13)	ND (3.83)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (10.6)	ND (10.6)	ND (10.6)
AP1AAPS-DP21	04/02/10	0-0.5	N	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (1.38) J	ND (2.48) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (6.89) J	ND (6.89) J	ND (6.89) J
	04/02/10	3.5-4	N	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (2.08) J	ND (3.74) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (10.4) J	ND (10.4) J	ND (10.4) J
AP1AAPS-DP22	04/02/10	0.5-1.5	N	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	59.2 J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	17.3 J	ND (4.97) J	ND (4.97) J	2.37 J	ND (9.93) J	ND (9.93) J
	04/02/10	0.5-1.5	FD	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	68.4 J	ND (1.87) J	ND (3.36) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	20.2 J	ND (4.67) J	ND (4.67) J	ND (9.34) J	ND (9.34) J	ND (9.34) J
	04/02/10	1.75-2.25	N	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (2.09) J	ND (3.76) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (10.4) J	ND (10.4) J	ND (10.4) J
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	0.445 J	ND (1.96) J	ND (3.53) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (9.8) J	ND (9.8) J	ND (9.8) J
	04/05/10	3.5-4	N	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (2.35)	ND (4.24)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (11.8)	ND (11.8)	ND (11.8)
AP1AAPS-DP24	04/02/10	0-0.5	N	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (2.07) J	ND (3.73) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (10.4) J	ND (10.4) J	ND (10.4) J
	04/02/10	3.5-4	N	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (2.22) J	ND (3.99) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (11.1) J	ND (11.1) J	ND (11.1) J
AP1AAPS-DP25	04/05/10	0-0.5	N	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (1.93)	ND (3.47)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (9.63)	ND (9.63)	ND (9.63)
	04/05/10	6.5-7	N	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (2.22)	ND (4)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (11.1)	ND (11.1)	ND (11.1)
	04/05/10	6.5-7	FD	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (2.37)	ND (4.26)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (11.8)	ND (11.8)	ND (11.8)
AP1AAPS-DP26	04/05/10	0-0.5	N	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	0.399 J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (11.4) J	ND (11.4) J	ND (11.4) J
	04/05/10	3-3.5	N	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (11.3)	ND (11.3)	ND (11.3)
AP1AAPS-DP27	04/05/10	0-0.5	N	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	1.15 J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	0.681 J	ND (5.74) J	ND (5.74) J	ND (11.5) J	ND (11.5) J	ND (11.5) J
	04/05/10	3.5-4	N	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (10.7)	ND (10.7)	ND (10.7)
	04/05/10	5.5-6	N	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (10.3)	ND (10.3)	ND (10.3)
AP1AAPS-DP28	04/05/10	0-0.5	N	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (11.6)	ND (11.6)	ND (11.6)
	04/05/10	3.5-4	N	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (10.2)	ND (10.2)	ND (10.2)
AP1AAPS-DP30	04/30/10	0-0.5	N	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (1.91) J	ND (3.44) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (9.56) J	ND (9.56) J	ND (9.56) J
	04/30/10	0.5-1	N	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (1.85) J	ND (3.32) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (9.23) J	ND (9.23) J	ND (9.23) J
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (2) J	ND (3.6) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (9.99) J	ND (9.99) J	ND (9.99) J
	04/30/10	0.5-1	N	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (1.77) J	ND (3.18) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (8.83) J	ND (8.83) J	ND (8.83) J
AP1AAPS-DP80	05/04/10	0-0.5	N	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (2.26) J	ND (4.07) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (11.3) J	ND (11.3) J	ND (11.3) J
	05/04/10	0.5-1	N	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (2.24) J	ND (4.04) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (11.2) J	ND (11.2) J	ND (11.2) J

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**8,700,000**	**560**	**1,100**	**3,300**	**240,000**	**5**	**22,000**	**62,000**	**34**	**5.4**	**1,900,000**	**430**	**890**	**780,000**	**NE**	**2,400**	**28,000,000**	**210,000**	**5,300,000**
Industrial Regional Screening Levels [b]				**38,000,000**	**2,800**	**5,300**	**17,000**	**1,100,000**	**95**	**99,000**	**260,000**	**170**	**69**	**9,800,000**	**2,200**	**4,500**	**10,000,000**	**NE**	**12,000**	**200,000,000**	**1,400,000**	**53,000,000**
Residential ESLs [c]				**98,000**	**9.1**	**32**	**320**	**8,900**	**NE**	**380**	**NE**	**7.3**	**NE**	**8,900**	**25**	**51**	**NE**	**NE**	**46**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**230,000**	**25**	**89**	**890**	**21,000**	**NE**	**1,000**	**NE**	**20**	**NE**	**21,000**	**70**	**140**	**NE**	**NE**	**130**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1a																					
AP1AAPS-DP81	05/04/10	0-0.5	N	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (2.26) J	ND (4.08) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (11.3) J	ND (11.3) J	ND (11.3) J
	05/04/10	0.5-1	N	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (2.26) J	ND (4.07) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (11.3) J	ND (11.3) J	ND (11.3) J
AP1AAPS-DP82	05/05/10	0-0.5	N	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (1.75) J	ND (3.14) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (8.73) J	ND (8.73) J	ND (8.73) J
	05/04/10	0.5-1	N	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (2.11) J	ND (3.81) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (10.6) J	ND (10.6) J	ND (10.6) J
AP1AAPS-DP83	05/05/10	0-0.5	N	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (2.12) J	ND (3.82) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (10.6) J	ND (10.6) J	ND (10.6) J
	05/05/10	3.5-4	N	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (2.22) J	ND (3.99) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (11.1) J	ND (11.1) J	ND (11.1) J
AP1AAPS-DP84	05/05/10	0-0.5	N	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (1.9)	ND (3.42)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (9.49)	ND (9.49)	ND (9.49)
	05/05/10	1.5-2	N	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (2.21)	ND (3.98)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (11.1)	ND (11.1)	ND (11.1)
AP1AFTA-DP01	04/08/10	0-0.5	N	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	0.262 J	0.637 J	ND (1.83) J	ND (3.3) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	0.589 J	ND (4.59) J	ND (4.59) J	ND (9.17) J	ND (9.17) J	ND (9.17) J
	04/08/10	1.5-2	N	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (1.17)	ND (2.1)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (5.84)	ND (5.84)	ND (5.84)
AP1AFTA-DP02	04/08/10	0-0.5	N	ND (4.74) J	*	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	0.355 J	0.456 J	ND (1.9) J	*	*	ND (4.74) J	ND (4.74) J	*	*	*	ND (9.49) J	ND (9.49) J	ND (9.49) J
	04/08/10	1.5-2	N	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (1.22)	ND (2.2)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (6.1)	ND (6.1)	ND (6.1)
AP1AFTA-DP03	04/08/10	0-0.5	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (2.3)	ND (4.14)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (11.5)	ND (11.5)	ND (11.5)
	04/08/10	0-0.5	FD	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (2.39)	ND (4.31)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (12)	ND (12)	ND (12)
	04/08/10	1.5-2	N	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (1.92)	ND (3.45)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (9.59)	ND (9.59)	ND (9.59)
AP1AFTA-DP04	04/08/10	0-0.5	N	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (2.23)	ND (4.01)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (11.1)	ND (11.1)	ND (11.1)
	04/08/10	3.5-4	N	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (1.05)	ND (1.89)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (5.24)	ND (5.24)	ND (5.24)
AP1AFTA-DP05	04/09/10	0-0.5	N	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (3.1)	ND (5.58)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (15.5)	ND (15.5)	ND (15.5)
	04/09/10	3.5-4	N	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (1.85)	ND (3.33)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (9.24)	ND (9.24)	ND (9.24)
AP1AFTA-DP06	04/07/10	0-0.5	N	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (9.65)	ND (9.65)	ND (9.65)
	04/07/10	3.5-4	N	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (11.3)	ND (11.3)	ND (11.3)
	04/07/10	3.5-4	FD	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (7.52)	ND (7.52)	ND (7.52)
AP1AFTA-DP07	04/07/10	0-0.5	N	ND (5.95)	ND (5.95) J	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	0.222 J	ND (5.95) J	ND (2.38)	ND (4.28) J	ND (5.95) J	ND (5.95)	ND (5.95)	ND (5.95) J	ND (5.95) J	ND (5.95) J	ND (11.9)	ND (11.9)	ND (11.9)
	04/07/10	3.5-4	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (11.5)	ND (11.5)	ND (11.5)
AP1AFTA-DP08	04/09/10	0-0.5	N	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17) J	ND (6.17)	ND (2.47)	ND (4.45)	ND (6.17) J	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17) J	ND (6.17) J	40.5 J	ND (12.3)	ND (12.3)
	04/09/10	1.5-2	N	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (2)	ND (3.59)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	103	ND (9.98)	ND (9.98)
AP1AFTA-DP09	04/07/10	0-0.5	N	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	4.64 J	ND (12.5)	ND (12.5)
	04/07/10	1.5-2	N	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (8.64)	ND (8.64)	ND (8.64)
	04/07/10	1.5-2	FD	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (12.6)	ND (12.6)	ND (12.6)
AP1AFTA-DP10	04/07/10	0-0.5	N	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	549	ND (58.1)	ND (105)	ND (145)	ND (145)	ND (145)	164	ND (145)	ND (145)	ND (291)	ND (291)	ND (291)
	04/07/10	1.5-2	N	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (2.07)	ND (3.73)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (10.4)	ND (10.4)	ND (10.4)
AP1AFTA-DP11	04/06/10	0-0.5	N	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (9.95)	ND (9.95)	ND (9.95)
	04/06/10	2-2.5	N	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (8.57)	ND (8.57)	ND (8.57)
AP1AFTA-DP12	04/06/10	0-0.5	N	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (1.8) J	ND (3.24) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (9.01) J	ND (9.01) J	ND (9.01) J
AP1AFTA-DP13	04/06/10	0-0.5	N	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (1.87)	ND (3.36)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	8.34 J	2.37 J	ND (9.34)
	04/06/10	0-0.5	FD	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (2.29)	ND (4.12)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	8.08 J	2.93 J	ND (11.4)
AP1AFTA-DP14	04/08/10	0-0.5	N	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (3.28)	ND (5.91)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (16.4)	ND (16.4)	ND (16.4)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**8,700,000**	**560**	**1,100**	**3,300**	**240,000**	**5**	**22,000**	**62,000**	**34**	**5.4**	**1,900,000**	**430**	**890**	**780,000**	**NE**	**2,400**	**28,000,000**	**210,000**	**5,300,000**
Industrial Regional Screening Levels [b]				**38,000,000**	**2,800**	**5,300**	**17,000**	**1,100,000**	**95**	**99,000**	**260,000**	**170**	**69**	**9,800,000**	**2,200**	**4,500**	**10,000,000**	**NE**	**12,000**	**200,000,000**	**1,400,000**	**53,000,000**
Residential ESLs [c]				**98,000**	**9.1**	**32**	**320**	**8,900**	**NE**	**380**	**NE**	**7.3**	**NE**	**8,900**	**25**	**51**	**NE**	**NE**	**46**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**230,000**	**25**	**89**	**890**	**21,000**	**NE**	**1,000**	**NE**	**20**	**NE**	**21,000**	**70**	**140**	**NE**	**NE**	**130**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1a																					
AP1AFTA-DP15	03/30/10	0-0.5	N	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (1.83)	ND (3.3)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (9.17)	ND (9.17)	ND (9.17)
	03/30/10	3.5-4	N	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (1.56)	ND (2.81)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (7.81)	ND (7.81)	ND (7.81)
AP1AFTA-DP16	04/08/10	0-0.5	N	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (1.13)	ND (2.04)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (5.66)	ND (5.66)	ND (5.66)
	03/30/10	1.5-2	N	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (1.66)	ND (2.99)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (8.3)	ND (8.3)	ND (8.3)
	03/30/10	1.5-2	FD	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (1.39)	ND (2.5)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (6.94)	ND (6.94)	ND (6.94)
AP1AFTA-DP17	03/30/10	0-0.5	N	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (2.01)	ND (3.62)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	29.3	ND (10)	ND (10)
	03/30/10	1.5-2	N	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (1.35)	ND (2.43)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (6.75)	ND (6.75)	ND (6.75)
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (2.14)	ND (3.86)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (10.7)	ND (10.7)	ND (10.7)
	03/30/10	3.5-4	N	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (2.03)	ND (3.65)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (10.1)	ND (10.1)	ND (10.1)
	03/30/10	4.5-5	N	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (2.18)	ND (3.93)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (10.9)	ND (10.9)	ND (10.9)
AP1AFTA-DP19	03/30/10	0-0.5	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (2.02)	ND (3.63)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (10.1)	ND (10.1)	ND (10.1)
	03/30/10	3.5-4	N	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (2)	ND (3.6)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (10)	ND (10)	ND (10)
	03/30/10	5.5-6	N	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87)	ND (4.87) J	ND (1.95) J	ND (3.51) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (9.75) J	ND (9.75) J	ND (9.75) J
	03/30/10	5.5-6	FD	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (2.25)	ND (4.04)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (11.2)	ND (11.2)	ND (11.2)
AP1AFTA-DP20	03/25/10	0-0.5	N	ND (4.81) J	*	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	*	1.72 J	ND (1.93) J	*	*	ND (4.81) J	ND (4.81) J	0.79 J	*	*	ND (9.63) J	ND (9.63) J	ND (9.63) J
	03/25/10	3.5-4	N	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (2.9)	ND (5.23)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (14.5)	ND (14.5)	ND (14.5)
	03/25/10	7.5-8	N	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (2.15)	ND (3.87)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (10.7)	ND (10.7)	ND (10.7)
AP1AFTA-DP21	03/25/10	0-0.5	N	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (1.98)	ND (3.56)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (9.9)	ND (9.9)	ND (9.9)
	03/25/10	3-3.5	N	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (2.12)	ND (3.81)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (10.6)	ND (10.6)	ND (10.6)
	03/25/10	7.5-8	N	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (2.24)	ND (4.04)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (11.2)	ND (11.2)	ND (11.2)
AP1AFTA-DP23	03/24/10	0-0.5	N	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42)	0.676 J	ND (2.17) J	ND (3.9) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (10.8) J	ND (10.8) J	ND (10.8) J
	03/24/10	0-0.5	FD	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	1.63 J	ND (2.01) J	ND (3.62) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (9.77) J	ND (9.77) J	ND (9.77) J
	03/24/10	2.5-3	N	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (2.22)	ND (3.99)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (9.6)	ND (9.6)	ND (9.6)
	03/24/10	7.5-8	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (2.05)	ND (3.69)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (8.36)	ND (8.36)	ND (8.36)
AP1AFTA-DP24	03/24/10	0-0.5	N	ND (30.5)	ND (30.5) J	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5) J	3.85 J	ND (12.2)	ND (22) J	ND (30.5) J	ND (30.5)	ND (30.5)	ND (30.5) J	ND (30.5) J	ND (30.5) J	ND (61.1)	ND (61.1)	ND (61.1)
	03/24/10	2-2.5	N	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (1.96)	ND (3.53)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (9.81)	ND (9.81)	ND (9.81)
	03/24/10	7.5-8	N	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (2.21)	ND (3.97)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (8.85)	ND (8.85)	ND (8.85)
AP1AFTA-DP25	03/24/10	0-0.5	N	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	1.67 J	ND (2) J	ND (3.59) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	0.757 J	ND (4.99) J	ND (4.99) J	ND (9.98) J	ND (9.98) J	ND (9.98) J
	03/24/10	2.5-3	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (2.3)	ND (4.14)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (9.77)	ND (9.77)	ND (9.77)
	03/24/10	7.5-8	N	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (1.94)	ND (3.48)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (9.68)	ND (9.68)	ND (9.68)
AP1AFTA-DP26	03/24/10	0-0.5	N	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (1.94)	ND (3.49)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (9.7)	ND (9.7)	ND (9.7)
	03/24/10	1.5-2.5	N	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (1.94)	ND (3.49)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (9.7)	ND (9.7)	ND (9.7)
	03/24/10	1.5-2.5	FD	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (2.25)	ND (4.05)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (9.8)	ND (9.8)	ND (9.8)
	03/24/10	7.5-8	N	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (2.19)	ND (3.94)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (9.12)	ND (9.12)	ND (9.12)
AP1AFTA-DP27	03/24/10	0-0.5	N	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	0.461 J	ND (2.13) J	3.83 J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (10.6) J	ND (10.6) J	ND (10.6) J
	03/24/10	1.5-2	N	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (2.32)	ND (4.18)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (11.6)	ND (11.6)	ND (11.6)
	03/24/10	7.5-8	N	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (2.07)	ND (3.72)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (8.43)	ND (8.43)	ND (8.43)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**8,700,000**	**560**	**1,100**	**3,300**	**240,000**	**5**	**22,000**	**62,000**	**34**	**5.4**	**1,900,000**	**430**	**890**	**780,000**	**NE**	**2,400**	**28,000,000**	**210,000**	**5,300,000**
Industrial Regional Screening Levels [b]				**38,000,000**	**2,800**	**5,300**	**17,000**	**1,100,000**	**95**	**99,000**	**260,000**	**170**	**69**	**9,800,000**	**2,200**	**4,500**	**10,000,000**	**NE**	**12,000**	**200,000,000**	**1,400,000**	**53,000,000**
Residential ESLs [c]				**98,000**	**9.1**	**32**	**320**	**8,900**	**NE**	**380**	**NE**	**7.3**	**NE**	**8,900**	**25**	**51**	**NE**	**NE**	**46**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**230,000**	**25**	**89**	**890**	**21,000**	**NE**	**1,000**	**NE**	**20**	**NE**	**21,000**	**70**	**140**	**NE**	**NE**	**130**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1a																					
AP1AFTA-DP28	03/25/10	0-0.5	N	ND (2.47) J	*	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	*	3.13 J	ND (0.99) J	*	*	ND (2.47) J	ND (2.47) J	1.33 J	*	0.323 J	*	ND (4.95) J	0.506 J
	03/25/10	2-2.5	N	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (1.36)	ND (2.45)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (6.8)	ND (6.8)	ND (6.8)
	03/25/10	7.5-8	N	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	0.231 J	ND (1.25)	ND (2.25)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (6.25)	ND (6.25)	ND (6.25)
AP1AFTA-DP29	03/25/10	0-0.5	N	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (1.05)	ND (1.89)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (5.25)	ND (5.25)	ND (5.25)
	03/25/10	1.5-2	N	ND (3.6) J	*	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	*	0.261 J	ND (1.44) J	*	*	ND (3.6) J	ND (3.6) J	*	*	*	ND (7.2) J	ND (7.2) J	ND (7.2) J
	03/25/10	7.5-8	N	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (1.62)	ND (2.92)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (8.12)	ND (8.12)	ND (8.12)
	03/25/10	7.5-8	FD	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (1.4)	ND (2.52)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (7.01)	ND (7.01)	ND (7.01)
AP1AFTA-DP30	04/05/10	0-0.5	N	ND (3.5) J	*	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	*	0.484 J	ND (3.5) J	*	*	ND (3.5) J	ND (3.5) J	*	*	*	ND (7) J	ND (7) J	ND (7) J
AP1AFTA-DP31	03/25/10	0-0.5	N	ND (2.87) J	*	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	0.124 J	*	ND (1.15) J	*	*	ND (2.87) J	ND (2.87) J	*	*	*	ND (5.74) J	ND (5.74) J	ND (5.74) J
	03/25/10	2-2.5	N	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (1.13)	ND (2.04)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (5.66)	ND (5.66)	ND (5.66)
	03/25/10	7.5-8	N	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (1.19)	ND (2.14)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (5.94)	ND (5.94)	ND (5.94)
AP1AFTA-DP32	03/25/10	0-0.5	N	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (1.92) J	ND (3.45) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (9.58) J	ND (9.58) J	ND (9.58) J
	03/25/10	1.5-2	N	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (2.34)	ND (4.2)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (11.7)	ND (11.7)	ND (11.7)
	03/25/10	7.5-8	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (2.17)	ND (3.91)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (10.9)	ND (10.9)	ND (10.9)
AP1AFTA-DP33	03/25/10	0-0.5	N	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (1.28)	ND (2.3)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (6.38)	ND (6.38)	ND (6.38)
	03/25/10	0-0.5	FD	ND (4.84)	ND (4.84) J	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84) J	ND (4.84) J	ND (1.93)	ND (3.48) J	ND (4.84) J	ND (4.84)	ND (4.84)	ND (4.84) J	ND (4.84) J	ND (4.84) J	ND (9.67)	ND (9.67)	ND (9.67)
	03/25/10	1.75-2.25	N	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (1.27)	ND (2.29)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (6.37)	ND (6.37)	ND (6.37)
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (1.7)	ND (3.06)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (8.51)	ND (8.51)	ND (8.51)
	03/25/10	1.75-2.25	N	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (1.17)	ND (2.11)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (5.87)	ND (5.87)	ND (5.87)
AP1AFTA-DP35	03/26/10	0-0.5	N	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (1.81)	ND (3.27)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (9.07)	ND (9.07)	ND (9.07)
	04/07/10	3.5-4	N	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (108)	ND (194)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (539)	ND (539)	ND (539)
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (2.08) J	ND (3.75) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (10.4) J	ND (10.4) J	ND (10.4) J
	04/08/10	2.5-3	N	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (2.23)	ND (4.02)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (11.2)	ND (11.2)	ND (11.2)
	04/08/10	2.5-3	FD	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (2.3)	ND (4.14)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (11.5)	ND (11.5)	ND (11.5)
AP1AW467B-DP02	04/08/10	0-1	N	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73) J	ND (5.73) J	ND (2.29)	ND (4.12)	ND (5.73) J	ND (5.73)	ND (5.73)	ND (5.73) J	ND (5.73) J	ND (5.73) J	ND (11.5)	ND (11.5)	ND (11.5)
	04/08/10	3.5-4	N	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (1.1)	ND (1.98)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (5.49)	ND (5.49)	ND (5.49)
	04/08/10	4.75-5.25	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (2.17)	ND (3.91)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (10.9)	ND (10.9)	ND (10.9)
AP1AW483A-DP01	03/30/10	0-0.5	N	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (2.12)	ND (3.82)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (10.6)	ND (10.6)	ND (10.6)
	03/30/10	3.5-4	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (2.17)	ND (3.91)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (10.9)	ND (10.9)	ND (10.9)
AP1AW483A-DP02	03/30/10	0-1	N	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (2.34)	ND (4.22)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (11.7)	ND (11.7)	ND (11.7)
	03/30/10	3.5-4.5	N	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (2.16)	ND (3.88)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (10.8)	ND (10.8)	ND (10.8)
	03/30/10	3.5-4.5	FD	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (2.26)	ND (4.06)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (11.3)	ND (11.3)	ND (11.3)
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	0.323 J	0.542 J	ND (2.32) J	ND (4.17) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (11.6) J	ND (11.6) J	ND (11.6) J
	03/31/10	3-3.5	N	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (2.03)	ND (3.66)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (10.2)	ND (10.2)	ND (10.2)
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (1.61)	ND (2.89)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (8.04)	ND (8.04)	ND (8.04)
	03/31/10	3.25-3.75	N	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (2.1)	ND (3.77)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (10.5)	ND (10.5)	ND (10.5)
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (4.69) J	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69) J	ND (4.69) J	ND (1.88)	ND (3.38)	ND (4.69) J	ND (4.69)	ND (4.69)	ND (4.69) J	ND (4.69) J	ND (4.69) J	ND (9.38)	ND (9.38) J	ND (9.38)
	04/12/10	2.5-3	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (2.17)	ND (3.91)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (10.9)	ND (10.9)	ND (10.9)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**8,700,000**	**560**	**1,100**	**3,300**	**240,000**	**5**	**22,000**	**62,000**	**34**	**5.4**	**1,900,000**	**430**	**890**	**780,000**	**NE**	**2,400**	**28,000,000**	**210,000**	**5,300,000**
Industrial Regional Screening Levels [b]				**38,000,000**	**2,800**	**5,300**	**17,000**	**1,100,000**	**95**	**99,000**	**260,000**	**170**	**69**	**9,800,000**	**2,200**	**4,500**	**10,000,000**	**NE**	**12,000**	**200,000,000**	**1,400,000**	**53,000,000**
Residential ESLs [c]				**98,000**	**9.1**	**32**	**320**	**8,900**	**NE**	**380**	**NE**	**7.3**	**NE**	**8,900**	**25**	**51**	**NE**	**NE**	**46**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**230,000**	**25**	**89**	**890**	**21,000**	**NE**	**1,000**	**NE**	**20**	**NE**	**21,000**	**70**	**140**	**NE**	**NE**	**130**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1a																					
AP1AW485B-DP02	04/12/10	0-0.5	N	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (103)	ND (185)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (513)	ND (513)	ND (513)
	04/12/10	1.5-2	N	ND (4.01)	ND (4.01) J	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01) J	3.97 J	ND (1.6)	ND (2.89) J	ND (4.01) J	ND (4.01)	ND (4.01)	2.37 J	ND (4.01) J	ND (4.01) J	5.68 J	ND (8.02)	ND (8.02)
	04/12/10	2.5-3	N	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (2.07)	ND (3.73)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (10.4)	ND (10.4)	ND (10.4)
AP1AW495A-DP01	03/26/10	0-0.5	N	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (2.21)	ND (3.97)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (11)	ND (11)	ND (11)
	03/26/10	3.5-4	N	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (2.25)	ND (4.05)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (11.3)	ND (11.3)	ND (11.3)
	03/26/10	7.5-8	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (2.15)	ND (3.87)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (10.8)	ND (10.8)	ND (10.8)
AP1AW495A-DP02	03/26/10	0-0.5	N	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (1.95)	ND (3.52)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (9.77)	ND (9.77)	ND (9.77)
	03/26/10	3.5-4	N	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (1.51)	ND (2.73)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (7.57)	ND (7.57)	ND (7.57)
AP1AW495B-DP01	03/26/10	0-1	N	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	0.313 J	0.539 J	ND (1.84) J	ND (3.31) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (9.19) J	ND (9.19) J	ND (9.19) J
	03/26/10	2.5-3	N	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (1.89)	ND (3.41)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (9.47)	ND (9.47)	ND (9.47)
	03/26/10	2.5-3	FD	ND (5.45) J	*	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	0.453 J	0.703 J	ND (2.18) J	*	*	ND (5.45) J	ND (5.45) J	*	*	*	ND (10.9) J	ND (10.9) J	ND (10.9) J
AP1AW495B-DP02	03/25/10	0-0.5	N	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (1.94)	ND (3.49)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (9.68)	ND (9.68)	ND (9.68)
	03/25/10	2.5-3	N	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (2.21)	ND (3.98)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (11.1)	ND (11.1)	ND (11.1)
	03/25/10	7.5-8	N	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (2.11)	ND (3.8)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (10.6)	ND (10.6)	ND (10.6)
AP1AW496-DP01	04/09/10	0-0.5	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (2.05)	ND (3.69)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (10.2)	ND (10.2)	ND (10.2)
	04/09/10	3.5-4	N	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (1.5)	ND (2.69)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (7.48)	ND (7.48)	ND (7.48)
AP1AW496-DP02	04/09/10	0-0.5	N	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (1.92)	ND (3.45)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	6.24 J	ND (9.58)	ND (9.58)
	04/09/10	3.5-4	N	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (2.16)	ND (3.89)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (10.8)	ND (10.8)	ND (10.8)
AP1AW499-DP01	04/01/10	0-0.5	N	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (2.33)	ND (4.19)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (11.7)	ND (11.7)	ND (11.7)
AP1AW499-DP02	04/01/10	0-0.5	N	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	0.992 J	ND (2.2)	ND (3.96)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (11)	ND (11)	ND (11)
	04/01/10	1.25-1.75	N	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (2.51)	ND (4.52)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (12.5)	ND (12.5)	ND (12.5)
	04/01/10	1.25-1.75	FD	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (2.13)	ND (3.84)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (10.7)	ND (10.7)	ND (10.7)
AP1AW599A-DP01	03/29/10	0-0.5	N	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (2.13)	ND (3.83)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (10.7)	ND (10.7)	ND (10.7)
	03/29/10	4.25-4.75	N	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (2.1)	ND (3.77)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (10.5)	ND (10.5)	ND (10.5)
AP1AW599A-DP02	03/30/10	0-0.5	N	ND (4.5) J	*	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5)	0.545 J	ND (1.8) J	*	*	ND (4.5) J	ND (4.5) J	*	*	*	ND (9.01) J	ND (9.01) J	ND (9.01) J
	03/30/10	3.75-4.25	N	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (2.33)	ND (4.19)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (11.6)	ND (11.6)	ND (11.6)
	03/30/10	3.75-4.25	FD	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (1.98)	ND (3.57)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (9.92)	ND (9.92)	ND (9.92)
AP1AW599B-DP01	03/29/10	0-0.5	N	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (2.04)	ND (3.67)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (10.2)	ND (10.2)	ND (10.2)
	03/29/10	3.5-4	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (2.15)	ND (3.87)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (10.8)	ND (10.8)	ND (10.8)
AP1AW599B-DP02	03/29/10	0-0.5	N	ND (4.82) J	*	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	0.336 J	0.389 J	ND (1.93) J	*	*	ND (4.82) J	ND (4.82) J	*	*	*	ND (9.65) J	ND (9.65) J	ND (9.65) J
	03/29/10	4.75-5.25	N	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (2.11)	ND (3.8)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (10.6)	ND (10.6)	ND (10.6)
FED-2c																					
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (2.18)	ND (3.92)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	*	*	*
	04/13/10	1.5-2	N	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (2.12)	ND (3.82)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	*	*	*
	04/13/10	1.5-2	FD	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (2.12)	ND (3.81)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	*	*	*

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**61,000,000**	**1,100**	**270**	**7,300**	**61,000**	**820,000**	**610**	**290,000**	**15,000,000**	**120,000**	**290**	**780,000**	**1,700**	**680**	**5,400**	**790,000**	**43,000,000**	**180,000**	**2,100,000**
Industrial Regional Screening Levels [b]				**630,000,000**	**5,400**	**1,400**	**32,000**	**220,000**	**3,700,000**	**3,000**	**1,400,000**	**61,000,000**	**500,000**	**1,500**	**10,000,000**	**8,100**	**3,300**	**27,000**	**3,400,000**	**180,000,000**	**780,000**	**11,000,000**
Residential ESLs [c]				**1,400,000**	**180**	**14**	**220**	**NE**	**NE**	**12**	**2,700**	**630**	**70**	**140,000**	**1,600**	**NE**	**19**	**390,000**	**NE**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**3,300,000**	**510**	**39**	**510**	**NE**	**NE**	**34**	**6,200**	**1,800**	**200**	**330,000**	**3,600**	**NE**	**54**	**390,000**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1a																						
AP1A259-DP01	03/31/10	0-0.5	N	5.47 J	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)
	03/31/10	1.75-2.25	N	ND (10.1)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)
AP1A259-DP03	03/31/10	0-0.5	N	ND (10.2)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)
	03/31/10	0-0.5	FD	ND (9.63)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)
	03/31/10	2.25-2.75	N	3.32 J	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)
AP1A259-DP04	03/31/10	0-0.5	N	ND (8.84) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J
	03/31/10	1.25-1.75	N	ND (10.1)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
AP1AAPS-DP01	04/06/10	0-0.75	N	ND (10.1)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
	04/06/10	0-0.75	FD	ND (10.7)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)
	04/06/10	0.75-1.25	N	ND (10.9)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)
AP1AAPS-DP02	04/06/10	0-0.75	N	ND (11.4)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)
	04/06/10	0.75-1.25	N	ND (11.5)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (11.3) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J
AP1AAPS-DP04	04/12/10	0-0.5	N	10.8 J	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83) J
	04/12/10	1.5-2	N	33.8	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)
	04/12/10	3.5-4	N	13.9	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)
AP1AAPS-DP05	04/09/10	0-1	N	ND (18.7)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99) J
	04/09/10	2-3	N	ND (10.9)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)
	04/09/10	2-3	FD	ND (18.7)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)
AP1AAPS-DP06	04/12/10	0-0.5	N	8.88 J	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)
	04/12/10	1-1.5	N	21.2	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)
	04/12/10	2-2.5	N	17.3	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)
AP1AAPS-DP07	04/12/10	0-0.5	N	4.57 J	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)
	04/12/10	1.5-2	N	55.4	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
AP1AAPS-DP08	04/12/10	0-0.5	N	20.6	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)
	04/12/10	1.5-2	N	ND (506)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	30.1 J	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)
AP1AAPS-DP09	04/12/10	0-0.5	N	6.5 J	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)
	04/12/10	1.5-2	N	4.29 J	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)
AP1AAPS-DP10	04/06/10	0-0.5	N	17.4	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)
	04/06/10	2-2.5	N	ND (10.8)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (10.7)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)
	04/06/10	1.5-2	N	ND (10.9)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)
AP1AAPS-DP12	04/07/10	0-0.75	N	ND (522)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	74.3 J
	04/07/10	0-0.75	FD	ND (521)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	77.7 J
	04/07/10	1.5-2	N	17.2	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	1.27 J
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (10.5)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)
	04/01/10	3.25-3.75	N	ND (10.2)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**61,000,000**	**1,100**	**270**	**7,300**	**61,000**	**820,000**	**610**	**290,000**	**15,000,000**	**120,000**	**290**	**780,000**	**1,700**	**680**	**5,400**	**790,000**	**43,000,000**	**180,000**	**2,100,000**
Industrial Regional Screening Levels [b]				**630,000,000**	**5,400**	**1,400**	**32,000**	**220,000**	**3,700,000**	**3,000**	**1,400,000**	**61,000,000**	**500,000**	**1,500**	**10,000,000**	**8,100**	**3,300**	**27,000**	**3,400,000**	**180,000,000**	**780,000**	**11,000,000**
Residential ESLs [c]				**1,400,000**	**180**	**14**	**220**	**NE**	**NE**	**12**	**2,700**	**630**	**70**	**140,000**	**1,600**	**NE**	**19**	**390,000**	**NE**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**3,300,000**	**510**	**39**	**510**	**NE**	**NE**	**34**	**6,200**	**1,800**	**200**	**330,000**	**3,600**	**NE**	**54**	**390,000**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1a																						
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (10.9)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)
	04/01/10	3.5-4	N	ND (9.1)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (10.8)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (12.8)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (5.58)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)
AP1AAPS-DP18	03/31/10	0-0.5	N	ND (11.6)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)
	03/31/10	1.5-2	N	ND (12.6)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (9.88) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	JD (4.94) J
	04/02/10	3.5-4	N	ND (10.8) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J
AP1AAPS-DP20	04/05/10	0-0.5	N	ND (9.8)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)
	04/05/10	3.5-4	N	3.62 J	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)
	04/05/10	5-5.5	N	ND (10.6)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)
AP1AAPS-DP21	04/02/10	0-0.5	N	ND (6.89) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	JD (3.45) J
	04/02/10	3.5-4	N	ND (10.4) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J
AP1AAPS-DP22	04/02/10	0.5-1.5	N	45.3 J	1.51 J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	2.26 J	ND (4.97) J	ND (4.97) J	ND (4.97) J	2.21 J
	04/02/10	0.5-1.5	FD	29.7 J	1.69 J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	12 J	ND (4.67) J	ND (4.67) J	ND (4.67) J	3.28 J
	04/02/10	1.75-2.25	N	ND (10.4) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	JD (5.22) J
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (9.8) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J
	04/05/10	3.5-4	N	5.4 J	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)
AP1AAPS-DP24	04/02/10	0-0.5	N	2.78 J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	JD (5.18) J
	04/02/10	3.5-4	N	3.67 J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	JD (5.55) J
AP1AAPS-DP25	04/05/10	0-0.5	N	ND (9.63)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)
	04/05/10	6.5-7	N	ND (11.1)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)
	04/05/10	6.5-7	FD	ND (11.8)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)
AP1AAPS-DP26	04/05/10	0-0.5	N	14.7 J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	JD (5.68) J
	04/05/10	3-3.5	N	16.3	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)
AP1AAPS-DP27	04/05/10	0-0.5	N	15.1 J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	JD (5.74) J
	04/05/10	3.5-4	N	14	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)
	04/05/10	5.5-6	N	12.5	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)
AP1AAPS-DP28	04/05/10	0-0.5	N	18.1	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)
	04/05/10	3.5-4	N	13.9	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)
AP1AAPS-DP30	04/30/10	0-0.5	N	ND (9.56) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	JD (4.78) J
	04/30/10	0.5-1	N	ND (9.23) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	JD (4.62) J
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (9.99) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J
	04/30/10	0.5-1	N	ND (57.8) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	JD (4.42) J
AP1AAPS-DP80	05/04/10	0-0.5	N	ND (11.3) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	JD (5.65) J
	05/04/10	0.5-1	N	ND (11.2) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	JD (5.61) J

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**61,000,000**	**1,100**	**270**	**7,300**	**61,000**	**820,000**	**610**	**290,000**	**15,000,000**	**120,000**	**290**	**780,000**	**1,700**	**680**	**5,400**	**790,000**	**43,000,000**	**180,000**	**2,100,000**
Industrial Regional Screening Levels [b]				**630,000,000**	**5,400**	**1,400**	**32,000**	**220,000**	**3,700,000**	**3,000**	**1,400,000**	**61,000,000**	**500,000**	**1,500**	**10,000,000**	**8,100**	**3,300**	**27,000**	**3,400,000**	**180,000,000**	**780,000**	**11,000,000**
Residential ESLs [c]				**1,400,000**	**180**	**14**	**220**	**NE**	**NE**	**12**	**2,700**	**630**	**70**	**140,000**	**1,600**	**NE**	**19**	**390,000**	**NE**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**3,300,000**	**510**	**39**	**510**	**NE**	**NE**	**34**	**6,200**	**1,800**	**200**	**330,000**	**3,600**	**NE**	**54**	**390,000**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1a																						
AP1AAPS-DP81	05/04/10	0-0.5	N	ND (11.3) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J
	05/04/10	0.5-1	N	ND (11.3) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J
AP1AAPS-DP82	05/05/10	0-0.5	N	10 J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J
	05/04/10	0.5-1	N	ND (10.6) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J
AP1AAPS-DP83	05/05/10	0-0.5	N	ND (10.6) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J
	05/05/10	3.5-4	N	ND (11.1) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J
AP1AAPS-DP84	05/05/10	0-0.5	N	ND (9.49)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)
	05/05/10	1.5-2	N	ND (11.1)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)
AP1AFTA-DP01	04/08/10	0-0.5	N	20.5 J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J
	04/08/10	1.5-2	N	4.57 J	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)
AP1AFTA-DP02	04/08/10	0-0.5	N	16.3 J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J
	04/08/10	1.5-2	N	8.53	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)
AP1AFTA-DP03	04/08/10	0-0.5	N	ND (11.5)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
	04/08/10	0-0.5	FD	34.5	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)
	04/08/10	1.5-2	N	19.4	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)
AP1AFTA-DP04	04/08/10	0-0.5	N	18.4	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)
	04/08/10	3.5-4	N	9.54	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)
AP1AFTA-DP05	04/09/10	0-0.5	N	36.4	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)
	04/09/10	3.5-4	N	ND (9.24)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)
AP1AFTA-DP06	04/07/10	0-0.5	N	7.41 J	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)
	04/07/10	3.5-4	N	14.8	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)
	04/07/10	3.5-4	FD	13.3	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)
AP1AFTA-DP07	04/07/10	0-0.5	N	29.6	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)
	04/07/10	3.5-4	N	24.8	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
AP1AFTA-DP08	04/09/10	0-0.5	N	118	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	1.72 J	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17) J
	04/09/10	1.5-2	N	ND (67)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	1.93 J	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)
AP1AFTA-DP09	04/07/10	0-0.5	N	27.9	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	2.03 J	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)
	04/07/10	1.5-2	N	ND (8.64)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)
	04/07/10	1.5-2	FD	14.7	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)
AP1AFTA-DP10	04/07/10	0-0.5	N	ND (291)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	32.2 J	ND (145)	ND (145)	ND (145)	30.7 J
	04/07/10	1.5-2	N	13.9	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)
AP1AFTA-DP11	04/06/10	0-0.5	N	ND (9.95)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)
	04/06/10	2-2.5	N	ND (8.57)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)
AP1AFTA-DP12	04/06/10	0-0.5	N	18.1 J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J
AP1AFTA-DP13	04/06/10	0-0.5	N	65	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)
	04/06/10	0-0.5	FD	70.1	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)
AP1AFTA-DP14	04/08/10	0-0.5	N	43.8	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**61,000,000**	**1,100**	**270**	**7,300**	**61,000**	**820,000**	**610**	**290,000**	**15,000,000**	**120,000**	**290**	**780,000**	**1,700**	**680**	**5,400**	**790,000**	**43,000,000**	**180,000**	**2,100,000**
Industrial Regional Screening Levels [b]				**630,000,000**	**5,400**	**1,400**	**32,000**	**220,000**	**3,700,000**	**3,000**	**1,400,000**	**61,000,000**	**500,000**	**1,500**	**10,000,000**	**8,100**	**3,300**	**27,000**	**3,400,000**	**180,000,000**	**780,000**	**11,000,000**
Residential ESLs [c]				**1,400,000**	**180**	**14**	**220**	**NE**	**NE**	**12**	**2,700**	**630**	**70**	**140,000**	**1,600**	**NE**	**19**	**390,000**	**NE**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**3,300,000**	**510**	**39**	**510**	**NE**	**NE**	**34**	**6,200**	**1,800**	**200**	**330,000**	**3,600**	**NE**	**54**	**390,000**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1a																						
AP1AFTA-DP15	03/30/10	0-0.5	N	ND (9.17)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)
	03/30/10	3.5-4	N	ND (7.81)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)
AP1AFTA-DP16	04/08/10	0-0.5	N	17.4	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)
	03/30/10	1.5-2	N	ND (8.3)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)
	03/30/10	1.5-2	FD	ND (6.94)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)
AP1AFTA-DP17	03/30/10	0-0.5	N	13.2	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)
	03/30/10	1.5-2	N	ND (6.75)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (10.7)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)
	03/30/10	3.5-4	N	ND (10.1)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)
	03/30/10	4.5-5	N	ND (10.9)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)
AP1AFTA-DP19	03/30/10	0-0.5	N	ND (10.1)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
	03/30/10	3.5-4	N	ND (10)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
	03/30/10	5.5-6	N	ND (9.75) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	JD (4.87) J
	03/30/10	5.5-6	FD	ND (11.2)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)
AP1AFTA-DP20	03/25/10	0-0.5	N	ND (9.63) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	JD (4.81) J
	03/25/10	3.5-4	N	ND (14.5)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)
	03/25/10	7.5-8	N	ND (10.7)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)
AP1AFTA-DP21	03/25/10	0-0.5	N	ND (9.9)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)
	03/25/10	3-3.5	N	ND (10.6)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)
	03/25/10	7.5-8	N	ND (11.2)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)
AP1AFTA-DP23	03/24/10	0-0.5	N	ND (10.8) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	JD (5.42) J
	03/24/10	0-0.5	FD	ND (9.77) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	JD (5.03) J
	03/24/10	2.5-3	N	ND (9.6)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)
	03/24/10	7.5-8	N	ND (8.36)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)
AP1AFTA-DP24	03/24/10	0-0.5	N	ND (61.1)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)
	03/24/10	2-2.5	N	ND (9.81)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)
	03/24/10	7.5-8	N	ND (8.85)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)
AP1AFTA-DP25	03/24/10	0-0.5	N	ND (9.98) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	JD (4.99) J
	03/24/10	2.5-3	N	ND (9.77)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
	03/24/10	7.5-8	N	ND (9.68)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)
AP1AFTA-DP26	03/24/10	0-0.5	N	ND (9.7)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)
	03/24/10	1.5-2.5	N	ND (9.7)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)
	03/24/10	1.5-2.5	FD	ND (9.8)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)
	03/24/10	7.5-8	N	ND (9.12)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)
AP1AFTA-DP27	03/24/10	0-0.5	N	ND (10.6) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	JD (5.31) J
	03/24/10	1.5-2	N	ND (11.6)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)
	03/24/10	7.5-8	N	ND (8.43)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**61,000,000**	**1,100**	**270**	**7,300**	**61,000**	**820,000**	**610**	**290,000**	**15,000,000**	**120,000**	**290**	**780,000**	**1,700**	**680**	**5,400**	**790,000**	**43,000,000**	**180,000**	**2,100,000**
Industrial Regional Screening Levels [b]				**630,000,000**	**5,400**	**1,400**	**32,000**	**220,000**	**3,700,000**	**3,000**	**1,400,000**	**61,000,000**	**500,000**	**1,500**	**10,000,000**	**8,100**	**3,300**	**27,000**	**3,400,000**	**180,000,000**	**780,000**	**11,000,000**
Residential ESLs [c]				**1,400,000**	**180**	**14**	**220**	**NE**	**NE**	**12**	**2,700**	**630**	**70**	**140,000**	**1,600**	**NE**	**19**	**390,000**	**NE**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**3,300,000**	**510**	**39**	**510**	**NE**	**NE**	**34**	**6,200**	**1,800**	**200**	**330,000**	**3,600**	**NE**	**54**	**390,000**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1a																						
AP1AFTA-DP28	03/25/10	0-0.5	N	30.9 J	ND (2.47) J	ND (2.47) J	0.364 J	ND (2.47) J	0.721 J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	JD (2.47) J
	03/25/10	2-2.5	N	ND (6.8)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)
	03/25/10	7.5-8	N	ND (6.25)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)
AP1AFTA-DP29	03/25/10	0-0.5	N	ND (5.25)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)
	03/25/10	1.5-2	N	ND (7.2) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J
	03/25/10	7.5-8	N	ND (8.12)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)
	03/25/10	7.5-8	FD	ND (7.01)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)
AP1AFTA-DP30	04/05/10	0-0.5	N	13.1 J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J
AP1AFTA-DP31	03/25/10	0-0.5	N	5.8 J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	JD (2.87) J
	03/25/10	2-2.5	N	ND (5.66)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)
	03/25/10	7.5-8	N	ND (5.94)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)
AP1AFTA-DP32	03/25/10	0-0.5	N	ND (9.58) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	JD (4.79) J
	03/25/10	1.5-2	N	ND (11.7)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)
	03/25/10	7.5-8	N	ND (10.9)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	3.82 J	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)
AP1AFTA-DP33	03/25/10	0-0.5	N	ND (6.38)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)
	03/25/10	0-0.5	FD	ND (9.67)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)
	03/25/10	1.75-2.25	N	ND (6.37)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (8.51)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)
	03/25/10	1.75-2.25	N	ND (5.87)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)
AP1AFTA-DP35	03/26/10	0-0.5	N	ND (9.07)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)
	04/07/10	3.5-4	N	ND (539)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)
AP1AW467B-DP01	04/08/10	0-0.5	N	15.7 J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	1.3 J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	JD (5.21) J
	04/08/10	2.5-3	N	15.4	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)
	04/08/10	2.5-3	FD	23.8	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
AP1AW467B-DP02	04/08/10	0-1	N	19.1	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73) J	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73) J	ND (5.73)	ND (5.73)	ND (5.73)	JD (5.73) J
	04/08/10	3.5-4	N	4.93 J	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)
	04/08/10	4.75-5.25	N	18.5	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)
AP1AW483A-DP01	03/30/10	0-0.5	N	ND (10.6)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)
	03/30/10	3.5-4	N	ND (10.9)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)
AP1AW483A-DP02	03/30/10	0-1	N	ND (11.7)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)
	03/30/10	3.5-4.5	N	ND (10.8)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)
	03/30/10	3.5-4.5	FD	ND (11.3)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (11.6) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	JD (5.79) J
	03/31/10	3-3.5	N	ND (10.2)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (8.04)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)
	03/31/10	3.25-3.75	N	ND (10.5)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (9.38)	ND (4.69)	ND (4.69) J	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69) J	ND (4.69) J	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69) J	ND (4.69)	ND (4.69) J	ND (4.69)	ND (4.69)	ND (4.69)	JD (4.69) J
	04/12/10	2.5-3	N	26.9	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)																	
Residential Regional Screening Levels [a]				**61,000,000**	**1,100**	**270**	**7,300**	**61,000**	**820,000**	**610**	**290,000**	**15,000,000**	**120,000**	**290**	**780,000**	**1,700**	**680**	**5,400**	**790,000**	**43,000,000**	**180,000**	**2,100,000**
Industrial Regional Screening Levels [b]				**630,000,000**	**5,400**	**1,400**	**32,000**	**220,000**	**3,700,000**	**3,000**	**1,400,000**	**61,000,000**	**500,000**	**1,500**	**10,000,000**	**8,100**	**3,300**	**27,000**	**3,400,000**	**180,000,000**	**780,000**	**11,000,000**
Residential ESLs [c]				**1,400,000**	**180**	**14**	**220**	**NE**	**NE**	**12**	**2,700**	**630**	**70**	**140,000**	**1,600**	**NE**	**19**	**390,000**	**NE**	**NE**	**NE**	**NE**
Industrial ESLs [d]				**3,300,000**	**510**	**39**	**510**	**NE**	**NE**	**34**	**6,200**	**1,800**	**200**	**330,000**	**3,600**	**NE**	**54**	**390,000**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1a																						
AP1AW485B-DP02	04/12/10	0-0.5	N	ND (513)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257) J	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257) J	ND (257)
	04/12/10	1.5-2	N	57.5	0.703 J	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01) J	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	2.24 J	ND (4.01)	ND (4.01)	ND (4.01) J	ND (4.01)
	04/12/10	2.5-3	N	27.7	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)
AP1AW495A-DP01	03/26/10	0-0.5	N	ND (11)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)
	03/26/10	3.5-4	N	ND (11.3)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)
	03/26/10	7.5-8	N	ND (10.8)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)
AP1AW495A-DP02	03/26/10	0-0.5	N	ND (9.77)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)
	03/26/10	3.5-4	N	ND (7.57)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)
AP1AW495B-DP01	03/26/10	0-1	N	ND (9.19) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J
	03/26/10	2.5-3	N	ND (9.47)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)
	03/26/10	2.5-3	FD	ND (10.9) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J
AP1AW495B-DP02	03/25/10	0-0.5	N	ND (9.68)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)
	03/25/10	2.5-3	N	ND (11.1)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)
	03/25/10	7.5-8	N	ND (10.6)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)
AP1AW496-DP01	04/09/10	0-0.5	N	8.8 J	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	0.657 J	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)
	04/09/10	3.5-4	N	10.2	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)
AP1AW496-DP02	04/09/10	0-0.5	N	ND (31)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)
	04/09/10	3.5-4	N	17.8	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)
AP1AW499-DP01	04/01/10	0-0.5	N	ND (11.7)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)
AP1AW499-DP02	04/01/10	0-0.5	N	ND (11)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)
	04/01/10	1.25-1.75	N	ND (12.5)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)
	04/01/10	1.25-1.75	FD	ND (10.7)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)
AP1AW599A-DP01	03/29/10	0-0.5	N	ND (10.7)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)
	03/29/10	4.25-4.75	N	ND (10.5)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)
AP1AW599A-DP02	03/30/10	0-0.5	N	ND (9.01) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J
	03/30/10	3.75-4.25	N	ND (11.6)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)
	03/30/10	3.75-4.25	FD	ND (9.92)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)
AP1AW599B-DP01	03/29/10	0-0.5	N	ND (10.2)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)
	03/29/10	3.5-4	N	ND (10.8)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)
AP1AW599B-DP02	03/29/10	0-0.5	N	ND (9.65) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J
	03/29/10	4.75-5.25	N	ND (10.6)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)
FED-2c																						
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (10.9)	ND (5.44)	ND (5.44)	ND (5.44) J	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)
	04/13/10	1.5-2	N	ND (10.6)	ND (5.31)	ND (5.31)	ND (5.31) J	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31) J
	04/13/10	1.5-2	FD	11.9 J	ND (5.29)	ND (5.29)	ND (5.29) J	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29) J

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)												
Residential Regional Screening Levels [a]				**11,000**	**43,000**	**570,000**	**6,300,000**	**550**	**5,000,000**	**150,000**	**1,700**	**2,800**	**970,000**	**60**	**630,000**
Industrial Regional Screening Levels [b]				**53,000**	**220,000**	**2,600,000**	**36,000,000**	**2,600**	**45,000,000**	**690,000**	**8,100**	**14,000**	**4,100,000**	**1,700**	**2,700,000**
Residential ESLs [c]				**520**	**2,000**	**NE**	**450,000**	**87**	**130,000**	**3,100**	**NE**	**260**	**NE**	**6.7**	**310,000**
Industrial ESLs [d]				**1,500**	**5,600**	**NE**	**1,100,000**	**240**	**310,000**	**7,300**	**NE**	**730**	**NE**	**19**	**420,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**trans-1,3-Dichloropropene**	**Trichloroethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**
FED-1a															
AP1A259-DP01	03/31/10	0-0.5	N	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)	ND (5.03)
	03/31/10	1.75-2.25	N	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)
AP1A259-DP03	03/31/10	0-0.5	N	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)
	03/31/10	0-0.5	FD	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)
	03/31/10	2.25-2.75	N	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)
AP1A259-DP04	03/31/10	0-0.5	N	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J
	03/31/10	1.25-1.75	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
AP1AAPS-DP01	04/06/10	0-0.75	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
	04/06/10	0-0.75	FD	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	ND (5.34)	1.33 J
	04/06/10	0.75-1.25	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	1.35 J
AP1AAPS-DP02	04/06/10	0-0.75	N	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	ND (5.68)	1.42 J
	04/06/10	0.75-1.25	N	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	1.41 J
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J	ND (5.63) J
AP1AAPS-DP04	04/12/10	0-0.5	N	ND (5.83)	ND (5.83)	ND (5.83) J	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	*	ND (5.83)	ND (5.83)
	04/12/10	1.5-2	N	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)	ND (5.23)
	04/12/10	3.5-4	N	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)
AP1AAPS-DP05	04/09/10	0-1	N	ND (4.99)	ND (4.99)	ND (4.99) J	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99) J	ND (4.99)	ND (4.99)
	04/09/10	2-3	N	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)
	04/09/10	2-3	FD	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)
AP1AAPS-DP06	04/12/10	0-0.5	N	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)
	04/12/10	1-1.5	N	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)
	04/12/10	2-2.5	N	0.638 J	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)
AP1AAPS-DP07	04/12/10	0-0.5	N	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)	ND (4.92)
	04/12/10	1.5-2	N	14.7	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
AP1AAPS-DP08	04/12/10	0-0.5	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)
	04/12/10	1.5-2	N	122 J	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)	ND (253)
AP1AAPS-DP09	04/12/10	0-0.5	N	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)
	04/12/10	1.5-2	N	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)	ND (4.86)
AP1AAPS-DP10	04/06/10	0-0.5	N	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)
	04/06/10	2-2.5	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	1.34 J
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	1.35 J
	04/06/10	1.5-2	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	1.34 J
AP1AAPS-DP12	04/07/10	0-0.75	N	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)	ND (261)
	04/07/10	0-0.75	FD	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)	ND (260)
	04/07/10	1.5-2	N	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)	ND (5.26)
	04/01/10	3.25-3.75	N	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	1.29 J

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)												
Residential Regional Screening Levels [a]				**11,000**	**43,000**	**570,000**	**6,300,000**	**550**	**5,000,000**	**150,000**	**1,700**	**2,800**	**970,000**	**60**	**630,000**
Industrial Regional Screening Levels [b]				**53,000**	**220,000**	**2,600,000**	**36,000,000**	**2,600**	**45,000,000**	**690,000**	**8,100**	**14,000**	**4,100,000**	**1,700**	**2,700,000**
Residential ESLs [c]				**520**	**2,000**	**NE**	**450,000**	**87**	**130,000**	**3,100**	**NE**	**260**	**NE**	**6.7**	**310,000**
Industrial ESLs [d]				**1,500**	**5,600**	**NE**	**1,100,000**	**240**	**310,000**	**7,300**	**NE**	**730**	**NE**	**19**	**420,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**trans-1,3-Dichloropropene**	**Trichloroethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**
FED-1a															
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)
	04/01/10	3.5-4	N	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)	ND (4.55)
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)	ND (6.38)
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)	ND (2.79)
AP1AAPS-DP18	03/31/10	0-0.5	N	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)
	03/31/10	1.5-2	N	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)	ND (6.29)
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J	ND (4.94) J
	04/02/10	3.5-4	N	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J	ND (5.4) J
AP1AAPS-DP20	04/05/10	0-0.5	N	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)
	04/05/10	3.5-4	N	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)	ND (6.06)
	04/05/10	5-5.5	N	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)
AP1AAPS-DP21	04/02/10	0-0.5	N	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J	ND (3.45) J
	04/02/10	3.5-4	N	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J	ND (5.2) J
AP1AAPS-DP22	04/02/10	0.5-1.5	N	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	4.96 J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	ND (4.97) J	17.5 J
	04/02/10	0.5-1.5	FD	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	6.22 J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	ND (4.67) J	28.6 J
	04/02/10	1.75-2.25	N	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J	ND (5.22) J
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J	ND (4.9) J
	04/05/10	3.5-4	N	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)
AP1AAPS-DP24	04/02/10	0-0.5	N	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J	ND (5.18) J
	04/02/10	3.5-4	N	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J
AP1AAPS-DP25	04/05/10	0-0.5	N	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)
	04/05/10	6.5-7	N	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)	ND (5.55)
	04/05/10	6.5-7	FD	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)	ND (5.92)
AP1AAPS-DP26	04/05/10	0-0.5	N	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	ND (5.68) J	1.46 J
	04/05/10	3-3.5	N	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	1.43 J
AP1AAPS-DP27	04/05/10	0-0.5	N	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	ND (5.74) J	1.55 J
	04/05/10	3.5-4	N	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	ND (5.35)	1.33 J
	04/05/10	5.5-6	N	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	1.28 J
AP1AAPS-DP28	04/05/10	0-0.5	N	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	1.46 J
	04/05/10	3.5-4	N	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	ND (5.09)	1.29 J
AP1AAPS-DP30	04/30/10	0-0.5	N	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J	ND (4.78) J
	04/30/10	0.5-1	N	ND (4.62) J	ND (4.62) J	*	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J	ND (4.62) J
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (5) J	ND (5) J	*	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J	ND (5) J
	04/30/10	0.5-1	N	ND (4.42) J	ND (4.42) J	*	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J	ND (4.42) J
AP1AAPS-DP80	05/04/10	0-0.5	N	ND (5.65) J	ND (5.65) J	*	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J
	05/04/10	0.5-1	N	ND (5.61) J	ND (5.61) J	*	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J	ND (5.61) J

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)												
Residential Regional Screening Levels [a]				**11,000**	**43,000**	**570,000**	**6,300,000**	**550**	**5,000,000**	**150,000**	**1,700**	**2,800**	**970,000**	**60**	**630,000**
Industrial Regional Screening Levels [b]				**53,000**	**220,000**	**2,600,000**	**36,000,000**	**2,600**	**45,000,000**	**690,000**	**8,100**	**14,000**	**4,100,000**	**1,700**	**2,700,000**
Residential ESLs [c]				**520**	**2,000**	**NE**	**450,000**	**87**	**130,000**	**3,100**	**NE**	**260**	**NE**	**6.7**	**310,000**
Industrial ESLs [d]				**1,500**	**5,600**	**NE**	**1,100,000**	**240**	**310,000**	**7,300**	**NE**	**730**	**NE**	**19**	**420,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**trans-1,3-Dichloropropene**	**Trichloroethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**
FED-1a															
AP1AAPS-DP81	05/04/10	0-0.5	N	ND (5.66) J	ND (5.66) J	*	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J	ND (5.66) J
	05/04/10	0.5-1	N	ND (5.65) J	ND (5.65) J	*	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J	ND (5.65) J
AP1AAPS-DP82	05/05/10	0-0.5	N	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J	ND (4.36) J
	05/04/10	0.5-1	N	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J	ND (5.29) J
AP1AAPS-DP83	05/05/10	0-0.5	N	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J
	05/05/10	3.5-4	N	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J	ND (5.55) J
AP1AAPS-DP84	05/05/10	0-0.5	N	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)	ND (4.75)
	05/05/10	1.5-2	N	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)
AP1AFTA-DP01	04/08/10	0-0.5	N	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J
	04/08/10	1.5-2	N	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)	ND (2.92)
AP1AFTA-DP02	04/08/10	0-0.5	N	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J	ND (4.74) J
	04/08/10	1.5-2	N	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)	ND (3.05)
AP1AFTA-DP03	04/08/10	0-0.5	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
	04/08/10	0-0.5	FD	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)	ND (5.99)
	04/08/10	1.5-2	N	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)
AP1AFTA-DP04	04/08/10	0-0.5	N	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)
	04/08/10	3.5-4	N	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)
AP1AFTA-DP05	04/09/10	0-0.5	N	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)
	04/09/10	3.5-4	N	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)	ND (4.62)
AP1AFTA-DP06	04/07/10	0-0.5	N	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)	ND (4.82)
	04/07/10	3.5-4	N	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)
	04/07/10	3.5-4	FD	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)	ND (3.76)
AP1AFTA-DP07	04/07/10	0-0.5	N	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)
	04/07/10	3.5-4	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
AP1AFTA-DP08	04/09/10	0-0.5	N	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17) J	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	*	ND (6.17)	ND (6.17)
	04/09/10	1.5-2	N	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)	ND (4.99)
AP1AFTA-DP09	04/07/10	0-0.5	N	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)
	04/07/10	1.5-2	N	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)	ND (4.32)
	04/07/10	1.5-2	FD	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)	ND (6.32)
AP1AFTA-DP10	04/07/10	0-0.5	N	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	ND (145)	53 J
	04/07/10	1.5-2	N	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)
AP1AFTA-DP11	04/06/10	0-0.5	N	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	ND (4.97)	1.23 J
	04/06/10	2-2.5	N	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)	ND (4.29)
AP1AFTA-DP12	04/06/10	0-0.5	N	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J
AP1AFTA-DP13	04/06/10	0-0.5	N	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)	ND (4.67)
	04/06/10	0-0.5	FD	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)
AP1AFTA-DP14	04/08/10	0-0.5	N	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)	ND (8.21)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)												
Residential Regional Screening Levels [a]				**11,000**	**43,000**	**570,000**	**6,300,000**	**550**	**5,000,000**	**150,000**	**1,700**	**2,800**	**970,000**	**60**	**630,000**
Industrial Regional Screening Levels [b]				**53,000**	**220,000**	**2,600,000**	**36,000,000**	**2,600**	**45,000,000**	**690,000**	**8,100**	**14,000**	**4,100,000**	**1,700**	**2,700,000**
Residential ESLs [c]				**520**	**2,000**	**NE**	**450,000**	**87**	**130,000**	**3,100**	**NE**	**260**	**NE**	**6.7**	**310,000**
Industrial ESLs [d]				**1,500**	**5,600**	**NE**	**1,100,000**	**240**	**310,000**	**7,300**	**NE**	**730**	**NE**	**19**	**420,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**trans-1,3-Dichloropropene**	**Trichloroethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**
FED-1a															
AP1AFTA-DP15	03/30/10	0-0.5	N	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)	ND (4.58)
	03/30/10	3.5-4	N	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)	ND (3.9)
AP1AFTA-DP16	04/08/10	0-0.5	N	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)
	03/30/10	1.5-2	N	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)	ND (4.15)
	03/30/10	1.5-2	FD	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)	ND (3.47)
AP1AFTA-DP17	03/30/10	0-0.5	N	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)
	03/30/10	1.5-2	N	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)	ND (3.38)
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)
	03/30/10	3.5-4	N	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)	ND (5.06)
	03/30/10	4.5-5	N	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)
AP1AFTA-DP19	03/30/10	0-0.5	N	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)	ND (5.04)
	03/30/10	3.5-4	N	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)	ND (5)
	03/30/10	5.5-6	N	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J	ND (4.87) J
	03/30/10	5.5-6	FD	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)
AP1AFTA-DP20	03/25/10	0-0.5	N	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J	ND (4.81) J
	03/25/10	3.5-4	N	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)
	03/25/10	7.5-8	N	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)	ND (5.37)
AP1AFTA-DP21	03/25/10	0-0.5	N	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)
	03/25/10	3-3.5	N	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)	ND (5.3)
	03/25/10	7.5-8	N	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)
AP1AFTA-DP23	03/24/10	0-0.5	N	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J	ND (5.42) J
	03/24/10	0-0.5	FD	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J	ND (5.03) J
	03/24/10	2.5-3	N	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)
	03/24/10	7.5-8	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)
AP1AFTA-DP24	03/24/10	0-0.5	N	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)	ND (30.5)
	03/24/10	2-2.5	N	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)	ND (4.9)
	03/24/10	7.5-8	N	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)
AP1AFTA-DP25	03/24/10	0-0.5	N	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J	ND (4.99) J
	03/24/10	2.5-3	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
	03/24/10	7.5-8	N	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)
AP1AFTA-DP26	03/24/10	0-0.5	N	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)
	03/24/10	1.5-2.5	N	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)	ND (4.85)
	03/24/10	1.5-2.5	FD	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)	ND (5.62)
	03/24/10	7.5-8	N	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)
AP1AFTA-DP27	03/24/10	0-0.5	N	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J	ND (5.31) J
	03/24/10	1.5-2	N	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)	ND (5.81)
	03/24/10	7.5-8	N	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)												
Residential Regional Screening Levels [a]				**11,000**	**43,000**	**570,000**	**6,300,000**	**550**	**5,000,000**	**150,000**	**1,700**	**2,800**	**970,000**	**60**	**630,000**
Industrial Regional Screening Levels [b]				**53,000**	**220,000**	**2,600,000**	**36,000,000**	**2,600**	**45,000,000**	**690,000**	**8,100**	**14,000**	**4,100,000**	**1,700**	**2,700,000**
Residential ESLs [c]				**520**	**2,000**	**NE**	**450,000**	**87**	**130,000**	**3,100**	**NE**	**260**	**NE**	**6.7**	**310,000**
Industrial ESLs [d]				**1,500**	**5,600**	**NE**	**1,100,000**	**240**	**310,000**	**7,300**	**NE**	**730**	**NE**	**19**	**420,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**trans-1,3-Dichloropropene**	**Trichloroethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**
FED-1a															
AP1AFTA-DP28	03/25/10	0-0.5	N	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	0.703 J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J	ND (2.47) J
	03/25/10	2-2.5	N	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)	ND (3.4)
	03/25/10	7.5-8	N	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)	ND (3.13)
AP1AFTA-DP29	03/25/10	0-0.5	N	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)	ND (2.62)
	03/25/10	1.5-2	N	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J	ND (3.6) J
	03/25/10	7.5-8	N	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)	ND (4.06)
	03/25/10	7.5-8	FD	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)	ND (3.5)
AP1AFTA-DP30	04/05/10	0-0.5	N	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	ND (3.5) J	0.895 J
AP1AFTA-DP31	03/25/10	0-0.5	N	0.443 J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J	ND (2.87) J
	03/25/10	2-2.5	N	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)	ND (2.83)
	03/25/10	7.5-8	N	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)	ND (2.97)
AP1AFTA-DP32	03/25/10	0-0.5	N	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J	ND (4.79) J
	03/25/10	1.5-2	N	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)
	03/25/10	7.5-8	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)
AP1AFTA-DP33	03/25/10	0-0.5	N	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)
	03/25/10	0-0.5	FD	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)
	03/25/10	1.75-2.25	N	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)	ND (3.19)
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)	ND (4.26)
	03/25/10	1.75-2.25	N	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)	ND (2.94)
AP1AFTA-DP35	03/26/10	0-0.5	N	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)	ND (4.54)
	04/07/10	3.5-4	N	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)	ND (269)
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J	ND (5.21) J
	04/08/10	2.5-3	N	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)
	04/08/10	2.5-3	FD	ND (6.91)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
AP1AW467B-DP02	04/08/10	0-1	N	ND (5.73)	ND (5.73)	ND (5.73) J	ND (5.73) J	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73)	ND (5.73) J	ND (5.73)	ND (5.73)
	04/08/10	3.5-4	N	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)	ND (2.75)
	04/08/10	4.75-5.25	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)
AP1AW483A-DP01	03/30/10	0-0.5	N	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)
	03/30/10	3.5-4	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)
AP1AW483A-DP02	03/30/10	0-1	N	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)	ND (5.86)
	03/30/10	3.5-4.5	N	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)
	03/30/10	3.5-4.5	FD	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J	ND (5.79) J
	03/31/10	3-3.5	N	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)	ND (5.08)
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)	ND (4.02)
	03/31/10	3.25-3.75	N	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (4.69)	ND (4.69)	ND (4.69) J	ND (4.69) J	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69)	ND (4.69) J	*	ND (4.69)	ND (4.69) J
	04/12/10	2.5-3	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/kg)												
Residential Regional Screening Levels [a]				**11,000**	**43,000**	**570,000**	**6,300,000**	**550**	**5,000,000**	**150,000**	**1,700**	**2,800**	**970,000**	**60**	**630,000**
Industrial Regional Screening Levels [b]				**53,000**	**220,000**	**2,600,000**	**36,000,000**	**2,600**	**45,000,000**	**690,000**	**8,100**	**14,000**	**4,100,000**	**1,700**	**2,700,000**
Residential ESLs [c]				**520**	**2,000**	**NE**	**450,000**	**87**	**130,000**	**3,100**	**NE**	**260**	**NE**	**6.7**	**310,000**
Industrial ESLs [d]				**1,500**	**5,600**	**NE**	**1,100,000**	**240**	**310,000**	**7,300**	**NE**	**730**	**NE**	**19**	**420,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloroethene**	**Toluene**	**trans-1,2-Dichloroethene**	**trans-1,3-Dichloropropene**	**Trichloroethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**
FED-1a															
AP1AW485B-DP02	04/12/10	0-0.5	N	299	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)	ND (257)
	04/12/10	1.5-2	N	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)	ND (4.01)
	04/12/10	2.5-3	N	15.4	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)	ND (5.18)
AP1AW495A-DP01	03/26/10	0-0.5	N	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)	ND (5.52)
	03/26/10	3.5-4	N	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)	ND (5.63)
	03/26/10	7.5-8	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)
AP1AW495A-DP02	03/26/10	0-0.5	N	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)	ND (4.89)
	03/26/10	3.5-4	N	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)	ND (3.79)
AP1AW495B-DP01	03/26/10	0-1	N	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J	ND (4.59) J
	03/26/10	2.5-3	N	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)
	03/26/10	2.5-3	FD	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J	ND (5.45) J
AP1AW495B-DP02	03/25/10	0-0.5	N	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)	ND (4.84)
	03/25/10	2.5-3	N	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)	ND (5.53)
	03/25/10	7.5-8	N	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)
AP1AW496-DP01	04/09/10	0-0.5	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)
	04/09/10	3.5-4	N	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)	ND (3.74)
AP1AW496-DP02	04/09/10	0-0.5	N	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)	ND (4.79)
	04/09/10	3.5-4	N	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)	ND (5.41)
AP1AW499-DP01	04/01/10	0-0.5	N	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)	ND (5.83)
AP1AW499-DP02	04/01/10	0-0.5	N	ND (5.49)	ND (5.49)	6.56	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)
	04/01/10	1.25-1.75	N	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)	ND (6.27)
	04/01/10	1.25-1.75	FD	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)
AP1AW599A-DP01	03/29/10	0-0.5	N	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)
	03/29/10	4.25-4.75	N	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)	ND (5.24)
AP1AW599A-DP02	03/30/10	0-0.5	N	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J	ND (4.5) J
	03/30/10	3.75-4.25	N	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)
	03/30/10	3.75-4.25	FD	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)	ND (4.96)
AP1AW599B-DP01	03/29/10	0-0.5	N	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)
	03/29/10	3.5-4	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)
AP1AW599B-DP02	03/29/10	0-0.5	N	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J	ND (4.82) J
	03/29/10	4.75-5.25	N	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)	ND (5.28)
FED-2c															
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)
	04/13/10	1.5-2	N	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)	ND (5.31)
	04/13/10	1.5-2	FD	18.4	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)	ND (5.29)

Table A2-1
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Notes:

a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)
c. FED Residential ESLs for Soil Protective of Indoor Air (U.S. EPA 2005)
d. FED Industrial ESLs for Soil Protective of Indoor Air (U.S. EPA, 2005)

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
VOC = volatile organic compound
USEPA = United States Environmental Protection Agency
NE = not established
ug/kg = micrograms per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
* indicates that a compound was analyzed, however there was no valid result

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Table A2-2
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Pesticides
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Pesticides (ug/kg)															
Residential Regional Screening Levels [a]				**2,000**	**1,400**	**1,700**	**29**	**77**	**1,600**	**NE**	**270**	**30**	**370,000**	**370,000**	**370,000**	**18,000**	**18,000**	**18,000**	**520**
Industrial Regional Screening Levels [b]				**7,200**	**5,100**	**7,000**	**100**	**270**	**6,500**	**NE**	**960**	**110**	**3,700,000**	**3,700,000**	**3,700,000**	**180,000**	**180,000**	**180,000**	**2,100**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**4,4'-DDD**	**4,4'-DDE**	**4,4'-DDT**	**Aldrin**	**alpha-BHC**	**alpha-Chlordane**	**beta-BHC**	**delta-BHC**	**Dieldrin**	**Endosulfan I**	**Endosulfan II**	**Endosulfan sulfate**	**Endrin**	**Endrin aldehyde**	**Endrin ketone**	**gamma-BHC (Lindane)**
FED-1a																			
AP1AA1-DP06	04/08/10	0-0.5	N	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.355)	ND (0.355)	ND (0.355)	ND (0.355)	ND (0.355)	ND (0.721)	ND (0.355)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.721)	ND (0.355)
	04/08/10	2.5-3	N	ND (0.771)	ND (0.771)	ND (0.771)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.771)	ND (0.38)	ND (0.771)	ND (0.771)	ND (0.771)	ND (0.771)	ND (0.771)	ND (0.38)
AP1AA1-DP07	04/08/10	0-0.5	N	ND (0.719)	ND (0.719)	ND (0.719)	ND (0.354)	ND (0.354)	ND (0.354)	ND (0.354)	ND (0.354)	ND (0.719)	ND (0.354)	ND (0.719)	ND (0.719)	ND (0.719)	ND (0.719)	ND (0.719)	ND (0.354)
	04/08/10	2.25-2.75	N	ND (0.772)	ND (0.772)	ND (0.772)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.772)	ND (0.38)	ND (0.772)	ND (0.772)	ND (0.772)	ND (0.772)	ND (0.772)	ND (0.38)
AP1AA1-DP08	04/08/10	0-0.5	N	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.729)	ND (0.359)	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.359)
	04/08/10	0-0.5	FD	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.729)	ND (0.359)	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.729)	ND (0.359)
	04/08/10	2.1-2.6	N	ND (0.753)	ND (0.753)	ND (0.753)	ND (0.371)	ND (0.371)	ND (0.371)	ND (0.371)	ND (0.371)	ND (0.753)	ND (0.371)	ND (0.753)	ND (0.753)	ND (0.753)	ND (0.753)	ND (0.753)	ND (0.371)
AP1AA1-DP09	04/08/10	0-0.5	N	ND (0.774)	ND (0.774)	ND (0.774)	ND (0.381)	ND (0.381)	ND (0.381)	ND (0.381)	ND (0.381)	ND (0.774)	ND (0.381)	ND (0.774)	ND (0.774)	ND (0.774)	ND (0.774)	ND (0.774)	0.597
	04/08/10	1.75-2.25	N	ND (0.759)	ND (0.759)	ND (0.759)	ND (0.374)	ND (0.374)	ND (0.374)	ND (0.374)	ND (0.374)	ND (0.759)	ND (0.374)	ND (0.759)	ND (0.759)	ND (0.759)	ND (0.759)	ND (0.759)	ND (0.374)

Table A2-2
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Pesticides
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Pesticides (ug/kg)				
Residential Regional Screening Levels [a]				**1,600**	**110**	**53**	**310,000**	**440**
Industrial Regional Screening Levels [b]				**6,500**	**380**	**190**	**3,100,000**	**1,600**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**gamma-Chlordane**	**Heptachlor**	**Heptachlor epoxide**	**Methoxychlor**	**Toxaphene**
FED-1a								
AP1AA1-DP06	04/08/10	0-0.5	N	ND (0.355)	ND (0.355)	ND (0.355)	ND (0.355)	ND (35.5)
	04/08/10	2.5-3	N	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (38)
AP1AA1-DP07	04/08/10	0-0.5	N	ND (0.354)	ND (0.354)	ND (0.354)	ND (0.354)	ND (35.4)
	04/08/10	2.25-2.75	N	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.38)	ND (38)
AP1AA1-DP08	04/08/10	0-0.5	N	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.359)	ND (35.9)
	04/08/10	0-0.5	FD	ND (0.359)	ND (0.359)	ND (0.359)	ND (0.359)	ND (35.9)
	04/08/10	2.1-2.6	N	ND (0.371)	ND (0.371)	ND (0.371)	ND (0.371)	ND (37.1)
AP1AA1-DP09	04/08/10	0-0.5	N	ND (0.381)	ND (0.381)	ND (0.381)	ND (0.381)	ND (38.1)
	04/08/10	1.75-2.25	N	ND (0.374)	ND (0.374)	ND (0.374)	ND (0.374)	ND (37.4)

Notes:
a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
USEPA = United States Environmental Protection Agency
NE = not established
ug/kg = micrograms per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
DDD = dichlorodiphenyldichloroethane
DDE = dichlorodiphenyldichloroethene
DDT = dichlorodiphenyltrichloroethane
BCH = benzene hexachloride

Table A2-3
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polychlorinated Biphenyls (ug/kg)										
Residential Regional Screening Levels [a]				**3,900**	**140**	**140**	**220**	**220**	**220**	**220**	**NE**	**NE**	**1,000** [c]	
Industrial Regional Screening Levels [b]				**21,000**	**540**	**540**	**740**	**740**	**740**	**740**	**NE**	**NE**	**1,000**	
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aroclor-1016**	**Aroclor-1221**	**Aroclor-1232**	**Aroclor-1242**	**Aroclor-1248**	**Aroclor-1254**	**Aroclor-1260**	**Aroclor-1262**	**Aroclor-1268**	**Total PCBs**	
FED-1a														
AP1AA1-DP01	04/07/10	0-0.5	N	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND	
	04/07/10	3.5-4	N	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND	
	04/07/10	3.5-4	FD	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND (18.7) J	ND	
	04/07/10	5-5.5	N	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND (19.2) J	ND	
AP1AA1-DP02	04/07/10	0-0.5	N	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND (19.6) J	ND	
	04/07/10	3.3-3.8	N	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND (19.5) J	ND	
AP1AA1-DP03	04/07/10	0-0.5	N	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND	
	04/07/10	2.5-3	N	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND	
AP1AA1-DP04	04/07/10	0-0.5	N	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND	
	04/07/10	2.5-3	N	ND (20.5)	ND (20.5)	ND (20.5)	ND (20.5)	ND (20.5)	ND (20.5)	ND (20.5)	ND (20.5)	ND (20.5)	ND	
AP1AA1-DP05	04/07/10	0-0.5	N	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND	
	04/07/10	3.1-3.6	N	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND (21.4) J	ND	
AP1AA1-DP06	04/08/10	0-0.5	N	ND (18.3)	ND (18.3)	ND (18.3)	ND (18.3)	ND (18.3)	ND (18.3)	ND (18.3)	ND (18.3)	ND (18.3)	ND	
	04/08/10	2.5-3	N	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND	
AP1AA1-DP07	04/08/10	0-0.5	N	ND (18.2)	ND (18.2)	ND (18.2)	ND (18.2)	ND (18.2)	ND (18.2)	ND (18.2)	ND (18.2)	ND (18.2)	ND	
	04/08/10	2.25-2.75	N	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND	
AP1AA1-DP08	04/08/10	0-0.5	N	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND	
	04/08/10	0-0.5	FD	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND (18.5)	ND	
	04/08/10	2.1-2.6	N	ND (19.1)	ND (19.1)	ND (19.1)	ND (19.1)	ND (19.1)	ND (19.1)	ND (19.1)	ND (19.1)	ND (19.1)	ND	
AP1AA1-DP09	04/08/10	0-0.5	N	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND	
	04/08/10	1.75-2.25	N	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND	
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND (18.5) J	ND	
	04/08/10	2.5-3	N	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND	
	04/08/10	2.5-3	FD	ND (19.7)	ND (19.7)	ND (19.7)	ND (19.7)	ND (19.7)	ND (19.7)	ND (19.7)	ND (19.7)	ND (19.7)	ND	
AP1AW467B-DP02	04/08/10	0-1	N	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND	
	04/08/10	3.5-4	N	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND (20) J	ND	
	04/08/10	4.75-5.25	N	ND (20.9)	ND (20.9)	ND (20.9)	ND (20.9)	ND (20.9)	ND (20.9)	ND (20.9)	ND (20.9)	ND (20.9)	ND	
AP1AW483A-DP01	03/30/10	0-0.5	N	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND (18.2) J	ND	
	03/30/10	3.5-4	N	ND (19.5)	ND (19.5)	ND (19.5)	ND (19.5)	ND (19.5)	ND (19.5)	ND (19.5)	ND (19.5)	ND (19.5)	ND	
AP1AW483A-DP02	03/30/10	0-1	N	ND (18)	ND (18)	ND (18)	ND (18)	ND (18)	ND (18)	ND (18)	ND (18)	ND (18)	ND	
	03/30/10	3.5-4.5	N	ND (20.3)	ND (20.3)	ND (20.3)	ND (20.3)	ND (20.3)	ND (20.3)	ND (20.3)	ND (20.3)	ND (20.3)	ND	
	03/30/10	3.5-4.5	FD	ND (20.7)	ND (20.7)	ND (20.7)	ND (20.7)	ND (20.7)	ND (20.7)	ND (20.7)	ND (20.7)	ND (20.7)	ND	
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (18.1)	ND (18.1)	ND (18.1)	ND (18.1)	ND (18.1)	ND (18.1)	ND (18.1)	ND (18.1)	ND (18.1)	ND	
	03/31/10	3-3.5	N	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND (19.3)	ND	
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (17.9)	ND (17.9)	ND (17.9)	ND (17.9)	ND (17.9)	ND (17.9)	ND (17.9)	ND (17.9)	ND (17.9)	ND	
	03/31/10	3.25-3.75	N	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND (19)	ND	
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (18) J	ND (18) J	ND (18) J	ND (18) J	ND (18) J	ND (18) J	ND (18) J	ND (18) J	ND (18) J	ND	
	04/12/10	2.5-3	N	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND (19.7) J	ND	

Table A2-3
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polychlorinated Biphenyls (ug/kg)										
Residential Regional Screening Levels [a]				**3,900**	**140**	**140**	**220**	**220**	**220**	**220**	**NE**	**NE**	**1,000** [c]	
Industrial Regional Screening Levels [b]				**21,000**	**540**	**540**	**740**	**740**	**740**	**740**	**NE**	**NE**	**1,000**	
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aroclor-1016**	**Aroclor-1221**	**Aroclor-1232**	**Aroclor-1242**	**Aroclor-1248**	**Aroclor-1254**	**Aroclor-1260**	**Aroclor-1262**	**Aroclor-1268**	**Total PCBs**	
AP1AW485B-DP02	04/12/10	0-0.5	N	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND (18.6) J	ND	
	04/12/10	1.5-2	N	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND (18.9) J	ND	
	04/12/10	2.5-3	N	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND (19.3) J	ND	
AP1AW495A-DP01	03/26/10	0-0.5	N	ND (19.4)	ND (19.4)	ND (19.4)	ND (19.4)	ND (19.4)	ND (19.4)	ND (19.4)	ND (19.4)	ND (19.4)	ND	
	03/26/10	3.5-4	N	ND (19.9)	ND (19.9)	ND (19.9)	ND (19.9)	ND (19.9)	ND (19.9)	ND (19.9)	ND (19.9)	ND (19.9)	ND	
	03/26/10	7.5-8	N	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND (20.1)	ND	
AP1AW495A-DP02	03/26/10	0-0.5	N	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND (17.9) J	ND	
	03/26/10	3.5-4	N	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND	
AP1AW495B-DP01	03/26/10	0-1	N	ND (18.4)	ND (18.4)	ND (18.4)	ND (18.4)	ND (18.4)	ND (18.4)	ND (18.4)	ND (18.4)	ND (18.4)	ND	
	03/26/10	2.5-3	N	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND (19.8)	ND	
	03/26/10	2.5-3	FD	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND (19.6)	ND	
AP1AW495B-DP02	03/25/10	0-0.5	N	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND	
	03/25/10	2.5-3	N	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND (20)	ND	
	03/25/10	7.5-8	N	ND (21.1)	ND (21.1)	ND (21.1)	ND (21.1)	ND (21.1)	ND (21.1)	ND (21.1)	ND (21.1)	ND (21.1)	ND	

Notes:
a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)
c. U.S. Environmental Protection Agency (EPA). 2007. 40 CFR Part 761. July 1.

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
PCB = polychlorinated biphenyl
USEPA = United States Environmental Protection Agency
NE = not established
ug/kg = micrograms per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

	Metals (mg/kg)																	
Residential Regional Screening Levels [a]	**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]	**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]	**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area	**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**

Location	Date	Depth (ft bgs)	Sample Type	Aluminum	Antimony	Arsenic	Barium	Beryllium	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Mercury	Molybdenum	Nickel	Potassium
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AAPS-DP01	04/06/10	0-0.75	N	4,900	ND (0.852) J	*2.07 J+*	30.4 J+	0.122 J	ND (0.284)	3,410	33.3	8.31	5.7	8,900	1.82	2,070	109	0.0299 J	ND (0.852)	27.2 J+	602
	04/06/10	0-0.75	FD	4,680	ND (0.848) J	*1.95*	25.9 J+	0.248 J	0.0735 J-	3,520	29.9 J-	5.75	5.16	7,690	1.76	1,740 J-	95.5	ND (0.0347)	ND (0.848)	23.2 J+	586
	04/06/10	0.75-1.25	N	4,440	ND (0.873) J	*1.65 J+*	32.2 J+	0.104 J	ND (0.291)	2,620	33.4	4.13	5.31	8,430	1.73	2,040	102	ND (0.0353)	0.338 J	26.5 J+	560
AP1AAPS-DP02	04/06/10	0-0.75	N	4,690	ND (0.841) J	*1.63 J+*	34.3 J+	0.0973 J	ND (0.28)	2,450	28.9	4.28	5.56	8,320	1.66	2,100	96.1	ND (0.0338)	ND (0.841)	27.7 J+	606
	04/06/10	0.75-1.25	N	5,190	ND (0.853) J	*1.86 J+*	67 J+	0.127 J	ND (0.284)	2,750	30.3	4.38	5.7	8,950	1.79	2,100	109	ND (0.0336)	ND (0.853)	27.7 J+	624
AP1AAPS-DP03	04/02/10	0-0.5	N	4,460 J	ND (0.891) J	*1.51*	33.9	ND (0.297)	ND (0.297) J	3,160	27.4 J	**22.4 J**	4.58	7,730 J	1.33 J-	1,860 J	95.1 J	ND (0.0342)	0.303 J	29.1 J-	516 J-
AP1AAPS-DP04	04/12/10	0-0.5	N	5,320	ND (0.869) J	*1.54*	32.9	0.264 J	0.0868 J-	2,950	28.5	4.96	5.28	8,410	1.64	2,090	86.7	ND (0.0333)	ND (0.869)	26.7	626
	04/12/10	1.5-2	N	4,670	ND (0.842) J	*1.05*	26.7	0.249 J	0.0762 J-	2,250	27.6	3.81	4.95	7,400	1.42	1,910	74.4	ND (0.036)	ND (0.842)	25.7	618
	04/12/10	3.5-4	N	4,390	ND (0.903) J	*1.67*	55.9	0.224 J	0.0993 J-	2,430	26.3	3.77	4.5	7,480	1.23	1,970	99.7	ND (0.0375)	0.359 J	23.2	536
AP1AAPS-DP05	04/09/10	0-1	N	4,450	ND (0.882) J	*1.61*	22.2	0.251 J	0.0865 J-	2,420	25.5	4.83	5.07	7,270	2.71	1,760 J-	83	ND (0.033)	ND (0.882)	23.4	549
	04/09/10	2-3	N	5,370	ND (0.882) J	*1.83*	60	0.27 J	0.0753 J	2,280	30.2	4.66	6.55	8,900	1.81	2,330 J-	111	0.0159 J	0.389 J	31.3	694
	04/09/10	2-3	FD	5,410	ND (0.924) J	*1.79*	64.2	0.26 J	0.0808 J	2,130	31	4.92	7.04	9,400	1.85	2,430 J-	116	ND (0.0345)	0.46 J	33	696
AP1AAPS-DP06	04/12/10	0-0.5	N	4,730	ND (0.903) J	*1.44*	23.3	0.302	ND (0.301) J	2,770	30.2	3.73	4.75	8,130	1.44	2,190	101	ND (0.0372)	ND (0.903)	25.2	533
	04/12/10	1-1.5	N	5,180	ND (0.9) J	*1.67*	32.2	0.34	ND (0.3) J	2,410	29.7	3.86	5.34	8,830	1.66	2,390	108	ND (0.0371)	ND (0.9)	27.8	688
	04/12/10	2-2.5	N	5,530	ND (0.918) J	*1.76*	44.4	0.358	ND (0.306) J	2,460	32.8	3.98	6.06	9,150	1.71	2,600	123	ND (0.0443)	0.445 J	29.3	758
AP1AAPS-DP07	04/12/10	0-0.5	N	4,740	ND (0.865) J	*1.84*	43	0.234 J	0.108 J-	2,980 J	27.9 J-	4.76	5.85	8,100	3.11	2,070 J-	98.5	ND (0.0342)	ND (0.865)	26.4	638
	04/12/10	1.5-2	N	4,400	ND (0.844) J	*1.54*	52.1	0.227 J	0.105 J-	2,240	25.2 J-	3.51	4.91	7,380	2.39	1,690 J-	86.7	ND (0.0341)	ND (0.844)	22.8	588
AP1AAPS-DP08	04/12/10	0-0.5	N	4,270	ND (0.866) J	*1.59*	30.4	0.216 J	0.0991 J-	1,820	23.9 J-	3.49	5.49	7,100	1.67	1,660 J-	79.3	ND (0.0348)	ND (0.866)	23.1	646
	04/12/10	1.5-2	N	6,830	ND (0.888) J	*1.98*	57	0.319	0.0821 J-	2,430	33.9 J-	5.23	7.53	10,900	2.4	2,660 J-	126	ND (0.033)	ND (0.888)	35.4	1,070
AP1AAPS-DP09	04/12/10	0-0.5	N	5,380	ND (0.89) J	*1.72*	48	0.252 J	0.121 J-	4,740	27.9 J-	**10.3**	7.36	8,660	3.06	2,140 J-	123	ND (0.0369)	ND (0.89)	28.3	672
	04/12/10	1.5-2	N	4,820	ND (0.863) J	*1.6*	26.7	0.215 J	0.0669 J-	1,960	25.8	4	4.7	7,750	1.26	1,990	93.2	ND (0.033)	ND (0.863)	27.8	545
AP1AAPS-DP10	04/06/10	0-0.5	N	4,430	ND (0.81) J	*2.75*	37.3 J+	0.229 J	0.255 J-	3,280	26.3 J-	6.41	4.84	7,330	3.12	1,680 J-	80.6	ND (0.0342)	0.37 J	22.3 J+	479
	04/06/10	2-2.5	N	4,930	ND (0.846) J	*1.68*	32 J+	0.26 J	0.0834 J-	2,520	28.8 J-	3.7	5.29	7,820	1.46	1,910 J-	85.8	ND (0.0363)	0.35 J	25.6 J+	619
AP1AAPS-DP11	04/06/10	0-0.5	N	5,570	0.349 J-	*1.87*	39.7 J+	0.291	ND (0.281)	3,610	29.6	9.34	5.58	8,840	1.99	2,300	113	ND (0.0334)	ND (0.843)	27.7 J+	572
	04/06/10	1.5-2	N	5,240	ND (0.852) J	*1.86*	34.5 J+	0.278 J	ND (0.284)	2,630	27.1	3.93	5.17	7,950	1.83	1,990	101	ND (0.0344)	ND (0.852)	25.3 J+	562
AP1AAPS-DP12	04/07/10	0-0.75	N	**12,700 J**	0.431 J	*3.46 J*	**129 J**	0.618	0.0666 J	8,810 J	**59.5 J**	***27.8 J***	12.6 J	18,200 J	4.65 J	5,200 J	236 J	ND (0.033)	ND (0.898)	**64.8 J**	1,500
	04/07/10	0-0.75	FD	6,420 J	ND (0.879)	*1.79 J*	64.9 J	0.316	0.0901 J	4,830 J	32.3 J	**14.2 J**	6.77 J	9,790 J	2.41 J	2,750 J	126 J	ND (0.0347)	ND (0.879)	31.1 J	821
	04/07/10	1.5-2	N	7,490	ND (0.891)	*1.87*	62.3	0.372	ND (0.297)	3,090	39.2	5.9	7.22	11,300	2.18	3,160	130	ND (0.0367)	ND (0.891)	41.6	978
	04/07/10	3.5-4	N	5,610	ND (0.892)	*1.75*	34.8	0.299	0.0884 J	2,560	31.5	4.24	5.48	9,080	1.62	2,580	104	ND (0.036)	0.319 J	30.1	705
AP1AAPS-DP13	04/01/10	0-0.5	N	5,600	0.31 J	*6.82*	36.6	0.195 J	ND (0.275) J	8,240	29.8	**11.5**	29.4	12,800	1.83	2,240	117	ND (0.033)	1.22	25.7	688
	04/01/10	3.25-3.75	N	4,350	ND (0.809)	*1.75*	33.4	0.15 J	ND (0.27)	6,040	27	3.31	4.53	7,220	1.3	1,680	80.8	ND (0.0339)	ND (0.809)	19.7	504
AP1AAPS-DP14	04/01/10	0-0.5	N	4,730	ND (0.853)	*2.16*	52	0.153 J	0.0594 J-	2,790	30.4	3.84	5.24	8,310	1.7	1,730	86.7	ND (0.0369)	ND (0.853)	22	548
	04/01/10	3.5-4	N	4,520	ND (0.796)	*1.78*	34.6	0.141 J	ND (0.265) J	2,140	25.7	3.6	4.86	7,410	1.42	1,690	82.5	ND (0.033)	ND (0.796)	21.9	581
AP1AAPS-DP15	04/01/10	0-0.5	N	4,330	ND (0.885)	*1.78*	44.6	0.167 J	ND (0.295) J	2,540	26.3	3.18	4.87	7,410	1.35	1,660	79.5	ND (0.0361)	0.326 J	18.9	507
AP1AAPS-DP16	03/31/10	0-0.5	N	4,180	ND (0.915)	*2*	33.8	0.133 J	ND (0.305) J	4,090	32.6	3.59	4.22	7,170	1.31	1,720	90.5	ND (0.0339)	ND (0.915)	21.6	427
AP1AAPS-DP17	03/31/10	0-0.5	N	4,320	ND (0.876)	*1.29*	31.9	0.148 J	ND (0.292) J	2,580	26.4	3.71	4.78	7,540	1.32	1,710	70.1	ND (0.0399)	ND (0.876)	20.5	505

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)																
Residential Regional Screening Levels [a]				**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]				**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]				**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area				**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Potassium**
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AAPS-DP18	03/31/10	0-0.5	N	4,620	ND (0.968)	*1.64*	44.7	0.153 J	ND (0.323) J	2,800	25.3	4.16	4.58	7,700	1.47	1,830	88.1	ND (0.0387)	ND (0.968)	20.8	517
	03/31/10	1.5-2	N	4,310	ND (0.845)	*1.65*	34.7	0.146 J	ND (0.282) J	2,440	26.4	3.59	4.48	7,410	1.66	1,850	84.2	ND (0.033)	0.371 J	21.1	520
AP1AAPS-DP19	04/02/10	0-0.5	N	5,310 J	ND (0.779) J	*2.18*	33.2	0.158 J	ND (0.26) J	2,440	33.5 J	6.54 J	5.94	8,470 J	1.74	2,320 J	106 J	ND (0.0346)	ND (0.779)	27.4 J-	651 J-
	04/02/10	3.5-4	N	8,710 J	ND (0.86) J	*3.17*	61.3	0.242 J	ND (0.287) J	2,510	39.8 J	6.5 J	9.55	13,600 J	2.56	3,190 J	131 J	ND (0.033)	ND (0.86)	41.4 J-	1,020 J-
AP1AAPS-DP20	04/05/10	0-0.5	N	8,570	0.339 J-	*3.56*	**82**	0.308	ND (0.263) J	2,850	**52.9**	**10.5**	15.5	13,600	5.11	4,790	248	ND (0.0337)	ND (0.789)	**49.1**	1,210
	04/05/10	3.5-4	N	4,510	ND (0.775) J	*2.06*	26.6	0.203 J	ND (0.258) J	2,080	26.1 J-	3.69	4.71	7,230	1.54	1,830 J-	89	0.0185 J	ND (0.775)	22.9	542
	04/05/10	5-5.5	N	4,360	ND (0.848) J	*1.59*	22.9	0.214 J	ND (0.283) J	4,160	25.4 J-	3.44	4.77	6,810	1.41	1,750 J-	91.4	ND (0.0363)	ND (0.848)	20.7	543
AP1AAPS-DP21	04/02/10	0-0.5	N	6,110 J	0.31 J-	*2.84*	53.1	0.183 J	ND (0.259) J	2,410	**70 J**	8.39 J	10	10,600 J	2.49	3,140 J	201 J	ND (0.033)	0.305 J	34.7 J-	878 J-
	04/02/10	3.5-4	N	4,710 J	ND (0.859) J	*2.22*	33	0.233 J	ND (0.286) J	2,180	27.7 J	3.33 J	5.8	7,590 J	1.49	1,900 J	84 J	0.028 J	ND (0.859)	21.8 J-	644 J-
AP1AAPS-DP22	04/02/10	0.5-1.5	N	8,880 J	ND (0.804) J	*2.86*	70.4	0.296	0.0736 J-	3,710	41.3 J	***47 J***	14.3	15,400 J	3.75	5,420 J	294 J	0.0152 J	ND (0.804)	44.5 J-	1,040 J-
	04/02/10	0.5-1.5	FD	10,000 J	0.379 J-	*2.52*	**88.3**	0.274	0.228 J-	4,160	41.8 J	***156 J***	15.1	15,500 J	3.63	5,740 J	**333 J**	ND (0.033)	0.294 J	**49.4 J-**	1,100 J-
	04/02/10	1.75-2.25	N	4,770 J	ND (0.852) J	*1.77*	33.8	0.184 J	ND (0.284) J	2,300	26.3 J	4.52 J	4.84	7,310 J	1.4	2,020 J	97.7 J	ND (0.0332)	ND (0.852)	25.2 J-	541 J-
AP1AAPS-DP23	04/05/10	0-0.5	N	5,670	0.291 J-	*2.11*	42	0.243 J	ND (0.271) J	2,530	**51.6 J-**	4.82	6.99	8,840	1.81	2,790 J-	136	ND (0.0338)	ND (0.812)	35.4	755
	04/05/10	3.5-4	N	4,610	ND (0.923) J	*1.58*	27.7	0.23 J	ND (0.308) J	2,590	25.7 J-	3.97	5	7,080	1.42	1,810 J-	81.5	ND (0.033)	ND (0.923)	23.3	612
AP1AAPS-DP24	04/02/10	0-0.5	N	6,490	0.268 J	*2.64*	47.3	0.238 J	ND (0.252) J	4,540	33.9	5.67	10.2	10,200	2.48	3,500 J-	220	ND (0.033)	0.279 J	32.4	720
	04/02/10	3.5-4	N	4,540	ND (0.864)	*2.11*	20.3	0.204 J	ND (0.288) J	2,430	27.5	3.85	4.75	7,730	1.56	1,970 J-	98.4	ND (0.0388)	ND (0.864)	23.4	499
AP1AAPS-DP25	04/05/10	0-0.5	N	5,540	ND (0.812) J	*2.4*	38.6	0.242 J	0.0582 J-	2,220	**48.6 J-**	***31.6***	7.52	9,100	2.3	2,840 J-	130	ND (0.0357)	ND (0.812)	35.3	767
	04/05/10	6.5-7	N	4,240	ND (0.903) J	*1.98*	23.1	0.195 J	ND (0.301) J	2,770	25.4 J-	3.88	4.2	7,230	1.32	1,820 J-	96.6	0.0153 J	ND (0.903)	22.9	454
	04/05/10	6.5-7	FD	4,730	ND (0.906) J	*2.42*	26.7	0.208 J	ND (0.302) J	2,830	26.4 J-	4.21	4.56	7,740	1.5	1,970 J-	108	ND (0.0354)	ND (0.906)	24.5	498
AP1AAPS-DP26	04/05/10	0-0.5	N	5,220	0.305 J-	*2.06*	32.2	0.212 J	ND (0.262) J	2,170	**55.9 J-**	7.99	7.19	8,530	1.84	3,570 J-	124	ND (0.0347)	ND (0.785)	40.5	678
	04/05/10	3-3.5	N	5,130	ND (0.859) J	*1.61*	28	0.216 J	ND (0.286) J	2,260	28.2 J-	4.21	4.77	7,540	1.05 J+	2,090 J-	97.1	ND (0.033)	ND (0.859)	27	579
AP1AAPS-DP27	04/05/10	0-0.5	N	7,130	0.283 J-	*2.37*	75.6	0.224 J	0.154 J-	18,600	28.5 J-	***23.8***	12.6	9,910	6.14	5,220 J-	278	0.0279 J	0.264 J	43.2	628
	04/05/10	3.5-4	N	4,360	ND (0.775) J	*2.03*	20.1	0.211 J	0.0707 J-	2,460	24 J-	3.85	3.89	7,260	1.33	1,860 J-	113	ND (0.033)	ND (0.775)	23.1	462
	04/05/10	5.5-6	N	4,360	ND (0.906) J	*1.88*	19	0.213 J	0.0764 J-	2,040	24.8 J-	3.98	3.94	7,440	1.37	1,940 J-	95.6	ND (0.0368)	ND (0.906)	24.4	515
AP1AAPS-DP28	04/05/10	0-0.5	N	4,530	ND (0.907) J	*1.79*	26.9	0.231 J	0.0796 J-	2,310	29.5 J-	3.69	4.4	7,300	1.21	1,860 J-	95.1	ND (0.033)	ND (0.907)	24.5	492
	04/05/10	3.5-4	N	4,330	ND (0.774) J	*2*	22.3	0.214 J	0.0631 J-	2,140	24 J-	3.88	3.96	7,190	1.34	1,750 J-	115	ND (0.033)	ND (0.774)	23.4	418
AP1AAPS-DP30	04/30/10	0-0.5	N	5,090	ND (0.906)	*1.62*	49.9	0.143 J	ND (0.302)	2,630 J-	26.2 J-	**18.2**	7.19	7,250 J-	2.29 J+	1,960 J-	97.4	ND (0.0368)	ND (0.906)	29.3	634
	04/30/10	0.5-1	N	6,130	ND (0.922)	*1.9*	**87.4**	0.18 J	ND (0.307)	2,270 J-	30.7 J-	5.78	7.62	8,540 J-	2.19 J+	2,270 J-	109	**0.262**	ND (0.922)	32.9	833
AP1AAPS-DP31	04/30/10	0-0.5	N	5,600	ND (0.881)	*1.98*	47.4	0.153 J	ND (0.294)	2,540 J-	28.2 J-	5.22	7.18	7,900 J-	3.9 J+	2,280 J-	121	0.0133 J	ND (0.881)	29.2	677
	04/30/10	0.5-1	N	5,650	ND (0.844)	*1.77*	57.5	0.148 J	ND (0.281)	2,230 J-	27.6 J-	4.95	6.74	7,940 J-	2.4 J+	2,340 J-	131	ND (0.0384)	ND (0.844)	31.4	689
AP1AAPS-DP80	05/04/10	0-0.5	N	5,370	ND (0.836) J	*2.33*	46.4 J+	0.148 J	ND (0.279)	2,940	27.2 J-	4.98	6.59	7,760 J-	3.77 J+	2,160 J-	112	ND (0.033)	ND (0.836)	28.6	643
	05/04/10	0.5-1	N	6,370	ND (0.841) J	*2.1*	44.6 J+	0.142 J	ND (0.28)	2,920 J-	31.1 J-	4.95	7.36	11,500 J-	4.43	3,030 J-	157	ND (0.033)	ND (0.841)	31.5	655
AP1AAPS-DP81	05/04/10	0-0.5	N	5,620	ND (0.837) J	*1.88*	43.6 J+	0.156 J	ND (0.279)	2,800	29.1 J-	5.06	6.81	7,780 J-	3.77 J+	2,320 J-	113	ND (0.0386)	ND (0.837)	29.6	670
	05/04/10	0.5-1	N	5,570	ND (0.861) J	*1.98*	50.6 J+	0.163 J	ND (0.287)	2,540	30.2 J-	5.12	6.53	7,850 J-	2.85 J+	2,030 J-	99.7	ND (0.033)	ND (0.861)	28.7	691
AP1AAPS-DP82	05/05/10	0-0.5	N	4,930	ND (0.871) J	*1.59*	45.1 J+	0.155 J	0.125 J	3,030	28.8 J-	***31***	5.84	6,990 J-	2.78 J+	1,890 J-	92	ND (0.0354)	ND (0.871)	26.4	589
	05/04/10	0.5-1	N	4,640	ND (0.834) J	*1.47*	**155 J+**	0.152 J	ND (0.278)	3,820	25.6 J-	5.4	4.76	6,670 J-	1.67 J+	1,540 J-	81.2	ND (0.033)	ND (0.834)	23.1	484

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)																
Residential Regional Screening Levels [a]				**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]				**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]				**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area				**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Potassium**
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AAPS-DP83	05/05/10	0-0.5	N	5,130	ND (0.853) J	*1.55*	42.2 J+	0.161 J	ND (0.284)	2,330	28.4 J-	5.27	5.89	7,300 J-	2.81 J+	1,940 J-	92.7	ND (0.0396)	ND (0.853)	28.4	629
	05/05/10	3.5-4	N	5,330	ND (0.874) J	*2.53*	44 J+	0.169 J	ND (0.291)	2,260	27.7 J-	5.32	6.09	7,440 J-	3.48 J+	2,030 J-	101	ND (0.0362)	ND (0.874)	30.1	698
AP1AAPS-DP84	05/05/10	0-0.5	N	10,900	ND (0.844) J	*2.99*	44.2 J+	0.163 J	ND (0.281)	7,210	24.1 J-	**14.8**	17.2	13,700 J-	2.49 J+	3,610 J-	199	0.0204 J	ND (0.844)	26.3	683
	05/05/10	1.5-2	N	6,070	ND (0.859) J	*1.78*	55.1 J+	0.172 J	ND (0.286)	2,340	31 J-	5.8	6.27	8,740 J-	2.07 J+	2,540 J-	99.9	ND (0.0371)	ND (0.859)	35.1	777
AP1AFTA-DP01	04/08/10	0-0.5	N	6,700	0.311 J-	*2.42*	42.3 J+	0.358	0.119 J	3,960 J	39.3 J+	5.36	11.1 J+	12,200	4.15	3,420	196	ND (0.033)	0.277 J	38 J+	821 J+
	04/08/10	1.5-2	N	5,580	ND (0.848) J	*1.79*	37.4 J+	0.299	0.146 J	2,330 J	34.1 J+	4.31	6.07 J+	9,310	1.94	2,340	101	ND (0.0363)	ND (0.848)	27.9 J+	642 J+
AP1AFTA-DP02	04/08/10	0-0.5	N	5,630	0.381 J-	*1.93*	37.7 J+	0.265	0.129 J	2,820 J	37.4 J+	**19.1**	6.92 J+	8,930	2.3	2,690	167	ND (0.033)	ND (0.784)	35.5 J+	702 J+
	04/08/10	1.5-2	N	4,320	0.298 J-	*1.58*	30.8 J+	0.218 J	0.135 J	2,050 J	30 J+	3.76	4.36 J+	7,300	1.61	1,960	84.8	ND (0.0353)	ND (0.839)	23.5 J+	463 J+
AP1AFTA-DP03	04/08/10	0-0.5	N	5,760	0.341 J-	*2*	54.3 J+	0.272 J	0.211 J	2,360 J	31.4 J+	4.77	7.67 J+	9,370	6.09 J	2,570	115	ND (0.0376)	ND (0.833)	29.9 J+	590 J+
	04/08/10	0-0.5	FD	5,450	0.386 J-	*1.83*	47.3 J+	0.259 J	0.234 J	2,190 J	32.3 J+	4.19	7.46 J+	8,700	12.4 J	2,350	102	ND (0.0383)	ND (0.83)	27.9 J+	562 J+
	04/08/10	1.5-2	N	7,660	0.428 J-	*2.71*	**81.9 J+**	0.337	0.157 J	2,710 J	38.3 J+	6.38	10.8 J+	12,000	3.43	4,010	177	ND (0.034)	ND (0.796)	42.2 J+	901 J+
AP1AFTA-DP04	04/08/10	0-0.5	N	10,400	0.536 J-	*4.5*	**82.5 J+**	0.38	0.118 J	3,010 J	**51.4 J+**	8.47	20 J+	17,700	4.33	7,220	**435**	0.0254 J	0.31 J	**58.4 J+**	939 J+
	04/08/10	3.5-4	N	4,710	0.305 J-	*1.72*	37.4 J+	0.25 J	0.125 J	2,660 J	30.9 J+	3.78	4.75 J+	7,830	1.58	1,920	96.1	ND (0.0364)	ND (0.846)	23.4 J+	417 J+
AP1AFTA-DP05	04/09/10	0-0.5	N	4,520 J	ND (0.791) J	*1.8*	38 J+	0.222 J	0.211 J-	2,060 J	26.8	3.5	6.38	7,820 J	13.3	1,900 J	104 J+	ND (0.033)	ND (0.791)	24.1	564
	04/09/10	3.5-4	N	4,290 J	ND (0.832) J	*1.48*	**102 J+**	0.222 J	0.0926 J-	2,010 J	27.7	3.25	4.97	7,400 J	1.55	1,700 J	89.4 J+	ND (0.0344)	ND (0.832)	21.2	499
AP1AFTA-DP06	04/07/10	0-0.5	N	4,420	ND (0.856)	*1.9*	17.8	0.256 J	0.0848 J	2,290	27.2	3.33	4.44	7,650	1.65	1,840	85.4	ND (0.0332)	ND (0.856)	21.5	452
	04/07/10	3.5-4	N	5,310	ND (0.942)	*1.77*	39	0.307 J	0.0902 J	3,070	33	3.61	5.09	8,440	1.64	2,150	98.9	ND (0.033)	ND (0.942)	24.6	538
	04/07/10	3.5-4	FD	4,760	ND (0.879)	*1.6*	32.3	0.277 J	0.0633 J	2,600	30.8	3.25	4.72	7,810	1.46	1,940	92.2	ND (0.0368)	ND (0.879)	22.5	484
AP1AFTA-DP07	04/07/10	0-0.5	N	5,400	ND (0.785)	*1.7*	40.5	0.289	0.0547 J	2,590	28	3.96	5.13	8,250	1.8	2,190	111	ND (0.033)	ND (0.785)	26.7	626
	04/07/10	3.5-4	N	4,990	ND (0.887)	*1.62*	21.8	0.288 J	ND (0.296)	2,550	27.6	3.5	4.36	7,840	1.47	1,960	97.8	ND (0.0398)	ND (0.887)	24.4	499
AP1AFTA-DP08	04/09/10	0-0.5	N	6,410 J	0.839 J-	*2.48*	36.6 J+	0.259 J	0.554	3,650 J	32.8	4.84	**124**	11,300 J	163	3,240 J	110 J+	ND (0.0422)	ND (1.04)	29.8	469
	04/09/10	1.5-2	N	5,270 J	ND (0.872) J	*2.92*	45.4 J+	0.259 J	0.137 J-	3,210 J	28.3	4.34	12.4	8,630 J	6.14	2,170 J	101 J+	ND (0.034)	0.489 J	28.3	608
AP1AFTA-DP09	04/07/10	0-0.5	N	6,990	0.285 J	*2.29*	49.8	0.35	0.0531 J	3,350	36.4	5.52	7.78	10,600	2.72	3,250	157	ND (0.035)	ND (0.792)	40.5	936
	04/07/10	1.5-2	N	6,020	ND (0.828)	*1.8*	34	0.305	ND (0.276)	2,780	30.4	6.3	5.43	8,500	1.72	2,370	101	ND (0.033)	ND (0.828)	29.4	697
	04/07/10	1.5-2	FD	5,140	ND (0.855)	*1.61*	22.7	0.283 J	ND (0.285)	2,480	27	3.73	4.61	7,860	1.36 J+	2,080	96.8	ND (0.033)	ND (0.855)	25.5	550
AP1AFTA-DP10	04/07/10	0-0.5	N	6,970	0.323 J	*2.39*	45.2	0.348	ND (0.269)	3,250	**45.6**	8.12	8.11	10,900	2.65	3,580	155	ND (0.033)	0.424 J	41.3	876
	04/07/10	1.5-2	N	5,040	ND (0.819)	*1.88*	23.1	0.25 J	0.0573 J	2,350	27.8	4.06	4.63	8,440	1.63	2,540	119	ND (0.0353)	ND (0.819)	28.8	448
AP1AFTA-DP11	04/06/10	0-0.5	N	5,280	ND (0.813) J	*1.95*	36.5 J+	0.262 J	0.0698 J-	2,460	36.8 J-	4.39	6.3	8,350	1.65	2,290 J-	114	ND (0.033)	0.411 J	29.5 J+	715
	04/06/10	2-2.5	N	4,850	ND (0.867) J	*2.41*	37.6 J+	0.228 J	0.0751 J-	2,280	30.6 J-	4.2	5.07	8,580	1.59	2,100 J-	125	ND (0.0363)	ND (0.867)	25.7 J+	546
AP1AFTA-DP12	04/06/10	0-0.5	N	5,340	ND (0.825) J	*1.99*	34.7 J+	0.31	ND (0.275)	2,590	38.3	6.11	5.97	8,740	1.67	2,360	129	ND (0.0355)	ND (0.825)	30 J+	636
AP1AFTA-DP13	04/06/10	0-0.5	N	7,340	0.338 J-	*2.96*	50.7 J+	0.302	0.0755 J	9,440 J	41	**12.3**	11.7 J	12,900	3.61	3,750	268	ND (0.036)	ND (0.846)	39.8 J+	779
	04/06/10	0-0.5	FD	6,660	ND (0.861) J	*2.64*	61.4 J+	0.339	0.108 J	24,000 J	33.2	**11**	6.83 J	9,450	2.39	3,400	145	ND (0.0381)	0.316 J	29 J+	728
AP1AFTA-DP14	04/08/10	0-0.5	N	5,500	0.322 J-	*1.88*	45.4 J+	0.257 J	0.336	2,600 J	34.7 J+	4.63	14 J+	9,530	12.3	2,100	109	ND (0.0365)	ND (0.81)	26.7 J+	568 J+
AP1AFTA-DP15	03/30/10	0-0.5	N	5,480	ND (0.817) J	*2.23 J+*	35.7	0.105 J	ND (0.272)	3,720 J+	35.6	7.26	5.98	8,920	1.97	2,430	117 J+	ND (0.0332)	ND (0.817)	31.5 J+	671 J+
	03/30/10	3.5-4	N	4,910	ND (0.872) J	*2.01 J+*	27.9	0.103 J	ND (0.291)	2,300 J+	29.3	4.17	4.93	8,000	1.63	2,400	108 J+	ND (0.034)	ND (0.872)	27.7 J+	541 J+

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)																
Residential Regional Screening Levels [a]				**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]				**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]				**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area				**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Potassium**
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AFTA-DP16	03/30/10	0-0.5	N	5,230	ND (0.841) J	*1.99 J+*	34.2	0.117 J	ND (0.28)	2,550 J+	32.5	5.6	5.65	8,900	1.91	2,380	125 J+	ND (0.033)	ND (0.841)	27.4 J+	632 J+
	03/30/10	1.5-2	N	5,190	ND (0.851) J	*2.01 J+*	35.3	0.132 J	ND (0.284)	2,650 J+	32.1	4.23	5.59	8,770	1.74	2,270	105 J+	ND (0.033)	ND (0.851)	26.9 J+	656 J+
	03/30/10	1.5-2	FD	7,010	ND (0.866) J	*2.39 J+*	48.1	0.179 J	ND (0.289)	2,800 J+	35.2	5.4	7.34	11,300	2.23	2,840	132 J+	ND (0.033)	ND (0.866)	34.1 J+	829 J+
AP1AFTA-DP17	03/30/10	0-0.5	N	4,860	ND (0.89) J	*2.16 J+*	**123**	0.142 J	ND (0.297)	2,600 J+	30.2	4.57	6.41	8,310	1.69	1,910	94.5 J+	ND (0.0354)	ND (0.89)	24.5 J+	578 J+
	03/30/10	1.5-2	N	4,800	ND (0.832) J	*1.95 J+*	**101**	0.135 J	ND (0.277)	2,600 J+	30.1	3.89	5.59	8,310	1.52	1,880	93.8 J+	ND (0.0363)	0.339 J	23.6 J+	568 J+
AP1AFTA-DP18	03/30/10	0-0.5	N	6,840	ND (0.859) J	*2.56*	52.3	0.154 J	ND (0.286)	3,200 J+	43.8	**13.7**	9.45	11,200	2.37	3,490	163 J+	ND (0.033)	ND (0.859)	37.5 J+	866 J+
	03/30/10	3.5-4	N	4,690	ND (0.862) J	*2.11 J+*	28.8	0.103 J	ND (0.287)	2,350 J+	29.4	4.07	4.82	8,190	1.57	2,180	114 J+	ND (0.033)	ND (0.862)	25.3 J+	539 J+
	03/30/10	4.5-5	N	4,230	ND (0.831) J	*2.31 J+*	22.5	0.104 J	ND (0.277)	2,400 J+	29.8	3.59	4.79	7,300	1.75	1,780	86 J+	ND (0.033)	ND (0.831)	22.2 J+	482 J+
AP1AFTA-DP19	03/30/10	0-0.5	N	4,300	ND (0.869) J	*2.07 J+*	22.3 J+	0.139 J	ND (0.29)	2,040	25.6	3.47	4.79	7,780	1.46	1,790	88.7	ND (0.033)	ND (0.869)	20.9	560
	03/30/10	3.5-4	N	4,320	ND (0.793) J	*1.99 J+*	23.5 J+	0.146 J	ND (0.264)	2,210	25.5	3.53	4.8	7,860	1.53	1,770	94.9	ND (0.033)	ND (0.793)	20.6	536
	03/30/10	5.5-6	N	6,560	ND (0.793) J	*3.21*	48.5 J+	0.18 J	ND (0.264)	2,810	**47 J**	5.55	11.2	11,700	3.2 J	3,250 J	158	ND (0.033)	ND (0.793)	32.3	875
	03/30/10	5.5-6	FD	4,400	ND (0.846) J	*2.03 J+*	23.8 J+	0.155 J	ND (0.282)	2,280	26.4 J	3.46	4.75	8,140	1.41 J	1,850 J	95.2	ND (0.033)	ND (0.846)	21.3	522
AP1AFTA-DP20	03/25/10	0-0.5	N	6,170	ND (0.773) J	*2.11*	37.8	0.0726 J	ND (0.258) J	3,570 J	**50**	4.89	7.35 J+	11,100	1.91	2,940 J	164	ND (0.033)	ND (0.773)	34.5	829
	03/25/10	3.5-4	N	4,390	ND (0.86) J	*1.67*	18.9	ND (0.287)	ND (0.287) J	2,630 J	26.4	3.6	3.97 J+	7,790	1.25 J-	2,030 J	98	ND (0.033)	ND (0.86)	24.8	477
	03/25/10	7.5-8	N	4,320	ND (0.874) J	*1.91*	20	ND (0.291)	ND (0.291) J	2,270 J	25.5	3.5	4.4 J+	7,640	1.57 J-	2,050 J	81.4	ND (0.0365)	ND (0.874)	24	596
AP1AFTA-DP21	03/25/10	0-0.5	N	5,140	ND (0.842) J	*2.14*	31.5	ND (0.281)	ND (0.281) J	2,690 J	38.1	5.03	6.06 J+	8,830	1.87	2,870 J	131	ND (0.0354)	ND (0.842)	33.5	689
	03/25/10	3-3.5	N	4,430	ND (0.798) J	*2.06*	17.7	0.0571 J	ND (0.266) J	3,470 J	28.7	3.85	4.28 J+	8,040	1.75	1,870 J	92.2	ND (0.033)	ND (0.798)	22.6	568
	03/25/10	7.5-8	N	4,520	ND (0.943) J	*1.97*	29.6	ND (0.314)	ND (0.314) J	2,310 J	27	3.78	4.59 J+	7,750	1.55	2,020 J	85.9	ND (0.033)	ND (0.943)	24	667
AP1AFTA-DP22	03/24/10	0-0.5	N	5,940	ND (0.763) J	*2.2*	51.7	0.116 J	0.085 J-	2,810	40.7	6.33	6.59	9,140	2.4	2,450	126	ND (0.033)	ND (0.763)	33.7	667
	03/24/10	3.5-4	N	5,220	ND (0.904) J	*1.64*	33	0.113 J	0.109 J-	2,620	30.1	4.17	5.42	8,570	1.8	2,090	94.6	ND (0.0369)	ND (0.904)	25.5	736
	03/24/10	7.5-8	N	4,300	ND (0.887) J	*1.59*	21.4	0.0894 J	0.11 J-	2,090	24.1	3.24	4.54	6,800	1.47	1,760	76.8	ND (0.041)	ND (0.887)	22.7	588
AP1AFTA-DP23	03/24/10	0-0.5	N	6,090	ND (0.749) J	*2.25*	58.8	0.107 J	0.0606 J-	2,640	36.8	5.58	11.6	9,630	2.46	3,420	188	ND (0.033)	0.405 J	37.1	727
	03/24/10	0-0.5	FD	6,710	ND (0.768) J	*2.48*	57.5	0.112 J	0.0565 J-	2,790	43.2	6.06	10.5	10,600	2.78	3,720	206	ND (0.033)	0.273 J	41.8	753
	03/24/10	2.5-3	N	4,860	ND (0.861) J	*2.01*	28.4	0.1 J	0.111 J-	2,310	28.1	3.83	4.81	7,780	1.64	2,130	99.9	ND (0.0336)	ND (0.861)	25	492
	03/24/10	7.5-8	N	5,290	ND (0.896) J	*1.72*	35.1	0.105 J	0.107 J-	2,380	28	4.4	5.48	8,170	1.84	2,340	100	ND (0.0337)	ND (0.896)	27.5	671
AP1AFTA-DP24	03/24/10	0-0.5	N	10,500	0.295 J-	*3.8*	**96.5**	0.164 J	ND (0.258) J	3,340	**49.1**	***25.5***	18.5	17,600	5.63	7,910	**375**	0.0136 J	0.395 J	**72.6**	1,070
	03/24/10	2-2.5	N	4,900	ND (0.828) J	*1.86*	34.3	0.098 J	0.105 J-	2,670	28.1	4.18	4.92	7,970	1.79	1,860	91.1	ND (0.037)	0.352 J	24.4	598
	03/24/10	7.5-8	N	4,640	ND (0.908) J	*1.77*	26.9	0.0923 J	0.114 J-	1,940	25.2	3.97	4.92	7,110	1.71	1,940	92.1	ND (0.0441)	ND (0.908)	25.2	594
AP1AFTA-DP25	03/24/10	0-0.5	N	5,040	ND (0.787) J	*1.87*	66.9	ND (0.262)	0.056 J-	2,730	**59.3**	5.22	6.25	8,830	1.81	2,620	148	ND (0.033)	ND (0.787)	27	610
	03/24/10	2.5-3	N	4,690	ND (0.879) J	*1.79*	48.2	ND (0.293)	0.0772 J-	2,570	30.3	3.54	4.96	8,110	1.58 J-	1,840	89.1	ND (0.0389)	ND (0.879)	22	563
	03/24/10	7.5-8	N	4,860	ND (0.902) J	*1.45*	30.7	ND (0.301)	0.0714 J-	2,240	28	4.18	5	8,090	1.47 J-	2,210	89.3	ND (0.037)	ND (0.902)	26.6	725
AP1AFTA-DP26	03/24/10	0-0.5	N	6,610	ND (0.836) J	*2.33*	59.8	ND (0.279)	ND (0.279) J	3,220	43.9	**11.1**	7.91	11,200	2.44	3,510	192	ND (0.033)	ND (0.836)	39.1	805
	03/24/10	1.5-2.5	N	4,850	ND (0.846) J	*2.09*	**101**	ND (0.282)	0.0771 J-	11,800 J	30.1	4.12	4.8	8,310	1.56 J-	1,950	106	ND (0.033)	ND (0.846)	25	554
	03/24/10	1.5-2.5	FD	4,840	ND (0.835) J	*1.95*	63.3	ND (0.278)	ND (0.278) J	3,640 J	30.7	3.95	4.67	8,280	1.56	1,900	90.9	ND (0.033)	ND (0.835)	24.4	548
	03/24/10	7.5-8	N	4,910	ND (0.86) J	*1.61*	35.4	ND (0.287)	ND (0.287) J	2,290	28.8	4.04	4.98	8,520	1.46 J-	2,250	93.6	ND (0.036)	ND (0.86)	26.5	705

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)																
Residential Regional Screening Levels [a]				**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]				**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]				**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area				**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Potassium**
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AFTA-DP27	03/24/10	0-0.5	N	7,630	ND (0.771) J	*2.58*	67.7	0.0652 J	ND (0.257) J	4,080	**59.5**	**9.69**	10.9	11,800	4.28	4,490	219	ND (0.0361)	0.282 J	45	982
	03/24/10	1.5-2	N	4,470	ND (0.862) J	*1.91*	50.3	ND (0.287)	0.0615 J-	2,680	27.5	3.53	4.3	7,980	1.51 J-	1,830	87.9	ND (0.033)	ND (0.862)	22.4	523
	03/24/10	7.5-8	N	4,790	ND (0.91) J	*2.03*	32	ND (0.303)	ND (0.303) J	2,480	29.9	4.1	4.98	8,520	1.75	2,090	94.2	ND (0.0379)	0.341 J	25.2	717
AP1AFTA-DP28	03/25/10	0-0.5	N	5,350	ND (0.886) J	*1.96*	41.4	ND (0.295)	0.0675 J-	2,750 J	39.5	8.07	6.12 J+	8,850	1.69	2,380 J	126	ND (0.0371)	1.72	29.5	775
	03/25/10	2-2.5	N	6,250	ND (0.86) J	*1.86*	52	ND (0.287)	ND (0.287) J	3,350 J	32.6	5.3	6.46 J+	9,970	1.85 J-	2,850 J	102	ND (0.0394)	0.301 J	34.3	979
	03/25/10	7.5-8	N	4,370	ND (0.902) J	*1.92*	34.5	ND (0.301)	ND (0.301) J	2,210 J	29.1	3.76	4.67 J+	7,430	1.67	1,770 J	79	ND (0.0376)	ND (0.902)	22.2	670
AP1AFTA-DP29	03/25/10	0-0.5	N	4,720	ND (0.849) J	*1.84*	26.1	ND (0.283)	0.0648 J-	7,970 J	26.3	3.9	4.61 J+	7,600	1.36 J-	2,120 J	108	ND (0.037)	ND (0.849)	24	583
	03/25/10	1.5-2	N	6,920	ND (0.831) J	*2.65*	**91.2**	0.235 J	ND (0.277) J	4,590 J	26.6	6.92	8.92 J+	11,500	4.99	2,950 J	166	**0.779**	ND (0.831)	33	1,430
	03/25/10	7.5-8	N	4,150	ND (0.916) J	*1.51*	38.8	ND (0.305)	ND (0.305) J	7,430 J	20.9	3.46	3.84 J+	6,270	1.27 J-	1,770 J	92.2	ND (0.033)	ND (0.916)	19.9	539
	03/25/10	7.5-8	FD	4,070	ND (0.861) J	*1.45*	39.1	ND (0.287)	ND (0.287) J	6,370 J	22.2	3.41	3.94 J+	6,400	1.21 J-	1,820 J	90.1	ND (0.0381)	ND (0.861)	20.5	530
AP1AFTA-DP30	04/05/10	0-0.5	N	5,310	ND (0.825) J	*1.78*	44	0.259 J	0.0752 J-	2,530	30.9 J-	4.18	5.69	8,450	1.5	2,050 J-	108	ND (0.033)	0.417 J	27.7	652
AP1AFTA-DP31	03/25/10	0-0.5	N	5,490	ND (0.787) J	*1.97*	47.5	ND (0.262)	ND (0.262) J	2,950 J	**49.9**	7.62	7.19 J+	8,880	2.19	2,770 J	138	ND (0.0365)	ND (0.787)	33.1	728
	03/25/10	2-2.5	N	4,300	ND (0.851) J	*1.56*	32.7	ND (0.284)	ND (0.284) J	3,260 J	24.7	3.45	3.86 J+	6,680	1.25 J-	1,900 J	97.2	ND (0.0342)	ND (0.851)	21.5	430
	03/25/10	7.5-8	N	5,130	0.932	*1.53*	38.8	ND (0.311)	ND (0.311)	2,610	27.6	4.28	4.82	8,000	1.58 J-	2,290	97.9	ND (0.0375)	ND (0.932)	26.9	676
AP1AFTA-DP32	03/25/10	0-0.5	N	8,110	ND (0.768) J	*2.6*	**81.3**	0.0657 J	ND (0.256) J	7,020 J	42.7	6.8	14.3 J+	14,900	5.3	7,310 J	**390**	0.0155 J	0.466 J	**60.6**	906
	03/25/10	1.5-2	N	6,050	0.872	*2.09*	46.3	ND (0.291)	ND (0.291)	9,630	32.4	5.01	6.35	9,800	2.08 J-	2,530	115	ND (0.035)	ND (0.872)	32.9	811
	03/25/10	7.5-8	N	5,650	0.923	*2.23*	43.5	ND (0.308)	ND (0.308)	2,340	28	4.48	5.62	9,520	2.6 J-	2,270	88.2	0.0245 J	ND (0.923)	29.1	910
AP1AFTA-DP33	03/25/10	0-0.5	N	6,210	0.856	*1.79*	48.2	ND (0.285)	ND (0.285)	3,050	31.9	4.91	7.18	9,970	8.69	2,620	121	0.0143 J	ND (0.856)	32.4	769
	03/25/10	0-0.5	FD	5,800	0.261	*2.01*	55	ND (0.26)	ND (0.26)	2,780	29	5.39	7.19	8,750	11.7	2,410	122	0.0126 J	ND (0.781)	35.5	750
	03/25/10	1.75-2.25	N	8,920	0.822	*4.08*	**131**	0.403	ND (0.274)	3,110	18.6	**10.1**	15.4	16,200	46.5	3,260	**357**	**0.494**	0.311 J	33.2	1,530
AP1AFTA-DP34	03/25/10	0-0.5	N	9,050	0.777	*2.5*	**101**	ND (0.259)	ND (0.259) J	3,680	24.1	**21.6**	18.9	15,300	3.6	5,490	**367**	0.022 J	0.616 J	36.9	811
	03/25/10	1.75-2.25	N	**12,400**	1.72	*3.02*	72.4	0.0708 J	ND (0.574) J	5,290	7.43	7.42	7.59	**32,100**	4.85	4,690	**1,000**	0.152	0.773 J	7.16	493
AP1AFTA-DP35	03/26/10	0-0.5	N	6,300 J	ND (0.809) J	*2.06*	**86.1**	ND (0.27)	ND (0.27)	3,490 J	31.8 J-	5.06	6.52	9,190	7.72	2,550 J	127	*	ND (0.809)	31	753
	03/26/10	3.5-4	N	5,280 J	ND (0.895) J	*2.16*	33.9	ND (0.298)	ND (0.298)	2,650 J	27 J-	4.47	4.91	8,460	2.24	2,530 J	105	*	ND (0.895)	28.4	542
AP1AW407A-DP01	03/29/10	0-0.5	N	9,940	ND (0.858) J	*2.22 J+*	57.1 J+	0.108 J	ND (0.286)	6,900	31.7	7.06	27.9	13,300	12.3	3,970	166	ND (0.0379)	ND (0.858)	22.1	691
	03/29/10	2-2.5	N	5,030	ND (0.911) J	*1.92 J+*	34.9 J+	0.101 J	ND (0.304)	2,390	30.2	4.34	5.18	7,760	1.48	2,080	99.5	ND (0.0393)	ND (0.911)	27.6	608
AP1AW407A-DP02	03/29/10	0-0.5	N	7,460	ND (0.791) J	*2.65*	65 J+	0.185 J	ND (0.264)	2,790	**45.1**	6.54	11.1	13,400	2.95	4,170	232	ND (0.0357)	ND (0.791)	40.3	1,010
	03/29/10	2-2.5	N	6,450	ND (0.899) J	*2.68*	**87.2 J+**	0.169 J	ND (0.3)	2,550	36	5.3	7.72	10,800	1.61	2,720	124	ND (0.033)	ND (0.899)	34.9	897
AP1AW407B-DP01	04/02/10	0-0.5	N	9,730	0.483 J	*3.03*	**82.2**	0.245 J	ND (0.26) J	11,400	**50.5**	**17.3**	16	14,900	5.12	6,750 J-	**340**	0.0273 J	ND (0.779)	**62.1**	943
	04/02/10	1.25-1.75	N	4,510	ND (0.828)	*1.67*	30.8	0.189 J	ND (0.276) J	2,200	26.5	3.61	4.9	7,070	1.64	1,800 J-	84.6	ND (0.033)	ND (0.828)	22.9	583
	04/02/10	1.25-1.75	FD	4,970	ND (0.818)	*1.82*	30.8	0.213 J	ND (0.273) J	2,500	30	4	5.58	7,830	1.55	2,000 J-	93.3	ND (0.033)	ND (0.818)	24.7	630
AP1AW407B-DP02	04/28/10	0-0.5	N	3,650 J-	ND (0.86) J	*1.32 J+*	25.8	0.133 J	ND (0.287)	2,870 J+	29.8	3.53 J-	3.86 J-	7,030	1.32 J-	1,850	91.3	ND (0.033)	ND (0.86)	21.3	381 J-
	04/28/10	1.5-2	N	3,780 J-	ND (0.895) J	*1.35 J+*	33.7	0.146 J	ND (0.298)	2,470 J+	27.7	3 J-	4.03 J-	7,240	1.48 J-	1,730	89.4	ND (0.033)	ND (0.895)	18.9	397 J-
AP1AW483A-DP01	03/30/10	0-0.5	N	5,810	ND (0.804) J	*2.81*	37.7	ND (0.268)	ND (0.268)	7,180 J+	43.8	5.08	7.2	9,390	6.66	2,380 J-	128 J+	0.0545	ND (0.804)	30.1 J+	887 J+
	03/30/10	3.5-4	N	4,700	ND (0.877) J	*1.86*	23.3	ND (0.292)	ND (0.292) J	2,620 J+	26.7	4.13	4.53	7,790	1.32 J+	1,800 J-	82.9 J+	ND (0.0378)	ND (0.877)	24.8 J+	567 J+

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)																
Residential Regional Screening Levels [a]				**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]				**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]				**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area				**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Potassium**
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AW483A-DP02	03/30/10	0-1	N	5,270	ND (0.796) J	*2.1*	36.1	ND (0.265)	0.376 J-	2,760 J+	28.1	**13.9**	10.9	8,410	11.8	1,780 J-	102 J+	0.0179 J	ND (0.796)	30.9 J+	600 J+
	03/30/10	3.5-4.5	N	4,670	ND (0.904) J	*1.79*	25.9	ND (0.301)	ND (0.301) J	2,520 J+	28.9	4.15	4.38	7,640	1.31 J+	1,840 J-	80.7 J+	ND (0.0337)	ND (0.904)	25.2 J+	659 J+
	03/30/10	3.5-4.5	FD	4,680	ND (0.912) J	*1.69*	29.5	ND (0.304)	ND (0.304) J	2,520 J+	28.5	4.21	4.43	7,620	1.24 J+	1,880 J-	81.4 J+	ND (0.0354)	ND (0.912)	25.4 J+	661 J+
AP1AW483B-DP01	03/31/10	0-0.5	N	5,510	ND (0.779)	*2.23*	43.1	0.168 J	ND (0.26)	2,920	29.2	***31.5***	10.5	9,180	12.8	2,170	109	ND (0.033)	ND (0.779)	28.7	585
	03/31/10	3-3.5	N	4,910	ND (0.829)	*2.02*	23.6	0.168 J	ND (0.276) J	5,710	29	4.06	5.17	8,450	1.4	1,880	92.3	ND (0.0351)	ND (0.829)	22.7	561
AP1AW483B-DP02	03/31/10	0-0.5	N	7,640	ND (0.756)	*3.35*	**145**	0.581	ND (0.252)	8,310	13.2	***23.2***	12.5	13,600	8.76	2,390	215	**1.24**	0.27 J	19.4	1,960
	03/31/10	3.25-3.75	N	4,820	ND (0.829)	*2.07*	27.5	0.176 J	ND (0.276) J	5,630	28.7	4.1	4.82	8,100	1.61	1,780	86	ND (0.0345)	ND (0.829)	21.9	469
AP1AW485B-DP01	04/12/10	0-0.5	N	12,000	0.505 J-	*3.17*	**85.2 J+**	0.357	ND (0.254) J	4,300	**66.4**	**10.8**	21.4	**21,000**	4.48	9,650	**392**	0.0224 J	0.591 J	**86.1 J-**	1,100
	04/12/10	2.5-3	N	4,270	ND (0.852) J	*1.72*	23.1	0.239 J	0.0952 J-	2,820	27.8 J-	3.47	4.64	7,540	1.63	1,620 J-	84.4	ND (0.037)	ND (0.852)	21.4	508
AP1AW485B-DP02	04/12/10	0-0.5	N	5,070	0.341 J-	*2.05*	38.2	0.251 J	0.0816 J-	2,430	**51.4 J-**	4.39	6.36	8,820	2.02	2,340 J-	123	ND (0.033)	ND (0.799)	31	706
	04/12/10	1.5-2	N	5,480	ND (0.817) J	*1.9*	34.3	0.255 J	0.0995 J	2,720	27.8 J-	6.73	7.88	9,140	3.05	2,500 J-	131	0.013 J	0.48 J	33.4	675
	04/12/10	2.5-3	N	4,830	ND (0.829) J	*2.04*	35.1	0.253 J	0.0901 J-	2,600	29.5 J-	3.96	5.13	8,500	1.91	1,900 J-	104	0.0158 J	ND (0.829)	25.4	587
AP1AW488-DP01	03/29/10	0-0.5	N	6,460	ND (0.849) J	*2.49 J+*	49.6 J+	0.176 J	ND (0.283)	4,000	35.8	6.16	8.13	11,300	3.37	3,080	159	ND (0.033)	ND (0.849)	31.8	740
	03/29/10	0-0.5	FD	6,280	ND (0.823) J	*2.28 J+*	69.7 J+	0.121 J	ND (0.274)	3,340	36.3	7.94	8.63	9,820	4.23	3,040	164	ND (0.0338)	ND (0.823)	35.2	758
	03/29/10	1.5-2	N	5,080	ND (0.872) J	*1.95 J+*	24.3 J+	0.12 J	ND (0.291)	2,640	28.7	4.35	4.97	8,530	1.38	2,490	119	ND (0.036)	ND (0.872)	28.1	433
AP1AW488-DP02	03/29/10	0-0.5	N	6,360	0.536 J-	*2.11 J+*	**169 J+**	0.149 J	**7.56**	3,720	**100**	5.24	14.7	10,600	92.1	2,750	144	0.0143 J	ND (0.85)	29.7	652
	03/29/10	2.25-2.75	N	5,050	ND (0.888) J	*1.27 J+*	29.2 J+	0.149 J	ND (0.296)	2,600	28.7	4.35	5.74	8,070	9.95	2,020	79.9	ND (0.033)	ND (0.888)	25.3	627
AP1AW495A-DP01	03/26/10	0-0.5	N	4,710 J	0.877 J-	*1.93*	53.8	ND (0.278)	ND (0.278)	7,420 J	29 J-	9.28	5.1	6,990	56.7	1,910 J	99.4	0.078 J-	ND (0.835)	23.1	588
	03/26/10	3.5-4	N	4,950 J	ND (0.898) J	*2*	31	ND (0.299)	ND (0.299)	2,640 J	29.5 J-	4.23	4.67	8,330	1.6	2,300 J	130	*	ND (0.898)	27.5	520
	03/26/10	7.5-8	N	4,580 J	ND (0.878) J	*1.64*	19.9	ND (0.293)	ND (0.293)	2,400 J	27.3 J-	3.77	4.51	7,570	1.48	1,910 J	89.7	*	ND (0.878)	24.3	565
AP1AW495A-DP02	03/26/10	0-0.5	N	7,640 J	ND (0.804) J	*2.99*	**84.7**	ND (0.268)	ND (0.268)	6,360 J	38.4 J-	6.92	12.4	12,400	7.26	4,250 J	237	*	ND (0.804)	47.5	1,050
	03/26/10	3.5-4	N	4,620 J	ND (0.852) J	*1.9*	27.4	ND (0.284)	ND (0.284)	2,910 J	28 J-	3.94	5.1	7,860	1.62	1,790 J	86.6	*	ND (0.852)	24.1	528
AP1AW495B-DP01	03/26/10	0-1	N	7,960 J	ND (0.834) J	*3.48*	**191**	0.704	ND (0.278) J	5,890 J	10.5 J-	6.68	12.6	15,800	8.9	3,060 J	**318**	**2.22 J-**	0.317 J	20.9	2,260
	03/26/10	2.5-3	N	6,030 J	ND (0.87) J	*2.25*	47.4	ND (0.29)	ND (0.29) J	3,080 J	31.8 J-	5.05	7.59	9,600	3.72	2,790 J	138	*	ND (0.87)	32.6	809
	03/26/10	2.5-3	FD	5,760 J	ND (0.846) J	*2.34*	46.8	ND (0.282)	ND (0.282)	2,970 J	33.4 J-	4.88	7.33	9,820	3.43	2,720 J	142	*	ND (0.846)	33	790
AP1AW495B-DP02	03/25/10	0-0.5	N	4,890	ND (0.767) J	*1.84*	38.6	ND (0.256)	ND (0.256) J	2,830 J	28.3	4.24	5.77 J+	8,090	3.94	2,180 J	105	ND (0.0367)	ND (0.767)	29.4	659
	03/25/10	2.5-3	N	6,600	ND (0.849) J	*1.98*	51.6	0.0773 J	ND (0.283) J	3,150 J	34.4	5.45	6.18 J+	10,400	1.55 J-	3,110 J	119	ND (0.0402)	ND (0.849)	37.6	867
	03/25/10	7.5-8	N	4,730	ND (0.946) J	*1.84*	22.8	0.0703 J	ND (0.315) J	2,570 J	28	3.66	4.86 J+	8,220	1.44 J-	2,120 J	86.7	ND (0.033)	ND (0.946)	25	688
AP1AW496-DP01	04/09/10	0-0.5	N	5,410 J	ND (0.83) J	*1.68*	32.9 J+	0.239 J	0.183 J-	3,150 J	27.6	***40.4***	14.3	8,040 J	6.84	1,840 J	93.8 J+	ND (0.033)	ND (0.83)	27.2	587
	04/09/10	3.5-4	N	**14,400 J**	0.595 J-	*4.16*	**85.5 J+**	0.48	ND (0.283) J	6,070 J	**50.4**	**13.1**	21.2	**24,700 J**	5.05	8,080 J	**538 J+**	0.0147 J	0.325 J	**57.8**	1,070
AP1AW496-DP02	04/09/10	0-0.5	N	7,550 J	ND (0.874) J	*1.39*	34.8 J+	0.21 J	0.205 J-	6,350 J	20.7	4.59	18.5	10,100 J	13.1	2,990 J	132 J+	ND (0.0368)	ND (0.874)	20.8	545
	04/09/10	3.5-4	N	4,410 J	ND (0.87) J	*0.909*	25.1 J+	0.244 J	0.0993 J-	2,360 J	28.2	3.38	5.4	7,300 J	1.53	1,690 J	70.7 J+	ND (0.034)	ND (0.87)	22.7	673
AP1AW499-DP01	04/01/10	0-0.5	N	6,620	ND (0.841)	*2.98*	40.5	0.192 J	0.3 J-	3,540	30.7	4.67	15	10,800	6.77	2,920	144	ND (0.0387)	ND (0.841)	25.6	632
AP1AW599A-DP01	03/29/10	0-0.5	N	6,200	ND (0.783)	*2.02*	67.8	ND (0.261)	ND (0.261)	2,910	33.6	**11.1**	12.1	9,190	3.71	2,530	121	ND (0.0344)	ND (0.783)	36.5	744
	03/29/10	4.25-4.75	N	5,020	ND (0.885)	*1.49*	28.4	ND (0.295)	ND (0.295)	2,720	28.5	4.25	4.72	7,720	1.52	1,930	89.8	ND (0.0393)	ND (0.885)	25.7	603

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)																
Residential Regional Screening Levels [a]				**77,000**	**31**	**0.39**	**15,000**	**160**	**70**	**NE**	**140**	**23**	**3,100**	**55,000**	**400**	**NE**	**1,800**	**23**	**390**	**1,500**	**NE**
Industrial Regional Screening Levels [b]				**990,000**	**410**	**1.6**	**190,000**	**2,000**	**800**	**NE**	**2,800**	**300**	**41,000**	**720,000**	**800**	**NE**	**23,000**	**310**	**5,100**	**20,000**	**NE**
Background for Pink Area [c]				**13,960**	**9.6**	**9.14**	**93.68**	**1.27**	**1.72**	**NE**	**54.84**	**NE**	**39.14**	**22,280**	**37.66**	**NE**	**383**	**0.52**	**5.2**	**55.72**	**NE**
Background for Yellow Area				**12,250**	**3.6**	**25**	**78**	**1.1**	**2**	**NE**	**45**	**9.4**	**48**	**18,850**	**175**	**NE**	**315**	**0.18**	**NE**	**48**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**	**Potassium**
FED-1a																					
Sample Locations Within the Pink Area																					
AP1AW599A-DP02	03/30/10	0-0.5	N	6,630	ND (0.842) J	*2.77*	57.3	ND (0.281)	ND (0.281) J	2,680 J+	39.5	6.14	10.4	11,100	3.77	3,550 J-	261 J+	ND (0.033)	ND (0.842)	38.4 J+	827 J+
	03/30/10	3.75-4.25	N	4,590	ND (0.932) J	*1.69*	24	ND (0.311)	ND (0.311)	2,670 J+	25.3	3.68	4.38	7,120	1.26 J+	1,790 J-	90.3 J+	ND (0.0402)	ND (0.932)	23.3 J+	543 J+
	03/30/10	3.75-4.25	FD	4,420	ND (0.905) J	*1.63*	23.8	ND (0.302)	ND (0.302)	2,530 J+	24.3	3.65	4.33	7,050	1.32 J+	1,730 J-	88.6 J+	0.0312 J	ND (0.905)	22.9 J+	535 J+
AP1AW599B-DP01	03/29/10	0-0.5	N	5,110	ND (0.818)	*1.58*	48.9	ND (0.273)	ND (0.273)	19,700	25.1	**17.8**	19.4	7,400	5.5	2,000	110	ND (0.033)	ND (0.818)	31.6	626
	03/29/10	3.5-4	N	9,300	ND (0.882)	*2.74*	**88**	ND (0.294)	ND (0.294)	9,080	36.4	6.42	13.7	11,700	5.81	3,590	197	0.0154 J	ND (0.882)	39.5	914
AP1AW599B-DP02	03/29/10	0-0.5	N	5,250	ND (0.822) J	*2.06 J+*	48 J+	0.11 J	ND (0.274)	15,100	28	**9.46**	11.5	7,950	13.3	2,640	136	0.0216 J	ND (0.822)	36.6	672
	03/29/10	4.75-5.25	N	4,590	ND (0.873) J	*1.53 J+*	21.8 J+	0.127 J	ND (0.291)	2,810	26.6	3.56	4.96	7,160	1.35	1,860	99.3	ND (0.0342)	ND (0.873)	22.1	522
Sample Locations Within the Yellow Area																					
AP1AW467B-DP01	04/08/10	0-0.5	N	4,300	ND (0.828) J	*1.43*	24.2 J+	0.288	0.0984 J	2,840 J	27.7 J+	***23.1***	4.58 J+	7,390	1.78	1,930	89.8	ND (0.033)	ND (0.828)	26.4 J+	580 J+
	04/08/10	2.5-3	N	4,370	ND (0.855) J	*1.45*	18.9 J+	0.276 J	0.102 J	2,450 J	27.8 J+	3.23	4.23 J+	7,560	1.41 J+	1,870	87.9	ND (0.0349)	ND (0.855)	20.5 J+	503 J+
	04/08/10	2.5-3	FD	4,090 J	ND (0.861) J	*1.52*	19.8 J+	0.212 J	0.0864 J-	2,420 J	26	3.17	4.52	6,840 J	1.4	1,690 J	83.4 J+	ND (0.0338)	ND (0.861)	20.4	515
FED-2c																					
Sample Locations Within the Pink Area																					
AP2CAPS-DP01	04/13/10	0-0.5	N	4,690	ND (0.915)	*1.31 J-*	36.9	0.238 J	0.0979 J	2,620	26.2	**21.5**	5.28	8,430	1.65 J+	2,310	96.8	ND (0.0341)	ND (0.915)	25.4	616
	04/13/10	1.5-2	N	4,180	ND (0.889)	*1.36 J-*	26.3	0.235 J	0.113 J	2,270	27	3.33	5	7,750	1.37 J+	1,940	82.6	ND (0.0384)	0.465 J	21.6	559
	04/13/10	1.5-2	FD	4,000	ND (0.876)	*1.33 J-*	25.6	0.226 J	0.104 J	2,160	27.5	3.23	4.77	7,590	1.2 J+	1,900	80.1	ND (0.0379)	0.426 J	21.1	545

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AAPS-DP01	04/06/10	0-0.75	N	ND (0.341)	ND (0.284)	75.9 J	ND (0.455)	20.1	16.1 J+
	04/06/10	0-0.75	FD	0.256 J	ND (0.283)	77.1 J	ND (0.452)	19.3	13 J
	04/06/10	0.75-1.25	N	ND (0.349)	ND (0.291)	68.6 J	ND (0.466)	20.1	16.4 J+
AP1AAPS-DP02	04/06/10	0-0.75	N	ND (0.336)	ND (0.28)	81.7 J	ND (0.448)	18.4	17.8 J+
	04/06/10	0.75-1.25	N	ND (0.341)	ND (0.284)	91.2 J	ND (0.455)	20.5	16.9 J+
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (0.356)	0.335	72.3 J	ND (0.475)	17.9	14.2
AP1AAPS-DP04	04/12/10	0-0.5	N	ND (0.348)	ND (0.29)	108 J	ND (0.464)	21	15.7
	04/12/10	1.5-2	N	ND (0.337)	ND (0.281)	99.2 J	ND (0.449)	18.5	14.9
	04/12/10	3.5-4	N	ND (0.361)	ND (0.301)	108 J	ND (0.482)	18.2	13.6
AP1AAPS-DP05	04/09/10	0-1	N	ND (0.353)	ND (0.294)	82.9 J	ND (0.47)	18.2	13.5
	04/09/10	2-3	N	ND (0.353)	ND (0.294)	141 J	ND (0.471)	19.7	17.5
	04/09/10	2-3	FD	ND (0.369)	ND (0.308)	142 J	ND (0.493)	20.2	18.4
AP1AAPS-DP06	04/12/10	0-0.5	N	ND (0.361)	ND (0.301)	86.9 J	ND (0.482)	20.3	14.3
	04/12/10	1-1.5	N	ND (0.36)	ND (0.3)	104 J	ND (0.48)	21.3	16.2
	04/12/10	2-2.5	N	ND (0.367)	ND (0.306)	123 J	ND (0.489)	22.6	17
AP1AAPS-DP07	04/12/10	0-0.5	N	ND (0.346)	ND (0.288)	114 J	ND (0.461)	19.8	14.6 J-
	04/12/10	1.5-2	N	ND (0.338)	ND (0.563)	90.5 J	ND (0.45)	18.8	13.2 J-
AP1AAPS-DP08	04/12/10	0-0.5	N	ND (0.346)	ND (0.577)	89.4 J	ND (0.462)	18.3	13.2 J-
	04/12/10	1.5-2	N	ND (0.355)	ND (0.592)	407	ND (0.473)	25	19.6 J-
AP1AAPS-DP09	04/12/10	0-0.5	N	ND (0.356)	ND (0.297)	91 J	ND (0.475)	19.9	16.1 J-
	04/12/10	1.5-2	N	ND (0.345)	ND (0.575)	267 J	ND (0.46)	18.2	14.2
AP1AAPS-DP10	04/06/10	0-0.5	N	0.21 J	ND (0.27)	97.4 J	ND (0.432)	18.9	13.3 J
	04/06/10	2-2.5	N	0.192 J	ND (0.282)	91.2 J	ND (0.451)	19.9	14.7 J
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (0.337)	ND (0.281)	105 J	ND (0.45)	21.6	17 J+
	04/06/10	1.5-2	N	ND (0.341)	ND (0.284)	75.4 J	ND (0.454)	20	15.6 J+
AP1AAPS-DP12	04/07/10	0-0.75	N	ND (0.359)	ND (0.599)	267 J	0.207 J+	43.9 J	40.6 J
	04/07/10	0-0.75	FD	0.191 J+	ND (0.293)	135 J	ND (0.469)	22.7 J	19.6 J
	04/07/10	1.5-2	N	0.251 J+	ND (0.297)	157 J	ND (0.475)	25.9	25.1
	04/07/10	3.5-4	N	ND (0.357)	ND (0.297)	106 J	ND (0.476)	21.4	18.3
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (0.329)	ND (0.275)	189 J	ND (0.439)	19.5	15
	04/01/10	3.25-3.75	N	ND (0.324)	ND (0.27)	85.9 J	ND (0.432)	17.4	12.4
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (0.341)	ND (0.284)	61.9 J	ND (0.455)	19.5	13.4
	04/01/10	3.5-4	N	ND (0.318)	ND (0.265)	60.6 J	ND (0.425)	17.1	12.9
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (0.354)	ND (0.295)	77.2 J	ND (0.472)	17.2	12.6
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (0.366)	ND (0.305)	81.8 J	ND (0.488)	16.5	12.4
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (0.351)	ND (0.292)	79.9 J	ND (0.467)	17.7	13.1

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AAPS-DP18	03/31/10	0-0.5	N	ND (0.387)	ND (0.323)	71 J	ND (0.516)	16.8	13.1
	03/31/10	1.5-2	N	ND (0.338)	ND (0.282)	74.6 J	ND (0.451)	16.3	12.9
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (0.312)	ND (0.26)	310	ND (0.416)	19.7	15.2
	04/02/10	3.5-4	N	ND (0.344)	ND (0.287)	105 J	ND (0.459)	26.6	24.7
AP1AAPS-DP20	04/05/10	0-0.5	N	ND (0.316)	ND (0.263)	449 J+	ND (0.421)	23.7	26.6
	04/05/10	3.5-4	N	ND (0.31)	ND (0.258)	343 J+	ND (0.414)	18.1	13.7 J-
	04/05/10	5-5.5	N	ND (0.339)	ND (0.283)	298 J+	ND (0.452)	17.4	13.3 J-
AP1AAPS-DP21	04/02/10	0-0.5	N	ND (0.31)	ND (0.259)	82.4 J	ND (0.414)	18.4	18.9
	04/02/10	3.5-4	N	ND (0.343)	ND (0.286)	216 J	ND (0.458)	18.2	14.1
AP1AAPS-DP22	04/02/10	0.5-1.5	N	ND (0.321)	ND (0.268)	317	ND (0.429)	25	30.7
	04/02/10	0.5-1.5	FD	0.258 J	ND (0.271)	445	ND (0.434)	26.3	34.2
	04/02/10	1.75-2.25	N	ND (0.341)	ND (0.284)	204 J	ND (0.454)	18.5	14.5
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (0.325)	ND (0.271)	160 J+	ND (0.433)	21.9	16.4 J-
	04/05/10	3.5-4	N	ND (0.369)	ND (0.308)	67.9 J+	ND (0.492)	18.6	14.5 J-
AP1AAPS-DP24	04/02/10	0-0.5	N	ND (0.302)	ND (0.252)	216 J	ND (0.403)	20.7	19.5
	04/02/10	3.5-4	N	ND (0.346)	ND (0.288)	85 J	ND (0.461)	19.2	13.4
AP1AAPS-DP25	04/05/10	0-0.5	N	ND (0.325)	ND (0.271)	511 J+	ND (0.433)	21.1	17.2 J-
	04/05/10	6.5-7	N	ND (0.361)	ND (0.301)	188 J+	ND (0.482)	17.4	12.7 J-
	04/05/10	6.5-7	FD	ND (0.362)	ND (0.302)	193 J+	ND (0.483)	19	14.2 J-
AP1AAPS-DP26	04/05/10	0-0.5	N	ND (0.314)	ND (0.262)	484 J+	ND (0.419)	19.2	16 J-
	04/05/10	3-3.5	N	ND (0.344)	ND (0.286)	364 J+	ND (0.458)	19.7	14.8 J-
AP1AAPS-DP27	04/05/10	0-0.5	N	0.17 J	ND (0.258)	112 J+	ND (0.413)	24.7	40.6 J-
	04/05/10	3.5-4	N	ND (0.31)	ND (0.258)	131 J+	ND (0.413)	17.8	12.7 J-
	04/05/10	5.5-6	N	ND (0.363)	ND (0.302)	130 J+	ND (0.483)	17.8	13.7 J-
AP1AAPS-DP28	04/05/10	0-0.5	N	ND (0.363)	ND (0.302)	82.1 J+	ND (0.484)	18.5	13.8 J-
	04/05/10	3.5-4	N	ND (0.31)	ND (0.258)	71.5 J+	ND (0.413)	17.4	13.5 J-
AP1AAPS-DP30	04/30/10	0-0.5	N	0.217 J	0.267 J	169 J+	ND (0.483) J	17.9 J-	17.6
	04/30/10	0.5-1	N	ND (0.369)	ND (0.307)	161 J+	ND (0.492) J	20.6 J-	21.1
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (0.353)	ND (0.294)	143 J+	ND (0.47) J	19.2 J-	19.6
	04/30/10	0.5-1	N	0.184 J	ND (0.281)	156 J+	ND (0.45) J	18 J-	19.4
AP1AAPS-DP80	05/04/10	0-0.5	N	0.27 J	ND (0.279)	142 J	ND (0.446) J	19.3	20.5
	05/04/10	0.5-1	N	0.199 J	ND (0.28)	133 J+	ND (0.449) J	21.4 J-	26
AP1AAPS-DP81	05/04/10	0-0.5	N	0.169 J	ND (0.279)	151 J	ND (0.446) J	19.4	20.3
	05/04/10	0.5-1	N	ND (0.344)	ND (0.287)	151 J	ND (0.459) J	19.8	20
AP1AAPS-DP82	05/05/10	0-0.5	N	0.181 J	2.27	133 J	ND (0.464) J	18	17.7
	05/04/10	0.5-1	N	0.227 J	ND (0.278)	121 J	ND (0.445) J	17	14.7

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AAPS-DP83	05/05/10	0-0.5	N	0.182 J	ND (0.284)	155 J	ND (0.455) J	18.8	18.4
	05/05/10	3.5-4	N	ND (0.35)	ND (0.291)	216 J	ND (0.466) J	18.3	19.5
AP1AAPS-DP84	05/05/10	0-0.5	N	0.299 J	0.106 J	288	ND (0.45) J	35.3	29.8
	05/05/10	1.5-2	N	0.272 J	ND (0.286)	192 J	ND (0.458) J	19.3	22.6
AP1AFTA-DP01	04/08/10	0-0.5	N	0.172 J	ND (0.522)	324	ND (0.417)	24.7	26.7 J+
	04/08/10	1.5-2	N	ND (0.339)	ND (0.565)	314	ND (0.452)	21.8	17.2 J+
AP1AFTA-DP02	04/08/10	0-0.5	N	0.203 J	ND (0.261)	259 J	ND (0.418)	20.6	18.4 J+
	04/08/10	1.5-2	N	ND (0.335)	ND (0.28)	78.2 J	ND (0.447)	16.9	14.2 J+
AP1AFTA-DP03	04/08/10	0-0.5	N	ND (0.333)	ND (0.555)	86.3 J	ND (0.444)	20.8	22.7 J+
	04/08/10	0-0.5	FD	0.238 J	ND (0.277)	79.7 J	ND (0.443)	20.4	26.6 J+
	04/08/10	1.5-2	N	0.167 J	ND (0.531)	87.8 J	ND (0.425)	21.9	25 J+
AP1AFTA-DP04	04/08/10	0-0.5	N	0.24 J	ND (0.26)	64.2 J	ND (0.415)	23.2	33.6 J+
	04/08/10	3.5-4	N	ND (0.338)	ND (0.282)	80.3 J	ND (0.451)	18.9	14.8 J+
AP1AFTA-DP05	04/09/10	0-0.5	N	ND (0.316)	ND (0.527)	68.5 J	ND (0.422)	20.3	24.5 J+
	04/09/10	3.5-4	N	ND (0.333)	ND (0.554)	ND (277)	ND (0.444)	17.8	12 J+
AP1AFTA-DP06	04/07/10	0-0.5	N	ND (0.342)	ND (0.285)	67.9 J	ND (0.456)	19.7	13.6
	04/07/10	3.5-4	N	ND (0.377)	ND (0.314)	66.1 J	ND (0.503)	22.1	15.7
	04/07/10	3.5-4	FD	ND (0.352)	ND (0.293)	67.5 J	ND (0.469)	20.5	14.3
AP1AFTA-DP07	04/07/10	0-0.5	N	ND (0.314)	ND (0.262)	224 J	ND (0.418)	20.5	16.9
	04/07/10	3.5-4	N	ND (0.355)	ND (0.296)	354	ND (0.473)	20.9	15.3
AP1AFTA-DP08	04/09/10	0-0.5	N	ND (0.415)	ND (0.692)	353	ND (0.554)	28.4	94.7 J+
	04/09/10	1.5-2	N	ND (0.349)	ND (0.581)	272 J	ND (0.465)	22	18.2 J+
AP1AFTA-DP09	04/07/10	0-0.5	N	0.237 J+	ND (0.264)	114 J	0.17 J+	24.2	22.5
	04/07/10	1.5-2	N	ND (0.331)	ND (0.276)	114 J	ND (0.442)	20.5	18.3
	04/07/10	1.5-2	FD	ND (0.342)	ND (0.285)	137 J	ND (0.456)	19.5	16.1
AP1AFTA-DP10	04/07/10	0-0.5	N	ND (0.322)	ND (0.269)	114 J	ND (0.43)	24.5	21.7
	04/07/10	1.5-2	N	ND (0.328)	ND (0.273)	101 J	ND (0.437)	20	16.1
AP1AFTA-DP11	04/06/10	0-0.5	N	0.207 J	ND (0.271)	85.2 J	ND (0.434)	20.4	15.5 J
	04/06/10	2-2.5	N	ND (0.347)	ND (0.289)	115 J	ND (0.462)	20.3	14.8 J
AP1AFTA-DP12	04/06/10	0-0.5	N	ND (0.33)	ND (0.275)	67.2 J	ND (0.44)	20.7	16.7 J+
AP1AFTA-DP13	04/06/10	0-0.5	N	ND (0.339)	ND (0.282)	82.9 J	ND (0.451)	30.1	29.2 J
	04/06/10	0-0.5	FD	ND (0.344)	ND (0.287)	101 J	ND (0.459)	22.8	19.9 J
AP1AFTA-DP14	04/08/10	0-0.5	N	0.183 J	ND (0.54)	80.8 J	ND (0.432)	32.7	23.3 J+
AP1AFTA-DP15	03/30/10	0-0.5	N	0.172 J	ND (0.272)	355 J+	ND (0.436)	21.8	17.8
	03/30/10	3.5-4	N	ND (0.349)	ND (0.291)	212 J+	ND (0.465)	19.2	16

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AFTA-DP16	03/30/10	0-0.5	N	ND (0.336)	ND (0.28)	112 J+	ND (0.449)	19.7	16.5
	03/30/10	1.5-2	N	ND (0.34)	ND (0.284)	153 J+	ND (0.454)	20.6	16.4
	03/30/10	1.5-2	FD	ND (0.346)	ND (0.289)	268 J+	ND (0.462)	23.8	20.8
AP1AFTA-DP17	03/30/10	0-0.5	N	ND (0.356)	ND (0.297)	91.5 J+	ND (0.475)	19.9	14.8
	03/30/10	1.5-2	N	ND (0.333)	ND (0.277)	99.2 J+	ND (0.444)	19.7	14.5
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (0.344)	ND (0.286)	317 J+	ND (0.458)	23.6	19.9
	03/30/10	3.5-4	N	ND (0.345)	ND (0.287)	91.4 J+	ND (0.46)	19.7	14.3
	03/30/10	4.5-5	N	ND (0.333)	ND (0.277)	126 J+	ND (0.443)	19.3	13.4
AP1AFTA-DP19	03/30/10	0-0.5	N	ND (0.348)	ND (0.29)	372	ND (0.464)	17.5	13.6
	03/30/10	3.5-4	N	ND (0.317)	ND (0.264)	284	ND (0.423)	17.5	13.6
	03/30/10	5.5-6	N	ND (0.317)	ND (0.264)	424	ND (0.423)	19.6	21.2
	03/30/10	5.5-6	FD	ND (0.339)	ND (0.282)	359	ND (0.451)	18.5	13
AP1AFTA-DP20	03/25/10	0-0.5	N	ND (0.309)	ND (0.258)	267 J+	ND (0.412)	22.1	19.4 J+
	03/25/10	3.5-4	N	ND (0.344)	ND (0.287)	77.1 J+	ND (0.459)	18	13.4 J+
	03/25/10	7.5-8	N	ND (0.35)	ND (0.291)	79.7 J+	ND (0.466)	17.6	13.6 J+
AP1AFTA-DP21	03/25/10	0-0.5	N	0.18 J	ND (0.281)	134 J+	ND (0.449)	19.9	16.1 J+
	03/25/10	3-3.5	N	ND (0.319)	ND (0.266)	371 J+	ND (0.426)	19.1	13.8 J+
	03/25/10	7.5-8	N	ND (0.377)	ND (0.314)	412 J+	ND (0.503)	17.5	14.7 J+
AP1AFTA-DP22	03/24/10	0-0.5	N	ND (0.305)	ND (0.254)	98.3 J	ND (0.407)	21.6	17.5
	03/24/10	3.5-4	N	ND (0.362)	ND (0.301)	66.8 J	ND (0.482)	21.6	16.2
	03/24/10	7.5-8	N	ND (0.355)	ND (0.296)	81.4 J	ND (0.473)	17	13.3
AP1AFTA-DP23	03/24/10	0-0.5	N	0.16 J	ND (0.25)	272	ND (0.4)	18.7	19.7
	03/24/10	0-0.5	FD	0.227 J	ND (0.256)	275	ND (0.41)	20.7	20.5
	03/24/10	2.5-3	N	ND (0.344)	ND (0.287)	132 J	ND (0.459)	19.1	13.9
	03/24/10	7.5-8	N	ND (0.359)	ND (0.299)	107 J	ND (0.478)	19.8	16.2
AP1AFTA-DP24	03/24/10	0-0.5	N	0.226 J	ND (0.258)	212 J	ND (0.412)	22.2	36.3
	03/24/10	2-2.5	N	ND (0.331)	ND (0.276)	82.1 J	ND (0.442)	19.9	14.7
	03/24/10	7.5-8	N	ND (0.363)	ND (0.303)	366	ND (0.484)	17.1	14.1
AP1AFTA-DP25	03/24/10	0-0.5	N	0.294 J	ND (0.262)	67.8 J	ND (0.42)	18.1	16
	03/24/10	2.5-3	N	ND (0.351)	ND (0.293)	ND (293)	ND (0.469)	19.2	14.4
	03/24/10	7.5-8	N	0.21 J	ND (0.301)	358	ND (0.481)	20.4	16.4
AP1AFTA-DP26	03/24/10	0-0.5	N	0.335	ND (0.279)	84.4 J	ND (0.446)	22.2	20.8
	03/24/10	1.5-2.5	N	ND (0.339)	ND (0.282)	133 J	ND (0.451)	19.4	14.6
	03/24/10	1.5-2.5	FD	ND (0.334)	ND (0.278)	66.8 J	ND (0.445)	19.5	14.4
	03/24/10	7.5-8	N	ND (0.344)	ND (0.287)	470	ND (0.459)	19.5	16.2

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AFTA-DP27	03/24/10	0-0.5	N	0.332	ND (0.257)	110 J	ND (0.411)	19.9	23.4
	03/24/10	1.5-2	N	ND (0.345)	ND (0.287)	89.1 J	ND (0.46)	19.2	13.6
	03/24/10	7.5-8	N	0.196 J	ND (0.303)	531	ND (0.485)	19	15.6
AP1AFTA-DP28	03/25/10	0-0.5	N	ND (0.354)	0.391	206 J+	ND (0.472)	20.2	17.1 J+
	03/25/10	2-2.5	N	0.223 J	ND (0.287)	262 J+	ND (0.459)	21.2	21.6 J+
	03/25/10	7.5-8	N	ND (0.361)	ND (0.301)	347 J+	ND (0.481)	16.7	14.1 J+
AP1AFTA-DP29	03/25/10	0-0.5	N	0.171 J	ND (0.283)	107 J+	ND (0.453)	17.7	14.9 J+
	03/25/10	1.5-2	N	0.227 J	ND (0.277)	108 J+	ND (0.443)	20.8	26.2 J+
	03/25/10	7.5-8	N	ND (0.367)	ND (0.305)	121 J+	ND (0.489)	15.8	12.5 J+
	03/25/10	7.5-8	FD	0.195 J	ND (0.287)	112 J+	ND (0.459)	15.6	12.8 J+
AP1AFTA-DP30	04/05/10	0-0.5	N	ND (0.33)	ND (0.275)	84.3 J+	ND (0.44)	19.8	15.2 J-
AP1AFTA-DP31	03/25/10	0-0.5	N	0.182 J	ND (0.262)	80.2 J+	ND (0.42)	18.3	17.6 J+
	03/25/10	2-2.5	N	ND (0.341)	ND (0.284)	73.4 J+	ND (0.454)	17.1	12.4 J+
	03/25/10	7.5-8	N	ND (0.373)	ND (0.311)	378	ND (0.497)	19.3	16.7
AP1AFTA-DP32	03/25/10	0-0.5	N	0.304 J	ND (0.256)	71.4 J+	ND (0.409)	22.2	31.3 J+
	03/25/10	1.5-2	N	ND (0.349)	ND (0.291)	130	ND (0.465)	21.5	18.8
	03/25/10	7.5-8	N	ND (0.369)	ND (0.308)	520	ND (0.492)	19.9	17.9
AP1AFTA-DP33	03/25/10	0-0.5	N	0.174 J	ND (0.285)	114	ND (0.456)	22.2	119 J
	03/25/10	0-0.5	FD	0.249 J	ND (0.26)	106	ND (0.833)	22.2	23 J
	03/25/10	1.75-2.25	N	ND (0.329)	ND (0.274)	129	ND (0.876)	18	57.3
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (0.311)	1.32	172	ND (0.829)	24.5	31.6
	03/25/10	1.75-2.25	N	0.349 J	ND (0.574)	598	ND (0.918)	37.3	89.6
AP1AFTA-DP35	03/26/10	0-0.5	N	0.174 J	ND (0.27)	120 J	ND (0.431)	21.7	19.9
	03/26/10	3.5-4	N	ND (0.358)	ND (0.298)	115 J	ND (0.477)	20.7	16.6
AP1AW407A-DP01	03/29/10	0-0.5	N	ND (0.343)	ND (0.286)	996	ND (0.457)	34.1	29.7
	03/29/10	2-2.5	N	ND (0.365)	ND (0.304)	321	ND (0.486)	19.2	16
AP1AW407A-DP02	03/29/10	0-0.5	N	ND (0.316)	ND (0.264)	131 J	ND (0.422)	21.5	24.2
	03/29/10	2-2.5	N	ND (0.36)	ND (0.3)	246 J	ND (0.479)	23	20.6
AP1AW407B-DP01	04/02/10	0-0.5	N	ND (0.312)	ND (0.26)	124 J	ND (0.416)	21.3	32.5
	04/02/10	1.25-1.75	N	ND (0.331)	ND (0.276)	108 J	ND (0.442)	17.8	13.7
	04/02/10	1.25-1.75	FD	ND (0.327)	ND (0.273)	119 J	ND (0.436)	19.3	14.7
AP1AW407B-DP02	04/28/10	0-0.5	N	ND (0.344) J	ND (0.287)	69 J-	ND (0.459) J	17.3	15.6
	04/28/10	1.5-2	N	ND (0.358) J	ND (0.298)	177 J-	ND (0.477) J	17.8	15.3
AP1AW483A-DP01	03/30/10	0-0.5	N	ND (0.322)	ND (0.268)	117 J+	ND (0.429)	21.2	23.8
	03/30/10	3.5-4	N	ND (0.351)	ND (0.292)	67.5 J+	ND (0.468)	18.6	13.5

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AW483A-DP02	03/30/10	0-1	N	ND (0.318)	ND (0.265)	100 J+	ND (0.425)	20.3	32.6
	03/30/10	3.5-4.5	N	ND (0.361)	ND (0.301)	94.9 J+	ND (0.482)	18.2	13.8
	03/30/10	3.5-4.5	FD	ND (0.365)	ND (0.304)	96.6 J+	ND (0.487)	17.9	13.7
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (0.312)	ND (0.26)	110 J	ND (0.416)	21.9	21.3
	03/31/10	3-3.5	N	ND (0.332)	ND (0.276)	86 J	ND (0.442)	18.4	13.7
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (0.302)	ND (0.252)	113 J	ND (0.403)	15.8	34.8
	03/31/10	3.25-3.75	N	ND (0.332)	ND (0.276)	83.8 J	ND (0.442)	18.4	13.4
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (0.305)	ND (0.508)	275	ND (0.406)	27.7	36.5
	04/12/10	2.5-3	N	ND (0.341)	ND (0.568)	65.5 J	ND (0.454)	19.8	12.6 J-
AP1AW485B-DP02	04/12/10	0-0.5	N	ND (0.32)	ND (0.533)	126 J	ND (0.426)	20.9	15.5 J-
	04/12/10	1.5-2	N	ND (0.327)	ND (0.545)	92.1 J	ND (0.436)	22.3	18.4 J-
	04/12/10	2.5-3	N	ND (0.331)	ND (0.552)	79 J	ND (0.442)	21.2	14.1 J-
AP1AW488-DP01	03/29/10	0-0.5	N	ND (0.34)	ND (0.283)	105 J	ND (0.453)	21.4	20.1
	03/29/10	0-0.5	FD	ND (0.329)	ND (0.274)	80.4 J	ND (0.439)	20.3	21.3
	03/29/10	1.5-2	N	ND (0.349)	ND (0.291)	125 J	ND (0.465)	19.9	14.9
AP1AW488-DP02	03/29/10	0-0.5	N	ND (0.34)	ND (0.283)	121 J	ND (0.453)	24.2	73.3
	03/29/10	2.25-2.75	N	ND (0.355)	ND (0.296)	97.3 J	ND (0.473)	19.5	15.3
AP1AW495A-DP01	03/26/10	0-0.5	N	0.172 J	ND (0.278)	98.1 J	ND (0.445)	18	53.7
	03/26/10	3.5-4	N	ND (0.359)	ND (0.299)	95.9 J	ND (0.479)	19.8	14.4
	03/26/10	7.5-8	N	ND (0.351)	ND (0.293)	72.6 J	ND (0.468)	18.2	13.6
AP1AW495A-DP02	03/26/10	0-0.5	N	ND (0.321)	ND (0.268)	82.2 J	ND (0.429)	21.5	28.3
	03/26/10	3.5-4	N	ND (0.341)	ND (0.284)	68.3 J	ND (0.455)	19.2	13.4
AP1AW495B-DP01	03/26/10	0-1	N	ND (0.334)	ND (0.278)	69.5 J	ND (0.445)	15.4	44.1
	03/26/10	2.5-3	N	ND (0.348)	ND (0.29)	90.2 J	ND (0.464)	20.6	20.5
	03/26/10	2.5-3	FD	ND (0.338)	ND (0.282)	90.5 J	ND (0.451)	20.8	19.4
AP1AW495B-DP02	03/25/10	0-0.5	N	0.266 J	ND (0.256)	114 J+	ND (0.409)	19.7	17.2 J+
	03/25/10	2.5-3	N	ND (0.339)	ND (0.283)	255 J+	ND (0.453)	23	20 J+
	03/25/10	7.5-8	N	ND (0.379)	ND (0.315)	115 J+	ND (0.505)	18.6	14.4 J+
AP1AW496-DP01	04/09/10	0-0.5	N	ND (0.332)	ND (0.554)	175 J	ND (0.443)	22.1	22.6 J+
	04/09/10	3.5-4	N	ND (0.34)	ND (0.567)	247 J	ND (0.453)	42.1	40.6 J+
AP1AW496-DP02	04/09/10	0-0.5	N	ND (0.349)	ND (0.582)	416	ND (0.466)	27.4	26.4 J+
	04/09/10	3.5-4	N	ND (0.348)	ND (0.58)	62.9 J	ND (0.464)	18	14.2 J+
AP1AW499-DP01	04/01/10	0-0.5	N	ND (0.337)	ND (0.28)	192 J	ND (0.449)	23.4	32
AP1AW599A-DP01	03/29/10	0-0.5	N	0.169 J	ND (0.261)	133 J	ND (0.418)	21.5	21
	03/29/10	4.25-4.75	N	ND (0.354)	ND (0.295)	77.3 J	ND (0.472)	18.9	15.5

Table A2-4
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Metals (mg/kg)					
Residential Regional Screening Levels [a]				**390**	**390**	**NE**	**NE**	**390**	**23,000**
Industrial Regional Screening Levels [b]				**5,100**	**5,100**	**NE**	**NE**	**5,200**	**310,000**
Background for Pink Area [c]				**1.78**	**2.22**	**NE**	**0.5**	**47.34**	**68.48**
Background for Yellow Area				**11**	**6.5**	**NE**	**5.8**	**47**	**125**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Vanadium**	**Zinc**
FED-1a									
Sample Locations Within the Pink Area									
AP1AW599A-DP02	03/30/10	0-0.5	N	ND (0.337)	ND (0.281)	99.4 J+	ND (0.898)	18.9	27.7
	03/30/10	3.75-4.25	N	ND (0.373)	ND (0.311)	92.1 J+	ND (0.497)	17.8	13.2
	03/30/10	3.75-4.25	FD	ND (0.362)	ND (0.302)	80.6 J+	ND (0.483)	17.1	12.8
AP1AW599B-DP01	03/29/10	0-0.5	N	ND (0.327)	ND (0.273)	201 J	ND (0.436)	19	16.5
	03/29/10	3.5-4	N	0.218 J	ND (0.294)	373	ND (0.47)	23.2	25.4
AP1AW599B-DP02	03/29/10	0-0.5	N	0.187 J	ND (0.274)	199 J	ND (0.877)	19.9	20.2
	03/29/10	4.75-5.25	N	ND (0.349)	ND (0.291)	77.1 J	ND (0.466)	17.2	13.8
Sample Locations Within the Yellow Area									
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (0.331)	ND (0.276)	437	ND (0.441)	20.4	13 J+
	04/08/10	2.5-3	N	ND (0.342)	ND (0.285)	108 J	ND (0.456)	18.2	12.7 J+
	04/08/10	2.5-3	FD	ND (0.344)	ND (0.574)	106 J	ND (0.459)	17	11.9 J+
FED-2c									
Sample Locations Within the Pink Area									
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (0.366)	ND (0.305)	301 J	ND (0.488)	17	16.8
	04/13/10	1.5-2	N	ND (0.356)	ND (0.296)	184 J	ND (0.474)	17.7	14.5
	04/13/10	1.5-2	FD	ND (0.351)	ND (0.292)	179 J	ND (0.467)	16.8	14

Notes:
a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)
c. TtEMI 2004

Results greater than the background value are bolded.
Results greater than or equal to the USEPA Residential Screening Levels are italicized.
Results greater than or equal to the USEPA Industrial Screening Levels are shaded.
USEPA = United States Environmental Protection Agency
NE = not established
mg/kg = milligrams per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
J+ = estimated result biased high determined by laboratory or data validation
J - = estimated result biased low determined by laboratory or data validation
* indicates that a compound was analyzed, however there was no valid result

Table A2-5
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dioxins and Furans (pg/g)																	
Residential Regional Screening Levels[a]				450	450	450	45	45	45	45	45	45	4.5	150	45	15	4.5	45	15,000	15,000	NE	NE
Industrial Regional Screening Levels[b]				1,800	1,800	1,800	180	180	180	180	180	180	18	600	180	60	18	180	60,000	60,000	NE	NE
DTSC Residential TEQ Remedial Goals[c]				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
DTSC Industrial TEQ Remedial Goals[d]				NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE	NE
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,2,3,4,6,7,8-HCDD**	**1,2,3,4,6,7,8-HCDF**	**1,2,3,4,7,8,9-HCDF**	**1,2,3,4,7,8-HXCDD**	**1,2,3,4,7,8-HXCDF**	**1,2,3,6,7,8-HXCDD**	**1,2,3,6,7,8-HXCDF**	**1,2,3,7,8,9-HXCDD**	**1,2,3,7,8,9-HXCDF**	**1,2,3,7,8-PCDD**	**1,2,3,7,8-PCDF**	**2,3,4,6,7,8-HXCDF**	**2,3,4,7,8-PCDF**	**2,3,7,8-TCDD**	**2,3,7,8-TCDF**	**Octachloro dibenzo furan**	**Octachloro dibenzo-p-dioxin**	**Total heptachloro dibenzo furan**	**Total heptachloro dibenzo-p-dioxin**
FED-1a																						
AP1AFTA-DP01	04/08/10	0-0.5	N	0.218 J	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	*	ND (5.61)	ND (5.61)	ND (5.61)	*	ND (5.61)	*	ND (1.12)	0.402 J	ND (11.2)	ND (11.2)	ND (5.61)	ND (5.61)
	04/08/10	1.5-2	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	*	ND (1.09)	0.476 J	ND (10.9)	ND (10.9)	ND (5.43)	ND (5.43)
AP1AFTA-DP02	04/08/10	0-0.5	N	0.289 J	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	0.147 J	ND (1.11)	0.489 J	ND (11.1)	*	ND (5.56)	1.18
	04/08/10	1.5-2	N	0.283 J	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	ND (5.25)	0.0798 J	ND (1.05)	0.382 J	ND (10.5)	ND (10.5)	ND (5.25)	0.508
AP1AFTA-DP03	04/08/10	0-0.5	N	16.1	4.07 J	0.393 J	0.512 J	0.665 J	0.99 J	0.546 J	0.746 J	ND (8.48)	0.536 J	*	1.05 J	1.31 J	ND (1.7)	1.51 J	8.42 J	116 J	10.9	41
	04/08/10	0-0.5	FD	1.16 J	0.721 J	ND (6.28)	ND (6.28)	0.264 J	ND (6.28)	0.292 J	ND (6.28)	ND (6.28)	ND (6.28)	0.231 J	0.538 J	0.935 J	ND (1.26)	0.754 J	*	ND (12.6)	1.6	1.16
	04/08/10	1.5-2	N	*	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	*	ND (1.1)	0.459 J	ND (11)	ND (11)	ND (5.49)	ND (5.49)
AP1AFTA-DP04	04/08/10	0-0.5	N	1.49 J	0.7 J	ND (5.62)	ND (5.62)	ND (5.62)	0.164 J	*	ND (5.62)	ND (5.62)	ND (5.62)	*	0.801 J	1.75 J	ND (1.12)	0.436 J	0.625 J	ND (11.2)	1.78	3.51
	04/08/10	3.5-4	N	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (1.1)	*	ND (11)	ND (11)	ND (5.51)	ND (5.51)
AP1AFTA-DP05	04/09/10	0-0.5	N	2.45 J	*	ND (5.72)	ND (5.72)	0.24 J	ND (5.72)	0.348 J	ND (5.72)	ND (5.72)	ND (5.72)	0.162 J	*	1.15 J	ND (1.14)	0.737 J	1.73 J	14.4	1.51	5.71
	04/09/10	3.5-4	N	0.181 J	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	ND (1.12)	0.416 J	ND (11.2)	ND (11.2)	ND (5.59)	0.181
AP1AFTA-DP06	04/07/10	0-0.5	N	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (1.15)	*	ND (11.5)	ND (11.5)	ND (5.77)	ND (5.77)
	04/07/10	3.5-4	N	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (1.19)	*	ND (11.9)	ND (11.9)	ND (5.96)	ND (5.96)
	04/07/10	3.5-4	FD	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (1.16)	ND (1.16)	ND (11.6)	ND (11.6)	ND (5.82)	ND (5.82)
AP1AFTA-DP07	04/07/10	0-0.5	N	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (1.27)	ND (1.27)	ND (12.7)	ND (12.7)	ND (6.33)	ND (6.33)
	04/07/10	3.5-4	N	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (1.11)	0.432 J	ND (11.1)	ND (11.1)	ND (5.57)	ND (5.57)
AP1AFTA-DP08	04/13/10	0-0.5	N	*	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	*	ND (1.22)	0.456 J	ND (12.2)	ND (12.2)	ND (6.09)	ND (6.09)
	04/13/10	3.5-4	N	0.285 J	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	0.14 J	ND (1.17)	*	ND (11.7)	ND (11.7)	ND (5.84)	0.285
AP1AFTA-DP09	04/07/10	0-0.5	N	0.276 J	ND (5.11)	ND (5.11)	ND (5.11)	ND (5.11)	ND (5.11)	*	ND (5.11)	ND (5.11)	ND (5.11)	0.1 J	ND (5.11)	0.215 J	ND (1.02)	0.278 J	ND (10.2)	0.861 J	ND (5.11)	0.616
	04/07/10	1.5-2	N	0.198 J	*	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	ND (6.1)	0.0635 J	ND (1.22)	*	ND (12.2)	0.576 J	ND (6.1)	0.198
	04/07/10	1.5-2	FD	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (1.11)	ND (1.11)	ND (11.1)	ND (11.1)	ND (5.57)	ND (5.57)
AP1AFTA-DP10	04/07/10	0-0.5	N	0.212 J	ND (4.83)	ND (4.83)	ND (4.83)	*	ND (4.83)	ND (4.83)	ND (4.83)	ND (4.83)	ND (4.83)	ND (4.83)	ND (4.83)	0.176 J	ND (0.965)	0.183 J	ND (9.65)	0.975 J	ND (4.83)	0.212
	04/07/10	1.5-2	N	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (5.4)	ND (1.08)	0.281 J	ND (10.8)	0.704 J	ND (5.4)	0.164
AP1AFTA-DP11	04/06/10	0-0.5	N	0.231 J	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (5.72)	ND (1.14)	ND (1.14)	ND (11.4)	0.668 J	ND (5.72)	0.231
	04/06/10	2-2.5	N	0.384 J	*	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	ND (6.36)	*	ND (1.27)	ND (1.27)	ND (12.7)	2.68 J	0.158	0.766
AP1AFTA-DP12	04/06/10	0-0.5	N	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	*	ND (1.27)	*	ND (12.7)	*	ND (6.35)	ND (6.35)
AP1AFTA-DP13	04/06/10	0-0.5	N	0.208 J	0.0677 J	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	0.097 J	ND (1.13)	ND (1.13)	ND (11.3)	0.823 J	0.111	0.345
	04/06/10	0-0.5	FD	0.342 J	*	ND (6.24)	ND (6.24)	ND (6.24)	ND (6.24)	ND (6.24)	ND (6.24)	ND (6.24)	ND (6.24)	0.0749 J	*	0.195 J	ND (1.25)	ND (1.25)	ND (12.5)	1.84 J	0.0924	0.342
AP1AFTA-DP14	04/08/10	0-0.5	N	5.8	*	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	ND (5.39)	*	1.24 J	ND (1.08)	*	2.38 J	43.1	3.95	5.8
AP1AFTA-DP15	03/30/10	0-0.5	N	ND (5.21)	*	ND (5.21)	ND (5.21)	0.0417 J	ND (5.21)	*	ND (5.21)	ND (5.21)	ND (5.21)	ND (5.21)	ND (5.21)	*	ND (1.04)	ND (1.04)	0.104 J	ND (10.4)	ND (5.21)	ND (5.21)
	03/30/10	3.5-4	N	*	ND (5.65)	ND (5.65)	ND (5.65)	ND (5.65)	ND (5.65)	ND (5.65)	ND (5.65)	ND (5.65)	ND (5.65)	*	ND (5.65)	0.052 J	ND (1.13)	ND (1.13)	ND (11.3)	0.502 J	ND (5.65)	ND (5.65)
AP1AFTA-DP16	03/30/10	0-0.5	N	0.764 J	0.626 J	ND (5.32)	ND (5.32)	0.23 J	ND (5.32)	*	ND (5.32)	*	ND (5.32)	*	0.243 J	0.255 J	ND (1.06)	*	*	2.81 J	0.922	0.764
	03/30/10	1.5-2	N	*	0.0717 J	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	ND (5.6)	*	ND (1.12)	ND (1.12)	*	0.758 J	0.128	0.148
	03/30/10	1.5-2	FD	*	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (5.16)	ND (1.03)	ND (1.03)	ND (10.3)	ND (10.3)	ND (5.16)	0.271

Table A2-5
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dioxins and Furans (pg/g)																	
Residential Regional Screening Levels[a]				**450**	**450**	**450**	**45**	**45**	**45**	**45**	**45**	**45**	**4.5**	**150**	**45**	**15**	**4.5**	**45**	**15,000**	**15,000**	**NE**	**NE**
Industrial Regional Screening Levels[b]				**1,800**	**1,800**	**1,800**	**180**	**180**	**180**	**180**	**180**	**180**	**18**	**600**	**180**	**60**	**18**	**180**	**60,000**	**60,000**	**NE**	**NE**
DTSC Residential TEQ Remedial Goals[c]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
DTSC Industrial TEQ Remedial Goals[d]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,2,3,4,6,7,8-HCDD**	**1,2,3,4,6,7,8-HCDF**	**1,2,3,4,7,8,9-HCDF**	**1,2,3,4,7,8-HXCDD**	**1,2,3,4,7,8-HXCDF**	**1,2,3,6,7,8-HXCDD**	**1,2,3,6,7,8-HXCDF**	**1,2,3,7,8,9-HXCDD**	**1,2,3,7,8,9-HXCDF**	**1,2,3,7,8-PCDD**	**1,2,3,7,8-PCDF**	**2,3,4,6,7,8-HXCDF**	**2,3,4,7,8-PCDF**	**2,3,7,8-TCDD**	**2,3,7,8-TCDF**	**Octachloro dibenzo furan**	**Octachloro dibenzo-p-dioxin**	**Total heptachloro dibenzo furan**	**Total heptachloro dibenzo-p-dioxin**
FED-1a																					
AP1AFTA-DP17	03/30/10	0-0.5	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (1.09)	ND (1.09)	ND (10.9)	*	ND (5.44)	ND (5.44)
	03/30/10	1.5-2	N	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (1.18)	ND (1.18)	ND (11.8)	ND (11.8)	ND (5.88)	ND (5.88)
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (5.44)	ND (1.09)	ND (1.09)	ND (10.9)	0.921 J	ND (5.44)	ND (5.44)
	03/30/10	3.5-4	N	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (1.15)	ND (1.15)	ND (11.5)	ND (11.5)	ND (5.77)	ND (5.77)
	03/30/10	4.5-5	N	0.282 J	0.0893 J	*	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	ND (5.19)	0.0602 J	ND (5.19)	0.0768 J	ND (1.04)	ND (1.04)	ND (10.4)	1.01 J	0.0893	0.282
AP1AFTA-DP19	03/30/10	0-0.5	N	0.132 J	0.0511 J	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	*	ND (5.56)	ND (5.56)	ND (1.11)	ND (1.11)	ND (11.1)	0.549 J	0.0511	0.124
	03/30/10	3.5-4	N	0.184 J	*	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (1.08)	ND (1.08)	ND (10.8)	0.537 J	ND (5.42)	0.306
	03/30/10	5.5-6	N	0.197 J	0.0699 J	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	0.0634 J	ND (5.46)	0.0984 J	ND (1.09)	*	ND (10.9) J	0.824 J	0.0699	0.197
	03/30/10	5.5-6	FD	0.247 J	0.147 J	ND (5.66)	ND (5.66)	*	ND (5.66)	0.0385 J	ND (5.66)	ND (5.66)	ND (5.66)	*	ND (5.66)	ND (5.66)	ND (1.13)	ND (1.13)	0.964 J	2.18 J	0.147	0.247
AP1AFTA-DP20	03/25/10	0-0.5	N	3.2 J	ND (16.1)	0.297 J	ND (16.1)	ND (16.1)	0.406 J	ND (16.1)	0.696 J	*	0.458 J	ND (16.1)	*	0.406 J	*	ND (3.22)	0.728 J	ND (32.2)	ND (16.1)	7.31
	03/25/10	3.5-4	N	0.549 J	ND (5.97)	*	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	*	ND (5.97)	ND (5.97)	0.0621 J	*	*	ND (1.19)	ND (11.9)	2.58 J	ND (5.97)	ND (5.97)
	03/25/10	7.5-8	N	ND (5.54)	0.173 J	0.0687 J	ND (5.54)	*	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	*	ND (1.11)	ND (1.11)	*	ND (11.1)	ND (5.54)	ND (5.54)
AP1AFTA-DP21	03/25/10	0-0.5	N	0.442 J	ND (5.02)	ND (5.02)	ND (5.02)	0.139 J	ND (5.02)	ND (5.02)	ND (5.02)	*	ND (5.02)	ND (5.02)	ND (5.02)	0.12 J	*	*	0.211 J	ND (10)	ND (5.02)	ND (5.02)
	03/25/10	3-3.5	N	0.49 J	ND (5.22)	0.1 J	ND (5.22)	ND (5.22)	ND (5.22)	ND (5.22)	ND (5.22)	*	ND (5.22)	ND (5.22)	ND (5.22)	0.0918 J	*	ND (1.04)	0.227 J	ND (10.4)	ND (5.22)	ND (5.22)
	03/25/10	7.5-8	N	0.484 J	ND (5.74)	0.0896 J	ND (5.74)	ND (5.74)	ND (5.74)	*	ND (5.74)	*	ND (5.74)	ND (5.74)	*	0.0987 J	*	ND (1.15)	0.246 J	ND (11.5)	ND (5.74)	ND (5.74)
AP1AFTA-DP22	03/24/10	0-0.5	N	ND (5.01)	ND (5.01)	*	ND (5.01)	ND (5.01)	ND (5.01)	ND (5.01)	ND (5.01)	*	ND (5.01)	ND (5.01)	*	ND (5.01)	*	*	ND (10)	2.65 J	ND (5.01)	ND (5.01)
	03/24/10	3.5-4	N	0.634 J	ND (5.58)	ND (5.58)	ND (5.58)	*	ND (5.58)	ND (5.58)	ND (5.58)	*	ND (5.58)	*	0.114 J	ND (5.58)	ND (1.12)	0.565 J	ND (11.2)	ND (11.2)	ND (5.58)	ND (5.58)
	03/24/10	7.5-8	N	0.691 J	ND (5.8)	ND (5.8)	ND (5.8)	ND (5.8)	ND (5.8)	*	ND (5.8)	ND (5.8)	ND (5.8)	*	ND (5.8)	ND (5.8)	ND (1.16)	0.603 J	0.487 J	ND (11.6)	ND (5.8)	ND (5.8)
AP1AFTA-DP23	03/24/10	0-0.5	N	0.599 J	ND (4.35)	*	ND (4.35)	ND (4.35)	ND (4.35)	*	ND (4.35)	0.0592 J	ND (4.35)	ND (4.35)	*	ND (4.35)	*	*	0.715 J	2.97 J	ND (4.35)	ND (4.35)
	03/24/10	0-0.5	FD	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	*	ND (4.95)	ND (4.95)	0.0773 J	ND (4.95)	*	0.438 J	ND (9.91)	3.3 J	ND (4.95)	ND (4.95)
	03/24/10	2.5-3	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	*	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	*	0.0538 J	ND (5.38)	*	0.458 J	0.26 J	1.27 J	ND (5.38)	ND (5.38)
	03/24/10	7.5-8	N	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	*	0.0843 J	ND (1.03)	*	*	ND (10.3)	ND (5.14)	ND (5.14)
AP1AFTA-DP24	03/24/10	0-0.5	N	ND (5.13)	*	ND (5.13)	ND (5.13)	*	ND (5.13)	ND (5.13)	ND (5.13)	ND (5.13)	ND (5.13)	ND (5.13)	*	ND (5.13)	ND (1.03)	0.351 J	ND (10.3)	ND (10.3)	ND (5.13)	ND (5.13)
	03/24/10	2-2.5	N	ND (5.47)	ND (5.47)	*	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	0.0984 J	*	*	0.658 J	0.273 J	ND (10.9)	ND (5.47)	ND (5.47)
	03/24/10	7.5-8	N	ND (5.79)	ND (5.79)	ND (5.79)	ND (5.79)	*	ND (5.79)	ND (5.79)	ND (5.79)	0.121 J	ND (5.79)	ND (5.79)	0.104 J	ND (5.79)	*	0.709 J	0.362 J	ND (11.6)	ND (5.79)	ND (5.79)
AP1AFTA-DP25	03/24/10	0-0.5	N	ND (4.74)	*	*	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	0.0663 J	ND (4.74)	ND (4.74)	0.102 J	ND (4.74)	*	*	0.171 J	ND (9.47)	ND (4.74)	ND (4.74)
	03/24/10	2.5-3	N	ND (6.11)	ND (6.11)	*	ND (6.11)	ND (6.11)	ND (6.11)	ND (6.11)	ND (6.11)	0.103 J	ND (6.11)	*	*	ND (6.11)	*	0.723 J	*	ND (12.2)	ND (6.11)	ND (6.11)
	03/24/10	7.5-8	N	ND (6.14)	ND (6.14)	ND (6.14)	ND (6.14)	ND (6.14)	ND (6.14)	ND (6.14)	ND (6.14)	0.0885 J	ND (6.14)	ND (6.14)	*	*	ND (1.23)	0.602 J	ND (12.3)	3.3 J	ND (6.14)	ND (6.14)
AP1AFTA-DP26	03/24/10	0-0.5	N	ND (5.02)	*	ND (5.02)	ND (5.02)	*	ND (5.02)	ND (5.02)	ND (5.02)	0.0804 J	ND (5.02)	ND (5.02)	0.104 J	ND (5.02)	*	0.46 J	ND (10)	2.24 J	ND (5.02)	ND (5.02)
	03/24/10	1.5-2.5	N	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	*	ND (5.33)	ND (1.07)	*	0.294 J	ND (10.7)	ND (5.33)	ND (5.33)
	03/24/10	1.5-2.5	FD	0.51 J	ND (5.48)	0.0986 J	ND (5.48)	*	ND (5.48)	*	ND (5.48)	ND (5.48)	ND (5.48)	*	ND (5.48)	0.0964 J	ND (1.1)	ND (1.1)	*	ND (11)	ND (5.48)	ND (5.48)
	03/24/10	7.5-8	N	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	*	ND (5.64)	ND (5.64)	ND (5.64)	*	ND (5.64)	ND (5.64)	*	*	ND (1.13)	0.583 J	*	ND (11.3)	ND (5.64)	ND (5.64)

Table A2-5
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dioxins and Furans (pg/g)																	
Residential Regional Screening Levels[a]				**450**	**450**	**450**	**45**	**45**	**45**	**45**	**45**	**45**	**4.5**	**150**	**45**	**15**	**4.5**	**45**	**15,000**	**15,000**	**NE**	**NE**
Industrial Regional Screening Levels[b]				**1,800**	**1,800**	**1,800**	**180**	**180**	**180**	**180**	**180**	**180**	**18**	**600**	**180**	**60**	**18**	**180**	**60,000**	**60,000**	**NE**	**NE**
DTSC Residential TEQ Remedial Goals[c]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
DTSC Industrial TEQ Remedial Goals[d]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,2,3,4,6,7,8-HCDD**	**1,2,3,4,6,7,8-HCDF**	**1,2,3,4,7,8,9-HCDF**	**1,2,3,4,7,8-HXCDD**	**1,2,3,4,7,8-HXCDF**	**1,2,3,6,7,8-HXCDD**	**1,2,3,6,7,8-HXCDF**	**1,2,3,7,8,9-HXCDD**	**1,2,3,7,8,9-HXCDF**	**1,2,3,7,8-PCDD**	**1,2,3,7,8-PCDF**	**2,3,4,6,7,8-HXCDF**	**2,3,4,7,8-PCDF**	**2,3,7,8-TCDD**	**2,3,7,8-TCDF**	**Octachloro dibenzo furan**	**Octachloro dibenzo-p-dioxin**	**Total heptachloro dibenzo furan**	**Total heptachloro dibenzo-p-dioxin**
FED-1a																					
AP1AFTA-DP27	03/24/10	0-0.5	N	ND (4.6)	*	ND (4.6)	ND (4.6)	*	ND (4.6)	ND (4.6)	ND (4.6)	*	ND (4.6)	ND (4.6)	0.0681 J	ND (4.6)	*	0.497 J	0.239 J	ND (9.21)	ND (4.6)	ND (4.6)
	03/24/10	1.5-2	N	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	*	ND (4.95)	ND (4.95)	0.0793 J	ND (4.95)	ND (0.991)	0.428 J	0.24 J	ND (9.91)	ND (4.95)	ND (4.95)
	03/24/10	7.5-8	N	0.503 J	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	*	ND (5.33)	*	ND (5.33)	ND (5.33)	ND (5.33)	*	*	ND (5.33)	0.249 J	ND (10.7)	ND (5.33)	ND (5.33)
AP1AFTA-DP28	03/25/10	0-0.5	N	0.532 J	ND (5.12)	0.113 J	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	0.088 J	*	*	ND (1.02)	ND (10.2)	ND (10.2)	ND (5.12)	ND (5.12)
	03/25/10	2-2.5	N	0.454 J	ND (5.45)	*	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	*	ND (5.45)	ND (5.45)	ND (5.45)	*	*	ND (1.09)	ND (10.9)	ND (10.9)	ND (5.45)	ND (5.45)
	03/25/10	7.5-8	N	0.534 J	ND (5.78)	*	ND (5.78)	*	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	*	0.104 J	ND (1.16)	ND (1.16)	ND (11.6)	ND (11.6)	ND (5.78)	ND (5.78)
AP1AFTA-DP29	03/25/10	0-0.5	N	0.503 J	ND (5.01)	0.0942 J	ND (5.01)	ND (5.01)	ND (5.01)	ND (5.01)	ND (5.01)	*	ND (5.01)	ND (5.01)	*	*	ND (1)	ND (1)	ND (10)	ND (10)	ND (5.01)	ND (5.01)
	03/25/10	1.5-2	N	4.01 J	ND (5.48)	ND (5.48)	ND (5.48)	ND (5.48)	ND (5.48)	0.32 J	0.285 J	ND (5.48)	ND (5.48)	ND (5.48)	ND (5.48)	0.559 J	ND (1.1)	*	ND (11)	15.1	ND (5.48)	8.85
	03/25/10	7.5-8	N	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (1.08)	0.295 J	ND (10.8)	ND (10.8)	ND (5.42)	ND (5.42)
	03/25/10	7.5-8	FD	0.55 J	*	0.0993 J	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	*	ND (5.17)	ND (5.17)	*	0.0786 J	ND (1.03)	ND (1.03)	ND (10.3)	ND (10.3)	ND (5.17)	ND (5.17)
AP1AFTA-DP30	04/05/10	0-0.5	N	*	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	*	ND (5.91)	0.078 J	ND (1.18)	ND (1.18)	ND (11.8)	0.77 J	ND (5.91)	ND (5.91)
AP1AFTA-DP31	03/25/10	0-0.5	N	0.454 J	*	*	ND (4.91)	ND (4.91)	ND (4.91)	*	ND (4.91)	ND (4.91)	ND (4.91)	ND (4.91)	ND (4.91)	0.116 J	ND (0.982)	ND (0.982)	ND (9.82)	ND (9.82)	ND (4.91)	ND (4.91)
	03/25/10	2-2.5	N	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	ND (1.18)	0.38 J	ND (11.8)	ND (11.8)	ND (5.9)	ND (5.9)
	03/25/10	7.5-8	N	*	0.224 J	*	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	*	ND (5.96)	ND (5.96)	*	*	ND (1.19)	ND (1.19)	ND (11.9)	ND (11.9)	ND (5.96)	ND (5.96)
AP1AFTA-DP32	03/25/10	0-0.5	N	3.15 J	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	ND (5.07)	0.365 J	0.385 J	*	ND (5.07)	0.333 J	ND (5.07)	0.956 J	*	ND (1.01)	0.862 J	14 J	ND (5.07)	6.99
	03/25/10	1.5-2	N	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (1.02)	ND (1.02)	ND (10.2)	ND (10.2)	ND (5.1)	ND (5.1)
	03/25/10	7.5-8	N	0.398 J	*	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	ND (10.5)	*	ND (2.1)	ND (2.1)	ND (21)	ND (21)	ND (10.5)	0.398
AP1AFTA-DP33	03/25/10	0-0.5	N	3.26 J	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	*	ND (5.36)	ND (5.36)	0.107 J	*	0.425 J	*	*	ND (10.7)	22.9 J	ND (5.36)	7.25
	03/25/10	0-0.5	FD	3.94 J	ND (4.98)	ND (4.98)	ND (4.98)	*	ND (4.98)	*	0.154 J	ND (4.98)	ND (4.98)	*	ND (4.98)	*	ND (0.997)	0.389 J	ND (9.97)	27.4 J	5.63	8.43
	03/25/10	1.75-2.25	N	3.33 J	ND (6.08)	ND (6.08)	ND (6.08)	*	ND (6.08)	*	ND (6.08)	ND (6.08)	ND (6.08)	*	ND (6.08)	0.435 J	ND (1.22)	ND (1.22)	ND (12.2)	24.7	ND (6.08)	7.14
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	ND (7.03) J	0.405 J	ND (7.03) J	ND (7.03) J	ND (1.41) J	ND (1.41)	ND (14.1) J	ND (14.1)	ND (7.03)	ND (7.03)
	03/25/10	1.75-2.25	N	1.35 J	ND (5.91)	0.338 J	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91) J	0.315 J	ND (5.91)	0.91 J	ND (1.18)	ND (1.18)	ND (11.8)	ND (11.8)	ND (5.91)	2.98
AP1AFTA-DP35	03/26/10	0-0.5	N	2.71 J	2.08 J	ND (6.22)	ND (6.22)	ND (6.22)	ND (6.22)	*	ND (6.22)	ND (6.22)	ND (6.22)	ND (6.22)	*	0.167 J	ND (1.24)	*	7.4 J	30	6.78	5.93
	03/26/10	3.5-4	N	ND (6.03)	*	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (1.21)	ND (1.21)	ND (12.1)	ND (12.1)	0.68	1.85

Table A2-5
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dioxins and Furans (pg/g)								
Residential Regional Screening Levels[a]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Industrial Regional Screening Levels[b]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
DTSC Residential TEQ Remedial Goals[c]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**50**
DTSC Industrial TEQ Remedial Goals[d]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**200**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Total hexachloro dibenzo furan**	**Total hexachloro dibenzo-p-dioxin**	**Total pentachloro dibenzo furan**	**Total pentachloro dibenzo-p-dioxin**	**Total tetrachloro dibenzo furan**	**Total tetrachloro dibenzo-p-dioxin**	**TEQBird**	**TEQFish**	**TEQHuman**
FED-1a												
AP1AFTA-DP01	04/08/10	0-0.5	N	ND (5.61)	ND (5.61)	0.415	ND (5.61)	0.666	ND (1.12)	0.402	0.0203	0.0424
	04/08/10	1.5-2	N	ND (5.43)	ND (5.43)	ND (5.43)	ND (5.43)	0.717	ND (1.09)	0.476	0.0238	0.0476
AP1AFTA-DP02	04/08/10	0-0.5	N	0.142	0.456	0.385	ND (5.56)	0.794	ND (1.11)	0.636	0.0982	0.0959
	04/08/10	1.5-2	N	ND (5.25)	ND (5.25)	0.0798	ND (5.25)	0.663	ND (1.05)	0.462	0.0593	0.065
AP1AFTA-DP03	04/08/10	0-0.5	N	9.64	8.52	7.05	2.55	7.48	0.573	3.77	1.84	1.77
	04/08/10	0-0.5	FD	4.33	ND (6.28)	3.68	ND (6.28)	2.71	ND (1.26)	1.83	0.635	0.491
	04/08/10	1.5-2	N	ND (5.49)	ND (5.49)	ND (5.49)	ND (5.49)	0.876	ND (1.1)	0.459	0.023	0.0459
AP1AFTA-DP04	04/08/10	0-0.5	N	6.86	1.37	6.92	ND (5.62)	3.11	ND (1.12)	2.28	0.987	0.687
	04/08/10	3.5-4	N	ND (5.51)	ND (5.51)	ND (5.51)	ND (5.51)	ND (1.1)	ND (1.1)	ND	ND	ND
AP1AFTA-DP05	04/09/10	0-0.5	N	5.51	0.14	5.12	0.849	4.49	ND (1.14)	1.97	0.683	0.512
	04/09/10	3.5-4	N	ND (5.59)	ND (5.59)	ND (5.59)	ND (5.59)	0.733	ND (1.12)	0.416	0.021	0.0434
AP1AFTA-DP06	04/07/10	0-0.5	N	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (1.15)	ND (1.15)	ND	ND	ND
	04/07/10	3.5-4	N	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (1.19)	ND (1.19)	ND	ND	ND
	04/07/10	3.5-4	FD	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	0.438	ND (1.16)	ND	ND	ND
AP1AFTA-DP07	04/07/10	0-0.5	N	ND (6.33)	ND (6.33)	ND (6.33)	ND (6.33)	ND (1.27)	ND (1.27)	ND	ND	ND
	04/07/10	3.5-4	N	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	0.432	ND (1.11)	0.432	0.0216	0.0432
AP1AFTA-DP08	04/13/10	0-0.5	N	ND (6.09)	ND (6.09)	ND (6.09)	ND (6.09)	---	ND (1.22)	0.456	0.0228	0.0456
	04/13/10	3.5-4	N	0.206	ND (5.84)	0.29	ND (5.84)	---	ND (1.17)	0.14	0.0703	0.0449
AP1AFTA-DP09	04/07/10	0-0.5	N	0.456	ND (5.11)	0.8	ND (5.11)	0.397	ND (1.02)	0.503	0.127	0.0983
	04/07/10	1.5-2	N	0.044	ND (6.1)	0.0635	ND (6.1)	ND (1.22)	ND (1.22)	0.0638	0.032	0.0212
	04/07/10	1.5-2	FD	ND (5.57)	ND (5.57)	ND (5.57)	ND (5.57)	ND (1.11)	ND (1.11)	ND	ND	ND
AP1AFTA-DP10	04/07/10	0-0.5	N	0.234	ND (4.83)	0.438	0.114	0.797	ND (0.965)	0.359	0.0975	0.0735
	04/07/10	1.5-2	N	ND (5.4)	ND (5.4)	0.101	ND (5.4)	0.438	ND (1.08)	0.281	0.0141	0.0283
AP1AFTA-DP11	04/06/10	0-0.5	N	ND (5.72)	ND (5.72)	0.0297	ND (5.72)	ND (1.14)	ND (1.14)	0.000298	0.000298	0.00251
	04/06/10	2-2.5	N	0.0432	ND (6.36)	ND (6.36)	ND (6.36)	ND (1.27)	ND (1.27)	0.000652	0.000652	0.00464
AP1AFTA-DP12	04/06/10	0-0.5	N	ND (6.35)	ND (6.35)	ND (6.35)	ND (6.35)	ND (1.27)	ND (1.27)	ND	ND	ND
AP1AFTA-DP13	04/06/10	0-0.5	N	0.0744	ND (5.64)	0.178	ND (5.64)	ND (1.13)	ND (1.13)	0.098	0.0495	0.0321
	04/06/10	0-0.5	FD	0.791	ND (6.24)	0.811	ND (6.24)	ND (1.25)	ND (1.25)	0.203	0.102	0.0647
AP1AFTA-DP14	04/08/10	0-0.5	N	5.23	2.45	6.35	0.42	2.51	ND (1.08)	1.25	0.63	0.444
AP1AFTA-DP15	03/30/10	0-0.5	N	0.119	ND (5.21)	ND (5.21)	ND (5.21)	ND (1.04)	ND (1.04)	0.00418	0.00418	0.0042
	03/30/10	3.5-4	N	ND (5.65)	ND (5.65)	0.052	ND (5.65)	ND (1.13)	ND (1.13)	0.0521	0.0261	0.0158
AP1AFTA-DP16	03/30/10	0-0.5	N	1.48	ND (5.32)	0.928	0.69	ND (1.06)	0.368	0.31	0.182	0.139
	03/30/10	1.5-2	N	0.056	ND (5.6)	ND (5.6)	ND (5.6)	ND (1.12)	ND (1.12)	0.000793	0.000793	0.000944
	03/30/10	1.5-2	FD	0.103	ND (5.16)	ND (5.16)	ND (5.16)	ND (1.03)	ND (1.03)	ND	ND	ND
AP1AFTA-DP17	03/30/10	0-0.5	N	0.139	ND (5.44)	ND (5.44)	ND (5.44)	ND (1.09)	ND (1.09)	ND	ND	ND
	03/30/10	1.5-2	N	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (1.18)	ND (1.18)	ND	ND	ND

Table A2-5
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dioxins and Furans (pg/g)								
Residential Regional Screening Levels[a]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Industrial Regional Screening Levels[b]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
DTSC Residential TEQ Remedial Goals[c]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**50**
DTSC Industrial TEQ Remedial Goals[d]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**200**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Total hexachloro dibenzo furan**	**Total hexachloro dibenzo-p-dioxin**	**Total pentachloro dibenzo furan**	**Total pentachloro dibenzo-p-dioxin**	**Total tetrachloro dibenzo furan**	**Total tetrachloro dibenzo-p-dioxin**	**TEQBird**	**TEQFish**	**TEQHuman**
FED-1a												
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (5.44)	ND (5.44)	0.098	ND (5.44)	ND (1.09)	ND (1.09)	0.0000921	0.0000921	0.000276
	03/30/10	3.5-4	N	ND (5.77)	ND (5.77)	ND (5.77)	ND (5.77)	ND (1.15)	ND (1.15)	ND	ND	ND
	03/30/10	4.5-5	N	ND (5.19)	ND (5.19)	0.137	ND (5.19)	ND (1.04)	ND (1.04)	0.0841	0.0427	0.0289
AP1AFTA-DP19	03/30/10	0-0.5	N	ND (5.56)	ND (5.56)	ND (5.56)	ND (5.56)	ND (1.11)	0.0956	0.000698	0.000698	0.002
	03/30/10	3.5-4	N	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	ND (1.08)	ND (1.08)	0.000238	0.000238	0.002
	03/30/10	5.5-6	N	0.0962	ND (5.46)	0.254	ND (5.46)	ND (1.09)	ND (1.09)	0.106	0.0533	0.0343
	03/30/10	5.5-6	FD	0.0385	ND (5.66)	ND (5.66)	ND (5.66)	ND (1.13)	ND (1.13)	0.00588	0.00588	0.00873
AP1AFTA-DP20	03/25/10	0-0.5	N	ND (16.1)	3.17	ND (16.1)	ND (16.1)	4.28	ND (3.22)	0.944	0.678	0.725
	03/25/10	3.5-4	N	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (1.19)	ND (1.19)	0.00702	0.00702	0.0125
	03/25/10	7.5-8	N	ND (5.54)	ND (5.54)	ND (5.54)	ND (5.54)	ND (1.11)	ND (1.11)	0.00242	0.00242	0.00242
AP1AFTA-DP21	03/25/10	0-0.5	N	ND (5.02)	0.0783	ND (5.02)	ND (5.02)	ND (1)	0.11	0.134	0.0744	0.0544
	03/25/10	3-3.5	N	ND (5.22)	ND (5.22)	ND (5.22)	ND (5.22)	ND (1.04)	ND (1.04)	0.0933	0.0474	0.0335
	03/25/10	7.5-8	N	ND (5.74)	ND (5.74)	ND (5.74)	ND (5.74)	1.16	ND (1.15)	0.1	0.0508	0.0354
AP1AFTA-DP22	03/24/10	0-0.5	N	ND (5.01)	ND (5.01)	ND (5.01)	ND (5.01)	ND (1)	0.0922	0.000265	0.000265	0.000795
	03/24/10	3.5-4	N	ND (5.58)	ND (5.58)	ND (5.58)	ND (5.58)	ND (1.12)	ND (1.12)	0.577	0.0403	0.0742
	03/24/10	7.5-8	N	ND (5.8)	ND (5.8)	ND (5.8)	ND (5.8)	1.24	ND (1.16)	0.604	0.0309	0.0674
AP1AFTA-DP23	03/24/10	0-0.5	N	ND (4.35)	0.258	ND (4.35)	ND (4.35)	1.19	ND (0.87)	0.00689	0.00689	0.013
	03/24/10	0-0.5	FD	ND (4.95)	0.392	ND (4.95)	ND (4.95)	ND (0.991)	ND (0.991)	0.446	0.03	0.0525
	03/24/10	2.5-3	N	ND (5.38)	ND (5.38)	ND (5.38)	ND (5.38)	ND (1.08)	ND (1.08)	0.464	0.0284	0.0516
	03/24/10	7.5-8	N	ND (5.14)	ND (5.14)	ND (5.14)	ND (5.14)	ND (1.03)	ND (1.03)	0.0843	0.0422	0.0253
AP1AFTA-DP24	03/24/10	0-0.5	N	ND (5.13)	0.312	ND (5.13)	ND (5.13)	ND (1.03)	ND (1.03)	0.351	0.0176	0.0351
	03/24/10	2-2.5	N	ND (5.47)	ND (5.47)	ND (5.47)	ND (5.47)	1.49	ND (1.09)	0.668	0.0428	0.0757
	03/24/10	7.5-8	N	ND (5.79)	ND (5.79)	ND (5.79)	ND (5.79)	1.3	ND (1.16)	0.732	0.058	0.0935
AP1AFTA-DP25	03/24/10	0-0.5	N	ND (4.74)	ND (4.74)	ND (4.74)	ND (4.74)	ND (0.947)	ND (0.947)	0.0168	0.0168	0.0169
	03/24/10	2.5-3	N	ND (6.11)	ND (6.11)	ND (6.11)	ND (6.11)	1.39	ND (1.22)	0.733	0.0465	0.0826
	03/24/10	7.5-8	N	ND (6.14)	ND (6.14)	ND (6.14)	ND (6.14)	ND (1.23)	ND (1.23)	0.611	0.0393	0.07
AP1AFTA-DP26	03/24/10	0-0.5	N	ND (5.02)	ND (5.02)	ND (5.02)	ND (5.02)	1.14	ND (1)	0.479	0.0417	0.0651
	03/24/10	1.5-2.5	N	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (1.07)	ND (1.07)	0.0000294	0.0000294	0.0000882
	03/24/10	1.5-2.5	FD	ND (5.48)	ND (5.48)	ND (5.48)	ND (5.48)	ND (1.1)	ND (1.1)	0.0979	0.0497	0.035
	03/24/10	7.5-8	N	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	1.21	ND (1.13)	0.583	0.0292	0.0583
AP1AFTA-DP27	03/24/10	0-0.5	N	ND (4.6)	ND (4.6)	ND (4.6)	ND (4.6)	1.32	ND (0.921)	0.504	0.0317	0.0566
	03/24/10	1.5-2	N	ND (4.95)	ND (4.95)	ND (4.95)	ND (4.95)	ND (0.991)	ND (0.991)	0.436	0.0294	0.0508
	03/24/10	7.5-8	N	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (1.07)	ND (1.07)	0.000528	0.000528	0.0051
AP1AFTA-DP28	03/25/10	0-0.5	N	ND (5.12)	ND (5.12)	ND (5.12)	ND (5.12)	1.22	ND (1.02)	0.0105	0.0105	0.0153
	03/25/10	2-2.5	N	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (5.45)	ND (1.09)	0.000454	0.000454	0.00454
	03/25/10	7.5-8	N	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (1.16)	ND (1.16)	0.105	0.0525	0.0365

Table A2-5
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Dioxins and Furans
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dioxins and Furans (pg/g)								
Residential Regional Screening Levels[a]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
Industrial Regional Screening Levels[b]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**
DTSC Residential TEQ Remedial Goals[c]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**50**
DTSC Industrial TEQ Remedial Goals[d]				**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**200**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Total hexachloro dibenzo furan**	**Total hexachloro dibenzo-p-dioxin**	**Total pentachloro dibenzo furan**	**Total pentachloro dibenzo-p-dioxin**	**Total tetrachloro dibenzo furan**	**Total tetrachloro dibenzo-p-dioxin**	**TEQBird**	**TEQFish**	**TEQHuman**
FED-1a												
AP1AFTA-DP29	03/25/10	0-0.5	N	ND (5.01)	ND (5.01)	ND (5.01)	ND (5.01)	1.05	ND (1)	0.00145	0.00145	0.00597
	03/25/10	1.5-2	N	ND (5.48)	ND (5.48)	ND (5.48)	ND (5.48)	1.59	ND (1.1)	0.625	0.32	0.273
	03/25/10	7.5-8	N	ND (5.42)	ND (5.42)	ND (5.42)	ND (5.42)	0.295	ND (1.08)	0.295	0.0148	0.0295
	03/25/10	7.5-8	FD	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (1.04)	ND (1.03)	0.0801	0.0408	0.0301
AP1AFTA-DP30	04/05/10	0-0.5	N	0.0661	ND (5.91)	0.078	ND (5.91)	ND (1.18)	ND (1.18)	0.0781	0.0391	0.0236
AP1AFTA-DP31	03/25/10	0-0.5	N	ND (4.91)	ND (4.91)	ND (4.91)	ND (4.91)	ND (0.982)	ND (0.982)	0.116	0.0585	0.0393
	03/25/10	2-2.5	N	ND (5.9)	ND (5.9)	ND (5.9)	ND (5.9)	0.712	ND (1.18)	0.38	0.019	0.038
	03/25/10	7.5-8	N	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (1.19)	ND (1.19)	0.00224	0.00224	0.00224
AP1AFTA-DP32	03/25/10	0-0.5	N	ND (5.07)	3.93	ND (5.07)	1.7	4.73	ND (1.01)	1.07	0.54	0.408
	03/25/10	1.5-2	N	ND (5.1)	ND (5.1)	ND (5.1)	ND (5.1)	ND (1.02)	ND (1.02)	ND	ND	ND
	03/25/10	7.5-8	N	ND (10.5)	ND (10.5)	0.088	ND (10.5)	ND (2.1)	ND (2.1)	0.000398	0.000398	0.00398
AP1AFTA-DP33	03/25/10	0-0.5	N	ND (5.36)	ND (5.36)	1.97	ND (5.36)	1.1	ND (1.07)	0.441	0.223	0.17
	03/25/10	0-0.5	FD	ND (4.98)	ND (4.98)	1.63	ND (4.98)	1.08	ND (0.997)	0.411	0.0277	0.102
	03/25/10	1.75-2.25	N	ND (6.08)	ND (6.08)	1.84	ND (6.08)	1.92	ND (1.22)	0.441	0.223	0.171
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (7.03)	ND (7.03)	0.405	ND (7.03)	ND (1.41)	ND (1.41)	0.0405	0.0203	0.0122
	03/25/10	1.75-2.25	N	ND (5.91)	ND (5.91)	2.1	ND (5.91)	ND (1.18)	ND (1.18)	0.946	0.475	0.299
AP1AFTA-DP35	03/26/10	0-0.5	N	1.87	ND (6.22)	0.167	ND (6.22)	ND (1.24)	ND (1.24)	0.194	0.111	0.109
	03/26/10	3.5-4	N	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (1.21)	ND (1.21)	ND	ND	ND

Notes:
a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)
c. Residential TEQ (DTSC 2009)
d. Industrial TEQ (DTSC 2009)

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
Results greater than or equal to the Residential California EPA Department of Toxic Substances Control (DTSC) are italicized.
Results greater than or equal to the Industrial California EPA Department of Toxic Substances Control (DTSC) are shaded.
USEPA = United States Environmental Protection Agency
TEQ = Toxic Equivalency Factor
NE = not established
pg/g = picograms per gram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
* indicates that a compound was analyzed, however there was no valid result

Table A2-6
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Explosives
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Explosives (ug/kg)													
Residential Regional Screening Levels [a]				**2,200,000**	**6,100**	**19,000**	**1,600**	**61,000**	**150,000**	**2,900**	**6,100**	**150,000**	**30,000**	**3,800,000**	**4,800**	**5,500**	**240,000**
Industrial Regional Screening Levels [b]				**27,000,000**	**62,000**	**79,000**	**5,500**	**620,000**	**2,000,000**	**13,000**	**62,000**	**1,900,000**	**110,000**	**49,000,000**	**24,000**	**24,000**	**2,500,000**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,3,5-Trinitro benzene**	**1,3-Dinitro benzene**	**2,4,6-Trinitro toluene**	**2,4-Dinitro toluene**	**2,6-Dinitro toluene**	**2-Amino-4,6-dinitro toluene**	**2-Nitro toluene**	**3-Nitro toluene**	**4-Amino-2,6-dinitro toluene**	**4-Nitro toluene**	**HMX**	**Nitro benzene**	**RDX**	**Tetryl**
FED-1a																	
AP1AMSA-DP01	04/09/10	0-0.5	N	ND (300)	ND (300)	258 J	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	311	ND (300)
	04/09/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP02	04/09/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP03	04/09/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	0-0.5	FD	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP04	04/09/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP05	03/26/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	03/26/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP06	03/26/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	03/26/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	03/26/10	3.5-4	FD	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	03/26/10	5.5-6	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP07	03/26/10	0-0.5	N	ND (300)	386 J	ND (300)	ND (300)	378	ND (300)	ND (300)	151 J	ND (300)	ND (300)	164	ND (300)	ND (300)	ND (300)
	03/26/10	2-2.5	N	143	333	ND (300)	ND (300)	153	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP08	04/09/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	1,110 J	355	ND (300)
	04/09/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP09	04/09/10	0-0.5	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	3.5-4	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	N	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	04/09/10	7.5-8	FD	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
AP1AMSA-DP10	03/26/10	0-0.5	N	ND (300)	249	ND (300)	ND (300)	330	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)
	03/26/10	2-2.5	N	ND (300)	185	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)	ND (300)

Table A2-6
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Explosives
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Notes:
a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
USEPA = United States Environmental Protection Agency
NE = not established
ug/kg = micrograms per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				22,000	310,000	3,400,000	3,400,000	17,000,000	1,700,000	150	15	150	1,500	15,000	15	2,300,000	2,300,000	150	3,600
Industrial Regional Screening Levels [b]				99,000	4,100,000	33,000,000	33,000,000	170,000,000	17,000,000	2,100	210	2,100	21,000	210,000	210	22,000,000	22,000,000	2,100	18,000
Residential ESLs [c]				NE	NE	130,000	NE	6,100	NE	NE	NE	NE	NE	NE	NE	NE	160,000	NE	460
Industrial ESLs [d]				NE	NE	130,000	NE	6,100	NE	NE	NE	NE	NE	NE	NE	NE	160,000	NE	1,500
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AAPS-DP01	04/06/10	0-0.5	N	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
	04/06/10	0-0.5	FD	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)
	04/06/10	0.5-2	N	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)
	04/06/10	2-4	N	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)	ND (8.11)
	04/06/10	4-8	N	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)
AP1AAPS-DP02	04/06/10	0-0.5	N	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)
	04/06/10	0.5-2	N	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)
	04/06/10	2-4	N	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)
	04/06/10	4-8	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)	ND (7.57)
	04/02/10	0.5-2	N	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)
	04/02/10	2-4	N	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)	ND (7.98)
	04/02/10	2-4	FD	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	2.06 J	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	1.76 J	ND (8.08)	ND (8.08)	ND (8.08)
	04/02/10	4-8	N	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)
AP1AAPS-DP04	04/12/10	0-0.5	N	ND (7.92)	2.02 J	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
	04/12/10	0.5-2	N	3.48 J	3.81 J	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	1.55 J	ND (7.75)	ND (7.75)	ND (7.75)
	04/12/10	2-4	N	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	3.32 J	6.11 J	5.99 J	ND (8.31)	3.68 J	ND (8.31)	6.08 J	ND (8.31)	ND (8.31)	ND (8.31)
	04/12/10	4-8	N	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)
AP1AAPS-DP05	04/09/10	0-0.5	N	2,120	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	12.9	11.8	62	18	68.6	ND (7.88)	141	ND (7.88)	22.7	ND (7.88)
	04/09/10	0.5-2	N	2,830	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	12.2	9.15	47.4	12.5	61.2	ND (7.94)	122	ND (7.94)	20.8	ND (7.94)
	04/09/10	2-4	N	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)	ND (8.25)
	04/09/10	4-8	N	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)
AP1AAPS-DP06	04/12/10	0-0.5	N	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)
	04/12/10	0-0.5	FD	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)
	04/12/10	0.5-2	N	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)
	04/12/10	2-4	N	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	1.97 J	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	3.14 J	ND (8.06)	ND (8.06)	ND (8.06)
	04/12/10	4-8	N	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AAPS-DP07	04/12/10	0-0.5	N	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)
	04/12/10	0.5-2	N	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	1.6 J	ND (7.74)	ND (7.74)	ND (7.74)
	04/12/10	2-4	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
	04/12/10	4-8	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
AP1AAPS-DP08	04/12/10	0-0.5	N	2.21 J	3.44 J	4.67 J	11.3	16.4	124 J	81.4	**125**	101	40.4	80.3 J	12.6 J	135	4.21 J	106	13.4
	04/12/10	0.5-2	N	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)
	04/12/10	2-4	N	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)	ND (7.96)
	04/12/10	4-8	N	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)
AP1AAPS-DP09	04/12/10	0-0.5	N	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)
	04/12/10	0.5-2	N	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)
	04/12/10	2-4	N	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)
	04/12/10	4-8	N	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)
AP1AAPS-DP10	04/06/10	0-0.5	N	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	3.12 J	ND (7.19)	ND (7.19)	ND (7.19)
	04/06/10	0.5-2	N	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)	ND (7.44)
	04/06/10	2-4	N	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)	ND (8.14)
	04/06/10	4-8	N	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)	ND (7.51)
	04/06/10	0-0.5	FD	ND (7.58)	1.6 J	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)
	04/06/10	0.5-2	N	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)
	04/06/10	2-4	N	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)	ND (8.2)
	04/06/10	4-8	N	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)	ND (8.12)
AP1AAPS-DP12	04/07/10	0-0.5	N	2,550 J	3,410 J	ND (7.82) J	ND (7.82) J	ND (7.82) J	ND (7.82)	17.2 J	ND (7.82)	ND (7.82)	ND (7.82)	26 J	ND (7.82)	78.1 J	115 J	ND (7.82)	*1,220 J*
	04/07/10	0.5-2	N	12	20.6	ND (8.05)	ND (8.05)	ND (8.05)	10.1	5.24 J	14.1	11.5	3.97 J	7.46 J	ND (8.05)	15.3	2.33 J	7.12 J	16.1
	04/07/10	2-4	N	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	ND (8.16)	6.85 J	ND (8.16)	ND (8.16)	ND (8.16)
	04/07/10	4-8	N	ND (8.01)	1.92 J	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	ND (8.01)	6.74 J	ND (8.01)	ND (8.01)	ND (8.01)
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)
	04/01/10	0.5-2	N	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)	ND (7)
	04/01/10	2-4	N	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)
	04/01/10	2-4	FD	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)	ND (7.53)
	04/01/10	4-8	N	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)	ND (8.07)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)	ND (7.14)
	04/01/10	0.5-2	N	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)
	04/01/10	2-4	N	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)
	04/01/10	4-8	N	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96) J	ND (5.96)	ND (5.96) J	ND (5.96) J	ND (5.96) J	ND (5.96)	ND (5.96) J	ND (5.96)	ND (5.96)	ND (5.96) J	ND (5.96)
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)
	04/01/10	0.5-2	N	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)
	04/01/10	2-4	N	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)	ND (7.97)
	04/01/10	4-8	N	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)	ND (7.91)
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)
	03/31/10	0-0.5	FD	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	3.54 J	3.33 J	ND (7.68)	3.32 J	ND (7.68)	3.57 J	ND (7.68)	4.86 J	ND (7.68)	ND (7.68)	ND (7.68)
	03/31/10	0.5-2	N	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)
	03/31/10	2-4	N	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)
	03/31/10	4-8	N	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)	ND (8.28)
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)
	03/31/10	0.5-2	N	1.58 J	1.6 J	1.66 J	1.65 J	1.88 J	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	1.76 J	ND (7.83)	1.73 J	2.14 J	ND (7.83)	ND (7.83)
	03/31/10	2-4	N	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)
	03/31/10	4-8	N	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)
AP1AAPS-DP18	03/31/10	0-0.5	N	2.42 J	2.89 J	2.42 J	2.21 J	2.59 J	ND (8.48)	ND (8.48)	ND (8.48)	ND (8.48)	ND (8.48)	2.11 J	ND (8.48)	2.37 J	2.76 J	ND (8.48)	ND (8.48)
	03/31/10	0.5-2	N	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)
	03/31/10	2-4	N	ND (8.51)	ND (8.51)	ND (8.51)	ND (8.51)	ND (8.51)	ND (8.51)	ND (8.51)	6.18 J	ND (8.51)	ND (8.51)	4.39 J	ND (8.51)	10.2	ND (8.51)	ND (8.51)	ND (8.51)
	03/31/10	2-4	FD	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)
	03/31/10	4-8	N	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)	ND (52.7)
	04/02/10	0.5-2	N	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)	ND (53.9)
	04/02/10	2-4	N	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)	ND (5.75)
	04/02/10	4-8	N	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)	ND (5.97)
AP1AAPS-DP20	04/05/10	0-0.5	N	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)
	04/05/10	0.5-2	N	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)	ND (5.36)
	04/05/10	2-4	N	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)	ND (5.32)
	04/05/10	4-8	N	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)	ND (5.66)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AAPS-DP21	04/02/10	0-0.5	N	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)	ND (54.9)
	04/02/10	0-0.5	FD	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)	ND (54.8)
	04/02/10	0.5-2	N	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)	ND (5.46)
	04/02/10	2-4	N	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)	ND (5.82)
	04/02/10	4-8	N	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)
AP1AAPS-DP22	04/02/10	0-0.5	N	1,000	1,140	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	ND (51)	757	ND (51)	ND (51)
	04/02/10	0.5-2	N	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)	ND (57.5)
	04/02/10	2-4	N	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)	ND (5.78)
	04/02/10	4-8	N	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)	ND (6.12)
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	**198 J**	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)
	04/05/10	0.5-2	N	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	*	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)	ND (74.3)
	04/05/10	2-4	N	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	*	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)	ND (5.93)
	04/05/10	2-4	N	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	*	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)
	04/05/10	4-8	N	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	*	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)
AP1AAPS-DP24	04/02/10	0-0.5	N	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)	ND (54.2)
	04/02/10	0.5-2	N	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)	ND (5.15)
	04/02/10	2-4	N	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	ND (5.64)	1.63 J	ND (5.64)	ND (5.64)	ND (5.64)
	04/02/10	4-8	N	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)	ND (5.96)
AP1AAPS-DP25	04/05/10	0-0.5	N	28.1 J	33 J	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)	85.5 J	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)	ND (70.7)
	04/05/10	0.5-2	N	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	*	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)	ND (34.7)
	04/05/10	2-4	N	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	*	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)	ND (5.33)
	04/05/10	4-8	N	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	*	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)	ND (5.88)
AP1AAPS-DP26	04/05/10	0-0.5	N	35.4 J	30.9 J	ND (79)	ND (79)	ND (79)	*	*	ND (79)	*	*	ND (79)	*	ND (79)	ND (79)	*	ND (79)
	04/05/10	0-0.5	FD	27.5 J	20.7 J	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)	*	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)	ND (80.7)
	04/05/10	0.5-2	N	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	*	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)	ND (6.18)
	04/05/10	2-4	N	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	*	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)	ND (6.03)
	04/05/10	4-8	N	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	*	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)	ND (6.17)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AAPS-DP27	04/05/10	0-0.5	N	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	71.8 J	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)	ND (71.7)
	04/05/10	0.5-2	N	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	*	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)	ND (72.9)
	04/05/10	2-4	N	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	*	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)	ND (5.17)
	04/05/10	4-8	N	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	*	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)
AP1AAPS-DP28	04/05/10	0-0.5	N	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	*	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)
	04/05/10	0.5-2	N	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	*	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)	ND (71.1)
	04/05/10	2-4	N	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)
	04/05/10	2-4	FD	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)	ND (7.63)
	04/05/10	4-8	N	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)
AP1AAPS-DP30	04/30/10	0-0.5	N	ND (8.23)	ND (8.23)	ND (8.23)	1.88 J	ND (8.23)	16.7	6.1 J	**21.8**	16.4	5.3 J	7.69 J	ND (8.23)	14.3	ND (8.23)	14.5	2.37 J
	04/30/10	0.5-2	N	ND (8.63)	ND (8.63)	ND (8.63)	2.85 J	1.89 J	31.9	8.35 J	**36.9**	33	12.2	10.7	ND (8.63)	19	ND (8.63)	24.8	3.3 J
	04/30/10	2-4	N	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	5.69 J	3.94 J	12.1	7.48 J	2.46 J	5.27 J	ND (7.94)	12	ND (7.94)	5.78 J	ND (7.94)
	04/30/10	4-8	N	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)	ND (78.6)
	04/30/10	0-0.5	FD	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)	ND (79.4)
	04/30/10	0.5-2	N	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	2.92 J	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	ND (7.55)	7.46 J	ND (7.55)	ND (7.55)	ND (7.55)
	04/30/10	2-4	N	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
	04/30/10	4-8	N	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
AP1AAPS-DP80	05/04/10	0-0.5	N	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)	ND (74.8)
	05/04/10	0.5-2	N	3.14 J	3.28 J	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	3.34 J
	05/04/10	2-4	N	3.51 J	3.7 J	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)
	05/04/10	4-8	N	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)
AP1AAPS-DP81	05/04/10	0-0.5	N	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)
	05/04/10	0.5-2	N	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)
	05/04/10	2-4	N	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)
	05/04/10	4-8	N	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)
AP1AAPS-DP82	05/05/10	0-0.5	N	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)	ND (7.64)
	05/05/10	0.5-2	N	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)	ND (7.54)
	05/05/10	2-4	N	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)
	05/05/10	4-8	N	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)	ND (7.88)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				22,000	310,000	3,400,000	3,400,000	17,000,000	1,700,000	150	15	150	1,500	15,000	15	2,300,000	2,300,000	150	3,600
Industrial Regional Screening Levels [b]				99,000	4,100,000	33,000,000	33,000,000	170,000,000	17,000,000	2,100	210	2,100	21,000	210,000	210	22,000,000	22,000,000	2,100	18,000
Residential ESLs [c]				NE	NE	130,000	NE	6,100	NE	NE	NE	NE	NE	NE	NE	NE	160,000	NE	460
Industrial ESLs [d]				NE	NE	130,000	NE	6,100	NE	NE	NE	NE	NE	NE	NE	NE	160,000	NE	1,500
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AAPS-DP83	05/05/10	0-0.5	N	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)
	05/05/10	0.5-2	N	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)
	05/05/10	2-4	N	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)	ND (7.77)
	05/05/10	4-8	N	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)	ND (7.81)
AP1AAPS-DP84	05/05/10	0-0.5	N	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)	ND (7.65)
	05/05/10	0.5-2	N	ND (9.35)	ND (9.35)	ND (9.35)	ND (9.35)	ND (9.35)	10.1 J	ND (9.35)	8.02 J	6.36 J	ND (9.35)	4.51 J	ND (9.35)	5.59 J	ND (9.35)	8.56 J	ND (9.35)
	05/05/10	2-4	N	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)
	05/05/10	4-8	N	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)	ND (7.99)
AP1AIR33-DP01	03/23/10	0-0.5	N	ND (70.4)	ND (70.4)	ND (70.4)	ND (70.4)	17.5 J	390	**363**	**534**	**703**	239	480 J	**86.9**	385	ND (70.4)	**392**	ND (70.4)
	03/23/10	0.5-2	N	ND (7.11)	ND (7.11)	ND (7.11)	ND (7.11)	1.8 J	18.8	11.7	**18.8**	22.8	8.5	17.2 J	4.78 J	8.73	ND (7.11)	16.7	ND (7.11)
	03/23/10	2-4	N	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)	ND (7.46)
	03/23/10	4-8	N	ND (7.79)	1.98 J	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)
AP1AIR33-DP02	03/24/10	0-0.5	N	ND (70.1)	ND (70.1)	51.8 J	ND (70.1)	115	2,910 J	**2,220 J**	**4,110 J**	**5,430**	**1,890**	2,780 J	**789 J**	2,200	20.4 J	**3,090 J**	ND (70.1)
	03/24/10	0.5-2	N	39.3 J	51.8 J	175	ND (73.3)	319	4,710 J	**5,650 J**	**8,770 J**	**12,400**	**3,820**	6,580 J	**1,680 J**	4,900	99.8	**5,450 J**	218
	03/24/10	2-4	N	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)	ND (73.8)
	03/24/10	4-8	N	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)
AP1AIR33-DP03	03/24/10	0-0.5	N	ND (70.8)	ND (70.8) J	ND (70.8)	ND (70.8)	ND (70.8)	1,950 J	**1,390 J**	**3,150 J**	**4,170 J**	1,400 J	1,780 J	**573 J**	878 J	ND (70.8) J	**2,030 J**	ND (70.8)
	03/24/10	0-0.5	FD	ND (70.5)	ND (70.5) J	ND (70.5)	ND (70.5)	ND (70.5)	828 J	**523 J**	**1,210 J**	**1,620 J**	492 J	669 J	ND (70.5) J	396 J	ND (70.5) J	**908 J**	ND (70.5)
	03/24/10	0.5-2	N	ND (7.04)	ND (7.04)	ND (7.04)	ND (7.04)	1.87 J	44.9 J	28.4 J	**54.1 J**	65.3	23	40.1 J	ND (7.04)	17.5	ND (7.04)	45.2 J	ND (7.04)
	03/24/10	2-4	N	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)
	03/24/10	4-8	N	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)	ND (7.75)
AP1AIR33-DP04	03/24/10	0-0.5	N	27.1 J	21.3 J	100	ND (71.1)	86.1	3,620 J	**2,750 J**	**6,660 J**	**8,770**	**2,970**	3,770 J	**1,090 J**	2,150	39.9 J	**4,650 J**	ND (71.1)
	03/24/10	0.5-2	N	ND (6.99)	ND (6.99)	ND (6.99)	1.48 J	2.08 J	ND (6.99)	ND (6.99)	6.92 J	ND (6.99)	ND (6.99)	6.58 J	ND (6.99)	4.06 J	ND (6.99)	ND (6.99)	ND (6.99)
	03/24/10	2-4	N	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)	ND (7.49)
	03/24/10	4-8	N	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)
AP1AIR33-DP05	03/23/10	0-0.5	N	ND (71.5)	ND (71.5)	ND (71.5)	ND (71.5)	ND (71.5)	1,250	**1,060**	**1,680**	**2,180**	727	1,450 J	**319**	1,000	ND (71.5)	**1,290**	ND (71.5)
	03/23/10	0.5-2	N	ND (7.01)	ND (7.01)	ND (7.01)	ND (7.01)	ND (7.01)	105	78.5	**155**	**298**	ND (7.01)	161 J	ND (7.01)	99.4	ND (7.01)	ND (7.01)	ND (7.01)
	03/23/10	2-4	N	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)	ND (7.62)
	03/23/10	2-4	FD	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)	ND (7.58)
	03/23/10	4-8	N	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)	ND (8.38)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AIR33-DP06	03/23/10	0-0.5	N	33	67.4	ND (7.03)	ND (7.03)	ND (7.03)	23.5	10.6	9.33	15.7	3.92 J	18.7 J	ND (7.03)	11.7	16.5	7.67	40.6
	03/23/10	0.5-2	N	ND (69.5)	ND (69.5)	ND (69.5)	ND (69.5)	ND (69.5)	742	**540**	**1,050**	**1,340**	418	788 J	**198**	413	ND (69.5)	**781**	ND (69.5)
	03/23/10	2-4	N	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)
	03/23/10	4-8	N	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	1.91 J	ND (8.05)	ND (8.05)	1.84 J	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)
AP1AIR33-DP07	03/23/10	0-0.5	N	70.6 J	93.8	794	ND (71.2)	1,590	13,900	**18,500**	**25,300**	**33,500**	**11,600**	**19,000 J**	**4,180**	23,000	309	**16,100**	271
	03/23/10	0.5-2	N	47.4 J	56.3 J	244	ND (69.8)	273	12,800	**11,400**	**17,200**	**22,200**	**6,410**	13,200 J	**3,450**	6,940	153	**13,800**	193
	03/23/10	2-4	N	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	13.6	ND (7.6)	**18.2**	ND (7.6)	ND (7.6)	25.3 J	ND (7.6)	11.8	4.23 J	ND (7.6)	ND (7.6)
	03/23/10	4-8	N	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	ND (7.93)	5.47 J	ND (7.93)	6.22 J	ND (7.93)	ND (7.93)	5.81 J	ND (7.93)	5.73 J	ND (7.93)	4.89 J	ND (7.93)
AP1AIR33-DP08	03/23/10	0-0.5	N	ND (72)	ND (72)	401	ND (72)	605	9,550	**7,860**	**13,700**	**18,100**	**5,250 J**	10,000 J	**2,510**	9,290	212	**11,100**	279
	03/23/10	0-0.5	FD	ND (72.1)	ND (72.1)	349	ND (72.1)	371	9,820	**9,170**	**17,100**	**27,300**	ND (72.1) J	11,500	**2,810**	7,650	191	**12,100**	238
	03/23/10	0.5-2	N	ND (6.97)	ND (6.97)	ND (6.97)	ND (6.97)	ND (6.97)	ND (6.97)	**152**	**238**	**456**	ND (6.97)	265 J	ND (6.97)	215	74.4	ND (6.97)	ND (6.97)
	03/23/10	2-4	N	29.9	32.7	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	ND (7.6)	54.2	ND (7.6)	ND (7.6)
	03/23/10	4-8	N	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	ND (8.57)	3.16 J	ND (8.57)	ND (8.57)	ND (8.57)
AP1AIR33-DP09	03/22/10	0-0.5	N	ND (71)	ND (71)	46.1 J	ND (71)	73.1 J	2,190 J	**1,720 J**	**2,740 J**	**3,550 J**	1,120 J	2,280 J	**507 J**	1,620 J	20.8 J	**2,220 J**	36.1 J
	03/22/10	0.5-2	N	1.82 J	1.68 J	ND (7.1)	ND (7.1)	ND (7.1)	5.36 J	4.22 J	5.51 J	5.75 J	2.54 J	ND (7.1)	ND (7.1)	5.43 J	ND (7.1)	4.81 J	ND (7.1)
	03/22/10	2-4	N	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	3.42 J	1.73 J	2.73 J	2.24 J	ND (7.68)	ND (7.68)	ND (7.68)	4.4 J	ND (7.68)	3.08 J	ND (7.68)
	03/22/10	4-8	N	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	ND (7.84)	2.84 J	ND (7.84)	1.99 J	1.91 J	ND (7.84)	ND (7.84)	ND (7.84)	2.35 J	ND (7.84)	2.04 J	ND (7.84)
AP1AIR33-DP10	03/22/10	0-0.5	N	ND (70.1)	ND (70.1)	25.3 J	70.1	ND (70.1)	1,050	**1,050**	**1,620**	**2,180**	726	1,360	**292**	993	ND (70.1)	**1,160**	70.1
	03/22/10	0.5-2	N	ND (7.71)	ND (7.71)	1.85 J	ND (7.71)	ND (7.71)	62.5	65.6	**85.2**	110	38.9	86.5	**15.2**	68.6	ND (7.71)	66.1	ND (7.71)
	03/22/10	2-4	N	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	2.68 J	ND (7.86)	2.02 J	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	3.7 J	ND (7.86)	2.06 J	ND (7.86)
	03/22/10	2-4	FD	1.71 J	3.77 J	ND (7.83)	ND (7.83)	ND (7.83)	2.51 J	ND (7.83)	1.94 J	ND (7.83)	ND (7.83)	ND (7.83)	ND (7.83)	2.84 J	ND (7.83)	ND (7.83)	3.78 J
	03/22/10	4-8	N	ND (8.29)	ND (8.29)	ND (8.29)	ND (8.29)	ND (8.29)	4.33 J	ND (8.29)	2.82 J	2.39 J	ND (8.29)	ND (8.29)	ND (8.29)	4.45 J	ND (8.29)	3.44 J	ND (8.29)
AP1AIR33-DP11	03/22/10	0-0.5	N	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	4.63 J	2.19 J	2.76 J	3.14 J	ND (7.7)	2.71 J	ND (7.7)	4.51 J	ND (7.7)	3.97 J	ND (7.7)
	03/22/10	0.5-2	N	124	141	ND (78.9)	ND (78.9)	ND (78.9)	ND (78.9)	**254**	**331**	**494**	ND (78.9)	498	ND (78.9)	195	70.6 J	78.9	78.9
	03/22/10	2-4	N	ND (8.76)	8.76	8.76	8.76	8.76	3.84	2.13	2.54	2.6	8.76	2.91	8.76	6.19 J	8.76	3.22	8.76
	03/22/10	4-8	N	7.05	3.13	7.05	7.05	7.05	3.32	1.52	2.65	2.21	7.05	2.17	7.05	3.78 J	7.05	2.58	4.51
AP1AIR33-DP12	03/22/10	0-0.5	N	20.2 J	28.6 J	190	ND (69.7)	379	2,210	**3,130**	**3,880**	**5,360**	**1,680**	3,730	**644**	4,490	112	**2,520**	157
	03/22/10	0.5-2	N	ND (7.44)	7.44	7.44	7.44	7.44	8.85	6.76 J	8.99	10.1	4.35 J	8.88	7.44	11.5 J	7.44	7.68	7.44
	03/22/10	2-4	N	3.05 J	5.74 J	7.51	7.51	2.4 J	12.6	14.5	**15.9**	19.8	6.29 J	18.5	2.27 J	23.1 J	7.51	12.1	6.42 J
	03/22/10	4-8	N	8.02	8.02	8.02	8.02	8.02	4.03 J	2.82 J	3.11 J	3.39 J	2.05 J	3.38 J	ND (8.02)	4.35 J	ND (8.02)	3.44 J	ND (8.02)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AIR33-DP13	03/22/10	0-0.5	N	29.5 J	37.9 J	123	ND (75.4)	194	4,710 J	**4,330 J**	**7,270 J**	**9,420 J**	**3,360 J**	5,350 J	**1,340 J**	4,040	50 J	**5,240 J**	144
	03/22/10	0-0.5	FD	ND (77.9)	ND (77.9)	50.8 J	ND (77.9)	91.4	2,100 J	**1,740 J**	**2,810 J**	**3,720 J**	1,190 J	2,220 J	**558 J**	1,970	19.1 J	**2,260 J**	ND (77.9)
	03/22/10	0.5-2	N	16 J	17.6 J	82.3	ND (76.9)	134	3,700	**4,060**	**5,880**	**7,690**	**2,600**	5,110	**1,080**	3,210	34 J	**4,250**	ND (76.9)
	03/22/10	2-4	N	ND (8.04)	ND (8.04)	3.43 J	ND (8.04)	6.32 J	145	118	**155**	**197**	60.5	157	**32.3**	140 J	ND (8.04)	142	ND (8.04)
	03/22/10	4-8	N	ND (8.1)	ND (8.1)	ND (8.1)	ND (8.1)	ND (8.1)	ND (8.1)	ND (8.1)	5.51 J	6.08 J	ND (8.1)	4.86 J	ND (8.1)	4.08 J	ND (8.1)	ND (8.1)	ND (8.1)
AP1AIR33-DP14	03/23/10	0-0.5	N	ND (8.93)	ND (8.93)	ND (8.93)	ND (8.93)	27.8	ND (8.93)	**177**	ND (8.93)	ND (8.93)	539	290	ND (8.93)	358	ND (8.93)	ND (8.93)	15.5
	03/23/10	0.5-2	N	4.83 J	6.92 J	26.7	ND (7.68)	56.8	820	**749**	**1,370**	**2,250**	ND (7.68)	999	**328**	915	10.6	**915**	25
	03/23/10	2-4	N	5.88 J	11.9	4.81 J	ND (7.65)	ND (7.65)	185	123	**249**	**300**	115	199	**45.4**	125	8	**200**	18.5
	03/23/10	4-8	N	ND (8.22)	ND (8.22)	ND (8.22)	ND (8.22)	2.7 J	65.5	44	**90.4**	100	45.6	68.6	**20.1**	39.7	ND (8.22)	73	ND (8.22)
AP1AIR33-DP15	03/23/10	0-0.5	N	21.7 J	26.7 J	88.4	ND (75.9)	54.5 J	3,980	**2,560**	**6,500**	**10,600**	ND (75.9)	3,840	**1,160**	1,820	35.9 J	**4,560**	138
	03/23/10	0.5-2	N	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	10.4	ND (7.66)	14.3	ND (7.66)	ND (7.66)	10.9	ND (7.66)	10.5	ND (7.66)	11.4	ND (7.66)
	03/23/10	2-4	N	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	3.26 J	ND (7.73)	ND (7.73)	ND (7.73)
	03/23/10	2-4	FD	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	1.62 J	ND (7.79)	ND (7.79)	ND (7.79)
	03/23/10	4-8	N	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	6.98 J	ND (7.87)	ND (7.87)	4.46 J	ND (7.87)	4.93 J	ND (7.87)	ND (7.87)	ND (7.87)
AP1AIR33-DP16	03/23/10	0-0.5	N	21.7 J	27.5 J	169	ND (71.7)	418	2,450	**3,320**	**4,670**	ND (71.7)	ND (71.7)	4,240	**696**	5,730	73.6	**2,750**	83.2
	03/23/10	0.5-2	N	12.2 J	13.3 J	93.3 J	11.5	133 J	2,720 J	**3,300 J**	**5,710 J**	**6,690**	**2,210**	4,440 J	**823 J**	2,870	34.1 J	**3,320 J**	43.9 J
	03/23/10	2-4	N	94.5	132	866	11.9	1,910	27,800	**28,900**	**35,700**	**42,500**	**14,600**	**35,400**	**6,870**	33,800	378	**31,100**	*504*
	03/23/10	4-8	N	228	271	1,840	ND (85.4)	2,690	83,300	**34,300**	**97,200**	**116,000**	**27,400**	**75,200**	**12,200**	57,500	810	**88,700**	*1,190*
AP1AIR33-DP17	03/23/10	0-0.5	N	ND (7.06)	ND (7.06)	ND (7.06)	ND (7.06)	ND (7.06)	ND (7.06)	ND (7.06)	7.32	ND (7.06)	ND (7.06)	6.7 J	ND (7.06)	4.73 J	ND (7.06)	ND (7.06)	ND (7.06)
	03/23/10	0.5-2	N	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	ND (7.19)	7.25	ND (7.19)	ND (7.19)	8.77	ND (7.19)	4.5 J	ND (7.19)	ND (7.19)	ND (7.19)
	03/23/10	2-4	N	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	5.68 J	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	2.71 J	ND (7.79)	ND (7.79)	ND (7.79)
	03/23/10	4-8	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
AP1AIR33-DP18	03/23/10	0-0.5	N	ND (7.3)	ND (7.3)	ND (7.3)	ND (7.3)	2.58 J	ND (7.3)	ND (7.3)	**62.5**	76.3	21.4	43.9	ND (7.3)	33.9	ND (7.3)	ND (7.3)	ND (7.3)
	03/23/10	0-0.5	FD	ND (7.26)	ND (7.26)	ND (7.26)	ND (7.26)	1.62 J	29 J	22.4 J	**38.4 J**	50.4	17.5	27.2 J	ND (7.26)	28.8	ND (7.26)	28.5 J	ND (7.26)
	03/23/10	0.5-2	N	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)
	03/23/10	2-4	N	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)
	03/23/10	4-8	N	2.13 J	2.38 J	3.63 J	4.61 J	13.7	12.7	27.9 J	**23.9**	26.8	11.7	30.5 J	ND (7.85)	47.9	6.93 J	12.8	ND (7.85)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AIR33-DP19	03/23/10	0-0.5	N	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	**137 J**	**174**	64.9 J	100 J	ND (71.8)	53.7 J	ND (71.8)	ND (71.8)	ND (71.8)
	03/23/10	0.5-2	N	3.92 J	5.93 J	10.5	1.53 J	15.9	882 J	**617 J**	**1,020 J**	**1,300**	393	780 J	**215 J**	426	5.98 J	**926 J**	12.2
	03/23/10	2-4	N	5.33 J	7.01 J	25.1	2.46 J	47.1	1,250 J	**1,290 J**	**1,700 J**	**2,170**	691	1,530 J	**338 J**	1,050	11.9	**1,420 J**	23.3
	03/24/10	4-8	N	5.58 J	11.6	8.48	ND (7.73)	10.3	264 J	**266 J**	**450 J**	**589**	172 J	334 J	**66.9**	176 J	ND (7.73)	**263 J**	18.7
AP1AIR33-DP20	03/24/10	0-0.5	N	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)
	03/24/10	0.5-2	N	ND (7.12)	ND (7.12)	ND (7.12)	ND (7.12)	ND (7.12)	6.12 J	3.51 J	5.9 J	7.62	ND (7.12)	7.13 J	ND (7.12)	3.76 J	ND (7.12)	4.94 J	ND (7.12)
	03/24/10	2-4	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	7.74 J	2.97 J	5.59 J	5.96 J	ND (8)	3.83 J	ND (8)	5.4 J	ND (8)	6.31 J	ND (8)
	03/24/10	2-4	FD	ND (7.9)	ND (7.9)	ND (7.9)	ND (7.9)	1.64 J	7.92 J	4.65 J	7.05 J	6.38 J	ND (7.9)	5.66 J	ND (7.9)	7.99	ND (7.9)	6.14 J	ND (7.9)
	03/24/10	4-8	N	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)	ND (8.17)
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (52.9)	ND (52.9)	ND (52.9)	ND (52.9)	ND (52.9)	ND (52.9)	ND (52.9)	*	*	*	ND (52.9)	*	ND (52.9)	ND (52.9)	*	ND (52.9) J
	04/08/10	0.5-2	N	ND (6.97)	ND (6.97)	ND (6.97)	ND (6.97)	ND (6.97)	ND (6.97) J	ND (6.97)	ND (6.97) J	ND (6.97) J	ND (6.97) J	ND (6.97)	ND (6.97) J	ND (6.97)	ND (6.97)	ND (6.97) J	ND (6.97)
	04/08/10	2-4	N	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)	ND (7.79)
	04/08/10	2-4	FD	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)	ND (7.76)
	04/08/10	4-8	N	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)	ND (8.05)
AP1AW467B-DP02	04/08/10	0-0.5	N	ND (7.69)	1.66 J	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	1.72 J	ND (7.69)	8.26	ND (7.69)	ND (7.69)	ND (7.69)
	04/08/10	0.5-2	N	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)	ND (7.28)
	04/08/10	2-4	N	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73) J	ND (7.73)	ND (7.73) J	ND (7.73) J	ND (7.73) J	ND (7.73)	ND (7.73) J	ND (7.73)	ND (7.73)	ND (7.73) J	ND (7.73)
	04/08/10	4-8	N	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J	ND (8.19) J
AP1AW483A-DP01	03/30/10	0-0.5	N	14.5 J	26.2 J	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)	ND (37)
	03/30/10	0.5-2	N	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)	ND (54.7)
	03/30/10	2-4	N	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)	ND (5.61)
	03/30/10	4-8	N	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
AP1AW483A-DP02	03/30/10	0-0.5	N	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)	ND (69.8)
	03/30/10	0.5-2	N	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)	ND (7.43)
	03/30/10	2-4	N	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)	ND (7.67)
	03/30/10	4-8	N	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)
	03/31/10	0-0.5	FD	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)	ND (36.9)
	03/31/10	0.5-2	N	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)	ND (73.3)
	03/31/10	2-4	N	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)	ND (7.68)
	03/31/10	4-8	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (72.6)	19.5 J	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	ND (72.6)	15.2 J	ND (72.6)	ND (72.6)	ND (72.6)
	03/31/10	0.5-2	N	ND (72.7)	19 J	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)	ND (72.7)
	03/31/10	2-4	N	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)	ND (7.45)
	03/31/10	4-8	N	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)	ND (7.85)
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)	ND (75.4)
	04/12/10	0.5-2	N	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	**525**	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)	ND (71.8)
	04/12/10	2-4	N	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)	ND (7.69)
	04/12/10	4-8	N	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
AP1AW485B-DP02	04/12/10	0-0.5	N	197	194	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)	ND (72.4)
	04/12/10	0-0.5	FD	139	167	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)
	04/12/10	0.5-2	N	6,060	5,780	ND (53.5)	ND (53.5)	ND (53.5)	ND (53.5)	ND (53.5)	ND (53.5)	ND (53.5)	ND (53.5)	873 J	ND (53.5)	ND (53.5)	1,760	ND (53.5)	*2,600*
	04/12/10	2-4	N	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)	ND (7.73)
	04/12/10	4-8	N	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)	ND (8.06)
AP1AW495A-DP01	03/26/10	0-0.5	N	ND (37.5)	ND (37.5)	30.3 J	ND (37.5)	64.7	1,540 J	**1,280**	**2,320 J**	**2,870**	1,030	1,800 J	**366**	1,250	10.9 J	**1,730 J**	ND (37.5)
	03/26/10	0.5-2	N	487	412	ND (71.5)	ND (71.5)	ND (71.5)	2,420 J	**1,790**	**3,460 J**	**4,860**	1,500	2,550 J	ND (71.5)	1,690	201	**2,600 J**	ND (71.5)
	03/26/10	2-4	N	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)	ND (37.4)
	03/26/10	4-8	N	ND (7.89)	ND (7.89)	ND (7.89)	ND (7.89)	ND (7.89)	ND (7.89)	2.03 J	2.74 J	3 J	ND (7.89)	2.88 J	ND (7.89)	2.72 J	ND (7.89)	ND (7.89)	ND (7.89)
AP1AW495A-DP02	03/26/10	0-0.5	N	ND (107)	ND (107)	ND (107)	ND (107)	182	1,390 J	**1,080**	ND (107)	**2,600**	801	1,380 J	ND (107)	1,810	ND (107)	**1,260 J**	ND (107)
	03/26/10	0-0.5	FD	ND (54)	ND (54)	ND (54)	ND (54)	ND (54) J	558 J	**374 J**	**740 J**	**963 J**	310 J	558 J	ND (54)	399 J	ND (54)	**439 J**	ND (54)
	03/26/10	0.5-2	N	ND (52.9)	ND (52.9)	ND (52.9)	ND (52.9)	ND (52.9) J	258 J	**159 J**	**286 J**	**376 J**	128 J	239 J	ND (52.9) J	124 J	ND (52.9)	**222 J**	ND (52.9)
	03/26/10	2-4	N	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)	ND (36.5)
	03/26/10	4-8	N	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)	ND (5.85)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AW495B-DP01	03/26/10	0-0.5	N	16.7 J	27.7 J	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	292 J	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)	ND (71.6)
	03/26/10	0.5-2	N	ND (71)	ND (71)	ND (71)	ND (71)	32 J	246 J	**322**	**445 J**	**579**	244	459 J	ND (71)	449	ND (71)	**307 J**	ND (71)
	03/26/10	2-4	N	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	ND (38.5)	7.99 J	ND (38.5)	ND (38.5)	ND (38.5)
	03/26/10	4-8	N	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)	ND (7.94)
AP1AW496-DP01	04/09/10	0-0.5	N	ND (53.4)	*	ND (53.4)	ND (53.4)	ND (53.4)	*	ND (53.4)	*	*	*	ND (53.4)	*	ND (53.4)	ND (53.4)	*	ND (53.4)
	04/09/10	0.5-2	N	377 J	325 J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	ND (71.6) J	256 J	ND (71.6) J	ND (71.6) J
	04/09/10	2-4	N	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	ND (7.7)	6.83 J	ND (7.7)	ND (7.7)	ND (7.7)
	04/09/10	2-4	FD	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66)	ND (7.66) J	ND (7.66)	ND (7.66) J	ND (7.66) J	ND (7.66) J	ND (7.66)	ND (7.66) J	ND (7.66)	ND (7.66)	ND (7.66) J	ND (7.66)
	04/09/10	4-8	N	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	ND (7.72)	6.54 J	ND (7.72)	ND (7.72)	ND (7.72)
AP1AW496-DP02	04/09/10	0-0.5	N	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)	ND (92.3)
	04/09/10	0.5-2	N	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)	ND (78.7)
	04/09/10	2-4	N	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)	ND (7.74)
	04/09/10	4-8	N	ND (8.68)	ND (8.68)	ND (8.68)	ND (8.68)	ND (8.68)	ND (8.68)	5.17 J	7.32 J	6.9 J	ND (8.68)	6.06 J	ND (8.68)	8.25 J	ND (8.68)	ND (8.68)	ND (8.68)
AP1AW499-DP01	04/01/10	0-0.5	N	ND (51)	ND (51)	ND (51)	39.5 J	45.7 J	258	131	ND (51)	**466**	177	357	ND (51)	388	ND (51)	ND (51)	ND (51)
	04/01/10	0.5-2	N	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)	ND (28.2)
	04/01/10	2-4	N	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)	ND (7.87)
	04/01/10	4-8	N	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)	ND (8.03)
AP1AW499-DP02	04/01/10	0-0.5	N	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)	ND (71.3)
	04/01/10	0.5-2	N	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	ND (7.56)	2.83 J	ND (7.56)	4.03 J	ND (7.56)	ND (7.56)	ND (7.56)
	04/01/10	2-4	N	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)	ND (5.84)
	04/01/10	2-4	FD	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)	ND (7.78)
	04/01/10	4-8	N	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)	ND (8.08)
AP1AW599A-DP01	03/29/10	0-0.5	N	ND (36.1)	ND (36.1)	ND (36.1)	ND (36.1)	ND (36.1)	ND (36.1)	35.8 J	ND (36.1)	96.9 J	37.5	55.1	ND (36.1)	48.2	ND (36.1)	56.9	ND (36.1)
	03/29/10	0.5-2	N	ND (7.05)	4.81 J	36.6	ND (7.05)	70.2	825	**1,010**	**1,480 J**	**2,110 J**	631	1,130	**238**	1,420	10.9	**1,050**	17.1
	03/29/10	2-4	N	ND (5.51)	ND (5.51)	3.57 J	ND (5.51)	7.68	120	118	**160 J**	**210 J**	71.3	154	**28.7**	161	ND (5.51)	120	ND (5.51)
	03/29/10	4-8	N	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)	ND (5.95)
AP1AW599A-DP02	03/30/10	0-0.5	N	ND (74.5)	ND (74.5)	ND (74.5)	ND (74.5)	ND (74.5)	600 J	**576**	**792 J**	**1,030**	336	721	**141 J**	841	ND (74.5)	**606 J**	ND (74.5)
	03/30/10	0.5-2	N	77.7	55.9	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	ND (35.7)	45	ND (35.7)	ND (35.7)
	03/30/10	2-4	N	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)	ND (7.71)
	03/30/10	4-8	N	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)	ND (8)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)															
Residential Regional Screening Levels [a]				**22,000**	**310,000**	**3,400,000**	**3,400,000**	**17,000,000**	**1,700,000**	**150**	**15**	**150**	**1,500**	**15,000**	**15**	**2,300,000**	**2,300,000**	**150**	**3,600**
Industrial Regional Screening Levels [b]				**99,000**	**4,100,000**	**33,000,000**	**33,000,000**	**170,000,000**	**17,000,000**	**2,100**	**210**	**2,100**	**21,000**	**210,000**	**210**	**22,000,000**	**22,000,000**	**2,100**	**18,000**
Residential ESLs [c]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**460**
Industrial ESLs [d]				**NE**	**NE**	**130,000**	**NE**	**6,100**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**NE**	**160,000**	**NE**	**1,500**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1a																			
AP1AW599B-DP01	03/29/10	0-0.5	N	ND (53)	ND (53)	ND (53)	ND (53)	ND (53)	139	110	ND (53) J	**261 J**	91.9	136 J	ND (53)	182	ND (53)	124 J	ND (53)
	03/29/10	0-0.5	FD	ND (53)	ND (53)	ND (53)	ND (53)	ND (53)	292	**177**	**334 J**	**427 J**	170	243 J	ND (53)	271	ND (53)	**263 J**	ND (53)
	03/29/10	0.5-2	N	ND (53.4)	ND (53.4)	ND (53.4)	ND (53.4)	ND (53.4)	ND (53.4)	ND (53.4)	ND (53.4)	97.8 J	32.7 J	55.3	ND (53.4)	55.4	ND (53.4)	ND (53.4)	ND (53.4)
	03/29/10	2-4	N	ND (5.74)	ND (5.74)	ND (5.74)	ND (5.74)	ND (5.74)	6.18	ND (5.74)	5.56 J	5.28 J	2.85 J	3.21 J	ND (5.74)	ND (5.74)	ND (5.74)	4.94 J	ND (5.74)
	03/29/10	4-8	N	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)	ND (5.98)
AP1AW599B-DP02	03/29/10	0-0.5	N	ND (54.3)	ND (54.3)	ND (54.3)	ND (54.3)	23 J	428	**314**	**582 J**	**780 J**	298	418	**94.4**	407	ND (54.3)	**399**	ND (54.3)
	03/29/10	0.5-2	N	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)	ND (52.4)
	03/29/10	2-4	N	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)	ND (54.4)
	03/29/10	4-8	N	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)	ND (5.91)
FED-2c																			
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)	ND (7.86)
	04/13/10	0.5-2	N	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)	ND (7.92)
	04/13/10	2-4	N	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)	ND (8.19)
	04/13/10	4-8	N	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)	ND (8.31)

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AAPS-DP01	04/06/10	0-0.5	N	ND (7.92)	ND (7.92)	ND
	04/06/10	0-0.5	FD	ND (7.88)	ND (7.88)	ND
	04/06/10	0.5-2	N	ND (7.79)	ND (7.79)	ND
	04/06/10	2-4	N	ND (8.11)	1.66 J	ND
	04/06/10	4-8	N	ND (7.88)	ND (7.88)	ND
AP1AAPS-DP02	04/06/10	0-0.5	N	ND (7.51)	ND (7.51)	ND
	04/06/10	0.5-2	N	ND (7.68)	ND (7.68)	ND
	04/06/10	2-4	N	ND (7.69)	ND (7.69)	ND
	04/06/10	4-8	N	ND (8)	ND (8)	ND
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (7.57)	ND (7.57)	ND
	04/02/10	0.5-2	N	ND (7.55)	ND (7.55)	ND
	04/02/10	2-4	N	ND (7.98)	ND (7.98)	ND
	04/02/10	2-4	FD	ND (8.08)	1.8 J	2.1
	04/02/10	4-8	N	ND (7.97)	ND (7.97)	ND
AP1AAPS-DP04	04/12/10	0-0.5	N	ND (7.92)	ND (7.92)	ND
	04/12/10	0.5-2	N	ND (7.75)	ND (7.75)	ND
	04/12/10	2-4	N	2.71 J	10.9	7
	04/12/10	4-8	N	ND (8.06)	ND (8.06)	ND
AP1AAPS-DP05	04/09/10	0-0.5	N	129	91.4	22
	04/09/10	0.5-2	N	175	75.9	17
	04/09/10	2-4	N	ND (8.25)	2.84 J	ND
	04/09/10	4-8	N	ND (8.06)	ND (8.06)	ND
AP1AAPS-DP06	04/12/10	0-0.5	N	ND (7.93)	ND (7.93)	ND
	04/12/10	0-0.5	FD	ND (7.75)	ND (7.75)	ND
	04/12/10	0.5-2	N	ND (8.05)	ND (8.05)	ND
	04/12/10	2-4	N	ND (8.06)	4.84 J	2
	04/12/10	4-8	N	ND (7.99)	ND (7.99)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AAPS-DP07	04/12/10	0-0.5	N	ND (7.78)	ND (7.78)	ND
	04/12/10	0.5-2	N	ND (7.74)	2.89 J	ND
	04/12/10	2-4	N	ND (8)	ND (8)	ND
	04/12/10	4-8	N	ND (8)	ND (8)	ND
AP1AAPS-DP08	04/12/10	0-0.5	N	52.6	197	170
	04/12/10	0.5-2	N	ND (7.96)	ND (7.96)	ND
	04/12/10	2-4	N	ND (7.96)	ND (7.96)	ND
	04/12/10	4-8	N	ND (8.01)	ND (8.01)	ND
AP1AAPS-DP09	04/12/10	0-0.5	N	ND (7.72)	ND (7.72)	ND
	04/12/10	0.5-2	N	ND (7.97)	ND (7.97)	ND
	04/12/10	2-4	N	ND (7.97)	ND (7.97)	ND
	04/12/10	4-8	N	ND (8.14)	ND (8.14)	ND
AP1AAPS-DP10	04/06/10	0-0.5	N	ND (7.19)	3.39 J	ND
	04/06/10	0.5-2	N	ND (7.44)	ND (7.44)	ND
	04/06/10	2-4	N	ND (8.14)	ND (8.14)	ND
	04/06/10	4-8	N	ND (8.03)	ND (8.03)	ND
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (7.51)	ND (7.51)	ND
	04/06/10	0-0.5	FD	ND (7.58)	ND (7.58)	ND
	04/06/10	0.5-2	N	ND (7.6)	ND (7.6)	ND
	04/06/10	2-4	N	ND (8.2)	ND (8.2)	ND
	04/06/10	4-8	N	ND (8.12)	ND (8.12)	ND
AP1AAPS-DP12	04/07/10	0-0.5	N	130 J	74.3 J	1.7
	04/07/10	0.5-2	N	4.17 J	14.2	17
	04/07/10	2-4	N	ND (8.16)	1.98 J	ND
	04/07/10	4-8	N	ND (8.01)	1.74 J	ND
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (7.55)	ND (7.55)	ND
	04/01/10	0.5-2	N	ND (7)	ND (7)	ND
	04/01/10	2-4	N	ND (7.55)	ND (7.55)	ND
	04/01/10	2-4	FD	ND (7.53)	ND (7.53)	ND
	04/01/10	4-8	N	ND (8.07)	ND (8.07)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (7.14)	ND (7.14)	ND
	04/01/10	0.5-2	N	ND (7.86)	ND (7.86)	ND
	04/01/10	2-4	N	ND (7.66)	ND (7.66)	ND
	04/01/10	4-8	N	ND (5.96)	ND (5.96)	ND
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (7.87)	ND (7.87)	ND
	04/01/10	0.5-2	N	ND (7.6)	ND (7.6)	ND
	04/01/10	2-4	N	ND (7.97)	ND (7.97)	ND
	04/01/10	4-8	N	ND (7.91)	ND (7.91)	ND
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (7.64)	ND (7.64)	ND
	03/31/10	0-0.5	FD	ND (7.68)	5.11 J	0.67
	03/31/10	0.5-2	N	ND (7.84)	ND (7.84)	ND
	03/31/10	2-4	N	ND (8.22)	ND (8.22)	ND
	03/31/10	4-8	N	ND (8.28)	ND (8.28)	ND
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (7.81)	ND (7.81)	ND
	03/31/10	0.5-2	N	ND (7.83)	1.83 J	0.0018
	03/31/10	2-4	N	ND (7.76)	ND (7.76)	ND
	03/31/10	4-8	N	ND (7.94)	ND (7.94)	ND
AP1AAPS-DP18	03/31/10	0-0.5	N	ND (8.48)	2.49 J	0.0021
	03/31/10	0.5-2	N	ND (7.56)	ND (7.56)	ND
	03/31/10	2-4	N	ND (8.51)	12.6	6.2
	03/31/10	2-4	FD	ND (7.87)	ND (7.87)	ND
	03/31/10	4-8	N	ND (8.22)	ND (8.22)	ND
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (52.7)	ND (52.7)	ND
	04/02/10	0.5-2	N	ND (53.9)	ND (53.9)	ND
	04/02/10	2-4	N	ND (5.75)	ND (5.75)	ND
	04/02/10	4-8	N	ND (5.97)	ND (5.97)	ND
AP1AAPS-DP20	04/05/10	0-0.5	N	ND (54.4)	ND (54.4)	ND
	04/05/10	0.5-2	N	ND (5.36)	ND (5.36)	ND
	04/05/10	2-4	N	ND (5.32)	ND (5.32)	ND
	04/05/10	4-8	N	ND (5.66)	ND (5.66)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AAPS-DP21	04/02/10	0-0.5	N	ND (54.9)	ND (54.9)	ND
	04/02/10	0-0.5	FD	ND (54.8)	ND (54.8)	ND
	04/02/10	0.5-2	N	ND (5.46)	1.51 J	ND
	04/02/10	2-4	N	ND (5.82)	ND (5.82)	ND
	04/02/10	4-8	N	ND (6.03)	2.2 J	ND
AP1AAPS-DP22	04/02/10	0-0.5	N	1,870	ND (51)	ND
	04/02/10	0.5-2	N	69.4	ND (57.5)	ND
	04/02/10	2-4	N	ND (5.78)	ND (5.78)	ND
	04/02/10	4-8	N	ND (6.12)	ND (6.12)	ND
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (71.1)	ND (71.1)	20
	04/05/10	0.5-2	N	ND (74.3)	ND (74.3)	ND
	04/05/10	2-4	N	ND (5.93)	1.96 J	ND
	04/05/10	2-4	N	ND (5.96)	ND (5.96)	ND
	04/05/10	4-8	N	ND (5.91)	ND (5.91)	ND
AP1AAPS-DP24	04/02/10	0-0.5	N	72.3	43.5 J	ND
	04/02/10	0.5-2	N	ND (5.15)	ND (5.15)	ND
	04/02/10	2-4	N	ND (5.64)	2.06 J	ND
	04/02/10	4-8	N	ND (5.96)	ND (5.96)	ND
AP1AAPS-DP25	04/05/10	0-0.5	N	40.1 J	ND (70.7)	8.6
	04/05/10	0.5-2	N	ND (34.7)	ND (34.7)	ND
	04/05/10	2-4	N	ND (5.33)	ND (5.33)	ND
	04/05/10	4-8	N	ND (5.88)	ND (5.88)	ND
AP1AAPS-DP26	04/05/10	0-0.5	N	140 J	49.7 J	ND
	04/05/10	0-0.5	FD	90.9	31.6 J	ND
	04/05/10	0.5-2	N	ND (6.18)	ND (6.18)	ND
	04/05/10	2-4	N	ND (6.03)	ND (6.03)	ND
	04/05/10	4-8	N	ND (6.17)	ND (6.17)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AAPS-DP27	04/05/10	0-0.5	N	43.1 J	44 J	7.2
	04/05/10	0.5-2	N	ND (72.9)	ND (72.9)	ND
	04/05/10	2-4	N	ND (5.17)	ND (5.17)	ND
	04/05/10	4-8	N	ND (5.84)	ND (5.84)	ND
AP1AAPS-DP28	04/05/10	0-0.5	N	ND (71.6)	ND (71.6)	ND
	04/05/10	0.5-2	N	ND (71.1)	ND (71.1)	ND
	04/05/10	2-4	N	ND (7.58)	ND (7.58)	ND
	04/05/10	2-4	FD	ND (7.63)	ND (7.63)	ND
	04/05/10	4-8	N	ND (7.6)	ND (7.6)	ND
AP1AAPS-DP30	04/30/10	0-0.5	N	3.11 J	19.1	26
	04/30/10	0.5-2	N	4.43 J	32.5	44
	04/30/10	2-4	N	2.95 J	11.2	14
	04/30/10	4-8	N	ND (7.88)	ND (7.88)	ND
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (78.6)	ND (78.6)	ND
	04/30/10	0-0.5	FD	ND (79.4)	ND (79.4)	ND
	04/30/10	0.5-2	N	1.58 J	3.23 J	ND
	04/30/10	2-4	N	ND (7.92)	ND (7.92)	ND
	04/30/10	4-8	N	ND (7.92)	ND (7.92)	ND
AP1AAPS-DP80	05/04/10	0-0.5	N	ND (74.8)	ND (74.8)	ND
	05/04/10	0.5-2	N	ND (7.99)	ND (7.99)	ND
	05/04/10	2-4	N	ND (7.66)	ND (7.66)	ND
	05/04/10	4-8	N	ND (7.83)	ND (7.83)	ND
AP1AAPS-DP81	05/04/10	0-0.5	N	ND (7.58)	ND (7.58)	ND
	05/04/10	0.5-2	N	ND (7.76)	ND (7.76)	ND
	05/04/10	2-4	N	ND (7.69)	ND (7.69)	ND
	05/04/10	4-8	N	ND (7.74)	ND (7.74)	ND
AP1AAPS-DP82	05/05/10	0-0.5	N	ND (7.64)	ND (7.64)	ND
	05/05/10	0.5-2	N	ND (7.54)	ND (7.54)	ND
	05/05/10	2-4	N	ND (7.85)	ND (7.85)	ND
	05/05/10	4-8	N	ND (7.88)	ND (7.88)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AAPS-DP83	05/05/10	0-0.5	N	ND (7.87)	ND (7.87)	ND
	05/05/10	0.5-2	N	ND (7.93)	ND (7.93)	ND
	05/05/10	2-4	N	ND (7.77)	ND (7.77)	ND
	05/05/10	4-8	N	ND (7.81)	ND (7.81)	ND
AP1AAPS-DP84	05/05/10	0-0.5	N	ND (7.65)	ND (7.65)	ND
	05/05/10	0.5-2	N	ND (9.35)	9.66	9.5
	05/05/10	2-4	N	ND (7.93)	ND (7.93)	ND
	05/05/10	4-8	N	ND (7.99)	ND (7.99)	ND
AP1AIR33-DP01	03/23/10	0-0.5	N	73.2	394	***770***
	03/23/10	0.5-2	N	2.04 J	10.9	29
	03/23/10	2-4	N	ND (7.46)	1.65 J	ND
	03/23/10	4-8	N	ND (7.79)	ND (7.79)	ND
AP1AIR33-DP02	03/24/10	0-0.5	N	467	2,210	***6,000***
	03/24/10	0.5-2	N	1,220	4,830	***13,000***
	03/24/10	2-4	N	ND (73.8)	ND (73.8)	ND
	03/24/10	4-8	N	ND (7.9)	ND (7.9)	ND
AP1AIR33-DP03	03/24/10	0-0.5	N	127	1,030 J	***4,500***
	03/24/10	0-0.5	FD	71.3	450 J	***1,500***
	03/24/10	0.5-2	N	2.97 J	22.2	68
	03/24/10	2-4	N	ND (7.7)	ND (7.7)	ND
	03/24/10	4-8	N	ND (7.75)	ND (7.75)	ND
AP1AIR33-DP04	03/24/10	0-0.5	N	380	2,570	***9,400***
	03/24/10	0.5-2	N	2.86 J	5.39 J	6.9
	03/24/10	2-4	N	ND (7.49)	ND (7.49)	ND
	03/24/10	4-8	N	ND (7.76)	ND (7.76)	ND
AP1AIR33-DP05	03/23/10	0-0.5	N	174	1,080	***2,500***
	03/23/10	0.5-2	N	23.5	109	190
	03/23/10	2-4	N	ND (7.62)	ND (7.62)	ND
	03/23/10	2-4	FD	ND (7.58)	ND (7.58)	ND
	03/23/10	4-8	N	ND (8.38)	ND (8.38)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AIR33-DP06	03/23/10	0-0.5	N	77.7	24.8	13
	03/23/10	0.5-2	N	62.7 J	513	***1,500***
	03/23/10	2-4	N	ND (7.56)	ND (7.56)	ND
	03/23/10	4-8	N	ND (8.05)	1.62 J	1.9
AP1AIR33-DP07	03/23/10	0-0.5	N	5,960	22,100	***36,000***
	03/23/10	0.5-2	N	1,090	8,290	***25,000***
	03/23/10	2-4	N	13.2	14.6	18
	03/23/10	4-8	N	2.83 J	6.18 J	6.7
AP1AIR33-DP08	03/23/10	0-0.5	N	2,480 J	9,460	***20,000***
	03/23/10	0-0.5	FD	1,430 J	8,590	***25,000***
	03/23/10	0.5-2	N	186	218	300
	03/23/10	2-4	N	155	54.3	ND
	03/23/10	4-8	N	ND (8.57)	3.13 J	ND
AP1AIR33-DP09	03/22/10	0-0.5	N	309 J	1,610 J	***4,000***
	03/22/10	0.5-2	N	1.73 J	ND (7.1)	7
	03/22/10	2-4	N	ND (7.68)	ND (7.68)	3.4
	03/22/10	4-8	N	ND (7.84)	ND (7.84)	2.4
AP1AIR33-DP10	03/22/10	0-0.5	N	181	1,070	***2,400***
	03/22/10	0.5-2	N	13.3	74.5	130
	03/22/10	2-4	N	1.73 J	ND (7.86)	2.2
	03/22/10	2-4	FD	ND (7.83)	ND (7.83)	1.9
	03/22/10	4-8	N	ND (8.29)	ND (8.29)	3.4
AP1AIR33-DP11	03/22/10	0-0.5	N	ND (7.7)	4.48 J	3.7
	03/22/10	0.5-2	N	317	269	410
	03/22/10	2-4	N	2.33	6.15 J	12
	03/22/10	4-8	N	7.05	3.75 J	10
AP1AIR33-DP12	03/22/10	0-0.5	N	1,530	4,150	***5,600***
	03/22/10	0.5-2	N	4.18 J	11.5 J	19
	03/22/10	2-4	N	9.8	23 J	23
	03/22/10	4-8	N	1.93 J	4.31 J	4.1

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AIR33-DP13	03/22/10	0-0.5	N	827 J	4,280	***11,000***
	03/22/10	0-0.5	FD	396 J	1,970	***4,200***
	03/22/10	0.5-2	N	538	3,490	***8,600***
	03/22/10	2-4	N	28.5	139 J	230
	03/22/10	4-8	N	1.84 J	4.79 J	6.1
AP1AIR33-DP14	03/23/10	0-0.5	N	116	316	23
	03/23/10	0.5-2	N	215	901	***2,100***
	03/23/10	2-4	N	70.3	146	360
	03/23/10	4-8	N	12	47	130
AP1AIR33-DP15	03/23/10	0-0.5	N	260	2,120	***9,400***
	03/23/10	0.5-2	N	4.05 J	10.5	15
	03/23/10	2-4	N	1.62 J	4.67 J	ND
	03/23/10	2-4	FD	ND (7.79)	2.64 J	ND
	03/23/10	4-8	N	ND (7.87)	7.24 J	7
AP1AIR33-DP16	03/23/10	0-0.5	N	1,590	5,240	***6,000***
	03/23/10	0.5-2	N	567	3,170	***7,900***
	03/23/10	2-4	N	8,930	31,800	***53,000***
	03/23/10	4-8	N	10,100	60,800	***130,000***
AP1AIR33-DP17	03/23/10	0-0.5	N	ND (7.06)	4.69 J	7.3
	03/23/10	0.5-2	N	ND (7.19)	5.5 J	7.3
	03/23/10	2-4	N	ND (7.79)	3.3 J	5.7
	03/23/10	4-8	N	ND (8)	ND (8)	ND
AP1AIR33-DP18	03/23/10	0-0.5	N	10.7	33.1	70
	03/23/10	0-0.5	FD	7.02 J	28.1	49
	03/23/10	0.5-2	N	ND (7.7)	ND (7.7)	ND
	03/23/10	2-4	N	ND (7.9)	1.87 J	ND
	03/23/10	4-8	N	45.7	47.7	31

Table A2-7
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Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AIR33-DP19	03/23/10	0-0.5	N	ND (71.8)	61.9 J	160
	03/23/10	0.5-2	N	63.9	499	***1,500***
	03/23/10	2-4	N	202	1,100	***2,500***
	03/24/10	4-8	N	59.2	281 J	***630***
AP1AIR33-DP20	03/24/10	0-0.5	N	ND (35.7)	ND (35.7)	ND
	03/24/10	0.5-2	N	1.79 J	4.28 J	7.5
	03/24/10	2-4	N	1.7 J	7.1 J	7.1
	03/24/10	2-4	FD	4.99 J	11	8.8
	03/24/10	4-8	N	ND (8.17)	1.81 J	ND
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (52.9)	17.5 J	ND
	04/08/10	0.5-2	N	ND (6.97)	ND (6.97)	ND
	04/08/10	2-4	N	ND (7.79)	ND (7.79)	ND
	04/08/10	2-4	FD	ND (7.76)	ND (7.76)	ND
	04/08/10	4-8	N	ND (8.05)	ND (8.05)	ND
AP1AW467B-DP02	04/08/10	0-0.5	N	ND (7.69)	4.92 J	0.0017
	04/08/10	0.5-2	N	ND (7.28)	2.05 J	ND
	04/08/10	2-4	N	ND (7.73)	ND (7.73)	ND
	04/08/10	4-8	N	ND (8.19) J	ND (8.19) J	ND
AP1AW483A-DP01	03/30/10	0-0.5	N	51.3	ND (37)	ND
	03/30/10	0.5-2	N	ND (54.7)	ND (54.7)	ND
	03/30/10	2-4	N	ND (5.61)	ND (5.61)	ND
	03/30/10	4-8	N	ND (7.92)	ND (7.92)	ND
AP1AW483A-DP02	03/30/10	0-0.5	N	ND (69.8)	ND (69.8)	ND
	03/30/10	0.5-2	N	ND (7.43)	ND (7.43)	ND
	03/30/10	2-4	N	ND (7.67)	ND (7.67)	ND
	03/30/10	4-8	N	ND (8.19)	ND (8.19)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
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Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (36.9)	ND (36.9)	ND
	03/31/10	0-0.5	FD	ND (36.9)	ND (36.9)	ND
	03/31/10	0.5-2	N	ND (73.3)	ND (73.3)	ND
	03/31/10	2-4	N	ND (7.68)	ND (7.68)	ND
	03/31/10	4-8	N	ND (8)	ND (8)	ND
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (72.6)	23 J	ND
	03/31/10	0.5-2	N	ND (72.7)	ND (72.7)	ND
	03/31/10	2-4	N	ND (7.45)	ND (7.45)	ND
	03/31/10	4-8	N	ND (7.85)	ND (7.85)	ND
AP1AW485B-DP01	04/12/10	0-0.5	N	ND (75.4)	ND (75.4)	ND
	04/12/10	0.5-2	N	295	149	53
	04/12/10	2-4	N	ND (7.69)	ND (7.69)	ND
	04/12/10	4-8	N	ND (7.92)	ND (7.92)	ND
AP1AW485B-DP02	04/12/10	0-0.5	N	131	ND (72.4)	ND
	04/12/10	0-0.5	FD	75.7	ND (54.4)	ND
	04/12/10	0.5-2	N	2,780	332	0.87
	04/12/10	2-4	N	ND (7.73)	ND (7.73)	ND
	04/12/10	4-8	N	ND (8.06)	ND (8.06)	ND
AP1AW495A-DP01	03/26/10	0-0.5	N	232	1,320	***3,300***
	03/26/10	0.5-2	N	532	1,870	***4,400***
	03/26/10	2-4	N	ND (37.4)	11.4 J	ND
	03/26/10	4-8	N	ND (7.89)	3.76 J	3.2
AP1AW495A-DP02	03/26/10	0-0.5	N	767	1,580	500
	03/26/10	0-0.5	FD	105 J	433 J	***920***
	03/26/10	0.5-2	N	ND (52.9) J	153 J	360
	03/26/10	2-4	N	ND (36.5)	ND (36.5)	ND
	03/26/10	4-8	N	ND (5.85)	ND (5.85)	ND

Table A2-7
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Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AW495B-DP01	03/26/10	0-0.5	N	82.7	86.3	0.29
	03/26/10	0.5-2	N	114	445	570
	03/26/10	2-4	N	ND (38.5)	11.7 J	ND
	03/26/10	4-8	N	ND (7.94)	ND (7.94)	ND
AP1AW496-DP01	04/09/10	0-0.5	N	ND (53.4)	ND (53.4)	ND
	04/09/10	0.5-2	N	411 J	141 J	ND
	04/09/10	2-4	N	ND (7.7)	2.34 J	ND
	04/09/10	2-4	FD	ND (7.66)	ND (7.66)	ND
	04/09/10	4-8	N	ND (7.72)	1.7 J	ND
AP1AW496-DP02	04/09/10	0-0.5	N	ND (92.3)	ND (92.3)	ND
	04/09/10	0.5-2	N	ND (78.7)	ND (78.7)	ND
	04/09/10	2-4	N	ND (7.74)	ND (7.74)	ND
	04/09/10	4-8	N	2.87 J	12.1	8.5
AP1AW499-DP01	04/01/10	0-0.5	N	157	334	62
	04/01/10	0.5-2	N	ND (28.2)	ND (28.2)	ND
	04/01/10	2-4	N	ND (7.87)	ND (7.87)	ND
	04/01/10	4-8	N	ND (8.03)	ND (8.03)	ND
AP1AW499-DP02	04/01/10	0-0.5	N	ND (71.3)	ND (71.3)	ND
	04/01/10	0.5-2	N	ND (7.56)	4.04 J	0.0028
	04/01/10	2-4	N	ND (5.84)	ND (5.84)	ND
	04/01/10	2-4	FD	ND (7.78)	ND (7.78)	ND
	04/01/10	4-8	N	ND (8.08)	ND (8.08)	ND
AP1AW599A-DP01	03/29/10	0-0.5	N	ND (36.1)	50.2	19
	03/29/10	0.5-2	N	327	1,330	***2,100***
	03/29/10	2-4	N	35	155	230
	03/29/10	4-8	N	ND (5.95)	1.6 J	ND
AP1AW599A-DP02	03/30/10	0-0.5	N	241	811	***1,200***
	03/30/10	0.5-2	N	89.2	ND (35.7)	ND
	03/30/10	2-4	N	ND (7.71)	ND (7.71)	ND
	03/30/10	4-8	N	ND (8)	ND (8)	ND

Table A2-7
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/kg)		
Residential Regional Screening Levels [a]				**17,000,000**	**1,700,000**	**620** [e]
Industrial Regional Screening Levels [b]				**170,000,000**	**17,000,000**	**620**
Residential ESLs [c]				**NE**	**85,000**	**620**
Industrial ESLs [d]				**NE**	**85,000**	**620**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**	**BaP Equivalent**
FED-1a						
AP1AW599B-DP01	03/29/10	0-0.5	N	78.9	167	51
	03/29/10	0-0.5	FD	63.1	261	420
	03/29/10	0.5-2	N	16.8 J	55.3	10
	03/29/10	2-4	N	ND (5.74)	6.16	6.6
	03/29/10	4-8	N	ND (5.98)	ND (5.98)	ND
AP1AW599B-DP02	03/29/10	0-0.5	N	87.5	407	***830***
	03/29/10	0.5-2	N	ND (52.4)	44.2 J	ND
	03/29/10	2-4	N	ND (54.4)	ND (54.4)	ND
	03/29/10	4-8	N	ND (5.91)	ND (5.91)	ND
FED-2c						
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (7.86)	1.78 J	ND
	04/13/10	0.5-2	N	ND (7.92)	ND (7.92)	ND
	04/13/10	2-4	N	ND (8.19)	ND (8.19)	ND
	04/13/10	4-8	N	ND (8.31)	ND (8.31)	ND

Notes:
a. Residential RSLs (U.S. EPA 2010)
b. Industrial RSLs (U.S. EPA, 2010)
c. FED Residential ESLs for Soil Protective of Indoor Air (U.S. EPA 2005)
d. FED Industrial ESLs for Soil Protective of Indoor Air (U.S. EPA, 2005)
e. Alameda Point-specific screening criterion for residential use developed during PAH Technical Meeting between the Navy, regulatory agencies and the City of Alameda, May 2001

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
Results greater than or equal to the Residential ESLs are italicized.
Results greater than or equal to the Industrial ESLs are shaded.
PAH = polycyclic aromatic hydrocarbon
USEPA = United States Environmental Protection Agency
BaP = benzo(a)pyrene
NE = not established
ug/kg = micrograms per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
* indicates that a compound was analyzed, however there was no valid result

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
	ESLs for the Petroleum Strategy Plan[a]			83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1a						
AP1AAPS-DP01	04/06/10	0-0.75	N	ND (23.4)	ND (8.78)	29.2
	04/06/10	0-0.75	FD	ND (23.2)	ND (9.18)	13.5 J
	04/06/10	0.75-1.25	N	ND (23.5)	ND (8.82)	32.9
AP1AAPS-DP02	04/06/10	0-0.75	N	ND (23.2)	ND (8.45)	35.7
	04/06/10	0.75-1.25	N	ND (23.1)	ND (8.28)	33.5
AP1AAPS-DP03	04/02/10	0-0.5	N	ND (23.5)	ND (7.4) J	10.1 J
AP1AAPS-DP04	04/12/10	0-0.5	N	**244**	ND (7.53)	21.1 J
	04/12/10	1.5-2	N	ND (23.2)	ND (8.32)	14.5 J
	04/12/10	3.5-4	N	ND (23.5)	ND (7.24)	14.8 J
AP1AAPS-DP05	04/09/10	0-1	N	**99.1 J**	ND (8.25)	67.7 J
	04/09/10	2-3	N	ND (24)	ND (8.89)	50.8 J
	04/09/10	2-3	FD	ND (25.1)	ND (7.82)	35.1 J
AP1AAPS-DP06	04/12/10	0-0.5	N	ND (24.8)	ND (8.44)	13.4 J
	04/12/10	1-1.5	N	ND (24)	ND (7.96)	16.9 J
	04/12/10	2-2.5	N	ND (25.1)	ND (8.01)	15.3 J
AP1AAPS-DP07	04/12/10	0-0.5	N	*	ND (7.47)	*
	04/12/10	1.5-2	N	ND (23.4)	ND (8.14)	12.3 J
AP1AAPS-DP08	04/12/10	0-0.5	N	ND (23.9)	ND (7.12)	8.91 J
	04/12/10	1.5-2	N	ND (23.8)	ND (8.34)	13.1 J
AP1AAPS-DP09	04/12/10	0-0.5	N	ND (119)	ND (7.82)	ND (119)
	04/12/10	1.5-2	N	ND (23.4)	ND (7.65)	9.61 J
AP1AAPS-DP10	04/06/10	0-0.5	N	ND (22.1)	ND (7.94)	15.9 J
	04/06/10	2-2.5	N	ND (23.5)	ND (8.82)	12.3 J
AP1AAPS-DP11	04/06/10	0-0.5	N	ND (22.9)	ND (8.53)	20.3 J
	04/06/10	1.5-2	N	ND (22.9)	ND (8.92)	16.6 J
AP1AAPS-DP12	04/07/10	0-0.75	N	**880**	11.7	121 J
	04/07/10	0-0.75	FD	**571**	23.4	145 J
	04/07/10	1.5-2	N	14.3 J	4.48 J	32.9
	04/07/10	3.5-4	N	ND (24)	ND (8.5)	9.62 J
AP1AAPS-DP13	04/01/10	0-0.5	N	ND (21.7)	ND (7.39)	35.5
	04/01/10	3.25-3.75	N	ND (21.9)	ND (7.49)	14.1 J
AP1AAPS-DP14	04/01/10	0-0.5	N	ND (23.1)	ND (8.07)	13.9 J
	04/01/10	3.5-4	N	ND (21.3)	ND (6.93)	10.8 J
AP1AAPS-DP15	04/01/10	0-0.5	N	ND (120)	ND (7.99)	ND (120)
AP1AAPS-DP16	03/31/10	0-0.5	N	ND (25.4)	ND (8.45)	ND (25.4)
AP1AAPS-DP17	03/31/10	0-0.5	N	ND (24.2)	ND (5.67)	ND (24.2)

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
	ESLs for the Petroleum Strategy Plan[a]			83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1a						
AP1AAPS-DP18	03/31/10	0-0.5	N	ND (25.8)	ND (9.13)	ND (25.8)
	03/31/10	1.5-2	N	ND (22.9)	ND (8.03)	ND (22.9)
AP1AAPS-DP19	04/02/10	0-0.5	N	ND (210)	ND (7.92) J	**449**
	04/02/10	3.5-4	N	ND (23.5)	ND (5.66) J	ND (23.5)
AP1AAPS-DP20	04/05/10	0-0.5	N	**112 J**	ND (8.17)	**683**
	04/05/10	3.5-4	N	ND (20.9)	ND (7.83)	11.2 J
	04/05/10	5-5.5	N	ND (22.7)	ND (8.53)	16.8 J
AP1AAPS-DP21	04/02/10	0-0.5	N	**96 J**	ND (13.5) J	**585**
	04/02/10	3.5-4	N	ND (22.8)	ND (7.7) J	14.7 J
AP1AAPS-DP22	04/02/10	0.5-1.5	N	**1,690**	4.26 J	**1,480**
	04/02/10	0.5-1.5	FD	**1,740**	4.39 J	**1,820**
	04/02/10	1.75-2.25	N	ND (118)	4.79 J	ND (118)
AP1AAPS-DP23	04/05/10	0-0.5	N	ND (219)	ND (8.2)	**1,120**
	04/05/10	3.5-4	N	ND (24.6)	ND (9.23)	13.3 J
AP1AAPS-DP24	04/02/10	0-0.5	N	ND (203)	4.12 J	**434**
	04/02/10	3.5-4	N	ND (23.5)	ND (8.38) J	13.1 J
AP1AAPS-DP25	04/05/10	0-0.5	N	ND (217)	ND (8.12)	**1,150**
	04/05/10	6.5-7	N	ND (24.7)	ND (9.26)	ND (24.7)
	04/05/10	6.5-7	FD	ND (25)	ND (9.38)	ND (25)
AP1AAPS-DP26	04/05/10	0-0.5	N	**151 J**	ND (7.89)	**1,220**
	04/05/10	3-3.5	N	ND (23.2)	ND (8.72)	10.1 J
AP1AAPS-DP27	04/05/10	0-0.5	N	ND (207)	5.61 J	**1,910**
	04/05/10	3.5-4	N	ND (21)	ND (7.87)	17.6 J
	04/05/10	5.5-6	N	ND (24.5)	ND (9.2)	14.2 J
AP1AAPS-DP28	04/05/10	0-0.5	N	ND (121)	ND (9.07)	114 J
	04/05/10	3.5-4	N	ND (20.9)	ND (7.85)	13.2 J
AP1AAPS-DP30	04/30/10	0-0.5	N	ND (23.8)	ND (8.34)	ND (23.8)
	04/30/10	0.5-1	N	ND (24.2)	ND (7.56)	ND (24.2)
AP1AAPS-DP31	04/30/10	0-0.5	N	ND (234)	ND (7.48)	ND (234)
	04/30/10	0.5-1	N	ND (22.5)	ND (7.93)	ND (22.5)
AP1AAPS-DP80	05/04/10	0-0.5	N	ND (113) J	ND (11.7)	ND (113) J
	05/04/10	0.5-1	N	ND (112) J	ND (6.76)	ND (112) J
AP1AAPS-DP81	05/04/10	0-0.5	N	ND (113) J	ND (6.96)	ND (113) J
	05/04/10	0.5-1	N	ND (113) J	ND (7.41)	ND (113) J
AP1AAPS-DP82	05/05/10	0-0.5	N	ND (114) J	ND (7.07)	ND (114) J
	05/04/10	0.5-1	N	9.51 J	ND (7.93)	9.56 J

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
	ESLs for the Petroleum Strategy Plan[a]			83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1a						
AP1AAPS-DP83	05/05/10	0-0.5	N	11.3 J	ND (7.66)	15.2 J
	05/05/10	3.5-4	N	10.7 J	ND (7.87)	13.9 J
AP1AAPS-DP84	05/05/10	0-0.5	N	11.9 J	ND (6.99)	17.4 J
	05/05/10	1.5-2	N	13.3 J	ND (10.4)	18.7 J
AP1AFTA-DP01	04/08/10	0-0.5	N	**119 J**	ND (6.74)	**542**
	04/08/10	1.5-2	N	ND (22.7)	ND (4.25)	8.34 J
AP1AFTA-DP02	04/08/10	0-0.5	N	ND (216)	ND (7.76)	364
	04/08/10	1.5-2	N	ND (22.8)	ND (3.87)	ND (22.8)
AP1AFTA-DP03	04/08/10	0-0.5	N	ND (22.8)	ND (8.31)	8.25 J
	04/08/10	0-0.5	FD	ND (22.5)	ND (8.49)	11.9 J
	04/08/10	1.5-2	N	ND (22)	ND (16.1)	ND (22)
AP1AFTA-DP04	04/08/10	0-0.5	N	ND (213)	ND (10.6)	345
	04/08/10	3.5-4	N	ND (22.8)	ND (3.78)	8.34 J
AP1AFTA-DP05	04/09/10	0-0.5	N	ND (109)	ND (9.39)	ND (109)
	04/09/10	3.5-4	N	ND (23)	ND (6.34)	12 J
AP1AFTA-DP06	04/07/10	0-0.5	N	ND (23.5)	ND (7.87)	ND (23.5)
	04/07/10	3.5-4	N	ND (25.1)	ND (7.97)	12.1 J
	04/07/10	3.5-4	FD	ND (23.8)	ND (6.37)	8.23 J
AP1AFTA-DP07	04/07/10	0-0.5	N	ND (217)	ND (7.57)	85.8 J
	04/07/10	3.5-4	N	ND (24.1)	ND (7.87)	8.61 J
AP1AFTA-DP08	04/09/10	0-0.5	N	ND (141)	ND (11.2)	227 J
	04/09/10	1.5-2	N	ND (117)	ND (7.67)	ND (117)
AP1AFTA-DP09	04/07/10	0-0.5	N	ND (212)	ND (7.54)	276
	04/07/10	1.5-2	N	ND (114)	ND (11.8)	ND (114)
	04/07/10	1.5-2	FD	ND (22.8)	ND (8.51)	9.52 J
AP1AFTA-DP10	04/07/10	0-0.5	N	**937**	3.48 J	**1,290**
	04/07/10	1.5-2	N	ND (22.8)	6.24 J	ND (22.8)
AP1AFTA-DP11	04/06/10	0-0.5	N	ND (224)	ND (6.56)	**393**
	04/06/10	2-2.5	N	ND (23.5)	ND (7.9)	15.2 J
AP1AFTA-DP12	04/06/10	0-0.5	N	ND (222)	ND (6.39)	**562**
AP1AFTA-DP13	04/06/10	0-0.5	N	ND (226)	ND (9.2)	**436**
	04/06/10	0-0.5	FD	ND (231)	ND (8.26)	**384**
AP1AFTA-DP14	04/08/10	0-0.5	N	ND (111)	ND (9.45)	ND (111)
AP1AFTA-DP15	03/30/10	0-0.5	N	ND (111)	ND (7.59)	215 J
	03/30/10	3.5-4	N	ND (23.4)	ND (5.85)	17.2 J
AP1AFTA-DP16	04/08/10	0-0.5	N	---	ND (4.14)	---

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
	ESLs for the Petroleum Strategy Plan[a]			83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1a						
AP1AFTA-DP16	03/30/10	0-0.5	N	ND (114)	---	194 J
	03/30/10	1.5-2	N	ND (112)	ND (6.85)	60.1 J
	03/30/10	1.5-2	FD	ND (22.5)	ND (7.9)	15.7 J
AP1AFTA-DP17	03/30/10	0-0.5	N	ND (115)	ND (7.48)	51 J
	03/30/10	1.5-2	N	ND (22.7)	ND (6.95)	31.2 J
AP1AFTA-DP18	03/30/10	0-0.5	N	ND (113)	ND (7.75)	ND (113)
	03/30/10	3.5-4	N	ND (23.3)	ND (4.77)	17.6 J
	03/30/10	4.5-5	N	ND (22.7)	ND (7.98)	25.9 J
AP1AFTA-DP19	03/30/10	0-0.5	N	ND (23.1)	ND (7.25)	21.5 J
	03/30/10	3.5-4	N	ND (20.9)	ND (3.64)	21.3 J
	03/30/10	5.5-6	N	ND (21.4)	ND (6.56)	30.8 J
	03/30/10	5.5-6	FD	ND (22.7)	ND (8.05)	37.4 J
AP1AFTA-DP20	03/25/10	0-0.5	N	ND (207)	ND (7.86)	**404**
	03/25/10	3.5-4	N	ND (22.8)	ND (8.9)	39.5
	03/25/10	7.5-8	N	ND (24.4)	ND (7.45)	ND (24.4)
AP1AFTA-DP21	03/25/10	0-0.5	N	ND (229)	ND (7.57)	**425**
	03/25/10	3-3.5	N	ND (21.4)	ND (7.96)	23
	03/25/10	7.5-8	N	ND (24.5)	ND (8.39)	ND (24.5)
AP1AFTA-DP22	03/24/10	0-0.5	N	ND (21) J	---	119 J
	03/24/10	3.5-4	N	ND (23.9)	---	15.5 J
	03/24/10	7.5-8	N	ND (24)	---	12 J
AP1AFTA-DP23	03/24/10	0-0.5	N	**140**	ND (7.39)	242
	03/24/10	0-0.5	FD	**154**	ND (7.29)	291
	03/24/10	2.5-3	N	ND (23.1)	ND (8.2)	16.4 J
	03/24/10	7.5-8	N	ND (24.5)	ND (8.29)	9.94 J
AP1AFTA-DP24	03/24/10	0-0.5	N	**361**	---	**1,650**
	03/24/10	2-2.5	N	ND (23.2)	ND (7.14)	14.8 J
	03/24/10	7.5-8	N	ND (24.9) J	ND (8.12)	ND (24.9) J
AP1AFTA-DP25	03/24/10	0-0.5	N	**199 J**	ND (8.54)	286 J
	03/24/10	2.5-3	N	ND (23.5)	ND (7.36)	16.3 J
	03/24/10	7.5-8	N	ND (24.7)	ND (7.97)	27.6
AP1AFTA-DP26	03/24/10	0-0.5	N	10.3 J	ND (7.29)	262
	03/24/10	1.5-2.5	N	ND (23.1)	ND (8.44)	42.5
	03/24/10	1.5-2.5	FD	ND (22.9)	ND (7.98)	22.3 J
	03/24/10	7.5-8	N	ND (24)	ND (7.74)	27.9
AP1AFTA-DP27	03/24/10	0-0.5	N	**157**	ND (10.9)	**913**

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
	ESLs for the Petroleum Strategy Plan[a]			83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1a						
AP1AFTA-DP27	03/24/10	1.5-2	N	ND (22.5)	ND (7.71)	64.5
	03/24/10	7.5-8	N	ND (24.5)	ND (8.3)	24.5
AP1AFTA-DP28	03/25/10	0-0.5	N	ND (120)	ND (6.23)	166
	03/25/10	2-2.5	N	ND (23.8)	ND (4.41)	20.3 J
	03/25/10	7.5-8	N	ND (24.3)	ND (2.56)	23.4 J
AP1AFTA-DP29	03/25/10	0-0.5	N	ND (22.4)	ND (4.4)	18.6 J
	03/25/10	1.5-2	N	ND (225)	ND (5.24)	**447**
	03/25/10	7.5-8	N	ND (23.9)	ND (3.96)	17.3 J
	03/25/10	7.5-8	FD	ND (23.9)	ND (3.81)	19.9 J
AP1AFTA-DP30	04/05/10	0-0.5	N	ND (113)	ND (8.46)	132
AP1AFTA-DP31	03/25/10	0-0.5	N	ND (221)	ND (3.73)	**371**
	03/25/10	2-2.5	N	ND (22.8)	ND (4.59)	18.4 J
	03/25/10	7.5-8	N	ND (24.2)	ND (3.51)	21.7 J
AP1AFTA-DP32	03/25/10	0-0.5	N	ND (209)	ND (7.13)	**697**
	03/25/10	1.5-2	N	ND (23.4)	ND (7.77)	ND (23.4)
	03/25/10	7.5-8	N	ND (24.6)	ND (7.55)	ND (24.6)
AP1AFTA-DP33	03/25/10	0-0.5	N	ND (225)	ND (3.98)	165 J
	03/25/10	0-0.5	FD	ND (216)	ND (5.47)	**804 J**
	03/25/10	1.75-2.25	N	31.6	ND (3.79)	**553**
AP1AFTA-DP34	03/25/10	0-0.5	N	ND (21.2)	ND (6.26)	28.2 J
	03/25/10	1.75-2.25	N	ND (23)	ND (5.03)	26.6 J
AP1AFTA-DP35	03/26/10	0-0.5	N	ND (109)	ND (8.33)	76.1 J
	03/26/10	3.5-4	N	ND (23.5)	---	33 J
	04/07/10	3.5-4	N	---	8.73 J	---
AP1AW467B-DP01	04/08/10	0-0.5	N	ND (217)	---	**583**
	04/08/10	2.5-3	N	ND (23.3)	---	13.7 J
	04/08/10	2.5-3	FD	ND (23.2)	---	9.54 J
AP1AW467B-DP02	04/08/10	0-1	N	ND (214)	---	265 J
	04/08/10	3.5-4	N	ND (23.6)	---	8.05 J
	04/08/10	4.75-5.25	N	ND (24.5)	---	ND (24.5)
AP1AW483A-DP01	03/30/10	0-0.5	N	ND (214)	---	**746 J**
	03/30/10	3.5-4	N	ND (22.9)	---	ND (22.9)
AP1AW483A-DP02	03/30/10	0-1	N	ND (212)	---	**487 J**
	03/30/10	3.5-4.5	N	ND (23.9)	---	29.9 J
	03/30/10	3.5-4.5	FD	ND (24.3)	---	26
AP1AW483B-DP01	03/31/10	0-0.5	N	ND (213)	---	**540**

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
	ESLs for the Petroleum Strategy Plan[a]			83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1a						
AP1AW483B-DP01	03/31/10	3-3.5	N	ND (22.7)	---	ND (22.7)
AP1AW483B-DP02	03/31/10	0-0.5	N	ND (211)	---	**523**
	03/31/10	3.25-3.75	N	ND (22.3)	---	ND (22.3)
AP1AW485B-DP01	04/12/10	0-0.5	N	**302 J**	---	**2,040**
	04/12/10	2.5-3	N	ND (23.2)	---	9.69 J
AP1AW485B-DP02	04/12/10	0-0.5	N	ND (218)	---	**457 J**
	04/12/10	1.5-2	N	ND (222)	---	**1,180 J**
	04/12/10	2.5-3	N	ND (22.8)	---	ND (22.8)
AP1AW495A-DP01	03/26/10	0-0.5	N	**86.3 J**	---	**2,370 J**
	03/26/10	3.5-4	N	ND (23.5)	---	29.4 J
	03/26/10	7.5-8	N	ND (23.7)	---	27.7 J
AP1AW495A-DP02	03/26/10	0-0.5	N	**103 J**	---	**1,770 J**
	03/26/10	3.5-4	N	ND (23.3)	---	33.1 J
AP1AW495B-DP01	03/26/10	0-1	N	ND (108)	---	**734 J**
	03/26/10	2.5-3	N	ND (117)	---	155 J
	03/26/10	2.5-3	FD	ND (115)	---	151 J
AP1AW495B-DP02	03/25/10	0-0.5	N	ND (208)	ND (7.1)	**1,690 J**
	03/25/10	2.5-3	N	ND (23.5)	ND (9.39)	40.2 J
	03/25/10	7.5-8	N	ND (24.9)	ND (8.02)	40.3 J
AP1AW496-DP01	04/09/10	0-0.5	N	ND (224)	---	**701 J**
	04/09/10	3.5-4	N	ND (22.9)	---	9.56 J
AP1AW496-DP02	04/09/10	0-0.5	N	ND (238)	---	**546 J**
	04/09/10	3.5-4	N	ND (24)	---	13.3 J
AP1AW499-DP01	04/01/10	0-0.5	N	ND (117)	---	114 J
AP1AW499-DP02	04/01/10	0-0.5	N	ND (220)	---	368
	04/01/10	1.25-1.75	N	ND (116)	---	50.9 J
	04/01/10	1.25-1.75	FD	ND (115)	---	49 J
AP1AW599A-DP01	03/29/10	0-0.5	N	ND (104)	---	240 J
	03/29/10	4.25-4.75	N	ND (23.8)	---	45.8
AP1AW599A-DP02	03/30/10	0-0.5	N	ND (223)	---	**422 J**
	03/30/10	3.75-4.25	N	ND (24.4)	---	ND (24.4)
	03/30/10	3.75-4.25	FD	ND (24.2)	---	22 J
AP1AW599B-DP01	03/29/10	0-0.5	N	ND (106)	---	358 J
	03/29/10	3.5-4	N	ND (23.3)	---	32.2 J
AP1AW599B-DP02	03/29/10	0-0.5	N	ND (108)	---	**727 J**
	03/29/10	4.75-5.25	N	ND (23.5)	---	18.5 J

Table A2-8
2010 Soil Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Soil Results (mg/kg)		
			ESLs for the Petroleum Strategy Plan[a]	83	83	370
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-2c						
AP2CAPS-DP01	04/13/10	0-0.5	N	ND (124)	ND (7.57)	ND (124)
	04/13/10	1.5-2	N	ND (24.1)	ND (7.82)	9.9 J
	04/13/10	1.5-2	FD	ND (23.7)	ND (8.13)	13.2 J

Notes:
a. Water Board, 2008

Results greater than or equal to the ESLs for the Petroleum Strategy Plan are bolded
TPH = total petroleum hydrocarbon
NE = not established
mg/kg = milligrams per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
* indicates that a compound was analyzed, however there was no valid result

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Table A2-9

2010 Soil Sample Analytical Results - FED-1A, FED-2B, and FED-2C: Radionuclides
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Radionuclides (pCi/g)										
	Release Criterion: [a]			NE	NE	NE	NE	0.113	NE	NE	NE	NE	NE	NE
Location	Date	Depth (ft bgs)	Sample Type	Actinium-228	Americium-241	Bismuth-212	Bismuth-214	Cesium-137	Cobalt-60	Europium-152	Europium-154	Lead-212	Lead-214	Potassium-40
FED-1A														
FED-1A-001	04/23/10	3.5-4	N	0.662 +/- 0.237	ND (0.189) +/- 0.657	0.54 +/- 0.327	0.423 +/- 0.131	ND (0.069) +/- 0.0557	0.0672 +/- 0.0462	ND (0.236) +/- 0.0629	0.118 J +/- 0.0912	0.388 +/- 0.119	0.555 +/- 0.182	9.8 +/- 1.74
FED-1A-002	04/23/10	3.5-4	N	0.563 +/- 0.160	ND (0.186) +/- 0.511	ND (0.54) +/- 3.55	0.402 +/- 0.172	ND (0.03) +/- 0.0354	0.0497 +/- 0.0378	0.141 J +/- 0.0791	ND (0.173) +/- 0.108	0.326 +/- 0.113	0.359 +/- 0.119	8.46 +/- 1.56
FED-1A-003	04/23/10	3.5-4	N	0.691 +/- 0.224	ND (1.23) +/- 0.759	0.346 J +/- 0.296	0.589 +/- 0.168	0.0373 J +/- 0.0425	0.0416 J +/- 0.0246	ND (0.256) +/- 0.0617	0.0797 J +/- 0.0879	0.454 +/- 0.132	0.606 +/- 0.168	9.88 +/- 1.68
FED-1A-004	04/23/10	3.5-4	N	0.654 +/- 0.217	0.0653 J +/- 0.0743	0.425 J +/- 0.355	0.564 +/- 0.166	0.045 J +/- 0.0355	ND (0.051) +/- 0.0226	0.138 J +/- 0.0931	0.107 +/- 0.0812	0.413 +/- 0.111	0.444 +/- 0.130	11.8 +/- 1.78
FED-1A-005	04/23/10	3.5-4	N	0.705 +/- 0.245	0.908 J +/- 1.19	ND (0.792) +/- 0.599	0.841 +/- 0.188	0.041 J +/- 0.0448	ND (0.062) +/- 0.0260	ND (0.274) +/- 0.0526	0.133 J +/- 0.103	0.531 +/- 0.129	0.472 +/- 0.132	9.75 +/- 1.77
FED-2B														
FED-2B-001	04/23/10	3.5-4	N	0.774 +/- 0.203	ND (1.14) +/- 0.698	0.693 +/- 0.387	0.632 +/- 0.170	ND (0.055) +/- 0.0358	ND (0.051) +/- 0.132	0.126 J +/- 0.0868	0.16 +/- 0.0899	0.475 +/- 0.127	0.68 +/- 0.236	10.8 +/- 1.87
FED-2B-002	04/23/10	3.5-4	N	0.557 +/- 0.256	ND (0.152) +/- 0.0933	0.488 J +/- 0.456	0.505 +/- 0.144	ND (0.079) +/- 0.0491	0.0577 +/- 0.0395	ND (0.143) +/- 0.107	0.151 +/- 0.0929	0.248 +/- 0.105	0.355 +/- 0.157	11.7 +/- 1.83

Table A2-9
2010 Soil Sample Analytical Results - FED-1A, FED-2B, and FED-2C: Radionuclides
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Radionuclides (pCi/g)					
	Release Criterion: [a]			NE	1.5602	NE	NE	NE	NE
Location	Date	Depth (ft bgs)	Sample Type	Protactinium-234	Radium-226	Thallium-208	Thorium-230	Thorium-234	Uranium-235
FED-1A									
FED-1A-001	04/23/10	3.5-4	N	ND (0.35) +/- 0.176	ND (1.85) +/- 1.16	0.329 +/- 0.116	ND (58.6) +/- 34.0	1.97 J +/- 1.94	ND (0.132) +/- 0.0770
FED-1A-002	04/23/10	3.5-4	N	ND (0.236) +/- 0.104	0.98 J +/- 1.12	0.189 +/- 0.0843	ND (56.6) +/- 65.5	ND (2.82) +/- 2.05	ND (0.134) +/- 0.0227
FED-1A-003	04/23/10	3.5-4	N	0.118 J +/- 0.110	ND (1.98) +/- 1.19	0.282 +/- 0.105	ND (50.2) +/- 31.5	2.59 J +/- 2.67	ND (0.13) +/- 0.0809
FED-1A-004	04/23/10	3.5-4	N	0.11 J +/- 0.0980	ND (1.69) +/- 1.04	0.338 +/- 0.118	ND (13) +/- 8.04	3.64 +/- 1.43	ND (0.113) +/- 0.0717
FED-1A-005	04/23/10	3.5-4	N	ND (0.346) +/- 0.160	ND (2.02) +/- 1.24	0.214 +/- 0.0903	ND (25.8) +/- 40.6	3.01 J +/- 2.07	ND (0.144) +/- 0.100
FED-2B									
FED-2B-001	04/23/10	3.5-4	N	ND (0.136) +/- 0.0991	ND (2.06) +/- 1.24	0.383 +/- 0.131	ND (44.8) +/- 54.7	2.84 J +/- 2.90	ND (0.144) +/- 0.0938
FED-2B-002	04/23/10	3.5-4	N	0.198 J +/- 0.141	0.789 J +/- 0.966	0.215 +/- 0.0899	ND (12.9) +/- 8.00	3.43 +/- 1.48	ND (0.104) +/- 0.0216

Notes:

a. Cesium 137 Release Criterion: DON. 2006b. Final Basewide Radiological Removal Action Memorandum, Revision 2006, Hunters Point Shipyard, San Francisco, California. April 21.
Radium 226 Release Criterion: USEPA. 2009. Letter to Rufus Howell with Center for Environmental Health California Department of Public health regarding USEPA acceptance of Hunters Point on-site laboratory results for radiological analysis. December 15.

pCi/g = picocuries per gram
ft bgs = feet below ground surface
N = primary sample
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

Table A2-10

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)																	
CA Maximum Contaminant Levels [a]				200	1	5	5	6	NE	5	NE	NE	0.2	600	0.5	5	NE	NE	5	NE	NE	NE
Federal Maximum Contaminant Levels [b]				200	NE	5	NE	7	NE	70	NE	0.05	0.2	600	5	5	NE	NE	75	NE	NE	NE
Tap Water Regional Screening Levels [c]				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1A																					
AP1A259-DP01	04/01/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/01/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1A259-DP02	04/01/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/01/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1A259-DP03	03/31/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/31/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1A259-DP04	03/31/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/31/10	5-7	FD	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/31/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP01	04/06/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/06/10	5-7	FD	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/06/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP02	04/06/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/06/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP03	04/02/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/02/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	0.423 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP05	04/09/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/09/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP06	04/13/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/13/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP07	04/12/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/12/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP09	04/12/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/12/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP11	04/07/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/07/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP12	04/07/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	0.396 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/07/10	13-15	N	ND (1) J	ND (1) J	ND (1) J	0.364 J	3.95	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (5) J	ND (5) J	ND (5) J
AP1AAPS-DP13	04/02/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/02/10	5-7	FD	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/02/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP17	04/01/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/01/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP19	04/05/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/05/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP21	04/05/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/05/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP22	04/02/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/02/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)

Table A2-10
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)																	
CA Maximum Contaminant Levels [a]				200	1	5	5	6	NE	5	NE	NE	0.2	600	0.5	5	NE	NE	5	NE	NE	NE
Federal Maximum Contaminant Levels [b]				200	NE	5	NE	7	NE	70	NE	0.05	0.2	600	5	5	NE	NE	75	NE	NE	NE
Tap Water Regional Screening Levels [c]				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1A																					
AP1AAPS-DP24	04/02/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/02/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP28	04/06/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/06/10	5-7	FD	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/06/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP30	04/30/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/30/10	13-15	N	ND (1)	ND (1)	ND (1)	0.608 J	3.99	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/30/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	0.574 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP31	04/30/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP80	05/04/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	05/04/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	0.77 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP81	05/04/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	05/04/10	13-15	N	ND (1)	ND (1)	ND (1)	0.286 J	0.459 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP82	05/05/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	05/05/10	13-15	N	ND (1)	ND (1)	ND (1)	0.246 J	1.54	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP83	05/05/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	05/05/10	13-15	N	ND (1)	ND (1)	ND (1)	0.368 J	0.959 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AAPS-DP84	05/05/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	05/05/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	2.42	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW467B-DP02	04/08/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/08/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW483A-DP02	03/30/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/30/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW483B-DP02	03/31/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/31/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW485B-DP02	04/12/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/12/10	5-7	FD	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/12/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW495A-DP02	03/29/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/26/10	5-7	FD	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/29/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW495B-DP02	03/29/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/29/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW496-DP01	04/09/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/09/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW499-DP02	04/01/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/01/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
AP1AW599A-DP02	03/30/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/30/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)

Table A2-10

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)																	
CA Maximum Contaminant Levels [a]				200	1	5	5	6	NE	5	NE	NE	0.2	600	0.5	5	NE	NE	5	NE	NE	NE
Federal Maximum Contaminant Levels [b]				200	NE	5	NE	7	NE	70	NE	0.05	0.2	600	5	5	NE	NE	75	NE	NE	NE
Tap Water Regional Screening Levels [c]				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1,1,1-Trichloro ethane**	**1,1,2,2-Tetrachloro ethane**	**1,1,2-Trichloro ethane**	**1,1-Dichloro ethane**	**1,1-Dichloro ethene**	**1,2,3-Trichloro propane**	**1,2,4-Trichloro benzene**	**1,2,4-Trimethyl benzene**	**1,2-Dibromo ethane**	**1,2-Dibromo-3-chloro propane**	**1,2-Dichloro benzene**	**1,2-Dichloro ethane**	**1,2-Dichloro propane**	**1,3,5-Trimethyl benzene**	**1,3-Dichloro benzene**	**1,4-Dichloro benzene**	**2-Butanone**	**2-Hexanone**	**4-Methyl-2-pentanone**
FED-1A																					
AP1AW599B-DP02	03/30/10	5-7	N	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (5) J	ND (5) J	ND (5) J
	04/06/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	03/30/10	13-15	N	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (5) J	ND (5) J	ND (5) J
	04/06/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
FED-2c																					
AP2CAPS-DP01	04/13/10	5-7	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)
	04/13/10	13-15	N	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (5)	ND (5)	ND (5)

Table A2-10
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)																	
CA Maximum Contaminant Levels [a]				NE	1	NE	NE	NE	NE	0.5	NE	NE	NE	NE	6	NE	NE	300	150	1,200	NE	NE
Federal Maximum Contaminant Levels [b]				NE	5	80	NE	80	NE	5	100	NE	NE	80	70	NE	80	700	NE	NE	NE	NE
Tap Water Regional Screening Levels [c]				NA	NA	NA	8.7	NA	NA	NA	NA	NA	190	NA	NA	NA	NA	NA	NA	NA	NA	680
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1A																						
AP1A259-DP01	04/01/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	0.747 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/01/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1A259-DP02	04/01/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/01/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	0.699 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1A259-DP03	03/31/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	0.584 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/31/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1A259-DP04	03/31/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/31/10	5-7	FD	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/31/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	0.681 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP01	04/06/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/06/10	5-7	FD	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/06/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP02	04/06/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/06/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP03	04/02/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/02/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP05	04/09/10	5-7	N	4.08 J	0.202 J	ND (1)	ND (2)	ND (1.5)	0.836 J	ND (1)	ND (1)	ND (2)	1.01 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/09/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	0.868 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP06	04/13/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/13/10	13-15	N	1.9 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP07	04/12/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/12/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	1.27	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP09	04/12/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/12/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP11	04/07/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/07/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP12	04/07/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	0.212 J	ND (2)	ND (1)	ND (2)	4.84
	04/07/10	13-15	N	ND (5) J	ND (1) J	ND (1) J	ND (2) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (2) J	0.805 J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (2) J	ND (1) J	ND (2) J	ND (1) J
AP1AAPS-DP13	04/02/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/02/10	5-7	FD	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/02/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP17	04/01/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/01/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	1.35 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP19	04/05/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/05/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP21	04/05/10	5-7	N	3.37 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/05/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP22	04/02/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/02/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	0.496 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)

Table A2-10
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)																		
CA Maximum Contaminant Levels [a]				NE	1	NE	NE	NE	NE	0.5	NE	NE	NE	NE	6	NE	NE	300	150	1,200	NE	NE
Federal Maximum Contaminant Levels [b]				NE	5	80	NE	80	NE	5	100	NE	NE	80	70	NE	80	700	NE	NE	NE	NE
Tap Water Regional Screening Levels [c]				NA	NA	NA	8.7	NA	NA	NA	NA	NA	190	NA	NA	NA	NA	NA	NA	NA	NA	680
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1A																						
AP1AAPS-DP24	04/02/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/02/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP28	04/06/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/06/10	5-7	FD	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/06/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP30	04/30/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2) J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/30/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	1.1	ND (1)	ND (1)	ND (2)	ND (2) J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/30/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2) J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP31	04/30/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2) J	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2) J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP80	05/04/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	1.09
	05/04/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP81	05/04/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	05/04/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP82	05/05/10	5-7	N	1.82 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	05/05/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	0.868 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP83	05/05/10	5-7	N	2.16 J	ND (1)	ND (1)	ND (2)	ND (1.5)	0.847 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	05/05/10	13-15	N	1.95 J	ND (1)	ND (1)	ND (2)	ND (1.5)	0.613 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AAPS-DP84	05/05/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	05/05/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	0.328 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW467B-DP02	04/08/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/08/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	0.997 J	ND (1)	ND (1)	ND (2)	3.99	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW483A-DP02	03/30/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/30/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW483B-DP02	03/31/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	3.32	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/31/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW485B-DP02	04/12/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	2.29 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/12/10	5-7	FD	3.93 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	2.71 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/12/10	13-15	N	4.31 J	ND (1)	ND (1)	ND (2)	ND (1.5)	0.671 J	ND (1)	ND (1)	ND (2)	2.34 J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW495A-DP02	03/29/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/26/10	5-7	FD	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/29/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW495B-DP02	03/29/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/29/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW496-DP01	04/09/10	5-7	N	2.55 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2) J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2) J	ND (1)
	04/09/10	13-15	N	4.85 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2) J	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2) J	ND (1)
AP1AW499-DP02	04/01/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/01/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	0.982 J	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
AP1AW599A-DP02	03/30/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	4.37	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/30/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)

Table A2-10
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)																	
CA Maximum Contaminant Levels [a]				NE	1	NE	NE	NE	NE	0.5	NE	NE	NE	NE	6	NE	NE	300	150	1,200	NE	NE
Federal Maximum Contaminant Levels [b]				NE	5	80	NE	80	NE	5	100	NE	NE	80	70	NE	80	700	NE	NE	NE	NE
Tap Water Regional Screening Levels [c]				NA	NA	NA	8.7	NA	NA	NA	NA	NA	190	NA	NA	NA	NA	NA	NA	NA	NA	680
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Acetone**	**Benzene**	**Bromo dichloro methane**	**Bromo methane**	**Bromoform**	**Carbon disulfide**	**Carbon tetra chloride**	**Chloro benzene**	**Chloro ethane**	**Chloro methane**	**Chloroform**	**cis-1,2-Dichloro ethene**	**cis-1,3-Dichloro propene**	**Dibromo chloro methane**	**Ethyl benzene**	**Freon-11**	**Freon-113**	**Freon-12**	**Isopropyl benzene**
FED-1A																						
AP1AW599B-DP02	03/30/10	5-7	N	ND (5) J	ND (1) J	ND (1) J	ND (2) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (2) J	ND (2) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (2) J	ND (1) J	ND (2) J	ND (1) J
	04/06/10	5-7	N	4.02 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	03/30/10	13-15	N	ND (5) J	ND (1) J	ND (1) J	ND (2) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (2) J	ND (2) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (1) J	ND (2) J	ND (1) J	ND (2) J	ND (1) J
	04/06/10	13-15	N	2.29 J	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
FED-2c																						
AP2CAPS-DP01	04/13/10	5-7	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)
	04/13/10	13-15	N	ND (5)	ND (1)	ND (1)	ND (2)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (2)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)	ND (2)	ND (1)

Table A2-10
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)												
CA Maximum Contaminant Levels [a]				**5**	**13**	**NE**	**100**	**5**	**150**	**10**	**NE**	**5**	**NE**	**0.5**	**1,750**	
Federal Maximum Contaminant Levels [b]				**5**	**NE**	**NE**	**100**	**5**	**1,000**	**100**	**NE**	**5**	**NE**	**2**	**10,000**	
Tap Water Regional Screening Levels [c]				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloro ethene**	**Toluene**	**trans-1,2-Dichloro ethene**	**trans-1,3-Dichloropro pene**	**Trichloro ethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**	
FED-1A																
AP1A259-DP01	04/01/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/01/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1A259-DP02	04/01/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/01/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1A259-DP03	03/31/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/31/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1A259-DP04	03/31/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/31/10	5-7	FD	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/31/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP01	04/06/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/06/10	5-7	FD	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/06/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP02	04/06/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/06/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP03	04/02/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/02/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP05	04/09/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/09/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP06	04/13/10	5-7	N	ND (2)	ND (1)	*	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/13/10	13-15	N	ND (2)	ND (1)	*	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP07	04/12/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/12/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP09	04/12/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/12/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP11	04/07/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3) J	ND (1)	ND (1)	
	04/07/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP12	04/07/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/07/10	13-15	N	ND (2) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (3) J	ND (1) J	ND (1) J	
AP1AAPS-DP13	04/02/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/02/10	5-7	FD	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/02/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP17	04/01/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/01/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP19	04/05/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/05/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP21	04/05/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3) J	ND (1)	ND (1)	
	04/05/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP22	04/02/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/02/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	

Table A2-10
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)												
CA Maximum Contaminant Levels [a]				**5**	**13**	**NE**	**100**	**5**	**150**	**10**	**NE**	**5**	**NE**	**0.5**	**1,750**	
Federal Maximum Contaminant Levels [b]				**5**	**NE**	**NE**	**100**	**5**	**1,000**	**100**	**NE**	**5**	**NE**	**2**	**10,000**	
Tap Water Regional Screening Levels [c]				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloro ethene**	**Toluene**	**trans-1,2-Dichloro ethene**	**trans-1,3-Dichloropro pene**	**Trichloro ethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**	
FED-1A																
AP1AAPS-DP24	04/02/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/02/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP28	04/06/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/06/10	5-7	FD	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/06/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP30	04/30/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/30/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	0.218 J	ND (1)	
	04/30/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP31	04/30/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP80	05/04/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	05/04/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AAPS-DP81	05/04/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
	05/04/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
AP1AAPS-DP82	05/05/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
	05/05/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
AP1AAPS-DP83	05/05/10	5-7	N	ND (2)	ND (1)	0.438 J	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
	05/05/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
AP1AAPS-DP84	05/05/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	ND (1)	ND (1)	
	05/05/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	*	0.216 J	ND (1)	
AP1AW467B-DP02	04/08/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3) J	ND (1)	ND (1)	
	04/08/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW483A-DP02	03/30/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/30/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW483B-DP02	03/31/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/31/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW485B-DP02	04/12/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/12/10	5-7	FD	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/12/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW495A-DP02	03/29/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/26/10	5-7	FD	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/29/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW495B-DP02	03/29/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/29/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW496-DP01	04/09/10	5-7	N	1.45 J	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/09/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW499-DP02	04/01/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/01/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
AP1AW599A-DP02	03/30/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/30/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	

Table A2-10

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Volatile Organic Compounds
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Volatile Organic Compounds (ug/L)												
CA Maximum Contaminant Levels [a]				**5**	**13**	**NE**	**100**	**5**	**150**	**10**	**NE**	**5**	**NE**	**0.5**	**1,750**	
Federal Maximum Contaminant Levels [b]				**5**	**NE**	**NE**	**100**	**5**	**1,000**	**100**	**NE**	**5**	**NE**	**2**	**10,000**	
Tap Water Regional Screening Levels [c]				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Methylene chloride**	**Methyl-tert-butyl ether**	**n-Hexane**	**Styrene**	**Tetrachloro ethene**	**Toluene**	**trans-1,2-Dichloro ethene**	**trans-1,3-Dichloropro pene**	**Trichloro ethene**	**Vinyl acetate**	**Vinyl chloride**	**Xylene, total**	
FED-1A																
AP1AW599B-DP02	03/30/10	5-7	N	ND (2) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (3) J	ND (1) J	ND (1) J	
	04/06/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	03/30/10	13-15	N	ND (2) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1) J	ND (1.5) J	ND (1) J	ND (1) J	ND (3) J	ND (1) J	ND (1) J	
	04/06/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
FED-2c																
AP2CAPS-DP01	04/13/10	5-7	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	
	04/13/10	13-15	N	ND (2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.5)	ND (1)	ND (1)	ND (3)	ND (1)	ND (1)	

Notes:

a. CA MCL (CDHS, 2010)
b. FED MCL (U.S. EPA, 2009)
c. Tap Water RSLs (U.S. EPA 2010)

Results greater than or equal to the California Maximum Containment Levels are bolded.
Results greater than or equal to the Federal Maximum Containment Levels are shaded.
Results greater than or equal to the EPA Regional Screening Level for Tap Water are bolded.
VOC = volatile organic compound
USEPA = United States Environmental Protection Agency
NE = not established
NA = not applicable because an MCL exists as a comparison criterion.
ug/L = micrograms per liter
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
* indicates that a compound was analyzed, however there was no valid result

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Table A2-11

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polychlorinated Biphenyls (ug/L)									
Federal Maximum Contaminant Levels [a]				**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**NE**	**NE**	**NE**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aroclor-1016**	**Aroclor-1221**	**Aroclor-1232**	**Aroclor-1242**	**Aroclor-1248**	**Aroclor-1254**	**Aroclor-1260**	**Aroclor-1262**	**Aroclor-1268**	**Total PCBs**
FED-1A													
AP1AW467B-DP02	04/23/10	5-7	N	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND
	04/23/10	13-15	N	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND
AP1AW483A-DP02	03/30/10	5-7	N	ND (0.481)	ND (0.481)	ND (0.481)	ND (0.481)	ND (0.481)	ND (0.481)	ND (0.481)	ND (0.481)	ND (0.481)	ND
	03/30/10	13-15	N	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND
AP1AW483B-DP02	03/31/10	5-7	N	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND
	03/31/10	13-15	N	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND
AP1AW485B-DP02	04/12/10	5-7	N	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND
	04/12/10	5-7	FD	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND (0.472)	ND
	04/12/10	13-15	N	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND
AP1AW495A-DP02	03/29/10	5-7	N	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND (0.49)	ND
	03/26/10	5-7	FD	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND
	03/29/10	13-15	N	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND (0.5) J	ND
AP1AW495B-DP02	03/29/10	5-7	N	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND (0.481) J	ND
	03/29/10	13-15	N	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND (0.49) J	ND

Notes:

a. FED MCL (U.S. EPA, 2009)

Results greater than or equal to the Federal Maximum Containment Levels are bolded.
PCB = polychlorinated biphenyl
USEPA = United States Environmental Protection Agency
NE = not established
ug/L = micrograms per liter
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

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Table A2-12
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dissolved Metals (ug/L)																	
CA Maximum Contaminant Levels [a]				**1,000**	**6**	**10**	**1,000**	**4**	**NE**	**5**	**NE**	**50**	**NE**	**1,300**	**NE**	**15**	**NE**	**NE**	**2**	**NE**	**100**
Federal Maximum Contaminant Levels [b]				**NE**	**6**	**10**	**2,000**	**4**	**NE**	**5**	**NE**	**100**	**NE**	**1,300**	**NE**	**15**	**NE**	**NE**	**2**	**NE**	**NE**
Background [c]				**1,070**	**37.5**	**20.72**	**569.5**	**2.5**	**NE**	**NE**	**NE**	**12.45**	**NE**	**24.03**	**6,586**	**11.45**	**NE**	**1,741**	**NE**	**NE**	**NE**
Tap Water Regional Screening Levels [d]				**NA**	**NA**	**NA**	**NA**	**NA**	**7,300**	**NA**	**NA**	**NA**	**11**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**180**	**NA**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**
FED-1A																					
AP1AAPS-DP01	04/06/10	5-7	N	83.7 J	ND (15)	*14.9*	156	ND (5)	---	ND (5)	37,800	ND (10)	ND (12.5)	ND (10)	302	ND (3)	15,900 J+	303	ND (0.2)	ND (15)	ND (10) J
	04/06/10	5-7	FD	86.8 J	ND (15)	*14.1*	168	ND (5)	---	ND (5)	40,600	ND (10)	ND (12.5)	ND (10)	321	ND (3)	17,200 J+	328	ND (0.2)	ND (15)	ND (10) J
	04/06/10	13-15	N	157 J	ND (15)	4.55 J	***1,730***	ND (5)	---	ND (5)	108,000	ND (10)	ND (12.5)	ND (10)	1,590	ND (3)	311,000 J+	**2,460**	ND (0.2)	11.1 J	3.14 J-
AP1AAPS-DP02	04/06/10	5-7	N	50.7 J	ND (15)	7.37 J	62.6	ND (5)	---	ND (5)	3,810 J	ND (10)	ND (12.5)	ND (10)	143	ND (3)	1,190 J+	5.35 J	ND (0.2)	ND (15)	ND (10) J
	04/06/10	13-15	N	71.4 J	ND (15)	3.18 J	202	ND (5)	---	ND (5)	22,300	ND (10)	ND (12.5)	ND (10)	71.1 J	ND (3)	36,700 J+	321	ND (0.2)	9.54 J	ND (10) J
AP1AAPS-DP03	04/02/10	5-7	N	80.9 J	ND (15)	ND (10)	133	ND (5)	---	ND (5)	30,100	ND (10)	ND (12.5)	ND (10)	533	ND (3)	10,300	295	ND (0.2)	5.47 J	ND (10)
	04/02/10	13-15	N	ND (200)	ND (15)	3.49 J	38.1 J	ND (5)	---	ND (5)	11,000	ND (10)	ND (12.5)	ND (10)	38.6 J	ND (3)	15,900	173	ND (0.2)	12.1 J	ND (10)
AP1AAPS-DP05	04/09/10	5-7	N	140 J	ND (15)	*11.4*	309	ND (5)	---	1.03 J	49,700	ND (10)	ND (12.5)	ND (10)	300	ND (3)	14,900	217	ND (0.2) J	5.65 J	ND (10)
	04/09/10	13-15	N	215	ND (15)	ND (10)	353	ND (5)	---	2.46 J	103,000	ND (10)	ND (12.5)	ND (10)	1,920	ND (3)	335,000	**2,640**	ND (0.2) J	9.99 J	5.75 J
AP1AAPS-DP06	04/13/10	5-7	N	ND (200)	ND (15)	*20.7*	31 J	ND (5)	---	ND (5)	2,350 J	ND (10)	ND (12.5)	ND (10)	115	ND (3)	1,110 J	6.41 J	ND (0.2)	ND (15)	ND (10)
	04/13/10	13-15	N	153 J	ND (15)	ND (10)	**593**	ND (5)	---	1.26 J	65,700	ND (10)	ND (12.5)	ND (10)	852	ND (3)	170,000	1,690	ND (0.2)	14.1 J	ND (10)
AP1AAPS-DP07	04/12/10	5-7	N	ND (200)	ND (15)	***21.7***	12.7 J-	ND (5)	---	ND (5)	2,790 J	ND (10)	ND (12.5) J	ND (10)	137	ND (3) J	1,140 J	8.6 J	ND (0.2)	5.67 J	ND (10)
	04/12/10	13-15	N	178 J	ND (15)	ND (10)	195 J-	ND (5)	---	ND (5)	75,400	ND (10)	ND (12.5) J	ND (10)	554	ND (3) J	193,000	**2,250**	ND (0.2)	13.8 J	3.95 J
AP1AAPS-DP09	04/12/10	5-7	N	ND (200)	ND (15)	*17.8*	14.9 J-	ND (5)	---	ND (5)	4,340 J	ND (10)	ND (12.5) J	ND (10)	42.9 J	ND (3) J	1,580 J	8.41 J	ND (0.2)	5.91 J	ND (10)
	04/12/10	13-15	N	206	ND (15)	ND (10)	195 J-	ND (5)	---	ND (5)	103,000	ND (10)	ND (12.5) J	ND (10)	86.4 J	ND (3) J	239,000	**2,840**	ND (0.2)	5.81 J	3.2 J
AP1AAPS-DP11	04/07/10	5-7	N	74 J	ND (15)	ND (10)	109	ND (5)	---	ND (5)	18,400	4.97 J	ND (12.5)	ND (10)	ND (100)	ND (3)	4,150 J	30.1	ND (0.2)	ND (15)	ND (10)
	04/07/10	13-15	N	89.8 J	ND (15)	3.45 J	144	ND (5)	---	ND (5)	31,200	ND (10)	ND (12.5)	ND (10)	55.5 J	ND (3)	47,200	470	ND (0.2)	6.42 J	ND (10)
AP1AAPS-DP12	04/07/10	5-7	N	73.3 J	ND (15)	ND (10)	51.5	ND (5)	---	ND (5)	17,400	ND (10)	ND (12.5)	ND (10)	58.6 J	ND (3)	6,490 J+	25.1	ND (0.2)	ND (15)	ND (10)
	04/07/10	13-15	N	56.2 J	ND (15)	4.58 J	79.9	ND (5)	---	ND (5)	18,500	ND (10)	ND (12.5)	ND (10)	38.5 J	ND (3)	27,300 J+	242	ND (0.2)	ND (15)	ND (10)
AP1AAPS-DP13	04/02/10	5-7	N	111 J	ND (15)	ND (10)	107	ND (5)	---	ND (5)	56,700	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	15,800	182	ND (0.2) J	13.6 J	ND (10)
	04/02/10	5-7	FD	108 J	ND (15)	ND (10)	106	ND (5)	---	ND (5)	54,000	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	15,100	178	ND (0.2) J	13.5 J	ND (10)
	04/02/10	13-15	N	ND (200)	ND (15)	***21.3***	33.7 J	ND (5)	---	ND (5)	3,740 J	ND (10)	ND (12.5)	ND (10)	34.7 J	ND (3)	2,860 J	16.7	ND (0.2) J	12 J	ND (10)
AP1AAPS-DP17	04/01/10	5-7	N	67.3 J	ND (15)	ND (10)	34.8 J	ND (5)	---	ND (5)	19,400	ND (10)	ND (12.5)	ND (10)	68 J	ND (3)	7,930	110	ND (0.2)	9.63 J	ND (10)
	04/01/10	13-15	N	68.4 J	ND (15)	ND (10)	34.2 J	ND (5)	---	ND (5)	19,900	ND (10)	ND (12.5)	ND (10)	72.3 J	ND (3)	8,030	110	ND (0.2)	9.26 J	ND (10)
AP1AAPS-DP19	04/05/10	5-7	N	63.7 J	ND (15)	*16.1*	9 J	ND (5)	---	ND (5)	ND (5,000)	2.02 J	ND (12.5)	ND (10)	434	ND (3)	ND (5,000)	7.75 J	ND (0.2)	69.3	ND (10) J
	04/05/10	13-15	N	ND (200)	ND (15)	*14.4*	18.5 J	ND (5)	---	ND (5)	2,250 J	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	2,940 J	18.2	ND (0.2)	22.6	ND (10)
AP1AAPS-DP21	04/05/10	5-7	N	ND (200)	ND (15)	4.01 J	8.9 J	ND (5)	---	ND (5)	1,980 J	ND (10)	ND (12.5)	ND (10)	95 J	ND (3)	1,480 J	9.82 J	ND (0.2)	41.2	ND (10)
	04/05/10	13-15	N	67.7 J	ND (15)	***35.4***	12.5 J	ND (5)	---	ND (5)	1,010 J	ND (10)	ND (12.5)	ND (10)	328	1.84 J	ND (5,000)	11 J	ND (0.2)	19.5	ND (10)
AP1AAPS-DP22	04/02/10	5-7	N	54.8 J	ND (15)	6.62 J	59.4	ND (5)	---	ND (5)	9,180	ND (10)	ND (12.5)	ND (10)	53.9 J	ND (3)	7,110	47.5	ND (0.2)	9.37 J	ND (10) J
	04/02/10	13-15	N	151 J	ND (15)	*17.2*	**914**	ND (5)	---	ND (5)	104,000	ND (10)	ND (12.5)	ND (10)	**9,120**	ND (3)	239,000	**3,020**	ND (0.2)	5.99 J	ND (10) J
AP1AAPS-DP24	04/02/10	5-7	N	ND (200)	ND (15)	ND (10)	14.9 J	ND (5)	---	ND (5)	11,800	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	5,990	63.5	ND (0.2)	23	ND (10) J
	04/02/10	13-15	N	73.8 J	ND (15)	***30.7***	ND (40)	ND (5)	---	ND (5)	ND (5,000)	ND (10)	ND (12.5)	ND (10)	419	ND (3)	ND (5,000)	5.44 J	ND (0.2)	ND (15)	ND (10) J
AP1AAPS-DP28	04/06/10	5-7	N	ND (200)	ND (15)	ND (10)	67.1	ND (5)	---	ND (5)	17,100	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	12,900	126	ND (0.2)	9.99 J	ND (10)
	04/06/10	5-7	FD	ND (200)	ND (15)	ND (10)	67	ND (5)	---	ND (5)	17,600	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	13,300	130	ND (0.2)	10.1 J	ND (10)
	04/06/10	13-15	N	ND (200)	ND (15)	6.63 J	25 J	ND (5)	---	ND (5)	5,290	ND (10)	ND (12.5)	ND (10)	77.2 J	ND (3)	4,400 J	87.2	ND (0.2)	8.47 J	ND (10)
AP1AW467B-DP02	04/08/10	5-7	N	82.6 J	ND (15)	*10.1*	47.2	ND (5)	---	ND (5)	26,800	ND (10)	ND (12.5)	ND (10) J	355	ND (3)	12,500 J-	338	ND (0.2)	ND (15)	ND (10)
	04/08/10	13-15	N	137 J	ND (15)	***21.7***	316	ND (5)	---	1.39 J	53,800	ND (10)	ND (12.5)	ND (10) J	**12,500**	ND (3)	70,600 J-	**1,990**	ND (0.2)	10.1 J	ND (10)

Table A2-12
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dissolved Metals (ug/L)																	
CA Maximum Contaminant Levels [a]				**1,000**	**6**	**10**	**1,000**	**4**	**NE**	**5**	**NE**	**50**	**NE**	**1,300**	**NE**	**15**	**NE**	**NE**	**2**	**NE**	**100**
Federal Maximum Contaminant Levels [b]				**NE**	**6**	**10**	**2,000**	**4**	**NE**	**5**	**NE**	**100**	**NE**	**1,300**	**NE**	**15**	**NE**	**NE**	**2**	**NE**	**NE**
Background [c]				**1,070**	**37.5**	**20.72**	**569.5**	**2.5**	**NE**	**NE**	**NE**	**12.45**	**NE**	**24.03**	**6,586**	**11.45**	**NE**	**1,741**	**NE**	**NE**	**NE**
Tap Water Regional Screening Levels [d]				**NA**	**NA**	**NA**	**NA**	**NA**	**7,300**	**NA**	**NA**	**NA**	**11**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**180**	**NA**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Aluminum**	**Antimony**	**Arsenic**	**Barium**	**Beryllium**	**Boron**	**Cadmium**	**Calcium**	**Chromium**	**Cobalt**	**Copper**	**Iron**	**Lead**	**Magnesium**	**Manganese**	**Mercury**	**Molybdenum**	**Nickel**
FED-1A																					
AP1AW483A-DP02	03/30/10	5-7	N	81.7 J	ND (15)	ND (10)	130	ND (5)	---	ND (5)	45,000	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	30,300	179	ND (0.2)	7.46 J	ND (10)
	03/30/10	13-15	N	ND (200)	ND (15)	*15.3*	32.9 J	ND (5)	---	ND (5)	2,280 J	2.1 J	ND (12.5)	ND (10)	ND (100)	2.11 J	2,820 J	31.6	ND (0.2)	38	4.3 J
AP1AW483B-DP02	03/31/10	5-7	N	114 J	ND (15)	ND (10)	39.2 J	ND (5)	---	ND (5)	58,500	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	6,760	74.3	ND (0.2)	5.34 J	ND (10)
	03/31/10	13-15	N	ND (200)	ND (15)	ND (10)	110	ND (5)	---	ND (5)	15,100	ND (10)	ND (12.5)	ND (10)	84.3 J	ND (3)	19,400	362	ND (0.2)	ND (15)	ND (10)
AP1AW485B-DP02	04/12/10	5-7	N	115 J	ND (15)	ND (10)	145 J-	ND (5)	---	ND (5)	42,000	ND (10)	ND (12.5) J	ND (10)	103	ND (3) J	14,700	266	ND (0.2) J	ND (15)	ND (10)
	04/12/10	5-7	FD	117 J	ND (15)	ND (10)	146 J-	ND (5)	---	ND (5)	42,600	ND (10)	ND (12.5) J	ND (10)	103	ND (3) J	15,100	268	ND (0.2) J	ND (15)	ND (10)
	04/12/10	13-15	N	ND (200)	ND (15)	5.29 J	28.5 J-	ND (5)	---	ND (5)	5,840	ND (10)	ND (12.5) J	ND (10)	30.6 J	ND (3) J	5,570	109	ND (0.2) J	19.6	ND (10)
AP1AW495A-DP02	03/29/10	5-7	N	176 J	ND (15)	ND (10)	77.5	ND (5)	65.9	ND (5)	81,300	ND (10)	ND (12.5)	5.36 J	ND (100)	ND (3)	15,300	403	ND (0.2)	22.4	8.48 J
	03/26/10	5-7	FD	117 J	ND (15)	ND (10)	76	ND (5)	63.8	ND (5)	81,100	ND (10)	ND (12.5)	4.87 J	ND (100)	ND (3)	15,200	404	ND (0.2)	21.7	5.59 J
	03/29/10	13-15	N	111 J	ND (15)	ND (10)	103	ND (5)	65.1	ND (5)	57,700	ND (10)	ND (12.5)	ND (10)	ND (104)	ND (3)	22,200	340	ND (0.2)	5.59 J	ND (10)
AP1AW495B-DP02	03/29/10	5-7	N	133 J	ND (15)	ND (10)	61.7	ND (5)	163	ND (5)	57,200	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	22,600	271	ND (0.2)	9.82 J	3.76 J
	03/29/10	13-15	N	119 J	ND (15)	***31.9***	7.91 J	ND (5)	353	ND (5)	ND (5,000)	ND (10)	ND (12.5)	ND (10)	432	ND (3)	ND (5,000)	16.4	ND (0.2)	37.9	3.9 J
AP1AW496-DP01	04/09/10	5-7	N	ND (200)	ND (15)	ND (10)	27.7 J-	ND (5)	---	ND (5)	5,050	ND (10)	ND (12.5) J	ND (10)	112	ND (3) J	4,730 J	128	ND (0.2) J	12.1 J	ND (10)
	04/09/10	13-15	N	56.6 J	ND (15)	ND (10)	65.9 J-	ND (5)	---	ND (5)	14,600	ND (10)	ND (12.5) J	ND (10)	2,470	ND (3) J	23,600	340	ND (0.2) J	**355**	3.57 J
AP1AW499-DP02	04/01/10	5-7	N	63 J	ND (15)	ND (10)	11 J	ND (5)	---	ND (5)	6,460	ND (10)	ND (12.5)	ND (10)	103	ND (3)	1,680 J	8.41 J	ND (0.2) J	ND (15)	ND (10)
	04/01/10	13-15	N	ND (200)	ND (15)	*11.8*	117	ND (5)	---	ND (5)	11,200	ND (10)	ND (12.5)	ND (10)	97.1 J	ND (3)	14,300	135	ND (0.2) J	14.2 J	3.19 J
AP1AW599A-DP02	03/30/10	5-7	N	101 J	ND (15)	ND (10)	126	ND (5)	---	ND (5)	53,100	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	16,500	222	ND (0.2)	15.5	4.84 J
	03/30/10	13-15	N	88.9 J	ND (15)	ND (10)	105	ND (5)	---	ND (5)	46,700	ND (10)	ND (12.5)	ND (10)	ND (129)	ND (3)	15,900	150	ND (0.2)	26.9	3.25 J
AP1AW599B-DP02	03/30/10	5-7	N	91.1 J	ND (15)	ND (10)	59.1	ND (5)	---	ND (5)	50,300	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	9,070	180	ND (0.2) J	14.1 J	ND (10)
	04/06/10	5-7	N	130 J	ND (15)	ND (10)	49.2	ND (5)	---	ND (5)	51,300	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	10,100	40.2	ND (0.2)	8.12 J	ND (10)
	03/30/10	13-15	N	77.5 J	ND (15)	ND (10)	106	ND (5)	---	ND (5)	37,000	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	27,900	100	ND (0.2) J	18.1	ND (10)
	04/06/10	13-15	N	ND (200)	ND (15)	4.84 J	66.9	ND (5)	---	ND (5)	17,900	ND (10)	ND (12.5)	ND (10)	ND (100)	ND (3)	13,500	59.4	ND (0.2)	47	ND (10)
FED-2c																					
AP2CAPS-DP01	04/13/10	5-7	N	185 J	ND (15)	ND (10)	465 J-	ND (5)	---	ND (5)	78,500	ND (10)	5.19 J-	ND (10)	155	ND (3) J	82,500	776	ND (0.2)	6.81 J	ND (10)
	04/13/10	13-15	N	286	ND (15)	4.12 J	531 J-	ND (5)	---	ND (10)	170,000	ND (20)	ND (12.5) J	ND (20)	**22,100**	ND (6) J	704,000	**2,610**	ND (0.2)	15.3	4.21 J

Table A2-12
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dissolved Metals (ug/L)									
CA Maximum Contaminant Levels [a]				**NE**	**50**	**NE**	**NE**	**2**	**NE**	**NE**	**NE**	**NE**	
Federal Maximum Contaminant Levels [b]				**NE**	**50**	**NE**	**NE**	**2**	**NE**	**NE**	**NE**	**NE**	
Background [c]				**NE**	**8.58**	**NE**	**NE**	**16.15**	**NE**	**NE**	**26.27**	**36.39**	
Tap Water Regional Screening Levels [d]				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Potassium**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Tin**	**Titanium**	**Vanadium**	**Zinc**	
FED-1A													
AP1AAPS-DP01	04/06/10	5-7	N	13,600 J+	ND (5)	ND (3)	127,000	ND (8)	---	---	ND (12.5)	ND (20)	
	04/06/10	5-7	FD	14,500 J+	ND (5)	ND (3)	137,000	ND (8)	---	---	ND (12.5)	ND (20)	
	04/06/10	13-15	N	112,000 J+	ND (5)	ND (3)	4,250,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AAPS-DP02	04/06/10	5-7	N	9,630 J+	ND (5)	ND (3)	107,000	ND (8)	---	---	8.55 J	ND (20)	
	04/06/10	13-15	N	36,700 J+	ND (5)	ND (3)	1,170,000	ND (8)	---	---	5.13 J	ND (20)	
AP1AAPS-DP03	04/02/10	5-7	N	7,990	ND (5)	ND (3)	19,800	ND (8)	---	---	ND (12.5)	ND (20)	
	04/02/10	13-15	N	25,600	ND (5)	ND (3)	770,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AAPS-DP05	04/09/10	5-7	N	13,100	ND (5)	ND (3)	93,000	ND (8)	---	---	ND (12.5)	ND (20)	
	04/09/10	13-15	N	118,000	ND (5)	ND (3)	4,010,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AAPS-DP06	04/13/10	5-7	N	5,870	ND (5)	ND (3)	174,000	ND (8)	---	---	19.1	ND (20)	
	04/13/10	13-15	N	86,600	ND (5)	ND (3)	2,840,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AAPS-DP07	04/12/10	5-7	N	7,590	ND (5)	ND (3)	139,000	ND (8)	---	---	13.9	ND (20) J	
	04/12/10	13-15	N	89,300	ND (5)	ND (3)	2,740,000	ND (8)	---	---	ND (12.5)	ND (20) J	
AP1AAPS-DP09	04/12/10	5-7	N	6,520	ND (5)	ND (3)	103,000	ND (8)	---	---	13.8	ND (20) J	
	04/12/10	13-15	N	87,600	ND (5)	ND (3)	2,890,000	ND (8)	---	---	ND (12.5)	ND (20) J	
AP1AAPS-DP11	04/07/10	5-7	N	10,000	ND (5)	ND (3)	45,800	ND (8)	---	---	5.37 J	ND (20)	
	04/07/10	13-15	N	39,600	ND (5)	ND (3)	1,190,000	ND (8)	---	---	6.43 J	ND (20)	
AP1AAPS-DP12	04/07/10	5-7	N	12,200	ND (5)	ND (3)	42,600	ND (8)	---	---	ND (12.5)	ND (20)	
	04/07/10	13-15	N	28,400	ND (5)	ND (3)	768,000	ND (8)	---	---	10.7 J	ND (20)	
AP1AAPS-DP13	04/02/10	5-7	N	7,930	ND (5)	ND (3)	15,800	ND (8)	---	---	ND (12.5)	ND (20)	
	04/02/10	5-7	FD	7,740	ND (5)	ND (3)	14,800	ND (8)	---	---	ND (12.5)	ND (20)	
	04/02/10	13-15	N	10,200	ND (5)	ND (3)	329,000	ND (8)	---	---	15.5	ND (20)	
AP1AAPS-DP17	04/01/10	5-7	N	8,840	ND (5)	ND (3)	108,000	ND (8)	---	---	ND (12.5)	ND (20)	
	04/01/10	13-15	N	8,720	ND (5)	ND (3)	108,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AAPS-DP19	04/05/10	5-7	N	5,710	ND (5)	ND (3)	127,000	ND (8)	---	---	25	ND (20)	
	04/05/10	13-15	N	9,030	ND (5)	ND (3)	358,000	ND (8)	---	---	19.4	ND (20)	
AP1AAPS-DP21	04/05/10	5-7	N	5,550	ND (5)	ND (3)	22,200	ND (8)	---	---	6.02 J	ND (20)	
	04/05/10	13-15	N	4,270 J	ND (5)	ND (3)	155,000	ND (8)	---	---	**39.5**	ND (20)	
AP1AAPS-DP22	04/02/10	5-7	N	13,700	ND (5)	ND (3)	432,000	ND (8)	---	---	ND (12.5)	ND (20)	
	04/02/10	13-15	N	82,300	ND (5)	ND (3)	3,310,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AAPS-DP24	04/02/10	5-7	N	11,100	ND (5)	ND (3)	26,200	ND (8)	---	---	ND (12.5)	ND (20)	
	04/02/10	13-15	N	1,500 J	ND (5)	ND (3)	53,700	ND (8)	---	---	**43.2**	ND (20)	
AP1AAPS-DP28	04/06/10	5-7	N	11,300	ND (5)	ND (3)	43,400	ND (8)	---	---	ND (12.5)	ND (20)	
	04/06/10	5-7	FD	11,800	ND (5)	ND (3)	44,300	ND (8)	---	---	ND (12.5)	ND (20)	
	04/06/10	13-15	N	13,400	ND (5)	ND (3)	118,000	ND (8)	---	---	ND (12.5)	ND (20)	
AP1AW467B-DP02	04/08/10	5-7	N	8,520	ND (5)	ND (3)	46,800	ND (8)	---	---	ND (12.5)	ND (20)	
	04/08/10	13-15	N	48,100	ND (5)	ND (3)	1,590,000	ND (8)	---	---	ND (12.5)	ND (20)	

Table A2-12
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Dissolved Metals (ug/L)									
CA Maximum Contaminant Levels [a]				**NE**	**50**	**NE**	**NE**	**2**	**NE**	**NE**	**NE**	**NE**
Federal Maximum Contaminant Levels [b]				**NE**	**50**	**NE**	**NE**	**2**	**NE**	**NE**	**NE**	**NE**
Background [c]				**NE**	**8.58**	**NE**	**NE**	**16.15**	**NE**	**NE**	**26.27**	**36.39**
Tap Water Regional Screening Levels [d]				**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Potassium**	**Selenium**	**Silver**	**Sodium**	**Thallium**	**Tin**	**Titanium**	**Vanadium**	**Zinc**
FED-1A												
AP1AW483A-DP02	03/30/10	5-7	N	43,500 J+	ND (5)	ND (3)	69,700 J+	ND (8)	---	---	ND (12.5)	ND (20)
	03/30/10	13-15	N	12,900 J+	ND (5)	ND (3)	364,000 J+	ND (8)	---	---	6.94 J	ND (20)
AP1AW483B-DP02	03/31/10	5-7	N	3,000 J	ND (5)	ND (3)	6,080	ND (8)	---	---	ND (12.5)	ND (20)
	03/31/10	13-15	N	26,400	ND (5)	ND (3)	156,000	ND (8)	---	---	ND (12.5)	ND (20)
AP1AW485B-DP02	04/12/10	5-7	N	13,300	ND (5)	ND (3)	32,800	ND (8)	---	---	ND (12.5)	ND (20) J
	04/12/10	5-7	FD	13,500	ND (5)	ND (3)	33,700	ND (8)	---	---	ND (12.5)	ND (20) J
	04/12/10	13-15	N	15,800	ND (5)	ND (3)	472,000	ND (8)	---	---	5.34 J	ND (20) J
AP1AW495A-DP02	03/29/10	5-7	N	3,990 J	ND (5)	ND (3)	8,030	ND (8)	ND (30)	ND (15)	ND (12.5)	ND (20)
	03/26/10	5-7	FD	3,940 J	ND (5)	ND (3)	7,890	ND (8)	ND (30)	ND (15)	ND (12.5)	ND (20)
	03/29/10	13-15	N	8,130	ND (5)	ND (3)	12,900	ND (8)	ND (30)	ND (15)	ND (12.5)	6.04 J
AP1AW495B-DP02	03/29/10	5-7	N	14,400	ND (5)	ND (3)	89,400	ND (8)	ND (30)	ND (15)	ND (12.5)	ND (20)
	03/29/10	13-15	N	5,810	ND (5)	ND (3)	155,000	ND (8)	ND (30)	17.5	19.7	ND (20)
AP1AW496-DP01	04/09/10	5-7	N	9,610	ND (5)	ND (3)	127,000	ND (8)	---	---	ND (12.5)	ND (20) J
	04/09/10	13-15	N	32,300	ND (5)	ND (3)	976,000	ND (8)	---	---	ND (12.5)	ND (20) J
AP1AW499-DP02	04/01/10	5-7	N	3,230 J	ND (5)	ND (3)	27,500	ND (8)	---	---	ND (12.5)	ND (20)
	04/01/10	13-15	N	22,200	ND (5)	ND (3)	743,000	ND (8)	---	---	6.94 J	ND (20)
AP1AW599A-DP02	03/30/10	5-7	N	10,500 J+	ND (5)	ND (3)	22,100 J+	ND (8)	---	---	ND (12.5)	ND (20)
	03/30/10	13-15	N	11,200 J+	ND (5)	ND (3)	35,800 J+	ND (8)	---	---	ND (12.5)	ND (20)
AP1AW599B-DP02	03/30/10	5-7	N	5,440	ND (5)	ND (3)	11,500	ND (8)	---	---	ND (12.5)	ND (20)
	04/06/10	5-7	N	6,300	ND (5)	ND (3)	15,000	ND (8)	---	---	ND (12.5)	ND (20)
	03/30/10	13-15	N	22,400	ND (5)	ND (3)	55,300	ND (8)	---	---	ND (12.5)	ND (20)
	04/06/10	13-15	N	16,000	ND (5)	ND (3)	163,000	ND (8)	---	---	ND (12.5)	ND (20)
FED-2c												
AP2CAPS-DP01	04/13/10	5-7	N	61,900	ND (5)	ND (3)	1,420,000	ND (8)	---	---	ND (12.5)	ND (20) J
	04/13/10	13-15	N	222,000	ND (5)	ND (3)	6,670,000	ND (8)	---	---	ND (12.5)	ND (40) J

Table A2-12

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Metals
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Notes:

a. CA MCL (CDHS, 2010)
b. FED MCL (U.S. EPA, 2009)
c. TtEMI 2004
d. Tap Water RSLs (U.S. EPA 2010)

Results greater than the background value are bolded.
Results greater than or equal to the California Maximum Containment Levels are shaded.
Results greater than or equal to the Federal Maximum Containment Levels are italicized.
Results greater than or equal to the EPA Regional Screening Level for Tap Water are bolded.
USEPA = United States Environmental Protection Agency
NE = not established
NA = not applicable because an MCL exists as a comparison criterion.
ug/L = micrograms per liter
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation
J+ = estimated result biased high determined by laboratory or data validation
J - = estimated result biased low determined by laboratory or data validation

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Table A2-13
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/L)															
CA Maximum Contaminant Levels [a]				NE	NE	NE	NE	NE	NE	NE	0.2	NE	NE	NE	NE	NE	NE	NE	NE
Federal Maximum Contaminant Levels [b]				NE	NE	NE	NE	NE	NE	NE	0.2	NE	NE	NE	NE	NE	NE	NE	NE
ESLS for the Petroleum Strategy Plan [c]				1.4	2.1	23	30	0.73	0.1	0.027	0.014	0.029	0.4	0.35	0.25	8	3.9	0.048	1.4
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1A																			
AP1AAPS-DP01	04/06/10	5-7	N	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	0.0305 J	ND (0.0481)	ND (0.0481)	ND (0.0481)
	04/06/10	5-7	FD	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
	04/06/10	13-15	N	0.043 J	0.0502 J	ND (0.0526)	ND (0.0526)	0.0257 J	ND (0.0526)	ND (0.0526)	ND (0.0526)	ND (0.0526)	ND (0.0526)	ND (0.0526)	ND (0.0526)	0.0276 J	ND (0.0526)	ND (0.0526)	ND (0.0526)
AP1AAPS-DP02	04/06/10	5-7	N	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)	ND (0.0714)
	04/06/10	13-15	N	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)
AP1AAPS-DP03	04/02/10	5-7	N	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)
	04/02/10	13-15	N	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)
AP1AAPS-DP05	04/09/10	5-7	N	*10.6*	ND (0.0472)	0.36	ND (0.0472)	0.108	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0673	0.698	ND (0.0472)	ND (0.0472)
	04/09/10	13-15	N	0.922	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	0.0222 J	0.0419 J	ND (0.05)	ND (0.05)
AP1AAPS-DP06	04/13/10	5-7	N	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	0.0268 J	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)
	04/13/10	13-15	N	ND (0.0476)	0.0194 J	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	0.0222 J	ND (0.0476)	ND (0.0476)	ND (0.0476)
AP1AAPS-DP07	04/12/10	5-7	N	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	0.0259 J	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)
	04/12/10	13-15	N	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
AP1AAPS-DP09	04/12/10	5-7	N	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)	ND (0.0467)
	04/12/10	13-15	N	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J
AP1AAPS-DP11	04/07/10	5-7	N	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)
	04/07/10	13-15	N	0.0437 J	0.0552	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
AP1AAPS-DP12	04/07/10	5-7	N	*18.6*	*26*	0.421	ND (0.0472)	ND (0.0472)	ND (0.0472)	*0.14*	*0.0954 J*	*0.132*	0.0719 J	0.191	ND (0.0472)	0.446	0.578	*0.0877 J*	*21.3*
	04/07/10	13-15	N	0.133	0.16	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	0.0266 J	ND (0.05)	ND (0.05)	ND (0.05)
AP1AAPS-DP13	04/02/10	5-7	N	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	0.027 J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J
	04/02/10	5-7	FD	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	0.0287 J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J
	04/02/10	13-15	N	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J
AP1AAPS-DP17	04/01/10	5-7	N	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0204 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)
	04/01/10	13-15	N	ND (0.0476)	ND (0.0476)	0.0253 J	0.0295 J	ND (0.0476)	*0.409 J*	*0.114 J*	***0.286 J***	*0.259 J*	0.109 J	0.152 J	0.0589 J	0.191 J	ND (0.0476)	*0.338 J*	ND (0.0476)
AP1AAPS-DP19	04/05/10	5-7	N	0.241	0.225	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)
	04/05/10	13-15	N	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	0.0202 J	ND (0.049)	ND (0.049)	ND (0.049)
AP1AAPS-DP21	04/05/10	5-7	N	ND (0.0481)	ND (0.0481)	ND (0.0481) J	ND (0.0481)	ND (0.0481)	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481)	ND (0.0481) J	0.0197 J	ND (0.0481)	ND (0.0481) J	ND (0.0481)
	04/05/10	13-15	N	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	0.029 J	ND (0.049)	ND (0.049)	ND (0.049)
AP1AAPS-DP22	04/02/10	5-7	N	0.0287 J	0.0322 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)
	04/02/10	13-15	N	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0353 J	ND (0.0472)	ND (0.0472)	ND (0.0472)
AP1AAPS-DP24	04/02/10	5-7	N	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)
	04/02/10	13-15	N	0.313	0.294	0.399	0.392	0.414	*0.174*	*0.275 J*	***0.242 J***	*0.236*	0.295 J	0.308	0.191	0.388	0.43	*0.179 J*	0.246
AP1AAPS-DP28	04/06/10	5-7	N	0.0239 J	0.0346 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)
	04/06/10	5-7	FD	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)
	04/06/10	13-15	N	0.126	0.126	0.166	0.16	0.198	ND (0.05)	*0.114 J*	*0.0976 J*	*0.103*	0.127 J	0.151 J	ND (0.05)	0.181	0.197	ND (0.05)	0.116
AP1AAPS-DP30	04/30/10	5-7	N	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.051) J	ND (0.119) J	ND (0.051) J	ND (0.051) J	ND (0.051) J
	04/30/10	13-15	N	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J	ND (0.134) J	ND (0.0625) J	ND (0.0625) J	ND (0.0625) J
	04/30/10	13-15	N	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.049) J	ND (0.104) J	ND (0.049) J	ND (0.049) J	ND (0.049) J
AP1AAPS-DP31	04/30/10	5-7	N	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.0902) J	ND (0.05) J	ND (0.05) J	ND (0.05) J

Table A2-13
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/L)															
CA Maximum Contaminant Levels [a]				NE	NE	NE	NE	NE	NE	NE	0.2	NE	NE	NE	NE	NE	NE	NE	NE
Federal Maximum Contaminant Levels [b]				NE	NE	NE	NE	NE	NE	NE	0.2	NE	NE	NE	NE	NE	NE	NE	NE
ESLS for the Petroleum Strategy Plan [c]				1.4	2.1	23	30	0.73	0.1	0.027	0.014	0.029	0.4	0.35	0.25	8	3.9	0.048	1.4
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**1-Methyl naphthalene**	**2-Methyl naphthalene**	**Acena phthene**	**Acena phthylene**	**Anthracene**	**Benzo (g,h,i) perylene**	**Benzo(a) anthracene**	**Benzo(a) pyrene**	**Benzo(b) fluor anthene**	**Benzo(k) fluor anthene**	**Chrysene**	**Dibenz(a,h) anthracene**	**Fluoranthene**	**Fluorene**	**Indeno (1,2,3-cd) pyrene**	**Naphthalene**
FED-1A																			
AP1AAPS-DP80	05/04/10	5-7	N	*1.82 J*	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J
	05/04/10	13-15	N	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J	ND (0.0472) J
AP1AAPS-DP81	05/04/10	5-7	N	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J
	05/04/10	13-15	N	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J	ND (0.0476) J
AP1AAPS-DP82	05/05/10	5-7	N	0.0235 J	0.0383 J	ND (0.0556)	ND (0.0556)	0.0449 J	ND (0.0556)	ND (0.0556)	ND (0.0556)	ND (0.0556)	ND (0.0556)	ND (0.0556)	ND (0.0556)	0.026 J	ND (0.0556)	ND (0.0556)	0.0425 J
	05/05/10	13-15	N	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	0.0276 J
AP1AAPS-DP83	05/05/10	5-7	N	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)	ND (0.0532)
	05/05/10	13-15	N	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)	ND (0.0515)
AP1AAPS-DP84	05/05/10	5-7	N	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)	ND (0.0521)
	05/05/10	13-15	N	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)	ND (0.0476)
AP1AW467B-DP02	04/08/10	5-7	N	ND (0.0463)	0.0202 J	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463) J	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	0.0262 J	ND (0.0463)	ND (0.0463)	ND (0.0463)
	04/08/10	13-15	N	ND (0.05)	0.021 J	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
AP1AW483A-DP02	03/30/10	5-7	N	0.0522	0.0513	0.0572 J	0.0453 J	0.0709 J	ND (0.0472)	*0.0829*	*0.0793*	*0.0992*	0.135 J	0.124 J	ND (0.0472)	0.111	0.0724	ND (0.0472)	ND (0.0472)
	03/30/10	13-15	N	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	0.0367 J	ND (0.05)	ND (0.05)	ND (0.05)
AP1AW483B-DP02	03/31/10	5-7	N	0.02 J	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)
	03/31/10	13-15	N	ND (0.0472)	ND (0.0472)	0.0203 J	0.0191 J	0.0205 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.026 J	0.022 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0256 J	ND (0.0472)	ND (0.0472)
AP1AW485B-DP02	04/12/10	5-7	N	0.0226 J	0.023 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0228 J	0.0197 J	ND (0.0472)	ND (0.0472)
	04/12/10	5-7	FD	0.023 J	0.0276 J	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)
	04/12/10	13-15	N	0.0233 J	0.0283 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.023 J	ND (0.0472)	ND (0.0472)	ND (0.0472)
AP1AW495A-DP02	03/29/10	5-7	N	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
	03/26/10	5-7	FD	0.0296 J	ND (0.0513)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)
	03/29/10	13-15	N	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)
AP1AW495B-DP02	03/29/10	5-7	N	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)
	03/29/10	13-15	N	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J	0.0254 J	ND (0.0556) J	ND (0.0556) J	ND (0.0556) J
AP1AW496-DP01	04/09/10	5-7	N	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0331 J	ND (0.0472)	ND (0.0472)	ND (0.0472)
	04/09/10	13-15	N	ND (0.05)	0.026 J	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	ND (0.05)	0.0699	ND (0.05)	ND (0.05)	ND (0.05)
AP1AW499-DP02	04/01/10	5-7	N	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	ND (0.05) J	0.0205 J	ND (0.05) J	ND (0.05) J	0.0399 J
	04/01/10	13-15	N	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	0.0239 J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J	0.0372 J	ND (0.0481) J	ND (0.0481) J	ND (0.0481) J
AP1AW599A-DP02	03/30/10	5-7	N	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	ND (0.049)	0.0322 J	ND (0.049)	ND (0.049)	ND (0.049)
	03/30/10	13-15	N	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	ND (0.0481)	0.0266 J	ND (0.0481)	ND (0.0481)	ND (0.0481)
AP1AW599B-DP02	03/30/10	5-7	N	ND (0.0463)	ND (0.0463)	0.0382 J	0.0266 J	0.0664 J	ND (0.0463) J	ND (0.0463) J	ND (0.0463) J	ND (0.0463) J	ND (0.0463) J	0.0716 J	ND (0.0463) J	0.0744 J	0.0452 J	ND (0.0463) J	ND (0.0463) J
	04/06/10	5-7	N	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0195 J	ND (0.0472)	ND (0.0472)	*0.102 J*	*0.127*	0.0679 J	0.105 J	ND (0.0472)	0.0877	ND (0.0472)	ND (0.0472)	ND (0.0472)
	03/30/10	13-15	N	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J	ND (0.1) J
	04/06/10	13-15	N	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)	ND (0.0463)
FED-2c																			
AP2CAPS-DP01	04/13/10	5-7	N	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	0.0545 J	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)	ND (0.0472)
	04/13/10	13-15	N	ND (0.0485)	ND (0.0485)	1.6	0.301	0.206 J	*0.247*	*0.133 J*	***0.296***	*0.297 J*	0.103	0.158 J	ND (0.0485)	1.32 J	0.367	*0.2*	ND (0.0485)

Table A2-13
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/L)	
CA Maximum Contaminant Levels [a]				**NE**	**NE**
Federal Maximum Contaminant Levels [b]				**NE**	**NE**
ESLS for the Petroleum Strategy Plan [c]				**NE**	**2**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**
FED-1A					
AP1AAPS-DP01	04/06/10	5-7	N	ND (0.0481)	0.0309 J
	04/06/10	5-7	FD	ND (0.05)	0.0214 J
	04/06/10	13-15	N	0.0455 J	0.0882
AP1AAPS-DP02	04/06/10	5-7	N	ND (0.0714)	ND (0.0714)
	04/06/10	13-15	N	0.0436 J	ND (0.049)
AP1AAPS-DP03	04/02/10	5-7	N	ND (0.049)	ND (0.049)
	04/02/10	13-15	N	ND (0.0481)	ND (0.0481)
AP1AAPS-DP05	04/09/10	5-7	N	0.145	0.047 J
	04/09/10	13-15	N	ND (0.05)	ND (0.05)
AP1AAPS-DP06	04/13/10	5-7	N	ND (0.0481)	ND (0.0481)
	04/13/10	13-15	N	ND (0.0476)	0.025 J
AP1AAPS-DP07	04/12/10	5-7	N	ND (0.0476)	0.022 J
	04/12/10	13-15	N	ND (0.05)	ND (0.05)
AP1AAPS-DP09	04/12/10	5-7	N	ND (0.0467)	ND (0.0467)
	04/12/10	13-15	N	ND (0.0472) J	ND (0.0472) J
AP1AAPS-DP11	04/07/10	5-7	N	ND (0.0476)	ND (0.0476)
	04/07/10	13-15	N	ND (0.05)	ND (0.05)
AP1AAPS-DP12	04/07/10	5-7	N	0.762	0.437
	04/07/10	13-15	N	ND (0.05)	0.0294 J
AP1AAPS-DP13	04/02/10	5-7	N	ND (0.05) J	ND (0.05) J
	04/02/10	5-7	FD	ND (0.05) J	ND (0.05) J
	04/02/10	13-15	N	ND (0.0625) J	ND (0.0625) J
AP1AAPS-DP17	04/01/10	5-7	N	ND (0.0472)	ND (0.0472)
	04/01/10	13-15	N	ND (0.0476)	0.258
AP1AAPS-DP19	04/05/10	5-7	N	0.16	ND (0.0472)
	04/05/10	13-15	N	ND (0.049)	0.0198 J
AP1AAPS-DP21	04/05/10	5-7	N	ND (0.0481)	0.023 J
	04/05/10	13-15	N	ND (0.049)	0.0276 J
AP1AAPS-DP22	04/02/10	5-7	N	ND (0.0472)	ND (0.0472)
	04/02/10	13-15	N	0.0319 J	0.0415 J
AP1AAPS-DP24	04/02/10	5-7	N	ND (0.0481)	ND (0.0481)
	04/02/10	13-15	N	0.444	0.417
AP1AAPS-DP28	04/06/10	5-7	N	ND (0.0472)	ND (0.0472)
	04/06/10	5-7	FD	ND (0.0481)	ND (0.0481)
	04/06/10	13-15	N	0.202	0.195
AP1AAPS-DP30	04/30/10	5-7	N	ND (0.0512) J	ND (0.051) J
	04/30/10	13-15	N	ND (0.0625) J	ND (0.0625) J
	04/30/10	13-15	N	ND (0.049) J	ND (0.049) J
AP1AAPS-DP31	04/30/10	5-7	N	ND (0.05) J	ND (0.05) J

Table A2-13
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				Polycyclic Aromatic Hydrocarbons (ug/L)	
CA Maximum Contaminant Levels [a]				**NE**	**NE**
Federal Maximum Contaminant Levels [b]				**NE**	**NE**
ESLS for the Petroleum Strategy Plan [c]				**NE**	**2**
Location	**Date**	**Depth (ft bgs)**	**Sample Type**	**Phenanthrene**	**Pyrene**
FED-1A					
AP1AAPS-DP80	05/04/10	5-7	N	ND (0.0472) J	ND (0.0472) J
	05/04/10	13-15	N	ND (0.0472) J	ND (0.0472) J
AP1AAPS-DP81	05/04/10	5-7	N	ND (0.0476) J	ND (0.0476) J
	05/04/10	13-15	N	ND (0.0476) J	ND (0.0476) J
AP1AAPS-DP82	05/05/10	5-7	N	0.0395 J	ND (0.0556)
	05/05/10	13-15	N	ND (0.0532)	ND (0.0532)
AP1AAPS-DP83	05/05/10	5-7	N	ND (0.0532)	ND (0.0532)
	05/05/10	13-15	N	ND (0.0515)	ND (0.0515)
AP1AAPS-DP84	05/05/10	5-7	N	ND (0.0521)	ND (0.0521)
	05/05/10	13-15	N	ND (0.0476)	ND (0.0476)
AP1AW467B-DP02	04/08/10	5-7	N	ND (0.0463)	0.0316 J
	04/08/10	13-15	N	ND (0.05)	ND (0.05)
AP1AW483A-DP02	03/30/10	5-7	N	ND (0.0918)	0.107
	03/30/10	13-15	N	ND (0.05)	0.041 J
AP1AW483B-DP02	03/31/10	5-7	N	ND (0.049)	ND (0.049)
	03/31/10	13-15	N	0.0363 J	ND (0.0472)
AP1AW485B-DP02	04/12/10	5-7	N	ND (0.0472)	0.0223 J
	04/12/10	5-7	FD	ND (0.049)	ND (0.049)
	04/12/10	13-15	N	ND (0.0472)	0.0327 J
AP1AW495A-DP02	03/29/10	5-7	N	ND (0.05)	ND (0.05)
	03/26/10	5-7	FD	ND (0.0463)	ND (0.0463)
	03/29/10	13-15	N	ND (0.05)	ND (0.05)
AP1AW495B-DP02	03/29/10	5-7	N	ND (0.0463)	ND (0.0463)
	03/29/10	13-15	N	ND (0.0556) J	0.0231 J
AP1AW496-DP01	04/09/10	5-7	N	ND (0.0472)	0.0396 J
	04/09/10	13-15	N	0.0709	0.0828
AP1AW499-DP02	04/01/10	5-7	N	ND (0.05) J	0.0211 J
	04/01/10	13-15	N	0.0301 J	0.0359 J
AP1AW599A-DP02	03/30/10	5-7	N	ND (0.049)	0.0335 J
	03/30/10	13-15	N	ND (0.0481)	0.027 J
AP1AW599B-DP02	03/30/10	5-7	N	0.0639 J	0.0825 J
	04/06/10	5-7	N	0.0482	0.0941
	03/30/10	13-15	N	ND (0.1) J	ND (0.1) J
	04/06/10	13-15	N	ND (0.0463)	ND (0.0463)
FED-2c					
AP2CAPS-DP01	04/13/10	5-7	N	ND (0.0472)	ND (0.0472)
	04/13/10	13-15	N	1.59	*2.97*

Table A2-13

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polycyclic Aromatic Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Notes:

a. CA MCL (CDHS, 2010)
b. FED MCL (U.S. EPA, 2009)
c. Water Board, 2008

Results greater than or equal to the California Maximum Containment Levels are bolded.
Results greater than or equal to the Federal Maximum Containment Levels are shaded.
Results greater than or equal to the ESLs for the Petroleum Strategy Plan are italized.
Results greater than or equal to the Residential ESLs Protective of Indoor Air are italicized.
PAH = polycyclic aromatic hydrocarbon
USEPA = United States Environmental Protection Agency
ESL = Environmental screening levels
NE = not established
ug/L = micrograms per liter
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

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Table A2-14
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Groundwater Results (ug/L)		
	ESLS for the Petroleum Strategy Plan[a]			100	100	100
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1A						
AP1AAPS-DP01	04/06/10	5-7	N	**442**	ND (150)	**546 J**
	04/06/10	5-7	FD	**383**	ND (150)	**359 J**
	04/06/10	13-15	N	ND (189)	ND (150)	ND (189)
AP1AAPS-DP02	04/06/10	5-7	N	ND (205)	ND (150)	ND (205)
	04/06/10	13-15	N	ND (189)	ND (150)	ND (189)
AP1AAPS-DP03	04/02/10	5-7	N	ND (192)	ND (150)	ND (192)
	04/02/10	13-15	N	ND (200) J	ND (150)	ND (200) J
AP1AAPS-DP05	04/09/10	5-7	N	**1,000**	57.1 J	**123 J**
	04/09/10	13-15	N	ND (189)	51.2 J	ND (189)
AP1AAPS-DP06	04/13/10	5-7	N	ND (286)	ND (150)	ND (286)
	04/13/10	13-15	N	ND (192)	ND (150)	ND (192)
AP1AAPS-DP07	04/12/10	5-7	N	ND (222)	ND (150)	ND (222)
	04/12/10	13-15	N	ND (200)	ND (150)	ND (200)
AP1AAPS-DP09	04/12/10	5-7	N	ND (192)	ND (150)	ND (192)
	04/12/10	13-15	N	ND (192)	ND (150)	ND (192)
AP1AAPS-DP11	04/07/10	5-7	N	ND (189)	ND (150)	ND (189)
	04/07/10	13-15	N	ND (213)	ND (150)	ND (213)
AP1AAPS-DP12	04/07/10	5-7	N	**1,730**	84.7 J	**164 J**
	04/07/10	13-15	N	ND (211)	ND (150)	**122 J**
AP1AAPS-DP13	04/02/10	5-7	N	ND (196) J	ND (150)	ND (196) J
	04/02/10	5-7	FD	ND (189) J	ND (150)	ND (189) J
	04/02/10	13-15	N	ND (200) J	ND (150)	ND (200) J
AP1AAPS-DP17	04/01/10	5-7	N	ND (196)	ND (150)	ND (196)
	04/01/10	13-15	N	ND (196)	ND (150)	ND (196)
AP1AAPS-DP19	04/05/10	5-7	N	ND (192)	ND (150)	ND (192)
	04/05/10	13-15	N	ND (196)	ND (150)	ND (196)
AP1AAPS-DP21	04/05/10	5-7	N	ND (192) J	ND (150)	ND (192) J
	04/05/10	13-15	N	ND (200)	ND (150)	ND (200)
AP1AAPS-DP22	04/02/10	5-7	N	ND (189)	ND (150)	**292**
	04/02/10	13-15	N	ND (196)	ND (150)	ND (196)
AP1AAPS-DP24	04/02/10	5-7	N	ND (189)	ND (150)	ND (189)
	04/02/10	13-15	N	ND (192)	ND (150)	ND (192)
AP1AAPS-DP28	04/06/10	5-7	N	ND (200)	ND (150)	ND (200)
	04/06/10	5-7	FD	ND (200)	ND (150)	ND (200)
	04/06/10	13-15	N	ND (217) J	ND (150)	ND (217) J
AP1AAPS-DP30	04/30/10	5-7	N	ND (230) J	ND (150)	ND (230) J

Table A2-14
2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Groundwater Results (ug/L)		
	ESLS for the Petroleum Strategy Plan[a]			100	100	100
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1A						
AP1AAPS-DP30	04/30/10	13-15	N	ND (208) J	ND (150)	ND (208) J
	04/30/10	13-15	N	ND (230) J	ND (150)	ND (230) J
AP1AAPS-DP31	04/30/10	5-7	N	ND (230) J	ND (150)	ND (230) J
AP1AAPS-DP80	05/04/10	5-7	N	**114 J**	62.6 J	ND (200) J
	05/04/10	13-15	N	**103 J**	50.9 J	ND (200) J
AP1AAPS-DP81	05/04/10	5-7	N	**106 J**	ND (150)	ND (200) J
	05/04/10	13-15	N	**106 J**	51.8 J	ND (200) J
AP1AAPS-DP82	05/05/10	5-7	N	ND (206)	ND (150)	ND (206)
	05/05/10	13-15	N	**104 J**	ND (150)	ND (206)
AP1AAPS-DP83	05/05/10	5-7	N	**136 J**	58.8 J	ND (238)
	05/05/10	13-15	N	ND (213)	57.5 J	ND (213)
AP1AAPS-DP84	05/05/10	5-7	N	ND (208)	ND (150)	ND (208)
	05/05/10	13-15	N	ND (198)	ND (150)	ND (198)
AP1AW467B-DP02	04/08/10	5-7	N	ND (187)	---	ND (187)
	04/08/10	13-15	N	ND (189)	---	ND (189)
AP1AW483A-DP02	03/30/10	5-7	N	ND (283)	---	ND (283)
	03/30/10	13-15	N	ND (294)	---	ND (294)
AP1AW483B-DP02	03/31/10	5-7	N	ND (192)	---	ND (192)
	03/31/10	13-15	N	ND (192)	---	ND (192)
AP1AW485B-DP02	04/12/10	5-7	N	ND (189)	---	ND (189)
	04/12/10	5-7	FD	ND (196)	---	**222**
	04/12/10	13-15	N	ND (189)	---	**278**
AP1AW495A-DP02	03/29/10	5-7	N	ND (300)	---	**406 J**
	03/26/10	5-7	FD	ND (300)	---	**488 J**
	03/29/10	13-15	N	ND (300)	---	**548 J**
AP1AW495B-DP02	03/29/10	5-7	N	ND (300)	---	**118 J**
	03/29/10	13-15	N	ND (300)	---	**105 J**
AP1AW496-DP01	04/09/10	5-7	N	ND (192)	---	**113 J**
	04/09/10	13-15	N	**102 J**	---	**205**
AP1AW499-DP02	04/01/10	5-7	N	ND (196) J	---	ND (196) J
	04/01/10	13-15	N	ND (189) J	---	ND (189) J
AP1AW599A-DP02	03/30/10	5-7	N	ND (294)	---	ND (294)
	03/30/10	13-15	N	ND (283)	---	ND (283)
AP1AW599B-DP02	03/30/10	5-7	N	ND (294) J	---	**156 J**
	04/06/10	5-7	N	ND (200)	---	ND (200)
	03/30/10	13-15	N	ND (600) J	---	**219 J**

Table A2-14

2010 Groundwater Sample Analytical Results FED-1A, FED-2B, and FED-2C: Total Petroleum Hydrocarbons
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

				TPH Groundwater Results (ug/L)		
	ESLS for the Petroleum Strategy Plan[a]			100	100	100
Location	Date	Depth (ft bgs)	Sample Type	TPH-diesel range	TPH-gas range	TPH-oil range
FED-1A						
AP1AW599B-DP02	04/06/10	13-15	N	ND (200)	---	ND (200)
FED-2c						
AP2CAPS-DP01	04/13/10	5-7	N	ND (196)	ND (150)	ND (196)
	04/13/10	13-15	N	ND (196)	ND (150)	ND (196)

Notes:

a. Water Board, 2008

Results greater than or equal to the ESLs for the Petroleum Strategy Plan are bolded
TPH = total petroleum hydrocarbon
ESL = Environmental screening levels
NE = not established
ug/L = micrograms per liter
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

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Table A2-15

2010 Concrete Sample Analytical Results FED-1A, FED-2B, and FED-2C: Polychlorinated Biphenyls
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

			Polychlorinated Biphenyls (ug/kg)										
Residential Regional Screening Levels [a]			**3,900**	**140**	**140**	**220**	**220**	**220**	**220**	**NE**	**NE**	**1,000** [c]	
Industrial Regional Screening Levels [b]			**21,000**	**540**	**540**	**740**	**740**	**740**	**740**	**NE**	**NE**	**1,000**	
Location	**Date**	**Sample Type**	**Aroclor-1016**	**Aroclor-1221**	**Aroclor-1232**	**Aroclor-1242**	**Aroclor-1248**	**Aroclor-1254**	**Aroclor-1260**	**Aroclor-1262**	**Aroclor-1268**	**Total PCBs**	
FED-1A													
AP1AB100-CC01	04/13/10	N	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND	
AP1AB100-CC02	04/13/10	N	ND (17.5) J	ND (17.5) J	ND (17.5) J	ND (17.5) J	ND (17.5) J	ND (17.5) J	35.6 J	ND (17.5) J	ND (17.5) J	35.6	
	04/13/10	FD	---	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	39.4 J	ND (17.6) J	ND (17.6) J	39.4	
AP1AB100-CC03	04/13/10	N	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	45.2 J	ND (17.6) J	ND (17.6) J	45.2	
AP1AB100-CC04	04/13/10	N	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	ND (17.6) J	98 J	ND (17.6) J	ND (17.6) J	98	
AP1AB100-CC05	04/13/10	N	ND (17.7) J	ND (17.7) J	ND (17.7) J	ND (17.7) J	ND (17.7) J	ND (17.7) J	43.1 J	ND (17.7) J	ND (17.7) J	43.1	

Notes:

a. Residential RSLs (U.S. EPA 2010)

b. Industrial RSLs (U.S. EPA, 2010)

c. U.S. Environmental Protection Agency (EPA). 2007. 40 CFR Part 761. July 1.

Results greater than or equal to the USEPA Residential Screening Levels are bolded.
Results greater than or equal to the USEPA Industrial Regional Screening Levels are boxed.
PCB = polychlorinated biphenyl
USEPA = United States Environmental Protection Agency
NE = not established
ug/kg = micrograms per kilogram
ft bgs = feet below ground surface
N = primary sample
FD = field duplicate
-- = not analyzed
ND = not detected at the listed reporting limit
J = estimated result determined by laboratory or data validation

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Appendix B
Parcel Evaluation Plans (on CD-ROM)

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SECTION 6-Z1

ZONE 1 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 1 at NAS Alameda (Figure 6-Z1-1). Zone 1 has been designated the Western Landfill Zone and encompasses the parcels that are included in Installation Restoration Sites 1 and 2, which were former landfill areas. Zone 1 is comprised of Parcels 1, 2, 5, 6, and 7. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and seven parcel-specific target areas have been identified in this zone. Surface soil sampling is the sampling procedures called for in the screening-level investigation. Figure 6-Z1-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 1, historical activities are discussed below.

Zone 1 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 1 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the parcel-specific evaluation plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Zone 1, the Western Landfill Zone, encompasses five parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in 1942 for Parcels 1, 2, and 5; in 1947 for Parcel 6; and in 1953 for Parcel 7. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1975. Because of the operations at the landfill, the site topography and features changed considerably over time.

Currently, 12 buildings, one mobile trailer, and several small structures located on Parcel 1 cover approximately two percent of the zone. The remaining 98 percent is open space. The zone area is presently utilized for various activities including a skeet range, a pistol range, an arms magazine, a picnic area, part of an aircraft runway, and wetlands. No buildings or structures were formerly located on Zone 1.

Zone 1 contains two Installation Restoration (IR) Program sites (IR Sites 1 and 2). Previous investigations have been conducted at Zone 1 and specific data regarding potential chemical occurrence are available. Previous investigations have been conducted at all parcels within Zone 1. Details of previous investigation activities are described in the corresponding PEPs.

Underground sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 5 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on Zone 1 will be addressed in other sampling programs and are not considered in this ZAP.

Previous Investigations

In the previous phases of investigation at NAS Alameda, the landfill containing Parcels 1, 2, 5, and 6, is referred to as IR Site 1 (the 1943-1956 Disposal Area). Additionally, in previous phases of investigation at NAS Alameda, the landfill containing Parcel 7, is referred to as IR Site 2 or the West Beach Landfill. IR Sites 1 and 2 are currently being investigated under the Installation Restoration Program (IRP).

On Parcel 5, the soil sampling included the collection and analysis of 57 surface soil samples. These samples were collected on a 200-foot grid in the areas of the parcel not occupied by aircraft runways. Several chemicals were detected in these samples. These include: SVOCs (detected at levels of 680 µg/kg to 7,800 µg/kg), TPH (detected at levels of 110 mg/kg to 850 mg/kg), and pesticides (detected at levels of 3 µg/kg to 3,200 µg/kg). Two samples collected from the western portion of Parcel 5 contained levels of benzo(b)flouranthene and benzo(a)pyrene that exceeded residential PRGs. The levels of benzo(a)pyrene in these samples also exceeded industrial PRGs. The locations of the sampling points are shown on Figure 6-5-1.

Because Parcel 6 is located outside the area of previous waste disposal, no previous soil sampling has been conducted on this parcel.

IR Site 2 (the West Beach Landfill) contains Parcel 7. This IR site occupies approximately 110 acres in the southwestern corner of NAS Alameda and is located south of IR Site 1 (the 1943-1956 Disposal Area). The western and southern borders of IR Site 2 are San Francisco Bay. A portion of the southwest half of IR Site 2 (approximately 42 acres) is within the city and county of San Francisco. The remainder of IR Site 2 is located in the city and county of Alameda. Details of the site, fill, and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1 993a) .

IR Site 2 is bounded on the west and south by San Francisco Bay and to the north and east by a fence with locked gates. The fence runs along Perimeter Road and the Runway Area. This landfill is surrounded by an earthen berm approximately 55 feet wide and 7 feet high. There are piles of construction debris located in the southeastern portion of the site. The refuse disposal area is moderately- to well-vegetated with grasses and supports a variety of wildlife. A small wetland area located within the disposal area provides a nesting area for birds and is well-vegetated with grasses. IR Site 2 is no longer used for any air station operations or activities. This landfill operated from the 1950s to 1978 and was used for disposal of chemical drums, asbestos, pesticides, inert ordnance, dredge spoils, and metal wastes. Two oil sumps were also reported to exist at this landfill.

Several previous investigations have been conducted at IR Site 2. Harding Lawson Associates (HLA) conducted several investigations in conjunction with the plan to close Site 2 as a Class II disposal facility. As mandated by the RWQCB in 1987, an initial SWAT investigation was conducted at IR Sites 1 and 2 by Canonie in 1990. A second, and more extensive, phase of the field investigation for the SWAT report was subsequently conducted at IR Sites 1 and 2 in 1991 by the PRC team.

Zone Target Areas and Compounds of Concern

Because this zone is currently under investigation by the IR contractor and no additional potential release areas were identified at this zone, no zone-wide target areas were identified for this zone. This zone contains several parcel-specific target areas. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Remaining data gaps (concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, the IR sites, and USTs) must be resolved before this zone can be leased or transferred.

Parcel 1 Target Areas

A total of two parcel-specific target areas were identified for Parcel 1 as indicated below. Five surface soil samples will be collected from this parcel. Sample locations are shown on Figure 6-1-1.

- Target Area 1 (Western Part of Parcel): This target area is located in the area of the target houses. This area was used for skeet shooting which involves the use of lead shot. The previous sampling associated with the IRP has not investigated the presence or extent of lead contamination in this area. In addition, plastic pigeons may have been used at the range; therefore, the presence of SVOCs will also be investigated. This target area is approximately 35,000 square feet, and has been classified as having a probable likelihood of impact. Samples to be collected in this Target Area are listed in Table 6-1-1.

- Target Area 2 (Staining Associated with Former Trap Mount): The staining in this area appears to be due to petroleum hydrocarbons, possibly lubrication oil. This target area is estimated to be approximately 100 square feet, and has been classified as having a potential likelihood of impact.

Parcel 2 Target Areas

- Target Area 1 (Pistol Range): This target area is located in the western part of the pistol range. This area was used for target practice which involves use of lead shot and bullets. The previous

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. A total of 12 surface soil samples will be collected from the locations shown on Figure 6-Z1-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-1

PARCEL 1 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 1 at NAS Alameda (Figure 6-1-1). The parcel, which is located in the northwest corner of the base, is approximately 2.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and two parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-1-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 1, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 1, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 2, 5, 6, and 7. This parcel zone has been designated the Western Landfill Zone (Zone 1). The Western Landfill Zone encompasses the parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. As

TABLE 6-1-1

Summary of Recommended Samples
NAS Alameda Parcel 1

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
1-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lubrication oil	TPH	Modified EPA 8015

Canonie Environmental reported IR Site 1 to be approximately 120 acres in area (Canonie, 1990d). Based on the aerial photographs examined during the EBS, the portion of IR Site 1 where material was actually buried may be as small as 12 acres. This 12-acre area is located to the east of Parcel 1, and it does not appear that Parcel 1 was used for waste disposal. The photographic evidence also suggests that approximately 15 of the 120 acres were used for the storage of construction and military materials. Details of the site history, fill and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1993a).

Three previous investigations have been conducted at IR Site 1. These investigations included soil and groundwater sampling for purgeable hydrocarbons, total recoverable hydrocarbons, SVOCs, pesticides, PCBs, metals, radiation, pH, and asbestos. Soil samples were collected from the surface and at depths between 2 feet and 22 feet below ground surface. Wahler Associates completed the first investigation of IR Site 1 in late 1984 under the NACIP program. As mandated by the RWQCB in 1987, the second investigation, an initial SWAT investigation, was conducted at IR Site 1 by Canonie in 1990. The third investigation, the second and more extensive phase of the field investigation for the SWAT report, was subsequently conducted at IR Site 1 in 1991 by the PRC team. During these three investigations, only 2 surface soil samples were collected from Parcel 1. Several SVOCs were detected at concentrations of 1,600 to 4,600 µg/kg in these samples. One sample collected from this parcel contained levels of several polynuclear aromatic hydrocarbons (benzo(a)anthracene, benzo(b)flouranthene, benzo(k)flouranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene) that exceeded residential PRGs. The concentration of benzo(a)pyrene in this sample also exceeded industrial PRGs.

As mentioned previously, this parcel is being investigated under the IRP. This PEP does not duplicate the previous or proposed sampling efforts of the IRP. Rather, it identifies target areas that have resulted from the recent use of the site as a skeet range.

Building 516

Building 516, located on the east central portion of the site, was reportedly constructed in 1945 and served as small arms and pyrotechnics magazine storage (Figure 6-1-1). This building is reported to occupy less than 100 square feet. The construction or current condition of the building was not reported during the EBS. The space occupied by Building 516 was formerly vacant open space. There are no utilities associated with this building.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 1 is bordered by Parcel 2 to the south and Parcel 5 to the north and east. The San Francisco Bay borders the parcel to the west. The primary activity of concern on these adjacent parcels is the buried hazardous materials associated with the landfill on Parcel 5 and, possibly Parcel 2. As mentioned earlier, Parcels 1, 2, and 5 are all part of IR Site 1. These parcels are part of an ongoing IR investigation.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6 since it is part of IR Site 1. Although this parcel may be reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-1-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 1 because no industrial buildings are present on the parcel.

As noted earlier, Parcel 1 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Additionally,

TABLE 6-1-2

Summary of Data Gaps
NAS Alameda Parcel 1

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Associated with former landfill.

the follow-up detailed evaluation phase. No zone-wide samples will be collected as no zone-wide target areas were identified for Parcel 1.

Table 6-1-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Four surface soil samples will be collected from Target Area 1. The samples should be located in the areas of highest lead pellet fallout. Because of the limited nature of the staining and the small size of Target Area 2, one surface soil sample will be collected and analyzed. This sample should be collected in the area with the most significant staining. Potential sampling locations are shown on Figure 6-1-1.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: Geoprobe subsurface sampling (SOP 14), HydroPunch ground water sampling (SOPs 1 and 15), and monitoring well ground water sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-1

PARCEL 1 EVALUATION PLAN

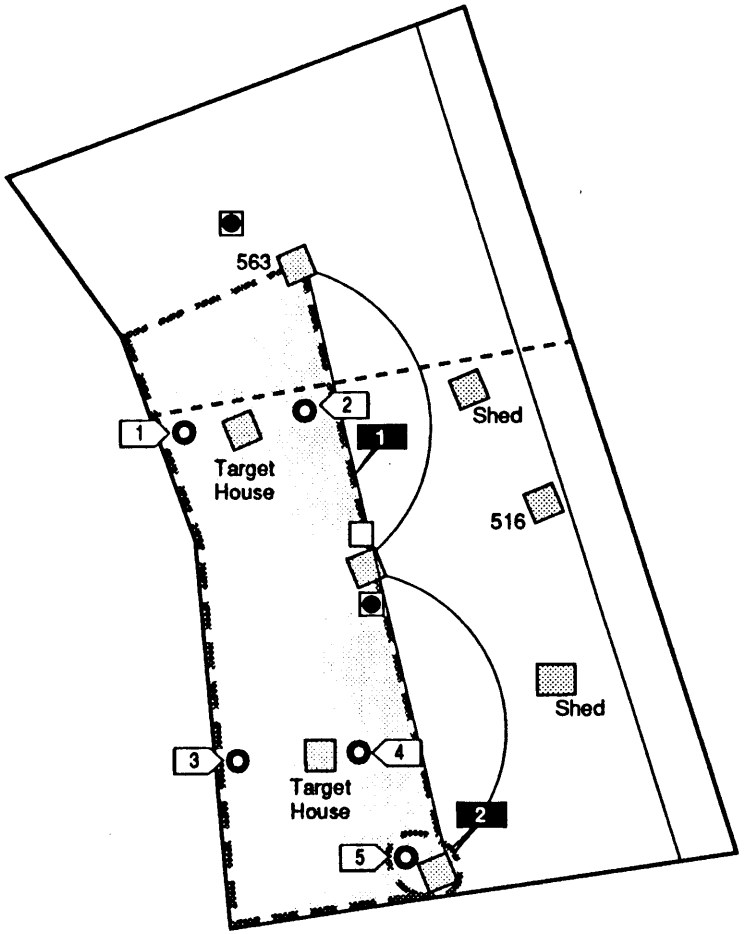
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 1 at NAS Alameda (Figure 6-1-1). The parcel, which is located in the northwest corner of the base, is approximately 2.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and two parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-1-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 1, historical activities are discussed below.

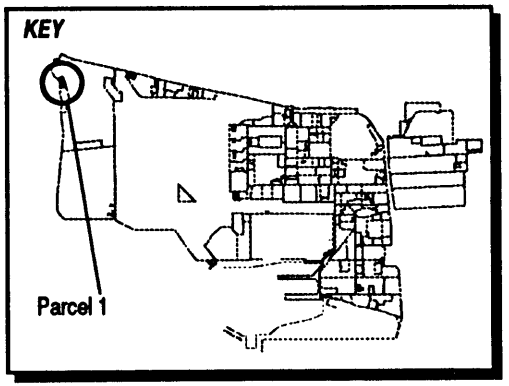
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 1, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 2, 5, 6, and 7. This parcel zone has been designated the Western Landfill Zone (Zone 1). The Western Landfill Zone encompasses the parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. As





LEGEND

- Target Areas 1-2
- Storm Sewer Line
- Surface Soil Sample Location
- Sampling Location *(Collected during initial phase of SWAT investigation by Canonie)*
- Proposed Surface Sample *(As presented in field sampling plan for follow-on work, RI/FS, Phases 5 and 6–Landfill investigation, July 1994)*

1"= 90'

Magnetic
True North

Figure 6-1-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
21[illegible]0/DS/07.13.94

TABLE 6-1-1

Summary of Recommended Samples
NAS Alameda Parcel 1

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
1-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, SVOCs, PAHs	Lead, SVOCs	CLP RAS
1-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lubrication oil	TPH	Modified EPA 8015

described below, the parcels in this zone are being investigated for landfill-related environmental concerns under the Installation Restoration Program (IR Sites 1 and 2). Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 1.

Filling began in the area bounded by this parcel in 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building, an unnumbered mobile trailer (the skeet range office), and several small structures cover approximately one percent of the parcel. Based on the historical use information, the skeet range was operational from 1956 to the present. The remaining 99 percent is open space. The parcel area is presently in use as a skeet range. Underground sewer lines are present on this parcel and are shown on Figure 6-1-1.

Parcel 1 is part of an Installation Restoration (IR) Program site (IR Site 1). Previous investigations have been conducted at Parcel 1 and specific data regarding potential chemical occurrence are available. Previous investigations conducted at this parcel are described below.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Previous Investigations

This parcel exists in the northwestern portion of a former NAS Alameda landfill. In the previous phases of investigation at NAS Alameda, this landfill is referred to as IR Site 1 (the 1943-1956 Disposal Area). IR Site 1 encompasses the northwest corner of Alameda NAS, and includes Parcels 1, 2, 5, and 6, and the western half of Parcel 8. IR Site 1 is currently being investigated under the Installation Restoration Program (IRP).

During its years of operation (1943-1956), IR Site 1 was the base's primary site for waste disposal. The site reportedly received all waste generated at NAS Alameda except liquid waste, which was discharged directly to the Seaplane Lagoon.

Canonie Environmental reported IR Site 1 to be approximately 120 acres in area (Canonie, 1990d). Based on the aerial photographs examined during the EBS, the portion of IR Site 1 where material was actually buried may be as small as 12 acres. This 12-acre area is located to the east of Parcel 1, and it does not appear that Parcel 1 was used for waste disposal. The photographic evidence also suggests that approximately 15 of the 120 acres were used for the storage of construction and military materials. Details of the site history, fill and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1993a).

Three previous investigations have been conducted at IR Site 1. These investigations included soil and groundwater sampling for purgeable hydrocarbons, total recoverable hydrocarbons, SVOCs, pesticides, PCBs, metals, radiation, pH, and asbestos. Soil samples were collected from the surface and at depths between 2 feet and 22 feet below ground surface. Wahler Associates completed the first investigation of IR Site 1 in late 1984 under the NACIP program. As mandated by the RWQCB in 1987, the second investigation, an initial SWAT investigation, was conducted at IR Site 1 by Canonie in 1990. The third investigation, the second and more extensive phase of the field investigation for the SWAT report, was subsequently conducted at IR Site 1 in 1991 by the PRC team. During these three investigations, only 2 surface soil samples were collected from Parcel 1. Several SVOCs were detected at concentrations of 1,600 to 4,600 µg/kg in these samples. One sample collected from this parcel contained levels of several polynuclear aromatic hydrocarbons (benzo(a)anthracene, benzo(b)flouranthene, benzo(k)flouranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene) that exceeded residential PRGs. The concentration of benzo(a)pyrene in this sample also exceeded industrial PRGs.

As mentioned previously, this parcel is being investigated under the IRP. This PEP does not duplicate the previous or proposed sampling efforts of the IRP. Rather, it identifies target areas that have resulted from the recent use of the site as a skeet range.

Building 516

Building 516, located on the east central portion of the site, was reportedly constructed in 1945 and served as small arms and pyrotechnics magazine storage (Figure 6-1-1). This building is reported to occupy less than 100 square feet. The construction or current condition of the building was not reported during the EBS. The space occupied by Building 516 was formerly vacant open space. There are no utilities associated with this building.

Information collected during the EBS indicates that this building was used to store ordnance and small arms. Based on the historical review conducted, it appears that Building 516 was always used for this purpose. All ordnance is reported to be brought to and removed from this building in packages, and thus leakage or spillage of ordnance materials is unlikely.

There have been no documented spills of chemicals associated with Building 516. Building 516 is not equipped with a heating-ventilation-air conditioning (HVAC) system. A small, unnumbered trailer is also present in the same general area as Building 516. This trailer served as the skeet range office. The mobile trailer contained small quantities (less than 50 gallons total) of grease, paint, oil, detergent, and corrosion inhibitor. No other chemical storage or spillage was observed to be associated with Building 516.

Open Space

The open space covers approximately 99 percent of the parcel. The ground surface of the open space is covered with gravel, weeds, and poorly maintained grass. These unpaved open space areas are shown on Figure 6-1-1. These areas have been unpaved or landscaped since the late 1950s. There are several small structures located within the open space of this parcel. These include two wooden target houses and two wooden sheds. Utilities located within and immediately surrounding the open space include a storm sewer and water line.

EBS information indicates that the majority of this open space has most recently been used as a skeet range. It appears that the open space was always used for this purpose.

No chemicals are documented to have been stored or spilled in the open space of this parcel. Site inspection data indicates that undocumented spills may have occurred at the former trap mountings. Staining was noted in this area, although the size of the stains was not reported in the EBS. Other incidents, including fires, mishaps, and flooding are not documented to have occurred within the open space.

This parcel has open space areas that are unpaved. These areas are shown on Figure 6-1-1. These areas have been unpaved since the area within the parcel boundary was filled in 1946.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 1 is bordered by Parcel 2 to the south and Parcel 5 to the north and east. The San Francisco Bay borders the parcel to the west. The primary activity of concern on these adjacent parcels is the buried hazardous materials associated with the landfill on Parcel 5 and, possibly Parcel 2. As mentioned earlier, Parcels 1, 2, and 5 are all part of IR Site 1. These parcels are part of an ongoing IR investigation.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6 since it is part of IR Site 1. Although this parcel may be reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-1-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 1 because no industrial buildings are present on the parcel.

As noted earlier, Parcel 1 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Additionally,

TABLE 6-1-2

Summary of Data Gaps
NAS Alameda Parcel 1

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 1.
Installation Restoration (IR) Sites	• IR Site 1 (the 1943-1956 Disposal Area) contains Parcel 1. Additional subsurface investigation, including groundwater monitoring wells, relative to IR Site 1 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels that are not part of IR sites identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Skeet Shooting Area. • Staining Associated with Former Trap Mount.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer and water lines identified.

TABLE 6-1-2

Summary of Data Gaps
NAS Alameda Parcel 1

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Associated with former landfill.

previous investigations have included surface soil sampling for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 1.

Once the data gaps in Table 6-1-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 1 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target areas. No zone-wide target areas were identified on Parcel 1; however two parcel-specific target areas were identified. The nature and location of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-1-2.

- Target Area 1 (western part of parcel): This target area is located in the area of the target houses. This area was used for skeet shooting, which involves the use of lead shot. The previous sampling associated with the IRP has not investigated the presence or extent of lead contamination in this area. In addition, plastic pigeons may have been used at the range; therefore, the presence of SVOCs will also be investigated. This target area is approximately 35,000 square feet, and has been classified as having a probable likelihood of impact. Samples to be collected in this Target Area are listed in Table 6-1-1.

- Target Area 2 (staining associated with former trap mount): The staining in this area appears to be due to petroleum hydrocarbons, possibly lubrication oil. This target area is estimated to be approximately 100 square feet, and has been classified as having a potential likelihood of impact.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in

the follow-up detailed evaluation phase. No zone-wide samples will be collected as no zone-wide target areas were identified for Parcel 1.

Table 6-1-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Four surface soil samples will be collected from Target Area 1. The samples should be located in the areas of highest lead pellet fallout. Because of the limited nature of the staining and the small size of Target Area 2, one surface soil sample will be collected and analyzed. This sample should be collected in the area with the most significant staining. Potential sampling locations are shown on Figure 6-1-1.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: Geoprobe subsurface sampling (SOP 14), HydroPunch ground water sampling (SOPs 1 and 15), and monitoring well ground water sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-2

PARCEL 2 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 2 at NAS Alameda (Figure 6-2-1). The parcel, which is located in the northwest corner of the base, is approximately 5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and one parcel-specific target investigation area (target area) has been identified on this parcel. Sampling for the parcel-specific target area will be performed by the Navy IR Contractor. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 2, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 2, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 1, 5, 6, and 7. This parcel zone has been designated the Western Landfill Zone (Zone 1). The Western Landfill Zone encompasses the parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. As described below, the parcels in this zone are being investigated for

landfill-related environmental concerns under the Installation Restoration Program (IR Sites 1 and 2). Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 1.

Filling began in the area covered by this parcel in 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, five buildings occupy approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently in use as a pistol range and picnic area. Underground sewer lines are present on this parcel and are shown on Figure 6-1-1.

Parcel 2 is part of an Installation Restoration (IR) Program site (IR Site 1). Previous investigations have been conducted at Parcel 2 and specific data regarding potential chemical occurrence are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

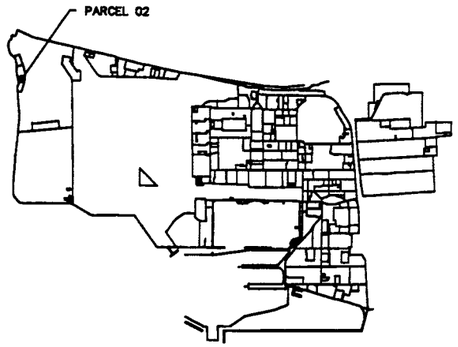
Previous investigations at Parcel 2 are described below.

Previous Investigations

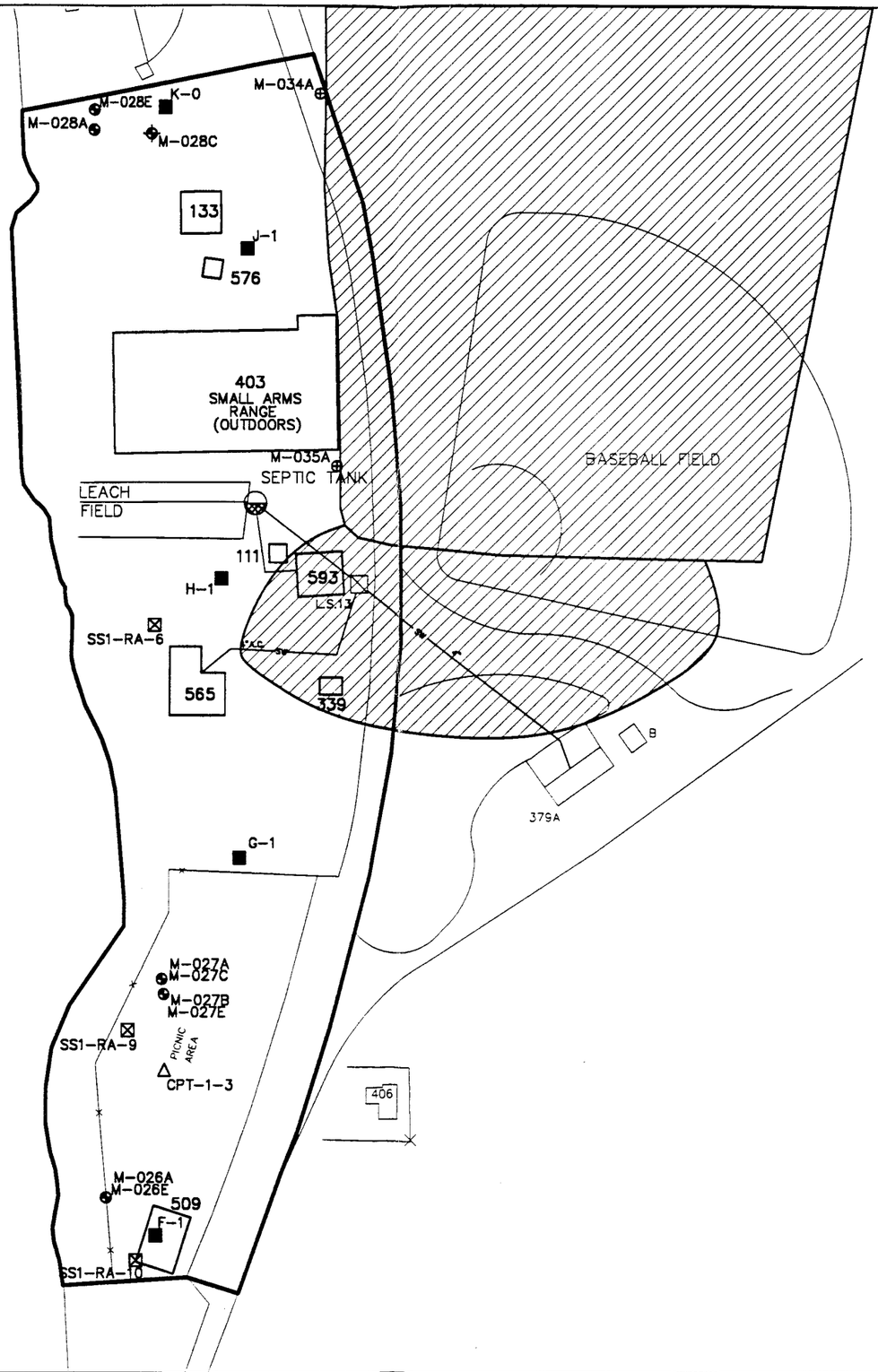
This parcel exists in the northwestern portion of a former NAS Alameda landfill. In the previous phases of investigation at NAS Alameda, this landfill is referred to as IR Site 1 or the 1943-1956 Disposal Area. IR Site 1 encompasses the northwest corner of Alameda NAS, and includes Parcels 1, 2, 5, and 6, and the western one-half of Parcel 8. IR Site 1 is currently being investigated under the Installation Restoration Program (IRP).

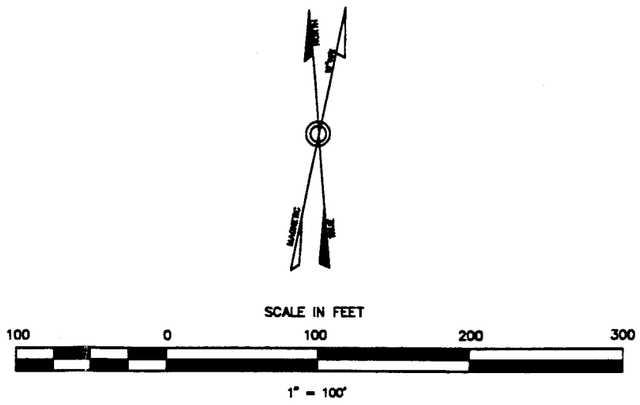
During its years of operation (1943-1956), IR Site 1 was the base's main site for waste disposal, and the site reportedly received all waste generated at NAS Alameda except liquid waste, which was discharged directly to the Seaplane Lagoon.

Canonie reported Site 1 to be approximately 120 acres in area (Canonie, 1990d). Based on an examination of aerial photographs, the portion of Site 1 where material was actually buried may be as small as 12 acres. This 12-acre area is located to the east of Parcel 2. Based on historical information it appears that the eastern edge of Parcel 2 was used for



KEY PLAN





GENERAL LEGEND

PARCEL OUTLINE

1943-1956 DISPOSAL AREA
(2) TWO DISPOSAL CELLS

SAMPLING PLAN BY OTHERS

SS1-RA-6 ⊠ PROPOSED SURFACE SOIL SAMPLE & No. (PRC)

M-028C ⊕ PROPOSED BORING & No. (TO BE TURNED INTO A DEEP MONITORING WELL) (PRC)

M-034A ⊕ PROPOSED BORING & No. (TO BE TURNED INTO A SHALLOW MONITORING WELL) (PRC)

CPT-1-3 △ PROPOSED CPT & No.

NOTES:

1. THE ABOVE ARE AS PRESENTED IN FIELD SAMPLING PLAN FOR FOLLOW-UP WORK, RI/FS, PHASES 5 & 6 LANDFILL INVESTIGATION, JULY 1994.

K-0 ■ SAMPLING COLLECTED DURING INITIAL PHASE OF SWAT INVESTIGATION BY CANONIE & NO.

M-028A ⊕ EXISTING MONITORING WELL & No.

SANITARY SEWER LINE LEGEND

LS.13 ⊠ LIFT STATION & No.

—SW— SANITARY SEWER LINE

MATERIALS:

A.C. - ASBESTOS CEMENT

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

GENERAL NOTES:

1. NO PARCEL SPECIFIC SAMPLING IS REQUIRED FOR THIS PARCEL.

NAVAL AIR STATION, ALAMEDA

FIGURE 6-02-1
PARCEL 02
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590002.DWG	PWC 17.629 (STORM DRAINS) PWC 108.728 (SANITARY SEWER) PWC 23.997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.95.45 — SHEET 1 OF 1

waste disposal. The photographic evidence also suggests that approximately 15 of the 120 acres were used for the storage of construction and military materials. Details of the site, fill, and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1993a).

Three previous investigations have been conducted at Site 1. These investigations included soil and ground water sampling for purgeable hydrocarbons, total recoverable hydrocarbons, SVOCs, pesticides, PCBs, metals, radiation, pH, and asbestos. Soil samples were collected from the surface and at depth between 2 feet and 22 feet below ground surface. Wahler Associates completed the first investigation of Site 1 in late 1984 under the NACIP program. As mandated by the RWQCB in 1987, the second investigation, an initial SWAT investigation, was conducted at Site 1 by Canonie in 1990. The third investigation (the second and more extensive phase of the field investigation for the SWAT report) was subsequently conducted at Site 1 in 1992 by the PRC team. On Parcel 2, the soil sampling included collection and analysis of five surface soil samples. Several contaminants were detected in these samples. These include: SVOCs (detected at levels of 740 to 2,400 µg/kg), TRPH (detected at a level of 110 mg/kg), and pesticides (detected at a level of 110 µg/kg). Four samples collected on this parcel contained levels of several polynuclear aromatic hydrocarbons (benzo(a)anthracene, benzo(b)flouranthene, benzo(k)flouranthene, and benzo(a)pyrene that exceeded residential and industrial PRGs.

As mentioned previously, this parcel is being investigated under the IRP. This PEP does not duplicate the previous or proposed sampling efforts as part of the IRP. Rather, it evaluates potential target areas that have resulted from the recent use of the site as a pistol range and picnic area.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 111

Building 111, located in the east central portion of the parcel, was reportedly constructed in 1942. This building has previously been used as a weapons field office, lounge, and clubhouse (Figure 6-2-1). This building is constructed of concrete walls and an elevated wood floor. This building occupies approximately 1,100 square feet. The current condition of the building was not reported during the EBS. The space occupied by Building 111 was formerly vacant open space. Utilities located within and immediately surrounding Building 111 include sanitary sewer, telephone, water, and electrical lines.

Information collected during the EBS indicates that this building was most recently used for fire training activities. Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 111.

There has been no documented usage or spillage of chemicals associated with Building 111. Building 111 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Other incidents, including fires, mishaps, and flooding are not documented to have occurred within this building.

Building 133

Building 133 was constructed in 1945 and serves as an air traffic control radio facility (Figure 6-2-1). This building is in good condition. Building 133 is a one story building constructed of wood with a concrete floor and a wood roof, and covers approximately 600 square feet. The space occupied by Building 133 was formerly vacant open space. Utilities located within and immediately surrounding Building 133 include telephone, water, and electrical lines.

Information collected during the EBS indicates that this building has been used as a receiver station for the air traffic control. Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 133. Building 133 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Other incidents, including fires, mishaps, and flooding are not documented to have occurred within this building.

Building 339

Building 339 was constructed in 1942 and serves as a small arms and pyrotechnics magazine (Figure 6-2-1). This building is in good condition. Building 339 is a one story building constructed of concrete block walls, concrete floor and ceiling, and occupies approximately 1,000 square feet. The space occupied by Building 339 was formerly vacant open space. Utilities located within and immediately surrounding Building 339 include telephone, water, and electrical lines.

Information collected during the EBS indicates that this building has been used to store small arms. Based on the historical review conducted, all ordnance is brought to the building and removed from the building in a packaged condition, and it is unlikely that spillage or leakage has occurred. Building 339 is not equipped with a heating-

ventilation-air conditioning (HVAC) system. Other incidents, including fires, mishaps, and flooding are not documented to have occurred within this building.

Building 403

Building 403 was constructed in 1953 and served as a pistol range until it was closed in October of 1993 (Figure 6-2-1). This building is in poor condition. The pistol range is constructed with wooden walls surrounding the range, and concrete walkways. There is no roof and a sand embankment exists at the west end of the range to catch the bullet slugs. The range area occupies approximately 20,000 square feet. The space occupied by Building 403 was formerly vacant open space. No utilities are located within or immediately surrounding Building 403.

Information collected during the EBS indicates that this building has been used as a pistol range since it was constructed in 1953. Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 403. During the EBS site inspection, the presence of lead slugs and pellets was noted to be widespread in the sand embankment area. Building 403 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Other incidents, including fires, mishaps, and flooding are not documented to have occurred within this building.

Building 576

Building 576 houses a generator (Figure 6-2-1). This building is in poor condition. Building 576 is a one story shed constructed of plaster board and wood with a cement floor and metal roof, and covers approximately 100 square feet. The space occupied by Building 576 was formerly vacant open space. No utilities are located within or immediately surrounding Building 576. No chemicals are documented to have been stored in or used at this building.

No spills are documented to have occurred in Building 576; however, during a visual inspection, an 8-foot-by-5-foot stain was observed on the concrete floor adjacent to the generator. This spill appeared to be diesel fuel and to have involved a small quantity of released material. No other staining was observed during visual inspections or in aerial photographs.

Building 576 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Incidents including fires, mishaps,

flooding, or crashes are not documented to have occurred within Building 576.

Open Space

The open space covers approximately 90 percent of the parcel. The ground surface of the open space is covered with concrete pads, gravel, weeds, sand, and brush. These unpaved open space areas are shown on Figure 6-2-1. These areas have been unpaved or landscaped since the late 1950s. A picnic area occupies the southern portion of the parcel. Utilities located within and immediately surrounding the open space include a storm sewer and septic tank with associated leach field present south of the pistol range. EBS information indicates that the majority of this open space has most recently been used as a picnic and recreation area.

Building 593, a sewage lift station is located in the open space. Two buildings (Buildings 509 and 565) were formerly located in the open space and have since been demolished. Building 509 was a wooden structure used for recreational purposes. Available EBS information did not indicate the use of Building 565, although based on its location, it was most likely associated with the sewage lift station. Two 1,000-gallon aboveground storage tanks are located on the middle third of the parcel. These tanks contain drilling fluids for the ongoing IRP at the site. One 55-gallon drum on a stand is located at the north end of the parcel. One 55-gallon fuel storage tank is located on the west side of Building 403. These two fuel tanks appear to be out of service. No staining or other evidence of spillage was associated with these drums and tanks.

Other incidents, including fires, mishaps, or flooding are not documented to have occurred within the open space of this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 2 is bounded by Parcel 1 to the north and Parcel 5 to the east and south. The San Francisco Bay borders the parcel to the west. Activities

of concern on these adjacent parcels include the buried hazardous materials associated with the landfill located on Parcel 5. As mentioned previously, Parcels 1, 2, and 5 are all part of IR Site 1. These parcels are part of an ongoing IR investigation.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. This parcel has been reclassified to BRAC Category 6 as it is part of IR Site 1. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-2-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 2 because no industrial buildings are present. Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 576.

As noted earlier, Parcel 2 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Additionally, previous investigations have included surface soil sampling for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 2.

Once the data gaps in Table 6-2-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 2 may be leased or transferred, as appropriate.

TABLE 6-2-1

Summary of Data Gaps
NAS Alameda Parcel 2

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 2.
Installation Restoration (IR) Sites	• IR Site 1 (the 1943-1956 Disposal Area) contains Parcel 2. Additional subsurface investigation, including groundwater monitoring wells, relative to IR Site 1 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels that are not part or IR sites identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Pistol Range.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, telephone, electrical, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.

TABLE 6-2-1

Summary of Data Gaps
NAS Alameda Parcel 2

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• Associated with former landfill.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. No zone-wide target areas were identified on Parcel 2; however one parcel-specific target area was identified. The nature and location of this area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Pistol Range): This target area is located in the western part of the pistol range. This area was used for target practice which involves use of lead shot and bullets. The previous sampling associated with the IR have not investigated the presence or extent of potential lead contamination in this area. This target area is estimated to occupy 3,000 square feet and has been classified as having a probable likelihood of impact. No sampling is proposed for this target area because it is a known release site and remediation will be performed by the Navy IR Contractor.

No zone-wide target areas and no parcel-specific samples were identified for this parcel; however, other concerns pertaining to transformers, lead-based paint, asbestos, radiological concerns, industrial hygiene (IH) issues, and IR sites must be resolved before this parcel can be leased and/or transferred.

SECTION 6-5

PARCEL 5 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 5 at NAS Alameda (Figure 6-5-1). The parcel, which is located in the northwest corner of the base, is approximately 122 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and four parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-5-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 5, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 5, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 1, 2, 6, and 7. This parcel zone has been designated the Western Landfill Zone (Zone 1). The Western Landfill Zone encompasses the parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. As

TABLE 6-5-1

Summary of Recommended Samples
NAS Alameda Parcel 5

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
5-1-3-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	DDT, PCBs, herbicides	Pesticides	CLP RAS
5-2-3-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	DDT, PCBs, herbicides	Pesticides	CLP RAS
5-3-3-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Lubrication oil, Diesel	TPH	Test Kit
5-4-3-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Lubrication oil, Diesel	TPH	Test Kit
5-4-3-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	Lubrication oil, Diesel	TPH	Modified EPA 8015
5-5-3-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Lubrication oil, Diesel	TPH	Test Kit
5-6-3-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Lubrication oil, Diesel	TPH	Test Kit
5-7-3-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	Lubrication oil, Diesel	TPH	Test Kit

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

described below, the parcels in this zone are being investigated for landfill-related environmental concerns under the Installation Restoration Program (IR Sites 1 and 2). Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 1.

Filling began in the area covered by this parcel in 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1953; the ground level and grading have not changed significantly since that time.

Currently, two buildings occupy less than one percent of the parcel. The remaining 99 percent is open space. The majority of the parcel area is presently in use as an aircraft runway. Underground sewer lines are present on this parcel and are shown on Figure 6-5-1.

Parcel 5 is part of an Installation Restoration (IR) Program site (IR Site 1). Previous investigations have been conducted at Parcel 5 and specific data regarding potential chemical occurrence are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Previous investigations at Parcel 5 are described below.

Previous Investigations

This parcel exists in the northwestern portion of a former NAS Alameda landfill. In the previous phases of investigation at NAS Alameda, this landfill is referred to as IR Site 1 or the 1943-1956 Disposal Area. IR Site 1 encompasses the northwest corner of Alameda NAS, and includes Parcels 1, 2, 5, and 6, and the western one-half of Parcel 8. IR Site 1 is currently being investigated under the Installation Restoration Program (IRP).

During its years of operation (1943-1956), IR Site 1 was the base's main site for waste disposal, and the site reportedly received all waste generated at NAS Alameda except liquid waste, which was discharged directly to the Seaplane Lagoon.

Canonie reported Site 1 to be approximately 120 acres in size (Canonie, 1990d). Based on an examination of aerial photographs, the portion of Site 1 where material was actually buried may be as small as 12 acres. This 12-acre area is located in the northeast corner of Parcel 5. An area

reported to be used for burning waste exists in the northeast corner of Parcel 5. The photographic evidence also suggests that approximately 15 of the 120 acres were used for the storage of construction and military materials. Details of the site, fill, and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1993a).

Three previous investigations have been conducted at Site 1. These investigations included soil and ground water sampling for purgeable hydrocarbons, total recoverable hydrocarbons, SVOCs, pesticides, PCBs, metals, radiation, pH, and asbestos. Soil samples were collected from the surface and at depth between 2 feet and 22 feet below ground surface. Wahler Associates completed the first investigation of Site 1 in late 1984 under the NACIP program. As mandated by the RWQCB in 1987, the second investigation, an initial SWAT investigation, was conducted at Site 1 by Canonie in 1990. The third investigation (the second and more extensive phase of the field investigation for the SWAT report) was subsequently conducted at Site 1 in 1992 by the PRC team. On Parcel 5, the soil sampling included collection and analysis of 57 surface soil samples. These samples were collected on a 200-foot grid in the areas of the parcel not occupied by aircraft runways. Several chemicals were detected in these samples. These include: SVOCs (detected at levels of 680 µg/kg to 7,800 µg/kg), TPH (detected at levels of 110 mg/kg to 850 mg/kg), and pesticides (detected at levels of 3 µg/kg to 3,200 µg/kg). Two samples collected from the western portion of the parcel contained levels of benzo(b)flouranthene and benzo(a)pyrene that exceeded residential PRGs. The levels of benzo(a)pyrene in these samples also exceeded industrial PRGs. The locations of the sampling points are shown on Figure 6-5-1.

As mentioned previously, this parcel is being investigated under the IRP. This PEP does not duplicate the previous or proposed sampling efforts as part of the IRP. Rather, it identifies target areas that have resulted from the recent use of the site as an aircraft runway and aircraft support area.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 406

Building 406, located in the west central portion of the parcel, was reportedly constructed in 1957. This building was reportedly 600 square feet in area and was demolished in 1993. This building was used as a tactical antenna station (Figure 6-5-1). No further information about the construction or use of the building was reported during the EBS.

The space occupied by Building 406 was formerly vacant open space. There are no utilities located within and immediately surrounding Building 406.

There have been no documented spills of chemicals associated with Building 406. Building 406 was not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 379

Building 379 was constructed in 1966 and serves as a radar station for the airfield tower (Figure 6-5-1). No further information about the construction or use of the building was reported during the EBS. The space occupied by Building 379 was formerly vacant open space.

Utilities located within and immediately surrounding Building 379 include telephone, water, and electrical lines. Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 379. Building 379 is not equipped with a HVAC system.

Open Space

The open space covers approximately 99 percent of the parcel. The majority of the ground surface of the open space is covered with the asphalt and concrete runway. The remaining open space is poorly maintained grass. These unpaved open space areas are shown on Figure 6-5-1. These areas have been unpaved or landscaped since the late 1950s. Utilities located within and immediately surrounding the open space include storm sewer, sanitary sewer, telephone, water, and electrical lines.

EBS information indicates that the majority of this open space is used as an aircraft runway. It appears that the open space was always used for this purpose. The historic aerial photographs indicated that a large unidentified building occupied the southwest corner of the parcel between 1963 and 1981. The construction or use of the building is not known.

Aircraft arresting gear is present on each of the two runways located in this parcel (Figure 6-5-1). Each of these locations contains two aboveground fuel storage tanks; one on each side of the runway. These tanks are used to power the runway arresting gear. During the EBS site inspection, dark stains, possibly from spilled fuel and motor oil, were observed beneath these tanks. Staining that appeared to be oil was also

observed to be associated with a radar unit that exists on the western side of Building 379. White staining was observed at the northern edge of Runway 13. This staining appeared to be the result of excessive herbicide use. Other incidents, including fires, mishaps, or flooding are not documented to have occurred within the open space of this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 5 is bounded by Parcels 1, 2, 6, 7, and 8. The San Francisco Bay borders the parcel to the north and west. Activities of concern on these adjacent parcels include the buried hazardous materials associated with the landfill. As mentioned previously Parcels 1, 2, 5, 6, and one-half of 8 are all part of IR Site 1 or the 1943 -1956 Disposal Area. These parcels are part of an ongoing IR investigation.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. This parcel has been reclassified to BRAC Category 6 because it is part of IR Site 1. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-5-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 5 because no industrial buildings are present.

TABLE 6-5-2

Summary of Data Gaps
NAS Alameda Parcel 5

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 5.
Installation Restoration (IR) Sites	• IR Site 1 (the 1943-1956 Disposal Area) contains Parcel 5. Additional subsurface investigation, including groundwater monitoring wells, relative to IR Site 1 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels that are not part of IR sites identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Pesticide Staining on North End of Runway 13. • Aircraft Arresting Gear Runway 13. • Aircraft Arresting Gear Runway 7. • Generator for Radar Station.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-5-2

Summary of Data Gaps
NAS Alameda Parcel 5

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, telephone, electrical, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Associated with former landfill.

As noted earlier, Parcel 5 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Additionally, previous investigations have included surface soil sampling for pesticides. Therefore, pesticide sampling has been proposed in this PEP for Parcel 5 only in the heavy herbicide use location as identified in Target Area 1.

Once the data gaps in Table 6-5-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 5 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target areas. No zone-wide target areas were identified on Parcel 5; however, four parcel-specific target areas were identified. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Pesticide Staining on North End of Runway 13): This target area is located at the north end of Runway 13. The staining occupies an area estimated to be 750 square feet and appears to be the result of heavy herbicide use. This target area has been classified as having a suspect likelihood of impact. Samples to be collected in this target area are listed in Table 6-5-1.

- Target Area 2 (Aircraft Arresting Gear Runway 13): This target area is located in the area adjacent to the aircraft arresting gear. This area contained staining that appeared to be diesel fuel or lubrication oil. This target area occupies approximately 200 square feet and has been classified as having a suspect likelihood of impact. Samples to be collected in this target area are listed in Table 6-5-1.

- Target Area 3 (Aircraft Arresting Gear Runway 7): This target area is located in the area adjacent to the aircraft arresting gear. This area contained staining that appeared to be diesel fuel or lubrication oil. This target area occupies approximately 200 square feet and has been

classified as having a suspect likelihood of impact. Samples to be collected in this target area are listed in Table 6-5-1.

- Target Area 4 (Generator for Radar Station): This target area is located adjacent to a radar station. An oily stain was present adjacent to the radar equipment in this area. This target area measures approximately 25 square feet and has been classified as having a potential likelihood of impact. Samples to be collected in this target area are listed in Table 6-5-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-5-1 summarizes screening-level sampling and analysis recommended for the parcel-specific target areas. No zone-wide samples will be collected as no zone-wide target areas were identified for Parcel 5. A total of seven surface soil samples will be collected from the locations shown on Figure 6-5-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Two surface soil samples will be collected at Target Area 1 and analyzed for pesticides. The samples should be located in the areas of greatest staining. Two surface soil samples will be collected for each of Target Areas 2 and 3 and analyzed for TPH. The samples should be located in the areas of greatest staining.

One surface soil sample will be collected in the area of staining in Target Area 4 and analyzed for TPH. The sample should be located in the area of greatest staining.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch ground water sampling (SOPs 1

and 15), and monitoring well ground water sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-6

PARCEL 6 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 6 at NAS Alameda (Figure 6-6-1). The parcel, which is located in the northwest portion of the base, is approximately 5.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities on Parcel 6 are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 6, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 1, 2, 5, and 7. This parcel zone has been designated the Western Landfill Zone (Zone 1). The Western Landfill Zone encompasses the parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. As described below, the parcels in this zone are being investigated for landfill-related environmental concerns under the Installation Restoration Program (IR Sites 1 and 2). Zone-wide considerations and

potential zone-wide concerns are described in the Zone Analysis Plan for Zone 1.

Filling began in the area covered by this parcel in 1947. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1953; the ground level and grading have not changed significantly since that time.

Currently, four buildings occupy approximately one percent of the parcel. The remaining 99 percent is open space. The parcel area is presently in use as an arms magazine.

Parcel 6 is part of an Installation Restoration (IR) Program site (IR Site 2). Previous investigations have been conducted at Parcel 6 and specific data regarding potential chemical occurrence are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

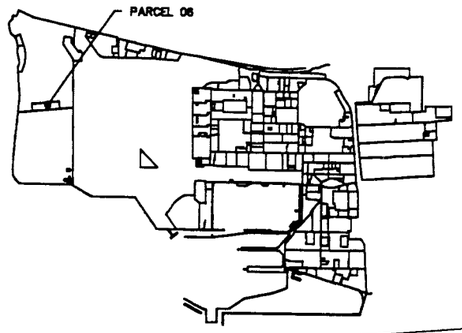
Previous investigation at Parcel 6 are described below.

Previous Investigations

This parcel exists on the southern edge of a former NAS Alameda landfill. In the previous phases of investigation at NAS Alameda, this landfill is referred to as IR Site 1 or the 1943-1956 Disposal Area. IR Site 1 encompasses the northwest corner of Alameda NAS, and includes Parcels 1, 2, 5, and 6, and the western one-half of Parcel 8. IR Site 1 is currently being investigated under the Installation Restoration Program (IRP).

During its years of operation (1943-1956), IR Site 1 was the base's main site for waste disposal, and the site reportedly received all waste generated at NAS Alameda except liquid waste, which was discharged directly to the Seaplane Lagoon.

Canonie reported Site 1 to be approximately 120 acres in area (Canonie, 1990d). Based on an examination of aerial photographs, the portion of Site 1 where material was actually buried may be as small as 12 acres. This 12-acre area is located to the northeast of Parcel 6. Based on historical information, it appears that Parcel 6 was not used for waste disposal. The photographic evidence also suggests that approximately 15 of the 120 acres were used for the storage of construction and military materials. Details of the site, fill, and disposal histories,



KEY PLAN

TAXIWAY NO.1

441

442

353

354

GENERAL LEGEND

PARCEL OUTLINE

SCALE IN FEET

80 0 80 160 240

1" = 80'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-06-1
PARCEL 06
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590006.DWG	PWC 17.629 (STORM DRAINS) PWC 108.728 (SANITARY SEWER) PWC 23.997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 10.27.94/2121.98.45 SHEET 1 OF 1

current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1993a).

Three previous investigations have been conducted at Site 1. These investigations included soil and ground water sampling for purgeable hydrocarbons, total recoverable hydrocarbons, SVOCs, PCBs, metals, radiation, pH, and asbestos. Wahler Associates completed the first investigation of Site 1 in late 1984 under the NACIP program. As mandated by the RWQCB in 1987, the second investigation, an initial SWAT investigation, was conducted at Site 1 by Canonie in 1990. The third investigation (the second and more extensive phase of the field investigation for the SWAT report) was subsequently conducted at Site 1 in 1992 by the PRC team. Because Parcel 6 is located outside the area of previous waste disposal, no soil sampling has been conducted on this parcel.

As mentioned previously, this parcel is being investigated under the IRP for IR Site 1. This PEP does not duplicate the proposed sampling efforts as part of the IRP. Rather, it evaluates target areas that may have resulted from the recent use of the site as an arms magazine.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 353 and 354

Buildings 353 and 354, located in the central portion of the parcel, were reportedly constructed in 1952. They are used as high explosives magazines (Figure 6-6-1). These buildings are approximately 1,400 square feet in size, and are constructed of concrete and have a soil cover. The space occupied by Buildings 353 and 354 was formerly vacant open space. There are no utilities located within or immediately surrounding Buildings 353 and 354.

Information collected during the EBS indicates that these building are used to store a variety of ordnance and high explosives. There has been no documented usage or spillage of chemicals associated with Buildings 353 and 354. It is reported that the ordnance is delivered and taken from the site in a packaged condition; therefore spillage is unlikely. The site inspection conducted during the EBS indicates that some minor undocumented spillage may have occurred. A 3-foot by 3-foot white stain was present on the concrete floor inside Building 354. The cause of this stain is unknown, but it appeared to be the result of a relatively minor amount of material.

Buildings 353 and 354 are not equipped with a heating-ventilation-air conditioning (HVAC) system. Other incidents, including fires, explosions, or flooding are not documented to have occurred within this building.

Building 441

Building 441 was constructed in 1959 and serves as guard and watch tower (Figure 6-6-1). This building is in good condition. Building 441 is a two story, all-wooden building. It covers approximately 120 square feet. The space occupied by Building 441 was formerly vacant open space. Utilities located within and immediately surrounding Building 441 include telephone, and electrical lines.

Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 441. Building 441 is not equipped with a HVAC system. Other incidents, including fires, mishaps, or flooding are not documented to have occurred within this building.

Building 442

Building 442 was constructed in 1959 and serves as a guard and watch tower. This building is in good condition. Building 442 is a two-story building constructed of concrete block walls with a concrete floor and ceiling, and occupies approximately 400 square feet. The space occupied by Building 442 was formerly vacant open space. Utilities located within and immediately surrounding Building 442 include telephone and electrical lines.

Information collected during the EBS indicates that this building has been used as a guard and watch tower. This building contains a back-up, diesel-powered, electrical generator. The diesel supply tank is located outside the building. An oil-filled transformer that may contain PCB oil is also present in this building.

Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 442. Building 442 is not equipped with a HVAC system. Other incidents, including fires, mishaps, or flooding are not documented to have occurred within this building.

Open Space

The open space covers approximately 99 percent of the parcel. The ground surface of the open space is covered with asphalt, soil, and grassland with shrubs. The open space is 90 percent grassland; ten percent of the open space is paved with asphalt. These unpaved open space areas are shown on Figure 6-6-1. These areas have been unpaved or landscaped since the 1950s.

There are no utilities located within or immediately surrounding the open space. EBS information indicates that the majority of this open space is vacant or contains roadways. It appears that the open space was always used for this purpose, though gaps in the historical record exist.

Other incidents, including fires, mishaps, or flooding are not documented to have occurred within the open space of this parcel.

Underground Storage Tanks

One abandoned tank is present at this parcel (Tank 442) It is unknown when this tank was installed. Tank 442 is located on the east side of Building 442. Tank 442 was used to store diesel fuel and has a capacity of up to 1,000 gallons. The presence of Tank 442 was identified from historical data and visual inspections. Based on the available information, this tank has been abandoned for several years. This tank is scheduled to be removed. Investigation of this tank has been completed as described in the October 1988 ERM-West, Inc. report entitled *Abandoned Underground Storage Tank Investigation*. Results of the investigation for Tank 442 detected aromatic volatile organic compounds in the tank. No chemicals were detected in the soil and no groundwater sample was taken. The available information did not identify why the tank was abandoned. However, based on general comments made by NAS Alameda personnel, a tank was most commonly abandoned because it was leaking.

This tank has been identified as a RCRA tank based on its former use as diesel storage for a diesel generator.

Parcel Boundary Conditions

Parcel 6 is bounded by Parcels 5 and 7. Activities of concern on these adjacent parcels include the buried hazardous materials associated with the landfill. As mentioned previously, Parcels 5 and 6 are included in IR Site 1, and Parcel 7 is IR Site 2. These parcels are part of an ongoing IR investigation.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU#UST-14). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this RCRA site does not require further investigation. A brief description of the RCRA site is provided below.

SWMU#UST-14 is located on the east side of Building 442, and it is unknown whether any chemicals were released from this site. SWMU#UST-14 is an underground storage tank with a capacity of 1,000 gallons. The chemicals of concern associated with this site are diesel fuel. This tank is currently abandoned. This site was identified during the RCRA Facility Assessment (RFA) as requiring a RCRA Facility Investigation (RFI). The UST will be removed and investigated under the UST program, which will meet the requirements of the RFA. This tank was identified as a RCRA tank based on its past use and contents.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. This parcel has been reclassified to BRAC Category 6 because it is part of IR Site 1. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-6-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites.

No Industrial Hygiene (IH) sampling is required for Parcel 6 because no industrial buildings are present. Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Buildings 353 and 354.

TABLE 6-6-1

Summary of Data Gaps
NAS Alameda Parcel 6

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 6.
Installation Restoration (IR) Sites	• IR Site 1 (the 1943-1956 Disposal Area) contains Parcel 6. Additional subsurface investigation, including groundwater monitoring wells, relative to IR Site 1 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• No PCB-containing electrical equipment identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels that are not part or IR sites identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST (SWMU#UST-14) currently exists at Parcel 6; however it is scheduled to be removed.
Underground Utilities	• Telephone and electrical lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.

TABLE 6-6-1

Summary of Data Gaps
NAS Alameda Parcel 6

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• Associated with former landfill.

As noted earlier, Parcel 6 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Additionally, previous investigations have included surface soil sampling for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 6.

Once the data gaps in Table 6-6-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 6 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

No zone-wide or parcel-specific target areas were identified for this parcel; however, several other concerns pertaining to asbestos-containing material, lead-based paint, USTs, underground utilities, industrial hygiene, radiological concerns, and IR sites must be resolved before this parcel can be leased and/or transferred.

SECTION 6-7

PARCEL 7 EVALUATION PLAN

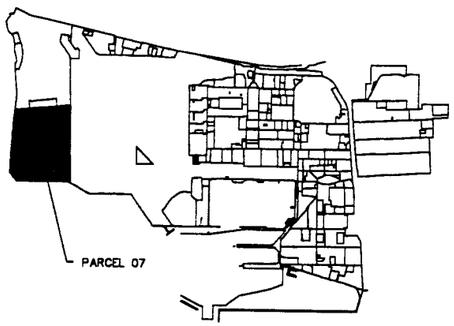
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 7 at NAS Alameda (Figure 6-7-1). The parcel, which is located in the southwest corner of the base, is approximately 110 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities for Parcel 7 are discussed below.

Background and Historical Activities

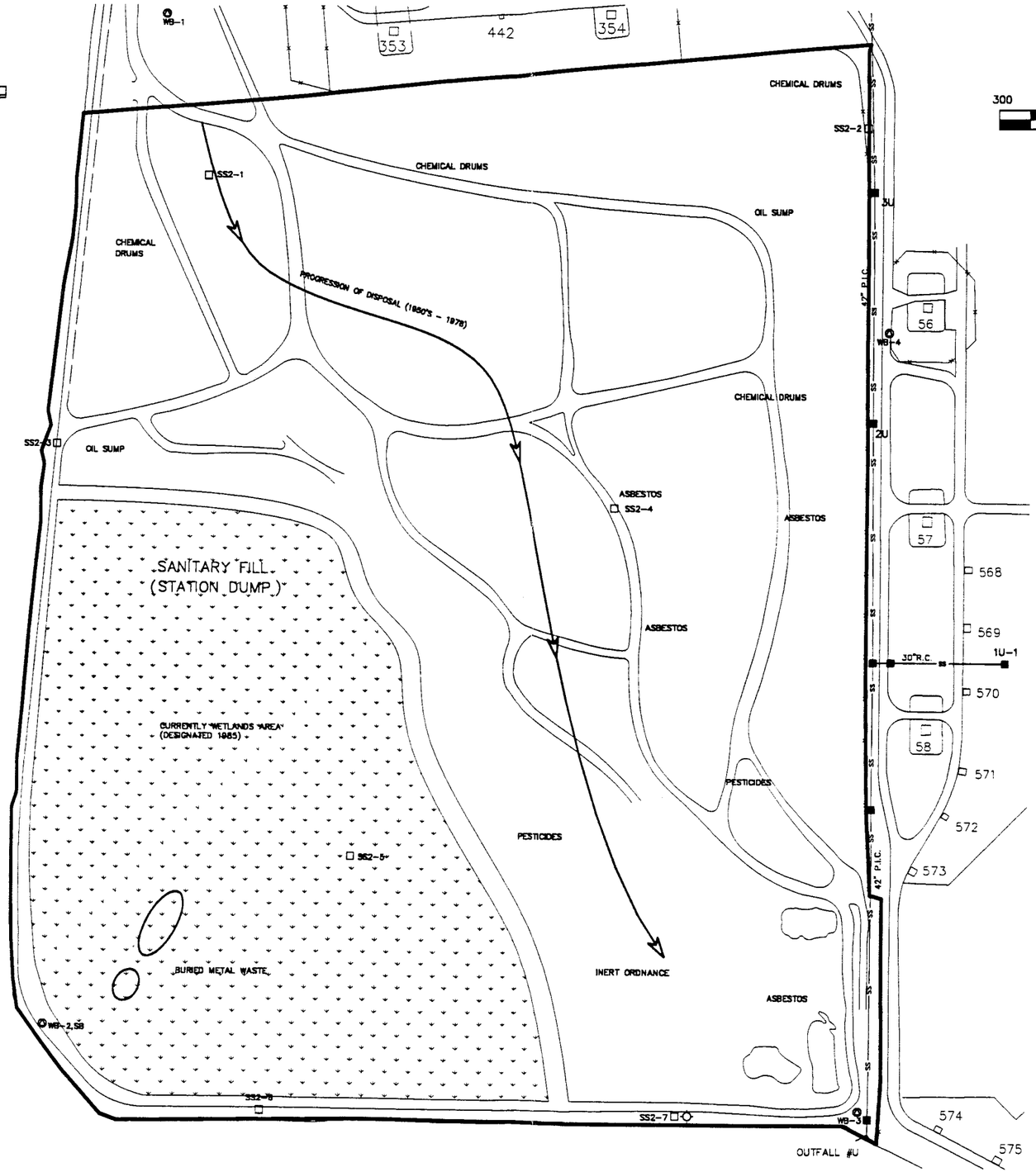
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 7, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 1, 2, 5, and 6. This parcel zone has been designated the Western Landfill Zone (Zone 1). The Western Landfill Zone encompasses the parcels that may have been used historically for waste disposal at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. As described below, the parcels in this zone are being investigated for landfill-related environmental concerns under the Installation Restoration Program (IR Sites 1 and 2). Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 1.



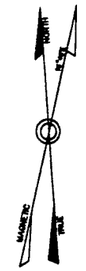
KEY PLAN



SCALE IN FEET

300 0 300 600 900

1" = 300'



GENERAL LEGEND

PARCEL OUTLINE

SAMPLING PLAN BY OTHERS

- SOIL BORING INSTALLED BY CANONIE IN 1990
- PROPOSED SURFACE SOIL SAMPLES (PRC)
- PROPOSED SOIL BORING (PRC)

STORM DRAIN LEGEND

- 3U MANHOLE & No.
- CATCH BASIN
- —SS— STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE
P.I.C. – PAVED INVERT CORRUGATED METAL

NAVAL AIR STATION, ALAMEDA

FIGURE 6-07-1
PARCEL 07
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO. 19590007.DWG	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 10.27.94/2121.96.45 SHEET 1 OF 1

Filling began in the area covered by this parcel in 1953. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1975. Because of the operations at the landfill, the site topography and features changed considerably over time.

No buildings or structures are present on this parcel; it is entirely open space. The parcel area is presently a wetlands area.

Parcel 7 is part of an Installation Restoration (IR) Program site (IR Site 2). Previous investigations have been conducted at Parcel 7 and specific data regarding potential chemical occurrence are available.

Most PCBs (see protocols in Section 3 for exceptions) and radiological considerations on this parcel will be addressed in other sampling programs and are not considered in this PEP.

Previous investigations at Parcel 7 are described below.

Previous Investigations

This parcel exists in the location of a former NAS Alameda landfill. In previous phases of investigation at NAS Alameda, this landfill is referred to as IR Site 2 or the West Beach Landfill. IR Site 2 encompasses all of Parcel 7. IR Site 2 is currently being investigated under the Installation Restoration Program (IRP).

IR Site 2 (the West Beach Landfill) occupies approximately 110 acres in the southwestern corner of NAS Alameda and is located south of IR Site 1 (the 1943-1956 Disposal Area). The western and southern borders of Site 2 are San Francisco Bay. A portion of the southwest half of Site 2 (approximately 42 acres) is within the city and county of San Francisco. The remainder of Site 2 is located in the city and county of Alameda. Details of the site, fill, and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1 993a) .

Site 2 is bounded on the west and south by San Francisco Bay and to the north and east by a fence with locked gates. The fence runs along Perimeter Road and the Runway Area. The landfill is surrounded by an earthen berm approximately 55 feet wide and 7 feet high. There are piles of construction debris located in the southeastern portion of the site. The refuse disposal area is moderately- to well-vegetated with grasses, and supports a variety of wildlife. A small wetland area within the disposal area provides a nesting area for birds and is well-vegetated with grasses. Site 2 is no longer used for any air station operations or activities.

This landfill operated from the 1950s to 1978 and was used for disposal of chemical drums, asbestos, pesticides, inert ordnance, dredge spoils, and metal wastes. Two oil sumps were also reported to exist at this landfill.

Several previous investigations have been conducted at Site 2. Harding Lawson Associates (HLA) conducted several investigations in conjunction with the plan to close Site 2 as a Class II disposal facility. As mandated by the RWQCB in 1987, an initial SWAT investigation was conducted at Sites 1 and 2 by Canonie in 1990. A second, and more extensive, phase of the field investigation for the SWAT report was subsequently conducted at Sites 1 and 2 in 1991 by the PRC team. Detailed results of the Canonie and PRC team investigations were submitted, respectively, to DTSC in the Phases 1 and 2A DSR, (PRC/Montgomery Watson, 1993b), and the PRC team report titled *Solid Waste Water Quality Assessment Test (SWAT) Report, RI/FS Phases 5 and 6, final,* dated September 1992 (PRC/Montgomery Watson, 1993a). Much of the work at this site involved installation of monitoring wells around the perimeter of the parcel. Several soil and wetland sediment samples were also collected and analyzed for VOCs, SVOCs, pesticides, and PCBs. Soil samples were collected at the surface and at depth between 1.5 feet and 45 feet below ground surface. Several chemicals were detected in these samples, including: VOCs (detected at levels of 8 µg/kg to 130 µg/kg), SVOCs (detected at levels of 2,300 µg/kg to 8,300 µg/kg), and pesticides/PCBs (detected at levels of 19 µg/kg to 400 µg/kg). One sample collected from the southeast corner of the parcel contained levels of several polynuclear aromatic hydrocarbons (benzo(a)anthracene, benzo(b)flouranthene, benzo(k)flouranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene) that exceeded residential PRGs. The levels of benzo(b)flouranthene and benzo(a)pyrene in this sample also exceeded industrial PRGs.

As mentioned previously, this parcel is being investigated under the IRP. This PEP does not duplicate the previous or proposed sampling efforts of the IRP. Rather, it evaluate potential target areas that may have resulted from the recent use of the site as a wetlands.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

The open space covers the entire parcel. The northern and southeastern portion of the parcel is covered by grassland and has several unpaved roads running through it. These unpaved open space areas are shown on Figure 6-7-1. These areas have been unpaved or landscaped since the 1950s. The southwest portion of the parcel was

designated a wetlands in 1985. There are no utilities located within and immediately surrounding the open space.

EBS information indicates that this parcel was vacant prior to being used as a landfill. After the closure of the landfill in 1978, it has remained open space.

There is no evidence that chemicals were stored in or used at this parcel. Other incidents, including fires, mishaps, or flooding are not documented to have occurred within the open space of this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 7 is bounded by Parcels 5, 6, and 23. The San Francisco Bay borders the parcel to the west and south. As mentioned previously, Parcels 1, 2, and 5 are all part of IR Site 1, the 1943-1956 Disposal Area. These parcels are part of an ongoing IR investigation.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. This parcel has been reclassified to BRAC Category 6 because it is part of IR Site 2. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-7-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. No Industrial Hygiene (IH) sampling is required for Parcel 7 because no buildings are present.

As noted earlier, Parcel 7 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that

TABLE 6-7-1

Summary of Data Gaps
NAS Alameda Parcel 7

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 7.
Installation Restoration (IR) Sites	• IR Site 2 (West Beach Landfill) contains Parcel 7. Additional subsurface investigation, including groundwater monitoring wells, relative to IR Site 2 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• No LBP issues identified.
PCB-Containing Equipment	• No PCB-containing electrical equipment identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels that are not part of IR sites identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• No evidence of underground utilities identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.

TABLE 6-7-1

Summary of Data Gaps
NAS Alameda Parcel 7

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
Wetlands	• Wetlands exist at Parcel 7.
Other	• Associated with former landfill.

likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Additionally, previous investigations have included surface soil sampling for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 7.

Once the data gaps in Table 6-7-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 7 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

No zone-wide or parcel-specific target areas were identified for this parcel; however, other concerns pertaining to radiological concerns and IR sites must be resolved before this parcel can be leased and/or transferred.

SECTION 6-Z2

ZONE 2 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 2 at NAS Alameda (Figure 6-Z2-1). Zone 2 has been designated the Northwest Ordnance Storage Zone and encompasses the parcels that have historically been used for storage and/or repair of small arms, ordnance, and munitions. Zone 2 is comprised of Parcels 3, 8, 12, and 13. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and four parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface Geoprobe soil sampling, and soil vapor sampling. Table 6-Z2-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z2-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 2, historical activities are discussed below.

Zone 2 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 2 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

TABLE 6-Z2-1

Summary of Recommended Samples
NAS Alameda Zone Z2

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z2-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS

information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 2, the Northwestern Ordnance Storage Zone, encompasses four parcels that have historically been used for storage and/or repair of small arms, ordnance, and munitions. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in the early 1900's. Prior to this time, the zone area was completely inundated by San Francisco Bay. The northern area that was initially filled contained railroad tracks that were used to access a ferry terminal to the west of Zone 2. The remaining zone area was filled between 1916 and 1939. The area within the zone boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, 17 buildings and two structures (Structure 96A on Parcel 12 and Structure 96B on Parcel 13) cover approximately five percent of the zone. The remaining 95 percent is open space. Three buildings were formerly located at this zone and have since been demolished. The zone area is presently in use as a storage area for impounded vehicles, ammunition (including Group B and Group D chemical ammunition), munitions, and small arms.

Zone 2 contains one Installation Restoration (IR) Program site (IR Site 14, Fire Training Area) and partially contains another IR site (IR Site 1, 1943-1956 Disposal Area). In addition, IR Site 20, the Oakland Estuary, borders Parcel 12 to the north. Previous investigations have been conducted in Zone 2 at Parcel 12 and near Parcel 8; specific data regarding potential chemical occurrence are available. Further subsurface investigations related to the nearby IR sites have been proposed within and immediately surrounding Zone 2. Details of previous and proposed investigation activities are described in the corresponding PEPs.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 2 will be addressed in other sampling programs and are not considered in this ZAP. Industrial hygiene may potentially be of concern in Buildings 26, 420, 594, 52, 53, 355, 356, 357, 358, and 359. Historical aerial photographs indicate that

collected from the nine zone-wide locations shown on Figure 6-Z2-1. Samples to be collected in this target area are listed in Table 6-Z2-1.

Parcel 3 Target Area

- Target Area 1 (GAP 11, Hazardous Materials Storage Area): The soil beneath the pavement under the flammable liquids storage shed and hazardous materials locker located west of Building 26 may have been impacted by releases of VOCs and metals from containers stored within these structures. This target area, which includes GAP 11, covers approximately 400 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 1 are listed in Table 6-3-1. One subsurface Geoprobe soil sample and one surface soil sample will be collected from the parcel-specific locations shown on Figure 6-3-1.

Parcel 8 Target Area

- Target Area 1 (Building 420): This target area is located in Building 420. This area was used to store and repair torpedoes and other equipment. The chemicals of concern in this target area include fuel, lubrication oils, and solvents. A stain was observed near the location of a former generator. Inactive GAP site (SWMU/GII-5) is located in this building. Limited sampling is required in order to comply with the requirements of the Part B Permit. Two surface soil samples and two subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-8-1.

Parcel 12 Target Areas

Two parcel-specific target areas were identified for Parcel 12 as indicated below. Twelve surface soil samples will be collected from this parcel. Sample locations are shown on Figure 6-12-1.

- Target Area 1 (Historical Aircraft Parking Area): Historical storage of aircraft in this area may have resulted in impacts to parcel soils from petroleum hydrocarbons. This target area covers approximately 70,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 1 are listed in Table 6-12-1.

- Target Area 2 (Bunker Area): The soils and gravel adjacent to the building entrances in the bunker area (central and eastern portion of the parcel) may have been impacted by metals from munitions

handled at these locations. This target area covers approximately 65,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 2 are listed in Table 6-12-1.

Parcel 13 Target Area

- Target Area 1 (Buildings 388, 120, 121, and 122): Based on staining observed during the site inspection, the floors of these buildings may have been impacted by releases of TPH and metals stored or handled in the buildings. This target area covers approximately 4,600 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 1 are listed in Table 6-13-1. Four surface soil and four soil vapor samples will be collected from the locations shown on Figure 6-13-1.

Screening-Level Investigation

Surface soil sampling (SOP 3), subsurface GeoProbe soil sampling (SOP 14), and soil vapor sampling (SOP 6) will be used to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-Z2-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. A total of 19 surface soil samples, three subsurface Geoprobe soil samples, and four soil vapor sample will be collected from the parcel-specific locations shown on Figure 6-Z2-1. A total of nine surface soil samples will be collected from the zone-wide locations shown on Figure 6-Z2-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater

the open space of Zone 2 has been at least partially unpaved since 1947. Pesticides, which may have been used to suppress vegetation in the unpaved areas, may have impacted the soil in this zone.

Underground Storage Tanks

Four underground storage tanks (Tanks 594-1, 594-2, 420-2, and FS-357) are present at this zone. Tanks 594-1, 594-2, and 420-2 are located on Parcel 8, while Tank FS-357 is located in the northeastern portion of Parcel 12. Underground storage tanks (USTs) are being investigated and removed through the UST Program.

Tank 594-1 stores diesel, has a capacity of 1,000 gallons, and is inactive. This tank failed a tightness test in October 1991. Tank 594-2 stores diesel, has a capacity of 1,000 gallons, and is active. This tank passed October 1991 tank and piping tests. The piping associated with Tank 594-2 reportedly could not be tested. Tanks 594-1 and 594-2 are scheduled to be removed.

Tank 420-2 (also referred to as SWMU UST-13), located near the north side of Building 420, stores diesel and has a capacity of 1,000 gallons. This inactive tank reportedly stored fuel for an emergency generator. Two soil samples collected near the fillpipe of Tank 420-1 during a 1988 ERM investigation contained TPH-diesel, toluene, and xylenes at maximum concentrations of 4,600 ppm, 0.08 ppm, and 0.03 ppm, respectively. Two tanks (Tanks 420-1 and 420-2) were formerly believed to exist near Building 420. A 1988 ERM investigation revealed that only one tank (Tank 420-2) exists near this building; the fillpipe for "Tank 420-1" was determined to be the fillpipe for Tank 420-2. Tank 420-2 is scheduled to be removed.

Tank FS-357 is used to store diesel, has a capacity of 1,000 gallons, and is inactive. A 1988 ERM investigation sampled the contents of this tank and collected one soil sample near Tank FS-357. Sampling of the tank contents revealed TPH-gasoline, benzene, toluene, and lead (in liquid and solid phases). The soil sample contained TPH-gasoline, benzene, and toluene at concentrations of 31 ppm, 0.08 ppm, and 0.1 ppm, respectively. A strong hydrocarbon odor was noted during the sampling. Tank FS-357 is inactive and is scheduled to be removed.

RCRA Sites

This zone contains three RCRA sites (GAP 11 on Parcel 3 and SWMU/GII-5, also known as GAP 7, and SWMU UST-13 on Parcel 8). These sites were evaluated consistent with the criteria applied to other

potential target areas at the zone. Under these criteria, of the three RCRA sites at this zone, GAP 11 and SWMU/GII-5 require further investigation. SWMU/GII-5 is listed in the RCRA Part B Permit and must be investigated as part of the IR or UST Programs. A brief description of each RCRA sites is provided in the corresponding PEPs. The sampling proposed for GAP 11 and SWMU/GII-5 is also described in the corresponding PEPs.

Zone Boundary Conditions

Zone 2 is bounded by Zones 1, 3, 4, and the Oakland Inner Harbor. Activities of concern include the former landfill and waste disposal area in Zone 1 (IR Site 1, 1943-1956 Disposal Site), IR Site 14 (Fire Training Area) in Zones 2 and 3, and the Oakland Inner Harbor (IR Site 20), which borders Parcel 2 to the north.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and five parcel-specific target areas. This subsection of the ZAP discusses specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 2 Target Area

- Zone 2 Target Area 1 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the open space of Zone 2 has been partially unpaved since at least 1947. Zone 2 Target Area 1 includes all currently/formerly unpaved areas within the Northwest Ordnance Storage Zone. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. Surface soil samples for pesticides will be

sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-3

PARCEL 3 EVALUATION PLAN

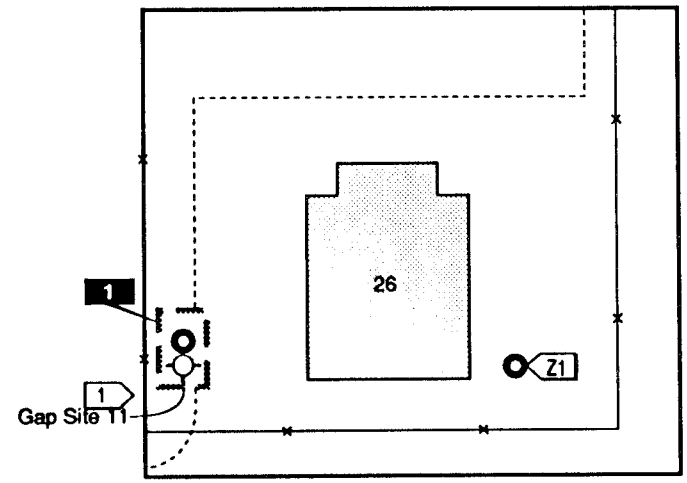
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 3 at NAS Alameda (Figure 6-3-1). The parcel, which is located in the northwestern portion of the base, is 0.6 acres in size and is square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site may potentially be located at this parcel. One zone-wide and one parcel-specific target investigation areas (target areas) were identified on this parcel. One zone-wide target area sample is located on this parcel. Sampling procedures called for in the screening-level investigation in these areas include subsurface Geoprobe soil and surface soil sampling. Table 6-3-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance in with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 3, historical activities are discussed below.

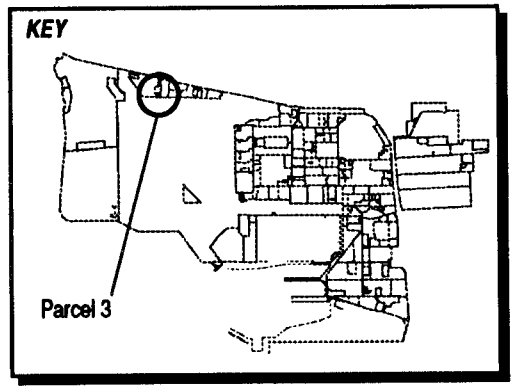
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 3, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Parcel 3 has been grouped into a zone with Parcels 8, 12, and 13. This parcel zone has been designated the Northwestern Ordnance Storage Zone (Zone 2). The zone encompasses the parcels that have historically been used for storage and/or repair of small arms, ordnance, and munitions. During the sampling program development, the parcels located in this zone were evaluated together.





LEGEND

- Target Area 1
- Sewer Line
- Surface Soil Sample Location
- Geoprobe Location

1" = 60'

Figure 6-3-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.06.94

TABLE 6-3-1

Summary of Recommended Samples
NAS Alameda Parcel 3

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
3-1-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	Cleaning Solvents	VOCs	CLP RAS
3-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead	Metals	CLP RAS
Z2-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 2.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 3) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 26) covers approximately 10 percent of the parcel. The remaining 90 percent is open space. In general, the parcel area is presently used for small arms/pyrotechnics storage. Utilities located at this parcel include underground electrical and water lines. One transformer is also located at this parcel.

Parcel 3 is located approximately 300 feet south of an Installation Restoration (IR) Program site (IR Site 14, Fire Training Area). No previous investigations have been conducted at Parcel 3, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within the parcel open space and building are described in detail below.

Building 26

Building 26 was constructed in approximately 1941 and serves as storage for small arms/pyrotechnics (Figure 6-3-1). This one-story building covers approximately 2,650 square feet and is generally in fair condition. Building 26 is constructed of concrete with a painted concrete floor and metal construction roof. Holes with protruding metal rods located around the perimeter of Building 26 appear to serve as electrical grounds for the building. These holes also collect runoff from the surrounding area.

Information collected during the EBS indicates that activities conducted within this building included cleaning of small arms and storage of live ammunition and guns. These activities involved the use or generation of chemicals and wastes including solvents and oils.

These processes occurred within Building 26 from the early 1940s to the present. Because it currently stores classified material, Building 26 could not be inspected.

Open Space

Open space covers approximately 90 percent of Parcel 3. The ground surface of the open space is mostly paved with asphalt, with intermittent patches of bare soil and grass. The pavement is generally in fair condition. Based on historical aerial photographs, the open space appears to have been partially unpaved since at least 1947.

Buildings 379A and 379B were formerly located in this open space. Both buildings were utilized as crew facilities and were constructed in the early 1950s. Building 379A was constructed of wood and covered approximately 210 square feet, and Building 379B was a Quonset hut and covered approximately 960 square feet. Both buildings were subsequently demolished. The activities conducted in these buildings are unknown.

The north side of Building 26 is used as a gun cleaning area. Two 55-gallon drums of cleaning solvent are stored inside a flammable liquids storage shed located on the west side of Building 26. Transfer of virgin and spent solvent between containers occurs within this storage shed. Spent solvent is disposed of in a 55-gallon drum. The ground surface under the storage shed is partially paved with asphalt and partially exposed soil. A hazardous materials locker is also located on the west side of Building 26. Two small oil stains are visible on the pavement west of Building 26. Floor finishing compound is stored in a shed located on the east side of Building 26.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 3 is bounded by Parcels 12, 13, 15, and 23 to the west, north, east, and south, respectively. There are no activities of environmental concern associated with the boundaries of these parcels that are likely to affect boundary areas of Parcel 3.

RCRA Sites

One RCRA site (GAP 11) is located on the west side of Building 26. Chemicals of concern at GAP 11 include solvents. Available information identifying GAP Site 11 conflicts. The site inspection locates GAP 11 on the west side of Building 26; however, the Part B permit indicates that GAP 11 is located at Building 162 (Parcel 135). The site will be investigated as part of the parcel evaluation plan.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 3, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-3-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns.

No Industrial Hygiene (IH) sampling is required for Parcel 3 because no industrial buildings are present. However, because Building 26 was not inspected, the one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 3 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 2.

Once the data gaps in Table 6-3-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 3 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-3-2

Summary of Data Gaps
NAS Alameda Parcel 3

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 14 (Fire Training Area) is located approximately 300 feet north of Parcel 3. Additional subsurface investigation relative to IR Site 14 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas on Parcel 3.
Potential Parcel-Specific Release Areas	• GAP 11, Hazardous Materials Storage Area
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Electrical and water lines identified.

TABLE 6-3-2

Summary of Data Gaps
NAS Alameda Parcel 3

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target areas and is also contained in a zone-wide target area. One zone-wide target area sample is located on this parcel. This subsection of the PEP discusses specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 2. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release area described above and listed in Table 6-3-2.

- Target Area 1 (GAP 11, Hazardous Materials Storage Area): The soil beneath the pavement under the flammable liquids storage shed and hazardous materials locker located west of Building 26 may have been impacted by releases of VOCs and metals from containers stored within these structures. This target area, which includes GAP 11, covers approximately 400 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 1 are listed in Table 6-3-1.

- Zone 2 Target Area 1 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the open space of Zone 2 has been unpaved since at least 1947. Zone 2 Target Area 1 includes all currently/formerly unpaved areas within the Northwest Ordnance Storage Zone. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. One surface soil sample for pesticides will be collected from the location shown on Figure 6-3-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z2-1 and shown on Figure 6-Z2-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-3-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 3. One subsurface GeoProbe soil sample and one surface soil sample will be collected from the parcel-specific locations shown on Figure 6-3-1. One surface soil sample will be collected from the zone-wide location shown on Figure 6-3-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The location of the soil samples shown on Figure 6-3-1 is approximate. The sample should be collected under the flammable liquids storage shed located on the west side of Building 26, near GAP 11. The sample should be located in the center of the darkest and largest stain observed in the field.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-8

PARCEL 8 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 8 at NAS Alameda (Figure 6-8-1). The parcel, which is located in the northwestern portion of the base, is approximately six acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel reportedly contains two RCRA sites (GAP 7 and SWMU UST-13). GAP Site 7 has been identified in the Part B Permit as requiring a RCRA Facility Investigation (RFI). One zone-wide and one parcel-specific target investigation area (target area) have been identified on this parcel. Three zone-wide target area samples are located on this parcel. Surface soil and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-8-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 8, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 8, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

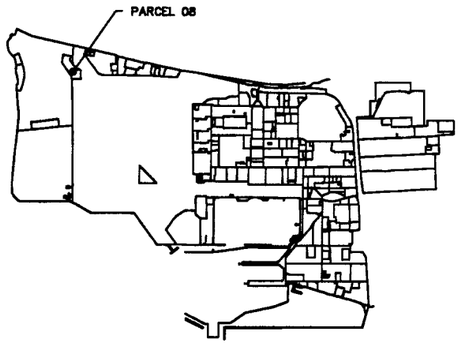
Parcel 8 has been grouped into a zone with Parcels 3, 12, and 13. This parcel zone has been designated the Northwestern Ordnance Storage Zone (Zone 2). The zone encompasses the parcels that have historically been used for storage and/or repair of small arms,

TABLE 6-8-1

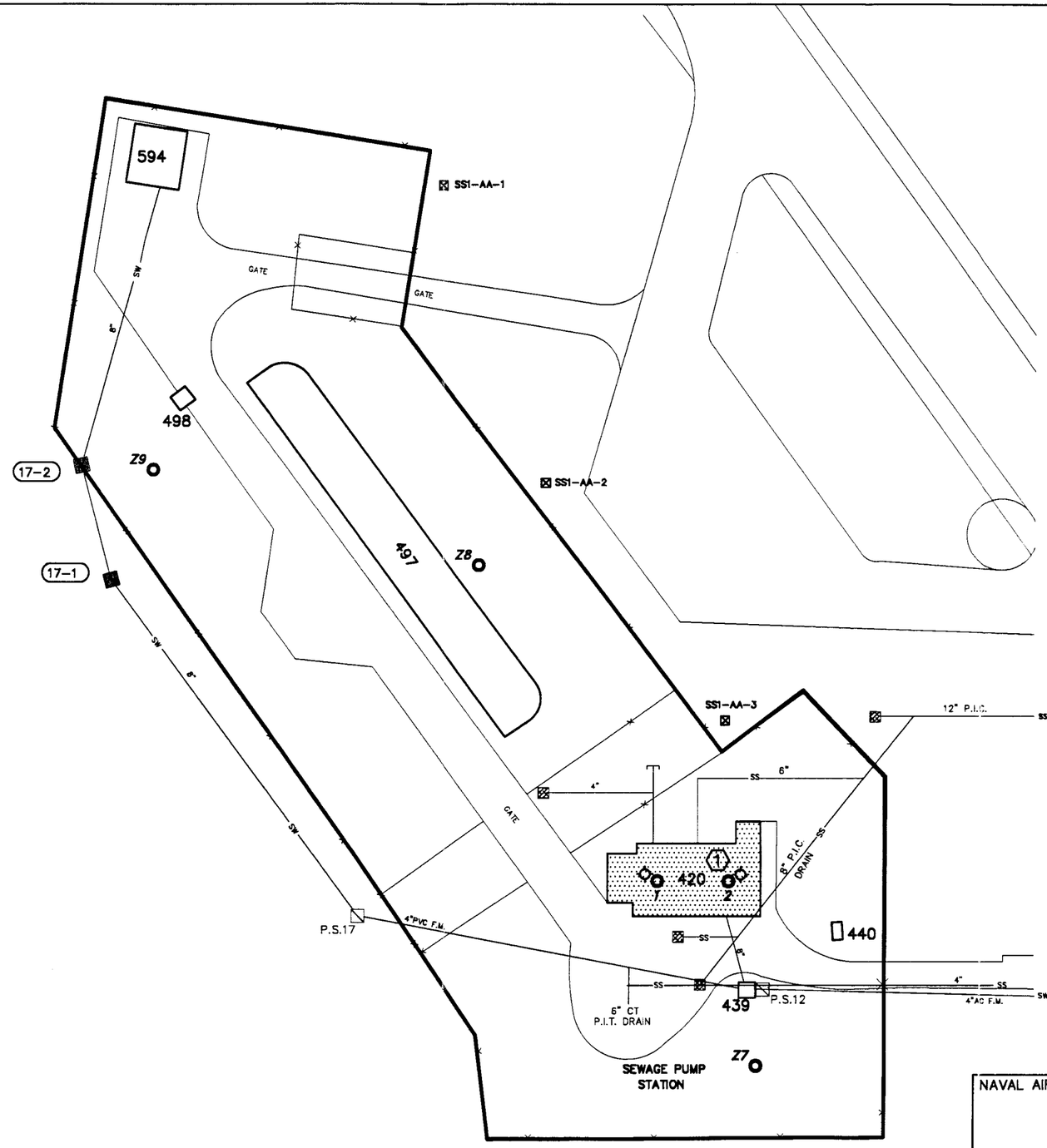
Summary of Recommended Samples
NAS Alameda Parcel 8

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
8-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, fuel	TPH	Test Kit
8-1-0-S-V-DDMMYY	4'	GeoProbe	Soil	Target Area 1	Solvents	VOCs	CLP RAS
8-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, fuel	TPH	Test Kit
8-2-0-S-V-DDMMYY	4'	GeoProbe	Soil	Target Area 1	Solvents	VOCs	CLP RAS
8-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, fuel	TPH	Modified EPA 8015
Z2-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.



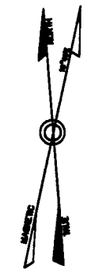
KEY PLAN



SCALE IN FEET

100 0 100 200 300

1" = 100'



GENERAL LEGEND

PARCEL OUTLINE

24 SURFACE SOIL SAMPLE & No.

GeoProbe SOIL SAMPLE

1 TARGET AREA & No.

SAMPLING PLAN BY OTHERS

PROPOSED SURFACE SAMPLE FOR TPH & METALS (PRC)

PROPOSED SURFACE SAMPLE FOR PCB (PRC)

SANITARY SEWER LINE LEGEND

17-2 SANITARY SEWER MANHOLE & No.

P.S.17 PUMP STATION & No.

—SW— SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON
PVC – POLYVINYL CHLORIDE
AC – ASBESTOS CEMENT
F.M. – FORCED MAIN

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

12A-2 MANHOLE

CATCH BASIN

—SS— STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE
P.I.C. – PAVED INVERT CORRUGATED METAL

NAVAL AIR STATION, ALAMEDA

FIGURE 6-08-1
PARCEL 08
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590008.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.96.45 — SHEET 1 OF 1

ordnance, and munitions. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 2.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, five buildings (Buildings 420, 439, 497, 498, and 594) cover approximately five percent of the parcel. The remaining 95 percent is open space. Sewer lines are present at this parcel and are shown on Figure 6-8-1. The parcel area is presently in use as a Marine weapons storage and repair facility.

Parcel 8 is partially located within an Installation Restoration (IR) site (IR Site 1, 1943-1956 Disposal Area) and approximately 400 feet south of another IR site (IR Site 20, Oakland Estuary). No previous investigations have been conducted at Parcel 8, and specific data regarding chemical occurrence at this parcel are not available. However, additional sampling that has been proposed near Parcel 8 as part of the IR Site 1 investigation is shown on Figure 6-8-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Previous Investigations

This parcel exists in the eastern portion of a former NAS Alameda landfill. In the previous phases of investigation at NAS Alameda this landfill is referred to as IR Site 1 or the 1943-1956 Disposal Area. IR Site 1 encompasses the northwest corner of Alameda NAS, and includes Parcels 1, 2, 5, and 6, and the western one-half of Parcel 8. IR Site 1 is currently being investigated under the Installation Restoration Program (IRP).

During its years of operation (1943-1956), IR Site 1 was the base's main site for waste disposal, and the site reportedly received all waste

generated at NAS Alameda except liquid waste, which was discharged directly to the Seaplane Lagoon.

Canonie reported Site 1 to be approximately 120 acres in area (Canonie, 1990d). Based on an examination of aerial photographs, the portion of Site 1 where material was actually buried may be as small as 12 acres. This 12-acre area is located to the west of Parcel 8. The photographic evidence also suggests that approximately 15 of the 120 acres were used for the storage of construction and military materials. Details of the site, fill, and disposal histories, current operations, and site hydrogeology are presented in the SWAT report (PRC/Montgomery Watson, 1993a).

Three previous investigations have been conducted at Site 1. These investigations included soil and groundwater sampling for purgeable hydrocarbons, total recoverable hydrocarbons, SVOCs, PCBs, metals, radiation, pH, and asbestos. Wahler Associates completed the first investigation of Site 1 in late 1984 under the NACIP program. As mandated by the RWQCB in 1987, the second investigation, an initial SWAT investigation, was conducted at Site 1 by Canonie in 1990. The third investigation, the second and more extensive phase of the field investigation for the SWAT report, was subsequently conducted at Site 1 in 1992 by the PRC team. Because Parcel 8 is located 500 to 1,000 feet from the actual waste burial area, no sampling has been conducted on this parcel as part of the previous investigations.

As mentioned previously, this parcel is being investigated under the IRP. This PEP does not duplicate the previous or proposed sampling efforts as part of the IRP. Rather, it identifies specific target areas that have resulted from the recent use of the site as a Marine weapons storage and repair facility.

Buildings 420

Building 420, located in the southern portion of the parcel, was reportedly constructed in 1966 (Figure 6-8-1). This building has previously been used for storage and repair of torpedoes. These types of industrial processes typically involve the use or generation of chemicals and wastes, including fuel, lubrication oil and potentially solvents used for parts cleaning. It is currently used for ammunition storage and repair. The ordnance is stored in crates and lockers.

Building 420 is constructed with concrete block and a concrete floor. This building is in good condition and occupies approximately 7,000 square feet. The space occupied by Building 420 was formerly vacant open space. Utilities located within or immediately

surrounding Building 420 include underground electrical, sanitary sewer, storm sewer, and water lines. One transformer is also located within this building.

Storage of approximately ten cylinders of oxygen and nitrogen, and small quantities (10 to 20 gallons total) of spray paint and motor oil was observed in Building 420. Hazardous waste containing non-halogenated organic compounds was reported to be stored in this building, although the quantities and exact locations were not reported. There has been no documented spillage of chemicals associated with Building 420. The site inspection conducted during the EBS indicates that some minor spillage may have occurred. A six foot by six foot stain was present on the concrete floor adjacent to the former location of a generator. The cause of this stain is unknown, but it appeared to be the result of a relatively small quantity of material.

Building 420 is equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within this building.

Building 439

Building 439 serves as a sewage pumping station (Figure 6-8-1). This building was not inspected during the site inspection. Building 439 covers approximately 170 square feet. The space occupied by Building 439 was formerly vacant open space. Utilities located within or immediately surrounding Building 439 include underground electrical, storm sewer, and sanitary sewer lines.

Information collected during the EBS indicates that this building has been used as a sewage pumping station since it was constructed. Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 439. Building 439 is not equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within this building.

Building 497

Building 497 was constructed in 1964 and serves as a special weapons magazine (Figure 6-8-1). This building covers approximately 5,000 square feet and is in good condition. Building 497 is a large concrete bunker covered with asphalt. The space occupied by Building 497 was formerly vacant open space. An electrical line is the only underground utility located near Building 497.

Information collected during the EBS indicates that this building has been used to store special weapons including torpedoes. Based on the historical review conducted, all ordnance is brought to this building and removed from this building in a packaged condition. It is unlikely that spillage or leakage has occurred. No other incidents such as fires, explosions, or flooding are documented to have occurred within this building.

Building 498

Building 498 was constructed in 1964 and serves as a guard watch tower (Figure 6-8-1). The tower is built on metal stilts and is constructed of reinforced concrete. The space occupied by Building 498 was formerly vacant open space. No underground utilities are located within or immediately surrounding Building 498.

Information collected during the EBS indicates that this building has been used as a guard watch tower since it was constructed in 1964. Based on the historical review conducted, it does not appear that hazardous materials were used or stored at Building 498. No other incidents such as fires, mishaps, or flooding are documented to have occurred within this building.

Building 594

Building 594 is located at the northeast corner of the parcel (Figure 6-8-1). This one-story building is constructed of concrete block with a cement floor and metal roof, and covers approximately 3,100 square feet. Building 594 is currently used for office and living space, but was previously used as a shop for underwater weapons. The space occupied by this building was formerly vacant open space.

Utilities located within or immediately surrounding Building 594 include underground sanitary and water lines. Although no chemicals are documented to have been stored in or used at this building, EBS information indicates that this building was used to store and repair underwater weapons and equipment. These types of industrial processes typically involve the use or generation of chemicals and wastes, including fuel, lubrication oil and possibly solvents used for parts cleaning. Building 594 is not equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are not documented to have occurred within Building 594.

Open Space

The open space covers approximately 90 percent of Parcel 8. The ground surface of the open space is covered with asphalt roadways, gravel, weeds, and brush. Utilities located within or immediately surrounding the open space include underground electrical, sanitary sewer, storm sewer, and water lines. According to a 1947 aerial photograph, equipment and/or vehicles and/or aircraft were stored in the eastern portion of the parcel. Apart from this 1947 aerial photograph, it appears that the open space has always been vacant. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space of this parcel.

Underground Storage Tanks

Three underground storage tanks (Tanks 594-1, 594-2, and 420-2) currently exist at this parcel. Tanks 594-1 and 594-2 store diesel. Tank 594-1 is inactive and has a capacity of 1,000 gallons. This tank failed a tightness test in October 1991. Tank 594-2 is active and has a capacity of 1,000 gallons. This tank passed October 1991 tank and piping tests. The piping associated with Tank 594-2 reportedly could not be tested. Tanks 594-1 and 594-2 are scheduled to be removed.

Tank 420-2 (also referred to as SWMU UST-13), located near the north side of Building 420, stores diesel and has a capacity of 1,000 gallons. This inactive tank reportedly stored fuel for an emergency generator. Two soil samples collected near the fillpipe of Tank 420-1 during a 1988 ERM investigation contained TPH-diesel, toluene, and xylenes at maximum concentrations of 4,600 ppm, 0.08 ppm, and 0.03 ppm, respectively. Two tanks (Tanks 420-1 and 420-2) were formerly believed to exist near Building 420. A 1988 ERM investigation revealed that only one tank (Tank 420-2) exists near this building; the fillpipe for "Tank 420-1" was determined to be the fillpipe for Tank 420-2. Tank 420-2 is scheduled to be removed under the UST program.

Parcel Boundary Conditions

Parcel 8 is bounded by Parcels 5 and 23. Activities of concern on these adjacent parcels include buried hazardous materials associated with the Parcel 5, which is part of an IR site (IR Site 1, 1942-1956 Disposal Area). IR Site 1 is currently being investigated under the IR Program. It is unlikely that neighboring parcels have impacted Parcel 8. If the continuing investigations at IR Site 1 reveal a cause for concern at Parcel 8, then additional sampling on Parcel 8 may be appropriate.

RCRA Sites

Two RCRA sites (SWMU/GII-5, also known as GAP 7, and SWMU UST-13) are located at this parcel. These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, SWMU/GII-5 requires further investigation. In addition, this site is listed in the RCRA Part B Permit and must be investigated through the IR or UST Program for NAS Alameda. A brief description of each RCRA site is provided below.

SWMU GII-5 is located in Building 420 and is inactive. The site was apparently recommended for an RFI because the inspector conducting the RCRA Facility Assessment (RFA) could not access Building 420 as it was considered a restricted area. Chemicals of concern associated with this site include solvents and thinners. No known releases have occurred at this site. This site could not be located during the EBS site inspection. To comply with the requirements of the Part B Permit, sampling has been proposed in Building 420 in this PEP.

SWMU UST-13 is located near the north side of Building 420, and is currently inactive. The chemicals of concern associated with SWMU UST-13 include diesel fuel. No known releases have occurred at this site. This site is currently being investigated as part of the UST Program and is scheduled to be removed. This tank was identified as a RCRA tank based on its past use and contents. The tank description and results of the 1988 ERM investigation performed on this tank are provided in the Underground Storage Tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 8, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-8-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated

TABLE 6-8-2

Summary of Data Gaps
NAS Alameda Parcel 8

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 1 (1943-1956 Disposal Area) is located adjacent to Parcel 8. Additional subsurface investigation relative to IR Site 1 is proposed by the IR contractor. • IR Site 20 (Oakland Estuary) is located approximately 400 feet north of Parcel 8. The status of any proposed subsurface investigations relative to IR Site 20 is unknown.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas on Parcel 8.
Potential Parcel-Specific Release Areas	• Building 420.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-8-2

Summary of Data Gaps
NAS Alameda Parcel 8

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Three USTs (Tanks 594-1, 594-2, and 420-2) currently exist at Parcel 8 and are scheduled to be removed.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

with USTs and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 420 and 594. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

As noted earlier, Parcel 8 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 2.

Once the data gaps in Table 6-8-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 8 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 2. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 420): This target area is located in Building 420. This area was used to store and repair torpedoes and other equipment. The chemicals of concern in this target area include fuel, lubrication oils, and solvents. A stain was observed near the location of a former generator. Inactive GAP site (SWMU/GII-5) is located in this building. Limited sampling is

required in order to comply with the requirements of the Part B Permit.

- Zone 2 Target Area 1 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the open space of Zone 2 has been partially unpaved since at least 1947. Zone 2 Target Area 1 includes all currently/formerly unpaved areas within the Northwest Ordnance Storage Zone. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. One surface soil sample for pesticides will be collected from the location shown on Figure 6-8-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z2-1.

In addition, concerns pertaining to industrial hygiene (Buildings 420 and 594), asbestos, lead-based paint, PCBs, underground lines, radiological issues, the impacts of the adjacent IR site (IR Site 1), and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) will be employed to assess conditions in the target area and to identify whether further sampling in the follow-up detailed evaluation phase is necessary. Two parcel-specific surface soil and subsurface Geoprobe soil samples and three zone-wide surface soil samples will be collected from the locations shown on Figure 6-8-1. The soil sample locations shown on Figure 6-8-1 are approximate. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the

following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-12

PARCEL 12 EVALUATION PLAN

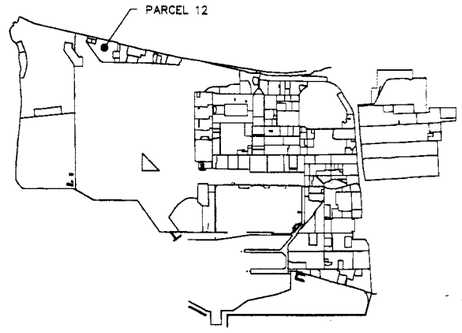
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 12 at NAS Alameda (Figure 6-12-1). The parcel, which is located in the northwestern portion of the base, is approximately 13 acres in size and is irregular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and two parcel-specific target investigation areas (target areas) were identified on this parcel. Four zone-wide target area samples are located on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-12-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 12, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 12, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, an underground storage tank, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Parcel 12 has been grouped into a zone with Parcels 3, 8, and 13. This parcel zone has been designated the Northwestern Ordnance Storage Zone (Zone 2). The zone encompasses the parcels that have historically been used for storage and/or repair of small arms, ordnance, and munitions. During the sampling program development, the parcels located in this zone were evaluated together.



KEY PLAN

PRC IR LEGEND

- PROPOSED PRC SURFACE SOIL LOCATION
- PROPOSED PRC SOIL BORINGS
- EXISTING PRC DEEP MONITORING WELL
- PROPOSED PRC CPT/HYDROPUNCH

GENERAL LEGEND

- PARCEL OUTLINE
- SURFACE SOIL SAMPLE & No.
- TARGET AREA & No.

SANITARY SEWER LINE LEGEND

- P.S.11 PUMP STATION & No.
- SANITARY SEWER LINE

MATERIALS:

A.C. – ASBESTOS CEMENT
F.M. – FORCED MAIN

NOTES:

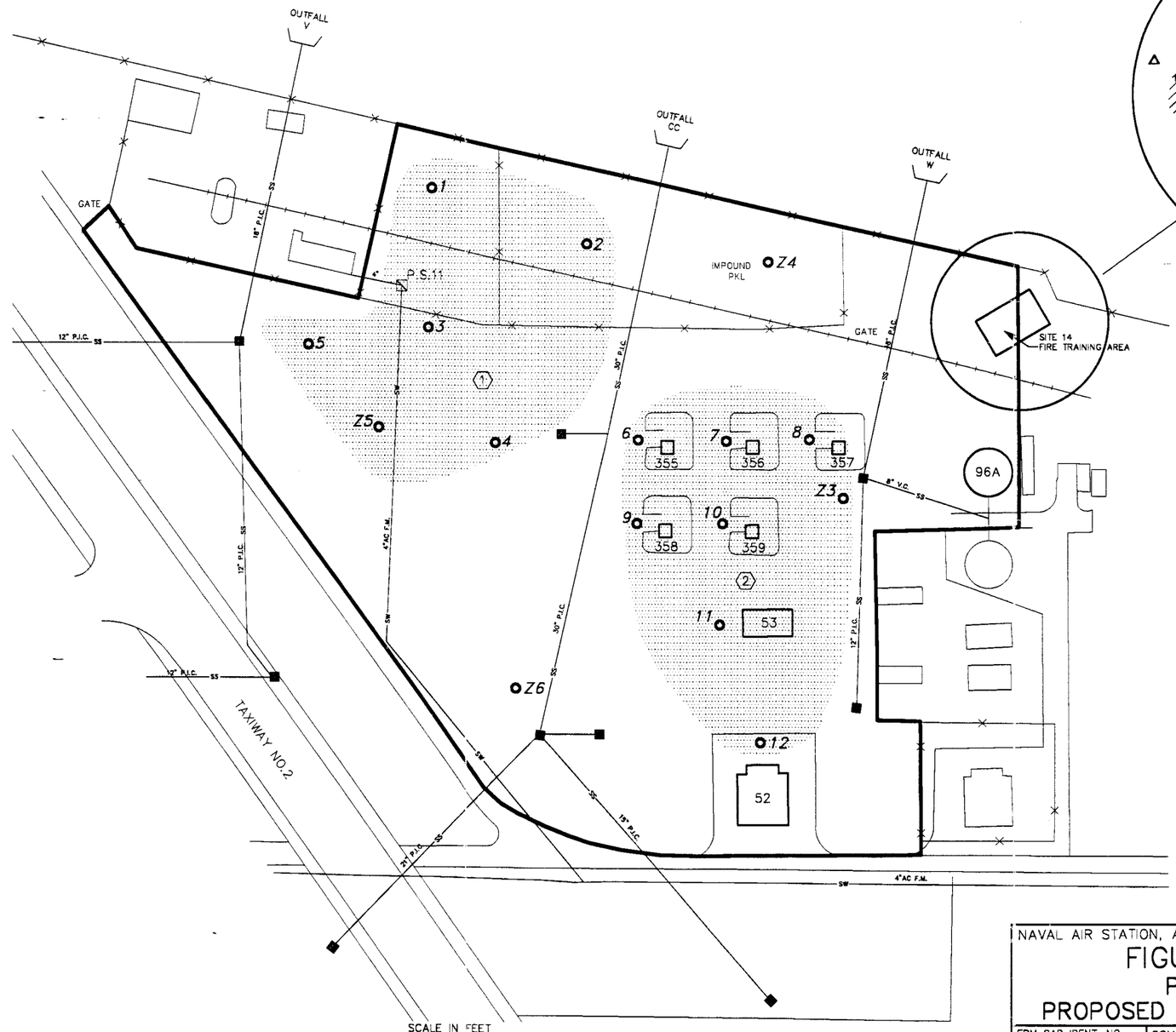
1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

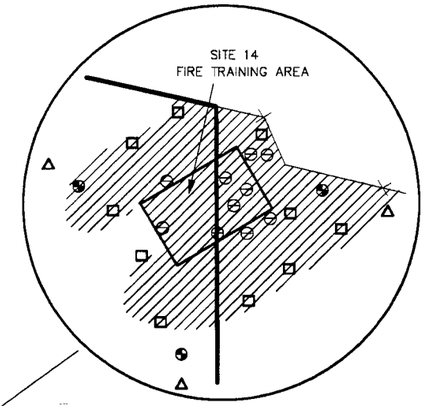
STORM DRAIN LEGEND

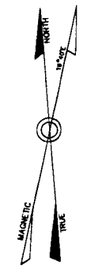
- CATCH BASIN
- STORM SEWER LINE

MATERIALS:

P.I.C. – PAVED INVERT CORREGATED METAL







SCALE IN FEET

150 0 150 300 450

1" = 150'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-12-1
PARCEL 12
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590012.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
..\HOME\SHARON\NAVY-AS\J_RUBIN\PARCEL5\	
SCALE AS NOTED	DATE: 10.27.94/2121.96.45 SHEET 1 OF 1

TABLE 6-12-1

Summary of Recommended Samples
NAS Alameda Parcel 12

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
12-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline	TPH	Test Kit
12-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline	TPH	Test Kit
12-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline	TPH	Modified EPA 8015
12-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline	TPH	Test Kit
12-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline	TPH	Test Kit
12-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline	TPH	Test Kit
12-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
12-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
12-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
12-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	CLP RAS
12-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
12-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
12-10-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	CLP RAS
12-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
12-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lead	Metals	XRF
Z2-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS

TABLE 6-12-1

Summary of Recommended Samples
NAS Alameda Parcel 12

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z2-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS
Z2-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 2.

Filling associated with the railroad tracks and the ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 12) began in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, seven buildings/bunkers (Buildings 52, 53, 355, 356, 357, 358, and 359) and one aboveground potable water tank (Structure 96A) cover approximately two percent of the parcel. The remainder of the parcel (approximately 98 percent) is open space. In general, the parcel area is presently in use for munitions storage including Group B and Group D chemical ammunition. Utilities located within and immediately surrounding Parcel 12 include underground sanitary sewer, storm sewer, water, and electrical lines. Sewer lines are shown on Figure 6-12-1.

An Installation Restoration (IR) Program site (IR Site 20, the Oakland Estuary) borders Parcel 12 to the north. Another site (IR Site 14, Fire Training Area) is partially located in the northeast corner of Parcel 12. Previous investigations have been conducted at IR Site 14. Data and results are summarized in a 1992 report prepared by PRC Environmental Management, Inc. and Montgomery Watson (contract N62474-88-D-5086) entitled *Data Summary Report Phases 2B and 3.* Proposed investigations are available in a 1993 report prepared by PRC Environmental Management, Inc. and Montgomery Watson (contract N62474-88-D-5086) entitled *Follow-on Field Sampling Plan Remedial Investigation/Feasibility Study Phases 2B and 3.* Therefore, specific data regarding potential chemical occurrence on the parcel are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. According to EBS information, an informal assessment indicated that asbestos-containing materials may be present at Buildings 357, 358, and 359. Activities of potential environmental or industrial hygiene concern within the parcel open space and buildings are described in detail below.

Building 52

Building 52 was constructed in approximately 1941 and reportedly serves as a storage facility for small arms/pyrotechnics (Figure 6-12-1). This one-story building covers approximately 2,700 square feet and is in fair condition. The walls and floor of Building 52 are constructed of concrete, while the roof is constructed of metal. Because it stores live ammunition, this building could not be inspected.

Building 53

Building 53 was constructed in approximately 1941 and reportedly served as an inert materials storehouse (Figure 6-12-1). This one-story building covers approximately 1,600 square feet and is generally in fair condition. The walls and floor of Building 53 are constructed of concrete, while the roof is constructed of metal. Specific information was not available on the activities in the building. Because it stores live ammunition, this building could not be inspected.

Building 355

Building 355 was constructed in approximately 1941 and serves as a storage bunker for small arms/pyrotechnics (Figure 6-12-1). This one-story building covers approximately 200 square feet and is in fair condition. Building 355 is constructed of concrete and has a roof covered with soil and grass. Because it stores live ammunition, this building could not be inspected.

Building 356

Building 356 was constructed in approximately 1941 and serves as a storage bunker for high explosives (Figure 6-12-1). This one-story building covers approximately 200 square feet and is in fair condition. Building 356 is constructed of concrete and has a roof covered with soil and grass. Because it stores live ammunition, this building could not be inspected.

Building 357

Building 357 was constructed in approximately 1941 and serves as a storage bunker for small arms/pyrotechnics (Figure 6-12-1). This one-story building covers approximately 200 square feet and is in fair condition. Building 357 is constructed of concrete and has a roof

covered with soil and grass. Because it stores live ammunition, this building could not be inspected.

Building 358

Building 358 was constructed in approximately 1941 and serves as a storage bunker for fuses and detonators (Figure 6-12-1). This one-story building covers approximately 200 square feet and is in fair condition. Building 358 is constructed of concrete and has a roof covered with soil and grass. Because it stores live ammunition, this building could not be inspected.

Building 359

Building 359 was constructed in approximately 1941 and serves as a storage bunker for high explosives (Figure 6-12-1). This one-story building covers approximately 200 square feet and is in fair condition. Building 359 is constructed of concrete and has a roof covered with soil and grass. Because it stores live ammunition, this building could not be inspected.

Open Space

Open space covers approximately 90 percent of Parcel 12. Historically, the open space was used for aircraft storage. The ground surface of the open space is mostly bare soil, gravel, and grass with some asphalt pavement around Building 52 for parking. The asphalt is in poor condition.

An automobile impoundment area is located in the north portion of the parcel and contains small scattered oil stains. Parked aircraft were observed in the northwestern portion of the parcel in 1947 and 1958 aerial photographs. Staining appears to exist around the aircraft in the 1947 aerial photograph.

Structure 96A, an aboveground potable water storage tank, is located in the northeastern potion of the parcel. This tank is constructed of cinder block-like material and has a capacity of 125,000 gallons. No concerns associated with this structure were noted during the site inspection. One abandoned aboveground storage tank was observed in the northeastern portion of the open space. This tank stores diesel and has an approximate capacity of 5,000 gallons. No secondary containment system was in place for this tank. No staining was noted on the soil near this tank.

The IR contractor has proposed CPT/HydroPunch sampling in the northern and southern portions of Parcel 12 as part of the investigation at IR Site 1 (1942-1956 Disposal Area) and the runways.

Fire Training Area (IR Site 14)

The Fire Training Area (FTA) consists of a concrete pad surrounded by an earthen berm on three sides. The FTA straddles the Parcel 12/Parcel 14 boundary adjacent to the Oakland Estuary in the northeast corner of Parcel 12. The area was used for fire fighting simulations from approximately 1973 to 1987. In training exercises waste fuels from plane defueling were ignited and then extinguished with fire fighting foam to simulate plane crashes. A sump in the northeast corner of the FTA pad apparently collected runoff from fire training activities. The construction dates of the concrete pad and sump are unknown. The area is currently used for fire department rescue training using "jaws of life" and other rescue equipment on automobiles.

Previous investigations at the FTA have consisted of soil vapor sampling (44 samples), surface soil sampling (3 samples), subsurface soil sampling (9 samples), and groundwater sampling from three monitoring wells. Compounds detected at elevated levels in soil and/or groundwater in and around the FTA have included TPH, VOCs (especially BTEX), SVOCs, pesticides, PCBs, metals, and dioxins and furans. Pesticides, PCBs, SVOCs, VOCs, and dioxins and furans were detected in soil at concentrations below residential PRGs. TPH concentrations ranged between 661 and 2070 mg/kg in surface soils. Arsenic and beryllium were detected in soil above USEPA residential PRGs; chromium was detected in soil above Cal-modified PRGs. Antimony, arsenic, beryllium, and manganese were detected in groundwater above USEPA MCLs. Oil and grease was detected in monitoring well M14-01 at a concentration of 0.3 mg/L.

Additional sampling proposed by the IR contractor is shown on Figure 6-12-1. Proposed sampling includes: subsurface soil sampling from 11 soil borings on the FTA concrete pad and berm, CPT/HydroPunch testing in three locations near previously installed monitoring wells, sampling of FTA sump contents, and collection of nine surface soil samples around the perimeter of the FTA berm.

Underground Storage Tanks

One inactive underground storage tank (Tank FS-357) is located in the northeastern portion of Parcel 12. Tank FS-357 is used to store diesel

and has a capacity of 1,000 gallons. A 1988 ERM investigation sampled the contents of this tank and collected one soil sample near Tank FS-357. Sampling of the tank contents revealed TPH-gasoline, benzene, toluene, and lead (in liquid and solid phases). The soil sample contained TPH-gasoline, benzene, and toluene at concentrations of 31 ppm, 0.08 ppm, and 0.1 ppm, respectively. A strong hydrocarbon odor was noted during the sampling. Tank FS-357 is inactive and is scheduled to be removed under the UST Program.

Parcel Boundary Conditions

Parcel 12 is bounded by Parcels 14, 13, and 3 to the east, Parcel 23 to the south, Parcels 9, 10, and 11 to the northwest, and the Oakland Estuary to the north. The IR Site 14 boundary was discussed above. A RCRA site (GAP 11) is located in the western portion of Parcel 3. The southeastern corner of Parcel 11 contains a former battery charging area. The other remaining parcels are not likely to affect boundary areas of Parcel 12.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 12, consistent with the objectives described in Section 1 of the Shell Workplan. Since this parcel contains part of IR site 14, it can be reclassified as BRAC Category 6. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents the parcel from being reclassified from BRAC Category 6 to another BRAC category. The data gaps shown in Table 6-12-1 must be addressed before the parcel can be reclassified from BRAC Category 6 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in the parcel buildings. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

TABLE 6-12-2

Summary of Data Gaps
NAS Alameda Parcel 12

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 14 (Fire Training Area) is located in the northeastern portion of Parcel 12. Additional subsurface investigation relative to IR Site 14 is proposed by the IR contractor. • IR Site 20 (Oakland Estuary) borders Parcel 12 to the north. It is unlikely that IR Site 20 has impacted Parcel 12.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas on Parcel 12.
Potential Parcel-Specific Release Areas	• Historical Aircraft Parking Area. • Bunker Areas.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-12-2

Summary of Data Gaps
NAS Alameda Parcel 12

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One UST (Tank FS-357) currently exists at Parcel 12 and is scheduled to be removed.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Based on historical aerial photographs, Parcel 12 has been at least partially unpaved since approximately 1947. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 2.

Once the data gaps in Table 6-12-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 12 may be reclassified from BRAC Category 6, leased or transferred.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the two parcel-specific target areas and provides an overview of the zone-wide target area. Four zone-wide target area samples are located on this parcel. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 2. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-12-2.

- Target Area 1 (Historical Aircraft Parking Area): Historical storage of aircraft in this area may have resulted in impacts to parcel soils from petroleum hydrocarbons. This target area covers approximately 70,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 1 are listed in Table 6-12-1.

- Target Area 2 (Bunker Area): The soils and gravel adjacent to the building entrances in the bunker area (central and eastern portion of the parcel) may have been impacted by metals from munitions handled at these locations. This target area covers approximately 65,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 2 are listed in Table 6-12-1.

- Zone 2 Target Area 1 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the open space of Zone 2 has been unpaved since at least 1947. Zone 2 Target Area 1 includes currently/formerly unpaved areas within the Northwest Ordnance Storage Zone. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. Four surface soil samples for pesticides will be collected from the locations shown on Figure 6-12-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z2-1 and shown on Figure 6-Z2-1.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, underground lines, radiological issues, the IR sites, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling is the screening-level technique that will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-12-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 12. Twelve parcel-specific and four zone-wide surface soil samples will be collected from the locations shown on Figure 6-12-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

No screening-level investigation will be performed at the Fire Training Area. Previous and proposed IR investigations will provide data that will exceed the requirements of this parcel evaluation program in this area of the parcel.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-13

PARCEL 13 EVALUATION PLAN

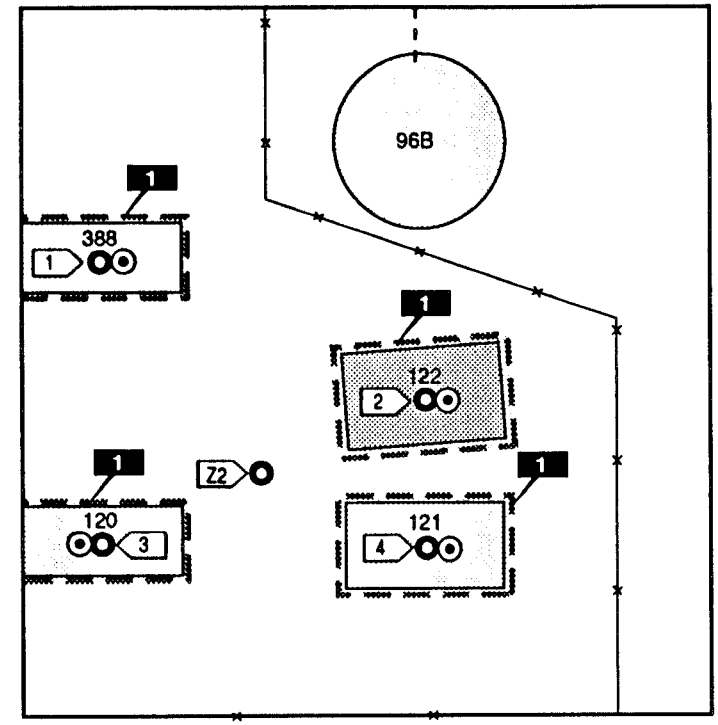
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 13 at NAS Alameda (Figure 6-13-1). The parcel, which is located in the northern portion of the base, is 1.2 acres in size and is square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and one parcel-specific target investigation areas (target areas) have been identified on this parcel. One zone-wide target area sample is located on this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-13-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 13, historical activities are discussed below.

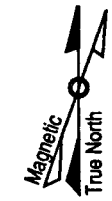
Background and Historical Activities

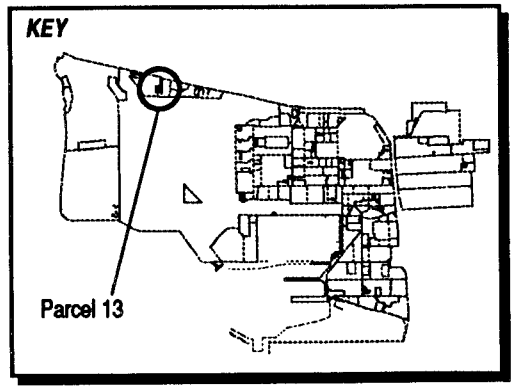
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 13, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Parcel 13 has been grouped into a zone with Parcels 3, 8, and 12. This parcel zone has been designated the Northwestern Ordnance Storage Zone (Zone 2). The zone encompasses the parcels that have historically been used for storage and/or repair of small arms, ordnance, and munitions. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the







LEGEND

- Target Area 1
- Storm Sewer Line
- Surface Soil Sample Location
- Soil Vapor Sample Location

1"= 60'

Figure 6-13-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.00 11/DS/07.06.94

TABLE 6-13-1

Summary of Recommended Samples
NAS Alameda Parcel 13

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
13-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, lead	TPH, Metals	Test Kit, XRF
13-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
13-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, lead	TPH, Metals	Test Kit, XRF
13-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
13-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, lead	TPH, Metals	Test Kit, XRF
13-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, lead	TPH, Metals	Modified EPA 8015, CLP RAS
13-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
13-3-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	Solvents	VOCs	CLP RAS
13-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, lead	TPH, Metals	Test Kit, XRF
13-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
Z2-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 02 Target Area 1	DDT, PCBs	Pesticides	CLP RAS

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 2.

Filling associated with the railroad tracks and the ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 13) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 388, 120, 121, and 122) and one aboveground storage tank (Structure 96B) cover 20 percent of the parcel. The remaining 80 percent is open space. The buildings on Parcel 13 were historically used for ordnance storage. Utilities located within or immediately surrounding this parcel include underground electrical, water, and storm sewer lines. The storm sewer lines present on this parcel are shown on Figure 6-13-1.

Parcel 13 is located approximately 200 feet south of an Installation Restoration (IR) Program site (IR Site 14, Fire Training Area). No previous investigations have been conducted at Parcel 13 and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 388

Building 388 was constructed in approximately 1950 and has been used as a storage facility for explosives and flammable materials, including paint, solvents, and oil (Figure 6-13-1). Currently the building is used to store Naval Investigation Services (NIS) evidence for trial. Building 388 is a Quonset hut constructed of corrugated metal with a gravel floor. The building covers approximately 760 square feet and is in fair condition.

Concerns associated with this building include leakage and spillage of chemicals stored in the building and scattered stains on the gravel floor. No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. Specific information was not available on historical hazardous materials use or handling in the building.

Building 120

Building 120 was constructed in approximately 1944 and has been used for ordnance storage. Currently the building is used to store ammunition and related equipment. Building 120 is a Quonset hut constructed of corrugated metal with a gravel and bare soil floor. The building covers approximately 1,280 square feet and is in fair condition.

Scattered stains were noted on the floor of the building during the site inspection. No hazardous materials or wastes were observed to be stored in or around the building during the site inspection. Specific information was not available on historical hazardous materials use or handling in the building.

Building 121

Building 121 was constructed in approximately 1944 and has been used for ordnance storage. Currently the building is used to store bomb fins. Building 121 is a Quonset hut constructed of corrugated metal with a gravel and bare soil floor. The building covers approximately 1,280 square feet and is in fair condition.

Scattered stains were noted on the floor of the building during the site inspection. No hazardous materials or wastes were observed to be stored in or around the building during the site inspection. Specific information was not available on historical hazardous materials use or handling in the building.

Building 122

Building 122 was constructed in approximately 1944 and has been used for ordnance storage. Currently the building is used to store bomb fins. Building 122 is a Quonset hut constructed of corrugated metal with a gravel and bare soil floor. The building covers approximately 1,280 square feet and is in fair condition.

Scattered stains were noted on the floor of the building during the site inspection. No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. Specific information was not available on historical hazardous materials use or handling in the building.

Structure 96B

Structure 96B is a concrete water storage tank. This tank covers approximately 5,000 square feet and has a capacity of 125,000 gallons. No concerns associated with this structure were noted during the site inspection.

Open Space

Open space covers approximately 80 percent of Parcel 13. The ground surface of the open space consists mostly of gravel and bare soil.

Building 389 was formerly located in this open space. The building was constructed in 1987 and was utilized as a line maintenance shelter. Building 389 covered approximately 800 square feet.

An area of stained soil (approximately 5 feet by 10 feet) was observed at the south end of Parcel 13 during the site inspection. Additional concerns in the open space include the potential impacts from the activities associated with the buildings described in the previous sections.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 13 is bounded by Parcels 3, 12, 14, and 15 to the south, west, north, and east, respectively. IR Site 14, the Fire Training Area, is located approximately 200 feet north of Parcel 13 on Parcels 13 and 14. Impacted soils have been identified in this area; however, migration of compounds of concern onto Parcel 13 is not probable. The IR contractor has proposed installation of a monitoring well on Parcel 13 near the east end of Buildings 121 and 122 as part of the ongoing investigation at IR Site 1 (Parcel 1) and IR Site 2 (Parcel 2).

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 13, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-13-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, a separate investigation is currently underway to address the Radiological Compounds data gap at this parcel. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is recommended for Parcel 13 because no industrial buildings are present.

As noted earlier, Parcel 13 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 2.

Once the data gaps in Table 6-13-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 13 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the parcel-specific target area and provides an overview of the zone-wide target area. One zone-wide target area sample is located on this parcel. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 2. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual

TABLE 6-13-2

Summary of Data Gaps
NAS Alameda Parcel 13

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 13.
Installation Restoration (IR) Sites	• IR Site 14 (Fire Training Area) is located approximately 200 feet north of Parcel 13. Additional subsurface investigation relative to IR Site 14 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the unpaved areas on Parcel 13.
Potential Parcel-Specific Release Areas	• TPH and metals may have impacted the floors of Buildings 388, 120, 121, and 122.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, electrical, and water lines identified.

TABLE 6-13-2

Summary of Data Gaps
NAS Alameda Parcel 13

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-13-2

- Target Area 1 (Buildings 388, 120, 121, and 122): Based on staining observed during the site inspection, the floors of these buildings may have been impacted by releases of solvents, TPH, and metals stored or handled in the buildings. This target area covers approximately 4,600 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in Target Area 1 are listed in Table 6-13-1.

- Zone 2 Target Area 1 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the open space of Zone 2 has been unpaved since at least 1947. Zone 2 Target Area 1 includes all currently/formerly unpaved areas within the Northwest Ordnance Storage Zone. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having a potential likelihood of impacts. One surface soil sample for pesticides will be collected from the location shown on Figure 6-13-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z2-1 and shown on Figure 6-Z2-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the nearby IR sites must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-13-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 13. One zone-wide and four parcel-specific surface soil samples and four parcel-specific soil vapor samples will be collected from the sampling locations shown on Figure 6-13-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The sample locations shown on Figure 6-13-1 are approximate. Samples should be collected from soil areas that are visibly stained.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z3

ZONE 3 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 3 at NAS Alameda (Figure 6-Z3-1). Zone 3 has been designated the Northwestern Construction and Maintenance Zone. The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. Zone 3 is comprised of Parcels 4, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, and 22. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and 24 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil, soil vapor, subsurface GeoProbe soil, and HydroPunch sampling. Table 6-Z3-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z3-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 3, historical activities are discussed below.

Zone 3 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 3 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-2.3-1
Summary of Recommended Samples
NAS Alameda Zone Z3

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-1-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-2-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-3-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-3-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-4-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-5-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-6-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-7-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-7-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-8-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-8-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-9-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-10-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

TABLE 6-Z3-1
Summary of Recommended Samples
NAS Alameda Zone Z3

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-11-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-15-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-16-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-17-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-18-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-19-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-20-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-22-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

TABLE 6-2.. 1
Summary of Recommended Samples
NAS Alameda Zone Z3

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-23-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-24-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-25-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-26-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 3, the Northwestern Construction and Maintenance Zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the Parcel Evaluation Plans (PEPs) for individual parcels.

Filling began in the area covered by this zone in the early 1900's. Prior to this time, the zone area was completely inundated by San Francisco Bay. The northern area that was initially filled contained railroad tracks that were used to access a ferry terminal to the west of Zone 3. The remaining zone area was filled between 1916 and 1939. The area within the zone boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, 37 buildings and seven structures cover approximately 85 percent of the zone. The remaining 15 percent is open space. Six buildings were formerly located on the parcel and have since been demolished. The zone area is presently in use as shops or storage areas associated with construction, maintenance, and fire training..

Zone 3 contains two Installation Restoration (IR) Program sites: IR Site 14, (the Fire Training Area located on Parcel 14) and IR Site 15 (located on Parcel 22). IR site 20 (the Oakland Estuary) borders Zone 3 to the north. Previous investigations have been conducted at Zone 3 and specific data regarding potential chemical occurrence are available. Specifically, previous investigations have been conducted at Parcel 14 and 22. Further subsurface investigations related to the nearby IR sites have been proposed within and immediately surrounding Zone 3. Details of previous and proposed investigation activities are described in the corresponding PEPs.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 3 will be addressed in other sampling programs and are not considered in this ZAP. Industrial hygiene may potentially be a concern in Buildings 26, 420, 594, 52, 53, 355, 356, 357, 358, and 359. Historical aerial photographs indicate that the open space of Zone 3 has been at least partially unpaved since 1947. Pesticides, which may have been used to suppress vegetation in the unpaved areas, may have impacted the soil in this zone.

Underground Storage Tanks

Three underground storage tanks (Tanks 374A, 374B, and Tank 473-1) are present at this zone. Tanks 374A and 374B are located on Parcel 16, while Tank 473-1 is located on Parcel 19.

Tanks 374A and 374B store JP aviation fuel and have a capacity of 500,000 gallons each. These tanks are currently active. The capacity of these tanks is unknown. No UST investigations have been conducted for these tanks, and no information is available regarding the condition or tightness of these tanks.

Tank 473-1, located south of Building 473, stored diesel fuel and has a capacity of 250 gallons. This tank has been abandoned. A 1988 UST investigation was performed on Tank 473-1. Two soil borings were drilled and subsurface soil samples were collected. The UST investigation indicated the presence of BTEX compounds at low levels. Tank 473-1 was included in the RCRA Facility Assessment.

RCRA Sites

This zone contains five RCRA sites (AST 331-1 on Parcel 4, SWMU/GII-23 on Parcel 16, GII-7 on Parcel 17, SWMU/GAP 78 on Parcel 18, and Tank 473-1 on Parcel 19). These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, of the five RCRA sites at this zone, AST 331-1, SWMU/GII-23, GII-7, SWMU/GAP 78, and Tank 473-1, require further investigation. SWMU/GII-23, GII-7, SWMU/GAP 78, and Tank 473-1 are listed in the RCRA Part B Permit and must be investigated as part of the RCRA Facility Investigation (RFI). A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for GAP 11 is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 3 is bounded by Zones 1, 2, 4, and the Oakland Inner Harbor. Activities of concern include the former landfill and waste disposal area in Zone 1 (IR Site 1, 1943-1956 Disposal Site), IR Site 14 (Fire Training Area) in Zones 2 and 3, and the Oakland Inner Harbor (IR Site 20), which borders Parcel 12 to the north.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and 24 parcel-specific target areas. This subsection of the ZAP discusses specific zone-wide target areas and provides an overview of the specific parcel target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 3 Target Areas

- Zone 3 Target Area 1 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the open space of Zone 3 has been unpaved since at least 1947. Zone 3 Target Area 1 includes all landscaped and currently/formerly unpaved areas within the Northwestern Construction and Maintenance Zone. Landscaped and unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of landscaped and unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. Surface soil samples for pesticides will be collected from the 13 zone-wide locations shown on Figure 6-Z3-1. Samples to be collected in this target area are listed in Table 6-Z3-1.

Parcels 10, 14, 20, and 22 Target Areas

No parcel-specific target areas were identified on these parcels.

Parcel 4 Target Areas

Two parcel-specific target areas were identified for Parcel 4 as indicated below. Three surface soil samples will be collected from this parcel. Sample locations are shown on Figure 6-4-1.

- Target Area 1 (Southwest Corner of Building 331): Release of TPH from machinery formerly located on the southwest exterior of Building 33 is a concern in this area. Stained soil was noted during the site inspection. This target area is estimated to cover 200 square feet and has been classified as having a potential level of impacts. Samples to be collected in Target Area 1 are listed in Table 6-4-1.

- Target Area 2 (Former AST 331-1): Release of diesel fuel from former aboveground storage tank (AST 331-1) located on the southern exterior of Building 331 is a concern in this area. Stained soil was noted during the site inspection. This target area is estimated to cover less than 100 square feet and has been classified as having a potential level of impacts. Samples to be collected in Target Area 2 are listed in Table 6-4-1.

Parcel 9 Target Area

- Target Area 1, Open Space: The storage of aircraft in this area may have resulted in impacts to parcel soils from TPH. This target area covers approximately 21,000 square feet and has been classified as having a potential likelihood of impacts. Four surface soil samples will be collected from the locations shown on Figure 6-9-1.

Parcel 11 Target Areas

Two parcel-specific target areas were identified for Parcel 11 as indicated below. Five surface soil samples will be collected from this parcel. Sample locations are shown on Figure 6-11-1.

- Target Area 1, open space: The storage of aircraft may have resulted in impacts to parcel soils from petroleum hydrocarbons. This target area covers approximately 20,000 square feet and has been classified as having a potential likelihood of impacts.

- Target Area 2, Building 465: The soils beneath the former battery charging area may have been impacted by spills or leakage of chemicals from batteries, particularly lead and acid. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts.

Parcel 15 Target Areas

Five parcel-specific target areas were identified for Parcel 15 as indicated below. Nine surface soil samples will be collected from this parcel. Sample locations are shown on Figure 6-15-1.

- Target Area 1 (Building 179): The three areas of stained soils adjacent to Building 179 may have been impacted by releases of petroleum hydrocarbons, specifically fuel oil. This target area covers approximately 700 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 2 (Open Space Disposal Area): The mounds of soils in the former disposal area may contain TPH, SVOCs, PCBs, and metals. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 3 (Open Space Heavy Equipment Area): The areas of stained soil located near the heavy equipment on the north side of the parcel may have been impacted by releases of petroleum hydrocarbons. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 4 (Open Space Fenced Area): The stained soil located in the southwest corner of the fenced area may have been impacted by releases of petroleum hydrocarbons from vehicles such as heavy construction equipment. This target area covers approximately 1,500 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 5 (Open Space Storage Area): The soils beneath the area utilized for the storage of poles and railroad ties may have been impacted by SVOCs, specifically creosote constituents. This target area covers approximately 4,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-15-1.

Parcel 16 Target Areas

Two parcel-specific target areas were identified for Parcel 16 as indicated below. Six surface soil samples, seven GeoProbe samples, and four

HydroPunch samples will be collected from the locations shown on Figure 6-16-1.

- Target Area 1 (Building 375): The soils adjacent to Building 375 may have been impacted by releases of petroleum hydrocarbons from fuel transfer operations. This target area covers approximately 20,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-16-1.

- Target Area 2 (Aboveground Fuel Pipelines): The soils beneath or adjacent to the aboveground fuel pipelines may have been impacted by releases of petroleum hydrocarbons. Groundwater at the parcel may have also been impacted by fueling operations conducted at the site. This target area covers approximately 25,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-16-1.

Parcel 17 Target Areas

Four parcel-specific target areas were identified for Parcel 17 as indicated below. Eleven surface soil samples will be collected from the locations shown on Figure 6-17-1.

- Target Area 1 (Southwest corner of Building 528): The area at the southwest corner of Building 528 may have been impacted by leakage of petroleum products, solvents, and cleaners used in building operations. This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

- Target Area 2 (Building 597): The area around Building 597 may have been impacted by leakage of petroleum products, glues, and cleaners used in building operations. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

- Target Area 3 (Above Ground Diesel Storage Tank): The soils beneath the above ground diesel tank located on the west side of Building 528 may have been impacted by releases of fuel. This target area covers approximately 500 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

- Target Area 4 (Open Space): The soils in the vehicle and equipment parking area and hazardous waste storage area may have been impacted by releases of petroleum hydrocarbons. Significant staining from vehicle maintenance was noted during the site inspection This target area covers approximately 60,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

Parcel 18 Target Areas

Four parcel-specific target areas were identified for Parcel 18 as indicated below. Sixteen surface soil samples and three soil vapor samples will be collected from the locations shown on Figure 6-18-1.

- Target Area 1 (Aboveground Storage Tanks): The soil (beneath the pavement) under the aboveground diesel fuel storage tanks on the east and west ends of the Building 330 and the aboveground diesel fuel storage tanks on the north, east, south, and west sides of the Building 344/474, may have been impacted by spillage or leakage of diesel fuel from the tanks. Each of these target areas covers approximately 20 square feet and has suspect likelihood of subsurface impacts indicated by the presence of staining. Samples to be collected in these target areas are listed in Table 6-18-1.

- Target Area 2 (Perimeters of Buildings 343 and 330): Abrasive blasting residues in and around this building may contain elevated levels of metals from removed paint and metal scale incorporated during blasting operations. Used blasting media on surrounding pavement and/or soil will be sampled as if it were surface soil. The target area covers the entire perimeter of the building (6,000 square feet) and has suspect likelihood of impacts.

- Target Area 3, Buildings 476, 477, and 479: The area in and around Buildings 476, 477, and 479 may have been impacted by spills or leakage of VOCs in paint and solvents. Dioxins may have been released from the stack in the southeast corner of Building 477. This target area covers approximately 5,000 square feet and has suspect likelihood of impacts.

- Target Area 4 Open Space II: Based on staining observed in historical aerial photographs, the soil in this unpaved former staging area may have been impacted by releases of TPH from stored vehicles and equipment.

- Target Area 5, Perimeter of Building 604: Based on a site inspection conducted in December 1994, the soil in this area may have been impacted by spills of garnet sandblast grit.

- Target Area 6, Area north of Building 510: Based on a site inspection conducted in December 1994, the soil in this area may have been impacted by spills of garnet sandblast grit.

Parcel 19 Target Areas

Three parcel-specific target areas were identified for Parcel 19 as indicated below. Nine surface soil samples will be collected from the locations shown on Figure 6-19-1.

- Target Area 1 (Building 345): The areas adjacent to Building 345 may have been impacted by metals from welding and sandblasting activities. This target area covers approximately 4,500 square feet and has been classified as having a probable likelihood of impacts. Samples to be collected in this target area are listed in Table 6-19-1.

- Target Area 2 (Building 471): The soils adjacent to Building 471 may have been impacted by welding and sandblasting operations conducted in the building. This target area covers approximately 2,500 square feet and has been classified as having a probable likelihood of impacts. Samples to be collected in this target area are listed in Table 6-19-1.

- Target Area 3 (Building 473): The soils adjacent to Building 473 may have been impacted by releases of petroleum hydrocarbons or metals. This target area covers approximately 800 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-19-1.

Parcel 21 Target Area

- Target Area 1 (Open Space, Eastern Boundary): Soils along the eastern boundary of Parcel 21 may have been impacted by PCBs and lead from Parcel 22. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-21-1. Two surface soil samples will be collected from the locations shown on Figure 6-21-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), and HydroPunch groundwater sampling (SOPs 1 and 15).

Table 6-Z3-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. A total of 13 surface soil samples will be collected from the zone-wide locations shown on Figure 6-Z3-1. A total of 65 surface soil samples, three soil vapor samples, seven subsurface GeoProbe soil samples, and four HydroPunch groundwater samples will be collected from the parcel-specific locations shown on Figure 6-Z3-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-4

PARCEL 4 EVALUATION PLAN

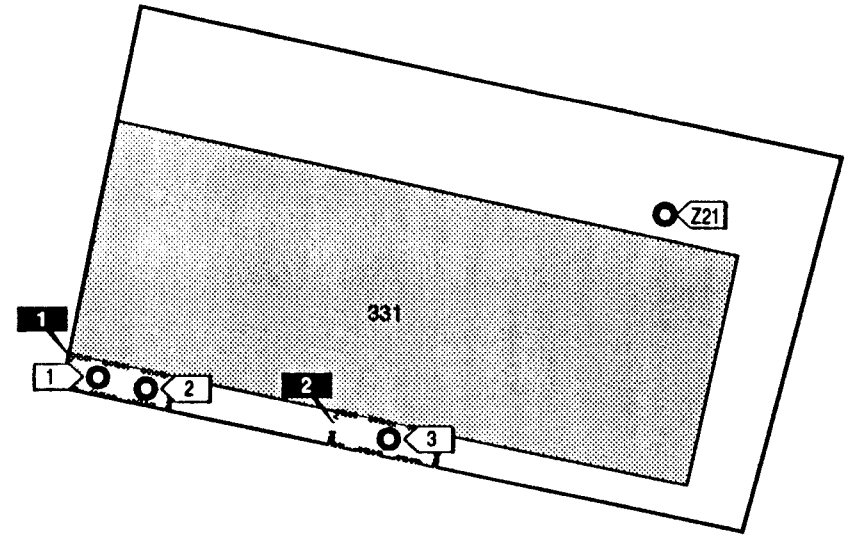
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 4 at NAS Alameda (Figure 6-4-1). The parcel, which is located north of the runway area, is approximately 9,000 square feet in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site, an aboveground diesel fuel tank, is present on the parcel. This site was identified during the RCRA Facility Assessment (RFA) as requiring a RCRA Facility Investigation (RFI). RFI sites requiring remediation will be remediated through the IR program or through the UST program. This parcel contains two parcel-specific target areas. In addition, this parcel is contained in one zone-wide target area. Surface soil sampling will be used to implement the screening-level investigation for this area. Table 6-4-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 4, historical activities are discussed below.

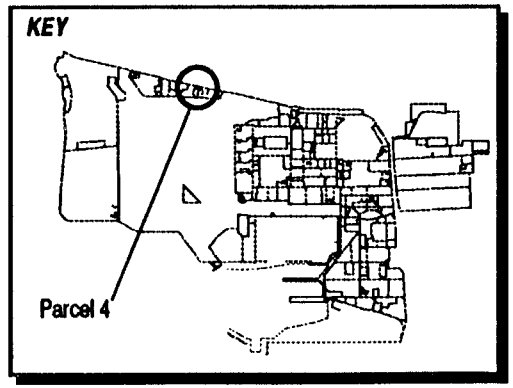
Background and Historical Activities

This subsection summarizes EBS information available for Parcel 4, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records, permits, and historical aerial photographs. This information was used to determine appropriate sampling to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have





LEGEND

Target Areas 1 & 2

Surface Soil Sample Location

Note: Parcel boundaries are approximate.

1" = 30'

Figure 6-4-1

Parcel Specific Sampling Locations

NAS Alameda, CA

ERM-West, Inc. 7'94

2121.90.12/DS/07.06.94

TABLE 6-4-1

Summary of Recommended Samples
NAS Alameda Parcel 4

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
4-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Test Kit, XRF
4-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Test Kit, XRF
4-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
4-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
Z3-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area, including the Parcel 4 area, began in the early 1900s. Prior to this time, the parcel area was inundated by San Francisco Bay. The parcel was completely filled as of 1915. Currently, one vacant building is present on the parcel. Sewer lines are not present on Parcel 4.

The north side of Parcel 4 borders the Oakland Estuary (IR Site 20). No previous investigations have been conducted at Parcel 4. Therefore, specific data regarding potential chemical occurrence on the parcel are not available.

Lead-based paint, radiological considerations, and industrial hygiene concerns are potentially of concern and are being addressed in separate programs. Activities of potential environmental concern within parcel open space and buildings are described in detail below.

Building 331

Building 331 was constructed in approximately 1948 and has been used as a Naval Air Rework Facility (NARF) woodworking shop with associated offices (Figure 6-4-1). The building was vacated in December 1993. Building 331 is a Quonset hut constructed of corrugated metal with a concrete floor. It covers approximately 5,900 square feet (two-thirds of the parcel). The interior of the building includes an equipment storage loft. The building is generally in fair to poor condition. During the site inspection, peeling paint was observed on the interior of the building and much sawdust was present on the floor and windowsills of the shop. Oil spills from the machines were documented during the site inspection. All equipment has been removed from the shop, but scattered oil stains remain, covering 10 to 15 percent of the building floor.

A spill is located on the southwest exterior of the building. A 500-gallon aboveground storage tank (AST) was located on the south exterioir of the building and was used to fuel a furnace. Diesel spills around the AST were noted during the site inspection. The AST has since been removed. Spills of garnet sandblast grit around the

perimeter of the building were revealed during site inspection on Decmeber 21, 1994. No hazardous materials or wastes storage was observed during site inspection. A previous chemical inventory reported that a total of 20 gallons of paint and non-halogenated organic compounds were formerly stored in the building.

Open Space

The parcel open space is located primarily on the north and east sides of Building 331. Bare soil and weeds cover most of the open space. Concerns associated with the areas on the south side of Building 331 are noted above. No other impacts were noted in the open space during the site inspection.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 4 is bordered by parcels 18, 19, and 20 and the Oakland Estuary to the west, south, east, and north, respectively. Environmental concerns associated with the Oakland Estuary (sediment contamination) are not likely to have impacted Parcel 4. Sandblasting shops on Parcels 18 and 19, and an electrical equipment repair shop on Parcel 20 may have impacted soil on Parcel 4 with metals and PCBs, respectively. Railroad tracks formerly paralleled the southern border of Parcel 4 on Parcel 19.

RCRA Sites

One RCRA unit (SWMU/unknown) has been identified on Parcel 4. This site is described in the Part B permit as a 500-gallon aboveground storage tank (AST 331-1) formerly located on the southern exterior of Building 331. This tank was owned by NADEP. The chemicals of concern associated with this site include diesel fuel. No documented releases of chemicals were identified for this site; however, staining was observed during a visual inspection. This tank has been removed; however, no ivestigative sampling has been performed. The sampling proposed for this site is described in the Target Areas and Compounds of Concern subsection

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 4, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-4-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. There are no USTs, fuel lines, or sewers located on this parcel. No Industrial Hygiene (IH) sampling is required for Parcel 4 because no buildings are present.

As noted earlier, Parcel 4 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped and unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 3.

Once the data gaps in Table 6-4-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 4 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-4-2

Summary of Data Gaps
NAS Alameda Parcel 4

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 4.
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located directly to the north side of Parcel 4. IR 20 is unlikely to have impacted Parcel 4. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas on Parcel 4.
Potential Parcel-Specific Release Areas	• Southwest Corner of Building 331. • Former AST 331-1.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-4-2

Summary of Data Gaps
NAS Alameda Parcel 4

Data Gap	Status/Description
Underground Utilities	• No evidence of underground utilities identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone with a zone-wide target area.

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-4-2.

- Target Area 1 (Southwest Corner of Building 331): Release of TPH from machinery formerly located on the southwest exterior of Building 33 is a concern in this area. Stained soil was noted during the site inspection. This target area is estimated to cover 200 square feet and has been classified as having a potential level of impacts. Samples to be collected in Target Area 1 are listed in Table 6-4-1.

- Target Area 2 (Former AST 331-1): Release of diesel fuel from former aboveground storage tank (AST 331-1) located on the southern exterior of Building 331 is a concern in this area. Stained soil was noted during the site inspection. This target area is estimated to cover less than 100 square feet and has been classified as having a potential level of impacts. Samples to be collected in Target Area 2 are listed in Table 6-4-1.

The following zone-wide target area was identified on Parcel 4 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. One of the twenty-six proposed zone-wide surface soil samples for pesticides and PCBs are located in Parcel 4. The samples were located on this parcel to ensure an appropriate

distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 4 are listed on Table 6-4-1.

Possible impacts from adjacent parcel sources, including the sandblasting shops, and electrical shop, will be addressed by investigations on the adjacent parcels.

Screening-Level Investigation

Surface soil sampling (SOP 3) will be employed to assess conditions in the target area and to identify whether further sampling in the follow-up detailed evaluation phase is necessary. Three parcel-specific surface soil samples and one zone-wide soil sample will be collected from the locations shown on Figure 6-4-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively. Surface soil sampling locations shown on Figure 6-4-1 are approximate. Samples should be collected from areas of darkest staining.

Detailed Evaluation Phase

The detailed evaluation phase, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern in the target areas identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-9

PARCEL 9 EVALUATION PLAN

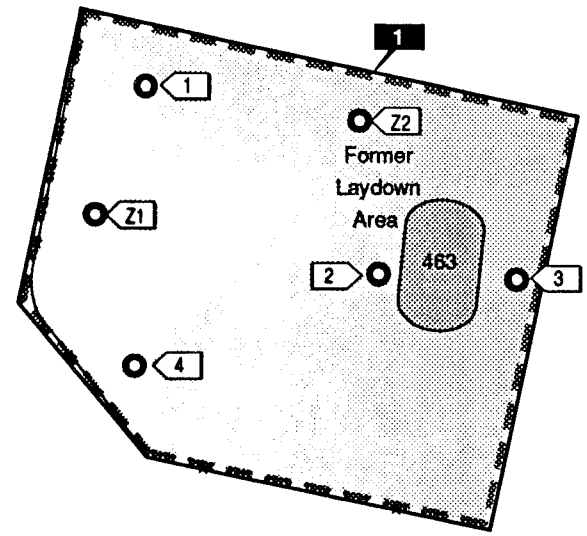
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 9 at NAS Alameda (Figure 6-9-1). The parcel, which is located in the northern portion of the base, is 0.5 acres in size and is approximately square. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. This parcel contains one parcel-specific target area. In addition, this parcel is contained in one zone-wide target area. Surface soil sampling will be used to implement the screening-level investigation in the target areas. Table 6-9-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 9, historical activities are discussed below.

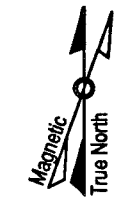
Background and Historical Activities

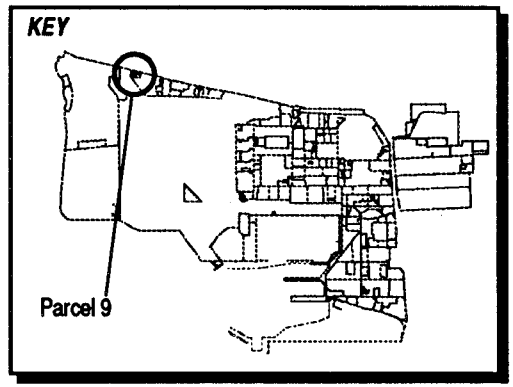
This subsection summarizes EBS information available for open spaces and boundaries of Parcel 9, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future







LEGEND

Target Area 1

Surface Soil Sample Location

Note: Parcel boundaries are approximate.

1" = 60'

Figure 6-9-1

Parcel Specific Sampling Locations

NAS Alameda, CA

ERM-West, Inc. 7'94

2121.9C.12/DS/07.06.94

TABLE 6-
Summary of Recommended Samples
NAS Alameda Parcel 9

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
9-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
9-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
9-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
9-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
9-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Modified EPA 8015
Z3-1-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-2-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 9) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The area within the parcel boundary was totally filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, no buildings are located on this parcel. The entire parcel is open space. Historically, the parcel area has been used for open storage of miscellaneous dry materials and storage of aircraft. There are no sewer lines located on this parcel.

Parcel 9 is located approximately 100 feet south of an Installation Restoration (IR) Program site, the Oakland Estuary (IR Site 20). No previous investigations have been conducted at Parcel 9 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel open space are described in detail below.

Former Laydown Area (Structure 463)

The former laydown area, Structure 463, was used for miscellaneous open storage of dry materials (Figure 6-9-1) and covers approximately 800 square feet. No hazardous materials or wastes were observed to be stored in and around the area during the site inspection. Specific information on historical hazardous materials use or handling in the area was not available.

Open Space

Parcel 9 open space is the area surrounding the former laydown area, extending to the parcel boundaries. The ground surface of the open space is mostly gravel and bare soil with some degraded pavement. Aerial photograph review indicated that this area has been unpaved since 1960.

This area was historically used for aircraft storage that may have resulted in impacts to parcel soils from aircraft fuel and oil. Railroad tracks historically crossed the northern part of the parcel parallel to the estuary approximately near the northern end of the former laydown area. Railroad ties have reportedly been uncovered in the vicinity of the parcel during past construction.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 9 is bounded by Parcels 10, 11, 12, and 23 to the north, east, south, and west, respectively. The Oakland Estuary borders Parcel 9 to the north. There are no activities of environmental concern associated with these parcels that are likely to affect boundary areas of Parcel 9.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 9, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-9-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. No underground lines or tanks have been identified at this parcel. No Industrial Hygiene (IH) sampling is required for Parcel 9 because no buildings are present.

As noted earlier, Parcel 9 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or

TABLE 6-9-2

Summary of Data Gaps
NAS Alameda Parcel 9

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 9.
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located adjacent to the north side of Parcel 9. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas (currently unpaved) on Parcel 9.
Potential Parcel-Specific Release Areas	• Target Area 1, Open Space: Releases of TPH.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-9-2

Summary of Data Gaps
NAS Alameda Parcel 9

Data Gap	Status/Description
Underground Utilities	• No evidence of underground utilities identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Railroad tracks formerly existed in this parcel.

distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped and unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 3.

Once the data gaps in Table 6-9-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 9 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. Two zone-wide target area samples proposed for this parcel.

This subsection of the PEP discusses the specific parcel target area. The discussion of the zone-wide target areas is provided in the Zone Analysis Plan for Zone 3. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

The following target area was identified on Parcel 9 based on possible impacts from activities described above involving potentially hazardous substances. Samples to be colled in this target area are listed in Table 6-9-1.

- Target Area 1, Open Space: The storage of aircraft in this area may have resulted in impacts to parcel soils from TPH. This target area covers approximately 21,000 square feet and has been classified as having a potential likelihood of impacts.

The following zone-wide target area was identified on Parcel 9 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Two of the twenty-six proposed zone-wide surface soil samples for pesticides and PCBs are located in Parcel 9. The samples were located on this parcel to ensure an appropriate

distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 9 are listed on Table 6-9-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) will be employed to assess conditions in the target area and to identify whether further sampling in the follow-up detailed evaluation phase is necessary. Four parcel-specific surface soil samples and two zone-wide surface soil samples will be collected from the locations shown on Figure 6-9-1. The surface soil sample locations shown on Figure 6-9-1 are approximate. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above on a higher density level as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-10

PARCEL 10 EVALUATION PLAN

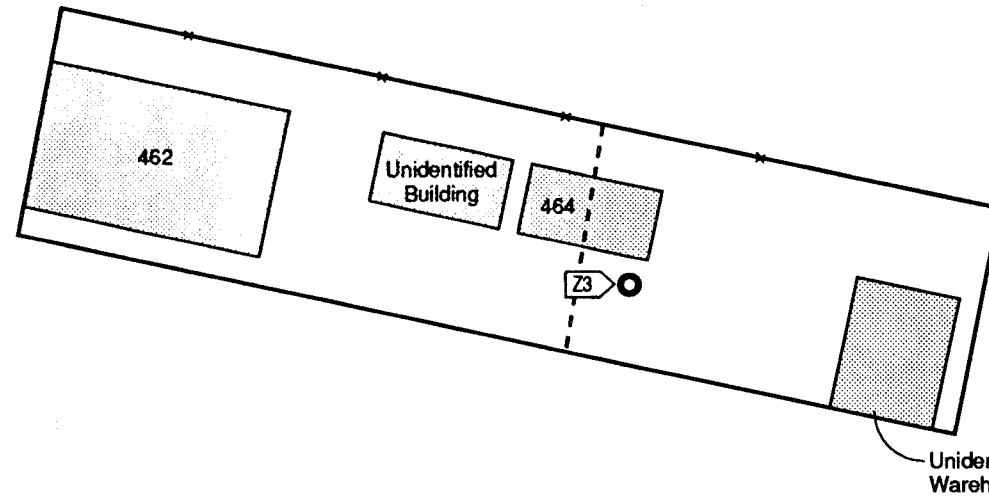
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 10 at NAS Alameda (Figure 6-10-1). The parcel, which is located in the northern portion of the base, is a half an acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. This parcel contains no parcel-specific target areas and is contained in one zone-wide target area. Surface soil sampling will be used to implement the screening-level investigation in the target areas. Table 6-10-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 10, historical activities are discussed below.

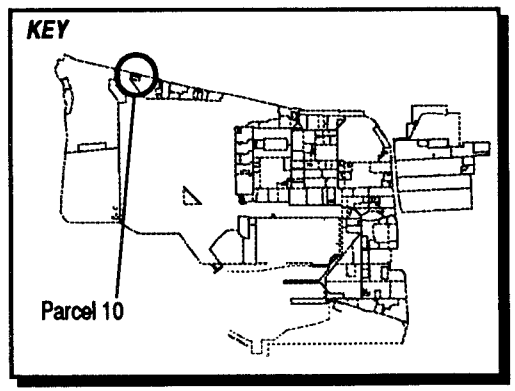
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 10, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 11, 14, 15, 16, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the





LEGEND

- Storm Sewer Line
- Surface Soil Sample Location

Note: Parcel boundaries are approximate.

1"= 60'

Magnetic
True North

Figure 6-10-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7/94
2121.90.11/DS/07.06.94

TABLE 6-1
Summary of Recommended Samples
NAS Alameda Parcel 10

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-3-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-3-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 10) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The parcel was totally filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, four buildings (462, 464, an unidentified building, and an unidentified new warehouse building) cover 30 percent of the parcel. The remainder (70 percent) is open space. In general, both the buildings and open space on Parcel 10 are used for general storage. Historically, this area was used to store aircraft.

Parcel 10 is located adjacent to Installation Restoration (IR) Program Site 20, the Oakland Estuary. No previous investigations have been conducted at Parcel 10 and specific data regarding potential chemical occurrence are not available.

Storm sewer lines are present at this parcel and are shown on Figure 6-10-1. Other utilities present on the parcel include water and electrical lines.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 462

Building 462 was constructed in approximately 1962 as a general warehouse (Figure 6-10-1). Currently, the building is used to store tents, cases, and sleeping bags. Building 462 is a one story building constructed of metal. The building is generally in fair condition and covers approximately 3,700 square feet.

Hazardous materials and wastes were not observed in or around the building during the site inspection and historical information concerning hazardous materials use or handling was not available.

Building 464

Building 464 was constructed in approximately 1962 and has been used as a general storage shed. Currently, the building is used to store carbon dioxide fire extinguishers and associated fire-fighting equipment. Building 464 is a one story building constructed of metal. The building is generally in fair condition and covers approximately 1,000 square feet.

Hazardous materials and wastes were not observed in or around the building during the site inspection and historical information concerning hazardous materials use or handling was not available.

Unidentified New Warehouse Building

The date of construction of this building is not known. The building appears to have been constructed within the last five years and is located partially on Parcel 11 and partially on Parcel 10. The building is currently used for helmet storage. The building is constructed of metal with a concrete floor and is in good condition. It covers a total of approximately 2,000 square feet with approximately 50 percent located on Parcel 10.

No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. Specific information was not available on historical hazardous materials use or handling in the building.

Unidentified Building

The date of construction of this building is not known. The building appears to have been constructed within the last five years and is located west of Building 464. The current and former use of the building is not known. The building is constructed of metal with a concrete floor. The building is in good condition and covers approximately 1,000 square feet.

No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. Specific information was not available on historical hazardous materials use or handling in the building.

Open Space

Open space occupies approximately 70 percent of the total parcel space (approximately 23,000 square feet). Parcel 10 open space is defined as the area surrounding the parcel buildings and extending to the parcel boundaries. Historically, this area was used for aircraft parking that may have resulted in impacts to parcel soils from aircraft fuel and oil, and possibly metals. Two storage sheds are located in the open space east of Building 462. There is no evidence of chemical use or storage in these sheds. Currently, only brooms and mops are stored in these sheds. The open space occupies approximately 70 percent of the total parcel space (approximately 23,000 square feet). The ground surface of the open space is mostly gravel and bare soil.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 10 is bounded by Parcels 9, 11, 12, and 23 to the south, south, east, and west, respectively. There are no activities of environmental concern associated with the boundaries of these parcels that are likely to affect boundary areas of Parcel 10. IR Site 20, the Oakland Estuary, borders the parcel to the north. Impacted sediments have been identified in this area; however, migration of compounds of concern onto Parcel 10 is not likely.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 10, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-10-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns

TABLE 6-10-1

Summary of Data Gaps
NAS Alameda Parcel 10

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 10.
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located adjacent to the north side of Parcel 10. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas on Parcel 10.
Potential Parcel-Specific Release Areas	• There are no parcel specific release areas.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer lines identified.
- Fuel lines	• No underground or aboveground fuel lines identified.

TABLE 6-10-1

Summary of Data Gaps
NAS Alameda Parcel 10

Data Gap	Status/Description
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Former railroad tracks.

and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 10 because no buildings are present.

As noted earlier, Parcel 10 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped and unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 3

Once the data gaps in Table 6-10-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 10 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains no parcel-specific target areas. One zone-wide target area sample is proposed for this parcel.

The following zone-wide target area was identified on Parcel 10 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. One of the twenty-six proposed zone-wide surface soil samples for pesticides and PCBs is located in Parcel 10. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. The sample that is located on Parcel 10 is listed on Table 6-10-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening level sampling method that will be employed to assess conditions in the target area. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-11

PARCEL 11 EVALUATION PLAN

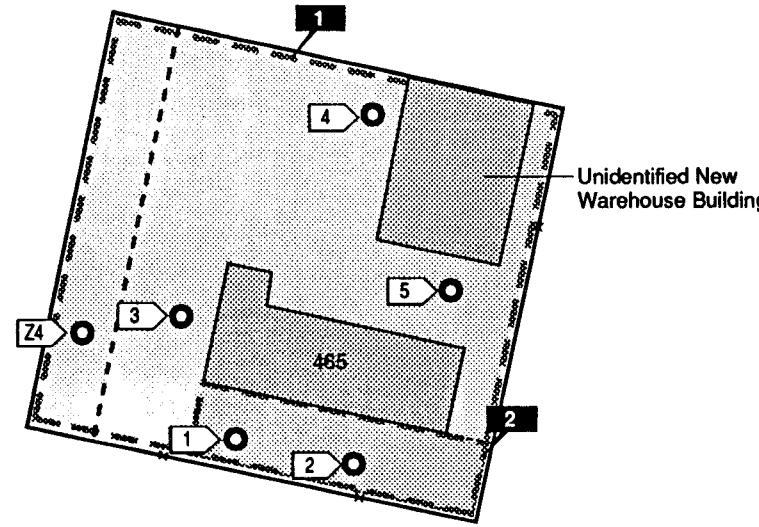
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 11 at NAS Alameda (Figure 6-11-1). The parcel, which is located in the northern portion of the base, is 0.5 acres in size and is square. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. This parcel contains two parcel-specific target areas. In addition, one zone-wide target area encompasses this parcel. One zone-wide target area sample is located on this parcel. Surface soil sampling will be conducted to accomplish the screening-level investigation of this area. Table 6-11-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 11, historical activities are discussed below.

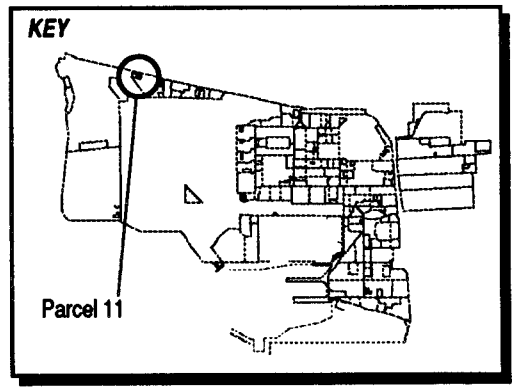
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 11, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 14, 15, 16, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling,





LEGEND

- Target Area 1-2
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location

Note: Parcel boundaries are approximate.

1"= 60'

Figure 6-11-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.12/DS/07.06.94

TABLE 6-11-1

Summary of Recommended Samples
NAS Alameda Parcel 11

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
11-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
11-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
11-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	CLP RAS
11-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
11-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
11-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
11-5-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Modified EPA 8015
Z3-4-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 11) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The parcel was totally filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, two buildings (465 and an unidentified warehouse building) cover 15 percent of the parcel. The remainder (85 percent) is open space. Both the building and open space on Parcel 11 are used for general storage. Historically, this area was used to store aircraft. Sewer lines are present on this parcel and are shown on Figure 6-11-1.

Parcel 11 is located approximately 100 feet south of an Installation Restoration (IR) Program site, The Oakland Estuary (IR Site 20). No previous investigations have been conducted at Parcel 11 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 465

Building 465 was constructed in approximately 1962 and has been used as a general storage shed (Figure 6-11-1). A former battery charging area was located along the south side of the building. Building 465 is a one story building constructed of wood with a metal roof. The building is generally in fair condition and covers approximately 2,000 square feet.

Hazardous materials and wastes were not observed in or around the building during the site inspection and historical information concerning hazardous materials use or handling was not available.

Unidentified New Warehouse Building

The date of construction of this building is not known. The building appears to have been constructed within the last five years and is located partially on Parcel 11 and partially on Parcel 10. The building is currently used for dry storage (e.g., helmets). The building is constructed of metal with a concrete floor and is in good condition. It covers a total of approximately 2,000 square feet with 50 percent located on Parcel 11.

Hazardous materials and wastes were not observed in or around the building during the site inspection and historical information concerning hazardous materials use or handling was not available.

Open Space

Parcel 11 open space is defined as the area surrounding Building 465 and the unidentified warehouse and extending to the parcel boundaries. This space occupies approximately 86 percent of the total parcel space (approximately 20,000 square feet). The ground surface of the open space is mostly gravel and bare soil.

Potential impacts to this area consist of activities already mentioned associated with the parcel buildings. In addition, the storage of aircraft may have resulted in impacts to parcel soils from fuel and oil. Railroad tracks historically crossed the northern part of the parcel parallel to the estuary approximately along the northern side of Building 465. Railroad ties have reportedly been uncovered in the vicinity of the parcel during past construction.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 11 is bounded by Parcels 9, 10, and 12 to the west, north, and southeast, respectively. There are no activities of environmental concern associated with the boundaries of these parcels that are likely to affect boundary areas of Parcel 11. IR Site 20, the Oakland Estuary is located approximately 100 yards north of Parcel 11. Impacted sediments

have been identified in this area; however, migration of compounds of concern onto Parcel 11 is not likely.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 11, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-11-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 11 because no buildings are present.

As noted earlier, Parcel 11 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 3.

Once the data gaps in Table 6-11-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 11 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone-wide target area.

TABLE 6-11-2

Summary of Data Gaps
NAS Alameda Parcel 11

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 11.
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located adjacent to the north side of Parcel 11. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas (currently unpaved) on Parcel 11.
Potential Parcel-Specific Release Areas	• Target Area 1, open space: Releases of petroleum hydrocarbons. • Target Area 2, Building 465: Releases of chemicals from batteries, particularly lead and acid.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-11-2

Summary of Data Gaps
NAS Alameda Parcel 11

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer lines identified
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Railroad tracks formerly existed in this parcel.

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-11-2. mples to be collected in this target area are in Table 6-11-1.

- Target Area 1, open space: The storage of aircraft may have resulted in impacts to parcel soils from petroleum hydrocarbons. This target area covers approximately 20,000 square feet and has been classified as having a potential likelihood of impacts.

- Target Area 2, Building 465: The soils beneath the former battery charging area may have been impacted by spills or leakage of chemicals from batteries, particularly lead and acid. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts.

The following zone-wide target area was identified on Parcel 11 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within the Northwestern Construction and Maintenance Zone. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Surface soil samples for pesticides will be collected from 13 zone-wide locations including edges of sidewalks, along building foundations, in open grass areas, and in unpaved areas. One of the twenty-six proposed zone-wide surface soil samples for pesticides is located in Parcel 11. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 11 are listed on Table 6-11-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) will be employed to assess conditions in the target areas and to identify whether further sampling in the follow-up detailed evaluation phase is necessary. Five parcel-specific and one zone-wide surface soil samples will be collected from the locations shown on Figure 6-11-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The surface soil sampling locations shown on Figure 6-11-1 are approximate. Samples should be collected from visibly stained soil areas, if appropriate. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-14

PARCEL 14 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 14 at NAS Alameda (Figure 6-14-1). The parcel, which is located in the north central portion of the base, is approximately 0.5 acres in size and is roughly rectangular. IR Site 14, the Fire Training Area, is located on the north end of the parcel, adjacent to the Oakland Estuary (IR Site 20). The IR site has been extensively investigated by the IR contractor, with further sampling proposed. The remainder of the parcel has been classified as requiring no sampling to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA units. No parcel-specific target areas were identified. In addition, one zone-wide target area encompasses this parcel. No zone-wide or parcel-specific target area samples are located on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical information on Parcel 14 is discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for Parcel 14, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records, and historical aerial photographs. This information was used to determine whether sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 15, 16, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling,

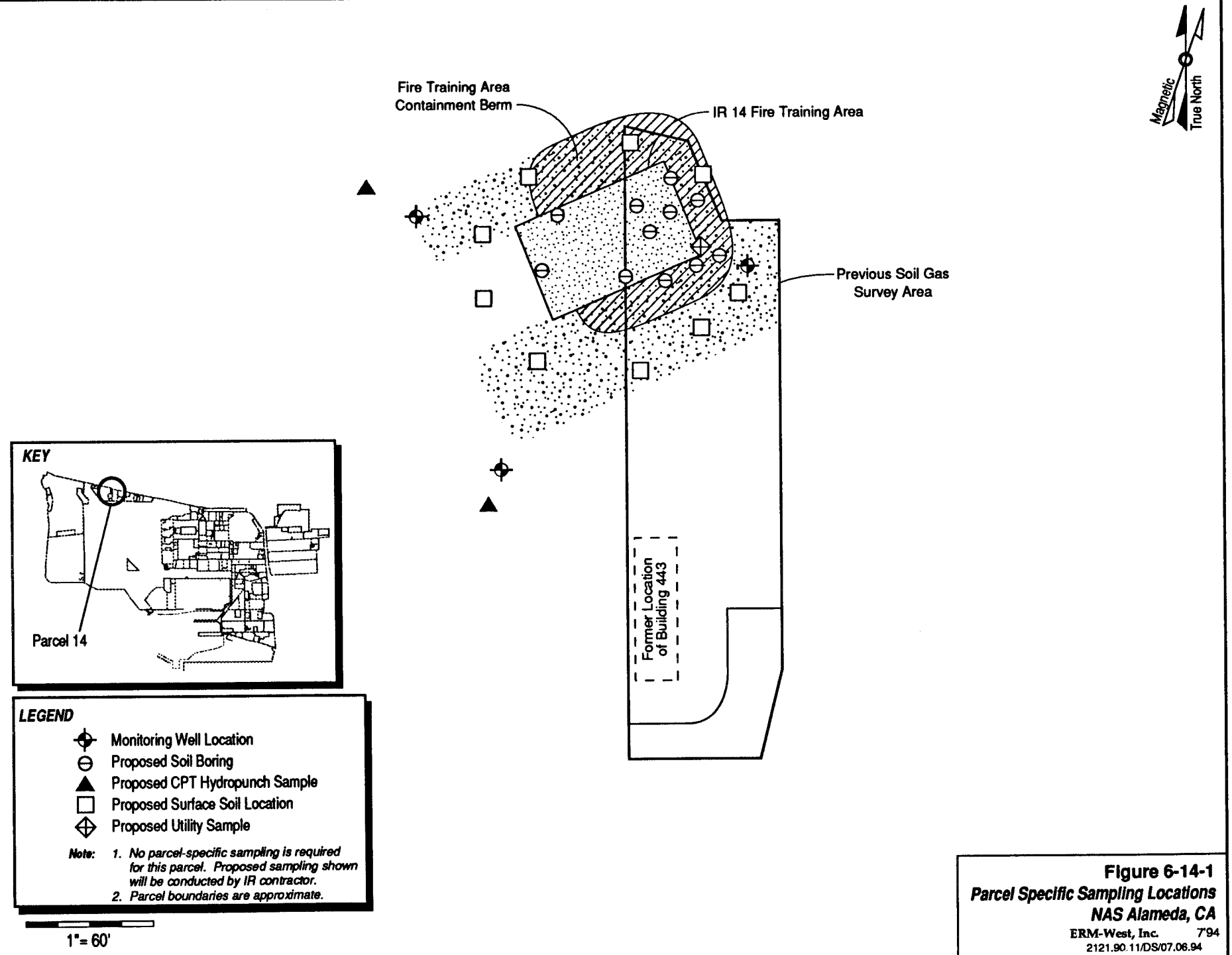


Figure 6-14-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.06.94

and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Railroad tracks, that have since been removed, crossed the center of the parcel parallel to the shoreline. Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 14) began in the early 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940. Currently, no buildings or underground lines exist on the parcel.

Parcel 14 is also located approximately 100 feet south of the Oakland Estuary (IR Site 20). No previous investigations regarding IR Site 20 have been conducted at Parcel 14. The north end of Parcel 14 contains part of an Installation Restoration (IR) Program site (IR Site 14 - the Fire Training Area). Previous investigations including monitoring well installation have occurred at this IR Site on Parcel 14. Data and results are summarized in a 1992 report prepared by PRC Environmental Management, Inc. and Montgomery Watson (contract N62474-88-D-5086) entitled *Data Summary Report Phases 2B and 3.* Proposed investigations are available in a 1993 report prepared by PRC Environmental Management, Inc. and Montgomery Watson (contract N62474-88-D-5086) entitled *Follow-on Field Sampling Plan Remedial Investigation/Feasibility Study Phases 2B and 3.* Therefore, specific data regarding potential chemical occurrence on the parcel are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below.

Open Space

The parcel open space is covered with gravel, soil, and debris. A small concrete building foundation (possibly former Building 143, Applied Instruction Building) is present on the parcel. Building 143 was constructed on the parcel in approximately 1958 and demolished in 1993. An old Navy fighter jet and associated debris are located on the

northern half of the parcel adjacent to the Fire Training Area. The plane may be used for fire department training activities.

Fire Training Area (IR Site 14)

The Fire Training Area (FTA) consists of a concrete pad surrounded by an earthen berm on three sides (the FTA is open to the southwest). The FTA straddles the Parcel 12/Parcel 14 boundary adjacent to the Oakland Estuary. The area was used for fire-fighting simulations from approximately 1973 to 1987. In training exercises, waste fuels from plane defueling were ignited and then extinguished with fire-fighting foam to simulate plane crashes. Excess fuel appears to have impacted area soil. A sump in the northeast corner of the FTA pad apparently collected runoff from fire training activities. The ages of the concrete pad and sump are unknown. The area is currently used for fire department rescue training using "jaws of life" and other rescue equipment on automobiles.

Previous investigations at the FTA have consisted of soil vapor sampling (44 samples), surface soil sampling (3 samples), subsurface soil sampling (9 samples), and groundwater sampling from three monitoring wells. Benzene was detected in concentrations of 50 to 150 µg/L in soil vapor samples taken at IR Site 14. Compounds detected at elevated levels in soil and/or groundwater in and around the FTA have included TPH, VOCs (especially BTEX), SVOCs, pesticides, PCBs, metals, and dioxins and furans. Pesticides, PCBs, SVOCs, VOCs, and dioxins and furans were detected in soil at concentrations below residential PRGs. TPH concentrations ranged between 661 and 2070 mg/kg in surface soils. Arsenic and beryllium were detected in soil above USEPA residential PRGs; chromium was detected in soil above Cal-modified PRGs. Antimony, arsenic, beryllium, and manganese were detected in groundwater above USEPA MCLs. Oil and grease was detected in monitoring well M14-01 at a concentration of 0.3 mg/L.

Additional sampling proposed by the IR contractor is shown on Figure 6-14-1. Proposed sampling includes: subsurface soil sampling from 11 soil borings on the FTA concrete pad and berm, CPT/Hydropunch testing in three locations near previously installed monitoring wells, sampling of FTA sump contents, and collection of nine surface soil samples around the perimeter of the FTA berm.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 14 is bordered by parcels 12, 13, and 15 and the Oakland Estuary to the west, south, east, and north, respectively. Environmental concerns associated with adjacent parcels and the Oakland Estuary (sediment contamination) are not likely to have impacted Parcel 14. It should be noted, however, that IR Site 14 has impacted adjacent Parcels 12 and possibly 15.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 14, consistent with the objectives described in Section 1 of the Shell Workplan. Since this parcel contains part of IR site 14, it can be reclassified as BRAC Category 6. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents the parcel from being reclassified from BRAC Category 6 to another BRAC category. The data gaps shown in Table 6-14-1 must be addressed before the parcel can be reclassified from BRAC Category 6 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. No Industrial Hygiene (IH) sampling is required for Parcel 14 because no buildings are present.

As noted earlier, Parcel 14 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped and unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 3.

TABLE 6-14-1

Summary of Data Gaps
NAS Alameda Parcel 14

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 14.
Installation Restoration (IR) Sites	• IR Site 14 (Fire Training Area) is located in Parcel 14. Additional subsurface investigation relative to IR Site 14 is proposed by the IR contractor. • IR Site 20 (The Oakland Estuary) is located adjacent to the north side of Parcel 14. Environmental concerns associated with the Oakland Estuary (sediment contamination) are not likely to have impacted Parcel 14. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas (currently paved).
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.

TABLE 6-14-1

Summary of Data Gaps
NAS Alameda Parcel 14

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• No evidence of underground utilities identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Railroad Tracks formerly existed in this parcel.

Once the data gaps in Table 6-14-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 14 may be reclassified from BRAC Category 6, leased or transferred.

Target Areas and Compounds of Concern

No parcel-specific target areas were identified on this parcel. Available information does not indicate that activities described above, other than those associated with the railroad tracks and the FTA, have impacted the parcel. Although this parcel is contained in a zone-wide target area, there are no zone-wide target area samples proposed for this parcel.

The following zone-wide target area was identified on Parcel 14 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. None of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 14.

In addition, concerns pertaining to radiological concerns and the IR site must be resolved before this parcel can be reclassified from BRAC Category 6.

Screening-Level Investigation

A screening-level investigation will not be performed on this parcel. Previous and proposed IR investigations will provide data that will exceed the requirements of this parcel evaluation program. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

Ongoing investigations of IR Site 14 may indicate additional impacts on Parcel 14. If this is the case, a detailed evaluation phase of sampling will be conducted on the parcel to more fully characterize parcel areas with elevated levels of compounds of concern identified during the other investigations. In this case, the boundaries of IR Site 14 would be extended to encompass the areas of Parcel 14. This characterization may utilize technologies including the following: chip sampling (SOP 18), soil vapor sampling (SOP 6), surface soil sampling (SOP 3), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-15

PARCEL 15 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 15 at NAS Alameda (Figure 6-15-1). The parcel, which is located in the northwestern portion of the base, is approximately 3.7 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Five parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation in these areas. Table 6-15-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 15, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available Parcel 15, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 16, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the

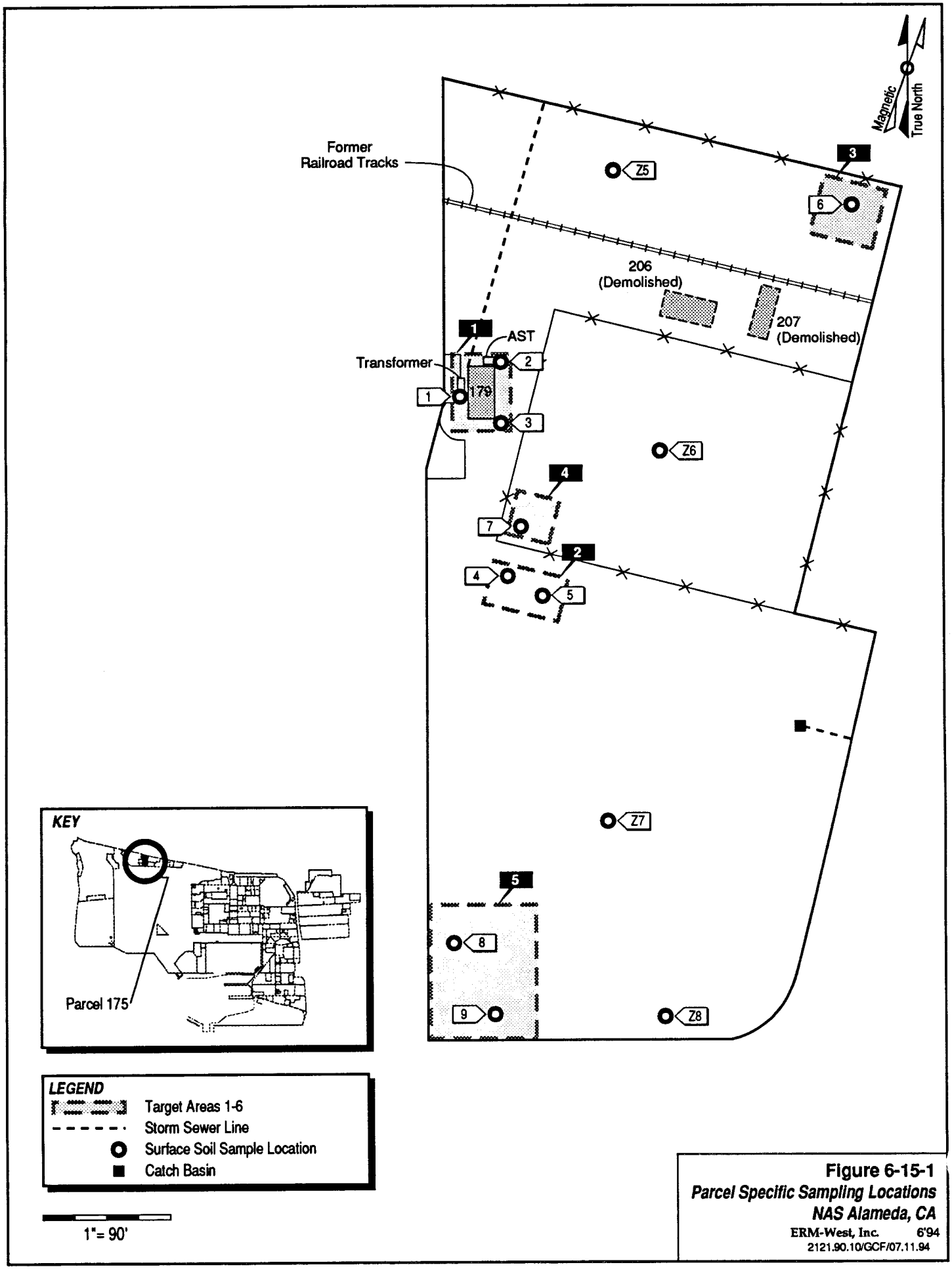


Figure 6-15-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-

Summary of Recommended Samples
NAS Alameda Parcel 15

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
15-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
15-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
15-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
15-3-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	CLP RAS
15-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
15-4-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	SVOCs	SVOCs	CLP RAS
15-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
15-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
15-5-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	SVOCs	SVOCs	CLP RAS
15-5-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
15-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Test Kit
15-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
15-7-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	CLP RAS
15-8-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	SVOCs	SVOCs	CLP RAS
15-8-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 5	SVOCs	SVOCs	CLP RAS
15-9-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	SVOCs	SVOCs	CLP RAS
15-9-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 5	SVOCs	SVOCs	CLP RAS
Z3-5-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-6-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-7-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

TABLE 6-15-1

Summary of Recommended Samples
NAS Alameda Parcel 15

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-7-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-8-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-8-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 179) and one structure (an aboveground storage tank) cover less than one percent of the parcel. The remainder of the parcel is open space. The parcel area is presently in use as a disposal area/landfill. Two buildings were formerly located on the parcel and have since been demolished (Buildings 206 and 207). Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-15-1.

Parcel 15 is located approximately 150 feet east and 150 south of Installation Restoration (IR) Program Sites IR 14 (the Fire Training Area) and IR 20, (the Oakland Estuary), respectively. No previous investigations have been conducted at Parcel 15, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and the building located on the parcel are described in detail below.

Building 179

Building 179 was constructed in 1942 and served as a pump house for a ground water well and pump installed by Pan American Airlines (Figure 6-15-1). The well was shut down in 1991 because of naturally-occurring mercury contamination in the ground water. This building is in fair condition. Building 179 is a one story-building constructed of wood with a concrete floor. The building covers approximately 550 square feet. The space occupied by Building 179 was formerly open space used as a disposal area.

Utilities located within and immediately surrounding Building 179 include underground storm sewer, water, and electrical lines. A concrete transformer pad and generator are also located within the building.

No chemicals are documented to have been stored in or used at the building. No staining was observed on the concrete floor of the building. A transformer and switch gear are located approximately 50 feet east of Building 179.

Review of aerial photographs and site inspection data indicates that undocumented spills may have occurred at three locations adjacent to Building 179. Three stained areas observed during the site inspection appear to have resulted from releases of minor quantities of diesel fuel and oil. The soil surrounding the transformer located on the west side of the building is also stained. A second area of staining measuring approximately five feet by five feet was observed on the soil surface at the northeast corner of Building 179. The third stained area measures approximately three by four feet and is located adjacent to the southeast corner of Building 179.

Building 179 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Open Space

The open space covers approximately 99 percent of the parcel. The open space is defined by the parcel area surrounding Building 179 and extends to the parcel boundaries. A portion of the open space has been used as a disposal area/landfill. The ground surface of the open space is completely unpaved. The unpaved areas are covered with gravel (90 percent) and grass (10 percent).

Structures located within the open space include an aboveground storage tank located approximately 50 feet northeast of Building 179. It is no longer in use (Figure 6-15-1). The tank is approximately 5,000 gallons in volume and appears to have been abandoned at this location. The tank is slightly rusted on the outside. In addition, the southwest corner of the parcel is utilized as a storage area for poles and railroad ties.

Buildings 206 and 207 were formerly located in this open space northeast of Building 179. Both buildings were used as crew shelters for training exercises. The demolition dates for both buildings are not known. Both buildings were one-story Quonset huts constructed of metal and covering approximately 1,000 square feet each.

Utilities located within and immediately surrounding open space include underground storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space include use of the area as a disposal area/landfill. The suspected disposal area located approximately 200 feet southeast of Building 179 is currently being bulldozed. A large mound of dirt and rubble is present in this area. Several pieces of heavy equipment including a crane and bulldozer are currently located on the north side of the parcel. In addition, railroad tracks historically crossed the northern part of Parcel 15 parallel to the estuary approximately along the northern side of former Buildings 206 and 207. Railroad ties have reportedly been uncovered on a nearby parcel to the east (Parcel 18) during past construction.

Review of aerial photographs and site inspection data indicates that undocumented spills may have occurred at several locations within the open space. These spills appear to have involved a relatively minor quantity of released material. Several stains measuring up to approximately one foot by three feet were observed around the heavy equipment located on the north side of the parcel. A five-foot by five-foot area of oil staining on the dirt surface was observed adjacent to the oil drain of the crane. A spill of solidified material resembling concrete and measuring approximately eight feet by eight feet was observed adjacent to the mounds of dirt and rubble located southeast of Building 179.

No other incidents, including (i.e. fires, mishaps or flooding) are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 15 is bounded by Parcels 3, 13, and 14 to the west, Parcels 16 and 17 to the east, and Parcel 23 to the south. IR Site 20 (the Oakland Estuary) borders Parcel 15 to the north. Activities of concern on these adjacent parcels include fuel storage areas on Parcel 16, chemical storage areas on Parcel 3, and IR Site 14 (the Fire Training Area) on Parcel 14. Impacted sediments have been identified in the Oakland

Estuary; however, migration of compounds of concern onto Parcel 15 is not probable. Impacts from the Fire Training Area (FTA) are more likely. Compounds of concern in the FTA include dioxins, VOCs, pesticides, TPH, PCBs, and metals.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 15, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-15-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and Installation Restoration Sites. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 15 because no industrial buildings are present.

As noted earlier, Parcel 15 previously had open space areas that were unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped and unpaved areas has been addressed as a zone-wide issue for the parcels located in Zone 3.

Once the data gaps in Table 6-15-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 15 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This parcel contains five parcel-specific target areas and is also contained in a zone with a zone-wide target area.

TABLE 6-15-2

Summary of Data Gaps
NAS Alameda Parcel 15

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Sites 14 (Fire Training Area) and 20 (Oakland Estuary) are located approximately 150 feet east and 150 feet north of Parcel 15, respectively. No additional subsurface investigation relative to IR Site 14 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1: Pesticides may have impacted the long-term unpaved areas.

TABLE 6-15-2

Summary of Data Gaps
NAS Alameda Parcel 15

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 179): Building 179 releases of petroleum hydrocarbons. • Target Area 2 (Open Space Disposal Area): May contain TPH, SVOCs, PCBs, metals. • Target Area 3 (Open Space Heavy Equipment Area): Releases of petroleum hydrocarbons. • Target Area 4 (Open Space Fenced Area): Releases of petroleum hydrocarbons from vehicles. • Target Area 5 (Open Space Storage Area): Impacted by SVOC's.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following five parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-15-2.

- Target Area 1 (Building 179): The three areas of stained soils adjacent to Building 179 may have been impacted by releases of petroleum hydrocarbons, specifically fuel oil. This target area covers approximately 700 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 2 (Open Space Disposal Area): The mounds of soils in the former disposal area may contain TPH, SVOCs, PCBs, and metals. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 3 (Open Space Heavy Equipment Area): The areas of stained soil located near the heavy equipment on the north side of the parcel may have been impacted by releases of petroleum hydrocarbons. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 4 (Open Space Fenced Area): The stained soil located in the southwest corner of the fenced area may have been impacted by releases of petroleum hydrocarbons from vehicles such as heavy construction equipment. This target area covers approximately 1,500 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-15-1.

- Target Area 5 (Open Space Storage Area): The soils beneath the area utilized for the storage of poles and railroad ties may have been impacted by SVOCs, specifically creosote constituents. This target area covers approximately 4,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-15-1.

The following zone-wide target area was identified on Parcel 15 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Four of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 15. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 15 are listed on Table 6-15-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-15-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Thirteen surface soil samples will be collected from the locations shown on Figure 6-15-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Surface soil sampling locations shown on Figure 6-15-1 are approximate and may be modified in the field based on accessibility. Samples should be collected from the areas exhibiting the darkest staining. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technology not previously discussed: soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), chip sampling

(SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-16

PARCEL 16 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 16 at NAS Alameda (Figure 6-16-1). The parcel, which is located in the northern portion of the base, is approximately six acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. RCRA Site SWMU/GII-23 has been identified in the Part B Permit as requiring a RCRA Facility Investigation (RFI). Two parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil, GeoProbe, and Hydropunch sampling. Table 6-16-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 16, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 16, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 17, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have

historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 376 and 375) and three structures (two large aviation fuel storage tanks, Structures 374A and 374B, and Pier 4) cover approximately 20 percent of the parcel. Each tank has a capacity of 500,000 gallons. The remaining 80 percent is open space. The parcel area is presently in use as a JP-5 fuel bulk storage facility. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-15-1.

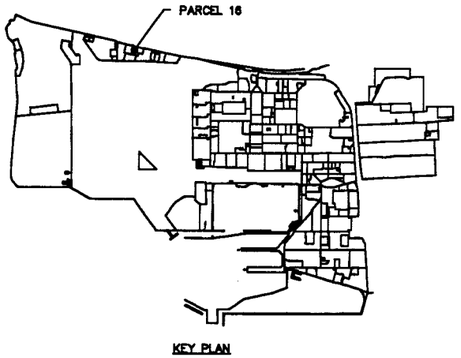
Parcel 16 is located approximately 100 feet south of Installation Restoration (IR) Program Site 20, the Oakland Estuary. No previous investigations have been conducted at Parcel 16, and specific data regarding chemical occurrence at this parcel are not available.

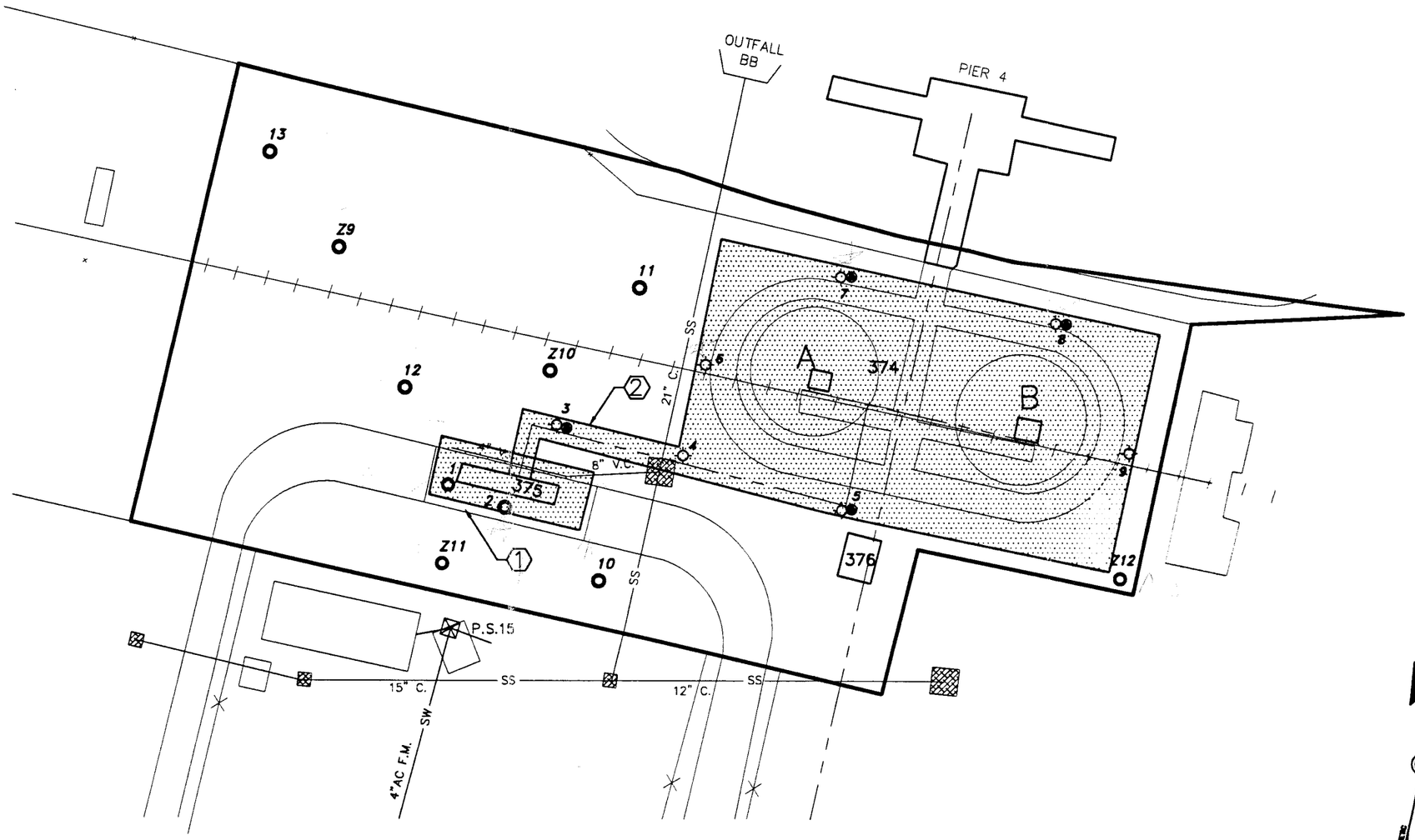
Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 376

Building 376 was constructed in 1953 and served as an electrical transformer house (Figure 6-16-1). The building currently houses three pad-mounted and two wall-mounted transformers. This building is in fair condition. Building 376 is a one-story building constructed of concrete with a concrete floor and concrete-construction roof, and covers approximately 18,000 square feet. No chemicals are documented to have been stored in or used at Building 376.





GENERAL LEGEND

- PARCEL OUTLINE
- 1 SURFACE SOIL SAMPLE & No.
- 2 GeoProbe SAMPLE & No.
- 3 HydroPunch SAMPLE & No.
- 3 TARGET AREA & No.

FUEL LINE LEGEND

- FUEL LINES IN USE

SANITARY SEWER LEGEND

- P.S.15 SANITARY SEWER PUMP STATION & No.
- —SW— SANITARY SEWER LINE

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

- 2A MANHOLE & No.
- CATCH BASIN
- —SS— STORM SEWER LINE

MATERIALS:

- CI – CAST IRON
- VC – VITRIFIED CLAY
- C – CONCRETE

SCALE IN FEET

80 0 80 160 240

1" = 80'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-16-1
PARCEL 16
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:	
19590016.DWG	PWC 17,829 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)	
SCALE AS NOTED	DATE: 2.10.95/2121.96.45	SHEET 1 OF 1

Utilities located within and immediately surrounding Building 376 include underground storm sewer, electrical, and fuel lines.

Building 376 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 375

Building 375 was constructed in 1953 and served as a tank truck loading stand and fueling station office (Figure 6-16-1). This building is in fair condition. Building 375 is a one-story building constructed of concrete with a concrete floor and concrete-construction roof, and covers approximately 500 square feet. No chemicals are documented to have been stored in or used at Building 375.

Utilities located within and immediately surrounding the building include underground fuel, storm sewer, and electrical lines. Building 375 is not equipped with a HVAC system.

Structures 374A and 374B

Structures 374A and 374B were constructed in 1953 and serve as large underground JP-5 aviation fuel storage tanks (Figure 6-16-1). The tanks are in good condition, constructed of steel, and cover approximately 31,000 square feet. Each tank has a capacity of 500,000 gallons.

Utilities located within and immediately surrounding the tanks include underground fuel, storm sewer, and electrical lines.

Information collected during the EBS indicates that JP-5 fuel is delivered to the fuel storage facility via barge and pumped to the tanks through an aboveground pipeline. The fuel is then transferred from the tanks to individual tanker trucks that service the aircraft. The ground surface surrounding the tanks is bermed. Storm water runoff inside the bermed area is conveyed through several drains to discharge outfalls in the Oakland Estuary. No chemicals are documented to have been stored in or used at Structures 374A and 374B.

Pier 4

Pier 4 is located at the north portion of Parcel 16, and overlies the Oakland Estuary (it is not located over dry land). A release of Strontium 90 has been reported at this location. The Department of Health Services Radiation Unit reportedly has more detailed information concerning this release. This release may have impacted

TABLE 6-1

Summary of Recommended Samples
NAS Alameda Parcel 16

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
16-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
16-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
16-3-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-3-GWT-GW-V-DDMMYY		HydroPunch	Water	Target Area 2	TPH	TPH	EPA Modified 8015
16-4-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-5-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-5-GWT-GW-V-DDMMYY		HydroPunch	Water	Target Area 2	TPH	TPH	EPA Modified 8015
16-6-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-7-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-7-GWT-GW-V-DDMMYY		HydroPunch	Water	Target Area 2	TPH	TPH	EPA Modified 8015
16-8-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-8-GWT-GW-V-DDMMYY		HydroPunch	Water	Target Area 2	TPH	TPH	EPA Modified 8015
16-9-3-S-S-DDMMYY	3'	GeoProbe	Soil	Target Area 2	TPH	TPH	Test Kit
16-10-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
16-11-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
16-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
16-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-9-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-10-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

TABLE 6-16-1

Summary of Recommended Samples
NAS Alameda Parcel 16

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-11-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

the pier. As noted earlier, however, radiological concerns are being addressed under a separate program.

Open Space

The open space covers approximately 80 percent of the parcel. The ground surface of the open space is unpaved, bare soil except for an area covered by an asphalt-paved road. Structures present in the open space include aboveground fuel pipelines. Utilities located within the open space include underground fuel, storm sewer, and electrical lines.

EBS information indicates that during the period from October 1992 to October 1993, pesticides were applied biannually to the ground surface within the open space to control grasses and weeds. It is likely that pesticides were also applied to this area prior to 1992, possibly since the early 1900s (in northern portion of the parcel). Railroad tracks historically crossed Parcel 16 parallel to the estuary in a line running approximately through the centers of the existing Structures 374A and 374B. Railroad ties have reportedly been uncovered on a nearby parcel to the east (Parcel 18) during past construction activities.

Underground Storage Tanks

Two large underground storage tanks (USTs) exist at this parcel. The condition of the two active tanks (Tanks 374A and 374B) is unknown. Based on the available information, the tanks store JP-5 aviation fuel. Two additional USTs formerly existed at this parcel near Structures 374A and 374B. No UST investigations have been conducted at this parcel. No information is available regarding the USTs' condition or tightness.

Parcel Boundary Conditions

Parcel 16 is bounded by Parcels 15, 17, and 18. Activities of concern on these adjacent parcels include chemical storage on Parcel 3. The Oakland Estuary, IR Site 20, borders Parcel 16 to the north. Impacted sediments have been identified in the Oakland Estuary; however, migration of compounds of concern onto Parcel 16 is not probable.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/GII-23) that consists of the two large USTs described above (Structures 374A and 374B), as well as their associated structures. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the site requires further investigation. Site GII-23 is listed in the RCRA Part B Permit and must be investigated as part of the RCRA Facility Investigation (RFI) for NAS Alameda. The requirements for the RFI are described in detail in Section 8. The sampling proposed for the site that requires sampling is described in the Target Areas and Compounds of Concern subsection.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 16, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-16-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, asbestos, underground storage tanks, and IR sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 16 because no industrial buildings are present.

As noted earlier, Parcel 16 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped and unpaved areas is being addressed as a zone-wide issue for the parcel located in Zone 3.

TABLE 6-16-2

Summary of Data Gaps
NAS Alameda Parcel 16

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 16.
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located adjacent to the north side of Parcel 14. Environmental concerns associated with the Oakland Estuary (sediment contamination) are not likely to have impacted Parcel 14. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1 Landscaped Area. During the sampling program development, two of the thirteen proposed zone-wide surface soil samples for pesticides were located in Parcel 16.

TABLE 6-16-2

Summary of Data Gaps
NAS Alameda Parcel 16

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 375): Releases of petroleum hydrocarbons from fuel transfer operations. • Target Area 2 (Aboveground Fuel Pipelines): Releases of petroleum hydrocarbons.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Four USTs currently exist at Parcel 16. One UST is scheduled to be removed. • Future actions for three of the tanks are unknown
Underground Utilities	• Storm sewer lines identified.
- Fuel lines	• Underground and aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Former railroad tracks were located at this parcel.

Once the data gaps in Table 6-16-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs, Parcel 16 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-16-2.

- Target Area 1 (Building 375): The soils adjacent to Building 375 may have been impacted by releases of petroleum hydrocarbons from fuel transfer operations. This target area covers approximately 20,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-16-1.

- Target Area 2 (Aboveground Fuel Pipelines): The soils beneath or adjacent to the aboveground fuel pipelines may have been impacted by releases of petroleum hydrocarbons. Groundwater at the parcel may have also been impacted by fueling operations conducted at the site. This target area covers approximately 25,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-16-1.

- Target Area 3 (Open Space, northwestern section): During the period from October 1992 to October 1993, pesticides were applied biannually to the ground surface within the open space to control grasses and weeds. It is likely that pesticides were also applied to this area prior to 1992, possibly since the early 1900s.

The following zone-wide target area was identified on Parcel 16 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Approximate sampling locations are shown on Figure 6-Z3-1. Four of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 16. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 16 are listed on Table 6-16-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), subsurface GeoProbe soil sampling (SOP 14), and Hydropunch groundwater sampling (SOPs 1 and 15).

Table 6-16-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 16. Ten surface soil samples, seven GeoProbe samples, and four HydroPunch samples will be collected from the parcel specific locations shown on Figure 6-16-1. Four surface soil samples will be collected from the zone-wide locations shown on Figure 6-16-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. The sampling locations shown on Figure 6-16-1 are approximate. Samples should be located in the areas with the most significant staining. If no staining is evident, then the samples should be distributed evenly over the target area. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level

investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technology not previously discussed: soil vapor sampling (SOP 6) and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-17

PARCEL 17 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 17 at NAS Alameda (Figure 6-17-1). The parcel, which is located in the northern portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. RCRA Site GII-7 has been identified in the Part B Permit as requiring an RFI. Four parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling and subsurface GeoProbe soil sampling will be used to accomplish the screening-level investigation. Table 6-17-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 17, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 17, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 16, 18, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety

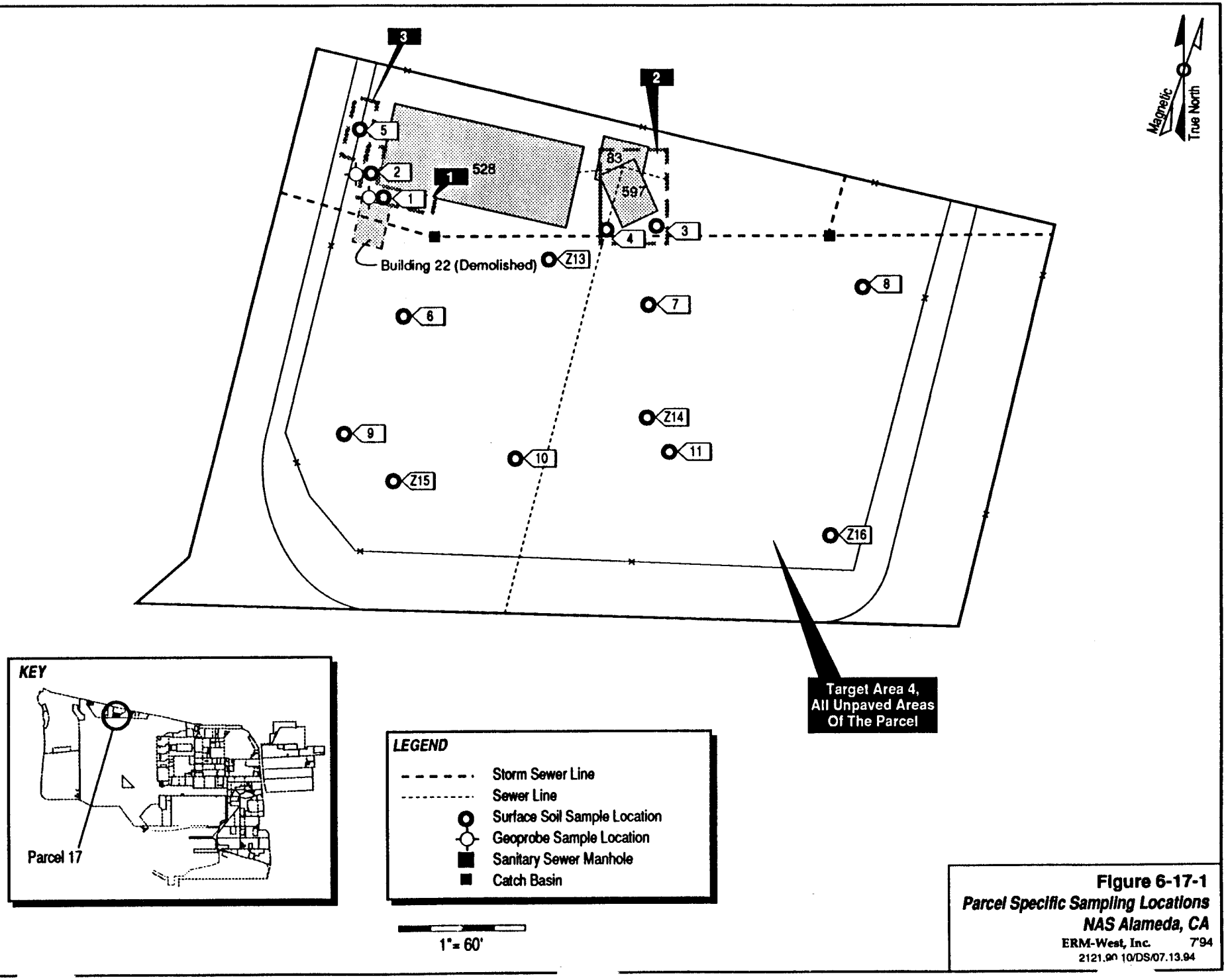


Figure 6-17-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7/94
2121.90 10/DS/07.13.94

TABLE 6-1. 1
Summary of Recommended Samples
NAS Alameda Parcel 17

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
17-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Test Kit, XRF
17-1-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	SVOCs	SVOCs	CLP RAS
17-1-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	VOCs	VOCs	CLP RAS
17-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Test Kit, XRF
17-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
17-2-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	SVOCs	SVOCs	CLP RAS
17-2-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	VOCs	VOCs	CLP RAS
17-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
17-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
17-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
17-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Test Kit
17-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
17-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
17-7-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Modified EPA 8015
17-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
17-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
17-9-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Modified EPA 8015
17-10-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
17-11-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
Z3-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

TABLE 6-17-1

Summary of Recommended Samples
NAS Alameda Parcel 17

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-15-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-16-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 528, 597, and 83) and one structure (sewage lift station 15) cover approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use for vehicle and equipment repair activities and equipment storage. One other building (Building 22) was formerly located on the parcel and has since been demolished. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-17-1.

Parcel 17 is located approximately 400 feet south of Installation Restoration (IR) Program Site 20, the Oakland Estuary. No previous investigations have been conducted at Parcel 17, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 528

Building 528 was constructed in 1971 and serves as a heavy equipment and vehicle maintenance shop (Figure 6-17-1). This building was in good condition. Building 528 is a one-story building constructed of concrete with a concrete floor and metal-construction roof, and covers approximately 4,000 square feet.

Utilities located within and immediately surrounding Building 528 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that activities conducted within this building include maintenance and repair of vehicles and equipment. Chemicals associated with these activities and used at Building 528 include petroleum products (oil, grease, and fuels), paints, cleaners, parts washer solvent, and battery fluids. Three flammable storage cabinets and a parts washer unit are located in the building. Building floor drains route spilled materials to the sanitary sewer system. In addition, a storm drain is located approximately 15 feet southwest of Building 528.

Two steel storage sheds located adjacent to Building 528 are used as satellite accumulation areas for hazardous wastes generated from maintenance and repair activities. One shed is used to store used batteries and paint, and the second shed is used to store petroleum products and solvents. The hazardous materials stored in these two sheds are removed by the hazardous materials team.

Review of aerial photographs and site inspection data indicates that undocumented spills may have occurred at several locations within and outside of the building. These spills appear to be materials related to vehicle repair activities (i.e., petroleum products, solvents, and acids) and involved a minor quantity of released material. Scattered stains were observed on the concrete floor of the building, and an area of oil staining measuring approximately 10 by 10 feet was present at the location of the storm drain outside of the building. This staining will be sampled in Target Area 1 investigation.

Building 528 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 597

Building 597 is currently used as a tire shop (Figure 6-17-1). The date of construction of this building is not known. Building 597 was historically used as a welding and steel cutting shop. This building was in good condition. Building 597 is a one-story building constructed of metal with a concrete floor and metal-construction roof, and covers approximately 2,000 square feet.

Utilities located within and immediately surrounding Building 597 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that activities historically conducted within this building included welding and steel cutting operations. Current activities include tire repair and tire

mounting operations. Chemicals associated with these activities and used at Building 597 include petroleum products (oils and fuels), glues, and cleaners. Scattered stains were observed on the concrete floor of the building. A compressed gas cylinder containing argon gas was located on the west exterior of the building. The concrete floor around the building floor drain was partially corroded.

Building 597 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 83

Building 83 is currently used as office space and is located adjacent to Building 597 (Figure 6-17-1). The date of construction of this building is not known. This building is in good condition. Building 83 is a one-story building constructed of metal with a concrete floor and metal-construction roof, and covers approximately 2,000 square feet.

Utilities located within and immediately surrounding Building 83 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines. No additional specific information regarding Building 83 was available.

Open Space

The open space covers approximately 95 percent of the parcel. It is used for equipment and vehicle parking. The ground surface of the open space is largely unpaved, except for an asphalt road along the eastern boundary of the parcel. The open space area consists of bare soil and gravel.

Structures located within the open space include Sewage Lift Station 15 located near the northern boundary of the parcel, an aboveground diesel fuel tank, and pad-mounted transformer located on the west side of Building 528. The dates of construction of these structures are not known.

Building 22 was formerly located in this open space. The dates of construction and demolition are not known. The materials of construction of Building 22 are also not known.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, telephone, water, and electrical lines.

EBS information indicates that a vehicle washdown area is located near the southwest corner of Building 528. The southwest corner of the parcel is used as a hazardous waste accumulation area. No hazardous waste was observed to be stored at this location. An empty 55-gallon drum labeled hydraulic oil and miscellaneous pieces of equipment were observed at this location at the southwest corner of the parcel. A storm water drain to collect surface water runoff from the parking area was located near the northeast corner of the parcel.

Site inspection data indicates that undocumented spills may have occurred at locations throughout the parking area and equipment yard. These spills appear to be petroleum products, primarily oils and fuels, and to have involved a relatively minor quantity of released material. Some areas of staining measure up to approximately three feet in diameter. No other incidents (i.e. fires, mishaps, or flooding) are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 17 is bounded by Parcels 15, 16, and 18. Activities of concern on these adjacent parcels include JP-5 fuel storage on Parcel 16 and a former disposal area/landfill on Parcel 15. IR Site 20, the Oakland Estuary, is located approximately 400 feet north of Parcel 17 but is not contiguous with Parcel 17. If the continuing investigations at the nearby sites reveal a cause for concern at Parcel 17, then additional sampling on Parcel 17 may be appropriate.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (Site GII-7). Site GII-7 is an area of soils measuring approximately 20 feet by 10 feet located on the south side of Building 528. No known releases have been documented at the site. The chemicals of concern associated with this site include waste petroleum hydrocarbons and

spent lead-acid electrolyte solutions. During the RFA, these compounds were apparently found to be stored directly on the soil (without secondary containment). This site is described as being currently active, and there are no plans for closure.

This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the site requires further investigation. Site GII-7 is listed in the RCRA Part B Permit and must be investigated as part of the RCRA Facility Investigation (RFI) for NAS Alameda. The requirements for the RFI are described in detail in Section 8. The sampling proposed for the site that requires sampling is described in the Target Areas and Compounds of Concern subsection.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 17, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-17-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, asbestos, and IR sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 528. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 17 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped

TABLE 6-17-2

Summary of Data Gaps
NAS Alameda Parcel 17

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located directly to the north side of Parcel 17. IR 20 is unlikely to have impacted Parcel 17. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1: Pesticides may have impacted the long-term unpaved areas.

TABLE 6-17-2

Summary of Data Gaps
NAS Alameda Parcel 17

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 528): Releases of petroleum products, solvents, and cleaners. • Target Area 2 (Building 597): Releases of petroleum products, glues, and cleaners. • Target Area 3 (Above Ground Diesel) Releases of fuel. • Target Area 4 (Open Space): Releases of petroleum hydrocarbons.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

and unpaved areas is being addressed as a zone-wide issue for parcels in Zone 3.

As noted earlier, Parcel 19 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling in landscaped and unpaved areas is being addressed as a zone-wide issue for parcels in Zone 3.

Once the data gaps in Table 6-17-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs, Parcel 17 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following four parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-17-2.

- Target Area 1 (Southwest corner of Building 528): The area at the southwest corner of Building 528 may have been impacted by leakage of petroleum products, solvents, and cleaners used in building operations. Compounds of concern are VOCs, SVOCs, TPH, and metals. This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

- Target Area 2 (Building 597): The area around Building 597 may have been impacted by leakage of petroleum products, glues, and

cleaners used in building operations. Compounds of concern are TPH, and metals. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

- Target Area 3 (Above Ground Diesel Storage Tank): The soils beneath the above ground diesel tank located on the west side of Building 528 may have been impacted by releases of fuel. TPH is the compound of concern. This target area covers approximately 500 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

- Target Area 4 (Open Space): The soils in the vehicle and equipment parking area and hazardous waste storage area may have been impacted by releases of petroleum hydrocarbons. Significant staining from vehicle maintenance was noted during the site inspection. TPH is the compound of concern. This target area covers approximately 60,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-17-1.

The following zone-wide target area was identified on Parcel 17 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Four of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 17. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 17 are listed on Table 6-17-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14), are the screening-level techniques that will be employed to

assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-17-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Eleven parcel-specific surface soil samples, two subsurface GeoProbe soil samples and four zone-wide surface soil samples will be collected from the locations shown on Figure 6-17-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. The sampling locations shown on Figure 6-17-1 are approximate.

- Target Area 1: The stains at Building 528, and specifically a 10-foot-by-10-foot oil stain located near the storm drain, are located within Target Area 1. One of the two soil samples proposed for this target area is intended to be collected from the 10-foot-by10-foot oil stain. The second samples will be collected from SWMU GII-7

- Target Area 2: Two surface soil samples will be collected from areas of staining outside of Building 597.

- Target Area 3: One surface soil sample will be collected from beneath the diesel fuel tank from an area of visual staining.

- Target Area 4: Six surface soil samples will be collected from areas with visual staining. The samples should be distributed evenly over the unpaved area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-18

PARCEL 18 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 18 at NAS Alameda (Figure 6-18-1). The parcel, which is located in the northwest portion of the base, is approximately four acres in size and is roughly L-shaped. The buildings on the parcel are currently vacant. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA unit (SWMU/GAP 78) described in the Part B permit as requiring an RFI. A total of six parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil and soil vapor sampling. Table 6-18-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 18, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 18, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 16, 17, 19, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have

historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 18) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The area within the parcel boundaries was totally filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, ten buildings (330, 343, 344/474, 472, 475, 476, 477, 479, 510, and 604) cover 15 percent of the parcel. The remaining 85 percent is open space. Most of the buildings on Parcel 18 were historically used for fabrication and repair of equipment used for aircraft overhaul. Open space, particularly in the southwestern area of the parcel, has been used for staging of equipment and materials since the 1940s. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-18-1.

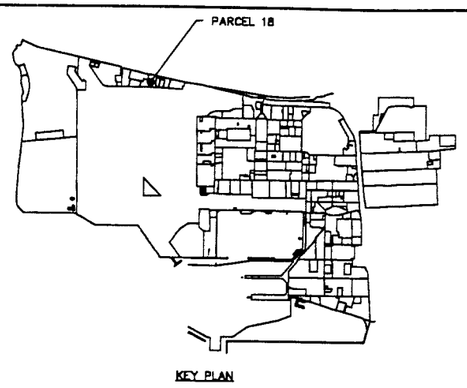
Parcel 18 is located adjacent to Installation Restoration (IR) Program Site 20 (the Oakland Estuary). No previous investigations have been conducted at Parcel 18 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. At least four transformers are located on the parcel. Two near Building 474 are known to contain oil with concentrations of greater than 50 parts per million of PCBs.

Potential environmental or industrial hygiene concerns within parcel open space and buildings are described in detail below.

Building 330

Building 330 was constructed in approximately 1948 and has been used for metal working and wood working (Figure 6-18-1). The building is in fair condition. Building 330 is a Quonset hut constructed of



KEY PLAN

FUEL LINE LEGEND

FUEL LINES IN USE

SANITARY SEWER LINE LEGEND

P.S.10 PUMP STATION & No.

SW SANITARY SEWER LINE

MATERIALS:

F.M. – FORCED MAIN
A.C. – ASBESTOS CEMENT
C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

CATCH BASIN

SS STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE

GENERAL LEGEND

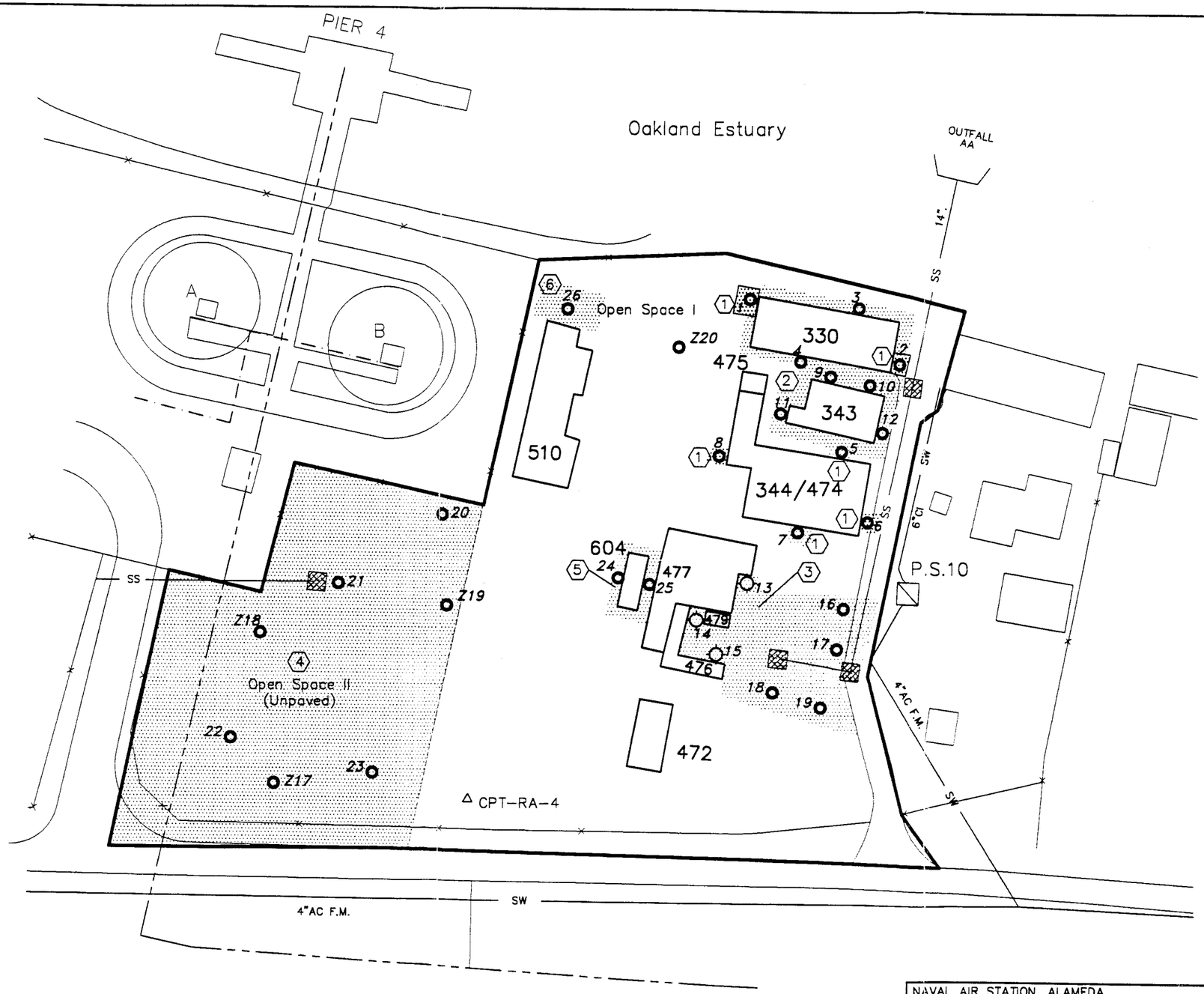
PARCEL OUTLINE

15 GeoProbe SOIL SAMPLE & No.

16 SURFACE SOIL SAMPLE & No.

CPT–RA–4 PROPOSED IR CONTRACTOR CPT/HYDROPUNCH SAMPLE & No.

(11) TARGET AREA & No.



SCALE IN FEET

80 0 80 160 240

1" = 80'

NAVAL AIR STATION, ALAMEDA

FIGURE 6–18–1
PARCEL 18
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590018.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.96.45 SHEET 1 OF 1

TABLE 6-18-1
Summary of Recommended Samples
NAS Alameda Parcel 18

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
18-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
18-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
18-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Modified EPA 8015
18-3-0-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
18-3-0-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	CLP RAS
18-4-0-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
18-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
18-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
18-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
18-7-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Modified EPA 8015
18-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
18-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil (Blast Media)	Target Area 2	Metals	Metals	XRF
18-10-0-S-S-DDMMYY	0-0.5'	Surface	Soil (Blast Media)	Target Area 2	Metals	Metals	XRF
18-11-0-S-S-DDMMYY	0-0.5'	Surface	Soil (Blast Media)	Target Area 2	Metals	Metals	XRF
18-12-0-S-S-DDMMYY	0-0.5'	Surface	Soil (Blast Media)	Target Area 2	Metals	Metals	XRF
18-12-0-V-DDMMYY *	0-0.5'	Surface	Soil (Blast Media)	Target Area 2	Metals	Metals	CLP RAS
18-13-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS
18-14-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS
18-15-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS
18-16-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Dioxins/Furan	Dioxins/Furan	CLP RAS

TABLE 6-18-1
Summary of Recommended Samples
NAS Alameda Parcel 18

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
18-17-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Dioxins/Furan	Dioxins/Furan	CLP RAS
18-18-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Dioxins/Furan	Dioxins/Furan	CLP RAS
18-19-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Dioxins/Furan	Dioxins/Furan	CLP RAS
18-20-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH, Metals	TPH, Metals	Test Kit, XRF
18-20-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
18-21-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH, Metals	TPH, Metals	Test Kit, XRF
18-21-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
18-21-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 4	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
18-22-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH, Metals	TPH, Metals	Test Kit, XRF
18-22-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
18-23-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH, Metals	TPH, Metals	Test Kit, XRF
18-23-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
18-24-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	TPH, Metals	TPH, Metals	Test Kit, XRF
18-24-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 5	TPH, Metals	TPH, Metals	CLP RAS
18-25-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	TPH, Metals	TPH, Metals	Test Kit, XRF
18-26-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 6	Metals	Metals	CLP RAS
Z3-17-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-18-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-19-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

TABLE 6-18-1

Summary of Recommended Samples
NAS Alameda Parcel 18

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-20-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

corrugated metal with a concrete floor. Currently, the building is not in use except for storage of a few pieces of equipment salvaged from other buildings. Building 330 covers approximately 5,300 square feet.

Utilities located within and immediately surrounding Building 330 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that leakage and spillage of diesel fuel from two tanks (outside) and two heaters (inside) located on the eastern and western ends of the building has occurred in this building. In addition, scattered stains are located on the rest of the building floor. An unidentified 2-inch pipe was observed protruding from the ground on the east side of Building 330.

Site inspections conducted by the Department personnel on December 21, 1994 revealed garnet sandblast grit around the perimeter of Building 330. No information was available regarding historical hazardous materials use or handling in the building. No incidents such as fires, mishaps, flooding, or crashes, are documented to have occurred within Building 330.

Building 330 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 343

Building 343 was constructed in approximately 1949 and has been used for storage of abrasive blast material for at least the last ten years. This building is in fair condition. Building 343 is a one-story building constructed of heavy gauge metal with a steel floor and metal roof. The building covers approximately 3,000 square feet.

Utilities located within and immediately surrounding Building 343 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

The construction of the building indicates that it may have been used historically for sand blasting operations. This is also consistent with the current storage of blast media in the building.

Building 343 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 344/474

Building 344 was constructed in approximately 1948. Other records identify it as Building 474 and indicate a construction date of 1950. The former use of the building is not known. It is vacant at present except for storage of several pieces of metal working equipment. The building is in fair condition. Building 344 is a one-story building constructed of sheet metal with a concrete floor and corrugated metal roof. The building covers approximately 4,500 square feet.

Utilities located within and immediately surrounding Building 344 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that four aboveground diesel fuel tanks are located outside, adjacent to the building. They are located at the northwest corner, the northeast corner, and along the south and west walls. The tanks were used to fuel diesel furnaces. Staining of soil and/or broken asphalt was observed beneath all four tanks. The building floor is heavily stained and deteriorated. A small empty flammable materials storage cabinet was observed outside the north side of the building.

Building 344 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 472

Building 472 was constructed in approximately 1946. The building is a covered lumber storage rack, which is currently empty. It is a one-story building constructed of corrugated metal with an asphalt floor. The eastern side of the building is open (no wall). The building covers approximately 800 square feet.

Utilities located within and immediately surrounding Building 472 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Building 472 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 475

Building 475 was constructed in approximately 1952. It is a heavy gauge steel building formerly used for bead blasting. The building is in fair

condition. Building 475 is a one-story building and covers approximately 600 square feet. It is attached to Building 344/474.

Utilities located within and immediately surrounding Building 475 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Building 475 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 476

Building 476 was constructed in approximately 1953 and served as a covered paint and paint supplies storage area for Building 477 (Figure 6-18-1). This building is in fair condition. Building 476 is a one-story building constructed of corrugated metal with an asphalt floor and one open side. The building is L-shaped and covers approximately 300 square feet. The building is designed to hold approximately 34 loaded pallets in racks forming bays with space for two pallets each, one above the other. The bays have hinged grates which serve as doors on the open side of the building. All bays are currently empty.

Utilities located within and immediately surrounding Building 476 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

A rectangular rust-stained area in front of the building appears to be the floor of a former sheet metal building, which was possibly a smaller former Building 476. The rest of the asphalt-paved area in front of (north and east of) Building 476 is 50 to 70 percent stained with paint and coatings. Minor cracks in the asphalt were also observed.

Building 476 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 477

Building 477 was constructed in approximately 1952 and housed a former paint shop with spray booth, solvent cleaning, and abrasive blasting air quality permits (Figure 6-18-1). This building is in fair condition. Building 477 is a one-story building constructed of sheet metal with a concrete floor. The building covers approximately 3,000 square feet.

Utilities located within and immediately surrounding Building 477 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

A paint spray booth with a high volume exhaust venting system is located on the south side of the building. Residual water and paint residue were observed in paint spray booths in the building. A stack rises from an unknown source in the southeastern corner of the building. A relatively large electric pump is located outside of the building adjacent to the stack. Disposal practices for hazardous wastes such as paint thinners and strippers from operations in Building 477 are not known.

Building 477 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 479

Building 479 was constructed in approximately 1985 for temporary storage of hazardous wastes as GAP Site 78. It has metal walls (three), a metal roof, and an asphalt floor. The building covers approximately 200 square feet.

Utilities located within and immediately surrounding Building 479 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

There are some scattered stains on the floor of the building. An emergency spill response cabinet is located in the building. The building is not currently used as a GAP site. Active GAP facilities are present on adjacent parcels.

Building 479 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 510

Building 510 was constructed in approximately 1967 and was reportedly used for storage of wood and metal. This building is in fair condition. The northern third of Building 510 is a one-story building constructed of metal with concrete floors. The southern portion of the building consists of four high (15-foot) bays open on the east side with metal walls and roof and an asphalt floor. The building covers a total area of approximately 3,000 square feet. Minor staining was observed in both areas of the building.

addition, railroad tracks historically crossed the northern part of the parcel parallel to the estuary approximately at the northern side of Building 344 and in the middle of Building 510. Railroad ties have reportedly been uncovered on the parcel during past construction. Site inspections conducted by the Department personnel on December 21, 1994 revealed garnet sandblast grit around the perimeter of Building 330.

No other incidents such as fires, mishaps, flooding, or crashes, are documented to have occurred within Open Space I.

Open Space II

Open Space II is defined as the unpaved area in the southwest corner of Parcel 18. This space takes up approximately 25 percent of the total parcel open space. The ground surface of Open Space II is covered with weeds, bare soil, and gravel.

Utilities located within and immediately surrounding the Open Space II include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

EBS information indicates that activities conducted within this open space included equipment and materials storage since the 1940s. Potential impacts to this area are not well known. Possible staining associated with equipment staging is visible in some historical aerial photographs. Records indicate spring and fall pesticide application in 1992-93 on the parcel of Round-Up, Krovar I, and Amizole to control mixed grassy weeds. Historical application of banned pesticides and PCBs may have occurred based on usage of the space as an unpaved staging area since the 1940s.

No incidents such as fires, mishaps, flooding, or crashes, are documented to have occurred within Open Space II. Potential radiological hazards do not appear to be of concern.

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 18 is bounded by Parcels 4, 23, 16, 17, 19, and the Oakland Estuary (IR Site 20). There are no activities of environmental concern

Utilities located within and immediately surrounding Building 510 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Building 510 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 604

Building 604 was constructed in approximately 1952 and was used for sandblasting equipment storage. This building is in fair condition. Building 604 is a one-story building constructed of corrugated metal with a concrete floor. The building covers approximately 1,200 square feet.

Utilities located within and immediately surrounding Building 604 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Two air compressors are present in the building. Some staining was observed near the compressors. Abrasive garnet blasting media covers the floor and outside areas of the building. The exact nature of blasting operations conducted in or around the building is not known. Two empty overturned drums, including one labeled "KEROSENE," were observed on the ground outside the building.

Building 604 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Open Space I

Open Space I is defined as the paved area surrounding the buildings in Parcel 18 and extending south of Building 510 to the southern parcel boundary. This space takes up approximately 75 percent of the total parcel open space. The ground surface of Open Space I is mostly paved with asphalt. The pavement is in fair condition.

Utilities located within and immediately surrounding Open Space I include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

EBS information indicates that this open space was used for staging equipment. Potential impacts to this area consist of activities already mentioned associated with the parcel's buildings. The western and southern halves of this area have historically been used for staging of equipment and materials, especially during the 1940s and 1950s. In

associated with boundaries of these parcels that are likely to affect boundary areas of Parcel 18. If the continuing investigations of the Oakland Estuary reveal a cause for concern at Parcel 18, then additional sampling on Parcel 18 may be appropriate.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site, SWMU/GAP 78. The site is located in Building 479 (see previous description); it is adjacent to Building 477. Site inspection information indicated that this GAP site is inactive, although other records list it as active. These records indicate that drums and cans of paint and solvents were accumulated at the site.

This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the site requires further investigation. The sampling proposed for the site that requires sampling is described in the Target Areas and Compounds of Concern subsection.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 18, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-18-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: industrial hygiene concerns, transformers, lead-based paint, asbestos, and IR sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in and around Buildings 330, 343,

TABLE 6-18-2

Summary of Data Gaps
NAS Alameda Parcel 18

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 20 (The Oakland Estuary) is located directly to the north side of Parcel 18. IR 20 is unlikely to have impacted Parcel 18. No additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1: Pesticides may have impacted the long-term unpaved areas (currently unpaved).

TABLE 6-18-2

Summary of Data Gaps
NAS Alameda Parcel 18

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Aboveground Storage Tanks) • Target Area 2 (Perimeters of Buildings 343 and 330) • Target Area 3, Buildings 476, 477, and 479 • Target Area 4 Open Space II • Target Area 5, Perimeter of Building 604 • Target Area 6, Area north of Building 510
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel lines	• Underground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Unidentified two-inch pipe protruding from ground east of Building 330. • Railroad tracks were formerly located on this parcel.

344/474, 475, 476, 477, 510, and 604. These concerns will be addressed as part of the one-time compliance program.

As noted earlier, Parcel 18 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling in landscaped and unpaved areas is being addressed as a zone-wide issue for parcels in Zone 3.

Once the data gaps in Table 6-18-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs, Parcel 18 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following six parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-18-2.

- Target Area 1 (Aboveground Storage Tanks): The soil (beneath the pavement) under the aboveground diesel fuel storage tanks on the east and west ends of the Building 330 and the aboveground diesel fuel storage tanks on the north, east, south, and west sides of the Building 344/474, may have been impacted by spillage or leakage of diesel fuel from the tanks. Each of these target areas covers approximately 20 square feet and has suspect likelihood of subsurface impacts indicated by the presence of staining. Samples to be collected in these target areas are listed in Table 6-18-1.

- Target Area 2 (Perimeters of Buildings 343 and 330): Abrasive blasting residues in and around this building may contain elevated levels of metals from removed paint and metal scale incorporated during blasting operations. Used blasting media on surrounding pavement and/or soil will be sampled as if it were surface soil. The target area covers the entire perimeter of the building (6,000 square feet) and has suspect likelihood of impacts.

- Target Area 3, Buildings 476, 477, and 479: The area in and around Buildings 476, 477, and 479 may have been impacted by spills or leakage of VOCs in paint and solvents. Dioxins may have been released from the stack in the southeast corner of Building 477. This target area covers approximately 5,000 square feet and has suspect likelihood of impacts.

- Target Area 4 Open Space II: Based on staining observed in historical aerial photographs, the soil in this unpaved former staging area may have been impacted by releases of TPH, SVOCs, and metals from stored vehicles and equipment.

- Target Area 5, Perimeter of Building 604: Based on a site inspection conducted in December 1994, the soil in this area may have been impacted by spills of garnet sandblast grit.

- Target Area 6, Area north of Building 510: Based on a site inspection conducted in December 1994, the soil in this area may have been impacted by spills of garnet sandblast grit.

The following zone-wide target area was identified on Parcel 18 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Four of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 18. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 18 are listed on Table 6-18-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). Table 6-18-1 summarizes screening-level sampling and analyses recommended for the parcel's target areas. Twenty-three parcel-specific surface soil, three parcel-specific GeoProbe, and four zone-wide surface soil samples will be collected from the locations shown on Figure 6-18-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Industrial hygiene issues are potential concerns in most site buildings particularly media blasting facilities (Buildings 330, 343, 475, and 604). Inspection of parcel buildings by an industrial hygienist is advised prior to lease or transfer of the property. These inspections may include sampling. Samples of used blasting media may be collected from floors, shelves, ground, and other areas where it has accumulated in and around former blasting facilities. Samples should represent the variety of media present.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor (SOP 6) sampling, HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-19

PARCEL 19 EVALUATION PLAN

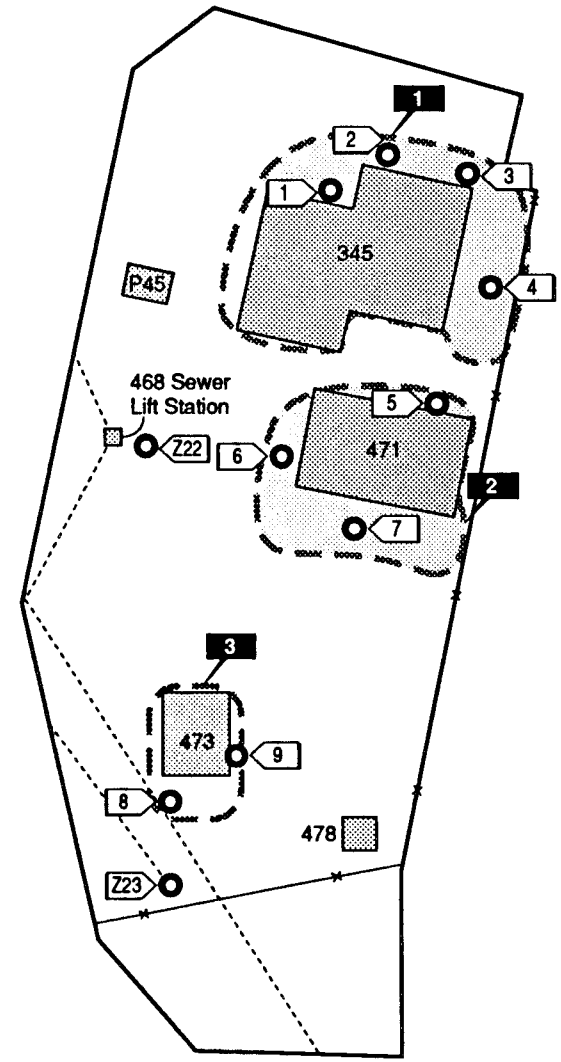
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 19 at NAS Alameda (Figure 6-19-1). The parcel, which is located in the northern portion of the base, is approximately one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA sites. Tank 473-1 has been identified in the Part B Permit as requiring a RCRA Facility Investigation (RFI). Three parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling. Table 6-19-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 19, historical activities are discussed below.

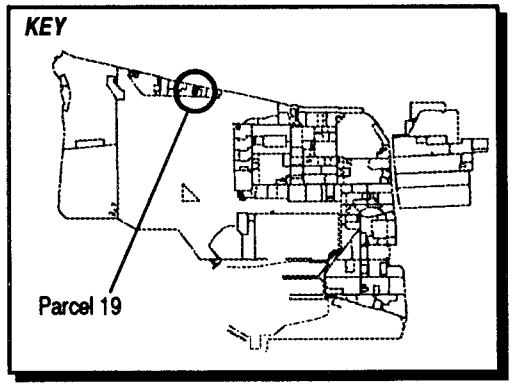
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 19, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 16, 17, 18, 20, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety





LEGEND

- Target Areas 1-4
- Sewer Line
- Surface Soil Sample Location

Note: Parcel Boundaries are Approximate

1"= 60'

Figure 6-19-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.18.94

TA. . 6-19-1

Summary of Recommended Samples
NAS Alameda Parcel 19

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
19-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals, TPH	Metals, TPH	XRF, Test Kit
19-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals, TPH	Metals, TPH	XRF, Test Kit
19-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals, TPH	Metals, TPH	XRF, Test Kit
19-3-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Metals, TPH	Metals, TPH	CLP RAS, Modified EPA
19-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals, TPH	Metals, TPH	XRF, Test Kit
19-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
19-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
19-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	XRF
19-7-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	CLP RAS
19-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	XRF, Test Kit
19-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	XRF, Test Kit
19-9-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	CLP RAS, Modified EPA 8015
Z3-22-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-23-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

* These are the suggested locations for analytical laboratory confirmation samples. The actual locations will depend on field analytical results.

of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, five buildings (Buildings P45, 345, 471, 473, and 478) and two structures (an above ground storage tank and Sewer Lift Station 468/Pump Station 10) cover approximately 20 percent of the parcel. The remainder of the parcel is open space. In the past, the parcel was used for fabrication and maintenance of aircraft ground support equipment. The parcel is presently vacant, except for limited storage of maintenance equipment. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-19-1.

Parcel 19 is located approximately 200 feet south of Installation Restoration (IR) Program Site 20, the Oakland Estuary, and approximately 200 feet east of IR Site 15 (Parcel 22). Soil at IR Site 15 has been impacted by PCBs and lead. A surface soil removal project at the parcel is scheduled for September 1994.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 345

Building 345 was constructed in 1947 and housed plant services operations for aircraft overhaul (Figure 6-19-1). This building is in poor condition. Building 345 is a one-story building constructed of metal walls with a concrete floor, and covers approximately 4,000 square feet. Utilities located within and immediately surrounding Building 345 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that activities historically conducted within this building included welding and

sandblasting operations. One diesel aboveground storage tank (AST) is located at the northeastern end of the building. Heavy staining was observed underneath and adjacent to the AST. A diesel AST was removed from the northwestern end of the building. The date of removal is not known. An area of apparent diesel-stained soil was observed on the west side of the building.

Site inspection data indicates that undocumented spills have occurred at the northern end and inside of Building 345. These spills appear to have involved moderate quantities of diesel fuel. The staining covers an area measuring approximately 10 by 20 feet. Building 345 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 471

Building 471 was constructed in 1946 and housed plant services operations for aircraft overhaul (Figure 6-19-1). This building is in poor condition. Building 471 is a one-story building constructed of wood with a concrete floor, and covers approximately 2,300 square feet. Utilities located within and immediately surrounding Building 471 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that activities conducted within this building included welding, sandblasting, and painting operations. Outside the southern border of the building are areas of white and gray stained sand measuring ten by ten feet. Small pieces of decayed wood are present in this area, indicating possible former pallet or lumber storage. Building 471 is not equipped with a HVAC system.

Building 473

Building 473 was constructed in 1948 and housed plant services operations for aircraft overhaul (Figure 6-19-1). This building is in poor condition. Building 473 is a one-story building constructed of sheet metal with an asphalt floor, and covers approximately 550 square feet. Utilities located within and immediately surrounding Building 473 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that activities conducted within this building included shearing (from a large metal shearing machine). Welding operations were also conducted in the building. Review of site inspection data indicates that an

undocumented oil spill occurred directly outside the southern end of the building. The spill was not cleaned up. The apparent source was a large power shear that was moved outside of the building and washed down in 1992. The remaining stain covers an area measuring approximately 6 by 6 feet. Building 473 is not equipped with a HVAC system.

Building 478

Building 478 was constructed in 1951 and was used for storage of small mechanical equipment (Figure 6-19-1). This building is in poor condition. Building 469 is a one-story shed, is constructed of metal walls and roof directly on the ground surface, and covers approximately 70 square feet. Utilities located surrounding Building 478 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Information collected during the EBS indicates that this building housed a saw. Review of aerial photographs and site inspection data does not indicate that spills have occurred at building 478. Building 478 is not equipped with a HVAC system.

Building P45

Building P45 was used to house a small metal shear machine (Figure 6 19-1). The date of construction is unknown. This building is in poor condition. Building P45 is a small one-story metal shed that covers approximately 20 square feet. Utilities located surrounding Building P45 include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

The EBS did not provide information concerning activities conducted within this building. Review of aerial photographs and site inspection data does not indicate that spills have occurred at Building P45. Building P45 is not equipped with a HVAC system.

Structure 468

Structure 468 serves as a Sewage Pumping Station (Figure 6-19-1) operating at a pumping rate of approximately 150 gallons per minute. The date of construction is not known. This structure is in fair condition. Structure 468 is a six by three foot diameter metal housing (with a lid) for the pump station. The control box is located on the southwestern side of Building 471. Utilities surrounding Structure 468

include underground sanitary sewer, storm sewer, telephone, water, electrical, and underground electrical lines.

Open Space

The open space covers approximately 80 percent of the parcel. The open space has been used for parking and storage of maintenance equipment. The ground surface of the open space is 40 percent paved and 60 percent unpaved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is covered with concrete. The pavement is generally in poor condition. The unpaved areas of the open space are covered with 30 % gravel and 70 % bare soil.

Structures located within the open space include two metal sheds, one 2,500-gallon gasoline UST (UST 473-1) and one 100-gallon diesel AST. The sheds and AST were discussed above. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, telephone, water, and electrical lines.

EBS information indicates that this open space was used for the manufacture of aircraft maintenance equipment, which included sandblasting and metal working operations. Areas of garnet sandblasting grit were observed adjacent to Building 471. A storm water drain is located east of the sewage pump station, Structure 468. A second storm drain is located south of Building 473.

Site inspection data indicates that undocumented spills may have occurred at several locations throughout the parcel. These spills appear to consist of moderate quantities of petroleum hydrocarbons or paint. Scattered areas of rust-colored soils containing paint chips and debris were observed on the ground surface in the open space. No other incidents (i.e. fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One abandoned underground storage tank (UST) exists at this parcel. Tank 473-1 was installed in 1948 and is located south of Building 473, adjacent to the fence Tank 473-1 was likely used to store diesel fuel and has a capacity of 250 gallons. This tank is a single walled and unlined steel tank with no leak detection system. It is not known if this tank has corrosion protection. The presence of this tank was identified in the NAS Alameda RCRA Facility Assessment. This tank was emptied on November 20, 1989. A UST investigation was performed on Tank 473-1 in October 1988. Two soil borings were

drilled and subsurface soil samples were collected at depths of 4.5 to 5.0 feet. Analytical results indicated the presence of low levels of benzene, toluene, ethylbenzene and xylene (BTEX).

Parcel Boundary Conditions

Parcel 19 is bounded by Parcels 18, 4, 20, 21, and 23. Activities of concern on these adjacent parcels include small diesel storage tanks on Parcel 18. No parcels contiguous with Parcel 19 are IR sites. No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 19, then additional sampling on Parcel 19 may be appropriate. Railroad tracks formerly paralleled the northern border of Parcel 19.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (Tank 473-1). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this RCRA site does not require further investigation. In addition, this site is listed in the RCRA Part B Permit and must be investigated as part of the RCRA Facility Investigation (RFI) for NAS Alameda. The requirements for the RFI are described in detail in Section 10. A brief description of the RCRA site is provided below.

Tank 473-1 is located south of Building 473, adjacent to the fence, and has had no known releases. The chemicals of concern associated with this site include diesel fuel. This site is currently inactive. This UST will be removed and investigated under the UST program which will meet the requirements of the RFA.

This tank was identified as a RCRA tank based on its past use and contents. A description of the tank and the results of the October 1988 UST investigation performed on this tank are provided in the Underground Storage Tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 19, consistent with the objectives described in Section 1 of the

Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-19-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, industrial hygiene concerns, radiological concerns, asbestos, underground storage tanks, and IR sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings P45, 345, 471, 473, and 478. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

As noted earlier, Parcel 19 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling in landscaped and unpaved areas is being addressed as a zone-wide issue for parcels in Zone 3.

Once the data gaps in Table 6-19-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs, Parcel 19 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains three parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature

and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following three parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-19-2.

- Target Area 1 (Building 345): The areas adjacent to Building 345 may have been impacted by metals from welding and sandblasting activities. This target area covers approximately 4,500 square feet and has been classified as having a probable likelihood of impacts. Samples to be collected in this target area are listed in Table 6-19-1.

- Target Area 2 (Building 471): The soils adjacent to Building 471 may have been impacted by welding and sandblasting operations conducted in the building. This target area covers approximately 2,500 square feet and has been classified as having a probable likelihood of impacts. Samples to be collected in this target area are listed in Table 6-19-1.

- Target Area 3 (Building 473): The soils adjacent to Building 473 may have been impacted by releases of petroleum hydrocarbons or metals. This target area covers approximately 800 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-19-1.

The following zone-wide target area was identified on Parcel 19 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Two of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 19. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 19 are listed on Table 6-19-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-19-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Nine parcel-specific surface soil samples and two zone-wide surface soil sample will be collected from the locations shown on Figure 6-19-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

The sampling locations shown on Figure 6-19-1 are approximate. Additional notes on sampling in each target area follow:

- Target Area 1: Soil-like and surface soil samples will be collected from areas of diesel fuel staining and sandblasting grit accumulation outside of the building.
- Target Area 2: Surface soil samples will be collected from suspected areas of sandblasting activities outside of the building.
- Target Area 3: Surface soil samples will be collected adjacent to the metal shearer located on the south side of Building 473.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-20

PARCEL 20 EVALUATION PLAN

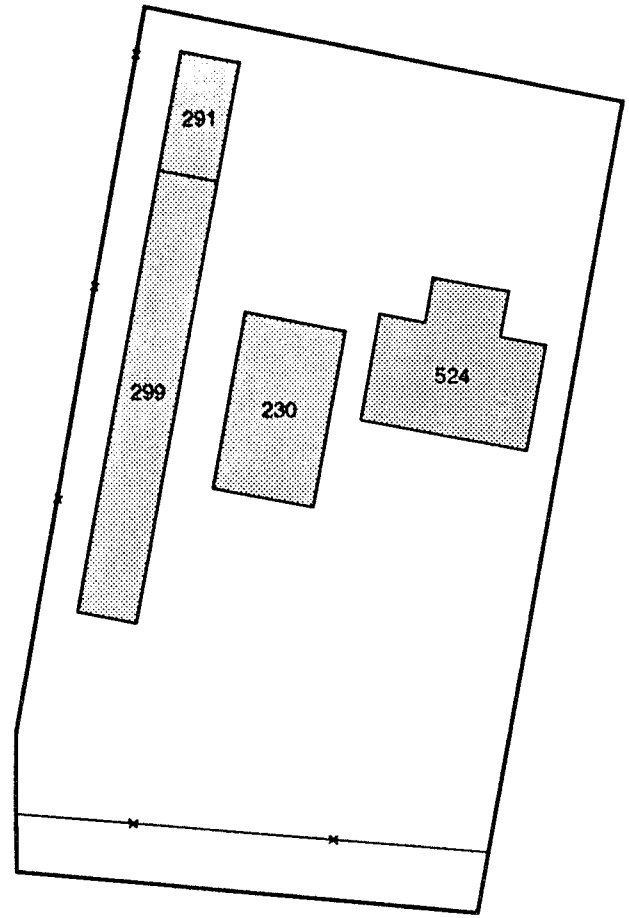
This Parcel-specific Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 20 at NAS Alameda (Figure 6-20-1). The parcel, which is located in the northwestern portion of the base, is one acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA Sites are located at this parcel. No parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. No zone-wide target investigation samples are located on this parcel. This parcel-specific evaluation plan has been developed in accordance with the Preliminary Endangerment Assessment requirements. Historical activities for Parcel 20 are discussed below.

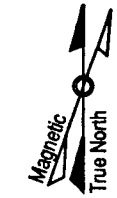
Background and Historical Activities

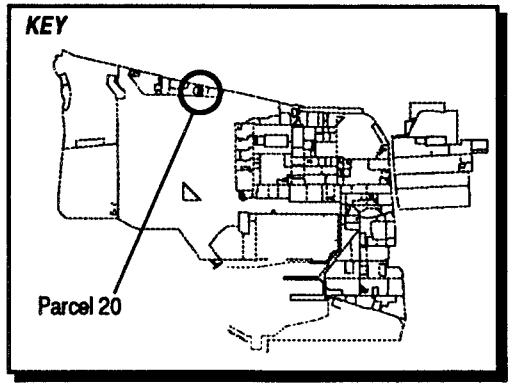
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 20, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program Sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 16, 17, 18, 19, 21, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the







Note: No screening-level sampling has been proposed for this parcel.

1"= 60'

Figure 6-20-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.12/DS/07.06.94

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, four buildings (291, 299, 230, and 524) cover approximately 15 percent of the parcel. The remainder of the parcel (85 percent) is open space. The buildings on Parcel 20 are currently used by a Marine construction battalion (CBU-416) for offices, shops, and storage. The open space has been used for staging of equipment and materials since the 1940s. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-20-1.

Parcel 20 is located approximately 250 feet east and 130 feet south of Installation Restoration (IR) Program Sites IR 15 (the western two-thirds of Parcel 22) and IR 20, (the Oakland Estuary), respectively. No previous investigations have been conducted at Parcel 20, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 291

Building 291 was constructed in approximately 1944 and has historically been used as a general storage warehouse (Figure 6-20-1). The building has been used as a training classroom since approximately 1981. The building is in fair condition. Building 291 is a one-story building constructed of wood with stucco interior walls, a metal roof, a concrete floor and covers approximately 1,000 square feet.

Utilities located within and immediately surrounding Building 291 include underground sanitary sewer, storm sewer, telephone, water, electrical, and industrial sewer lines.

No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. No specific

information was available on historical hazardous materials use or handling in the building.

Building 299

Building 299 was constructed in approximately 1946 and has historically been used for utility system storage. Currently, the building houses a game room, electrical shop, and offices. Building 299 is constructed of wood with a metal roof and concrete floor. The building is in fair condition and covers approximately 1,600 square feet.

Utilities located within and immediately surrounding Building 299 include underground sanitary sewer, storm sewer, telephone, water, electrical, and industrial sewer lines.

No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. No specific information was available on historical hazardous materials use or handling in the building.

Building 230

Building 230 was constructed in approximately 1971 and has historically been used as a supply warehouse. The building is currently listed on base records as a "construction/WT handling equipment shop." Building 230 is a Quonset hut constructed of metal with a concrete floor. The building is in fair condition and covers approximately 1,700 square feet.

Utilities surrounding Building 230 include storm sewer and electrical lines.

No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. No specific information was available on historical hazardous materials use or handling in the building. Building 230 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 524

Building 524 was constructed in approximately 1970 and has been used for administrative offices. Building 524 is a Quonset hut constructed of metal with a concrete floor. The building is generally in fair condition and covers approximately 1,700 square feet.

Utilities surrounding Building 524 include storm sewer, water, telephone and electrical lines.

No hazardous materials or wastes were observed to be stored in and around the building during the site inspection. No specific information was available on historical hazardous materials use or handling in the building. Building 524 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Open Space

The open space covers approximately 85 percent of the total parcel space (approximately 36,000 square feet). The ground surface of the open space is mostly paved with asphalt for vehicle parking except for a 20-foot by 50-foot grass volleyball court near Building 524. The asphalt pavement is in fair condition.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, telephone, water, and electrical lines.

An electrical transformer is located west of Building 291. Railroad tracks historically crossed the central part of the parcel parallel to the estuary approximately near the southern end of Building 291. Railroad ties have reportedly been uncovered in the vicinity of the parcel during past construction.

No other incidents (i.e. fires, mishaps, flooding, etc.) are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 20 is bounded by Parcels 19, 21, and 23 to the west, northeast, and south, respectively. There are no activities of environmental concern associated with the boundaries of these parcels that are likely to affect boundary areas of Parcel 20.

No parcels contiguous with Parcel 20 are IR sites, therefore, no sampling is called for in this PEP in response to any nearby IR site. If the continuing investigations at nearby IR sites reveals a cause for concern at Parcel 20, then sampling on Parcel 20 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 20, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-20-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, asbestos, and IR sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 20 because no industrial buildings are present.

As noted earlier, Parcel 20 has a small open space area that is landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 20. Pesticide sampling in landscaped and unpaved areas is being addressed as a zone-wide issue for parcels in Zone 3.

Once the data gaps in Table 6-20-1 are addressed and screening-level sampling results from the target areas described below are compared to PRGs, Parcel 20 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-20-1

Summary of Data Gaps
NAS Alameda Parcel 20

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 50.
Installation Restoration (IR) Sites	• IR Sites 15 (located in Parcel 22) and IR 20 are located 250 feet west and 130 feet north of Parcel 20, respectively.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1: Pesticides may have impacted the long-term unpaved areas (currently unpaved).
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel lines	• No underground or aboveground fuel lines identified.

TABLE 6-20-1

Summary of Data Gaps
NAS Alameda Parcel 20

Data Gap	Status/Description
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Former railroad tracks identified.

Target Areas and Compounds of Concern

This parcel contains no parcel-specific target areas. Although this parcel is contained in a zone-wide target area, no zone-wide target area samples are proposed for this parcel.

The following zone-wide target area was identified on Parcel 20 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. None of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 20.

Screening-Level Investigation

No screening level sampling methods will be employed to assess conditions in the target area. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-21

PARCEL 21 EVALUATION PLAN

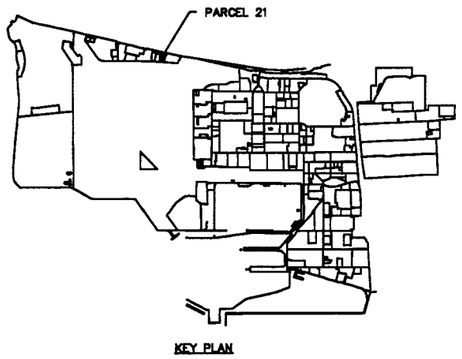
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 21 at NAS Alameda (Figure 6-21-1). The parcel, which is located in the northern portion of the base, is 1.6 acres in size and is roughly L-shaped. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and one parcel-specific target investigation area (target area) has been identified on this parcel. Surface soil sampling is the procedures called for in the screening-level investigation for these areas. Table 6-21-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 21, historical activities are discussed below.

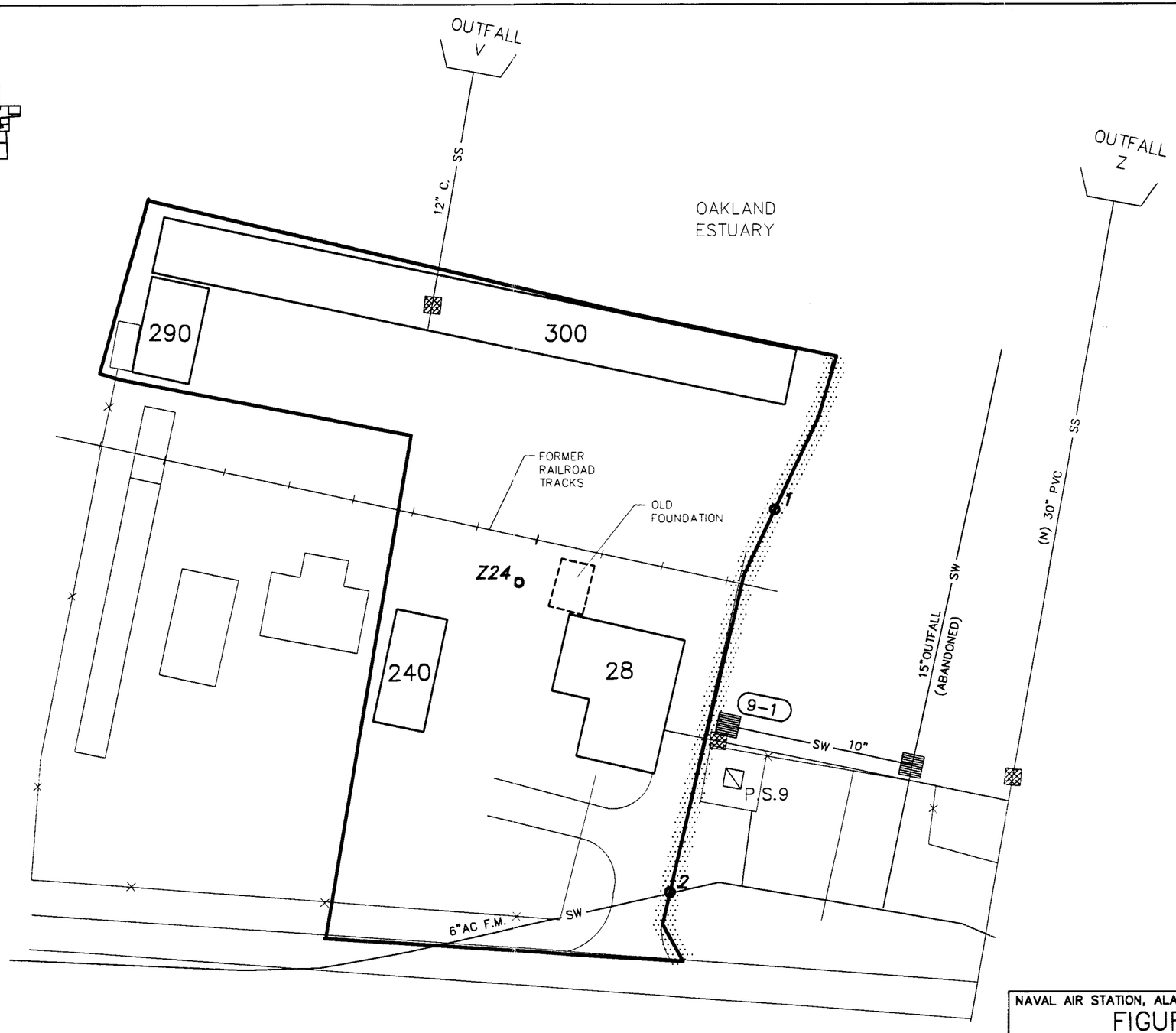
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 21, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, and 22. This parcel zone has been designated the Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcels north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this





GENERAL LEGEND

- PARCEL OUTLINE
- 2 ○ SURFACE SOIL SAMPLE & No.
- (1) TARGET AREA & No.

SANITARY SEWER LEGEND

- (9-1) ■ SANITARY SEWER MANHOLE (MH No.)
- —SW— SANITARY SEWER LINE
- P.S.9 ▨ PUMP STATION & No.

MATERIALS:

A.C. – ASBESTOS CEMENT
F.M. – FORCED MAIN

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

- ▩ CATCH BASIN
- —SS— STORM SEWER LINE

MATERIALS:

CI – CAST IRON

SCALE IN FEET

60 0 60 120 180

1" = 60'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-21-1
PARCEL 21
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO. 19590021.DWG	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.96.45 — SHEET 1 OF 1

TABLE 6-2
Summary of Recommended Samples
NAS Alameda Parcel 21

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
21-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, PCBs	Lead, PCBs	XRF, Test Kit
21-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lead, PCBs	Lead, PCBs	XRF, Test Kit
21-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Lead, PCBs	Lead, PCBs	CLP RAS
Z3-24-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 21) began in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 290, 300, 240, and 28) cover approximately 20 percent of Parcel 21. The remaining 80 percent is open space. Most of the buildings on Parcel 21 were historically used as shops or warehouses. Open space has been used for staging of equipment and materials since the 1940s. Sewer lines are present on this parcel and are shown on Figure 6-21-1.

Parcel 21 is bordered by two Installation Restoration (IR) Program sites. IR Site 20 (Oakland Estuary) borders Parcel 21 to the north. IR Site 15 (Buildings 301 and 389 Storage Area) is located on Parcel 22, approximately 300 feet east of Parcel 21. IR Site 15 has been impacted by PCBs and lead. No previous investigations have been conducted at Parcel 21 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel open space and buildings are described in detail below.

Building 290

Building 290 was constructed in approximately 1944 and historically was an electrical shop (Figure 6-21-1). Currently, the building is used for locker rooms and offices. Building 290 is constructed of wood with stucco interior walls, a metal roof, and a concrete floor. The building is generally in fair condition and covers approximately 1,000 square feet.

No hazardous materials or wastes were observed to be stored in or around the building during the site inspection. No specific information

was available on historical hazardous materials use or handling in the building.

Building 300

Building 300 was constructed in approximately 1946. Currently, the building houses a tool room, dry storage warehouse, and weight room. Building 300 is constructed of wood with a metal roof and a concrete floor. The building is generally in fair condition and covers approximately 6,800 square feet.

Scattered stains on the building floor were observed during the site inspection. An approximately 12-foot by 12-foot stain was observed on the floor adjacent to a compressor storage area. Two gasoline containers (less than 50 gallons total volume) and several oxygen and acetylene compressed gas cylinders were observed to be stored in the building during the site inspection. No specific information was available on historical hazardous materials use or handling in the building.

Building 240

Building 240 was constructed in approximately 1971. Currently, the building is used as a carpentry shop. Building 240 is a Quonset hut constructed of metal with a concrete floor. The building is generally in fair condition and covers approximately 1,700 square feet.

Several small containers of glues and waxes were observed to be stored in a flammable materials storage cabinet inside the building during the site inspection. No specific information was available on historical hazardous materials use or handling in the building.

Building 28

Building 28 was constructed in approximately 1970. Currently, the building is used as a steel shop. Activities conducted in the building include welding and metal cutting and grinding. Building 28 is constructed of metal with a metal roof and a painted concrete floor. The building is generally in fair condition and covers approximately 3,000 square feet.

Scattered stains of machine oil were observed on the building floor during the site inspection. In addition, several 5-gallon containers of cutting oil were observed to be stored on the building floor. Several oxygen and acetylene compressed gas cylinders mounted on portable carts were also observed. Used cutting oil is reportedly disposed of by the

NAS Alameda hazardous materials department. Specific information was not available on historical hazardous materials use or handling in the building. The foundation of a former building is located at the northwest corner of Building 28. The former use of this building is unknown.

Open Space

Open space is defined as the paved area surrounding the parcel buildings and extending to the parcel boundaries. This space covers approximately 80 percent of Parcel 21 and is utilized for vehicle parking and material storage. The ground surface of the open space is 90 percent paved with asphalt with intermittent patches of bare soil. The asphalt is generally in fair condition.

Potential impacts to this area consist of activities already mentioned associated with the parcel buildings. In addition, there is a chemical storage locker located in the northeast corner of the parcel. The locker stores small containers of diesel fuel (less than 50 gallons total volume) and cans of latex paint (less than 25 gallons total volume). Several acetylene compressed gas cylinders are stored outside next to the locker. Three pad-mounted transformers are located approximately 15 feet north of Building 240. Railroad tracks historically crossed the northern part of the parcel parallel to the estuary approximately along the northern end of Building 28. Railroad ties have reportedly been uncovered in the vicinity of the parcel during past construction.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 21 is bounded by Parcels 4, 19, 20, 22, and 23 to the west, southwest, southwest, east, and south, respectively. Mounds of excavated soil and 55-gallon drums generated from an investigation previously conducted on Parcel 22 are located on Parcel 22 near the eastern boundary of Parcel 21. PCB and lead contamination from Parcel 22 may potentially affect Parcel 21. IR Site 20 (the Oakland Estuary) borders the parcel to the north. Impacted sediments have been identified in this area; however, migration of compounds of concern onto Parcel 21 is not probable.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 21, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-21-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 299. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 21 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 3.

Once the data gaps in Table 6-21-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 21 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-21-2

Summary of Data Gaps
NAS Alameda Parcel 21

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 15 (Buildings 301 and 389 Storage Area) is located approximately 300 feet east of Parcel 21. Remediation activities are planned for 1994 at IR Site 15. • IR Site 20 (Oakland Estuary) border Parcel 21 to the north. IR Site 20 is unlikely to have impacted Parcel 21.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1: Pesticides may have impacted the long-term unpaved areas (currently unpaved).
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space, Eastern Boundary): Soils along the eastern boundary of Parcel 21 may have been impacted by PCBs and lead from Parcel 22.

TABLE 6-21-2

Summary of Data Gaps
NAS Alameda Parcel 21

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Railroad tracks formerly existed in this parcel.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release areas described above and listed in Table 6-21-2.

- Target Area 1 (Open Space, Eastern Boundary): Soils along the eastern boundary of Parcel 21 may have been impacted by PCBs and lead from Parcel 22. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-21-1.

The following zone-wide target area was identified on Parcel 21 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Four of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 21. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 21 are listed on Table 6-21-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) will be employed to assess conditions in the target areas and to identify whether further sampling in the follow-up detailed evaluation phase is necessary. Two parcel-specific and one zone-wide surface soil sample will be collected from the locations shown

on Figure 6-21-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The surface soil sampling locations shown on Figure 6-21-1 are approximate. Samples should be collected from visibly stained soil areas, if appropriate. Two surface soil samples should be collected from Target Area 1 at locations judged to have the greatest potential to be impacted by PCBs or lead from Parcel 22 and IR Site 15 (i.e., potential observed surface water runoff pathways from Parcel 22). Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sample (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-22

PARCEL 22 EVALUATION PLAN

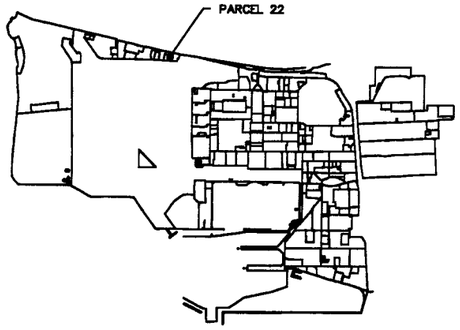
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 22 at NAS Alameda (Figure 6-22-1). The parcel, which is located in the northern portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. The eastern two-thirds of Parcel 22 is Installation Restoration (IR) Program Site 15, which is currently being investigated. Remediation of soils at IR Site 15 contaminated with PCBs and lead is scheduled for September 1994. Parcel 22 could not be accessed for site inspection because of the investigation activities currently being conducted. No parcel-specific and one zone-wide target investigation area (target area) were identified at this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-22-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 22, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 22, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 4, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, and 21. This parcel zone has been designated the



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

Z13 SURFACE SOIL SAMPLE LOCATION

(1) TARGET AREA AND NUMBER

FUEL LINE LEGEND

FUEL LINES IN USE

SANITARY SEWER LINE LEGEND

9-1 SANITARY SEWER MANHOLE & No.

VENTURI METER

VALVE

SW SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON
A.C – ASBESTOS CEMENT
F.M. – FORCED MAIN

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

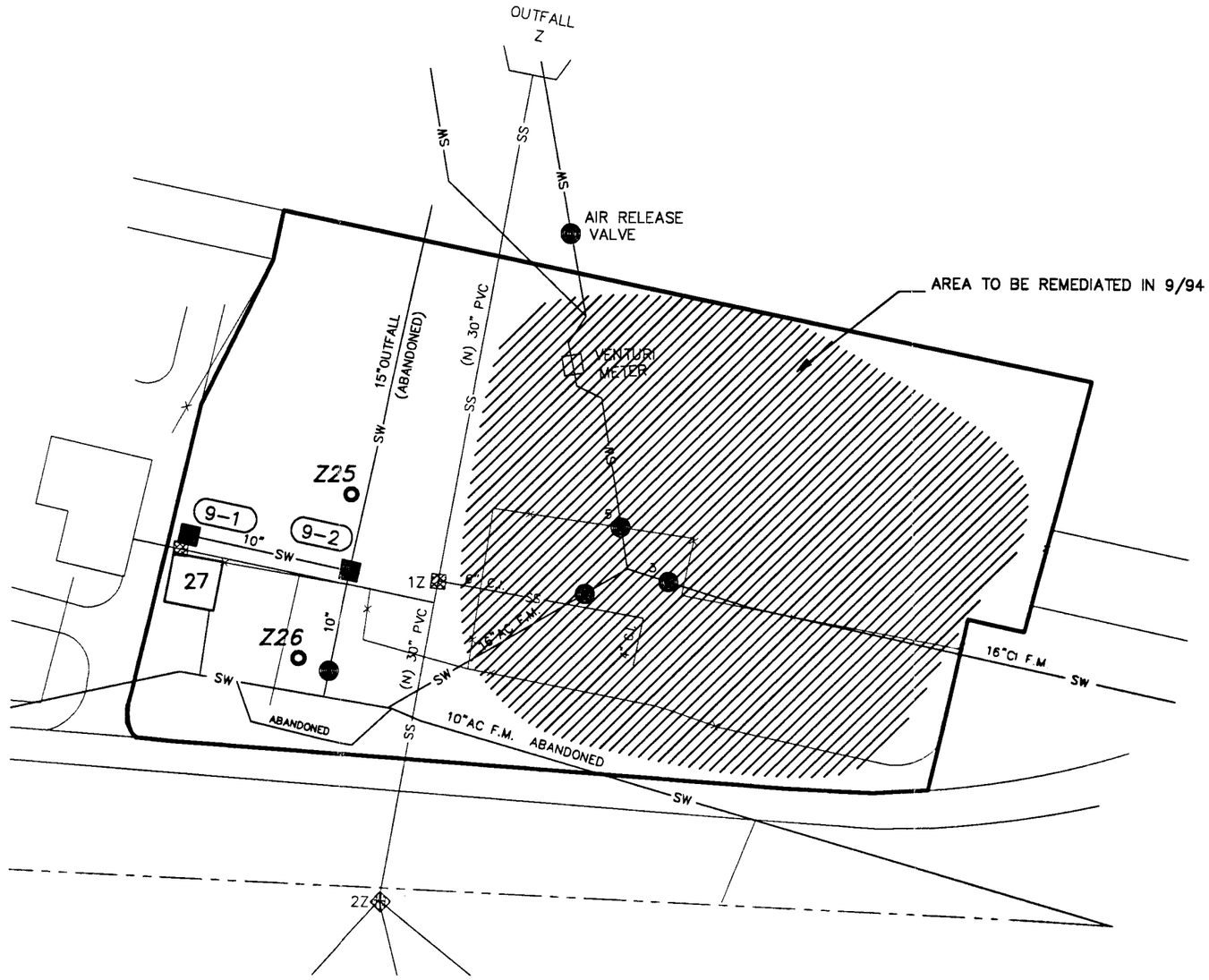
1Z MANHOLE & No.

CATCH BASIN

SS STORM SEWER LINE

MATERIALS:

C.I. – CAST IRON
PVC – POLYVINYL CHLORIDE



SCALE IN FEET

80 0 80 160 240

1" = 50'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-22-1
PARCEL 22
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590022.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.96.45 — SHEET 1 OF 1

TABLE 6-22-1

Summary of Recommended Samples
NAS Alameda Parcel 22

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z3-25-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS
Z3-26-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 03 Target Area 1	Pesticides, PCBs	Pesticides, PCBs	CLP RAS

Northwestern Construction and Maintenance Zone (Zone 3). The zone encompasses the parcel north of the runway that have historically contained shops and storage areas associated with a variety of activities including construction, maintenance, aircraft refueling, and fire training. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 3.

Filling associated with the railroad tracks and ferry terminal formerly located along the northern edge of the current NAS Alameda runway area (including part of Parcel 22) began in the early 1900s. Prior to this time, the area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 27) and three former building foundations (Buildings 283, 301, and 389) cover approximately 20 percent of this parcel. The remaining 80 percent is open space. The parcel area and building are not currently utilized because of the investigation and remediation activities ongoing at IR Site 15. In the recent past, parcel buildings were used for shops and equipment storage. Sewer lines are present on this parcel and are shown on Figure 6-22-1. Construction activities associated with parcel sanitary sewer lines are scheduled for late 1994. A transformer and substation switchgear are also located at this parcel.

Parcel 22 is located adjacent to an Installation Restoration (IR) Program site (IR Site 20, Oakland Estuary). The western two-thirds of Parcel 22 is an IR site (IR Site 15, Buildings 301 and 389 Storage Area). Previous investigations have been conducted at IR Site 15 and specific data regarding chemical occurrence are included in this PEP.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 27

The date of construction of Building 27 is unknown (Figure 6-22-1). The materials of construction and condition of the building are also unknown because access could not be gained to the parcel for site inspection. Building 27 is a sewer lift station/maintenance shop and covers approximately 1,300 square feet.

Concerns associated with Building 27 include the potential for runoff from the building; a catch basin located to the east of the building captures runoff, which is then conveyed to Oakland Estuary Outfall Z. In addition, information collected during the EBS indicates that biocide and petroleum products were reportedly stored in Building 27. The quantities of these products stored and the duration of storage are unknown.

Building 283 (Demolished)

Building 283 was constructed in approximately 1945. Information collected during the EBS indicates that Building 283 was used as a general warehouse and for storage of aircraft arresting gear. This building was a Quonset hut constructed of metal with a concrete floor and covered approximately 850 square feet. Based on a review of aerial photographs, the building was demolished in early 1994. The building foundation still remains.

Concerns associated with this building include documented chemical storage in the building. Approximately 3,000 gallons of paint, petroleum products, and halogenated and non-halogenated organic compounds were previously stored in this building. The time period during which these chemicals were stored in the building is unknown.

Building 301 (Demolished)

Building 301 was constructed in approximately 1944. Information collected during the EBS indicates that Building 301 was used for storage of electrical equipment, oil-filled transformers, and unused machinery. This building was a Quonset hut constructed of metal with a concrete floor and covered approximately 850 square feet. Based on a review of aerial photographs, the building was demolished in early 1994. The building foundation still remains.

Concerns associated with this building include documented chemical storage in the building. Approximately 2,500 gallons of paint, petroleum products, and halogenated and non-halogenated organic

compounds were previously stored in Building 301. The time period during which these chemicals were stored in the building is unknown. During a site visit conducted in March 1988 Canonie Environmental representatives reported that several 55-gallon drums of hydraulic fluid were stored in Building 301 and surface soils around the building were discolored.

Building 302 (Demolished)

Building 302 was constructed in 1977. The dimensions, materials of construction, and function of Building 302 are not known. Associated structures 302E and 302W function as navigation aid targets and were constructed in 1985. The dimensions and materials of construction of structures 302E and 302 W are not known.

Building 389 (Demolished)

Building 389 was constructed in the early 1950s. Information collected during the EBS indicates that Building 389 was used for storage of transformers. The building was a Quonset hut constructed of metal with a concrete floor. The dimensions of this building are unknown. Based on a review of aerial photographs, the building was demolished in the early 1980s. The building foundation still remains.

Concerns associated with this building include the storage of transformers. Prior to 1974, transformers were stored on the soil in the vicinity of Buildings 283, 301, and 389. According to personnel familiar with site operations, up to 400 gallons of PCB-containing oil from transformers may have been stored at any one time. Periodic leaks of the PCB-containing oil were recalled. The PCB-containing oil was also drained from the transformers on a regular basis and sprayed on the ground around the nearby buildings for weed control (Ecology and Environment, 1983).

Open Space

The open space occupies approximately 80 percent of the total parcel area. The majority of the open space is IR Site 15, which is excluded from the screening-level investigation proposed in this PEP.

Several previous investigations were conducted at IR Site 15 between 1985 and 1992. Investigation activities conducted at the site include surface geophysics, surface soil sampling, installation of soil borings and subsurface soil sampling, installation and sampling of

groundwater monitoring wells, in situ ground water permeability testing, and ground water level measurement. The investigations indicated that surface soils at IR Site 15 contained moderate levels of PCBs (Aroclor-1260) and lead and low levels of pesticides, SVOCs, and other metals. Concentrations of PCBs detected in surface soils ranged from less than 1 mg/kg to 19 mg/kg, and concentrations of lead ranged from 5 mg/kg to 1,350 mg/kg. At depths greater than two feet below ground surface, PCBs and pesticides were not detected and lead concentrations did not exceed 10 mg/kg. No PCBs, pesticides, VOCs, SVOCs, or lead have been detected in groundwater.

Based on the results of the investigations conducted at IR Site 15, the lateral extent of PCBs and lead in surface soils was estimated. PCBs in soil at concentrations greater than 1 mg/kg (1 mg/kg is the preliminary site remedial goal for PCBs in soil) encompass an area of approximately 45,000 square feet. The areal extent of soil containing lead at concentrations greater than 130 mg/kg (130 mg/kg is the default value used by DTSC for the remediation of lead in soil) is approximately 17,000 square feet. The estimated volume of soil requiring remediation is approximately 3,700 cubic yards. Remediation activities at IR Site 15 are currently scheduled for September 1994.

Although the PCB- and lead-contaminated soils at IR Site 15 do not appear to have impacted groundwater, the potential exists given that the depth to groundwater is shallow (between two and five feet below ground surface). Several CPT/HydroPunch testing locations on Parcel 22 have been proposed by the IR contractor as part of ongoing investigations.

The western one-third of the open space occupies approximately 5,000 square feet. The ground surface of the open space is 90 percent asphalt paved, with patches of dirt. The pavement is generally in poor condition. Potential impacts to this area consist of the activities already mentioned associated with the parcel buildings, and potential impacts from IR Site 15. In addition, a transformer is located near the southwest corner of Building 27.

Railroad tracks historically crossed the center of Parcel 22 parallel to the estuary. Railroad ties have reportedly been uncovered in the vicinity of the parcel during past construction.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified

any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 22 is bounded by Parcels 21 and 23 to the west and east, respectively. There are no activities of environmental concern associated with the boundaries of these parcels that are likely to affect boundary areas of Parcel 22. IR Site 20, the Oakland Estuary, borders the parcel to the north. Impacted sediments have been identified in this area; however, migration of compounds of concern onto Parcel 22 is not probable.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that may prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-22-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 22 because no industrial buildings are present.

As noted earlier, Parcel 22 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 3.

TABLE 6-22-2

Summary of Data Gaps
NAS Alameda Parcel 22

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 22.
Installation Restoration (IR) Sites	• IR Site 15 (Buildings 301 and 389 Storage Areas) is located on Parcel 22. Additional subsurface investigation relative to IR Site 15 is proposed by the IR contractor. • IR Site 20 (Oakland Estuary) borders Parcel 22 to the north.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 3 Target Area 1: Pesticides may have impacted the long-term unpaved areas (currently unpaved).
Potential Parcel-Specific Release Areas	• No parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-22-2

Summary of Data Gaps
NAS Alameda Parcel 22

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel lines	• No underground or aboveground fuel lines identified.
- Steam lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-22-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 22 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 3. The nature and location of the zone-wide target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 3 Target Area 1 (Landscaped and Long-Term Unpaved Areas): This target area includes all landscaped and current/former unpaved areas within Zone 3. Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. This target area is classified as having potential likelihood of impacts. Two of the twenty-six proposed zone-wide surface soil samples for pesticides are located in Parcel 22. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 22 are listed on Table 6-22-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the zone target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-22-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 22. One surface soil sample will be collected from the location shown on Figure 6-22-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Sampling associated with former railroad tracks will not be conducted because their former location is not known well enough to sample effectively.

The sample locations shown on Figure 6-22-1 is approximate. The sample locations were selected to provide overall coverage of the area of soils that may have been impacted by pesticides.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z4

ZONE 4 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 4 at NAS Alameda. Zone 4 has been designated the Runway Zone and encompasses the two parcels that are used as aircraft runways, taxiways, and aprons. Zone 4 contains Parcels 23 and 205. During sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and five parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface GeoProbe soil sampling. Twenty-two surface soil samples and 12 subsurface soil samples will be collected in the zone. Because Parcel 23 covers more than 99 percent of this zone and no zone-wide target areas have been identified, the Parcel 23 PEP (Section 6-23) provides most information relevant to the evaluation of this zone.

SECTION 6-23

PARCEL 23 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 23 at NAS Alameda (Figure 6–23–1). The parcel, which is located in the western portion of the base, is 547 acres in size and is irregular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units; however, two former GAP sites existed on adjacent Parcel 205. Four parcel-specific target investigation areas (target areas) have been identified on this parcel; one has been identified on the adjacent Parcel 205. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface GeoProbe soil sampling. Table 6-23-1 provides the complete list of samples and analyses prescribed by this plan. No potential zone-wide concerns were identified in this zone, therefore, the Zone Analysis Plan for Zone 4 has been condensed. This PEP for Parcel 23 will serve as the ZAP for Zone 4. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 23, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 23, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcel 205 (less than 0.2 acres). This parcel zone has been designated the Runway Zone

TABLE 6-23-1

Summary of Recommended Samples
NAS Alameda Parcel 23

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
23-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, EPA 8080
23-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, EPA 8080
23-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, EPA 8080
23-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, EPA 8080
23-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, EPA 8080
23-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, CLP RAS
23-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, EPA 8080
23-6-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1, Open Space IV	Fuels, Oils, PCBs	TPH, PCBs	EPA 8015-Modified, CLP RAS
23-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2, Open Space IV	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2, Open Space IV	Fuels, Oils	TPH, Metals	EPA 8015-Modified, CLP RAS
23-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2, Open Space IV	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-7-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2, Open Space IV	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, CLP RAS

TABLE 6-23-1

Summary of Recommended Samples
NAS Alameda Parcel 23

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
23-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2, Open Space IV	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-8-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2, Open Space IV	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3, Open Space II	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 3, Open Space II	Fuels, Oils	TPH, Metals	EPA 8015-Modified, CLP RAS
23-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3, Open Space II	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-9-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 3, Open Space II	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, CLP RAS
23-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3, Open Space II	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-10-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3, Open Space II	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3, Open Space II	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-11-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3, Open Space II	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3, Open Space II	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-12-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3, Open Space II	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3, Open Space II	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan

TABLE 6-23-1

Summary of Recommended Samples
NAS Alameda Parcel 23

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
23-13-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3, Open Space II	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-14-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-14-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4, Open Space I	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-15-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-15-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4, Open Space I	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-16-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-16-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4, Open Space I	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-17-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-17-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4, Open Space I	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-18-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-18-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, CLP RAS
23-18-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4, Open Space I	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, EPA 8240, ICAP Scan
23-18-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 4, Open Space I	Fuels, Solvents, Metals	TPH, VOCs, Metals	EPA 8015-Modified, CLP RAS

TABLE 6-23-1

Summary of Recommended Samples
NAS Alameda Parcel 23

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
23-19-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-20-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, ICAP Scan
23-20-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 4, Open Space I	Fuels, Oils	TPH, Metals	EPA 8015-Modified, CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

(Zone 4). The Runway Zone encompasses the areas that have been used as aircraft runways, taxiways, and parking aprons. During sampling program development, the two parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for both parcels.

Filling began in the area covered by Parcel 23 in approximately 1900. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was filled in phases, with most recent filling completed in 1963; the ground level and grading have not changed significantly since that time.

Currently, 16 buildings and 12 structures cover approximately one percent of the parcel. The remainder (99 percent) is open space. In general, the parcel area is presently in use as an airfield. Fifteen buildings and three structures were formerly located on the parcel and have since been demolished. Underground fuel lines and sewer lines are present on this parcel and are shown in Figure 6-23-1.

Parcel 23 is located in proximity to seven Installation Restoration (IR) Program sites (IR sites 1, 2, 6, 10A, 15, 17 and 20). Previous investigations have been conducted at Parcel 23 and specific data regarding potential chemical occurrence at the sites are available. Previous investigations affecting adjacent parcels are discussed in the following section.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Previous Investigations

Portions of Parcel 23 were investigated as part of the investigations for IR Sites 1, 2, 6, 10A, and 15. These investigations are summarized in two reports prepared in 1992 and 1993 by PRC Environmental Management and Montgomery Watson., under contract N62474-88-D-5086, entitled *Data Summary Report RI/FS Phases 1 and 2a* and *Data Summary Report RI/FS Phases 2b and 3* . Previous investigations have produced analytical results from soil borings and twelve monitoring wells scattered throughout Open Spaces III, V, and VI (see Figure 6-23-1 for monitoring well locations). Additional surface soil, soil boring, and

HydroPunch sample locations proposed by the IR contractor are also shown on Figure 6-23-1.

Building 50, 51, 56, 57, and 58

Buildings 50, 51, 56, 57, and 58 were constructed in 1941 and served as high explosive, pyrotechnic, and missile magazines. These one-story, 1,400 to 1,600-square-foot buildings are still standing, but were not inspected because they contain classified ammunitions. Buildings 50, 51, 56, 57, and 58 are constructed of concrete and feature concrete floors and dirt roofs. Utilities located within and immediately surrounding the buildings include storm sewer and electrical lines. A transformer is reportedly present at Building 56. EBS information indicates that activities conducted within these buildings were limited to high explosive munitions storage.

Documents show that ordnance has been stored in Building 50, 51,.56, 57, and 58 from 1941 to the present. The actual inventory of the materials stored in these buildings is classified. There have not been any documented spills at these buildings. Staining is not apparent in the aerial photographs. Because most ordnance was shipped into and out of Alameda intact, it is unlikely that significant environmental impact has occurred resulting from this use of the buildings.

Although Buildings 50, 51, 56, 57, and 58 were not physically inspected, a preliminary assessment performed by the Facility Management Office indicates that asbestos-containing materials (ACM) are probably not present. Based on the age of the buildings, lead-based paint may be present.

Building 71

Building 71 was constructed in 1950 and served as a gasoline filling station. Building 71 was located directly north of Building 4, at the eastern tip of Runway 25. Demolished in 1962, Building 71 was of semi-permanent construction and covered approximately 2,400 square feet. Utilities located within and immediately surrounding Building 71 included sanitary sewer, storm sewer, water, electrical, and fuel lines.

EBS information indicates that activities conducted within and adjacent to this building included gasoline refueling. The refueling process, which involved filling vehicle fuel tanks with petroleum products, occurred within Building 71 from 1950 to approximately 1962.

There have not been any documented spills at this building. Staining is not apparent in the aerial photographs, and was not noted during the site inspection. Because this building was demolished in 1962, and staining would not be readily apparent in aerial photographs, this building is addressed by Target Area 2.

Building 100

Building 100 served as a vault for a 4,160 kVA transformer, which is still present. This one-story building is still standing and covers approximately 600 square feet. Utilities located within and immediately surrounding Building 100 include electrical lines.

EBS information indicates that this building was always used as a transformer vault. Although Building 100 was not physically inspected, a preliminary assessment performed by the Facility Management Office indicates that asbestos-containing materials (ACM) are probably not present.

Structure 259

Structure 259 was constructed in 1983 and serves as an aircraft rinse facility. This sloped concrete structure, which covers approximately 8,500 square feet, is located west of Structure 489 and south of Buildings 490 and 100. Utilities located within and immediately surrounding Structure 259 include storm sewer, water, and electrical lines. On-site inspection failed to locate an oil/water separator; the rinsate appears to drain to the storm sewer.

EBS information indicates that the rinsing of aircraft has occurred at Structure 259 from 1983 to the present. There have not been any documented spills at this structure. Staining is not apparent in the aerial photographs, and no staining was noted during the site inspection.

Building 270

Building 270 was constructed in 1944 and served as a pyrotechnics magazine. This one-story, 800-square-foot building was demolished in 1987. Building 270 was constructed of concrete and featured a concrete floor and dirt roof. There were no utilities located within or immediately surrounding Building 270.

EBS information indicates that Building 270 was used for pyrotechnics storage from 1944 to 1987. The actual inventory of the materials stored

in this building is classified. There have not been any documented spills at this building. Staining is not apparent in the aerial photographs, and none was noted during the site inspection.

Building 272

Building 272 was constructed in 1945 and serves as a miscellaneous storage facility. This one-story building is still standing and is in fair condition. Building 272 is a metal Quonset hut with a concrete floor, and covers approximately 800 square foot. Building 272 was formerly a liquid oxygen/nitrogen facility. Storm sewer and electrical utilities are located within and immediately surrounding Building 272.

Building 272 is equipped with a heating-ventilation-air conditioning (HVAC) system. A preliminary assessment performed by the Facility Management Office indicates that asbestos-containing materials (ACM) probably are not present. Based on the age of Building 272, lead-based paint may be present.

There have not been any documented spills at this building. Staining is not apparent in the aerial photographs, and no staining was noted during the site inspection.

Building 332

Building 332 was constructed in 1947 and served as a Navy Exchange Garage. Building 332 was located directly north of Building 4, Wing number 14, where Runway 25 is now located. Demolished in approximately 1962, Building 332 was of semi-permanent construction and covered approximately 4,100 square feet. Utilities located within and immediately surrounding Building 332 included underground storage tanks, sanitary sewer, storm sewer, and fuel lines.

EBS information indicates that activities conducted within this building included automobile repair and maintenance. It appears that Building 332 was always used as a garage. The operations which may have occurred here involve automobile engine maintenance and repair, which typically involve the use of chemicals including solvents, acids (engine dipping and cleaning processes), oil, gasoline, and other petroleum products. These operations occurred within Building 332 from 1947 to approximately 1962.

There have not been any documented spills at this structure. No staining is apparent in aerial photographs, and no staining was noted during the site inspection. Because this building was demolished in

1962, and staining would not be readily apparent in aerial photographs, this building is addressed by Target Area 2.

Building 407

Building 407 was constructed in 1957 and served as a liquid nitrogen/oxygen storage facility. This one-story, 900-square-foot building is constructed of cinder blocks and features a concrete floor and metal roof. Utilities located within and immediately surrounding Building 272 include a storm sewer and electrical lines. A transformer is also present.

EBS information indicates that activities conducted within this building included those associated with its use as a liquid oxygen/nitrogen facility. Liquid oxygen/nitrogen storage and transfer processes occurred within Building 407 from 1957 to the present.

There have not been any documented spills at this structure. No staining is apparent in the aerial photographs, and no staining was noted during the site inspection.

Structure 452

Structure 452 was constructed in 1960 and served as an aviation meteorological facility. This structure is still standing and is generally in fair condition. Utilities located within and immediately surrounding Structure 452 include storm sewer lines.

EBS information indicates that this structure was always used as an aviation meteorological facility. No chemicals are documented to have been stored in or used at Structure 452. There have not been any documented spills at this structure. Staining is not apparent in the aerial photographs, and none was noted during the site inspection.

A preliminary assessment performed by the Facility Management Office indicates that asbestos-containing materials (ACM) are probably not present. Based on the age of Building 452, lead-based paint may be present.

Structure 480

Structure 480 was constructed in 1942 and serves as a wind direction indicator. This multi-sided aluminum structure responds to changes in wind direction by rotating about a vertical axis. The space occupied

by Structure 480 was formerly open space. There are no utilities located within or immediately surrounding Structure 480.

EBS information indicates that this structure has always been used for wind direction indication. No chemicals are documented to have been stored or used at Structure 480. There have not been any documented spills at this structure. Staining is not apparent in the aerial photographs, and no staining was noted during the site inspection.

Structures 483, 485, 495, 511, 567, and 599

Structures 483, 485, 495, 511, 567, and 599 were constructed between 1957 and 1967 and serve as aircraft arresting devices. Structure 485 has been removed. Structure 495 was demolished in 1988. The remaining facilities are generally in fair condition. The structures are each composed of a hydraulic cable arresting mechanism and two aboveground diesel storage tanks.

EBS information indicates that Structures 483, 485, 495, 511, 567, and 599 were always used as aircraft arresting devices. Hydraulic fluid and diesel fuel are documented to have been stored and used at these structures. Approximately 60 gallons of diesel fuel are stored in two tanks at each structure.

Site inspection data indicate that undocumented spills may have occurred near Structures 483, 485, 495, 511, 567, and 599, as evidenced by staining in these areas. These stains appear to be diesel or hydraulic fluid, and appear to have involved a relatively minor quantity of released material. The staining covers less than 100 square feet at Structures 483, 485 495, 511, 567. Surface soil samples will be obtained at three of the aircraft arresting structures (Target Area 1) and will be considered representative of all six current or former structures.

Structures 488 and 489

Structures 488 and 489 were constructed in 1944 and serve as Aircraft Calibration Pads. These concrete structures are generally in fair condition and cover approximately 2,000 square feet, each. The space occupied by Structures 488 and 489 was formerly open space. The only utility located within and immediately surrounding Structures 488 and 489 is a storm sewer.

EBS information indicates that this structure has always been used for aircraft compass calibration purposes. No chemicals are documented to have been stored or used at Structures 488 and 489. There have not

been any documented spills at these structures. Staining is not apparent in aerial photographs, and no staining was noted during the site inspection.

Structure 520

Structure 520 was constructed in 1968 and served as an Aircraft Calibration Pad. This structure is constructed of concrete, is in good condition, and covers approximately 1,100 square feet. The space occupied by Structure 520 was formerly open space. Utilities located within and immediately surrounding Structure 520 include storm sewer lines. EBS information indicates that this structure has always been used as an aircraft compass calibration pad.

No chemicals are documented to have been stored or used at Structure 520. There have not been any documented spills at this structure. Staining is not apparent in aerial photographs, and no staining was noted during the site inspection.

Building 490

Building 490 was constructed in 1957 and serves as a line maintenance shelter. This one-story building is in fair condition and covers approximately 630 square feet. The space occupied by Building 490 was formerly open space. Utilities located within Building 490 include of a transformer.

No chemicals are documented to have been stored in or used at Building 490. There have not been any documented spills at this building. Staining is not apparent in the aerial photographs, and no staining was noted during the site inspection.

Building 492

No EBS information exists for Building 492 (Sewage Pumping Station). This building, which covers approximately 2,900 square feet, could not be located in aerial photographs.

Structure 496

Structure 496 was constructed in 1964 and served as a Ground Control Approach (GCA) turntable. This steel and concrete structure is in fair condition and covers approximately 1,500 square feet. The space

occupied by Structure 496 was formerly open space. Utilities located within Structure 496 include a transformer and electrical lines.

EBS information indicates that this facility has always been used as a Ground Control Approach (GCA) turntable. There have not been any documented spills, chemical storage or use, or staining at this structure.

Building 499

Building 499 was constructed in 1964 and served as an Electrical Distribution Shelter. This one-story building is in fair condition and covers approximately 1,400 square feet. The space occupied by Building 499 was formerly open space. Utilities located within Building 499 include a transformer.

EBS information indicates that activities conducted within this building were limited to its use as an electric distribution shelter. There have not been any documented chemical storage, spills, or staining at this building.

Structure 512

Structure 512 was constructed in 1964 and served as a ship beacon. This one-story wood facility is in poor condition and covers approximately 30 square feet. The space occupied by Structure 512 was formerly open water. Utilities located within Structure 512 include electrical lines. A transformer is also present.

Small quantities of chemicals (e.g., an aerosol can of trichlorotrifluoro-ethane) are documented to have been stored inside Structure 512. There have not been any documented spills or staining at this facility.

Structure 513

Structure 513 was constructed in 1964 and serves as wheels-up/wave-off lighting. This wood structure is in fair condition. The space occupied by Structure 513 was formerly open water. Utilities located at Structure 513 include a transformer and electrical lines.

There have not been any documented chemical storage, spills, or staining associated with this structure.

Building 519

Building 519 was a field monitor station. It was constructed in 1968 and covered approximately 60 square feet. It was demolished in 1987. No chemicals are documented to have been stored or used at Building 519.

Buildings 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581

Buildings 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, and 581 were constructed in 1975 and served as ready magazines. These buildings were demolished in approximately 1992. These buildings were one-story CONEX boxes, and covered approximately 48 square feet each. Utilities located within and immediately surrounding those buildings include storm sewer lines. EBS information indicates that these buildings were used for ready munitions storage from 1975 to 1992.

There have not been any documented chemical storage or spills at these buildings. Staining was not apparent in aerial photographs, and no staining was noted during the site inspection.

Unnumbered Building #1

Unnumbered Building #1 is of metal prefabricated-type construction and is located on the southwest side of Structure 488. This one-story building is used for storage of magnetic compass calibrator equipment, an AC power source, and an electric heater. Utilities located within or immediately surrounding Unnumbered Building #1 include a storm sewer.

Unnumbered Building #2

Unnumbered Building #2 is of metal prefabricated-type construction and is located approximately 200 feet northwest of Building 499. The use of this building is unknown. Utilities located within or immediately surrounding Unnumbered Building #2 include the storm sewer.

Open Space

The open space in Parcel 23 has been subdivided into six open spaces (Open Space I through VI). The boundaries of these open spaces are shown in Figure 6-23-1.

Open Space I

Open Space I comprises approximately 10 percent of the parcel. In general, Open Space I is used as a parking apron and taxiway for aircraft. No structures, other than aircraft, are located within Open Space I. The open space surrounds three sides of a cluster of four buildings contained within Parcel 205 along the north side of the Seaplane Lagoon. Concrete covers 70 percent of the open space. Asphalt pavement covers the remaining 30 percent. All pavement is in good condition. Utilities located within Open Space I include underground active and abandoned fuel, sanitary sewer, electrical, and storm sewer lines.

Two oil/water separators are located south of Building 12 on Parcel 53 in the north portion of Parking Apron No. 4. These oil/water separators, which were installed after 1993 and are located within concrete secondary containment berms, collect runoff from two nearby aircraft parking areas. Surface soil samples will be collected from the area surrounding these oil/water separators as indicated in Target Area 4.

EBS information indicates that aircraft parking, refueling, and maintenance activities have always occurred in Open Space I. Maintenance and refueling processes appear to have been conducted primarily in the parking apron area of Open Space I. Maintenance and refueling processes appear to have occurred within Open Space I from the 1940s to the present. Aerial photographs reveal large scattered stains in the parking aprons north and south of Taxiway No. 7.

No documented spills have occurred in Open Space I. A review of aerial photographs and site inspection data indicate that undocumented spills may have occurred in the parking aprons north and south of the Taxiway No. 7. These small stains are dark and appear to consist of leaked fuel. Many stains apparent in older aerial photographs are not present in more recent photographs because the parking aprons have been repaved. Five stains south of Parcel 70, in the helicopter parking area of Parking Apron No. 4, are each approximately 40 feet long by 30 feet wide. Aircraft maintenance occurred in the area south of Taxiway No. 7 and may have resulted in fuel, oil, and solvent spills. The staining in this area is addressed by Target Area 4.

Open Space II

Open Space II comprises approximately 15 percent of the parcel. In general, Open Space II has been used as a parking apron for helicopters

and airplanes. Structures located within Open Space II include Structure 488 (Aircraft Compass Calibration Pad), Buildings 272 (Liquid Oxygen/Nitrogen Facility), 407 (Liquid Oxygen/Nitrogen Facility), 499 (Field Lighting Vault), 490 (Line Maintenance), Unnumbered Building #1 and Unnumbered Building #2. (Figure 6-23-1). The open space is 70 percent paved with concrete in good condition, 15 percent paved with asphalt in good condition, and 15 percent bare soil and vegetation in fair condition. Utilities located within and immediately surrounding Open Space II include underground storm sewer and electrical lines.

A 1,000-gallon aboveground diesel storage tank is located outside the northwestern corner of Building 499. The storage tank, which is within a concrete secondary containment berm, provides fuel to a diesel-powered generator located inside Building 499. A 5,000-gallon aboveground aviation gasoline storage tank is located on the northern side of the helicopter parking pads. This storage tank is located within a temporary secondary containment berm, which is lightly stained.

EBS information indicates that aircraft parking, refueling, and maintenance occurred within Open Space II. Aerial photographs show dark stains in the parking aprons which may be the result of refueling and maintenance. The refueling process on the northern side of the helicopter parking pads involves fuel transfer from an aboveground storage tank to aircraft via a dispensing mechanism and hose. Refueling processes that involve fuel transfer between fuel trucks and aircraft were probably conducted throughout Parking Aprons 2 and 3. Staining of the parking apron area, as observed in aerial photographs, may be a consequence of refueling and maintenance activities, in which aviation fuel and lubricating fluids are used. These stained areas are addressed by Target Area 3.

Liquid oxygen and liquid nitrogen are documented to have been stored in Building 407 at the southwestern portion of Open Space II from 1957 to present. Approximately 6,000 gallons of liquid oxygen and liquid nitrogen are presently stored in and around Building 407.

No documented spills have occurred in Open Space II. Review of aerial photographs and site inspection data indicate that undocumented spills may have occurred in Parking Aprons 2 and 3. The stained areas correspond to aircraft parking locations in the parking aprons, and are probably the result of spilled fuel or lubricating fluids. The largest stain is approximately 20 feet by 45 feet. These stained areas are addressed by Target Area 3.

Open Space III

Open Space III comprises approximately 30 percent of the parcel. In general, Open Space III is comprised of abandoned runways and is currently used primarily as a taxiway for aircraft and a training area for fire fighting activities. It also serves as a washdown area. Open Space III was used as a runway and helicopter landing area.

Structures located within the open space include Structure 480 (Wind Direction Indicator), Structure 496 (GCA Turntable), and Structure 489 (Aircraft Compass Calibration Pad). The open space is 95 percent asphalt in fair condition (with patches of dirt and other vegetation), and five percent concrete taxiways in good condition. Utilities located within and immediately surrounding Open Space III include underground fuel, storm sewer, and industrial sewer lines.

EBS information indicates that activities conducted within this open space include aircraft washdown, fire fighting training activities, aircraft warm-up, and use of the aircraft runway. The washdown process involves the rinsing of residuals (e.g., fuel and dirt) from aircraft exteriors. Washdowns were conducted in the southeastern area of the open space, north of the east/west taxiway and west of Structure 489. Fire fighting training activities involve the use of fire fighting foam on aircraft in various areas in various fire fighting scenarios.

From aerial photographs, aircraft washdown appears to have occurred at the rinse facility since 1983. From the site inspection, it appears that the residuals from the rinse facility drain to the storm sewer system.

A 200-gallon aboveground diesel storage tank is located in the northwestern portion of Open Space III, approximately 50 feet west of Structure 496. The storage tank, which does not have secondary containment, provides fuel for a generator.

Site inspection records and photo logs indicate that flammable fuels are currently stored in and used at the fire fighting training area portion of Open Space III. Approximately 60 gallons of flammable fuels are being stored in a CONEX box 150 feet east of Structure 480. Current protocols specify that excess materials be returned to the hazardous materials distribution center.

Review of aerial photographs and site inspection data indicates that undocumented scattered spills have occurred in the aircraft parking areas. The aircraft parking area spills appear to consist of small amounts of leaked fuel. This staining is relatively minor and will not be sampled.

The site inspection documented that the application of fire fighting foam in the fire training area left a white residue on the ground surface in scattered areas within Open Space III. The chemical composition of the fire fighting foam and the types of training activities conducted are unknown.

Open Space IV

Open Space IV, which is comprised of aircraft Runways 25 and 31, comprises approximately 20 percent of the parcel. Open Space IV is primarily used as an aircraft runway. Structures located within the open space include aircraft arresting devices (Structures 599, 495, 483, 485, and 511), the ship beacon (Structure 512), and the wheels up landing aid (Structure 513) (Figure 6-23-1). Each aircraft arresting device is composed of a hydraulic cable arresting mechanism and two aboveground diesel storage tanks. Ninety-five percent of the open space is paved with asphalt and concrete in good condition, and the remaining five percent is covered with grasses and other vegetation. Former Building 332, the Navy Exchange garage, was located near the eastern end of Runway 25. Former Building 71 served as a gasoline filling station from 1950 until its demolition in 1962.

EBS information indicates that activities conducted within this open space include typical aircraft runway activities. Refueling processes involving diesel fuel were conducted at the aircraft arresting devices. Staining was noted during the site inspection at the fill ports and on the asphalt around the aircraft arresting devices' storage tanks. This staining is addressed by Target Area 1. Activities typical of a service garage probably occurred at Building 332 from 1947 until demolition. Potential impacts from Buildings 332 and 71 are addressed by Target Area 2.

Diesel fuel and hydraulic fluid are documented to have been stored at the aircraft arresting devices on Runway 31 and Runway 25. Approximately 60 gallons of diesel fuel is or was stored in two aboveground storage tanks at each aircraft arresting device. The disposal method of used chemicals is unknown. Various fuels, lubricating fluids, and solvents were probably stored and used at Building 332.

A release of hydraulic fluid to a concrete vault was discovered and documented in 1987. Approximately 40 gallons of hydraulic fluid containing up to 700,000 parts per million of PCBs were released near an aircraft arresting device on the eastern side of Runway 31. The spill was absorbed and containerized; contaminated concrete was to be removed for disposal.

Review of aerial photographs and site inspection data indicates dark areas at various locations along the centerline of each of the two runways. Skid marks from aircraft tires or minor undocumented releases from aircraft are potential causes of the dark areas.

Open Space V

Open Space V comprises approximately 15 percent of the parcel. Open Space V is used for munitions storage, an aircraft taxiway, and a roadway. Structures located within the open space were constructed in 1941 and include Buildings 50, 51, 56, 57, and 58. Buildings 50, 51, 56, 57, and 58 are constructed of concrete and dirt. The open space is in fair condition; 50 percent of the surface is paved with asphalt/concrete and 50 percent is covered with grasses and other vegetation. Former Buildings 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, and 581 were lockers which housed munitions, and covered approximately 48 square feet each. All of the buildings were demolished in 1992. Utilities located within or immediately surrounding Open Space V include a storm sewer.

EBS information indicates that activities conducted within this open space included munitions storage. Munitions storage processes were conducted in the south and west perimeters of the open space. The storage of ordnance does not usually involve the use of chemicals. The storage occurred within Open Space V from 1975 to approximately 1992. Ordnance is documented to have been stored at the south and west perimeters of Open Space V from 1941 to present. The amount of ordnance stored in the buildings in Open Space V is classified.

No spills have been documented in this area. Review of aerial photographs and site inspection data did not indicate any undocumented spills.

Open Space VI

Open Space VI comprises approximately 10 percent of the parcel. There are no structures located within the open space, which is 70 percent paved with asphalt and concrete in fair condition, and 30 percent covered with grasses and other vegetation. Utilities located within and immediately surrounding Open Space VI include underground sanitary sewer, storm sewer, electrical, and fuel lines.

EBS information indicates that activities conducted within this open space were restricted to aircraft runway operations. These processes involve aircraft fuel and exhaust. The northernmost part of this area

was historically part of the railroad system. In addition, at least three different runways were situated here throughout the area's history. No chemicals are documented to have been stored or used in Open Space VI.

No spills have been documented in this area. Review of aerial photographs and site inspection data did not indicate any undocumented spills.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 23 is located in proximity to IR Sites 1, 2, 6, 10A, 15, 17, and 20. Sites 1 and 2 border the western edge of Parcel 23. IR Sites 15 and 20 border the northern edge of the parcel. The panhandle (southeast side) of the parcel is bordered by IR Sites 6 and 10A to the north and IR Site 17 to the south. IR Site 17 is not expected to impact Parcel 23. The San Francisco Bay borders the south side of the parcel. Aircraft hangars are situated along the east boundary of the main parcel property and the north boundary of the panhandle.

Parcel 205 is located south of taxiway 7 on Parcel 23. Parcel 205 contains two former GAP sites. During a site inspection, a hazardous waste storage area (possibly former GAP Site 73) was located immediately east of Building 523 on Parcel 205 at the boundary of Parcel 23. This area is used to store paint, trichlorofluoroethane, waste JP-5 and hydraulic fluid, synthetic oils, and drums of absorbent and used oil.

RCRA Sites

This parcel contains no RCRA sites; however, two former GAP Sites exist in Zone 4 on Parcel 205. GAP Site 73 is located at the eastern boundary of Parcel 205 with Parcel 23.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 23, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-23-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps for this parcel: transformers, lead-based paint, asbestos, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines is also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 50, 51, 56, 57, 58, 270, and 272. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

As noted earlier, Parcel 23 has open space areas that are landscaped or unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) or intermediate-use areas (e.g., existing unpaved parking lots or roadways where records indicate long-term pesticide use to control weeds) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 23.

Once the data gaps in Table 6-23-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcel 23 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-23-2

Summary of Data Gaps
NAS Alameda Parcel 23

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• Identified nesting and/or mating grounds for least tern on adjacent Parcel 24.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR sites 1, 2, 6, 10A, 15, 17, and 20 located in proximity to Parcel 23. Additional subsurface investigation relative to IR sites 1 and 2 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program. One aircraft arresting device reportedly contained 70% PCBs in hydraulic fluid.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-23-2

Summary of Data Gaps
NAS Alameda Parcel 23

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space IV (Buildings 332 and 71)) • Target Area 2 (Open Space IV (Runways 25 and 31)) • Target Area 3 (Open Space II (Parking Aprons 2 and 3)) • Target Area 4 (Open Space I (Taxiway No. 7 and Parking Apron No. 4))
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific and no zone-wide target areas. This subsection of the PEP discusses specific parcel target areas. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-23-2.

- Target Area 1, Open Space IV (Runways 25 and 31): In Open Space IV, Structures 483, 485, 495, 511, 567, and 599 (Aircraft Arresting Devices) are potential sources of releases due to the storage and use of diesel fuel and hydraulic fluid. At least one spill of PCB-contaminated hydraulic fluid has been documented. The stains observed during the on-site inspection suggest that spillage of diesel or hydraulic fluid occurred at each of the Aircraft Arresting Devices. Three of the six current or former Arresting Devices with the most severe staining will be sampled in the screening level investigation. Compounds of concern possible within this target area include PCBs and TPH at the current and former aircraft arresting devices. The likelihood of environmental impact having occurred within this target area is classified as potential. Six surface soil samples will be collected in this Target Area, and are listed on Table 6-23-1.

- Target Area 2, Open Space IV (Buildings 332 and 71): In Open Space IV, vehicle fueling activities that occurred at former Building 71 are a potential source of release. Similarly, former Building 332, the Navy Exchange garage, is a potential source of release due to the storage, disposal and use of potentially hazardous substances related to vehicle repair activities. Compounds of concern possible within this target area include TPH, metals, and VOCs in the former locations of Buildings 332 and 71. The likelihood of environmental impact having occurred within this target area is classified as potential. Two surface soil and two subsurface soil samples will be collected in this Target Area, and are listed on Table 6-23-1.

- Target Area 3, Open Space II (Parking Aprons 2 and 3): The aircraft parking, fueling, and maintenance that have occurred in Parking Aprons 2 and 3 of Open Space II are potential sources of release. Extensive staining is evident in aerial photographs throughout the parking apron. Compounds of concern possible within this target area include TPH, metals and VOCs in Parking Aprons 2 and 3. The likelihood of environmental impact having occurred within this target area is classified as potential. Five surface soil and five

subsurface soil samples will be collected in this Target Area, and are listed on Table 6-23-1. The sampling locations were placed in portions of Open Space II with the most severe staining.

- Target Area 4, Open Space I (Taxiway No. 7 & Parking Apron No. 4): Open Space I is a potential source of releases of fuel, lubricating fluids, and solvents due to the aircraft parking, fueling, and maintenance activities that have occurred in the parking aprons (including the area surrounding the two oil/water separators in Parking Apron No. 4). Heavy staining observed during the site inspection and in the aerial photographs indicate that spillage has occurred in the areas north and south of Taxiway No. 7. Compounds of concern possible within this target area include TPH, metals, and VOCs in the parking aprons north and south of Taxiway No. 7. The likelihood of environmental impact having occurred within this target area is classified as potential. Seven surface soil and five subsurface soil samples will be collected in this Target Area, and are listed on Table 6-23-1. Two of the seven surface soil samples will be collected from the area surround the two oil/water separators in Parking Apron No. 4. The sampling locations were placed in the areas with the most severe staining.

Screening-Level Investigation

Two screening-level techniques will be employed to assess the target areas and to identify areas that require follow-up sampling. These techniques are subsurface GeoProbe soil sampling (SOP 14) and surface soil sampling (SOP 3). A total of 20 surface soil samples and 12 subsurface soil samples will be collected at the locations shown on Figure 6-23-1. A summary of soil sample analyses to be performed for the screening level investigation is presented in Table 6-23-1. No screening-level sampling is recommended for those immediate areas until proposed IR contractor sampling has been conducted, and the extent and validity of historical and new data have been confirmed.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor

sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-205

PARCEL 205 EVALUATION PLAN

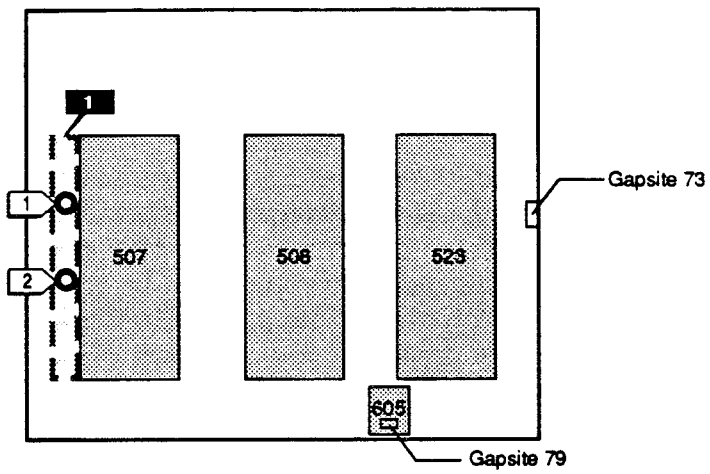
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 205 at NAS Alameda (Figure 6-205-1). The parcel, which is located in the south central portion of the base, is less than one fifth of an acre in size and is square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1. This parcel contains two former RCRA sites. One target investigation area (target area) has been identified on this parcel. Surface soil sampling is the sampling procedure called for in the screening-level investigation in these areas. Table 6-205-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 205, historical activities are discussed below.

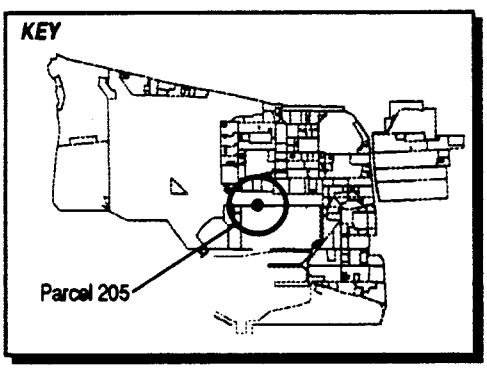
Background and Historical Activities

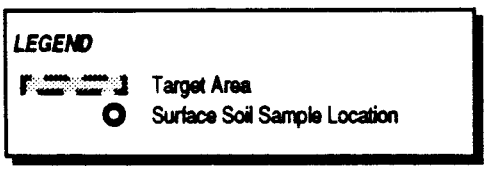
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 205, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined during the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcel 23. This parcel zone has been designated the Runway Zone (Zone 4). The Runway Zone encompasses the areas that have been used as aircraft runways, taxiways, and parking aprons. No zone-wide considerations or potential zone-wide concerns were identified in this zone so the Zone Analysis Plan for Zone 4 has been condensed. The PEP for Parcel 23 will serve as the ZAP for this zone. During sampling program







1" = 30'

Figure 6-205-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.12/GCF/07.08.94

TABLE 6-205-1

Summary of Recommended Samples

NAS Alameda Parcel 205

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
205-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, metals	EPA 8015-Modified, ICAP Scan
205-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, metals	EPA 8015-Modified, ICAP Scan
205-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, metals	EPA 8015-Modified, CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

development, the two parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for both parcels.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 507, 508, 523, and 605) cover approximately 40 percent of the parcel. The remaining 60 percent is paved open space. Overhead electrical lines, and underground water and storm sewer lines are located within or immediately surrounding Parcel 205. Storm sewer lines run west of the western parcel boundary and discharge to the Seaplane Lagoon. The parcel is currently part of the flight test area. It was formerly used as an aircraft taxiway and for sea plane docking and repair. Buildings 507, 508, 523, and 605 are not equipped with heating-ventilation-air conditioning (HVAC) systems. No incidents are documented to have occurred within Parcel 205.

Parcel 205 is located on the north side of an Installation Restoration (IR) Program site (IR Site 17, the Seaplane Lagoon). No previous investigations have been conducted at Parcel 205, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 507 and 508

Buildings 507 and 508 were constructed in 1966 and served as covered ground check and flight test buildings (Figure 6-205-1). These are one story buildings in fair condition. They are constructed of metal with a concrete floor and metal roof, and cover approximately 500 square feet each.

Information collected during the EBS indicates that activities conducted within these buildings included storage of personal equipment, electrical parts, and tools.

No chemicals are documented to have been stored in or used at Building 507. Approximately 10 gallons of oils and non-chlorinated organics are stored in three flammable storage lockers between Buildings 507 and 508. These products are used in Building 508.

During site inspection, mottled dark and white staining was noted on the southwest corner of the inside of Building 507. The stain was approximately four feet by three feet. This staining is minor and will not be sampled. Engine oil stains were noted near an engine oil drum on the west side of Building 507. This area is addressed by Target Area 1. No spills or staining were noted in Building 508.

Building 523

Building 523 was constructed in 1969 and served as a ground check and flight test building (Figure 6-205-1). This building is in fair condition. Building 523 is a one story building, constructed of metal with a concrete floor and metal roof, and covers approximately 500 square feet.

Information collected during the EBS indicates that activities conducted within this building included storage of electrical parts and tools.

Approximately 10 gallons of general cleaning supplies are stored in Building 523. Hazardous waste generation has been documented for Building 523. Approximately 1000 gallons of non-halogenated organics, petroleum products, and fuel were documented to be present during February 1992. No spills or staining was evident during the site inspection. GAP Site 73 was formerly located in Building 523. This GAP site has been removed.

Building 605

Building 605 was constructed as a storage space for electrical equipment (Figure 6-205-1). This building is in fair condition. Building 605 is a one story building and is constructed of metal with a concrete floor.

Information collected during the EBS indicates that activities conducted within this building included storage. No chemicals are documented to have been stored in or used at Building 605. There are no documented spills or staining within this building. Building 605 is listed as a removed GAP site that formerly stored blasting media, and no evidence of blasting media was noted during the site inspection.

Open Space

The open space covers approximately 60 percent of the parcel. The open space is completely paved. Approximately five percent of the paved area is surfaced with asphalt and 95 percent is covered with concrete. The pavement is generally in fair condition.

EBS information indicates that activities conducted within this open space include flight checks. In the past this parcel was used as an aircraft taxiway and as a sea plane docking and repair facility servicing Ramp No. 1 on the Seaplane Lagoon.

During a site inspection, a hazardous waste storage area (possibly former GAP Site 73) was located immediately east of Building 523 on Parcel 205 at the boundary of Parcel 23. This area is used to store paint, trichlorofluoroethane, waste JP-5 and hydraulic fluid, synthetic oils, and drums of absorbent and used oil. Chemicals in this area appeared to be stored and labeled correctly and adequately.

No spills are documented for this open space. Minor staining was noted between Buildings 523 and 508 during the site inspection. Because this staining was minor (covering two square feet) and on concrete, no sampling is proposed.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 205 is bounded by Parcel 23 to the north, west and east. The former Seaplane Lagoon (IR Site 17) borders Parcel 205 to the south. IR Site 17 is not expected to impact Parcel 205.

RCRA Sites

This subsection identifies RCRA sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (GAP Site 73 and GAP Site 79). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, these sites do not require sampling, because no staining

was noted in the former locations of these GAP Sites, and because the areas are paved.

GAP Site 73 is identified as Building 523, at Shop 95521 and has had no known releases. Site 73 was a GAP Site for JP-5, engine oil, lube oil, and hydraulic oil. This GAP site has been removed. During a site inspection, a hazardous waste storage area (possibly former GAP Site 73) was located immediately east of Building 523 on Parcel 205 at the boundary of Parcel 23. This area was storing the same compounds noted to be stored at former GAP Site 73.

GAP Site 79 is identified as Building 605, at Shop 65234 and has had no known releases. Site 79 was a GAP Site containing blasting media. This GAP Site is reported to have been removed. No evidence of blasting media was noted during the site inspection.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 205, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-205-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 507, 508, 523, and 605. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-205-2 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-205-2

Summary of Data Gaps
NAS Alameda Parcel 205

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located immediately south of Parcel 205. This site is not expected to impact Parcel 205.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (West side of Building 507).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, electrical, and water lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-205-2

Summary of Data Gaps
NAS Alameda Parcel 205

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

PRGs and background concentrations, Parcel 205 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and no zone-wide target areas. This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (west side of Building 507): Engine oil stains were noted during the site inspection on the west side of Building 507. This target area covers less than 200 square feet and has been classified as having a potential likelihood of impacts. TPH and metals are the compounds possible within this target area. Two surface soil samples will be collected in this target area, and are listed in Table 6-205-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-205-1 summarizes screening-level sampling and analysis for the target area on the parcel. Two surface soil samples will be collected from the locations shown on Figure 6-205-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. The surface soil samples in Target Area 1 should be collected from the most heavily stained areas.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling

(SOP 6), subsurface GeoProbe soil sampling (SOP 4), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z5

ZONE 5 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 5 at NAS Alameda (Figure 6-Z5-1). Zone 5 has been designated the Wetlands/Protected Area and encompasses the parcels that contain current wetlands. Zone 5 is comprised of Parcels 24 and 25. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and one parcel-specific target area have been identified in this zone. No zone-wide samples have been proposed in the zone-wide target area. Surface soil sampling is the sampling procedures called for in the screening-level investigation in the parcel-specific target area. Figure 6-Z5-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 5, historical activities are discussed below.

Zone 5 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 5 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the parcel-specific evaluation plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Zone Boundary Conditions

Zone 5 is bounded by Zones 4 and 7. Activities of concern on these adjacent zones include aircraft traffic on Zone 4 and corrosion control and aircraft testing on Zone 7. The San Francisco Bay borders Zone 5 to the south.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and one parcel-specific target area. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target area in Parcel 25. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target area and the proposed sampling are provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

In addition, parcel-specific data gaps pertaining to transformers, underground lines, parcel boundaries, and radiological concerns must be resolved before this zone can be reclassified from BRAC Category 7, leased, or transferred.

Zone 5 Target Areas

- Target Area Z1 (Unpaved Areas): This target area includes all current/former unpaved areas within the Wetlands/Protected Area Zone. Unpaved areas maintained since approximately 1941 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area contained persistent compounds. A range of unpaved areas will be sampled as a special precaution in this zone to provide data to allow potential ecological risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. No zone-wide sampling has been proposed for the zone-wide target area.

Parcel 25 Target Area

- Target Area 1 (Stain Along Road): The soil in this area appeared to have been impacted by an unknown substance. This target area

Zone 5, the Wetlands/Protected Area Zone, encompasses two parcels that contain current wetlands. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the Parcel Evaluation Plans (PEPs) for individual parcels.

Filling began in the area covered by this zone in approximately 1941. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1963; the ground level and grading have not changed significantly since that time.

The entire zone is open space. The zone area is presently wetlands. Three small concrete pads are located in Parcel 25. No buildings or structures are presently or were formerly located on the parcels in Zone 5.

Zone 5 is located more than 500 feet from any Installation Restoration (IR) Program site; however, previous investigations have been conducted near parcels in Zone 5 as part of the investigations for IR Site 1 (Disposal Area) and IR Site 2 (West Beach Landfill). Three monitoring wells (MW-108A, MW-108B, and MW-109A) have been installed near Zone 5 parcels. Details of previous investigation activities are described in the corresponding PEPs.

Underground sewer lines present in this zone are illustrated in the individual PEP figures. Most PCBs (see protocols in Section 3 for exceptions) and radiological considerations on Zone 5 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

No evidence of underground storage tanks has been identified in this zone. Neither the document review nor the site inspection identified any information that indicated that any tanks are or may have been present in this zone.

RCRA Sites

No RCRA sites have been identified in this zone.

covers approximately 100 square feet and has been classified as having a potential likelihood of impact. Although the contaminant of concern is not known, it is most likely a petroleum hydrocarbon compound, as the stain is located beside a roadway. One surface soil sample will be collected from this target area. The sample to be collected in this target area is listed in Table 6-25-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level techniques that will be employed to assess conditions in the parcel-specific target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

One surface soil sample will be collected from the parcel-specific location shown on Figure 6-Z5-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-24

PARCEL 24 EVALUATION PLAN

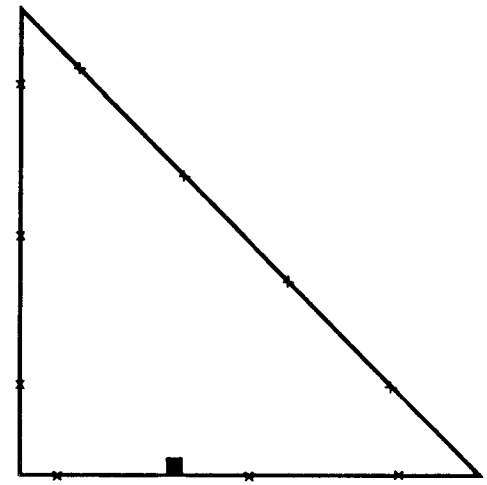
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 24 at NAS Alameda (Figure 6-24-1). The parcel, which is located in the south central portion of the base, is approximately four acres in size and is triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at Parcel 24. No parcel-specific and no zone-wide target investigation area (target area) have been identified on this parcel; however, no zone-wide sampling has been proposed for the zone-wide target area. This parcel evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 24, historical activities are discussed below.

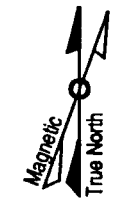
Background and Historical Activities

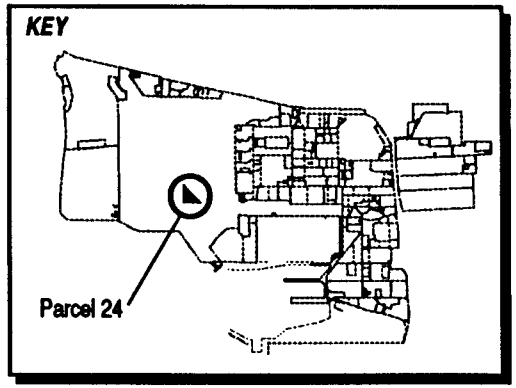
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 24 consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies other areas of concern at Parcel 24.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcel 25. This parcel zone has been designated the Wetlands/Protected Area Zone (Zone 5). The Wetlands/Protected Area Zone encompasses the parcels that presently contain wetlands, which by law must be managed and protected. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 5.







LEGEND

■ Catch Basin

Note: No parcel specific sampling required for this parcel

1"= 250'

Figure 6-24-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121 [illegible]/DS/06.29.94

Filling took place in the area covered by this parcel in 1941. Prior to this time, the parcel area was wetlands. The ground level and grading have not changed significantly since the time Parcel 24 was filled.

This parcel is entirely open space. There are no buildings, structures, utilities, or USTs on the parcel. Historical records do not indicate that any structures have been present in this area. This parcel is a protected wetlands area, and is currently a California Least Tern habitat. Only the catch basin of an underground sewer line is present on this parcel and is shown on Figure 6-24-1.

Parcel 24 is located more than 500 feet from any Installation Restoration (IR) Program site; however, previous investigations have been conducted immediately west of Parcel 24 as part of the investigations for IR Site 1 (Disposal Area) and IR Site 2 (West Beach Landfill). Two monitoring wells (MW-108A and MW-108B) have been installed immediately west of Parcel 24. Soil boring data and groundwater monitoring well results were not available for review. This area is currently under investigation. Activities of potential environmental concern within the parcel open space are described in detail below.

Open Space

All of Parcel 24 is considered open space. This parcel is entirely open space that is unpaved as shown on Figure 6-24-1. During a visual inspection, the ground surface appeared to be bare soil. This parcel has always been vacant open space since it was filled. The entire parcel is designated as a California Least Tern nesting ground.

Utilities located within and immediately surrounding the open space include underground electric lines and storm sewers. Pesticides were applied biannually from October of 1991 through October of 1993 for weed control. EBS data indicates that types of pesticides used on this parcel include Round-Up, Krovar, and Amizole.

There is no evidence that spills occurred or chemicals were stored at this parcel. Other incidents, including fires, mishaps, or flooding are not documented to have occurred within the open space of this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified

no information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 24 is bounded by Parcel 23 on all sides. Activities of concern on this adjacent parcel include typical runway operations. Investigations of IR Site 1 and IR Site 2 are on-going. If the continuing investigations at these IR sites reveal a cause for concern near this parcel, then additional sampling adjacent to Parcel 24 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 24, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific or zone-wide issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-24-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 24 because no buildings are present. As noted earlier, Parcel 24 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 5 because this parcel contains wetlands, which are environmentally sensitive areas.

Once the data gaps in Table 6-24-1 are addressed and screening-level sampling results from the zone-wide target area described below is compared to the appropriate screening levels, Parcel 24 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-24-1

Summary of Data Gaps
NAS Alameda Parcel 24

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No ACM identified at this parcel.
Endangered Species	• Identified California Least Tern nesting ground at this parcel.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 24.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 24, although potential groundwater contamination may have resulted at Parcel 24 from IR Site 1 (Disposal Area) and IR Site 2 (West Beach Landfill). Current investigations include soil and groundwater sampling from MW-108A and MW-108B on the western boundary of Parcel 24.
Lead-Based Paint (LBP)	• No LBP identified at this parcel.
PCB-Containing Equipment	• No PCB-containing equipment identified at this parcel.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas (currently unpaved) on Parcel 24.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• A storm sewer catch basin identified at this parcel.

TABLE 6-24-1

Summary of Data Gaps
NAS Alameda Parcel 24

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the parcel-specific and zone-wide target areas. The one zone-wide target area contains this parcel. No parcel-specific target areas were identified for this parcel.

- Zone 5 Target Area 1: This zone-wide target area includes all landscaped and currently or formerly unpaved areas within the Wetlands/Protected Area Zone. The landscaped areas located throughout Parcel 24 are part of this zone-wide target area. No zone-wide sampling has been proposed for the zone-wide target area.

In addition, data gaps pertaining to transformers, underground lines, parcel boundaries, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-25

PARCEL 25 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 25 at NAS Alameda (Figure 6-25-1). The parcel, which is located in the south central portion of the base, is approximately 24 acres in size and is roughly trapezoidal in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. No zone-wide sampling has been proposed for the zone-wide target area. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the parcel-specific target areas. Table 6-25-1 provides the complete list of samples and analyses prescribed by this plan. This parcel evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 25, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 25 consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies other areas of concern at Parcel 25.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcel 24. This parcel zone has been designated the Wetlands/Protected Area Zone (Zone 5). The Wetlands/Protected Area Zone encompasses the parcels that presently contain wetlands, which by law must be managed and protected. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data

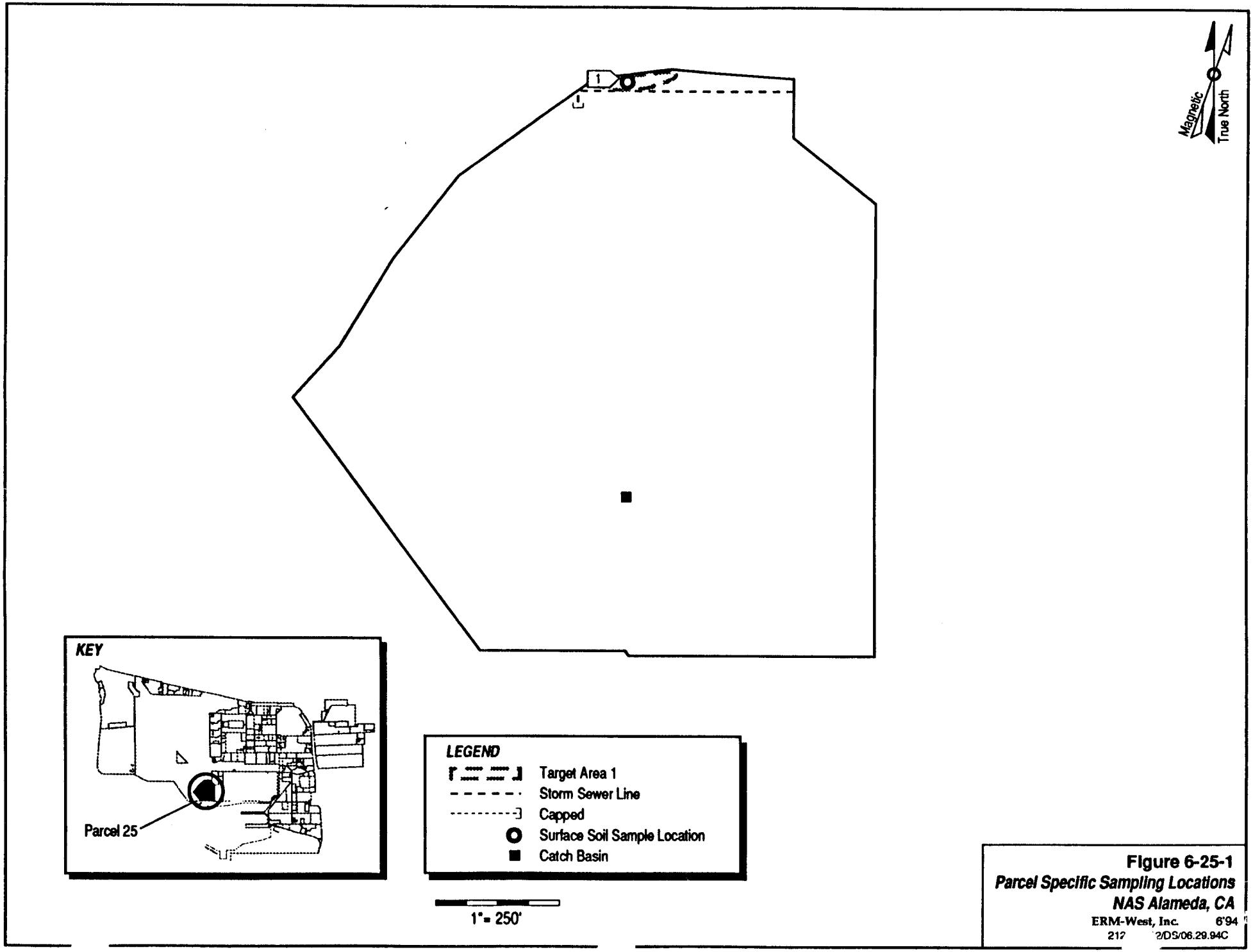


Figure 6-25-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
217 2/DS/06.29.94C

TABLE 6-25-1

Summary of Recommended Samples
NAS Alameda Parcel 25

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
25-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Gasoline, diesel, PAHs, lead	TPH, SVOCs, metals	Modified EPA 8015, CLP RAS

evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 5.

Filling began in the area of this parcel in 1958. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1963; the ground level and grading have not changed significantly since that time.

This parcel is entirely open space. There are no buildings, structures, utilities, or USTs on the parcel. Historical records do not indicate that any structures have been present in this area. This parcel is a protected wetlands area. An underground sewer line and a catch basin are present on this parcel and are shown on Figure 6-25-1.

Parcel 25 is located more than 500 feet from any Installation Restoration (IR) Program site; however, previous investigations have been conducted at the southeast corner of Runways 31 and 25 as part of the investigations for IR Site 1 (Disposal Area) and IR Site 2 (West Beach Landfill). One monitoring well (MW-109A) has been installed to the northwest of Parcel 25. Soil boring data results at MW-109A indicated the presence of 7,000 mg/kg petroleum products and 2,400 mg/kg fuel products. Groundwater sample results at MW-109A indicated a maximum concentration of 4.3 µg/L halogenated organic compounds. This area is currently under investigation.

Most PCBs (see protocols in Section 3 for exceptions) and radiological considerations on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental concern within the parcel open space are described in detail below.

Open Space

All of Parcel 25 is considered open space. This parcel is entirely open space that is unpaved as shown on Figure 6-25-1. This parcel has always been vacant open space since it was filled. This parcel, which is part of the western side of NAS Alameda, is considered a Least Tern habitat. The northern portion of the parcel is above water and is covered by grassland. The southern portion of the parcel is below the water level, and is essentially a marshland. During a visual inspection, three small concrete pads were noted at Parcel 25. One of the concrete pads was empty, one was gated (possibly for transformer), and the third supported a wind meter. An asphalt roadway enters the parcel at the northwest corner. During a visual inspection, an abandoned pipe was noted in the center of the grassy open space.

Utilities located within and immediately surrounding the open space include a capped storm sewer along the northern parcel boundary and a catch basin in the southern portion of the site.

During the EBS site inspection, a dark stain was present along the road at the northern edge of the parcel. The stain measured approximately 20 feet by 5 feet. The origin of the stain is not known.

There is no evidence that chemicals were stored in or used at this parcel. Other incidents, including fires, mishaps, or flooding are not documented to have occurred within the open space of this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified no information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 25 is bounded by Parcel 23 to the north and west, Parcel 26 to the northeast, Parcel 27 to the east, and the San Francisco Bay to the south. Activities of concern on these adjacent parcels include typical runway operations. Investigations of IR Site 1 and IR Site 2 are on-going. If the continuing investigations at these IR sites reveal a cause for concern near this parcel, then additional sampling near Parcel 25 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 25, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific or zone-wide issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-25-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed

TABLE 6-25-2

Summary of Data Gaps
NAS Alameda Parcel 25

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No ACM identified at this parcel.
Endangered Species	• Identified California Least Tern habitat at this parcel.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 25.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 25, although potential groundwater contamination may have resulted at Parcel 25 from IR Site 1 (Disposal Area) and IR Site 2 (West Beach Landfill) as indicated by detection of TPH and halogenated organic compounds in MW-109A.
Lead-Based Paint (LBP)	• No LBP identified at this parcel.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term unpaved areas (currently unpaved) on Parcel 25.
Potential Parcel-Specific Release Areas	• TPH may have impacted the northern boundary of Parcel 25 as indicated by the presence of a dark stain along the northern roadway.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-25-2

Summary of Data Gaps
NAS Alameda Parcel 25

Data Gap	Status/Description
Underground Utilities	• Storm sewer and catch basin identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• Wetlands exist at Parcel 25.
Other	• Other data gaps identified include an abandoned pipe located in the center of the grassy open space.

separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 25 because no buildings are present. As noted earlier, Parcel 25 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 5 because this parcel contains wetlands, which are environmentally sensitive areas.

Once the data gaps in Table 6-25-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 25 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the parcel-specific and zone-wide target areas. The one zone-wide target area contains this parcel. One parcel-specific target area was identified for this parcel. The nature and location of the parcel-specific target area was evaluated in this PEP to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The nature and location of the zone-wide target area was evaluated in the Zone Analysis Plan for Zone 5.

- Target Area 1 - Stain Along Road: It appears that the soil in this area has been impacted by an unknown substance. This target area covers approximately 100 square feet and has been classified as having a potential likelihood of impact. Although the contaminant of concern is not known, it is most likely a petroleum hydrocarbon compound, as the stain is located beside a roadway. the sample to be collected in this target area is listed in Table 6-25-1.

- Zone 5 Target Area 1: This zone-wide target area includes all landscaped and currently or formerly unpaved areas within the Wetlands/Protected Area Zone. The landscaped areas located throughout Parcel 25 are part of this zone-wide target area. No zone-wide sampling has been proposed for the zone-wide target area.

In addition, data gaps pertaining to transformers, underground lines, parcel boundaries, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level techniques that will be employed to assess conditions in the parcel-specific and zone-wide target area, and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-25-1 summarizes the screening-level sampling and analysis recommended for the parcel-specific and zone-wide target areas that impact Parcel 25. Two surface soil samples for the zone-wide target area, and one surface soil sample and one soil vapor sample for the parcel-specific target area will be collected from the locations shown on Figure 6-25-1.

The parcel-specific surface soil sample will be field analyzed for TPH, SVOCs, and metals. The parcel-specific sampling density is less than the standard sampling density as identified in Table 3-1 of the Shell Workplan because of the small size of the parcel-specific target area.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z6

ZONE 6 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 6 at NAS Alameda (Figure 6-Z6-1). Zone 6, which is located in the central portion of the base, has been designated the Western Hangar Zone and encompasses the parcels that are primarily used for aircraft maintenance and support activities. Zone 6 is comprised of Parcels 29, 30, 31, 32, 33, 34, 35, 36, 37, 190, 191, 192, 193, and 204. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and 16 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, soil vapor sampling, and subsurface GeoProbe sampling. Table 6-Z6-1 provides the complete list of zone-wide samples and analyses prescribed for this zone, and Figure 6-Z6-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone analysis plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 6, historical activities are discussed below.

Zone 6 Background and Historical Activities

This subsection briefly summarizes EBS information available for Zone 6, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies underground storage tanks and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the parcel-specific evaluation plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 01 Target Area 2	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-3-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-6-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-9-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-11-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-12-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-13-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-14-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-15-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-16-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-17-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-18-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-18-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-19-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-20-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-21-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-22-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-22-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-23-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-25-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-26-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-27-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-28-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-29-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-30-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-31-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-32-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-33-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-34-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-35-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-35-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-36-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-36-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-37-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-38-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-39-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-40-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-41-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-42-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-43-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-43-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-44-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-45-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-46-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-47-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-48-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-49-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-50-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-50-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-51-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-52-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-53-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-54-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-55-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-56-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-56-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-57-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-58-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-59-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-Z6-1

Summary of Recommended Samples
NAS Alameda Zone 6

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-59-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-60-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-61-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-62-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-63-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-64-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-65-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-65-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS

was deemed necessary to delineate potential impacts of compounds of concern.

Zone 6, the Western Hangar Zone, encompasses 14 parcels that are primarily used for aircraft parking, maneuvering, washdown, fueling, and maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the Parcel Evaluation Plans (PEPs) for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The area within the zone boundaries was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, approximately 34 buildings and 17 structures cover approximately 20 percent of the zone. The remaining 80 percent is open space. The zone is presently used primarily for aircraft maintenance and support activities. Five buildings and six structures were formerly located on the parcel and have since been demolished. Underground fuel and sewer lines present on this zone are illustrated in the individual PEP figures.

No Installation Restoration (IR) Program sites are located in Zone 6. No previous investigations have been conducted at Zone 6 and specific data regarding chemical occurrence at this zone are not available. Sampling near the eastern edge of Zone 6 has been performed by the IR contractor as part of the IR investigation associated with IR Site 5 (Building 5).

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on Zone 6 will be addressed in other sampling programs and are not considered in this ZAP. Industrial hygiene concerns potentially exist in Buildings 20, 21, 22, 24, 316, 319, 377, 377A, and 582.

Underground Storage Tanks

One underground storage tank (Tank 491-1) was formerly present at Zone 6 on Parcel 29. This 500-gallon tank was used to store gasoline, presumably for a nearby emergency generator. The installation date,

removal date, and exact former location of Tank 491-1 are unknown. No information is available regarding the integrity of this tank upon removal. Soil and groundwater sampling have been proposed near the former location of this tank by a separate ERM investigation.

Two active tanks are present at this zone on Parcel 37. No record regarding the tank numbers for these tanks is available. Based on the available information, these tanks are supplemental to the oil/water separator pit and are used for spill containment and storm water runoff collection around the fueling areas. The installation date for these tanks and the secondary containment status is unknown. No data pertaining to tightness or tank integrity have been identified.

Flush grade valves and pump ports observed during the site inspection indicate that two underground storage tanks may exist in the northeast portion of Parcel 30. In addition, an anecdotal report indicates that an underground storage tank, related to the fire station in Building 19, may be located on or north of Parcel 193. There is no other evidence to support the presence of underground tanks in these areas.

RCRA Sites

This zone contains seven RCRA sites on Parcels 30, 32, 190, 191, 192, 193, and 204. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, two of the RCRA sites (located in Parcel 30) in this zone require further investigation. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 6 is bounded by Zones 4, 8, 9, 10, and 11. First Street, Taxiway 4, Taxiway 3, and Taxiway 7 border Zone 6 to the east, west, north, and south, respectively. Activities of concern in adjacent zones include heavy industrial operations in Zone 10 and IR Site 10A located in Zone 11. Activities of concern on these adjacent zones include ongoing subsurface investigations related to IR sites (IR Sites 1, 2, 5, and 10A) and underground storage tanks on Zones 4, 8, 10, and 11.

Sampling related to IR Sites in Zones 1 and 11 has been proposed by the IR contractor near the boundaries of Zone 6. Additional CPT/HydroPunch samples have been proposed near the western and northern border of Zone 6 as part of the continuing investigation related to IR Sites 1 and 2 (Zone 1). Also, additional monitoring wells

have been proposed near the southeastern border of Zone 6 as part of the ongoing subsurface investigation related to IR Site 10A (Zone 11).

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and 16 parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. In addition, parcel-specific data gaps pertaining to asbestos, lead-based paint, PCBs, USTs, underground lines, and radiological concerns must be resolved before this zone can be leased or transferred.

Zone 6 Target Area

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of chemicals to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

Parcels 31, 33, 35, 36, 190, 191, 193, and 204 Target Areas

No parcel-specific target areas were identified on these parcels.

Parcel 29 Target Area

- Target Area 1 (Building 491): Based on the staining observed on the floor of Building 491, the soil beneath the concrete floor may have been impacted by diesel fuel. This target area covers approximately 100 square feet. The likelihood that environmental impacts have occurred in Target Area 1 is classified as potential. Two surface soil samples will be collected from Target Area 1. Samples to be collected in Target Area 1 are listed in Table 6-29-1.

Parcel 30 Target Areas

Three parcel-specific target areas were identified for Parcel 30 as indicated below. Twenty-eight soil vapor samples and three subsurface Geoprobe soil samples will be collected from this parcel and analyzed for VOCs, SVOCs, TPH, and metals.

- Target Area 1 (Building 24, Hangar Bay 1): Within Hangar Bay 1, significant staining was noted where volatile organic compounds were used and may have subsequently migrated into subsurface soils. Target Area 1 covers approximately 13,000 square feet. The likelihood that environmental impacts have occurred within this target area is classified as suspect. Samples to be collected in Target Area 1 are listed on Table 6-30-1.

- Target Area 2 (Building 24, Hangar Bay 3): Within Hangar Bay 3, significant staining was noted where volatile organic compounds were used and may have subsequently migrated into subsurface soils. Target Area 2 covers approximately 6,000 square feet. The likelihood that environmental impacts have occurred within this target area is classified as suspect. Samples to be collected in Target Area 2 are listed on Table 6-30-1.

- Target Area 3 (Building 24, The Mixing Room): This area is of concern because of the storage, disposal, and use of potentially hazardous substances related to painting, mixing, and finishing activities. Volatile organic compounds are the primary compounds of concern. Target Area 3 covers approximately 2,500 square feet. The likelihood that environmental impacts have occurred within this target area is classified as potential. Samples to be collected in this Target Area 3 are listed on Table 6-30-1.

Parcel 32 Target Area

- Target Area 1 (Open Space Washdown Area): The open space in the aircraft washdown area will be sampled immediately surrounding the catch basin-oil/water separator. This area is defined as a target area because of the aircraft washdown activities that occur in this area, the defueling activity that was witnessed in May 1994, and the staining observed near the drain during the site inspection. Two subsurface GeoProbe soil samples will be collected and analyzed for TPH, SVOCs, and VOCs. Samples to be collected in Target Area 1 are listed in Table 6-32-1.

Parcel 34 Target Area

- Target Area 1 (Open Space): The open space located northeast of Building 266 will be sampled in the stained areas. This area has the potential to have been impacted because of the use and spillage of hydraulic fluid in this area and the historical use of Building 266 as a line maintenance shelter. Two surface soil samples will be collected and analyzed for TPH and metals. Samples to be collected in Target Area 1 are listed in Table 6-34-1.

Parcel 37 Target Areas

Seven parcel-specific target areas were identified for Parcel 37 as indicated below. A total of 13 surface soil samples and 14 GeoProbe soil samples will be collected from this parcel.

- Target Area 1 (Oil-Water Separator Pump and Drainage Area): Subsurface soil will be collected from two sides of the oil-water separator. Samples will be collected from a depth equal to the depth to the bottom of separator pit. A Geoprobe device will be used to collect to collect these samples. The soil in the drainage area leading west to the storm drain will be sampled in two places using a surface soil survey and a subsurface Geoprobe survey. The samples will be analyzed for TPH, pesticides, metals, VOCs, and SVOCs. This target area is approximately 3,600 square feet in size.

- Target Area 2 (Maintenance Shelter): This area will be sampled with a Geoprobe. The samples will be analyzed for metals, pesticides, SVOCs, and VOCs. This target area is approximately 600 square feet in size.

- Target Area 3 (Truck Parking Area): This area will be sampled with two subsurface Geoprobe soil samples located over the two areas of

darkest staining (staining must be representative of the general staining in this target area). The samples will be analyzed for metals, pesticides, SVOCs, and VOCs. This target area is approximately 4,500 square feet in size.

- Target Area 4 (Spill Area, West Side of Parcel 37): This area will be sampled with one subsurface Geoprobe soil sample and one surface soil sample located in the darkest stained areas. The samples will be analyzed for pesticides, metals, PCBs, SVOCs, VOCs, and TPH. This target area is approximately 40 square feet in size.

- Target Area 5 (Fueling Islands): Soils in the vicinity of the fueling islands may have been impacted by chemical releases from activities conducted at this parcel. Two surface soil samples and two subsurface Geoprobe soil samples will be collected from each of the two darkest stained areas of the fueling island. One subsurface Geoprobe soil sample and one surface soil sample will be collected in the darkest stained area between the fueling islands. Two surface soil samples and two subsurface Geoprobe soil samples will be collected from the south side of the islands where the pipes enter the ground. The samples will be analyzed for metals, TPH, SVOCs, VOCs, and pesticides. This target area is approximately 4,500 square feet in size.

- Target Area 6 (Hazardous Waste Accumulation Area): This area will be sampled with one subsurface Geoprobe soil sample and one surface soil sample in the darkest most representative stained area of the hazardous waste accumulation site. The samples will be analyzed for metals, TPH, SVOCs, VOCs, and pesticides. This target area is approximately 4,500 square feet in size.

- Target Area 7 (Parcel Perimeter, Grass and Dirt Areas): This area will be sampled with four surface soil surveys located in the most representative grass and soil areas. The samples will be analyzed for pesticides. This target area is approximately 780 square feet.

Parcel 192 Target Areas

Three parcel-specific target areas were identified for Parcel 192 as indicated below. A total of five surface soil samples and two subsurface GeoProbe soil samples will be collected from this parcel.

- Target Area 1 (Building 20): Regular lubrication of the sliding hangar doors in the northwest and southeast portions of Building 20 may have resulted in the release of petroleum products to soils in these areas. The northwest area will be sampled during

the screening phase, because this area should be representative of both areas. This area is less than 500 square feet in area, and the likelihood of environmental impacts having occurred in this target area is classified as potential. Samples to be collected in Target Area 1 are listed on Table 6-192-1.

- Target Area 2 (Building 20): The central hangar-helicopter parking area of Building 20 has the potential to have impacted soils and groundwater because of storage, disposal, and use of potentially hazardous substances including petroleum products and solvents related to aircraft maintenance activities. The total stained area within Target Area 2 is less that 200 square feet and is classified as having a potential likelihood of environmental impacts. Samples to be collected in Target Area 2 are listed on Table 6-192-1.

- Target Area 3 (Open Space): Soils in the aircraft washdown area have the potential to have been impacted by petroleum products and solvents during washdown activities. The total potential affected area within Target Area 3 is less that 200 square feet, and is classified as having a potential likelihood of environmental impacts. Samples to be collected in Target Area 3 are listed on Table 6-192-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone-wide and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), and subsurface GeoProbe soil sampling (SOP 14).

Table 6-Z6-1 summarizes screening-level sampling and analysis for the zone-wide target area. For the zone target area, a total of 65 soil vapor samples and 13 subsurface Geoprobe soil samples will be collected from the zone-wide locations shown on Figure 6-Z6-1. For the parcel-specific target areas, a total of 28 soil vapor samples, 22 surface soil samples, and 21 subsurface GeoProbe samples will be collected from the locations shown on Figure 6-Z6-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-29

PARCEL 29 EVALUATION PLAN

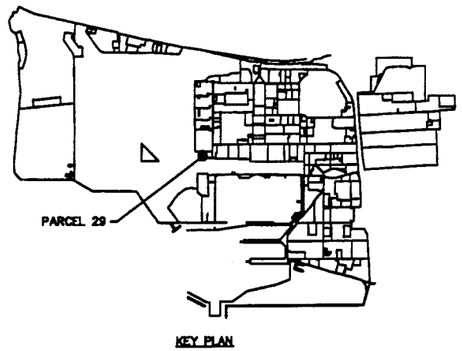
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 29 at NAS Alameda (Figure 6-29-1). The parcel, which is located in the central portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and no zone-wide target investigation areas (target areas) were identified for Parcel 29. Surface soil sampling will be used to accomplish the screening-level investigation in this target area. Table 6-29-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 29, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open space, and boundaries of Parcel 29, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies underground storage tanks and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 30, 31, 32, 33, 34, 35, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

SURFACE SOIL SAMPLE & No.

TARGET AREA & No.

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

SANITARY SEWER MANHOLE & No.

GREASE TRAP

SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM & CONDENSATE LINE LEGEND

STEAM & CONDENSATE MANHOLE & No.

STEAM & CONDENSATE LINES

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

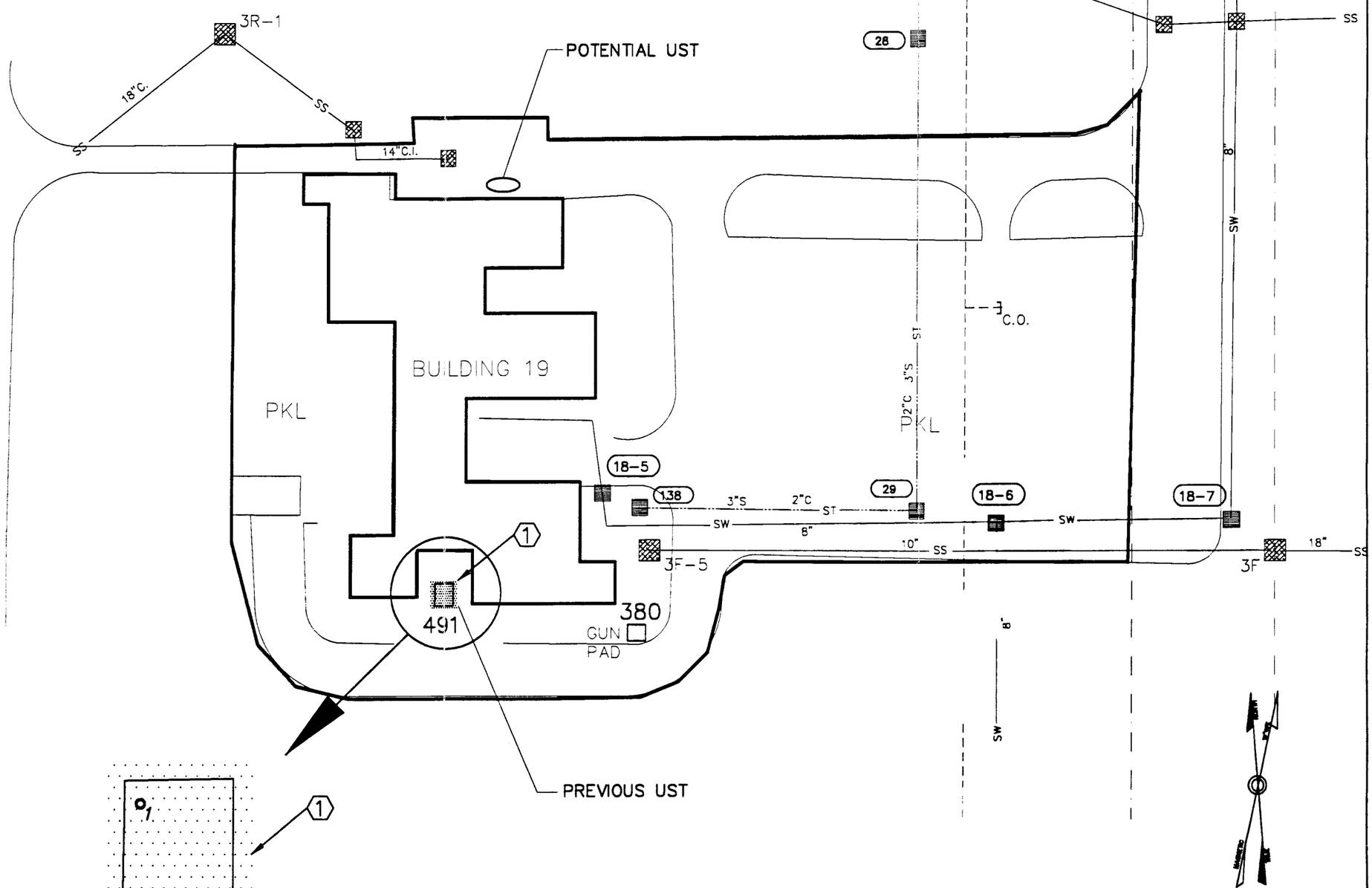
MANHOLE & No.

CATCH BASIN

STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



SCALE IN FEET

60 0 60 120 180

1" = 60'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-29-1
PARCEL 29
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO. 19590029.DWG	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,822 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.98.45 SHEET 1 OF 1

TABLE 6-29-1

Summary of Recommended Samples
NAS Alameda Parcel 29

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
29-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, Diesel	TPH	Test Kit
29-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, Diesel	TPH	Test Kit
29-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil, Diesel	TPH	Modified EPA 8015

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 491 and 518) and one structure (Structure 380, Saluting Battery Gun Mount) cover less than one percent of the parcel. The remainder of the parcel area is open space. In general, the parcel open space is presently in use as a vehicle parking area for Building 19 (located on Parcel 193), while Buildings 491 and 518 serve as support facilities for Building 19. Underground fuel and sewer lines are present at this parcel and are shown on Figure 6-29-1.

Parcel 29 is located approximately 500 feet southwest of an Installation Restoration (IR) Program site (IR Site 5, Building 5). No previous investigations have been conducted at Parcel 29 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 491

Building 491 was constructed in 1961 and has been used to house an emergency generator for Building 19 (Figure 6-29-1). Building 491 is constructed of concrete, with a concrete floor and wood roof. This one-story building covers approximately 181 square feet and is in poor condition.

Utilities located within and immediately surrounding Building 491 include underground sanitary sewer, storm sewer, steam, fuel, and electrical lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that activities conducted within this building included the use and operation of an emergency diesel generator, including fueling and maintenance. It appears that Building 491 was built specifically for the emergency diesel generator and has always housed this generator. No other chemicals are documented to have been stored in Building 491.

Although no spills are documented to have occurred on Parcel 29, staining observed during the site inspection indicates that spills may have occurred within Building 491. These stains are located on the concrete floor immediately beside and beneath the diesel generator and appear to consist of lubrication oil or diesel fuel. The quantity of material involved is unknown. The two dark, wet stains observed during the site inspection covered approximately 25 square feet and eight square feet, respectively. The smaller stain was located on the concrete secondary containment structure; site inspection photographs indicate that additional spillage may be present beneath the secondary containment. In addition to the observed staining, a strong diesel odor was noted during the building inspection.

Building 491 is not equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 491.

Building 518

Building 518 was labeled as Building 518 on Navy facility maps; however, site inspection data indicate that the building corresponding to Building 518 on Parcel 29 (a former weather station) was not physically labeled as Building 518. This former weather station (located near the west side of Building 19) is believed to be Building 518. This one-story building covers approximately 144 square feet. The construction date of Building 518 is unknown. No chemicals are known to have been stored in this building, and no spills or stains are documented.

Open Space

The open space on Parcel 29 is used primarily as a vehicle parking area for Building 19. The ground surface of the open space is approximately 95 percent paved and five percent unpaved. Approximately 70 percent of the paved area is surfaced with asphalt and 30 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. An oil-filled transformer is located near the southeast corner of Building 19. No permits appear to have been issued for processes occurring within this open space.

Structures located within the open space include a saluting battery gun mount (Structure 380) and three aboveground storage tanks (ASTs). The saluting battery gun mount, which was constructed in 1954, is located near the southeast corner of Building 19. This structure is constructed of concrete and covers approximately 50 square feet. The first aboveground storage tank provides diesel fuel to the emergency generator within Building 491 via underground fuel lines. This 500-gallon, double-walled tank is located within a 110-percent secondary containment structure. No staining was visible on the concrete beneath this tank during the site inspection. The second and third aboveground storage tanks, each with a capacity of approximately 40 gallons, are located between the 500-gallon AST and Building 19. These two tanks are mounted on a steel support structure and are no longer in use. The types of materials stored in these two tanks are unknown. No staining was noted beneath these tanks during the site inspection.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 29.

Underground Storage Tanks

One underground storage tank (Tank 491-1) was formerly present at Parcel 29. This 500-gallon tank was used to store gasoline. The installation date, removal date, and exact former location of Tank 491-1 are unknown. No information is available regarding the integrity of this tank upon removal. Soil and groundwater sampling have been proposed near the former location of this tank by ERM-West, Inc. in the Remedial Investigation of this UST being conducted under Contract No. N62474-92-D-3608, Delivery Order 009.

According to an anecdotal report, another UST may potentially be located near the north side of Building 19 (Parcel 193). There is no other evidence to support the presence of an underground tank in this area.

Parcel Boundary Conditions

Parcel 29 is bounded by Parcels 23, 193, 30, and 50. Activities of concern on adjacent parcels include aircraft painting and finishing on Parcel 30, which borders Parcel 29 to the north. First Street, Taxiway 4, and Taxiway 7 border Parcel 29 to the east, west, and south, respectively.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 29, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-29-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 29 because no industrial buildings are present.

As noted earlier, Parcel 29 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for the landscaped areas of Parcel 29.

Once the data gaps in Table 6-29-2 are addressed and screening-level sampling results from the target area described below are compared to the appropriate screening levels, Parcel 29 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. No zone-wide target areas were identified for Parcel 29. This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 491): Based on the staining observed on the floor of Building 491, the soil beneath the concrete floor may have

TABLE 6-29-2

Summary of Data Gaps
NAS Alameda Parcel 29

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 29.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 500 feet northeast of Parcel 29. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Building 491, Emergency Diesel Generator.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST (Tank 491-1) formerly existed at Parcel 29 and has been removed. According to an anecdotal report, another UST is potentially located near the north side of Building 19 (Parcel 193).

TABLE 6-29-2

Summary of Data Gaps
NAS Alameda Parcel 29

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, industrial, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

been impacted by diesel fuel. This target area covers approximately 100 square feet. The likelihood that environmental impacts have occurred in Target Area 1 is classified as potential. Two surface soil samples will be collected from beneath the concrete floor of Building 491 and analyzed for TPH. The samples should be located near floor cracks and in areas with the most significant staining. Samples to be collected in Target Area 1 are listed in Table 6-29-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-29-1 summarizes the screening-level sampling and analysis recommended for this target area. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of the sampling program, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-30

PARCEL 30 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 30 at NAS Alameda (Figure 6-30-1). The parcel, which is located in the west-central portion of the base, is approximately 11 acres in size and is roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel is approximately 11 acres in size and is roughly square in shape. Two RCRA sites (SWMU/GAP 5 and IWTP 24A) are located at this parcel. One zone-wide and three parcel-specific target investigation areas (target areas) were identified at Parcel 30. Soil vapor and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-30-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 30, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 30 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies potential underground storage tanks and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 31, 32, 33, 34, 35, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone. The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1941. The ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 24 and 24A) and one structure (Fire Pump Station) cover approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel area is presently in use as an aircraft maintenance and paint finishing hangar. Fuel and sewer lines are present at this parcel and are shown in Figure 6-30-1.

Parcel 30 is located approximately 300 feet west of an Installation Restoration (IR) Program site (IR Site 5, Building 5). Although previous investigations have been conducted near Parcel 30, specific data regarding potential chemical occurrence at Parcel 30 are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Potential environmental or industrial hygiene concerns within the open space and buildings are described in detail below.

Building 24

Building 24 was constructed in 1990 and serves as a paint and finishing hangar (Figure 6-30-1). This one-story building is approximately 250 feet wide by 375 feet long and is in good condition. Building 24 is constructed of steel, with metal siding, a concrete floor, and an asphalt-coated, steel-framed roof. The concrete floor, which is reported to be built on a five-foot to six-foot thick concrete slab, may have been damaged during the 1989 Loma Prieta earthquake while the building was under construction. It is unclear whether the report of earthquake damage refers to the floor or the slab. Building 24 contains three paint hangars and has large hangar doors on its east and west sides. The space occupied by Building 24 was formerly open space used for aircraft and vehicle parking and maneuvering.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

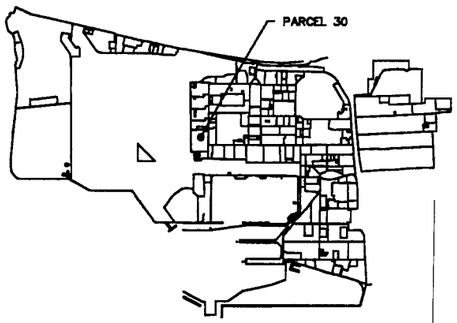
FIGURE 6-30-1 – PARCEL 30
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

6 SOIL VAPOR SAMPLE & No.

GeoProbe SOIL SAMPLE

1 TARGET AREA & No.

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

18-25 SANITARY SEWER MANHOLE & No.

G.T. GREASE TRAP

SW SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM & CONDENSATE LINE LEGEND

28 STEAM & CONDENSATE MANHOLE & No.

STEAM & CONDENSATE LINES

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

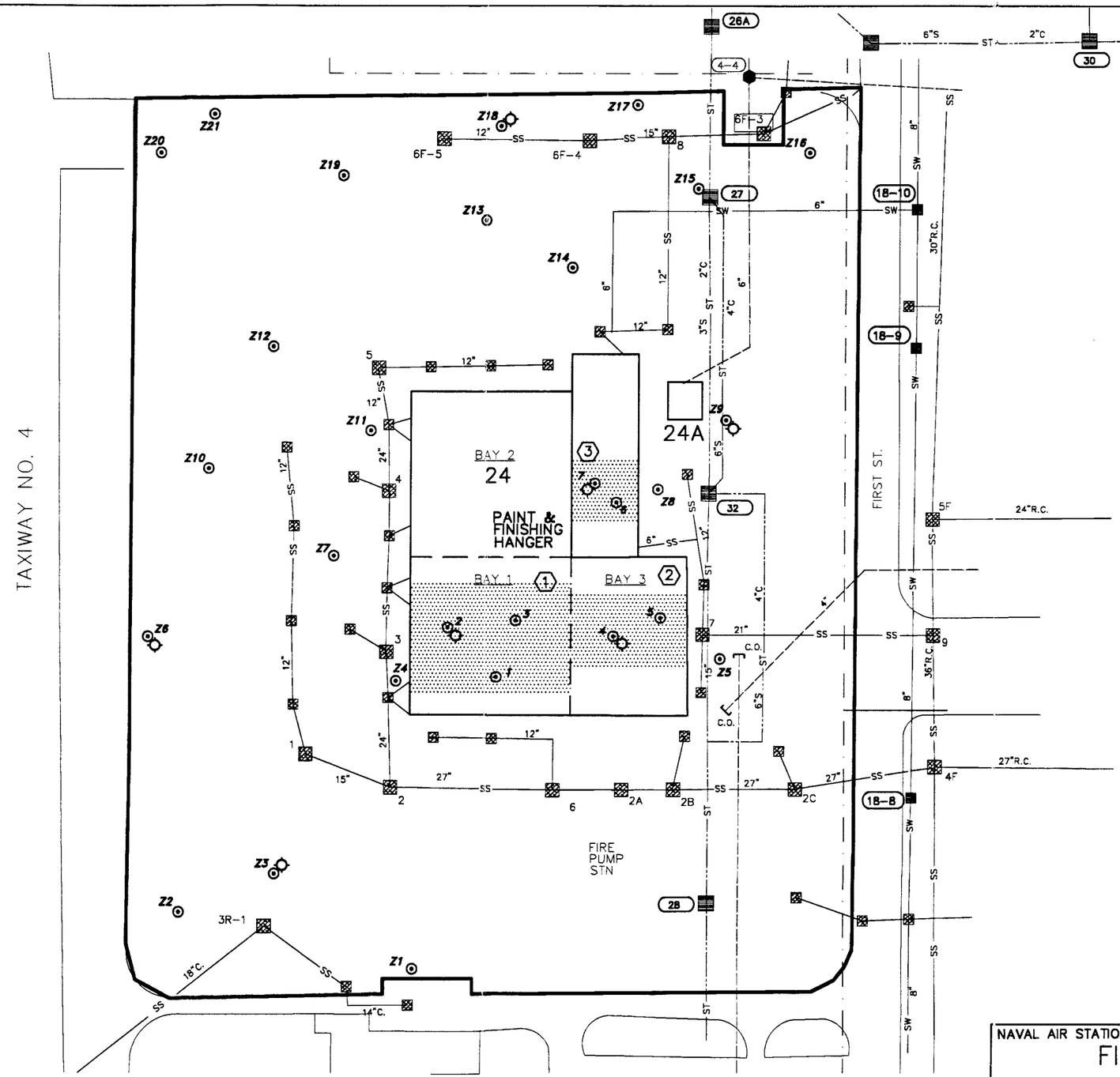
14A-5 MANHOLE & No.

CATCH BASIN

SS STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



SCALE IN FEET

100 0 100 200 300

1" = 100'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-30-1
PARCEL 30
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590030.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.96.45 — SHEET 1 OF 1

SENSITIVE

TABLE 6-30-1

Summary of Recommended Samples
NAS Alameda Parcel 30

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
30-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
30-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
30-2-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
30-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
30-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Non-halogenated/ Halogenated Org.	VOCs	GC
30-4-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
30-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Non-halogenated/ Halogenated Org.	VOCs	GC
30-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	Non-halogenated/ Halogenated Org.	VOCs	GC
30-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	Non-halogenated/ Halogenated Org.	VOCs	GC
30-7-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 3	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-30-1

Summary of Recommended Samples
NAS Alameda Parcel 30

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-3-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-6-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-9-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-11-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-30-1

Summary of Recommended Samples
NAS Alameda Parcel 30

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-12-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-13-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-14-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-15-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-16-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-17-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-18-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-18-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-19-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-20-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-21-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

Utilities located within and immediately surrounding Building 24 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. An air quality permit was issued for this building in 1993 for the paint sprayer, solvent cleaning process, furnaces, water heater, boiler, conversion coating process, and solvent recovery process.

Information collected during the EBS indicates that the following activities are conducted within Building 24: aircraft washing; paint and primer spraying, mixing, and storage; solvent storage and use; and storage and use of adhesives, detergents, alcohol, and sealers. Painting, mixing, and finishing processes, which involve preparation of paint surfaces, spray painting (including primers), and sealing of surfaces, are conducted in the three hangar areas. The majority of the paints, primers, sealers, and other chemicals are stored and mixed in the "mixing" room, which is located in the east-central portion of the building. Painting processes are currently ongoing in Building 24. Painting processes typically create paint skins, metals (from surface preparation), used solvents, and wastewater.

According to Building 24's chemical inventory, a maximum quantity of 32,000 gallons of paint, non-halogenated organic compounds, corrosives, and metals may be stored at this building. The chemical inventory also includes small amounts of primers, topcoat, adhesives, alcohols, paint thinners, conductive coatings, dry lubricants, acetone, solvents, detergents, enamel spray cans, acrylic, and lacquer paint. Solvent and detergent tanks, ranging in capacity from 100 to 200 gallons, are suspended from the ceiling of the mixing room. These tanks are filled by a vacuum pump from 55-gallon drums. Minor stains were located on the floor in the filling area during the site inspection. An aboveground tank, with a capacity of 500 pounds, stores oxygen for respirators that are used in the painting bays. A solvent still for recycling solvents is located in Hangar Bay 1. Chemicals are stored in the mixing room and flammable safety storage cabinets. Chemicals are mixed in the mixing room and transported to paint bays in closed containers. The mixing room floor is covered with aluminum foil to contain spills. Used foil and empty containers are disposed of in the hazardous waste accumulation area located in the mixing room. The wastes are stored on pallets covered with aluminum sheeting. This hazardous waste accumulation area is managed by the Public Works Center (PWC). Aircraft washing, sealing, and coating activities conducted within Building 24 generate wastewater. This wastewater drains to floor trenches. From there, it is pumped to the Industrial Wastewater Treatment Plant (IWTP) in Building 24A.

Although no records of spills were found during the site history review, staining observed in historical aerial photographs and during the site inspection indicate that undocumented spills may have occurred over approximately 70 percent of Hangar Bay 1 (135 feet by 155 feet) and over approximately 40 percent of Hangar Bay 3 (95 feet by 135 feet). Prior to the construction of Building 24, the area that is now occupied by Building 24 was significantly stained in historical aerial photographs. The largest and darkest stains are located in areas that appear to correspond to aircraft parking locations. The source of the staining in these areas is unknown. Staining was also noted in the tank filling area of the mixing room during the site inspection. The most likely sources of staining are the chemicals stored in the suspended tanks (i.e., solvents, ethyl acetate, acetone, and/or detergent).

Building 24 is equipped with a heating-ventilation-air conditioning (HVAC) system designed to mitigate vapor and fume accumulation to Occupational Safety and Health Administration (OSHA) acceptable levels. An extensive system of ventilation components is located within Building 24. No significant accumulation of dusts on interior building surfaces was noted during the site inspection. Because it was constructed in 1990, Building 24 is not likely to contain lead-based paint, asbestos-containing materials, or PCB-containing transformers.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 24.

Building 24A

Building 24A was constructed in 1991 and serves as the IWTP for Building 24. Constructed as an annex to Building 24 in 1991, Building 24A is approximately 30 feet wide by 40 feet long, constructed of steel, with a corrugated metal roof, corrugated metal walls, and a concrete floor. A roll-up door is located on the north side of the building.

Wastewater treatment chemicals are stored in Building 24A. Two 5,000-gallon metal hazardous waste storage tanks, with two carbon filter chambers, are located at the south side of Building 24A. These tanks are located within secondary containment. Other chemical storage in Building 24A includes two 500-gallon capacity carbon units, 200 gallons of magnesium, 300 gallons of sulfuric acid, 300 gallons of polymers, and 200 pounds of lime. These chemicals are stored in plastic drums and are used to treat liquid waste from Building 24. The sludge produced by the treatment process is sent to a filter press where it is drummed and/or stored in a metal bin. The sludge reportedly has

elevated levels of chromium. Liquid wastewater is pretreated and then discharged into the sanitary sewer. One effluent permit exceedence for elevated zinc levels occurred in 1992. A strong, concentrated odor was noted in Building 24A during the site inspection. A gravity ventilator system is located on the roof of Building 24A.

No records of spills were found during the site history review. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 24A.

Open Space

Open space covers approximately 85 percent of Parcel 30. In general, the open space is and has been used for aircraft and vehicle parking and maneuvering. The ground surface is completely paved with concrete and is generally in good condition, although there are cracks in the concrete throughout the open space. Some of the cracks are severe and appear to be associated with differential settlement.

One structure (Fire Pump Station) is located within the open space. The Fire Pump Station, which was constructed in conjunction with Building 24, is located south of Building 24. The structure is 25 feet wide by 55 feet long, and is constructed of steel with metal siding and a concrete floor. No chemical storage is known to occur within the pump station.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

EBS information indicates that activities conducted within this open space include vehicle and aircraft maneuvering, parking, and taxiing. According to site inspection data, widespread, scattered staining associated with vehicle parking was present throughout the open space.

Although no chemicals are documented to have been stored or used in the open space, seven 55-gallon drums of JP-5 located on pallets were noted during the site inspection. This area does not appear to be a normal fuel storage area. There were some empty drums stored on crates in steel trailers southeast of Building 24, and three weapons trailer bases were located in the same area. Four large dumpsters for storage and collection of hazardous wastes were located northeast of Building 24.

Although an extensive network of storm drains exists on Parcel 30 to collect runoff, storm drains in the south and southeast portions of the parcel were backed up the day of the visual inspection. Some staining around the storm drains was noted.

No spills have been documented on Parcel 30; however, two large stained areas were noted during the site inspection. One stain, located in the northeast corner of the parcel, measured approximately 8 feet wide by 40 feet long. The second stain, located in the north central portion of the parcel, covered approximately 1,000 square feet of both Parcel 30 and Parcel 31, and appeared to consist of heavy oil. The stained areas appear to be the result of leakage from parked aircraft and vehicles.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

Flush grade valves and pump ports observed during the site inspection indicate that two underground storage tanks may exist in the northeast portion of the parcel. There is no other evidence to support the presence of underground tanks in this area.

Parcel Boundary Conditions

Parcel 30 is bounded by Parcels 23, 190, 31, 20, 49, 50, 29 and 193. Environmental concerns exist at Parcels 31, 190, and 49. On Parcels 31 and 190, a leak in the fuel lines to Building 23 reportedly resulted in extensive soil excavation in 1941. Hazardous materials storage and abandoned fuel lines located on Parcel 49 may have impacted Parcel 30.

RCRA Sites

This subsection identifies RCRA sites on this parcel and the requirements associated with these sites, consistent with the objectives described in Section 1 of the Shell Workplan. Two RCRA sites (SWMU/GAP 5 in Building 24 and the RCRA Part B permitted IWTP in Building 24A) are located at this parcel. These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, both RCRA sites require further investigation. The IWTP at Building 24A is listed in the RCRA Part B Permit and must be investigated under the IR Program at NAS

Alameda. The requirements for the RFI are described in detail in Section 8. A brief description of the two RCRA sites is provided below. The sampling proposed for these sites is described in the Target Areas and Compounds of Concern subsection.

SWMU/GAP 5 is located in the mixing room of Building 24 and is currently active. Site SWMU/GAP 5 consists of 55-gallon drums and aerosol cans. The chemicals of concern associated with this site include paint, primers, alcohol, acetone, and aerosol paint. The SWMU/GAP 5 site has not had any known releases. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this site does not require any sampling. However, SWMU/GAP 5 is being evaluated as a part of the target area located in the Building 24 mixing room.

The RCRA Part B permitted IWTP in Building 24A is used to treat liquid wastes that are generated during aircraft surface preparation and subsequent painting operations in Building 24. This site is currently being investigated and remediated as part of the IR Program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 30, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-30-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: underground storage tanks, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3.

Historical aerial photographs indicate that Parcel 30 has been completely paved since at least 1947. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for

TABLE 6-30-2

Summary of Data Gaps
NAS Alameda Parcel 30

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance). Building 24A is subject to a RCRA closure plan.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 300 feet east of Parcel 30. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Fueling Areas.
Potential Parcel-Specific Release Areas	• Building 24, Hangar Bay 1. • Building 24, Hangar Bay 3. • Building 24, Mixing Room.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-30-2

Summary of Data Gaps
NAS Alameda Parcel 30

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Two USTs are *potentially* located in the open space. Flush grade valves and pump ports observed during the site inspection indicate that two underground storage tanks may exist in the northeast portion of Parcel 30.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

pesticides. Therefore, no pesticide sampling has been proposed for Parcel 30.

No Industrial Hygiene (IH) sampling is required for Building 24A, a RCRA Part B Permitted Facility, because this facility will be closed in accordance with its RCRA Closure Plan. Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 24. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-30-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 30 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area and three parcel-specific target areas were identified at Parcel 30. This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The three parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-30-2.

- Target Area 1 (Building 24, Hangar Bay 1): Within Hangar Bay 1, significant staining was noted where volatile organic compounds were used and may have subsequently migrated into subsurface soils. Target Area 1 covers approximately 13,000 square feet. The likelihood that environmental impacts have occurred within this target area is classified as suspect. Samples to be collected in Target Area 1 are listed on Table 6-30-1.

- Target Area 2 (Building 24, Hangar Bay 3): Within Hangar Bay 3, significant staining was noted where volatile organic compounds were used and may have subsequently migrated into subsurface soils. Target Area 2 covers approximately 6,000 square feet. The likelihood that environmental impacts have occurred within this target area is classified as suspect. Samples to be collected in Target Area 2 are listed on Table 6-30-1.

- Target Area 3 (Building 24, The Mixing Room-GAP Site 5): This area is of concern because of the storage, disposal, and use of

potentially hazardous substances related to painting, mixing, and finishing activities. Volatile organic compounds are the primary compounds of concern. Target Area 3 covers approximately 2,500 square feet. The likelihood that environmental impacts have occurred within this target area is classified as potential. Samples to be collected in this Target Area 3 are listed on Table 6-30-1.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of VOCs, SVOCs, TPH, and metals to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

In addition, concerns pertaining to underground lines, radiological issues, PCBs, impacts of IR Site 5, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Soil vapor sampling (SOP 6) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. Table 6-30-1 summarizes the screening-level sampling and analysis for the parcel's target areas. Twenty-eight soil vapor samples will be collected from the target areas. Twenty-one of the 65 soil vapor samples and four of the 13 subsurface Geoprobe soil samples in the zone-wide target area will be collected from this parcel. Minor adjustments in the sample locations may be made in the field based on visual observations and accessibility. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

It should be noted that one boring will be drilled in the hangar floor to determine the thickness of the concrete (as described above, the concrete reportedly may be up to six feet thick); once the thickness of the concrete is known, the most appropriate course of action may be determined. The samples and locations presented within this PEP are based on the assumption that the maximum realistic thickness of the concrete pad is three feet.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-31

PARCEL 31 EVALUATION PLAN

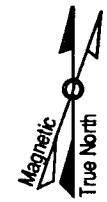
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 31 at NAS Alameda (Figure 6-31-1). The parcel, which is located in the central portion of the base, is less than one acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) were identified at Parcel 31. Soil vapor and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-31-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 31, historical activities are discussed below.

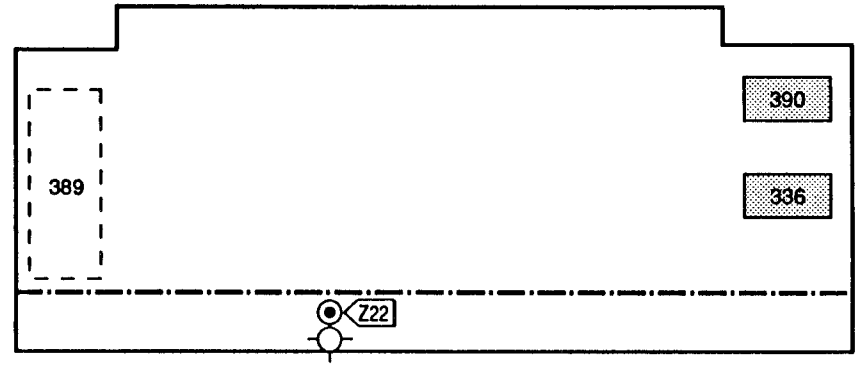
Background and Historical Activities

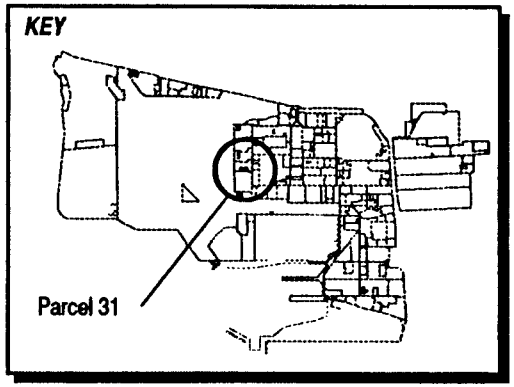
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 31, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

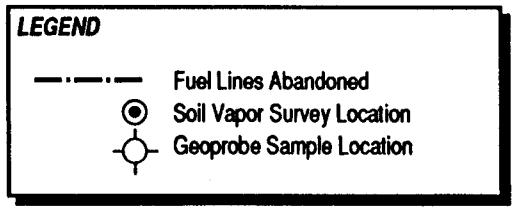
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 32, 33, 34, 35, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and









1"= 60'

Figure 6-31-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/PAC/07.11.94

TABLE 6-31-1

Summary of Recommended Samples
NAS Alameda Parcel 31

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-22-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non halogenated/ Halogenated Org.	VOCs	GC
Z6-22-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS

potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 390 and 336) cover approximately five percent of the parcel. One building, Building 389, was formerly located on the parcel but has since been demolished. The remaining 95 percent is open space. The parcel is presently in use as an entrance apron for Building 23 and as a parking area. Underground fuel and sewer lines are present at this parcel and are shown in Figure 6-31-1.

Parcel 31 is located approximately 400 feet west of an Installation Restoration (IR) Program site (IR Site 5, Building 5). No previous investigations have been conducted at Parcel 31 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 336

Building 336 was constructed in 1948 and serves as a storage area and workshop (Figure 6-31-1). This one-story building covers approximately 400 square feet and is in moderately good condition. Building 336 is constructed of corrugated steel with a concrete floor. This building appeared abandoned and not in use during the site inspection. According to EBS information, this building has been authorized for demolition.

Utilities located within and immediately surrounding Building 336 (including those on adjacent parcels) include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. Steam lines also serve the building and may be of sufficient age as to be composed of or insulated with asbestos-containing materials. No permits appear to have been issued for this building.

No chemicals are documented to have been stored in Building 336, nor was any chemical storage noted in the building during the site inspection. The only staining noted during the site inspection was paint overspray on the floor inside the building and outside the building on the west side. This building is not equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 336.

Building 390

Building 390 is a Quonset Hut that was constructed in 1953 and has historically served as a storage area for aircraft lines and corrosion control material (Figure 6-31-1). Chemicals, aircraft parts, and furniture were stored in this building during the site inspection. This one-story building covers approximately 475 square feet and is in fair condition. Building 390 is constructed of corrugated metal with a concrete floor. According to EBS information, this building has been authorized for demolition.

Utilities located within and immediately surrounding Building 390 (including those on adjacent parcels) include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for this building. Information collected during the EBS indicates that activities conducted within this building include storage of chemicals, furniture, and aircraft parts.

Less than 30 gallons of paint thinner and less than 10 gallons of isopropyl alcohol are documented to have been stored in Building 390. No spills or staining were noted during the EBS review or the site inspection, except for paint overspray staining on the walls of the building. A collection area for old cans, including used containers of paint thinner and isopropyl alcohol, is located within Building 390. The containers in the collection area are reportedly picked up every three to four months by GAP personnel. Building 390 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 390.

Former Building 389

Former Building 389 was an abandoned trailer-type structure that was used as an office by the Field Services Division. Aerial photographs indicate that Building 389 was placed on Parcel 31 between 1985 and

1990. This one-story building covered approximately 1,000 square feet and was constructed of wood. This building appeared abandoned and not in use during the site inspection, but has since been demolished.

Utilities located within and immediately surrounding former Building 389 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for this building.

No chemicals are documented to have been stored or used in former Building 389. No spills were noted during the document review, and no staining was noted during the site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within former Building 389.

Open Space

Open space covers approximately 95 percent of Parcel 31. In general, the open space is used as a parking area and as an entrance apron for Building 23. The ground surface is completely paved with concrete. The pavement is generally in good condition, with minor cracks. No structures are located within the open space.

Utilities located within and immediately surrounding the open space on Parcel 31 (including those on adjacent parcels) include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for processes occurring within this open space.

EBS information indicates that a small area south of Building 390 is used for chemical and hazardous materials storage. No staining was noted in the vicinity of the storage area during the site inspection. Staining that appeared to originate from the northern portion of Parcel 30 was noted along the south edge of Parcel 31. The staining was approximately 40 feet long by 10 feet wide. The stain appears to be the result of leakage from parked aircraft or vehicles.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 31.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated

that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 31 is bounded by Parcels 30 and 190. Activities of concern on these adjacent parcels include aircraft maintenance, washdown, painting, finishing, and, historically, fueling.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 31, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-31-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 31 because no industrial buildings are present.

Historical aerial photographs indicate that Parcel 31 has been completely paved since at least 1947. Based on current EPA/Cal-EPA policy, landscaped that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 31.

Once the data gaps in Table 6-31-2 are addressed and screening-level sampling results from the target area described below are compared to the appropriate screening levels, Parcel 31 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-31-2

Summary of Data Gaps
NAS Alameda Parcel 31

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 400 feet east of Parcel 31. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Support Area.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-31-2

Summary of Data Gaps
NAS Alameda Parcel 31

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 31. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 6. The nature and location of the zone-wide target area were evaluated to determine field investigation and sampling strategies.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of VOCs to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and the impacts of IR Site 5 must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Soil vapor sampling (SOP 6) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the zone-wide target area and to identify any areas that require further sampling in the follow-up detailed evaluation phase. One of the 65 soil vapor samples and one of the 13 subsurface Geoprobe soil samples proposed for the zone-wide target area will be collected in this parcel. Table 6-31-1 summarizes screening-level sampling and analysis for the target area. The sample location is shown on Figure 6-31-1. Sampling will be conducted in accordance

with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-32

PARCEL 32 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 32 at NAS Alameda (Figure 6-32-1). The parcel, which is located in the west-central portion of the base, is approximately seven acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site is located at this parcel; however, this site does not require a RCRA Facility Investigation (RFI). One parcel-specific and one zone-wide target investigation area (target area) were identified at Parcel 32. Sampling procedures called for in the screening-level investigation in these areas include soil vapor sampling and subsurface Geoprobe sampling. Table 6-32-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 32, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 32, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 33, 34, 35, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together.

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 22, 321, 335, and 314) cover approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel area is presently in use for aircraft maintenance, washdown, and support. No other buildings or structures were formerly located on this parcel. Underground fuel and sewer lines present at this parcel are shown in Figure 6-32-1.

Parcel 32 is located approximately 500 feet west of an Installation Restoration (IR) Program site (IR Site 5, Building 5). No previous investigations have been conducted at Parcel 32 and specific data regarding potential chemical occurrence are not available.

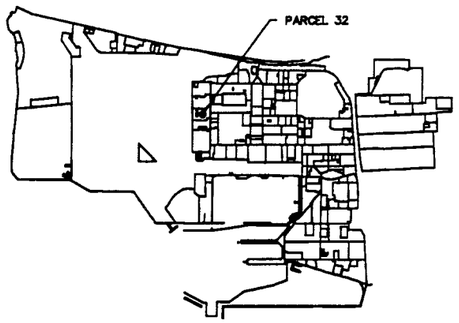
Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 22

Building 22 was constructed in 1941 and has since served as an aircraft maintenance hangar (Figure 6-32-1). Helicopters, offices, and a metal shop are located in Building 22. This one-story building has two floors of loft office space on the east and west end. It is constructed of a steel frame, with concrete walls, a concrete floor, and a steel-frame built-up roof. Building 22 covers approximately 66,000 square feet (approximately 260 feet long by 230 feet wide) and is in moderate condition.

Utilities located within and immediately surrounding Building 22 include underground sanitary sewer, storm sewer, steam, water, electricity, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for this building.



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

SOIL VAPOR SAMPLE & No.

SUBSURFACE GeoProbe SOIL SAMPLE & No.

TARGET AREA & No.

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

SANITARY SEWER MANHOLE & No.

GREASE TRAP

SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM & CONDENSATE LINE LEGEND

STEAM & CONDENSATE MANHOLE & No.

STEAM & CONDENSATE LINE

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

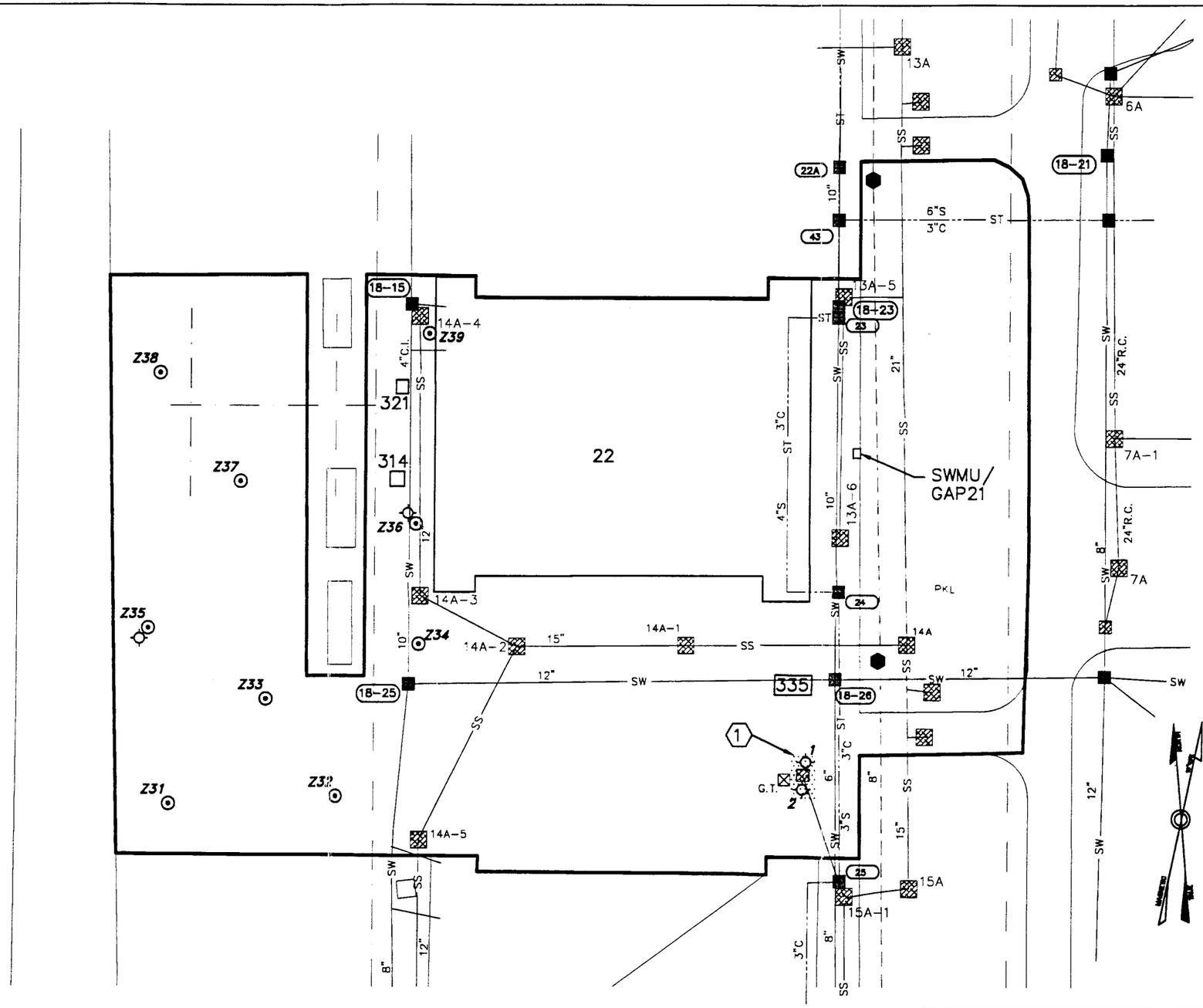
MANHOLE & No.

CATCH BASIN

STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



SCALE IN FEET

80 0 80 160 240

1" = 80'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-32-1
PARCEL 32
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590032.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)

SCALE AS NOTED	DATE: 2.10.95/2121.96.45	SHEET 1 OF 1

TABLE 6-32-1

Summary of Recommended Samples
NAS Alameda Parcel 32

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
32-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Oils, Solvents, SVOCs	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
32-2-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Oils, Solvents, SVOCs	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
Z6-31-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-32-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-33-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-34-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-35-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-35-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-36-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-36-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-37-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-38-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC
Z6-39-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated / Halogenated Org.	VOCs	GC

Information collected during the EBS indicates that activities conducted within this building include light aircraft maintenance. Light aircraft maintenance typically involves oil changes, minor repairs, and the replacement of worn equipment, such as tires. These maintenance activities, which are believed to have been conducted in most areas of the building, typically involve chemicals, including solvents and petroleum products (especially lubricating oils), and the generation of waste products such as waste oils. These activities and related chemical use and storage have occurred within Building 22 since it was constructed in 1941.

Less than ten gallons of solvents, five gallons of non-halogenated organic compounds, and 10 cans of spray paint were stored in Building 22 at the time of the building inspection. A review of EBS information indicates that a maximum of 2,500 gallons of non-halogenated organic compounds, halogenated organic compounds, petroleum products, paint, metals, and corrosives have been stored in Building 22.

Small stains (less than ten square feet each) were noted in the metal shop and boiler room. The floors in both of these rooms were heavily cracked and in poor condition. The floor in the hangar area, which was in fair condition during the site inspection, is reportedly cleaned one to two times per week.

Building 22 is not equipped with an HVAC system. Dusty conditions were noted in the building during the site inspection. Wall deterioration was also noted in the northeast portion of the building. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 22.

Building 321

Building 321 was constructed in 1942 and served as a hazardous/flammable materials storage area (Figure 6-32-1). This building is currently used to store old files and paper products. The types of hazardous/flammable materials that were formerly stored in this building are unknown. This one-story building covers approximately 110 square feet and is in moderately good condition. The walls, floor, and roof of Building 321 are constructed of concrete.

Utilities located within and immediately surrounding Building 321 include underground sanitary sewer, storm sewer, water, electrical, and abandoned fuel lines. No permits appear to have been issued for this building. No spills or staining were noted during the building inspection. Building 321 is not equipped with an HVAC system.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 321.

Building 335

Building 335 was constructed in 1948 and served as a hazardous/flammable materials storage area (Figure 6-32-1). Old office furniture, old gymnasium lockers, and tables were stored in this building during the site inspection. Building 335 is a corrugated-metal Quonset hut with a concrete floor. This one-story building covers approximately 400 square feet and is in moderately good condition.

Utilities located within and immediately surrounding Building 335 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for this building.

The types of hazardous and/or flammable materials that were historically stored in Building 335 are unknown. No floor stains were noted during the site inspection. Building 335 is not equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 335.

Building 314

Building 314 was constructed in 1942 and served as a small arms/pyrotechnic magazine (Figure 6-32-1). This building was empty during the site inspection. Building 314 is also reported to have been used for hazardous materials storage. The types of hazardous materials are unknown. This one-story building covers approximately 100 square feet and is in moderately good condition. The walls, floor, and roof of Building 314 are constructed of concrete. No stains were noted on the concrete floor during the site inspection.

Utilities located within and immediately surrounding Building 314 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines. No permits appear to have been issued for this building. Building 314 is not equipped with an HVAC system.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 314.

Open Space

Open space covers approximately 70 percent of Parcel 32. The ground surface of the open space is completely paved. Approximately 40 percent of the paved area is surfaced with asphalt and the remaining 60 percent is paved with concrete. The pavement is in good condition. In general, the eastern half of the parcel is used for vehicle parking, while the western portion is used for the storage of materials lockers.

Structures located within the open space include a landscape shack on the east side of Building 22, an ordnance cleaning locker southeast of Building 22, and the materials storage lockers in the western portion of the parcel. The construction or placement dates of these structures are unknown.

Utilities located within and immediately surrounding the open space on Parcel 32 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for processes occurring within this open space.

According to EBS information, aircraft and equipment washdown occurs in the southeast portion of the open space, near the northeast corner of Building 23. Wastewater treatment and/or disposal methods are unknown. During the site inspection, staining was noted around a drain in the washdown area. During a visit to another site in May 1994, an ERM-West representative witnessed an aircraft being defueled in the aircraft washdown area.

Extensive staining was noted in aerial photographs dated 1947 through 1966. The staining was primarily located west of Building 22, where aircraft maintenance, fueling, and support activities occurred. Minor staining was noted in this area during the site inspection.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 32.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 32 is bounded by Parcels 191, 33, 23, 190, 46, and 45. Activities of concern on Parcels 191, 33, and 190 include aircraft fueling, maintenance, washdown, and support activities. First Street borders Parcel 32 to the east.

An underground storage tank (Tank 2-1) was recently removed on Parcel 45. This 500-gallon tank stored diesel. Soil and groundwater sampling have been proposed by ERM near the former location of this tank.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (SWMU/GAP 21) is located west of Building 22. This site contains two 55-gallon Bowser drums. The chemicals of concern associated with SWMU/GAP 21 include oil, solvents, paint-related material, rags, and hydraulic fluid. It is unknown whether any chemicals were released at this site. SWMU/GAP 21 was evaluated consistent with the criteria applied to other potential target areas at the parcel. Based on these criteria, SWMU/GAP 21 does not require further investigation.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 32, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-32-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

TABLE 6-32-2

Summary of Data Gaps
NAS Alameda Parcel 32

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 500 feet east of Parcel 32. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Support Area.
Potential Parcel-Specific Release Areas	• Open Space, Washdown Area.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-32-2

Summary of Data Gaps
NAS Alameda Parcel 32

Data Gap	Status/Description
Underground Utilities	• Fuel, storm sewer, sanitary sewer, steam, industrial sewer, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 22. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Historical aerial photographs indicate that Parcel 32 has been completely paved since at least 1947. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 32.

Once the data gaps in Table 6-32-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 32 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and one zone-wide target area. This subsection of the PEP discusses the parcel-specific target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 6. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release area described above and listed in Table 6-32-2.

- Target Area 1 (Open Space Washdown Area): The open space in the aircraft washdown area will be sampled immediately surrounding the catch basin-oil/water separator. This area is defined as a target area because of the aircraft washdown activities that occur in this area, the defueling activity that was witnessed in May 1994, and the staining observed near the drain during the site inspection. Two subsurface Geoprobe soil samples will be collected and analyzed for TPH, SVOCs, and VOCs.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples and 13 subsurface Geoprobe soil samples are proposed to be collected from this zone-wide target area. The proposed zone-wide target areas are listed on Table 6-32-1.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the impacts of IR Site 5 must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include soil gas sampling (SOP 6) and subsurface GeoProbe soil sampling (SOP 14). Table 6-32-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 32. Nine of the 65 soil vapor samples and two of the 13 subsurface Geoprobe soil samples will be collected from the zone-wide sampling locations shown on Figure 6-32-1. Two subsurface Geoprobe soil samples will be collected from the parcel-specific sampling locations shown on Figure 6-32-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and

monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-33

PARCEL 33 EVALUATION PLAN

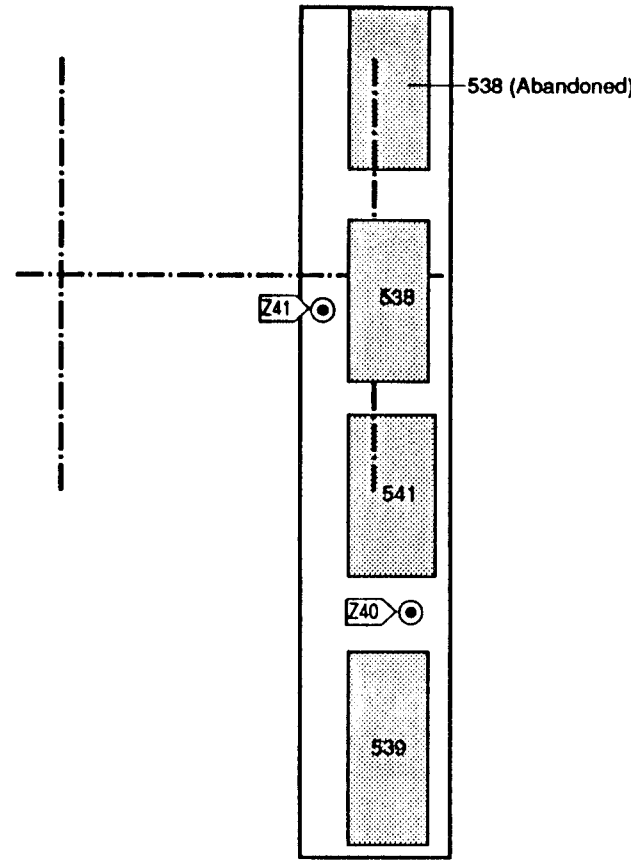
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 33 at NAS Alameda (Figure 6-33-1). The parcel, which is located in the west-central portion of the base, is less than one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) were identified at Parcel 33. Soil gas sampling will be used to accomplish the screening-level investigation. Table 6-33-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 33, historical activities are discussed below.

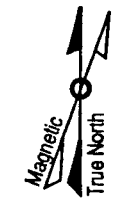
Background and Historical Activities

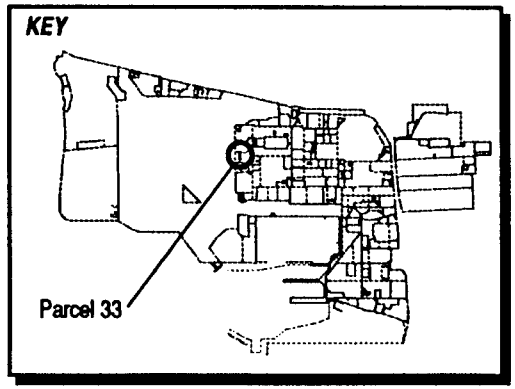
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 33, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 34, 35, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and







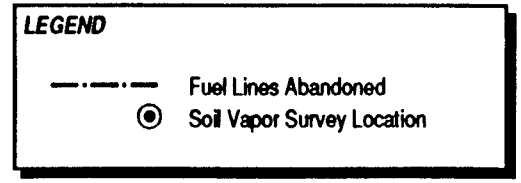


Figure 6-33-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90 11/DS/06.29.94A

TABLE 6-33-1

Summary of Recommended Samples
NAS Alameda Parcel 33

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-40-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-41-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1940. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 549, 541, 538, and abandoned Building 538) cover approximately 45 percent of the parcel. The remaining 55 percent is open space. The parcel area is presently in use primarily for office space and storage. Fuel lines are present at this parcel and are shown in Figure 6-33-1.

Parcel 33 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 33 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel open space and buildings are described in detail below.

Building 538

The original Building 538 was constructed in 1976 and served as a line maintenance shelter (Figure 6-33-1). This building covers approximately 960 square feet and is currently abandoned. New Building 538, located immediately south of the abandoned original Building 538, is a prefabricated trailer-type building that is approximately two years old. This building is used for flight gear storage and checkout.

Utilities located within and immediately surrounding these buildings (including utilities on adjacent parcels) include underground sanitary sewer, storm sewer, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for these buildings.

Information collected during the EBS indicates that only non-hazardous materials were stored within Building 538. No chemical

storage is documented to have occurred in either building. No spills or stains were noted during the site inspection.

Building 538 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 538.

Buildings 539 and 541

Buildings 539 and 541 were constructed in 1974 and serve as line maintenance shelters (Figure 6-33-1). These one-story buildings are currently used for office space. Each building covers approximately 960 square feet and is in good condition. Buildings 539 and 541 are both trailer-type structures on cinder blocks.

Utilities located within and surrounding Buildings 539 and 541 (including utilities on adjacent parcels) include underground gas, sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for these buildings.

Information collected during the EBS indicates that general office activities were conducted within these buildings. No chemicals are documented to have been stored or used in Buildings 539 and 541. No spills or stains were noted in these buildings during the site inspection.

Buildings 539 and 541 are not equipped with HVAC systems. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Buildings 539 and 541.

Open Space

Open space covers approximately 55 percent of Parcel 33. The ground surface is completely paved with concrete. The pavement is generally in good condition. EBS information indicates that the area occupied by the buildings currently located on Parcel 33 was formerly used for aircraft fueling, parking, and maneuvering. According to the site inspection, the open space has not been in recent use.

Structures located within the open space include several hazardous and flammable materials storage lockers and cabinets. Three of the lockers are large storage units. One locker is used as a hydraulic repair shop. According to site inspection data, the floor of this locker was slick and stained, most likely from past spills. No cleanup was

apparent. No staining was noted on the ground near any of the lockers or in the open space in general.

Utilities located within and surrounding the open space on Parcel 33 (including utilities on adjacent parcels) include underground gas, sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for the open space on the parcel.

Large-scale staining in the open space west of Building 22 was noted on historical aerial photographs dated 1947 through approximately 1966. This staining may be related to the fueling activities that historically occurred in this area. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 33.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 33 is bounded by Parcels 32 and 191. Activities of concern on these adjacent parcels include aircraft fueling, maintenance, and washdown.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 33, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-33-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with underground fuel

TABLE 6-33-2

Summary of Data Gaps
NAS Alameda Parcel 33

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 33.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Fueling Areas.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.

TABLE 6-33-2

Summary of Data Gaps
NAS Alameda Parcel 33

Data Gap	Status/Description
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

lines are also addressed separately. Sampling associated with fuel lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 33 because no industrial buildings are present.

Historical aerial photographs indicate that Parcel 33 has been completely paved since at least 1947. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 33.

Once the data gaps in Table 6-33-2 are addressed and screening-level sampling results from the target area described below are compared to the appropriate screening levels, Parcel 33 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area and no parcel-specific target areas were identified for Parcel 33. This subsection of the PEP provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 6. The nature and location of the zone-wide target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of VOCs to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown

on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

Screening-Level Investigation

Soil vapor sampling (SOP 6) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Two of the 65 soil vapor samples to be collected from the zone-wide target area are located on this parcel. Table 6-33-1 summarizes screening-level sampling and analysis for the target area on Parcel 33. The sampling locations are shown on Figure 6-33-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-34

PARCEL 34 EVALUATION PLAN

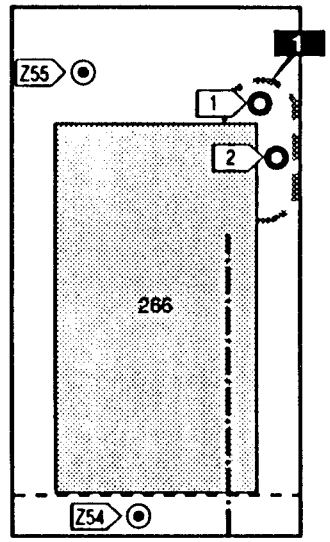
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 34 at NAS Alameda (Figure 6-34-1). The parcel, which is located in the north-central portion of the base, is less than one acre (approximately 0.1 acre) in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. One parcel-specific and one zone-wide target investigation area (target area) has been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil gas sampling. Table 6-34-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 34, historical activities are discussed below.

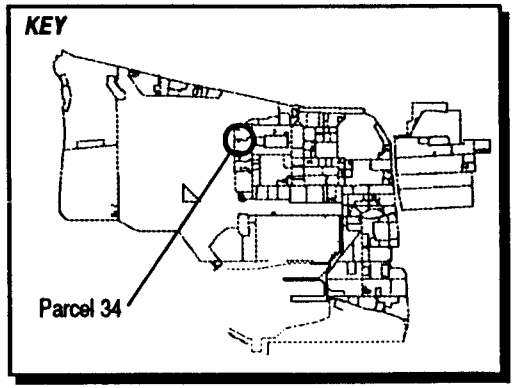
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 34, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 35, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this





LEGEND

- Target Area 1
- Fuel Lines Abandoned
- Storm Sewer Line
- Soil Vapor Survey Location
- Surface Soil Sample Location

Note: Parcel borders are approximate.

1" = 30'

Magnetic
True North

Figure 6-34-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90 12/DS/05.29.94A

TABLE 6-34-1

Summary of Recommended Samples
NAS Alameda Parcel 34

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
34-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lube oil, metals	TPH, metals	Test Kit, XRF
34-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Lube oil, metals	TPH, metals	Modified EPA 8015, CLP RAS
34-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lube oil, metals	TPH, metals	Test Kit, XRF
Z6-54-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non halogenated/ Halogenated Org.	VOCs	GC
Z6-55-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non halogenated/ Halogenated Org.	VOCs	GC

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

parcel should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

The area within the parcel boundary was completely filled as of 1941. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The ground level and grading on the parcel have not changed significantly since that time.

Currently, one building (Building 266) with an annex (Building 266A) covers approximately 45 percent of the parcel. The remainder (55 percent) is open space. The parcel area is presently in use as a snack shop, office space, and storage area for fuel sampling and aircraft maintenance equipment. Fuel and sewer lines are present at this parcel and are shown in Figure 6-34-1.

Parcel 34 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 34 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 266/266A

Building 266 was constructed in 1941 and served as a line maintenance shelter. This building is currently in use as a snack shop and office space. This building is in moderately good condition. Building 266 is a one-story building constructed of wood with a corrugated steel roof, and covers approximately 1,650 square feet. Building 266A is an annex attached to Building 266. The construction date of the annex is unknown. Building 266A is located on the west side of Building 266 and is used to store fuel sampling equipment and small aircraft maintenance equipment. Lube oil, hydraulic fluid, and floor wax is stored immediately outside Building 266A in a secondary containment structure.

Utilities located within and immediately surrounding Building 266 include underground sanitary sewer, storm sewer, water, and abandoned fuel lines. No permits appear to have been issued for Buildings 266 or 266A.

No chemicals are documented to have been stored or used in Building 266. No spills have been documented in Building 266, and no stains were observed in the building during the site inspection. No other incidents (e.g., fires, mishaps, flooding, crashes) are documented to have occurred within or near Building 266.

Open Space

The open space on Parcel 34 is currently used for storage and vehicle maneuvering and parking. There are two storage sheds located west of Building 266. The open space occupies approximately 55 percent of the parcel.

Structures located within the open space include two sheds used to store aircraft maintenance equipment. The ground surface of the open space on Parcel 34 is completely paved with concrete. The pavement is generally in good condition.

Utilities located within and immediately surrounding the open space on Parcel 34 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines. No permits appear to have been issued for processes occurring within this open space.

EBS information indicates that activities conducted within this open space include storage of lube oil, hydraulic fluid, and methanol in the area north of Building 266 in quantities of less than 110, 15, and 20 gallons, respectively. The sheds located west of Building 266 are used for storage of fuel sampling equipment. A satellite hazardous waste collection accumulation point is also located north of Building 266.

No spills have been documented at this parcel. There is staining present at the entrance to, and within, one of the sheds located west of Building 266 that appears to be hydraulic fluid. Three areas of oily, black staining located north and west of Building 266 were observed during the site inspection. These three areas measure approximately 25 feet by 25 feet, 10 feet by 10 feet, and 4 feet by 6 feet, respectively.

No other incidents (e.g., fires, mishaps, flooding) are documented to have occurred within the open space on Parcel 34.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated

that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 34 is bounded by Parcels 191 and 192. Activities of concern on these adjacent parcels include aircraft maintenance, washdown, and fueling on Parcels 191 and 192.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 34, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-34-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 34 because no industrial buildings are present.

Once the data gaps in Table 6-34-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 34 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed

TABLE 6-34-2

Summary of Data Gaps
NAS Alameda Parcel 34

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 34.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 34.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Support Areas.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space): This area has the potential to have been impacted because of the use and spillage of hydraulic fluid in this area and the historical use of Building 266 as a line maintenance shelter.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-34-2

Summary of Data Gaps
NAS Alameda Parcel 34

Data Gap	Status/Description
Underground Utilities	• Fuel, storm sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

sampling is provided in the Zone Analysis Plan for Zone 6. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Space): Two surface soil samples will be collected from the stained areas located northeast of Building 266. This area has the potential to have been impacted because of the use and spillage of hydraulic fluid and petroleum products in this area and the historical use of Building 266 as a line maintenance shelter. Samples to be collected are listed in Table 6-34-1.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of VOCs to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Two surface soil samples will be collected from the parcel specific locations shown on Figure 6-43-1, and two of the 65 soil vapor samples will be collected from the zone-wide locations shown on Figure 6-34-1. Table 6-34-1 summarizes the screening-level sampling and analysis recommended for the parcel's target areas. The sample locations are shown on Figure 6-34-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface GeoProbe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-35

PARCEL 35 EVALUATION PLAN

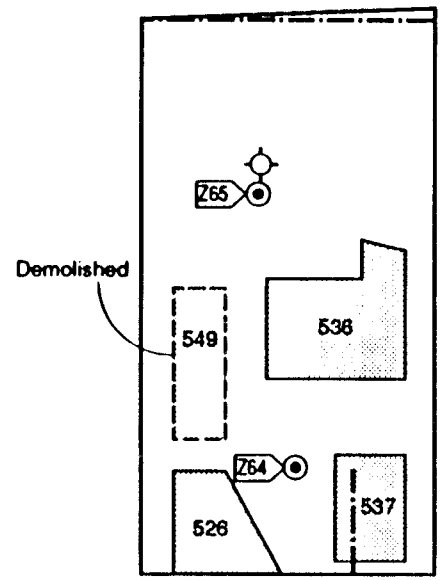
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 35 at NAS Alameda (Figure 6-35-1). The parcel, which is located in the north-central portion of the base, is less than one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. No parcel-specific target areas and one zone-wide target investigation area (target area) were identified on this parcel. The sampling procedures called for in the screening-level investigation in this area are soil vapor and subsurface Geoprobe soil sampling. Table 6-35-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 35, historical activities are discussed below.

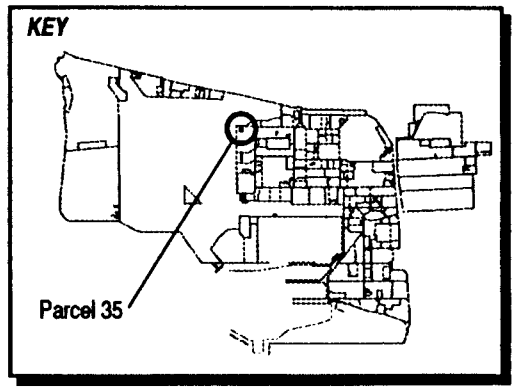
Background and Historical Activities

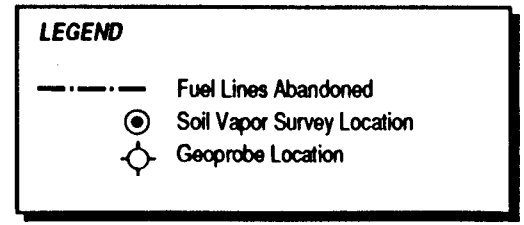
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 35, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 36, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone







1" = 60'

Figure 6-35-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
212 /DS/06.29.94A

TABLE 6-35-1

Summary of Recommended Samples
NAS Alameda Parcel 35

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-64-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-65-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-65-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS

were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1940. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 526, 536, and 537) cover approximately 20 percent of the parcel. The remainder (80 percent) is open space. In general, the parcel area is presently in use as a snack shop and smoking area. Building 549 was formerly located on the parcel. Underground fuel lines are present at this parcel and are shown in Figure 6-35-1.

Parcel 35 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 35; therefore, specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 526, 536, and 537 (Common Considerations)

Utilities located within and immediately surrounding Buildings 526, 536, and 537 include underground sanitary sewer, storm sewer, water, electrical, and abandoned fuel lines. No permits appear to have been issued for these buildings. No chemicals are documented to have been stored in these buildings, and no staining was identified in these buildings during the site inspection.

Buildings 526, 536, and 537 are not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within or near Buildings 526, 536, or 537.

Building 526

Building 526 was constructed in 1970 and served as a maintenance shelter. This building is currently used as a smoking area (Figure 6-35-1). This building is still standing and is generally in moderately good condition. Building 526 is a one-story building constructed of wood with a corrugated steel roof. This building covers approximately 660 square feet (22 feet by 30 feet).

Building 536

Building 536 was constructed in 1975 and served as a maintenance shelter. The building is currently used as a snack bar (Figure 6-35-1). This building is still standing and is in moderately good condition. Building 536 is a one-story building constructed of wood with a corrugated steel roof. This building covers approximately 1,400 square feet.

Building 537

Building 537 was constructed in 1975 and served as a maintenance shelter. The building is currently used as a smoking area (Figure 6-35-1). This building is still standing and is in moderately good condition. Building 537 is a one-story building constructed of wood with a corrugated steel roof. This building covers approximately 750 square feet.

Open Space

The open space on Parcel 35 is currently not in use. The only exceptions are the storage of hazardous materials in hazardous materials lockers located at the north end of the parcel and the outside space related to the snack shop.

The ground surface of the open space on Parcel 35 is completely paved with concrete. The pavement is generally in good condition. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, electrical, and abandoned fuel lines. No permits appear to have been issued for the open space in this parcel.

No chemical storage is documented to have occurred on Parcel 35, and no staining was noted during the site inspection. Historical aerial photographs between 1947 and 1970 indicated that stained soils located west of Hangars 20 through 23 from 1947 to 1970 also impacted

Parcel 35. This staining may be related to fueling activities that occurred in this area.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 35.

Underground Storage Tanks

Three underground storage tanks associated with Building 549 may be present at this parcel. It is unclear whether these tanks still exist in this area, and if so, where they are located.

Parcel Boundary Conditions

Parcel 35 is bounded by Parcels 23 and 192. Activities of concern on these adjacent parcels include aircraft fueling, maintenance and taxiing on Parcel 192, and aircraft fueling and taxiing on Parcel 23.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 35, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-35-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with underground fuel lines are also addressed separately. Sampling associated with fuel lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 35 because no industrial buildings are present.

Once the data gaps in Table 6-35-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 35 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-35-2

Summary of Data Gaps
NAS Alameda Parcel 35

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 35.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 35.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Support Areas.
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Three underground storage tanks associated with Building 549 may be present at this parcel. Building 549 is located on Parcel 35, which is inset into Parcel 192. It is unclear whether these tanks still exist in this area, and if so, where they are located.

TABLE 6-35-2

Summary of Data Gaps
NAS Alameda Parcel 35

Data Gap	Status/Description
Underground Utilities	• No evidence of underground utilities identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

One zone-wide target area has been identified for this parcel. No parcel-specific target areas were identified for this parcel.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of VOCs to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

Screening-Level Investigation

Soil gas sampling (SOP 6) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-35-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 35. Two of the 65 soil vapor samples and one of the 13 subsurface Geoprobe soil samples will be collected from the zone-wide locations shown on Figure 6-35-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of

compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-36

PARCEL 36 EVALUATION PLAN

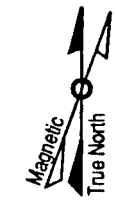
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 36 at NAS Alameda (Figure 6-36-1). The parcel, which is located in the north-central portion of the base, is less than an acre in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities for Parcel 36 are discussed below.

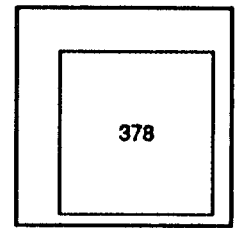
Background and Historical Activities

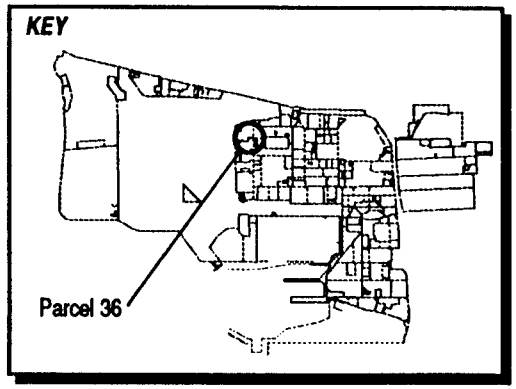
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 36, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 37, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 6.







1"= 30'

Figure 6-36-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121[illegible]12/DS/06.29.94A

The area within the parcel boundary was completely filled as of 1941. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The ground level and grading on the parcel have not changed significantly since that time.

Currently, one building (Building 378) covers approximately 50 percent of the parcel. The remaining 50 percent is open space. In general, the parcel area is presently in use for storage.

Parcel 36 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 36 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 378

Building 378 was constructed in 1951 and serves as a general storage area (Figure 6-36-1). This building is in moderately good condition, and has been approved for demolition. Building 378 is a one-story building constructed of corrugated steel with a concrete floor (Quonset hut). It covers approximately 550 square feet.

Utilities located immediately surrounding Building 378 (i.e., within 100 feet) include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that activities conducted within this building included storage of paper supplies, floor tiles, wrapped aircraft parts, and light bulbs. An interview conducted during the EBS indicates that no hazardous chemicals or wastes were ever stored in Building 378. Building 378 is not equipped with an HVAC system. No industrial hygiene issues were noted. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 378 or Parcel 36.

Open Space

The open space on Parcel 36 is not currently used for any specific purpose. This space occupies approximately 50 percent of the parcel.

No structures are located within the open space (Figure 6-36-1). The ground surface of the open space on Parcel 36 is 100 percent paved with concrete. The pavement is generally in good condition.

Utilities located within and immediately surrounding the open space on Parcel 36 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for processes occurring within this open space.

No chemicals are documented to have been stored in or used at Parcel 36. No spills or staining were noted during the EBS or site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 36.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 36 is bounded by Parcels 191 and 192. Activities of potential environmental concern on these adjacent parcels include aircraft maintenance, fueling, and aircraft washdown on Parcels 191 and 192. The aircraft washdown activities on the southeast portion of Parcel 192 is of concern because of the proximity of this area to Parcel 36. However, drainage in the area of the aircraft washdown facility is directed away from Parcel 36.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 36, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data

TABLE 6-36-1

Summary of Data Gaps
NAS Alameda Parcel 36

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 36.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 36.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential zone -wide release areas identified.
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• No evidence of underground utilities identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.

TABLE 6-36-1

Summary of Data Gaps
NAS Alameda Parcel 36

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

gaps shown in Table 6-36-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer line are also addressed separately. Sampling associated with fuel lines and sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 36 because no industrial buildings are present.

Once the data gaps in Table 6-36-1 are addressed, Parcel 36 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to radiological concerns and impacts of the nearby IR site must be resolved before this parcel can be leased or transferred

SECTION 6-37

PARCEL 37 EVALUATION PLAN

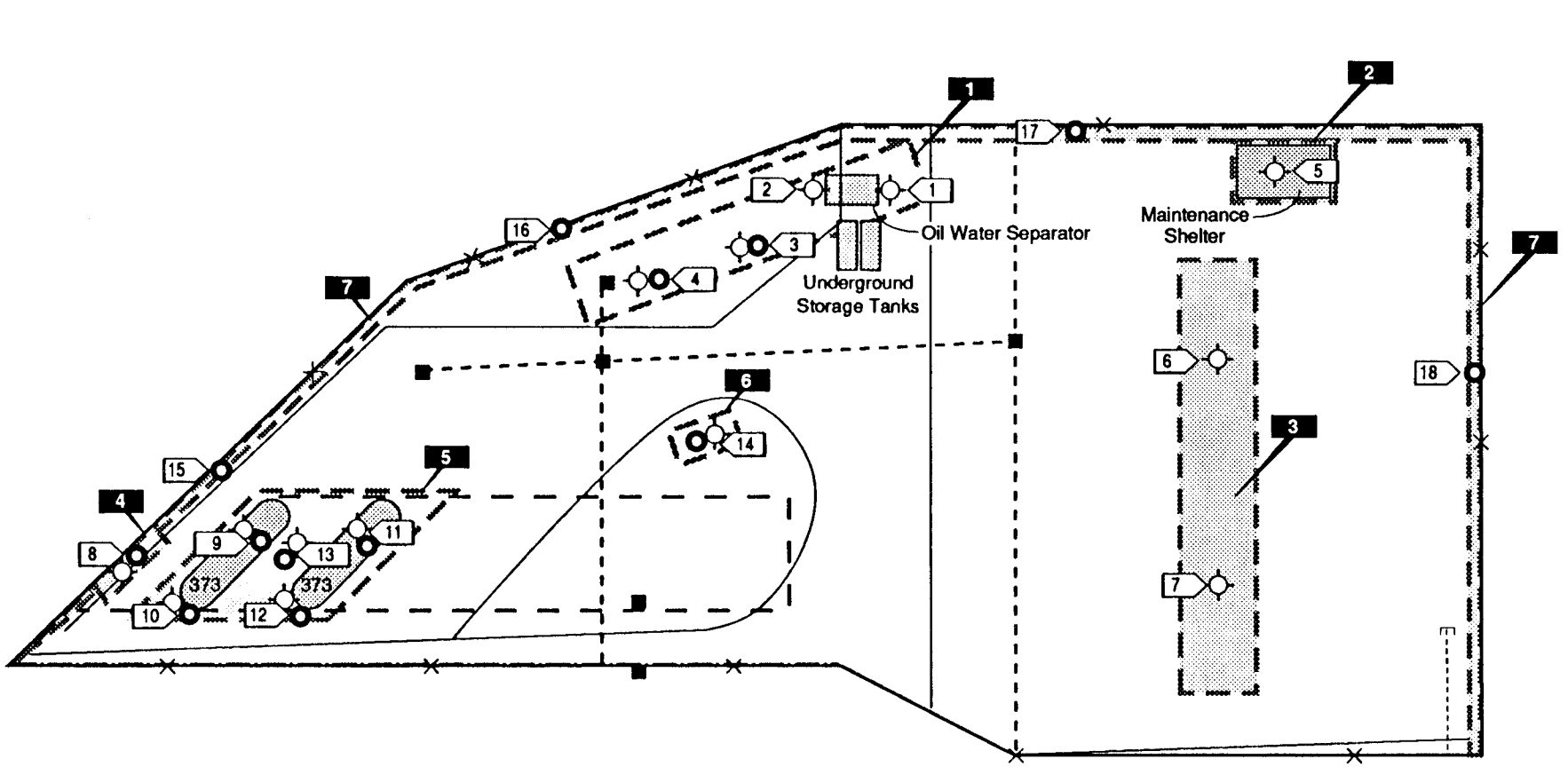
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 37 at NAS Alameda (Figure 6-37-1). The parcel, which is located in the north central portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Seven parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface GeoProbe sampling. Table 6-37–1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 37, historical activities are summarized below.

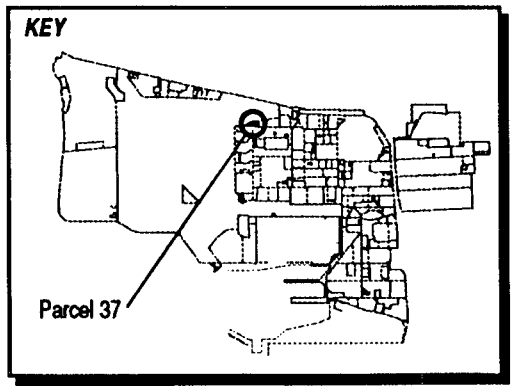
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 37, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies underground storage tanks and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 36, 190, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone





LEGEND

- Target Areas
- Fuel Lines Abandoned
- Fuel Lines in Use
- Storm Sewer Line
- Sewer Line
- Capped
- Surface Soil Sample Location
- Geoprobe Location
- Catch Basin

Note: 1.) Parcel borders are approximate.

1" = 60'

Figure 6-37-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121 [illegible]/DS/07.18.94

TABLE 6-37-1

Summary of Recommended Samples
NAS Alameda Parcel 37

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
37-1-3-S-V-DDMMYY	3'*	GeoProbe	Soil	Target Area 1	Oil or JP-5, SVOCs, VOCs, PCBs, Metals	TPH, SVOCs, VOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-2-3-S-V-DDMMYY	3'*	GeoProbe	Soil	Target Area 1	Oil or JP-5, SVOCs, VOCs, PCBs, Metals	TPH, SVOCs, VOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-3-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	SVOCs, VOCs, Metals	SVOCs, VOCs, Metals	CLP RAS
37-3-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-4-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	SVOCs, VOCs, Metals	SVOCs, VOCs, Metals	CLP RAS
37-4-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-5-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 2	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-6-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-7-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS

TABLE 6-37-1

Summary of Recommended Samples
NAS Alameda Parcel 37

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
37-8-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-8-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 4	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-9-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-9-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 5	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-10-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-10-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 5	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-11-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-11-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 5	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-12-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 5	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS

TABLE 6-37-1

Summary of Recommended Samples
NAS Alameda Parcel 37

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
37-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-13-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 5	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 6	Oil or JP-5, SVOCs, PCBs, Metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
37-14-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 6	SVOCs, VOCs, PCBs, Metals	SVOCs, VOCs, Pesticides, Metals	CLP RAS
37-15-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 7	DDT, PCBs	Pesticides	CLP RAS
37-16-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 7	DDT, PCBs	Pesticides	CLP RAS
37-17-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 7	DDT, PCBs	Pesticides	CLP RAS
37-18-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 7	DDT, PCBs	Pesticides	CLP RAS

were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1940. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

There is currently one structures (Structure 373), and two facilities (maintenance shelter and an oil-water separator) on Parcel 37. These features occupy approximately 10 percent of the parcel area. The remaining 90 percent is open space. In general, the parcel area is presently in use as an aviation fuel truck loading stand. A building was formerly located on the western portion of the parcel and has since been demolished. There is no information available about this building. Underground fuel and sewer lines are present on this parcel and are shown in Figure 6-37-1.

Parcel 37 is not located near an Installation Restoration (IR) Program site. No previous investigations have been conducted at Parcel 37 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Structure 373

Structure 373 was constructed in 1953 and served as an aviation fuel pump station (Figure 6-37-1). This structure is still standing and is generally in fair condition. Structure 373 is a fuel station on ground level and is constructed of cement and occupies approximately 500 square feet. The area occupied by Structure 373 was formerly open space, and was newly filled land.

Utilities located within and immediately surrounding Structure 373 include sanitary sewer, storm sewer, and fuel lines. A transformer is also located near this structure.

Review of historical records, site inspections, permits, interviews, and historic aerial photographs indicate that activities conducted within this structure included loading of aviation fuel trucks. This process typically involves the use of JP-5. Refueling processes occurred within Structure 373 from 1953 to present.

Distribution activities for JP-5 and motor oil are documented at Structure 373 from 1953 to the present. The fuel and oil are distributed via the fuel lines present at this parcel and dispensed as necessary. There is no storage of fuel or oil at Structure 373, except for the fuel remaining in the fuel lines between fueling processes. Used chemicals are collected at the hazardous waste accumulation point and sent to a central collection point.

Aviation fuels are documented to have been used at Structure 373 from 1953 to present. Spilled fuel and rain runoff is collected in an oil-water separator. Disposal of used chemicals is accomplished by discharging into the oil-water separator. Any spent spill absorbent and excess fuel is disposed of as hazardous waste.

Review of aerial photographs and site inspection data indicates that undocumented spills may have occurred at the fueling islands. These spills appear to be oily and dark in origin, and to have involved a significant quantity of released material. Most of the small spills appear to have been immediately treated with absorbent. The staining at each of the fueling islands (Structure 373) covers an area measuring approximately 10 feet by 10 feet.

Open Space

With the exception of Structure 373 and the maintenance shelter, this parcel is completely open space. In general, this open space is used for refueling fuel trucks. The eastern side of the parcel is used for truck parking and maintenance.

The open space is 95 percent paved and five percent unpaved. Approximately 65 percent of the paved area is surfaced with asphalt and 30 percent is covered with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with bare soil (5 percent).

Building 132 was formerly located in this open space. Its use is unknown and it was demolished in 1953. It covered approximately 20,000 square feet.

Utilities located within and immediately surrounding the open space include storm sewers and fuel lines.

EBS information indicates that activities conducted within this open space included former airfield operations and refueling station operations. Refueling processes involving JP-5 and truck maintenance were conducted in the eastern and western areas of the open space, respectively. These industrial processes involve chemical storage and use, and generate wastes including JP-5 and motor oil. The refueling processes occurred within the open space from 1953 to the present. Airfield operations occurred within the open space from 1947 to approximately 1953.

Review of aerial photographs and site inspection data indicate that undocumented releases may have occurred along the southeastern perimeter, at the fueling islands, at the truck parking and maintenance area, at the maintenance shelter, at the oil-water separator outlet, and the ground between the oil-water separator and the storm drain. These releases are oily and dark in appearance, and have involved a relatively major quantity of material. Most of the small spills appear to have been immediately treated with absorbent which is collected and disposed of as hazardous waste. The staining at the southeastern perimeter covers an area measuring approximately three feet by three feet. The staining at each of the fueling islands (Structure 373) covers an area measuring approximately 10 feet by 10 feet. The staining at the oil-water separator outlet covers an area measuring approximately seven feet by seven feet. The staining on the ground between the oil-water separator and the storm drain cover an area measuring approximately three feet by 20 feet. The stains in the truck parking and maintenance area measure approximately five feet by five feet. The staining in the maintenance shelter measures approximately 15 feet by 15 feet.

Underground Storage Tanks

Two active tanks are present at this parcel (No record regarding the tank numbers for these tanks is available). The presence of these tanks was identified from site inspection. The installation date for these tanks is unknown. These tanks are located on the north side of the parcel and are associated with the oil-water separator. Based on the available information, these tanks are used to catch, the capacities of these tanks are unknown. Investigation of these tanks has not been scheduled. No data pertaining to tightness or tank integrity has been identified.

Parcel Boundary Conditions

Parcel 37 is bounded by Parcels 23, 192, 41, and 38. Activities of concern on these adjacent parcels include aircraft washdown, maintenance, and fueling on Parcel 192. Parcel 37 has berms around its edges which prevent runoff from traveling on and off the parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 37, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-37-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 37 because no industrial buildings are present.

As noted earlier, Parcel 37 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides.

Potential concerns related to pesticides have been identified as a parcel-specific data gap for Parcel 37. Pesticide sampling for this parcel has been limited to the edges of the parcel that are unpaved and lack vegetation (Target Area 7).

Once the data gaps in Table 6-37-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 37 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-37-2

Summary of Data Gaps
NAS Alameda Parcel 37

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 37.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 37.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1: Oil/Water Separator Pump and Drainage Area • Target Area 2: Maintenance Shelter • Target Area 3: Truck Parking Area • Target Area 4: Spill Area, West Side of Parcel 37 • Target Area 5: Fueling Islands • Target Area 6: Hazardous Waste Accumulation Area • Target Area 7: Parcel Perimeter, Grass and Dirt Areas

TABLE 6-37-2

Summary of Data Gaps
NAS Alameda Parcel 37

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• 2 USTs currently exist at Parcel 37 associated with the oil/water separator.
Underground Utilities	• Storm sewer and electrical.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains seven parcel-specific target areas however, zone-wide samples are not located inside Parcel 37 boundaries.

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 6. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following seven parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-37-2.

- Target Area 1 (Oil-Water Separator Pump and Drainage Area): Subsurface soil will be collected from two sides of the oil-water separator. Samples will be collected from a depth equal to the depth to the bottom of separator pit. A Geoprobe device will be used to collect to collect these samples. The soil in the drainage area leading west to the storm drain will be sampled in two places using a surface soil survey and a subsurface Geoprobe survey. The samples will be analyzed for TPH, pesticides, metals, VOCs, and SVOCs. This target area is approximately 3,600 square feet in size.

- Target Area 2 (Maintenance Shelter): This area will be sampled with a Geoprobe. The samples will be analyzed for metals, pesticides, SVOCs, and VOCs. This target area is approximately 600 square feet in size.

- Target Area 3 (Truck Parking Area): This area will be sampled with two subsurface Geoprobe soil samples located over the two areas of darkest staining (staining must be representative of the general staining in this target area). The samples will be analyzed for metals, pesticides, SVOCs, and VOCs. This target area is approximately 4,500 square feet in size.

- Target Area 4 (Spill Area, West Side of Parcel 37): This area will be sampled with one subsurface Geoprobe soil sample and one surface soil sample located in the darkest stained areas. The samples will be analyzed for pesticides, metals, PCBs, SVOCs, VOCs, and TPH. This target area is approximately 40 square feet in size.

- Target Area 5 (Fueling Islands): Soils in the vicinity of the fueling islands may have been impacted by chemical releases from activities

conducted at this parcel. Two surface soil samples and two subsurface Geoprobe soil samples will be collected from each of the two darkest stained areas of the fueling island. One subsurface Geoprobe soil sample and one surface soil sample will be collected in the darkest stained area between the fueling islands. Two surface soil samples and two subsurface Geoprobe soil samples will be collected from the south side of the islands where the pipes enter the ground. The samples will be analyzed for metals, TPH, SVOCs, VOCs, and pesticides. This target area is approximately 4,500 square feet in size.

- Target Area 6 (Hazardous Waste Accumulation Area): This area will be sampled with one subsurface Geoprobe soil sample and one surface soil sample in the darkest most representative stained area of the hazardous waste accumulation site. The samples will be analyzed for metals, TPH, SVOCs, VOCs, and pesticides. This target area is approximately 4,500 square feet in size.

- Target Area 7 (Parcel Perimeter, Grass and Dirt Areas): This area will be sampled with four surface soil surveys located in the most representative grass and soil areas. The samples will be analyzed for pesticides. This target area is approximately 780 square feet.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). Table 6-37–1 summarizes screening-level sampling and analysis for the parcel's target areas. The total number of samples to be collected from the locations shown on Figure 6-37-1 are: 13 surface soil samples and 14 GeoProbe soil samples. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

When surface soil samples are designated on paved surfaces, the samples will be collected from the soil layer directly beneath the paved surface.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-190

PARCEL 190 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 190 at NAS Alameda (Figure 6-190-1). The parcel, which is located in the west-central portion of the base, is approximately five acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site; however, this site does not require a RCRA Facility Investigation (RFI). One zone-wide and no parcel-specific target investigation areas (target area) were identified on Parcel 190. Soil vapor sampling and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-190-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 190, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 190, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 36, 37, 191, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone

were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 23 and 540), one structure (RCRA Site SWMU/GAP 22), five hazardous materials storage lockers, and one aboveground storage tank cover approximately 45 percent of the parcel. The remaining 55 percent is open space. In general, the parcel area is presently in use as an aircraft maintenance area, with parking and materials storage in the open space. Two buildings were formerly located on the parcel and have since been demolished. Underground fuel and sewer lines are present at this parcel and are shown in Figure 6-190-1.

Parcel 190 is located approximately 300 feet west of an Installation Restoration (IR) Program site (IR Site 5, Building 5). Previous investigations have not been conducted at Parcel 190 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 23 and 540

Because Building 540 is annexed to Building 23 and shares a common wall with Building 23, Buildings 23 and 540 will be discussed together. Building 23 was constructed in 1941 and has since served as an aircraft maintenance hangar (Figure 6-190-1). This one-story building covers approximately 67,000 square feet (220 feet wide by 300 feet long) and is in moderately good condition. Building 23 is constructed of a steel frame with external siding, a concrete floor, and a steel-frame, built-up roof. Offices are located in the built-up loft areas on the west and east sides of the building. Building 540 is located directly adjacent (i.e., a lean-to) to the southwest side of Building 23. Building 540 houses a

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

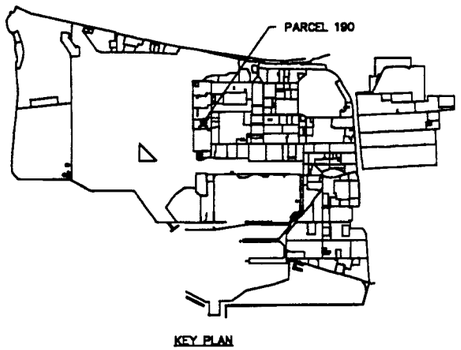
FIGURE 6-190-1 – PARCEL 190
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

6 SOIL VAPOR SAMPLE & No.

GeoProbe SOIL SAMPLE

APPROXIMATE LOCATION OF HAZARDOUS MATERIALS STORAGE LOCKER

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

18-25 SANITARY SEWER MANHOLE & No.

G.T. GREASE TRAP

SW SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM & CONDENSATE LINE LEGEND

26A STEAM & CONDENSATE MANHOLE & No.

STEAM & CONDENSATE LINES

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

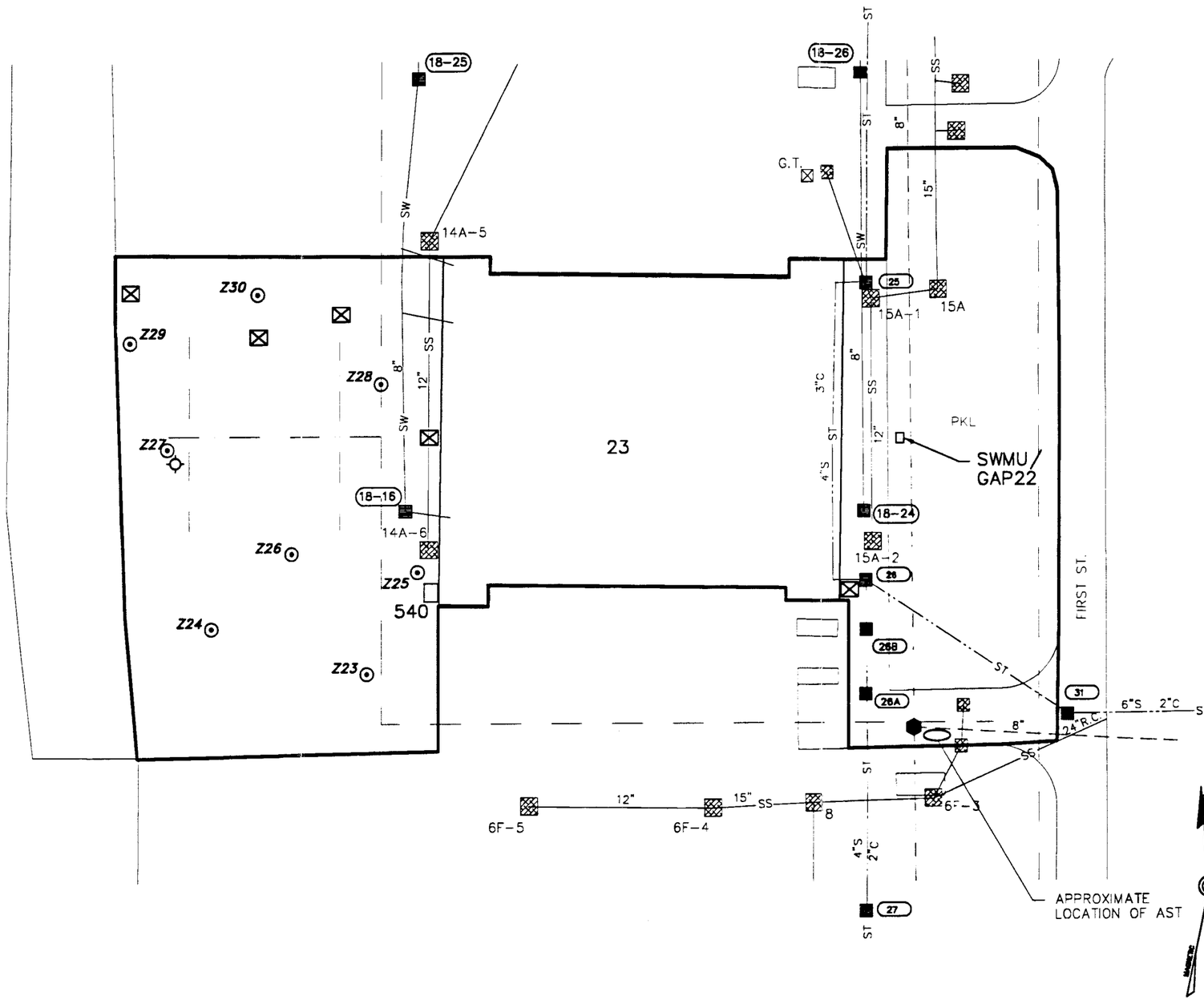
14A-5 MANHOLE & No.

CATCH BASIN

SS STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



SCALE IN FEET

80 0 80 160 240

1" = 80'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-190-1

PARCEL 190

PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO. 19590190.DWG	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.96.45 SHEET 1 OF 1

SENSITIVE

TABLE 6-190-1

Summary of Recommended Samples
NAS Alameda Parcel 190

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-25-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-26-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-27-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-28-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-29-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-30-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

diesel generator. An aboveground storage tank (AST), which provides fuel to the diesel generator, is located adjacent to Building 540.

Utilities located within and immediately surrounding Buildings 23 and 540 include underground sanitary sewer, storm sewer, steam, water, electricity, abandoned fuel, and industrial sewer lines. Several transformers are also located in the northeast and northwest transformer rooms in Building 23. These transformers, which appeared relatively new, either contain less than five parts per million PCBs or are of unknown PCB classification. No staining was noted beneath or near the transformers during the site inspection. No permits appear to have been issued for these buildings.

Information collected during the EBS indicates that activities conducted within this building include light aircraft maintenance. It appears that Building 23 has been used for this purpose continually since its construction. Light aircraft maintenance typically involves oil changes, minor repairs, and replacing worn equipment, such as tires. These maintenance activities are believed to have been conducted in most areas of the building. Maintenance activities typically involve the use of chemicals including solvents and petroleum products (especially lubricating oils), and the generation of waste products including waste oils. A paint booth is located in the southeast corner of Building 23. Maintenance activities and related chemical use and storage have occurred within Building 23 from 1941 to present.

Less than 50 gallons of paints were stored in a flammable materials locker that was located in the southeast corner of the paint booth area. Less than five pounds of both Freon and greases were stored in a cabinet in the second room located north of the southern stairwell. In the first two rooms in the southwest portion of the building, on the loft floor off of the main hangar, approximately 475 gallons of non-halogenated organic compounds and 10 pounds of halogenated organic compounds were stored on benches, shelves, tables, and on the concrete floor. No secondary containment system was present.

No documented spills were found during review of the EBS data. According to site inspection data, however, scattered staining covered approximately 30 percent of the floor in the second room from the southwest corner of the building, on the loft floor. A black, low intensity stain measuring approximately eight square feet was noted on the hangar floor in the southeast corner of the building. No staining was noted around Building 540 or the AST.

Building 23 is not equipped with a heating ventilation air-conditioning (HVAC) system. Based on the age of Building 23, asbestos-containing materials (ACM) may be present. It was noted during the building

inspection that the northeast corner of the building on the office-loft floor had deteriorating ceiling tiles and paint, which appeared to create the dusty atmosphere observed during the site inspection. Dusty conditions were a building-wide issue.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 23.

Buildings 313 and 322 (Demolished)

Building 313 and Building 322 were constructed in 1942 and served as a small arms/pyrotechnic storage area and a hazardous/flammable storage area, respectively. Both one-story buildings were demolished between 1953 and 1958. Each building covered approximately 100 square feet. Construction materials used for these buildings are unknown.

Open Space

Open space covers approximately 55 percent of Parcel 190. The ground surface of the open space is completely paved. Approximately 20 percent of the paved area is surfaced with asphalt and 80 percent is covered with concrete. The pavement is in good condition. In general, the open space has been used for aircraft washdown, parking, maneuvering, and fueling.

Structures located within the open space include hazardous materials storage lockers and the SWMU/GAP 22 site (Figure 6-190-1). Buildings 313 and 322 were formerly located in this open space.

Utilities located within and immediately surrounding the open space on Parcel 190 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines, and overhead electrical lines.

EBS information indicates that activities conducted within this open space include fueling, aircraft maneuvering, vehicle parking, and storage of equipment and materials. These activities have occurred on Parcel 190 from 1941 to the present.

According to site inspection data, three of the five hazardous materials storage lockers located in the northwest portion of the parcel were empty. The materials historically stored in these lockers are unknown. In addition it is unknown how long the lockers have been in their present location. An aboveground storage tank (AST) located next to

Building 540 appears to store diesel fuel for the generator located within Building 540.

No staining other than normal staining related to vehicle and maintenance equipment parking was noted during the site inspection. Significant staining located west of Building 23 was noted on historical aerial photographs dated 1947 through approximately 1970. This staining may be related to the aircraft fueling and maintenance activities historically conducted.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 190 is bounded by Parcel 23 to the west, Parcels 30, 31, and 204 to the south, Parcel 32 to the north, and Parcels 46, 47, 48 and 49 to the east. First Street borders Parcel 190 to the east. IR Site 5 (Building 5, Parcel 54) is located on the east side of Parcels 46, 47, 48, and 49. Activities of concern on adjacent parcels include aircraft maintenance, fueling, taxiing, painting and finishing, and washdown on Parcels 30, 31, 204, and 32. One underground storage tank (Tank 614-1) is located on Parcel 49, approximately 100 feet southeast of Parcel 190.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (SWMU/GAP 22) is located at this parcel. SWMU/GAP 22 is composed of two Bowser 55-gallon drums. Chemicals of concern associated with this site include oil, solvents, paint-related material, rags, and hydraulic fluid. There is no evidence that any chemicals were released from this site. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, SWMU/GAP 22 has not been identified as a potential release area.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 190, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-190-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 23. Surfaces within the paint booth area located in the southeast portion of Building 23 were coated with dust during the site inspection. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Historical aerial photographs indicate that Parcel 190 was completely paved since at least 1947. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 190.

Once the data gaps in Table 6-190-2 are addressed and screening-level sampling results from the target area described below are compared to the appropriate screening levels, Parcel 190 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-190-2

Summary of Data Gaps
NAS Alameda Parcel 190

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 300 feet east of Parcel 32. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Support Area.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-190-2

Summary of Data Gaps
NAS Alameda Parcel 190

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

One zone-wide target area and no parcel-specific target areas were identified for Parcel 190. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 6. The nature and location of the zone-wide target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples and 13 subsurface Geoprobe soil samples will be collected from this zone-wide target area. The proposed zone-wide target area samples on Parcel 190 are listed on Table 6-190-1.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the impacts of IR Site 5 must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Soil vapor sampling (SOP 6) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the zone-wide target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Exact sampling locations will be determined in the field, based on visual observations of staining, pavement conditions, and accessibility restrictions. Table 6-190-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target area on Parcel 190. Seven of the 65 soil vapor samples and one of the 13 will be collected from the zone-wide locations shown on Figure 6-190-1. Sampling will be conducted in accordance with the

referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-191

PARCEL 191 EVALUATION PLAN

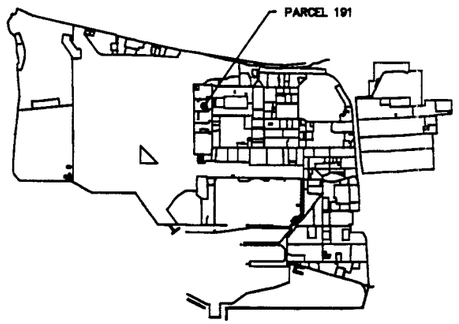
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 191 at NAS Alameda (Figure 6-191-1). The parcel, which is located in the north-central portion of the base, is approximately six acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site (SWMU/GAP 20). One zone-wide and no parcel-specific target investigation areas (target areas) were identified at Parcel 191. Soil vapor sampling and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-191-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 191, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 191, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 36, 37, 190, 192, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

6 SOIL VAPOR SAMPLE & No.

GeoProbe SOIL SAMPLE

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

18-25 SANITARY SEWER MANHOLE & No.

G.T. GREASE TRAP

—SW— SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM & CONDENSATE LINE LEGEND

43 STEAM & CONDENSATE MANHOLE & No.

CONDENSATE PUMP

STEAM & CONDENSATE LINE

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

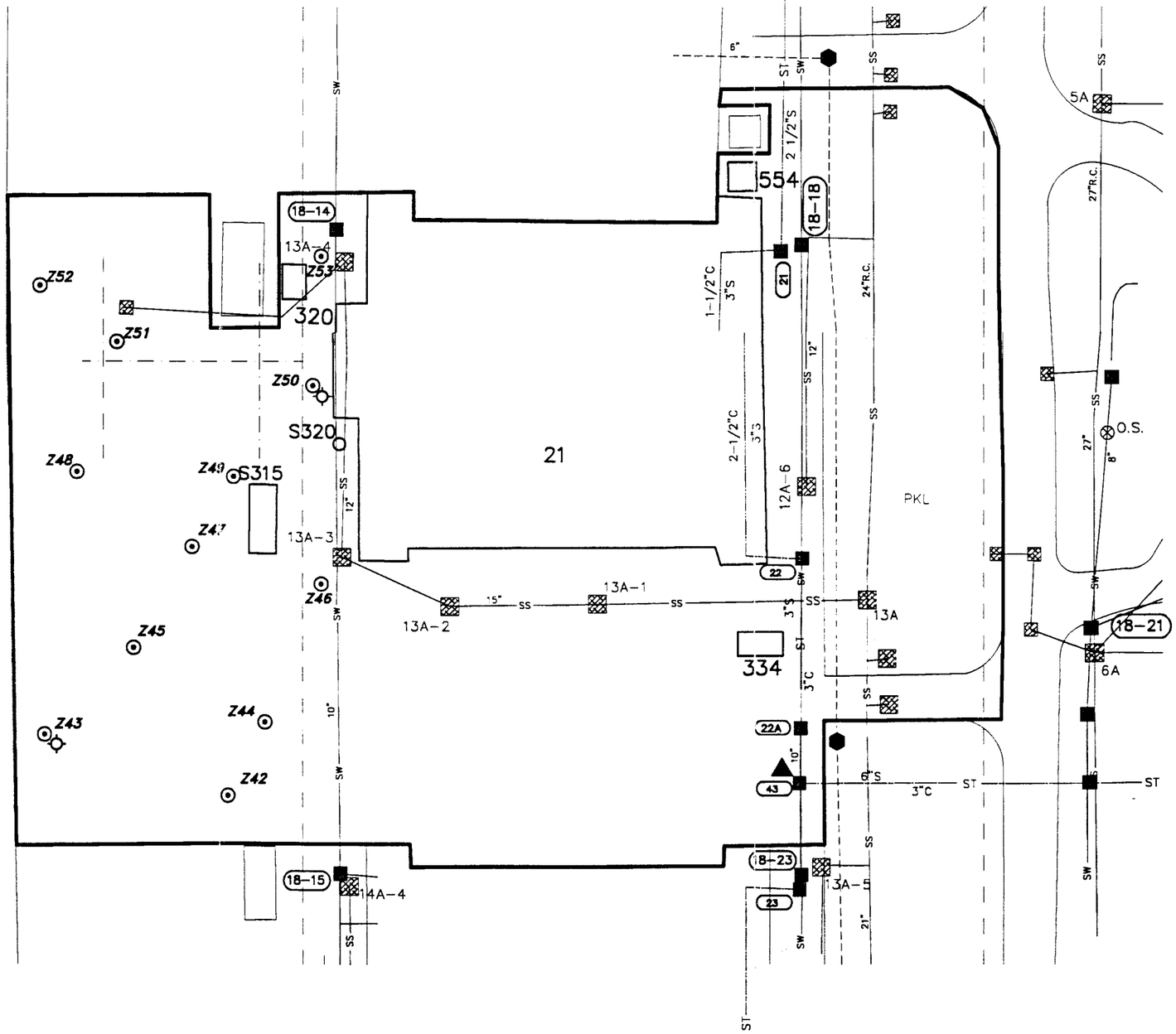
14A-5 MANHOLE & No.

CATCH BASIN

—SS— STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



SCALE IN FEET

80 0 80 160 240

1" = 80'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-191-1

PARCEL 191

PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590191.DWG	PWC 17,629 (STORM DRAINS) PWC 106,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 2.10.95/2121.98.45 — SHEET 1 OF 1

TABLE 6-191-1

Summary of Recommended Samples
NAS Alameda Parcel 191

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-42-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-43-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-43-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-44-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-45-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-46-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-47-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-48-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-49-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-50-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-50-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS

TABLE 6-191-1

Summary of Recommended Samples
NAS Alameda Parcel 191

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-51-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-52-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-53-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began in 1940 and was completed in the area covered by this parcel in approximately 1941. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The ground level and grading have not changed significantly since that time.

Currently, five buildings (Buildings 21, 334, 315, 320, and 554) cover approximately 25 percent of the parcel. The remaining 75 percent is open space. The parcel area is presently in use as a maintenance hangar and related support facilities. Documents indicate that former Building 329 was demolished in 1953, nine years after being constructed as a line maintenance shelter. Building 334 has been scheduled for demolition. Underground fuel and sewer lines are present at this parcel and are shown in Figure 6-191-1.

Parcel 191 is located approximately 500 feet northwest of an Installation Restoration (IR) Program site (IR Site 5, Building 5). No previous investigations have been conducted at Parcel 191 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 21

Building 21 was constructed in 1941 and has served as a maintenance hangar since that time (Figure 6-191-1). This building covers approximately 65,500 square feet (approximately 260 feet long by 230 feet wide) and is in fair condition. Building 21 is a one-story building with loft space on the east and west ends. It is constructed with a steel frame and external siding and features a concrete floor and steel-frame, built-up roof.

Utilities located within and immediately surrounding Building 21 include underground sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that activities conducted within this building include light aircraft maintenance. It appears that Building 21 has been used for this purpose continually since its construction. Light aircraft maintenance typically involves oil changes, minor repairs, and changing of worn equipment, such as tires. These activities are believed to have been conducted in most areas of the building. This activity typically involves the use of chemicals, including solvents and petroleum products (especially lubricating oils), and the generation of waste products, including waste oils. These activities and related chemical use and storage have occurred within Building 21 from 1941 to the present.

Documents show that non-halogenated organic compounds and paint have been stored and used in Building 21. At the time of the site inspections, approximately 30 gallons of non-halogenated organic compounds were stored in Building 21. Small amounts of lubricant are stored in an aircraft shop behind the fourth door located south of the north stairwell in Building 21. The south part of Building 21's west wing annex contains small quantities of hydraulic fluid, aerosol cleaners, and lubricants. A chemical inventory in 1993 reveals that up to 150 gallons of non-halogenated organic compounds, halogenated organic compounds, paint, and petroleum products were stored in Building 21 at that time. Up to 275 gallons of waste non-halogenated organic compounds and paint has been documented to be stored in Building 21. No documented spills or stains were observed during EBS review. The concrete floors are reportedly cleaned regularly, thus evidence of any releases is likely to be minimal.

Building 21 does not appear to contain a heating-ventilation-air conditioning (HVAC) system. Organic vapor odors were noted in Building 21, as well as significant amounts of accumulated dust. Boiler overflow was noted in two boiler rooms at the north end of the building on the first floor of Building 21; one on the east side and one on the west side.

During the site inspection it was noted that there may be boiler and steam pipe insulation of sufficient age to potentially consist of asbestos-containing materials. Peeling potentially lead-based paint was noted on the interior and exterior surfaces of Building 21. EBS information indicates that PCB-containing transformers were present in the northeast and northwest vault areas of Building 21 in 1987. Transformers were observed in these areas during the site inspection; all of the transformers looked relatively new. No significant staining was observed in the transformer vaults during the site inspection.

Building 21 has suffered significant earthquake damage. The southern half of the annex located on the west side of the building is closed as a result of damage incurred during the 1989 Loma Prieta earthquake. The foundation blocks have separated, creating a one-inch gap in the annex. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 21.

Building 554

Historical aerial photograph review indicates that Building 554 was constructed between 1970 and 1975, and has served as Electrical Substation 7 since that time (Figure 6-191-1). This building covers approximately 1,000 square feet and is in fair condition. Building 554 is constructed of concrete, with a concrete floor and a corrugated metal ceiling. Utilities located within and immediately surrounding Building 554 include underground sanitary sewers, storm sewer, water, and electrical lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that activities conducted within this building have been confined to typical operations of an electrical substation. An air circuit breaker is located on the premises, as is a transformer compound. The transformer compound is located adjacent to the building on the north side. No PCB concerns appear to exist at the transformer compound; the oil-filled transformer is clearly labeled "No PCBs."

No chemical storage or use is documented to have occurred in this building. There were no spills (documented or otherwise) mentioned in the site inspection reports for Building 554. Historical aerial photographs do not indicate significant staining in this area of the parcel.

Building 554 does not appear to contain an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 554.

Building 334

Building 334 was constructed in 1948 and served as a flammable and hazardous materials storage shed (Figure 6-191-1). This building covers approximately 300 square feet and is in fair condition. Building 334 is a typical Quonset hut building with corrugated steel walls and roof, and a concrete floor. This building is scheduled to be demolished. No permits appear to have been issued for Building 334. Utilities located

within and immediately surrounding Building 334 include underground sanitary sewer, storm sewer, water, and electrical lines.

Information collected during the EBS indicates that this building was used to store hazardous and flammable materials when it was first constructed. There is no information regarding the length of time the building has been used for chemical storage. Currently, Building 334 is used both as a small paint spray booth and for dry goods storage. Less than 10 gallons of paint were stored in a hazardous materials locker at the time of the site inspection. In 1993, 500 gallons of non-halogenated organic compounds, paint, petroleum products, and metals were documented to be stored in this building.

No staining or spills have been documented in Building 334. The floor was clean during the site inspection. Building 334 does not appear to contain an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 334.

It was noted during visual inspection that there may be insulation of sufficient age to consist of asbestos-containing materials. Peeling potentially lead-based paint was noted inside and outside of Building 334 during the site inspection.

Buildings 315 and 320

Buildings 315 and 320 were constructed in 1942 and served as small arms/pyrotechnics magazines (Figure 6-191-1). These one-story buildings are in fair condition. Buildings 315 and 320 are corrugated metal, trailer-type buildings. These buildings are currently used as office space cover approximately 100 square feet each. Although EBS information indicates that these buildings are used for both office space and ammunition storage, site inspection data indicate that they are currently used for office space only.

Utilities located within and immediately surrounding Buildings 315 and 320 include industrial waste, water, electrical, steam, and storm sewer lines. No permits appear to have been issued for these buildings.

Ordnance was stored in Buildings 315 and 320 for an unknown period of time. Typically, ordnance was reportedly imported and exported from NAS Alameda intact and packaged (i.e., NAS Alameda was a transfer point only). Chemical storage has not been documented to have occurred in these buildings. No spills or stains were noted within Buildings 315 and 320 during the site inspection.

Buildings 315 and 320 do not contain HVAC systems. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Buildings 315 and 320.

Open Space

Open space covers approximately 75 percent of Parcel 191. The ground surface is approximately 70 percent paved with concrete and 30 percent paved with asphalt. The pavement is generally in good condition, although it is cracked in some areas. The open space has been used for vehicle and aircraft parking, maneuvering, and washdown.

Structures located within the open space include storage sheds and hazardous materials lockers. Building 329 was formerly located in the open space. This building served as a line maintenance shelter and was demolished in 1953. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for processes occurring within this open space.

Site inspections, interviews, and a review of historical records and aerial photographs indicate that activities conducted in this area include general aircraft and vehicle parking and maneuvering, aviation gasoline (AVGAS) fueling on the west side of Building 21, and aircraft washdown southeast of Building 20. It is unknown when fueling was discontinued west of Building 21. An interview with Navy personnel indicates that six additional hazardous materials lockers were formerly located in this area. Various cleaners, solvents, and oils were reportedly stored in the lockers. The lockers were removed when the base-wide centralization of hazardous materials and wastes was implemented in approximately 1992. No staining was noted in this area during the site inspection. This area is likely RCRA Site SWMU/GAP 20.

No spills have been documented, although some spills likely occurred during fueling operations. Historical aerial photograph review indicates significant, widespread staining existed west of Building 21 between approximately 1947 and 1970. This staining may be associated with aircraft exhaust or fueling operations. Typical vehicle parking stains were also noted throughout the parcel.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 191.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 191 is bounded by Parcels 23, 34, 192, 36, 43, 45, 32, and 33. No IR sites are located at any of these parcels. Activities of concern on Parcels 32 and 192 include aircraft maintenance, historical fueling, and aircraft washdown. First Street borders Parcel 191 to the east.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (SWMU/GAP 20) is located at Parcel 191. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, SWMU/GAP 20 does not require further investigation. SWMU/GAP 20 was noted during the site inspection but it is not listed in the NAS Alameda RCRA Site Summary.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 191, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-191-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewers is discussed in corresponding protocols presented in Section 3.

TABLE 6-191-2

Summary of Data Gaps
NAS Alameda Parcel 191

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 500 feet southeast of Parcel 191. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Fueling Areas.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-191-2

Summary of Data Gaps
NAS Alameda Parcel 191

Data Gap	Status/Description
Underground Utilities	• Storm sewer lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 21, 334, 315, 320, and 554. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

Once the data gaps in Table 6-191-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 191 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

No parcel-specific target areas were identified for Parcel 191. However, this parcel was affected by the following zone-wide target area:

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples and 13 subsurface Geoprobe soil samples will be collected in Zone 6 to assess potential releases of chemicals to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this parcel are listed in Table 6-191-1.

Screening-Level Investigation

Soil vapor sampling (SOP 6) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Twelve of the 65 soil vapor samples and two of the subsurface Geoprobe soil samples will be collected from the zone-wide locations shown on Figure 6-191-1. Table 6-191-1 summarizes screening-level sampling and analysis for the parcel's target areas. The sample locations are shown on Figure 6-191-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-

level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-192

PARCEL 192 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 192 at NAS Alameda (Figure 6-192-1). The parcel, which is located in the north-central portion of the facility east of the airfield, is 6.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives as outlined in Section 1 of the Shell Workplan. The parcel is 6.5 acres in size and is roughly rectangular in shape. This parcel contains one RCRA site (SWMU/GAP 19). Three parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, soil vapor sampling, and subsurface Geoprobe sampling. Table 6-192-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 192, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 192, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 36, 37, 190, 191, 193, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily

used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 6.

Filling began and was completed in the area within the parcel boundaries in approximately 1941. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The ground level and grading have not changed significantly since that time.

Currently, six buildings (Buildings 20, 582, 377, 377A, 316, and 319) cover approximately 25 percent of the parcel. The remaining 75 percent is open space. The parcel area is presently in use as a hangar and related support facilities. Underground fuel and sewer lines are present at this parcel and are shown in Figure 6-192-1.

Parcel 192 is located approximately 500 feet west of an Installation Restoration (IR) Program site (Building 5). Previous investigations have not been conducted at Parcel 192 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 20

Building 20 was constructed in 1941 and has served as a maintenance hangar since that time. This building is in fair condition. Building 20 is a one-story building with loft office space on the east and west ends. It is constructed with a steel frame and external siding and features a concrete floor and steel-frame, built-up roof. Building 20 covers approximately 65,500 square feet in area, is approximately 260 feet long by 230 feet wide, and currently houses a squadron of ten helicopters. The space occupied by Building 20 does not appear to have been used prior to construction of Building 20. Utilities located within and immediately surrounding Building 20 include underground, sanitary sewer, storm sewer, steam, water, electric, and industrial sewer lines. No permits appear to have been issued for this building.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

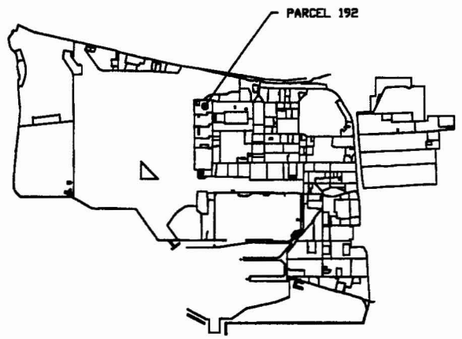
FIGURE 6-192-1 – PARCEL 192
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

6 SOIL VAPOR SAMPLE & No.

2 GeoProbe SAMPLE & No.

24 SURFACE SOIL SAMPLE & No.

1 TARGET AREA & No.

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

18-25 SANITARY SEWER MANHOLE & No.

G.T. GREASE TRAP

—SV— SANITARY SEWER LINE

MATERIALS:

C.I. - CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM & CONDENSATE LINE LEGEND

21 STEAM & CONDENSATE MANHOLE & No.

—ST— STEAM & CONDENSATE LINES

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

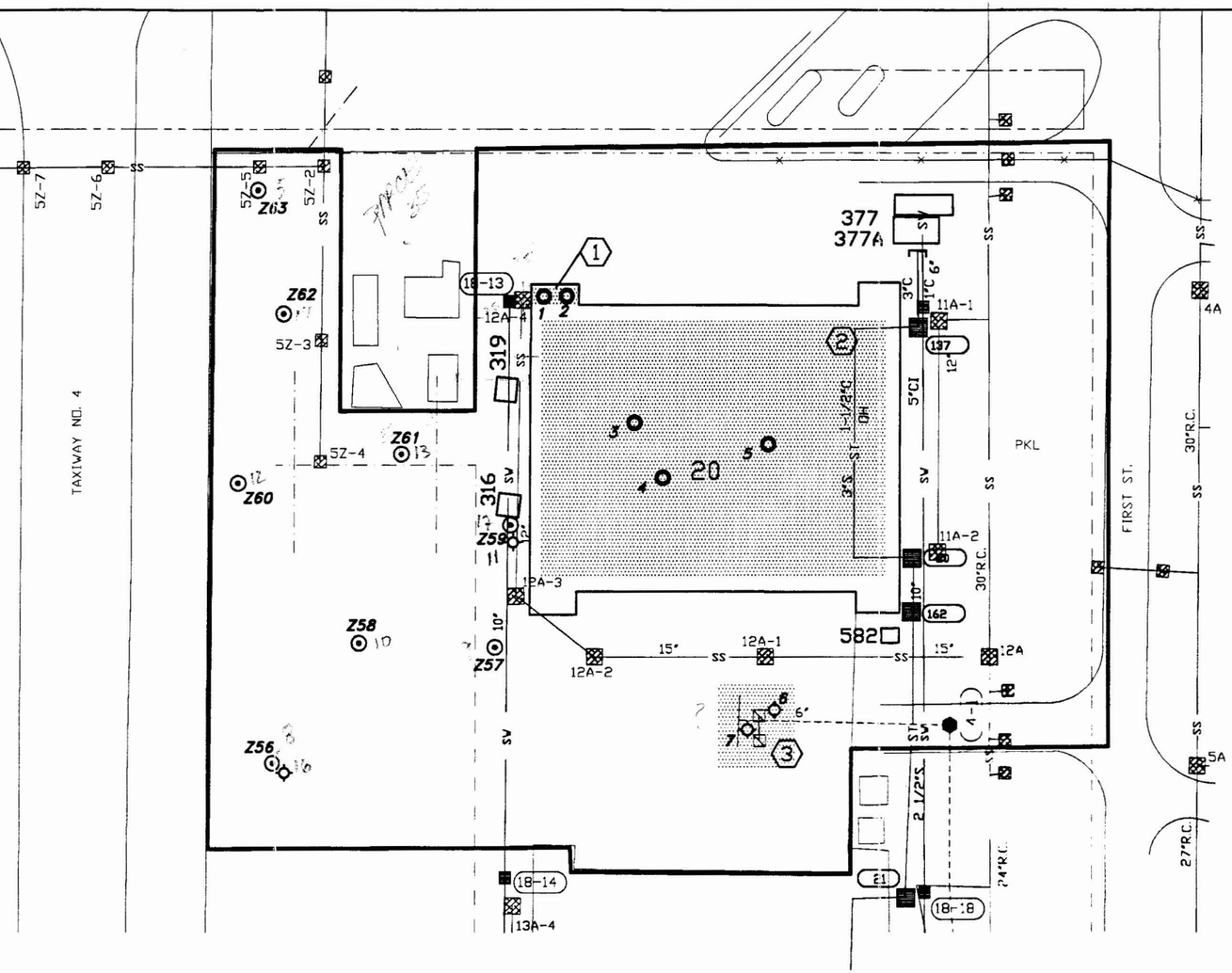
14A-5 MANHOLE & No.

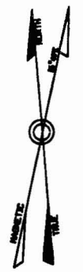
CATCH BASIN

—SS— STORM SEWER LINE

MATERIALS:

R.C. - REINFORCED CONCRETE





SCALE IN FEET

100 0 100 200 300

1" = 100'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-192-1
PARCEL 192
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590192.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)

SCALE AS NOTED	DATE: 2.10.95/2121.96.45	SHEET 1 OF 1

SENSITIVE

TABLE 6-192-1

Summary of Recommended Samples
NAS Alameda Parcel 192

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
192-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil	TPH	Test Kit
192-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil	TPH	Modified EPA 8015
192-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubrication oil	TPH	Test Kit
192-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lubrication oil	TPH	Test Kit
192-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Solvents	VOCs	CLP RAS
192-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lubrication oil	TPH	Test Kit
192-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Solvents	VOCs	CLP RAS
192-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Lubrication oil	TPH	Test Kit
192-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Lubrication oil, solvents	TPH, VOCs	Modified EPA 8015, CLP RAS
192-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Lubrication oil, AVGAS	TPH	Test Kit
192-6-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Lubrication oil, AVGAS, solvents	TPH, VOCs	Modified EPA 8015, CLP RAS
192-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Lubrication oil, AVGAS	TPH	Test Kit
192-7-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Lubrication oil, AVGAS, solvents	TPH, VOCs	Modified EPA 8015, CLP RAS
Z6-56-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-56-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-57-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

TABLE 6-192-1

Summary of Recommended Samples
NAS Alameda Parcel 192

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z6-58-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-59-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-59-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Zone 06 Target Area 1	TPH, VOCs, SVOCs, metals	TPH, VOCs, SVOCs, metals	Modified EPA 8015, CLP RAS
Z6-60-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-61-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-62-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC
Z6-63-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 06 Target Area 1	Non-halogenated/ Halogenated Org.	VOCs	GC

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

Information collected during the EBS indicate that activities conducted within this building included light aircraft maintenance. It appears that Building 20 has been used for this purpose continually since its construction. Light aircraft maintenance typically involves oil changes, minor repairs, and changing of worn equipment, such as tires. These maintenance activities are believed to have been conducted in most areas of the building. This activity typically involves the use of chemicals, including solvents and petroleum products (especially lubricating oils), and the generation of waste products, including waste oils. There is a general, cordoned-off storage area located in the north-central portion of Building 20. These activities and related chemical use and storage have occurred within Building 20 from 1941 to the present.

Documents show that non-halogenated organic compounds, petroleum products, and corrosives have been stored and used in Building 20. A maximum of approximately 600 gallons of the above chemicals were stored in Building 20; these chemicals and amounts are likely typical of normal storage inventories. In addition, 500 gallons of petroleum products were also documented as having been stored in Building 20 in 1993. Because this notation was made relative to the hazardous waste classification, this may denote storage of used petroleum products. Daily collection to a centralized location is the disposal option currently used for waste oils and solvents. The centralized disposal location is outside the northwest corner of Building 20. The collection system has been in effect since approximately the beginning of 1994.

No documented spills were noted during document review. During the building inspection, it was noted that floors are mopped regularly, and that the resultant wastewater is discharged into the drain that is connected to an oil/water separator located in the aircraft washdown area outside the building. Based on the site walk, the floor was noted to be in relatively good condition, although there were cracks in between the floor sections that were approximately 1-inch wide and 1-inch deep. It is unknown if these cracks penetrate to soils underlying the foundation.

A review of site inspection data indicates that undocumented spills may have occurred as evidenced by staining in approximately 3-foot-by-4-foot patches inside Building 20 beneath parked helicopters. These stains appear to be dark and oily. The western end of the slide track for the northern hangar door was also noted during the building inspection to be stained (2 feet by 3 feet) by what appears to be lubricating oil used for the sliding doors. There is a 30-foot-by-0.5-foot area of exposed, damp soil on the side of the track opposite from the staining.

An oily, dark stain (2 feet by 11 feet) was also noted in the southeast corner of Building 20, where the southern sliding door rests when it is open. Outside Building 20 in this same area is a wooden shed that is currently storing approximately eight, 1-gallon containers of cleaning products containing petroleum distillates. Aerial photograph review indicates that there was extensive staining located west of Building 20 of unknown origin, although it may be related to historic fueling activities.

Building 20 does not appear to contain a heating ventilation air conditioning (HVAC) system designed to mitigate vapor and fume accumulation. No air inlets or exhaust vents were noted during the site walk. Open hangar doors may provide adequate ventilation.

It was noted during the visual inspection that there may be boiler and steam pipe insulation of sufficient age as to potentially consist of asbestos-containing materials (ACM). There is evidence that lead-based paint is a potential environmental concern in Building 20, as there is peeling paint on the north sliding door (in the Commanding Officer's office located in the southwest loft area) and in the boiler room (Room 154). PCB-containing transformers are listed in the inventory as present in the northeast and northwest vault areas of Building 20 on dates in 1986 and 1987. These transformers were not seen during the building inspection, and it is unknown if they are still present. One transformer was seen during the visual inspection next to room 147; there was no sign of release in this area.

No other incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 20.

Building 582

Building 582 was constructed in 1975 and serves as a detached wash rack (Figure 6-192-1). This building is in moderately good condition. Building 582 is a one-story building. It is constructed of corrugated steel (floor construction is unknown) and covers an area of approximately 90 square feet. The space presently occupied by Building 582 was formerly open space used for aircraft parking and maneuvering.

Utilities located within and immediately surrounding Building 582 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines. No permits appear to have been issued for this building.

Information collected during the EBS indicate that activities conducted within and immediately surrounding this building consisted of aircraft washdown. Aircraft washdown typically involves the use of steam

cleaners and chemicals, including detergents, to washdown aircraft engines and bodies. Aircraft washdown processes occurred within and in the area immediately surrounding Building 582 from 1975 to the present. Typically, this process results in the creation of wastewater that may be contaminated with petroleum products. If the aircraft washdown soap contains degreasing agents, then the use of the soap may render the oil/water separator useless.

Aircraft washdown soap is documented to have been stored in and used at Building 582, probably during the time from 1975 to the present. The quantity of aircraft washdown soap stored in Building 582 is unknown. Disposal of used chemicals and released lubrication compounds (in wastewater) is accomplished via an oil/water separator.

No spills were noted during the document review. No staining was noted during the site walk within Building 582. Some staining that may be related to aircraft washdown activities was noted near the southeast corner of Building 20, and may be an accumulation of dirt and water. The size of this "stained" area was not noted.

Building 582 does not appear to contain an HVAC system. There is no evidence that lead-based paint or ACM are potential environmental concerns in Building 582. PCB-containing transformers do not appear to have been present in Building 582. No other incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within or immediately surrounding Building 582.

Buildings 316 and 319

Buildings 316 and 319 were constructed in 1942 and served as storage areas (Figure 6-192-1). These buildings are in good condition. Buildings 316 and 319 are both one-story buildings constructed of concrete with concrete floors and concrete roofs, and cover an area of approximately 100 square feet each. The space occupied by Buildings 316 and 319 was formerly open space used for aircraft parking and maneuvering.

Utilities located within and immediately surrounding Buildings 316 and 319 include underground sanitary sewer, storm sewer, water, electrical, and abandoned fuel lines. No permits appear to have been issued for these buildings.

Information collected during the EBS indicate that activities conducted within this building included small arms/pyrotechnic storage, hazardous materials storage, and, currently, storage of fuel sampling equipment. No detailed information is available regarding the types of hazardous materials stored in Buildings 316 and 319 or the periods of

time during which hazardous materials were stored in these areas. Ordnance was stored in Buildings 316 and 319 for an unknown period of time. Typically, ordnance was imported and exported from NAS Alameda intact and packaged (i.e., NAS Alameda was a transfer point only).

No documented spills or stains were noted during the document review and site inspections.

Buildings 316 and 319 do not appear to contain HVAC systems designed to mitigate vapor and fume accumulation. The building may contain ceiling tiles, floor tiles, and/or insulation of sufficient age as to potentially be composed of asbestos-containing materials. There is no evidence that lead-based paint is a potential environmental concern in Buildings 316 and 319. PCB-containing transformers do not appear to have been present in Buildings 316 and 319.

No other incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within or immediately surrounding Buildings 316 and 319.

Building 377

Building 377 was constructed in 1954 and served as a tank truck loading facility until 1969, at which time the building was converted for use as office space (Figure 6-192-1). This building is in moderately good condition. Building 377 is a one-story building constructed of concrete with a tile floor and wood-construction roof, and covers approximately 1,000 square feet in area. The space occupied by Building 377 was formerly open space used for aircraft parking and maneuvering.

Utilities located within and immediately surrounding Building 377 include underground sanitary sewer, storm sewer, water, electrical, and abandoned fuel lines. No permits appear to have been issued for this building.

Information collected during the EBS indicate that activities conducted within this building included tank truck loading. The specific activities conducted in and around Building 377 while it was a tank truck loading facility are not clear. The chemicals that may have been stored or transferred in conjunction with these activities is also unknown. Building 377 has been used for office space since approximately 1969. No chemicals were documented to have been stored or used in Building 377.

No documented spills or stains were noted during the document review and site inspections.

Building 377 does not appear to contain an HVAC system designed to mitigate vapor and fume accumulation. No outside air inlets or exhaust vents were noted during the site inspection. The building may contain insulation materials of sufficient age as to potentially be composed of asbestos-containing materials (ACM). There is no evidence that lead-based paint is a potential environmental concern in Building 377. PCB-containing transformers do not appear to have been present in Building 377, although there is a suspect transformer located adjacent to Buildings 377 and 377A. No other incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 377.

Building 377A

The date of construction of Building 377A is unknown, though the aerial photographs indicate that it was built some time between 1963 and 1966. There is no historical use data available for Building 377A. This building is generally in good condition. Building 377A is a one-story building constructed of wood with a raised floor (on cinder blocks) and corrugated metal roof, and covers approximately 1,000 square feet.

Utilities located within and immediately surrounding Building 377A include underground sanitary sewer, storm sewer, steam, water, electrical, and active and abandoned fuel lines. No permits appear to have been issued for this building.

Documents show that chemicals including motor oil, antifreeze, and household cleaners have been stored in Building 377A in 1994. Less than approximately five gallons of each of the above chemicals are presently stored in Building 377A. No spills have been documented in Building 377A, and no staining was noted during the building inspection.

Building 377A does not appear to be equipped with an HVAC system. The building may contain materials that are of sufficient age as to potentially be composed of asbestos-containing materials. There is no evidence that lead-based paint is a potential environmental concern in Building 377A. PCB-containing transformers may be present adjacent to Building 377A.

No other incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within or immediately surrounding Building 377.

Open Space

Open space covers approximately 75 percent of the parcel. Open space on Parcel 192 has been and is currently used for vehicle and aircraft parking, maneuvering, washdown, and cleaning. Structures located within the open space include storage sheds and hazardous materials lockers that were constructed or installed at an unknown time. The open space is approximately 70 percent paved with concrete and 30 percent paved with asphalt. The pavement is generally in good condition, although it is cracked in some areas.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, fuel, and industrial sewer lines. There is also a telephone company manhole located near the northeast corner of Building 20 that is marked as containing flammable gases. No permits appear to have been issued for processes occurring within this open space.

Information collected during the EBS indicate that activities conducted within this open space included aviation gasoline (AVGAS) fueling on the west side of Building 20, aircraft washdown in the area of Building 582, and general aircraft and vehicle parking and maneuvering. Fueling processes could involve some spillage at the open space area on the west side of Building 20. It is unknown when fueling was discontinued west of Building 20. Aircraft washdown can result in used washdown soap and petroleum product residues in wastewater, which currently is disposed via an oil/water separator. It is unknown when the oil/water separator was installed or what disposal method was used prior to its installation. The depth of the oil/water separator will be determined during sampling.

There are two hazardous materials storage lockers located within the Parcel 192 open space. These lockers are all-metal construction, grounded, and are located northwest of Building 20. These lockers have apparently only been used for chemical and waste storage. One is estimated to contain a total of approximately 100 gallons of various petroleum products, aerosols, and corrosives. The other is a hazardous waste accumulation shed that contains paint, fuel, petroleum products, and chlorinated and non-chlorinated solvents and has a total capacity of approximately 350 gallons. There is evidence of release within the secondary containment for the hazardous waste accumulation shed. Drums were formerly stored outside this shed on the asphalt.

No spills have been documented, although some spills likely occurred during fueling operations. Oil staining was noted during the visual inspections near the washdown area south of Building 20. There is significant, wide-spread staining west of Building 20 that may be

associated with aircraft exhaust or fueling operations. Typical vehicle parking stains are located throughout the parcel.

No other incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

Three underground storage tanks associated with Building 549 may be present at this parcel. Building 549 is located on Parcel 35, which is inset into Parcel 192. It is unclear whether these tanks still exist in this area, and if so, where they are located.

Parcel Boundary Conditions

Parcel 192 is bounded by parcels 23, 34, 35, 36, 37, 41, and 191. The former and currently active fueling areas on Parcels 23 and 37 may cause additional concerns at the boundary of these parcels with Parcel 192. Abandoned fuel lines are listed as bordering Parcel 192 on the east side. These fuel lines are reported to have been abandoned and filled with water, and breaks in the lines are known to have occurred. According to interviews, AVGAS refueling occurred on the west side of Buildings 20-23 and ended when the fuel lines were abandoned, but it is unclear when the lines were abandoned.

No parcel contiguous with Parcel 192 are IR sites, therefore, no sampling is called for in this PEP in response to the nearby IR site at Building 5. If the continuing investigation at the Building 5 IR site reveals a cause for concern at Parcel 192, then additional sampling on Parcel 192 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with these sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (SWMU/GAP 19) is located at this parcel. SWMU/GAP 19 is located northwest of Building 20. There is no evidence that any chemicals have been released from this site. Site SWMU/GAP 19 is comprised of two Bowser 55-gallon drums. The chemicals of concern associated with this site include oil, solvents, paint-related material, rags, and hydraulic fluid. The site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the RCRA site at this parcel does not qualify

as a target area. The investigation and remediation of this RCRA site will be performed under the IR Program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 192, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-192-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines is also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 20, 582, 377, 377A, 316, and 319. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-192-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcel 192 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Three parcel-specific target areas and one zone-wide target area were identified at this parcel.

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed

TABLE 6-192-2

Summary of Data Gaps
NAS Alameda Parcel 192

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located within 500 feet east of Parcel 192. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Open Space, Aircraft Maintenance and Fueling Areas.
Potential Parcel-Specific Release Areas	• The southeast and northwest corners of Building 20. • The central hangar-helicopter parking area of Building 20 . • Aircraft washdown area.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-192-2

Summary of Data Gaps
NAS Alameda Parcel 192

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Three underground storage tanks associated with Building 549 may be present at this parcel. Building 549 is located on Parcel 35, which is inset into Parcel 192. It is unclear whether these tanks still exist in this area, and if so, where they are located.
Underground Utilities	• Storm sewer, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 6. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following three parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-192-2.

- Target Area 1, (Building 20): Regular lubrication of the sliding hangar doors in the northwest and southeast portions of Building 20 may have resulted in the release of petroleum products to soils in these areas. The northwest area will be sampled during the screening phase, because this area should be representative of both areas. This area is less than 500 square feet in area, and the likelihood of environmental impacts having occurred in this target area is classified as potential. Samples to be collected in this target area are listed in Table 6-192-1.

- Target Area 2, (Building 20): The central hangar-helicopter parking area of Building 20 has the potential to have impacted soils and groundwater because of storage, disposal, and use of potentially hazardous substances including petroleum products and solvents related to aircraft maintenance activities. The total stained area within Target Area 2 is less that 200 square feet and is classified as having a potential likelihood of environmental impacts. Samples to be collected in this Target Area are listed in Table 6-192-1.

- Target Area 3, (Open Space): Soils in the aircraft washdown area have the potential to have been impacted by petroleum products and solvents during washdown activities. The total potential affected area within Target Area 3 is less that 200 square feet, and is classified as having a potential likelihood of environmental impacts. Samples to be collected in this Target Area are listed in Table 6-192-1.

- Zone 6 Target Area 1 (Open Space Aircraft Maintenance and Fueling Areas): This target area includes the open space of Parcels 30, 31, 32, 33, 34, 35, 190, 191, and 192 within the Western Hangar Zone. The aerial extent of this target area is defined by the widespread staining observed in historical aerial photographs as a result of the aircraft fueling and maintenance activities conducted in this area. The largest and heaviest stains corresponded to aircraft parking locations and the borders of hangar buildings. Sixty-five soil vapor samples will be collected in Zone 6 to assess potential releases of VOCs to subsurface soil via cracks in the concrete. This target area has been classified as having a potential likelihood of impacts. Samples to be

collected in this target area are listed in Table 6-Z6-1. The approximate sampling locations shown on Figure 6-Z6-1 correspond to areas observed to be significantly stained based on historical aerial photograph review or site inspection information.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), and subsurface GeoProbe soil sampling (SOP 14).

Table 6-192-1 summarizes screening-level sampling and analysis for the parcel's target areas. Eight of the 65 soil vapor samples and two of the 13 subsurface Geoprobe soil samples will be collected from the zone-wide locations shown on Figure 6-192-1. Five surface soil samples and two subsurface Geoprobe soil samples will be collected from the parcel-specific locations shown on Figure 6-192-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-193

PARCEL 193 EVALUATION PLAN

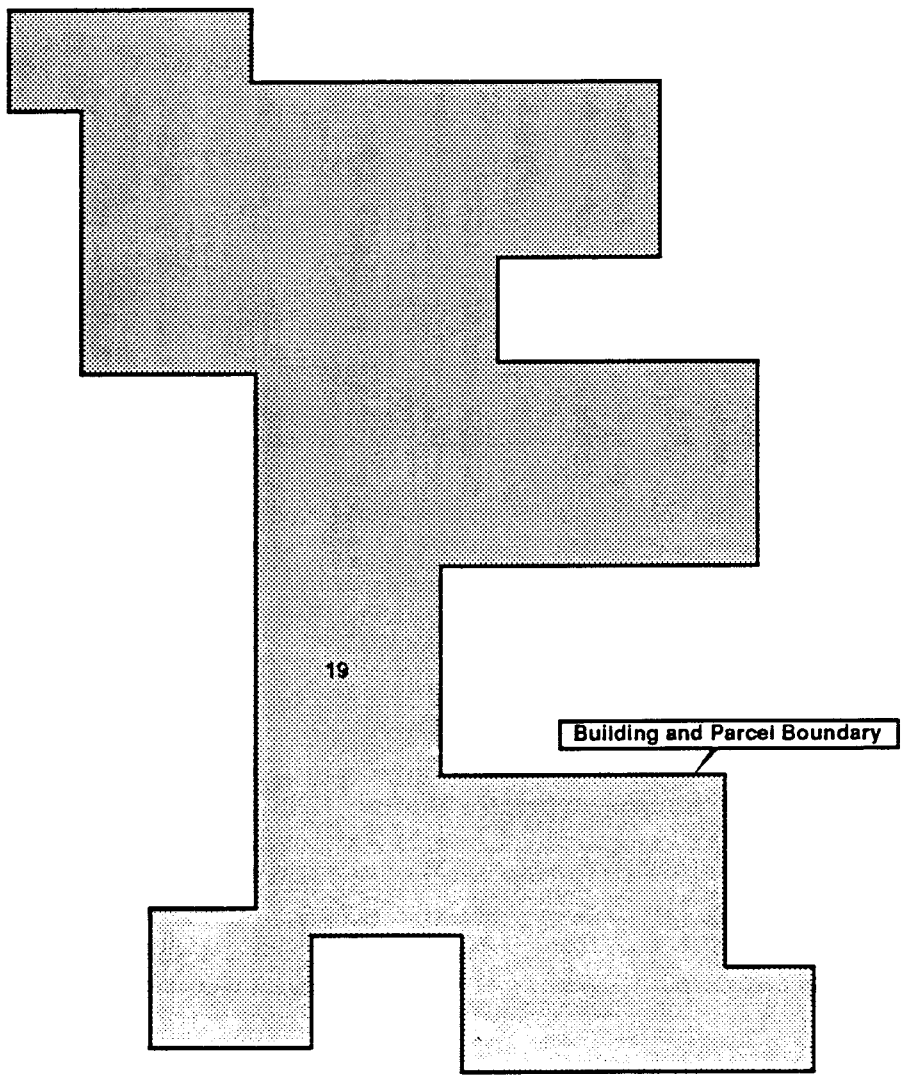
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 193 at NAS Alameda (Figure 6-193-1). The parcel, which is located in the central portion of the base, is less than one acre in size and is irregular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site is located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) were identified at Parcel 193. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities for Parcel 193 are discussed below.

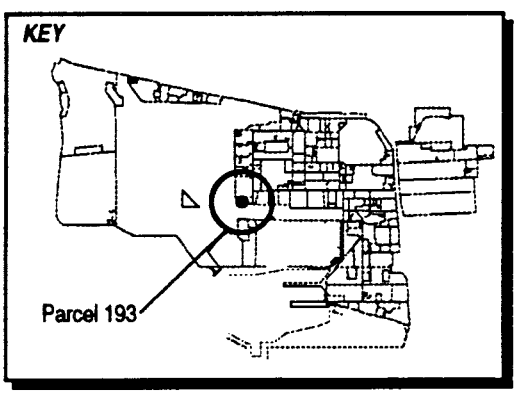
Background and Historical Activities

This subsection summarizes EBS information available for buildings and boundaries of Parcel 193, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies underground storage tanks and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 36, 37, 190, 191, 192, and 204. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.





LEGEND

Note: No target areas were identified for Parcel 193

1"= 45'

Figure 6-193-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 19) covers 100 percent of the parcel. The parcel area is presently in use for aircraft operations, photographic processing, administration, and a fire/rescue station.

Parcel 193 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 193, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within Building 19 are described in detail below.

Building 19

Building 19 was constructed in 1941 and contains aircraft operations administration (including a control tower) offices, a photographic processing department, as well as a fire/rescue station (Figure 6-193-1). This building covers approximately 23,700 square feet and is in moderately good condition. Building 19 is a two-story building (the control tower is a three-story structure), and is constructed of concrete with a built-up, composite roof. The fire department stalls are constructed with metal walls and roof and a concrete floor. According to EBS information, part of Building 19 was demolished because of earthquake damage.

Utilities located within and immediately surrounding Building 19 include underground sanitary sewer, storm sewer, steam, water, fuel, and electrical lines. No permits appear to have been issued for this building.

Photographic processes have occurred within Building 19 from an unknown starting date to the present. Photographic finishing involves the use of various chemicals including fixers and developers, and is conducted in the southeastern portion of Building 19.

According to the Building 19 authorized-use inventory, nonhalogenated organic compounds, petroleum products, metals, fuel, halogenated organic compounds, corrosives, and paint may be stored in Building 19 in total quantities up to 10,000 gallons. The authorized-use inventory lists maximum quantities of specific chemicals that can be stored in or related to a building over the course of one year. This does not mean that the given quantity has been stored, but that the location listed has the capacity to store the stated amount given.

Photographic chemicals, including corrosive and flammable materials, are stored in the photographic processing area (photo lab) in quantities totaling up to 180 gallons. This quantity reflects all the chemical storage noted during the site inspection. Disposal of used photographic and developer chemicals in the photo lab occurs via collection from the three photo processor units into a waste storage room. The waste storage room has a plastic secondary containment unit and a drain. No evidence of release of wastes was noted in this area during the site inspection. Waste nonhalogenated organics and metals are also documented to have been stored in Building 19.

Spills of photographic fixer and developer were noted as being an ongoing occurrence in the photo lab. Wet developing trays and the dispensing of photographic finishing chemicals appeared to be the sources of the spillage. Staining was noted around a drain in the room during the site inspection. Spillage of ethylene glycol (antifreeze) was noted in the firefighting/rescue vehicle parking stalls located in the northern portion of the building during the site inspection. The spillage appeared to also have impacted the asphalt area immediately north of the parking stalls. According to site inspection data, approximately one-half gallon of ethylene glycol is released each time a firefighting vehicle is started.

Building 19 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Transformer inventories indicate that PCB-containing transformers were present in Building 19 in 1986, 1987, and 1988; however, these transformers were not observed during the building inspection. According to site inspection data, ceiling tiles on the third floor of the building were damaged by water.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 19.

Open Space

There is no open space at Parcel 193.

Underground Storage Tanks

According to an anecdotal report, one underground storage tank is potentially located on or near the north edge of Parcel 193 (Building 19). There is no other evidence to support the presence of an underground tank in this area.

Parcel Boundary Conditions

Parcel 193 is bounded by Parcel 29. Three aboveground storage tanks and an emergency diesel generator are potential concerns on Parcel 29. In addition, one underground storage tank (Tank 491-1) was recently removed from Parcel 29. Although no information is available regarding the integrity of this tank upon removal, soil and groundwater sampling near the former location of this tank have been proposed by a separate ERM investigation.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (SWMU/GAP 12) is located on Parcel 193. Chemicals of concern at this site include waste film, paper, silver solution, metallic sludge, and flake storage. No known releases have occurred at this site. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, SWMU/GAP 12 does not require further investigation.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 193, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-193-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene,

TABLE 6-193-1

Summary of Data Gaps
NAS Alameda Parcel 193

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 193.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• According to an anecdotal report, one UST is potentially located on or near the north edge of Parcel 193.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.

TABLE 6-193-1

Summary of Data Gaps
NAS Alameda Parcel 193

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

and radiological concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no industrial hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 19 (photo lab). The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Because no landscaped or unpaved areas exist at Parcel 193, no pesticide sampling has been proposed for this parcel.

Once the data gaps in Table 6-193-1 are addressed, Parcel 193 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and USTs must be resolved before this parcel can be leased or transferred.

SECTION 6-204

PARCEL 204 EVALUATION PLAN

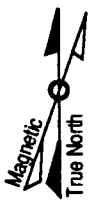
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 204 at NAS Alameda (Figure 6-204-1). The parcel, which is located in the north-central portion of the base, is less than one acre in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) were identified on Parcel 204. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities for Parcel 204 are discussed below.

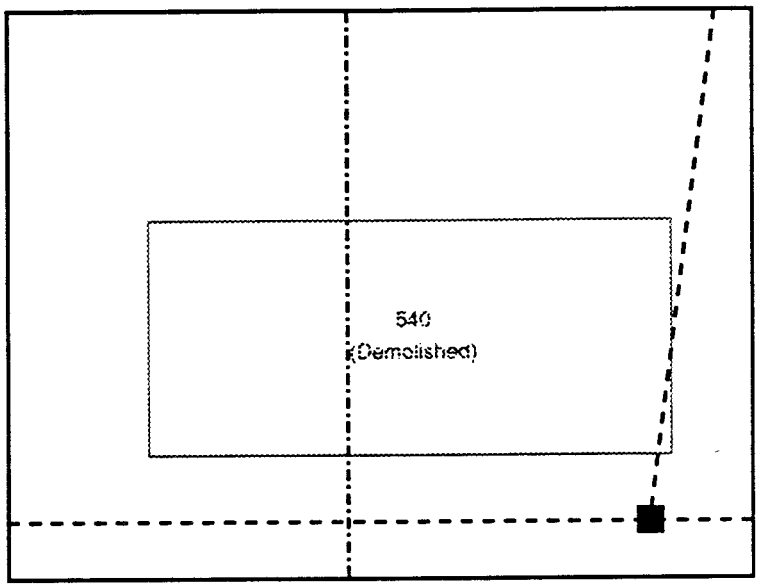
Background and Historical Activities

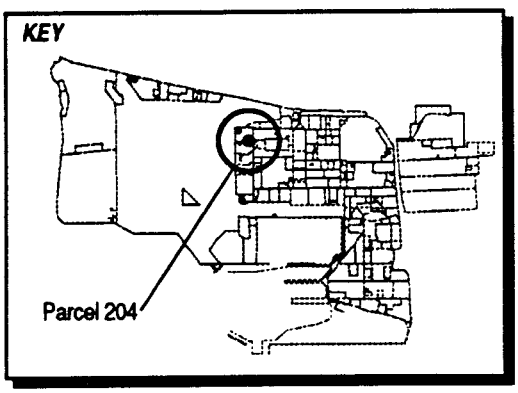
This subsection summarizes EBS information available for buildings, open space, and boundaries of Parcel 204, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 29, 30, 31, 32, 33, 34, 35, 36, 37, 190, 191, 192, and 193. This parcel zone has been designated the Western Hangar Zone (Zone 6). The Western Hangar Zone encompasses the parcels located west of Building 5 that are primarily used for aircraft maintenance and support activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 6.







LEGEND

- Industrial Sewer Line
- Storm Sewer Line
- Stormwater Sewer Manhole

1"= 15'

Figure 6-204-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

Filling occurred in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

No buildings or structures are currently present on Parcel 204; the parcel is 100 percent open space. One building (Building 540) was formerly located on the parcel. The parcel area is not presently in use except as part of an aircraft taxiway area. Sewer lines are present at this parcel and are shown in Figure 6-204-1.

Parcel 204 is located approximately 350 feet west of an Installation Restoration (IR) Program site (IR Site 5, Building 5). No previous investigations have been conducted at Parcel 204 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

Open space covers 100 percent of the parcel area. The ground surface of the open space is completely paved with concrete. The concrete is extensively cracked and is in poor condition. The open space has been used as part of the aircraft maneuvering and taxiing area around the maintenance hangars surrounding Parcel 204.

Building 540, formerly located in the open space on Parcel 204, was constructed in 1975 and served as a storage area for aircraft spare parts. This one-story building, which covered approximately 700 square feet, was demolished between 1975 and 1981.

Utilities located within and immediately surrounding Parcel 204 include underground industrial sewer, storm sewer, steam, abandoned fuel, sanitary sewer, water, and electrical lines. No permits appear to have been issued for Building 540 or Parcel 204. No incidents such as fires, mishaps, or flooding are documented to have occurred within or near Parcel 204.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 204 is bounded by Parcels 192 and 191. Activities of concern on these adjacent parcels include historic aircraft fueling, and current maintenance and aircraft washdown. The aircraft washdown area on Parcel 192 is located immediately adjacent to Parcel 204, but is not likely to be of significant concern because the slope of the ground surface ensures that drainage flows away from Parcel 204.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 204, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-204-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, a separate investigation is currently underway to address the radiological concerns data gap at this parcel. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 204 because no buildings are present.

Historical aerial photographs indicate that Parcel 204 has been completely paved since at least 1947. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 204.

TABLE 6-204-1

Summary of Data Gaps
NAS Alameda Parcel 204

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 204.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 350 feet east of Parcel 204. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, industrial sewer, electrical, and water lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.

TABLE 6-204-1

Summary of Data Gap
NAS Alameda Parcel 2U

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-204-1 are addressed, Parcel 204 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to underground lines and radiological issues must be resolved before this parcel can be leased or transferred.

SECTION 6-Z7

ZONE 7 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 7 at NAS Alameda (Figure 6-Z7-1). Zone 7 has been designated the Corrosion Control and Aircraft Testing Zone. Zone 7 is comprised of Parcels 26, 27, and 28. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and eight parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Figure 6-Z7-1 illustrates all sample locations for the entire zone. None of the parcels in this zone have been reclassified from BRAC Category 7.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 7, historical activities are discussed below.

Zone 7 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 7 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

was deemed necessary to delineate potential impacts of compounds of concern.

Zone 7, the Corrosion Control and Aircraft Testing Zone encompasses three parcels that are used for corrosion control or aircraft testing. During the sampling program development, the parcels located in this zone were evaluated together to better address potential zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1932. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1958; the ground level and grading have not changed significantly since that time.

Currently, ten buildings and two partial structures cover approximately 20 percent of the zone. The remaining 80 percent is open space. Four buildings and one structure were formerly located on the parcel and have since been demolished.

Zone 7 is adjacent to one Installation Restoration (IR) Program site (IR Site 17 (Seaplane Lagoon)). No previous investigations have been conducted at Zone 7, and specific data regarding chemical occurrence at this zone are not available.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 7 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this zone. Neither the document review nor the site inspection identified any information that indicated that any tanks are or may have been present at this zone.

RCRA Sites

This zone includes three RCRA sites (on Parcels 26 and 27). These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, the RCRA sites do not

require further investigation under this program. The IWTP on Parcel 27 will be closed according to its Part-B closure plan. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 7 is bounded by Zones 4 and 5. Activities of concern on these adjacent zone include aircraft fueling, maintenance and operation on Zone 4. The former Seaplane Lagoon (IR Site 17) borders Zone 7 to the east. IR Site 17 is not expected to impact Zone 7.

Zone Target Areas and Compounds of Concern

This zone contains no zone-wide target areas and eight parcel-specific target areas. This subsection of the ZAP provides an overview of the parcel-specific target areas. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Parcel 26 Target Areas

- Target Area 1 (Building 29, Dip Tank Line): This target area comprises the area occupied by the dip tank line and the hazardous waste storage area in the northern part of Building 29. The area of spillage is estimated to be approximately 2,000 square feet. The compounds of concern are VOCs and TPH that may have leaked from the dip tank line and the hazardous waste storage area. The likelihood of environmental impact from these areas is classified as potential. Two surface soil and two subsurface soil samples will be collected from this target area.

- Target Area 2 (Building 38): This target area comprises the area of spillage in the engine run-up area. Target Area 2 is shown on Figure 6-26-1. The compounds of concern are TPH from fuel and oil spillage and VOCs from solvent use and spillage. The likelihood of environmental impact from these areas is classified as potential. One surface and one subsurface soil sample will be collected from this target area.

- Target Area 3 (Facilities 461A, 461B, 461C): This target area comprises the former area of the large dark stains in the engine run-up areas. Each of these stains is approximately 1,000 square feet. The compounds of concern are TPH from fuel and oil spillage and VOCs from solvent use and spillage. The likelihood of environmental impact from these areas is classified as potential. Three surface and three subsurface soil samples will be collected from this target area.

- Target Area 4 (Open Space II-Aircraft Storage and Repair Area): This target area comprises the large black stains present in the two northernmost parking aprons of the aircraft repair area. Each of these stains is approximately 1,200 square feet. The compounds of concern in this target area include TPH, VOCs, and SVOCs. The likelihood of environmental impact from these areas is classified as potential. Two surface soil and two subsurface soil samples will be collected from this target area.

Parcel 27 Target Areas

- Target Area 1 (Building 25): This building uses large quantities of corrosive chemicals which contain halogenated and non-halogenated organic compounds that regularly come in contact with the floor surface. These substances, especially the volatile organics, can be highly mobile. Leakage of those compounds to the soil below the building has potentially occurred through cracks or seams in the concrete floor and trenches. Compounds of concern in this target area include acids, metals, and VOCs. This target area covers the entire floor of the building and has a potential likelihood of impacts. Six surface soil and six subsurface soil samples will be collected from this target area.

- Target Area 2 (Building 25A): This target area addressed the spillage noted in Building 25A during the site inspection and document review. The treatment process that occurs in this building involves the treatment of wastewater containing acids, metal, TPH, and VOCs. Compounds of concern in this target area include acids, metals, TPH, and VOCs. This target area covers the entire floor of the building and has a potential likelihood of subsurface impacts. Four surface and four subsurface soil samples will be collected from this target area. The samples are listed in Table 6-27-1.

- Target Area 3 (Stains in Building 622): This building contained stains associated with the backup diesel tank. These stains are presumed to be diesel fuel and appear to be the result of minor spillage. This target area has a potential likelihood of impacting at

least the shallow subsurface. TPH is the compound of concern. One surface soil sample will be collected from this target area.

Parcel 28 Target Area

- Target Area 1 (Building 543): This target area is located adjacent to the north wall, outside of Building 543. The staining in this area appears to be fuel and/or lubrication oil. The staining appears to be the result of chronic, small-scale spillage. This area covers less than 1,000 square feet and has been classified as having a potential likelihood of impact. Two surface soil samples will be collected in this target area.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14), will be employed to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

A total of 21 surface soil samples and 18 subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-Z7-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-26

PARCEL 26 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 26 at NAS Alameda (Figure 6-26-1). The parcel, which is located in the south central portion of the base, is approximately 12 acres in size, and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site, GAP Site 74. Four parcel-specific target investigation areas (target areas) have been identified on this parcel. No zone-wide target areas were identified at this parcel. Sampling procedures called for in the screening-level investigation in these areas include subsurface Geoprobe soil sampling and surface soil sampling. Table 6-26-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 26, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 26 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 27 and 28. This parcel zone has been designated the Corrosion Control and Aircraft Testing Zone (Zone 7). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

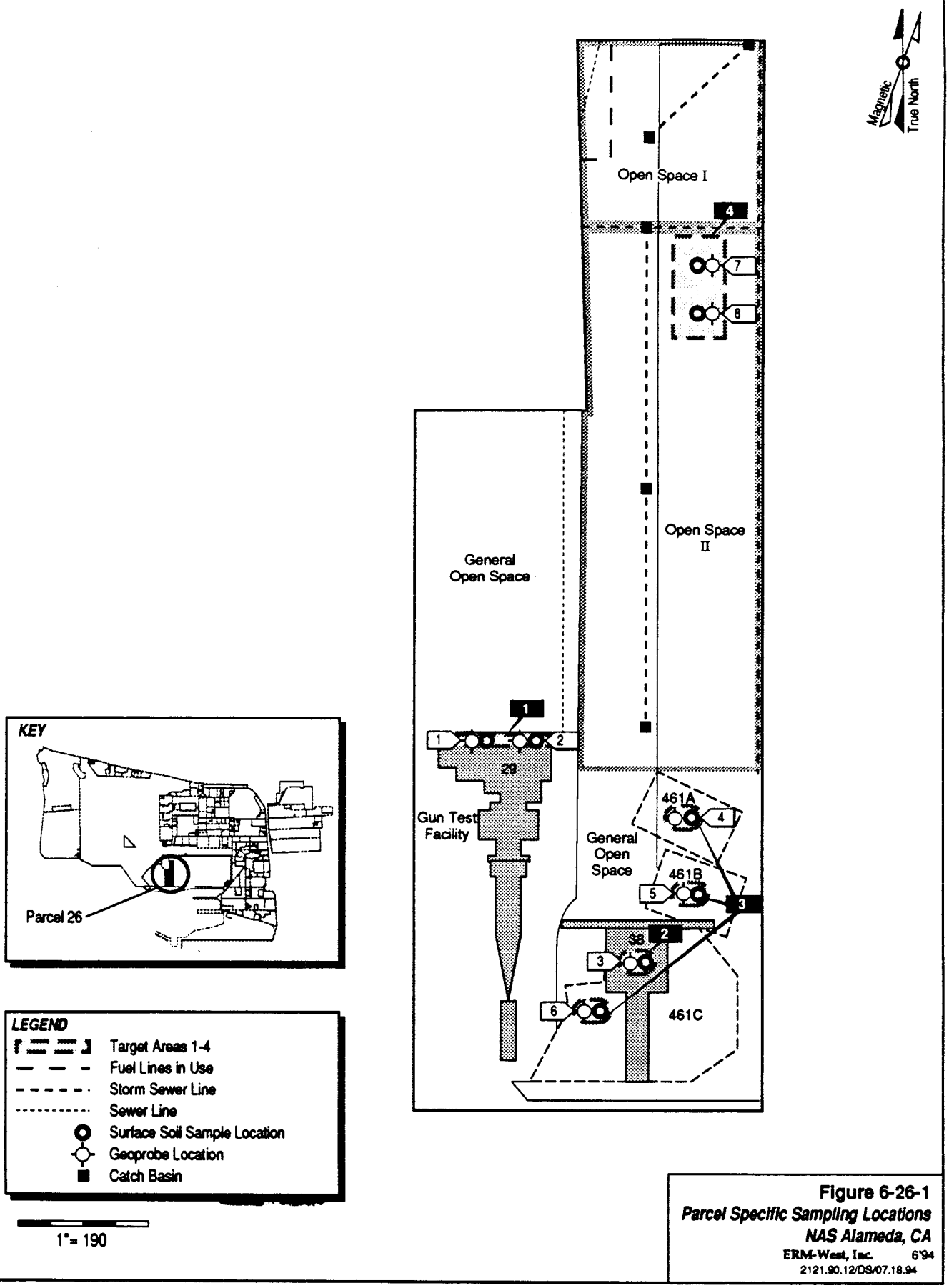


Figure 6-26-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/07.18.94

TABLE 6-26-1

Summary of Recommended Samples
NAS Alameda Parcel 26

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
26-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	EPA 8015-Modified
26-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
26-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	EPA 8015-Modified
26-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	EPA 8015-Modified
26-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
26-2-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Fuels, Solvents	VOCs, TPH	CLP RAS, Modified EPA 8015
26-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	EPA 8015-Modified
26-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	EPA 8015-Modified
26-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Fuels, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
26-3-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	Fuels, Solvents	VOCs, TPH	CLP RAS, Modified EPA 8015
26-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils	TPH	EPA 8015-Modified
26-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils	TPH	EPA 8015-Modified
26-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Fuels, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
26-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 3	Fuels, Solvents	VOCs, TPH	CLP RAS, Modified EPA 8015
26-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils	TPH	EPA 8015-Modified

TABLE 6-26-1

Summary of Recommended Samples
NAS Alameda Parcel 26

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
26-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Fuels, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
26-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils	TPH	EPA 8015-Modified
26-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Fuels, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
26-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Oils, Paints	TPH, SVOCs	EPA 8015-Modified, EPA 8270
26-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Oils, Paints	TPH, SVOCs	EPA 8015-Modified, CLP RAS
26-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Fuels, Solvents, Paints	VOCs, SVOCs, TPH	EPA 8240, EPA 8270, Modified EPA 8015
26-7-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 4	Fuels, Solvents, Paints	VOCs, SVOCs, TPH	CLP RAS, Modified EPA 8015
26-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Oils, Paints	TPH, SVOCs	EPA 8015-Modified, EPA 8270
26-8-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Fuels, Solvents, Paints	VOCs, SVOCs, TPH	EPA 8240, EPA 8270, Modified EPA 8015

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

for the entire zone. The parcels in this zone were considered as a whole during the evaluation. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 7.

Filling began in the area covered by this parcel prior to 1953. Prior to that time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1958; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 29 and 38) occupy approximately 20 percent of the parcel. The remainder (80 percent) is open space. In general, the parcel area is presently used to test and repair aircraft engines and aircraft weapons. Three facilities were formerly located on the parcel (Facilities 461A, 461B, and 461C) and have since been demolished. Portions of Facilities 461A and 461C are still in place, but are not used. Sewer lines are present at this parcel and are shown on Figure 6-26-1.

Parcel 26 is adjacent to the Seaplane Berthing Area, which is an Installation Restoration (IR) Program site. No previous investigations have been conducted at Parcel 26 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 29

Building 29 was constructed in 1989 and serves as an aircraft weapons overhaul and testing facility (Figure 6-26-1). This building is generally in good condition. Building 29 is a large, warehouse-style building. It is constructed of steel with a concrete floor and steel frame roof, and covers approximately 19,500 square feet. The space occupied by Building 29 was formerly vacant open space.

Utilities located within and immediately surrounding Building 29 include sanitary sewer, storm sewer, telephone, water, and electrical lines. An air quality permit for a gun test system, solvent cleaning, a dip tank, a magnetic inspection machine, a spray booth and abrasive blasting was issued for this building, although the date of the permit is not known.

Information collected during the EBS indicates that activities conducted within this building included aircraft weapons overhaul and testing. The processes that take place in Building 29 typically involve the use or generation of chemicals and wastes including hydraulic fluid, jet fuel (JP-5), lubricating oil, solvents, and paint products.

The chemicals documented to have been stored at and used in Building 29 from 1989 to the present include solder flux; 1,1,1 trichloroethane; thermal grenadine; and oil VV-L800 in drums. Small amounts of miscellaneous lubricants, cleaners and solvents were also observed to be stored in a storage cabinet.

Three 55-gallon drums of 1,1,1 trichloroethane and one 55-gallon drum of magnaflux were observed to be stored outside Building 29. A small amount of hazardous waste was also observed to be stored in Building 29. Three 55-gallon drums with contaminated glass bead blast, aerosol cans of paint, lubricant and solvent residue, paper towels contaminated with oil and grease, and filters from a small paint booth are stored in the northeast corner of the building. The hazardous waste is stored on pallets and then transferred to a hazardous waste storage facility at periodic intervals. Sand with lead shells is stored in the concrete pit at the end of the testing tunnel (south end of the building). This sand is used to stop projectiles during test firing. It is reported that the projectiles are periodically removed from the sand, but that the sand is not changed.

Evidence of spillage of sand blast shot, 1,1,1 trichloroethane, thermol grenadine, and VV-L800 oil was observed to be associated with the dip tank cleaning area, located in the northwest corner of Building 29. This spillage appears to be the result of normal work activities as a crane moves parts from bin to bin. As the spills occur during normal work activities it is not possible to assign volumes or dates to such spills. These spills appear to have involved a moderate quantity of released material. The staining occurs in an area measuring approximately 100 by 20 feet. Evidence of petroleum spillage in the northwest corner of the building was also observed adjacent to a floor drain. The staining in this area is addressed by Target Area 1.

Building 29 is equipped with a heating-ventilation-air conditioning (HVAC) system. Incidents such as fires, mishaps, flooding, or crashes have not been documented within or immediately surrounding Building 29.

Building 38

Building 38 was constructed 1991 and serves as an aircraft acoustical enclosure for aircraft engine testing (Figure 6-26-1). This building is generally in good condition. Building 38 is a large warehouse-style building. It is constructed of steel with a concrete floor and occupies approximately 12,700 square feet. The space occupied by Building 38 was formerly open space used for testing of aircraft engines.

Utilities located within and immediately surrounding Building 38 include sanitary sewer, storm sewer, and telephone, water, and electrical lines.

Information collected during the EBS indicates that aircraft engine testing is conducted in this building. This testing typically involves the use or generation of chemicals and wastes including hydraulic fluid, jet fuel, fire extinguisher foam, and solvents. The building has been used for the aircraft engine testing since it was constructed.

Fire extinguisher foam and hydraulic fluid (Mobil DTE 13M) are documented to have been stored in and used at Building 38. Approximately 200 gallons of fire extinguisher foam and 55 gallons of hydraulic fluid were stored in the building.

Occasional spillage of jet fuel, hydraulic fluid, and oil reportedly occurs during the normal work activities in this building in the engine run-up area. It was estimated by on-site personnel that each incident averages less than 5 gallons. The spills are cleaned up by using solvents and washed down with water. The rinsate from this washdown procedure is collected into an oil/water separator located outside the northwest corner of Building 38. It is reported that rinsate water exits the oil/water separator and travels to the storm sewer system. Target Area 2 addresses potential impacts to soils underlying the building in the area of these recurring spills.

Building 38 is equipped with a heating-ventilation-air conditioning (HVAC) system. Incidents such as fires, mishaps, flooding, or crashes have not been documented to have occurred within Building 38.

Facilities 461A, 461B, and 461C

Facilities 461A, 461B, and 461C were constructed in 1962 and served as aircraft engine run-up areas (Figure 6-26-1). All of these facilities consisted of a concrete pad and a wooden exhaust and sound barrier. Facility 461A has been partially demolished. The concrete pad, and one side of the sound and exhaust barrier remains. Facility 461B has been

completely removed. Facility 461C has been partially demolished. It is unknown when the demolition of these facilities occurred. Prior to being occupied by facilities 461A, 461B and 461C the land was vacant open space. There are currently no utilities located within or immediately surrounding Facilities 461A, 461B, and 461C.

No chemicals are documented to have been stored in or used at these facilities. Evidence of spillage of aircraft fluids (jet fuel, hydraulic fluid, and oil) in the form of stains was observed to exist in the former aircraft parking areas of these facilities in historic aerial photographs prior to 1985. These stains are no longer visible. Based on the historic aerial photographs, these areas may have been repaved after 1985. It is reported that the spillage occurred during the normal work activities associated with these facilities. These areas of historic staining are addressed by Target Area 3.

Incidents such as fires, mishaps, flooding, and crashes are not documented to have occurred within these three facilities.

Open Space

The open space in Parcel 26 has been subdivided into three open spaces (Open Space I, Open Space II, and General Open Space). The boundaries of these open spaces are shown on Figure 6-26-1.

Open Space I

Open Space I occupies the northern corner of the parcel and comprises approximately 10 percent of the entire parcel. No structures occupy this open space. Concrete covers the eastern half of the open space and asphalt occupies the western half. Open Space I contains a hazardous waste storage area (GAP #74) and small equipment storage. All pavement is generally in good condition. Utilities located within Open Space I include storm sewers and sanitary sewers (see Figure 6-26-1).

The GAP is located roughly in the middle of the concrete area and is used to store small amounts of chemicals and wastes prior to permanent disposal. During the EBS site inspection, the following materials and volumes were observed: jet fuel (one 55-gallon drum), hydraulic fluid (255 gallons), engine oil (one 55-gallon drum), 1,1,1 trichloroethane (six 55-gallon drums), waste paper and absorbent contaminated with jet fuel (one 55 gallon drum), isopropyl alcohol (one 55-gallon drum) and lubricating oil (two 55-gallon drums). No stains were observed on the concrete beneath this area.

The small equipment storage area is located approximately 50 feet north of the GAP. This area is occupied by 10 to 15 small pieces of equipment used in the repair and maintenance of aircraft. These include cherry-pickers and lubrication trailers.

EBS information suggests that this open space was used as a support area for aircraft storage. It is also likely that this open space was also used for aircraft parking and repair in the past. These activities usually involve chemicals and wastes including jet fuel, hydraulic fluid, lubrication oil, and solvents for parts cleaning.

No documented spills have occurred in Open Space I. Site inspection data indicate that undocumented spills have occurred in the small equipment storage area. Several small stains measuring approximately 2 feet by 3 feet were observed in this area. This staining occurs on concrete and is relatively minor. No sampling is proposed in this area.

Other incidents such as fires, mishaps, or flooding are not documented to have occurred within Open Space I.

Open Space II

Open Space II occupies the area north of Facility 461A and south of Open Space I (see Figure 6-26-1). It occupies approximately 30 percent of the entire parcel. No structures are located in this open space. Concrete covers the eastern half of the space and asphalt occupies the western half. Open Space II is used as an aircraft storage and repair area. The asphalt of the western side of the space is used as a taxiway for the aircraft. The aircraft parking aprons are on the concrete on the eastern half of the open space. The southernmost part of this open space is referred to as the Navy engine test area. All pavement is generally in good condition. The only utilities located within Open Space II are storm sewers, which run north/south through both the middle of the open space and the eastern edge.

EBS inofrmation indicates that aircraft parking, refueling, and maintenance activities have occurred in Open Space II since this area was developed. There is space for approximately 8 to 10 aircraft. These activities usually involve the use of chemicals, including aviation fuel, hydraulic fluids, lubrication oils, and solvents. Aerial photographs show large scattered stains on the parking aprons along the concrete in this open space.

No documented spills have occurred in Open Space II. However, undocumented spills have occurred in the parking aprons along the eastern portion of this open space. These stains are dark and appear to

be caused by leaked fuel and other maintenance fluids. Several stains, measuring approximately 10 feet by 10 feet to 30 feet by 40 feet, are visible. The northernmost parking aprons appear to be the areas with the most extreme staining. This area of staining is addressed by Target Area 4. Exhaust stains are also associated with the parking aprons and are typically located to the east of the other staining attributed to fluid spillage. These exhaust stains are produced during engine testing in this area, but do not appear to be problematic. A small dark oily stain, 3 feet by 4 feet, is present in the Navy engine test area. It appears to be leaked fluid from parked equipment. This staining is minor.

Other incidents such as fires, mishaps, flooding, etc. are not documented to have occurred within Open Space II.

General Open Space

The general open space in this parcel takes up approximately 50 percent of the parcel and occupies the open areas around Buildings 29 and 38. (Figure 6-27-1). In general this open space is vacant or used for parking, roadways, and taxiways.

Other than the building previously mentioned there are no structures located within the open space. Approximately 50 percent of the open space is covered with grass; twenty-five percent of the area is covered with concrete. The remaining 25 percent is covered with asphalt. The pavement is generally in good condition.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, telephone, water, industrial sewer lines, and overhead electrical lines. EBS information indicates that this area has always been vacant open space.

No chemicals are documented to have been stored or used in this open space. No spills have been documented to have occurred in the open space. Review of aerial photographs and site inspection did not reveal any staining or outside storage of hazardous materials in this area.

No other incidents such as fires, mishaps, flooding are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated

that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 26 is bounded by Parcels 25, 27, and 28. The Seaplane Berthing Area borders the parcel to the east. The Seaplane Berthing Area is IR Site 17. The sediments within the Seaplane Berthing Area have been contaminated from storm sewer run-off from the surrounding parcels, but are not expected to impact Parcel 26.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site, GAP 74. This site is listed as being located on Parcel 28 at Building 543, but it appears to be present on this parcel. This site was evaluated consistent with the criteria applied to to other potential target areas at the parcel. Because this site is paved, and because no staining was noted in the area of the GAP site, no sampling is required.

GAP Site 74 is located in the northeast corner of Open Space II. The site inspection indicates that this site is active. This area is used to store waste fuel and oil, hydraulic fluid and waste solvents associated with the processes in this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 26, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-26-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling

TABLE 6-26-2

Summary of Data Gaps
NAS Alameda Parcel 26

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17, Seaplane Lagoon is located adjacent to the east of Parcel 26. This IR site is not expected to impact Parcel 26.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 29, Dip Tank Line) • Target Area 2 (Building 38) • Target Area 3 (Facilities 461A, 461B, 461C) • Target Area 4 (Open Space II-Aircraft Storage and Repair Area)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-26-2

Summary of Data Gaps
NAS Alameda Parcel 26

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 28 and 38. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 26.

Once the data gaps in Table 6-26-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 26 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific target areas. This subsection of the PEP discusses specific parcel target areas. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following four parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-26-1.

- Target Area 1 (Building 29, Dip Tank Line): This target area comprises the area occupied by the dip tank line and the hazardous waste storage area in the northern part of Building 29. Target Area 1 is shown on Figure 6-26-1. The area of spillage is estimated to be approximately 2,000 square feet. The compounds of concern are VOCs and TPH that may have leaked from the dip tank line and the hazardous waste storage area. The likelihood of environmental impact from these areas is classified as potential. Two surface soil and two subsurface soil samples will be collected from this target area. The samples are listed in Table 6-26-1.

- Target Area 2 (Building 38): This target area comprises the area of spillage in the engine run-up area. Target Area 2 is shown on Figure 6-26-1. The compounds of concern are TPH from fuel and oil spillage and VOCs from fuel and solvent use and spillage. The likelihood of environmental impact from these areas is classified as potential. One surface and one subsurface soil sample will be collected from this target area. The samples are listed in Table 6-26-1.

- Target Area 3 (Facilities 461A, 461B, 461C): This target area comprises the former area of the large dark stains in the engine run-up areas. Target Area 3 is shown on Figure 6-26-1. Each of these stains is approximately 1,000 square feet. The compounds of concern are TPH from fuel and oil spillage and VOCs from fuel and solvent use and spillage. The likelihood of environmental impact from these areas is classified as potential. Three surface and three subsurface soil samples will be collected from this target area. The samples are listed in Table 6-26-1.

- Target Area 4 (Open Space II-Aircraft Storage and Repair Area): This target area comprises the large black stains present in the two northernmost parking aprons of the aircraft repair area. Each of these stains is approximately 1,200 square feet. Target Area 4 is shown on Figure 6-26-1. The compounds of concern in this target area include TPH (from the lubrication oil and hydraulic fluid), VOCs (from the aircraft fuel and solvents used for parts cleaning), and SVOCs (from waste oils and partially combusted fuels). The exhaust stains mentioned previously do not appear to be cause for concern and will not be sampled. The likelihood of environmental impact from these areas is classified as probable. Two surface soil and two subsurface soil samples will be collected from this target area. The samples are listed in Table 6-26-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-26-1 summarizes screening-level sampling and analysis for the target areas on the parcel. Eight surface soil and eight subsurface soil samples will be collected from the locations shown on Figure 6-26-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-

level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs-1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-27

PARCEL 27 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 27 at NAS Alameda (Figure 6-27-1). The parcel, which is located in the south central portion of the base, is approximately six acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains two RCRA sites, GAP 31 and the IWTP in Building 25A. Three parcel-specific target investigation areas (target areas) have been identified on this parcel. No zone-wide target areas were identified at this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-27-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 27, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 27, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 26 and 28. This parcel zone has been designated the Corrosion Control and Aircraft Testing Zone (Zone 7). During the sampling program development, the parcels located in this zone were evaluated together. Therefore,

TABLE 6-27-1

Summary of Recommended Samples
NAS Alameda Parcel 27

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
27-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	ICAP Scan, Ch.7, SW 846
27-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	CLP RAS, Ch.7, SW 846
27-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	EPA 8240, ICAP Scan, Ch.7-SW 846
27-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	CLP RAS, Ch.7-SW 846
27-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	ICAP Scan, Ch.7, SW 846
27-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	EPA 8240, ICAP Scan, Ch.7-SW 846
27-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	ICAP Scan, Ch.7, SW 846
27-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	EPA 8240, ICAP Scan, Ch.7-SW 846
27-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	ICAP Scan, Ch.7, SW 846
27-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	EPA 8240, ICAP Scan, Ch.7-SW 846
27-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	ICAP Scan, Ch.7, SW 846
27-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	EPA 8240, ICAP Scan, Ch.7-SW 846
27-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	ICAP Scan, Ch.7, SW 846
27-6-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Metals, Acids	Metals, pH	CLP RAS, Ch.7, SW 846
27-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	EPA 8240, ICAP Scan, Ch.7-SW 846
27-6-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Solvents, Metals, Acids	VOCs, Metals, pH	CLP RAS, Ch.7-SW 846

TABLE 6-27-1

Summary of Recommended Samples
NAS Alameda Parcel 27

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
27-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, Acids, Fuels, Oils	Metals, pH, TPH	ICAP Scan, Ch.7, SW 846, EPA 8015 Modified
27-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Metals, Acids, Fuels, Oils	VOCs, Metals, pH, TPH	EPA 8240, ICAP Scan, Ch.7, SW 846, Modified EPA 8015
27-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, Acids, Fuels, Oils	Metals, pH, TPH	ICAP Scan, Ch.7, SW 846, EPA 8015 Modified
27-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Metals, Acids, Fuels, Oils	Metals, pH, TPH	CLP RAS, Ch.7, SW 846, EPA 8015 Modified
27-8-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Metals, Acids, Fuels, Oils	VOCs, Metals, pH, TPH	EPA 8240, ICAP Scan, Ch.7, SW 846, Modified EPA 8015
27-8-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	Solvents, Metals, Acids, Fuels, Oils	VOCs, Metals, pH, TPH	CLP RAS, Ch.7, SW 846, Modified EPA 8015
27-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, Acids, Fuels, Oils	Metals, pH, TPH	ICAP Scan, Ch.7, SW 846, EPA 8015 Modified
27-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Metals, Acids, Fuels, Oils	VOCs, Metals, pH, TPH	EPA 8240, ICAP Scan, Ch.7, SW 846, Modified EPA 8015
27-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, Acids, Fuels, Oils	Metals, pH, TPH	ICAP Scan, Ch.7, SW 846, EPA 8015 Modified
27-10-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Metals, Acids, Fuels, Oils	VOCs, Metals, pH, TPH	EPA 8240, ICAP Scan, Ch.7, SW 846, Modified EPA 8015
27-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils	TPH	EPA Modified 8015
27-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils	TPH	EPA Modified 8015

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 7.

Filling began in the area covered by this parcel between 1932 and 1939. Prior to this time, the parcel area was completely covered by the San Francisco Bay. The parcel was completely filled as of 1958; the ground level and grading have not changed significantly since that time.

Currently, eight buildings (Buildings 25, 25A, 451, 494, 515, 595, and 622 and 623) occupy approximately 30 percent of the parcel. The remainder (70 percent) is open space. In general, the parcel area is presently used to strip paint and coatings off aircraft in preparation for corrosion protection. Sewer lines are present in this parcel and are shown on Figure 6-27–1.

Parcel 27 is located approximately 200 feet west of an Installation Restoration (IR) Program site (IR Site 17, Seaplane Lagoon). No previous investigations have been conducted at Parcel 27, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 25

Building 25 was constructed in 1987 and is called the NARF (now NADEP) Corrosion Control Facility. It serves as the corrosion control facility for aircraft and equipment (Figure 6-27-1). This building is currently operating and is generally in good condition. Building 25 is a large warehouse-style building that is constructed of steel with a concrete floor and steel frame roof, and covers approximately 54,500 square feet. The floor of the building contains six concrete work bays. Each of the bays performs one of three corrosion prevention preparation processes. These bays include two PMV grit stripping bays, two washing bays, and two chemical stripping bays. There is also a concrete trench collection system that runs throughout the entire building. This trench system collects rinsate from the processes in the work bays and transports it to the Industrial Wastewater Treatment Plant (IWTP) located to the south of Building 25. This IWTP, also

known as Building 25A, is discussed in the next section. The space occupied by Building 25 was formerly vacant open space .

Utilities located within and immediately surrounding Building 25 include underground sanitary sewer, storm sewer, telephone, water, electrical lines, and an industrial waste system.

Information collected during the EBS indicates that activities conducted within this building included checking for corrosion, stripping aircraft, aircraft washing, and sand/bead blasting. The processes that take place in Building 25 typically involve the use or generation of chemicals and wastes including waste chemical stripping materials (grit, solvents, and caustics), sand blast grit and paint products.

Chemicals stored in Building 25 include non-halogenated organics, halogenated organics, corrosives, paint and metals. The chemicals documented to have been stored and used in Building 25 from 1987 to the present include storage of corrosion prevention agents, liquid paint strippers, and plastic grit stripper. The majority of hazardous waste generated on-site (paint stripper wash, spent corrosive prevention agents, and soapy wash water) is pumped to the IWTP for treatment. The rinsate from the processes at Building 25 reportedly contains halogenated and non-halogenated organics, metals, petroleum products, and corrosives. The residual plastic PMV beads are collected in two bag houses and are transported off-site by PWC.

The only documented release of hazardous materials at this building was a release of spent PMV grit and dust in 1993. This release occurred at the south side of Building 25. This release was reportedly cleaned up by an onsite workcrew. No staining was noted in the building, but because the chemicals used in solution in the building regularly come into contact with the floor, sampling will be performed in Building 25 (Target Area 1).

Building 25 is equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, flooding, or crashes, have been documented within Building 25.

Building 25A

Building 25A was constructed in the late 1980s. There has been a new addition to the building within the last several years. This building is referred to as the IWTP (Industrial Wastewater Treatment Plant) or Building 25A. It appears that the majority of the treatment facilities in this building were a part of the new addition and that the building was

renamed Building 25A after the addition was completed. It contains a laboratory and wastewater treatment facility for the effluent of Building 25 (Figure 6-27-1). This building is generally in good condition. The laboratory IWTP is constructed with corrugated steel walls and roof, and has a concrete floor. It occupies approximately 10,000 square feet. The space occupied by Building 25A was formerly vacant open space.

Utilities located within and immediately surrounding Building 25A include sanitary sewer, storm sewer, telephone, water, and industrial sewer lines, and overhead and underground electrical lines.

Information collected during the EBS indicates that this building serves as the wastewater treatment facility for the effluent from Building 25. The IWTP treats approximately 5,000 gallons per day. The paint sludge is removed first, stored temporarily on-site, and then removed from the site by Laidlaw. The liquid waste (wastewater with paint stripper and anticorrosives) is pumped into an initial holding tank, (a 32,000 gallon aboveground tank), and then through a series of 17 treatment tanks. The resultant water is discharged to the sanitary sewer; the resultant solid (a pressed metal/bacteria sludge) is stored temporarily at GAP Site 31 and then hauled off-site within 90 days by Laidlaw for permanent disposal. The entire facility has a trench collection system that collects any leakage and pumps the leaked materials back into the main tank.

In addition to the above wastes, small quantities of phenol, ammonia, phosphate, mercury waste, and spent methylene chloride waste are stored in the laboratory.

The southern part of Building 25A is a covered concrete pad that is used as Gap Site 31. This is the area that the pressed metal/bacteria sludge and other hazardous wastes are stored temporarily prior to permanent disposal.

Several areas of spillage were noted at this facility. Corroding concrete was noted in a phosphoric acid and sulfuric acid drum storage area. Evidence of leakage was found around a 500-gallon sulfuric acid tank. A five by eight foot metal containment tray was etched and stained. A volume estimate for these leaks is not available. Less than 1,000 gallons of water containing methylene chloride and phenols were reported to have leaked from a pump seal between bioreactor tanks on May 2, 1994. The fluid leaked onto the concrete and was fed back into the treatment system after collection in the drain system. Cleanup of the area was scheduled for week of May 9, 1994. Target Area 2 addresses the potential environmental impacts resulting from spillage and staining noted during the site inspection.

The IWTP has had several effluent permit exceedances in the last seven years. There was one exceedence for lead in 1992 and two exceedences for toxic organics in 1990. There were 18 exceedences for chromium in 1987, one exceedence for chromium in 1990 and one exceedence for chromium in 1991.

Building 25A is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, flooding, or crashes have been documented to have occurred within Building 25A.

Building 451

Building 451 was constructed in 1959 and served as an aviation meteorological facility and is now abandoned (Figure 6-27-1). This building is still standing and is generally in fair condition. Building 451 is a one-story building, is constructed of wood with a concrete floor, and covers approximately 100 square feet. The space occupied by Building 451 was formerly vacant open space.

No utilities are located within or immediately surrounding Building 451. Information collected during the EBS indicates that this building was a weather station for the base. There are no reports of chemical use, storage, spills, or staining in Building 451.

Building 494

Building 494 was constructed in 1963 and served as an office, work shop, tool and equipment area, and locker room (Figure 6-27-1). This building is still standing and is generally in fair condition. Building 494 is a one-story building, is constructed of corrugated steel with an asphalt and concrete floor, and covers approximately 2,900 square feet. The space occupied by Building 494 was formerly vacant open space.

Utilities located within and immediately surrounding Building 494 include sanitary sewer, storm sewer, telephone, water, and industrial sewer lines, and overhead and underground electrical lines.

Information collected during the EBS indicates that this building was used by NADEP for aircraft testing prior to flight and equipment repair. These types of industrial processes typically involve the use or generation of chemicals and wastes including hydraulic fluid, lube oil and grease, and sealing compound. It is believed that this building was used for the same purpose since it was built in 1963.

The above-cited chemicals, along with isopropyl alcohol, and cylinders of oxygen and nitrogen were observed in storage lockers. It is not clear how the chemicals at this building are disposed of.

Several small oil stains were observed in the parts storage area, and one large oily stain (6 feet by 4 feet) was observed in the break area. These spills appear to be petroleum hydrocarbons and to have involved a relatively minor quantity of released material. This staining occurred on asphalt in relatively good condition, and the size of the staining is relatively minor. No sampling will be done to address this staining.

Building 494 is equipped with a heating-ventilation-air conditioning (HVAC) system. Incidents including fires, mishaps, flooding, or crashes have not been documented to have occurred within Building 494.

Building 515

Building 515 was constructed in 1967 and served as a gun pod testing facility, firing range, and aircraft weapons overhaul and testing site. (Figure 6-27-1). This building has been demolished and the site of the building is now occupied by the 2,200 square foot concrete pad. This building was replaced by Building 29 (Parcel 26) as a gun test facility between 1990 and 1994. Projectiles were caught in a water tank formerly located on the south side of the building. No other details about the activities in this building are available. The space occupied by Building 515 was formerly vacant open space. No chemical storage, usage, or spills are reported for this building.

Building 595

Building 595 was constructed in 1976 and is used as a liquid oxygen converter storage shed (Figure 6-27-1). This building is still standing and is generally in fair condition. Building 595 is a one-story building. It is constructed of corrugated steel with a concrete floor and covers approximately 375 square feet. The space occupied by Building 595 was formerly vacant open space.

Utilities located within and immediately surrounding Building 595 include sanitary sewer, storm sewer, telephone, water, and industrial sewer lines, and overhead and underground electrical lines.

Information collected during the EBS indicates that this building was used by NADEP to store liquid oxygen. The liquid oxygen was used to

fill small aircraft containers. No other information about this building was available. No spills or staining were noted at this building. Building 595 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents including fires, mishaps, flooding, or crashes have been documented to have occurred within Building 595.

Building 622

Building 622 was constructed in 1987 and serves as a steam generation building (Figure 6-27-1). This building is generally in good condition. Building 622 is a one-story building, and is constructed of concrete blocks with a concrete floor. It covers approximately 9,100 square feet. The space occupied by Building 622 was formerly vacant open space.

Utilities located within and immediately surrounding Building 622 include sanitary sewer, storm sewer, telephone, water, and industrial sewer lines, and overhead and underground electrical lines.

Information collected during the EBS indicates that this building was used as a hot water generating facility and a switching substation for multiple buildings in the general area surrounding this building. The building contains a diesel-powered boiler unit. There is a 25,000-gallon aboveground diesel fuel tank which supplies fuel to the boiler. This tank has secondary containment and appears to be in good condition. A 500-gallon backup diesel tank is located inside the building. Two other 15,000-gallon above-ground storage tanks also exist outside Building 622. These tanks reportedly have never been used. Originally they were to be used to store paint stripper. No other chemical storage usage was observed in this building.

Several oil stains were observed around the backup oil tank and pumps to the boiler. Oil was observed to be leaking into a floor trench. These spills appear to be petroleum hydrocarbons (diesel fuel) and to have involved ongoing releases of material. This ongoing spill and resultant staining will be addressed by Target Area 3.

Building 622 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents including fires, mishaps, flooding, or crashes have been documented to have occurred within Building 622.

Building 623

Building 623 was constructed in 1987. EBS information reported this building to be a jet engine fuel storage area. However, the site inspection indicated this building is the air compressor control room for operations in Building 25. Building 623 is a one-story building. It is a metal framed building with a concrete floor and metal roof. Based on aerial photograph information, this building is estimated to cover 10,000 square feet. The space occupied by Building 623 was formerly vacant open space.

Utilities located within and immediately surrounding Building 623 include sanitary sewer, storm sewer, telephone, water, industrial sewer lines, and overhead and underground electrical lines.

One 55-gallon drum of lubricating oil was located in the building. This is presumably used for minor maintenance of the control equipment. No spills or staining is documented for Building 623. Building 623 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents including fires, mishaps, flooding, or crashes have been documented to have occurred within Building 623.

Open Space

The open space in this parcel covers approximately 70 percent of the parcel (Figure 6-27-1). In general, the open space is vacant or used for roads.

No structures are located within the open space. Approximately 50 percent of the open space is covered with asphalt; twenty-five percent of the area is covered with concrete. The remaining 25 percent is covered with grass. The pavement is generally in good condition.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, telephone, water, fuel, and industrial sewer lines, and overhead electrical lines.

EBS information indicates that the open spaces in this parcel have always been vacant open space. No chemicals are documented to have been stored in or used in the open space. No spills have been documented to have occurred in the open space. Review of site inspection data indicates that an undocumented spill may have occurred at the southeast corner of Building 25. This spill appears to be petroleum hydrocarbons, and to have involved a small quantity of released material. The staining covers an area measuring approximately 5 by 6 feet. This staining occurred on asphalt in

relatively good condition, and the size of the staining is relatively minor. No sampling will be done to address this staining.

No other incidents such as fires, mishaps, flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 27 is bounded by Parcels 23, 25, 26, and 28. None of these parcel is an IR site. There are no significant environmental concerns associated with these areas.

The Seaplane Berthing area, IR Site 17, is located less than 500 feet to the east of Parcel 27. No sampling is called for in this PEP in response to nearby IR Site 17, because it is not expected to have impacted Parcel 27.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites, GAP 31 and the IWTP located at Building 25A. These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. These sites do not require sampling as part of this PEP. GAP 31 is paved and no staining was noted in the area aurrounding it, and the IWTP is Part-B permitted with an approved closure plan as part of the permit. The IWTP was described previously during the discussion of Building 25A.

GAP Site 31 is located just south of Building 25A. The site inspection indicates that this site is active. This area is used to store the pressed metal/bacteria sludge and other hazardous wastes associated with the processes in Building 25A.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 27, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-27-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 25, 25A, 494 and 622. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

As noted earlier, Parcel 27 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 27.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. The following target areas were identified based on possible impacts from activities described above involving potentially hazardous substances.

- Target Area 1 (Building 25): This building uses large quantities of corrosive chemicals which contain halogenated and non-halogenated organic compounds that regularly come in contact with

TABLE 6-27-2

Summary of Data Gaps
NAS Alameda Parcel 27

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located within 200 feet east of Parcel 27. This IR site is not expected to impact Parcel 27.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 25). • Target Area 2 (Building 25A). • Target Area 3 (Building 622).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-27-2

Summary of Data Gaps
NAS Alameda Parcel 27

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, Industrial sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the floor surface. These substances, especially the volatile organics, can be highly mobile. Leakage of those compounds to the soil below the building has potentially occurred through cracks or seams in the concrete floor and trenches. Compounds of concern in this target area include acids, metals, and VOCs. This target area covers the entire floor of the building and has a potential likelihood of impacts. Six surface soil and six subsurface soil samples will be collected from this target area. The samples are listed in Table 6-27-1.

- Target Area 2 (Building 25A): This target area addressed the spillage noted in Building 25A during the site inspection and document review. The treatment process that occurs in this building involves the treatment of wastewater containing acids, metal, TPH, and VOCs. Compounds of concern in this target area include acids, metals, TPH, and VOCs. This target area covers the entire floor of the building and has a potential likelihood of subsurface impacts. Four surface and four subsurface soil samples will be collected from this target area. The samples are listed in Table 6-27-1.

- Target Area 3 (Stains in Building 622): This building contained stains associated with the backup diesel tank. These stains are presumed to be diesel fuel and appear to be the result ongoing releases of material. This target area has a potential likelihood of impacting at least the shallow subsurface. TPH is the compound of concern. One surface soil sample will be collected from this target area, and is listed in Table 6-27-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques are surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-27-1 summarizes screening-level sampling and analysis for the target areas on the parcel. Total numbers of samples to be collected from the locations shown on Figure 6-27-1 are: 11 surface soil samples and 10 subsurface soil samples. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Due to the large size of Target Areas 1 and 2, the sampling densities for all analytes has been reduced from that presented in Table 3–1. The samples are to be placed so as to adequately cover the entire floors of

these buildings. At each sampling point shown in Target Areas 1 and 2 surface soil samples will be analyzed for metals and pH. Subsurface soil samples will be analyzed for VOCs.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-28

PARCEL 28 EVALUATION PLAN

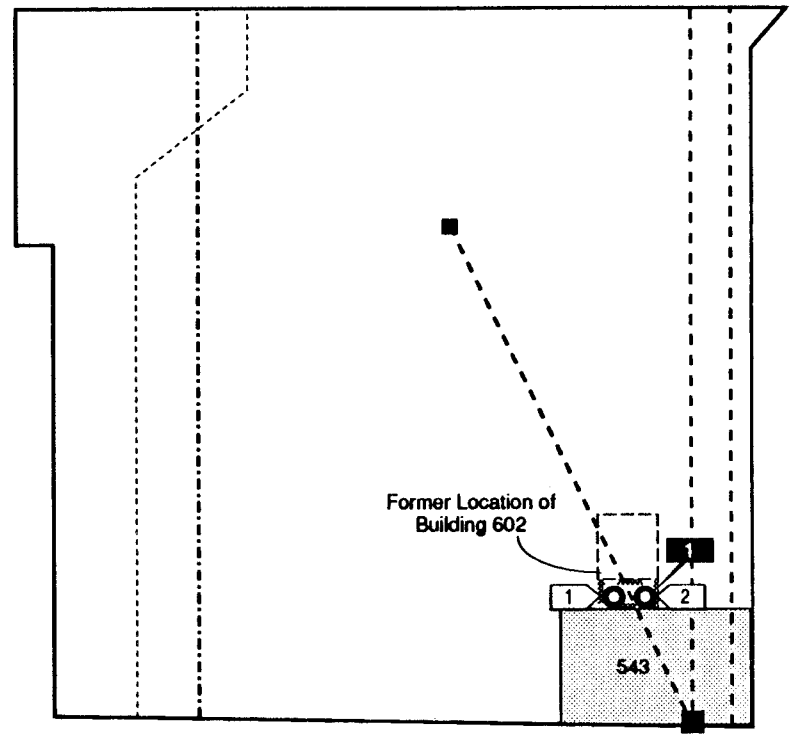
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 28 at NAS Alameda (Figure 6-28-1). The parcel, which is located in the south central portion of the base, is 1.4 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel is reported to contain one RCRA site (GAP 74); however, the site inspection indicated that GAP 74 is actually located on Parcel 26, which is located immediately to the south of Parcel 28, and is therefore discussed on part of Parcel 26. One parcel-specific target investigation area (target area) and no zone-wide target areas have been identified on this parcel. Surface sampling will be used to accomplish the screening-level investigation. Table 6-28-1 provides the complete list of samples and analyses prescribed by this plan. To provide a basis for the proposed investigation of Parcel 28, historical activities are discussed below.

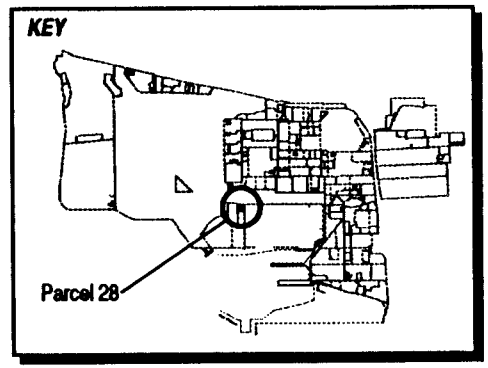
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 28, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 26 and 27. This parcel zone has been designated the Corrosion Control and Aircraft Testing Zone (Zone 7). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected





LEGEND

- Target Area 1
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 60'

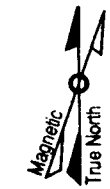


Figure 6-28-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.07.94

TABLE 6-28-1

Summary of Recommended Samples
NAS Alameda Parcel 28

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
28-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Building 543	Fuels, Oils	TPH	EPA 8015-Modified
28-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Building 543	Fuels, Oils	TPH	EPA 8015-Modified
28-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Building 543	Fuels, Oils	TPH	EPA 8015-Modified

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 7.

Filling began in the area covered by this parcel in the mid to late 1930s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 543) covers approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as an air compressor facility and aircraft taxiway. Two buildings (Building 602 and a small unidentified building in the northeast corner of the parcel) were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-28-1.

Parcel 28 is directly west of an Installation Restoration (IR) Program site (IR Site 17, Seaplane Lagoon). No previous investigations have been conducted at Parcel 28, and specific data regarding chemical occurrence at this parcel are not available.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 543

Building 543 was constructed in 1975 and serves as the main air compressor facility for the flight line operations (Figure 6-28-1). This building is in fair condition. Building 543 is a one-story building, constructed of corrugated metal walls with a concrete floor and metal-construction roof, and covers approximately 2,400 square feet. A 200-square foot building (Building 602) was formerly located immediately to the north of Building 543. This building, demolished between 1990 and 1992, reportedly housed electrical generators. The space occupied by Buildings 543 and 602 was formerly vacant open space. Utilities located within and immediately surrounding Building 543 include sanitary sewer, storm sewer, and industrial sewer lines.

Use of air compressors typically involves the use or generation of chemicals and wastes, including fuel, lubrication oil, and potentially solvents for parts cleaning.

Silica gel is the only documented chemical that was found to be stored in the area of Building 543. Approximately 720 pounds of this substance were stored along the western wall of the building. The use and/or disposal of this material is not known. Five 55-gallon drums of

non-hazardous waste (labeled: waste condensate water with compressor air residue) were stored along the north wall of Building 543.

There have been no documented spills of chemicals associated with Building 543. The site inspection information indicates that undocumented spills may have occurred along the north wall of Building 543. These spills appear to be fuel and/or lubrication oil, and involved a small quantity of released material. The staining covers an area measuring approximately 10 by 10 feet. There are several seams in the asphalt and concrete in this area that could possibly act as a conduit to the subsurface. This area is addressed by Target Area 1.

Open Space

The open space covers approximately 95 percent of the parcel. The ground surface of the open space is completely paved. Approximately 30 percent of the paved area is surfaced with asphalt and 70 percent is surfaced with concrete. The pavement is generally in good condition

No structures are located within the open space of this parcel. A small unidentified building was formerly located in the extreme northeast corner of the site. The use and construction of this former building are not known. This building was demolished between mid-1985 and 1990. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, and industrial sewer lines.

EBS information indicates that this open space was used as part of the flight line runway area. No chemicals are documented to have been used, stored or spilled in the open space of this parcel. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 28 is bounded by Parcels 23, 26, 27, and the Seaplane Berthing Area. The Seaplane Berthing Area is an IR Site (Site 17). Activities of concern on these adjacent parcels include the GAP Site 74 on Parcel 26,

and the NARF Corrosion Control Facility on Parcel 27. It is possible that hazardous materials at these sites could impact Parcel 28. The sediments within the Seaplane Berthing Area have been impacted by storm sewer run-off from the surrounding parcels. However, IR Site 17 is not expected to impact Parcel 28.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel is reported to include one RCRA site (GAP Site 74). However, GAP Site 74 is actually located on Parcel 26, and is addressed in the PEP for Parcel 26.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 28, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-28-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 543. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-28-2 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-28-2

Summary of Data Gaps
NAS Alameda Parcel 28

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located east of Parcel 28. This IR site is not expected to impact Parcel 28.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (North of Building 543).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and industrial sewer lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-28-2

Summary of Data Gaps
NAS Alameda Parcel 28

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 28 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of this area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 543): This target area is located adjacent to the north wall, outside of Building 543. The staining in this area appears to be fuel and/or lubrication oil. The staining appears to be the result of chronic, small-scale spillage. This area covers less than 1,000 square feet and has been classified as having a potential likelihood of impact. Two surface soil samples will be collected in this target area. The samples are listed in Table 6-28-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-28-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 28. Two surface soil samples will be collected from the locations shown on Figure 6-28-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental

air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z8

ZONE 8 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 8 at NAS Alameda (Figure 6-Z8-1). Zone 8 has been designated the North Central Recreational Zone and encompasses the parcels that are primarily used for recreation (e.g., volleyball courts, gymnasium, officers' club). Zone 8 is comprised of Parcels 38, 39, 60, 61, 62, 63, 91, 92, 93, 94, 95, 96, 97, 101, and 194. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and three parcel-specific target areas have been identified in this zone. Figure 6-Z8-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 8, historical activities are discussed below.

Zone 8 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 8 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies the nearby Installation Restoration Program site and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 8, the North Central Recreational Zone encompasses 15 parcels that have historically been used for recreational activities. During the

1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1900. Prior to this time, the zone area was wetlands. The zone was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, 12 buildings and one structure cover approximately 10 percent of the zone. The remaining 90 percent is open space. The zone area is presently in use as recreational area. Twelve buildings and one structure were formerly located on the zone and have since been demolished.

Zone 8 does not contain any Installation Restoration (IR) Program sites. However, IR Site 20 (Oakland Estuary) borders Zone 8 to the north. No previous investigations have been conducted at Zone 8, and specific data regarding chemical occurrence at this zone are not available.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 8 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this zone. Neither the document review nor the site inspection identified any information that indicated that any tanks are or may have been present at this zone.

RCRA Sites

No RCRA sites are located at this zone.

Zone Boundary Conditions

Zone 8 is bounded by Zones 4, 9, 12, 15, and 16. IR Site 20 (Oakland Estuary) borders Zone 8 to the north. There are no activities of concern

in these neighboring zones. Contaminated sediments in the Oakland Estuary do not represent a contamination migration concern.

Zone Target Areas and Compounds of Concern

This zone contains no zone-wide target areas and three parcel-specific target areas. This subsection of the ZAP provides an overview of the parcel-specific target areas. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Parcels 38, 39, 60, 63, 92, 93, 94, 95, 96, 97, 101, and 194 Target Areas

No parcel-specific target areas were identified at these parcels.

Parcel 61 Target Areas

- Target Area 1 (Open Space Surrounding Building 562): The soil beneath the stained hazardous material storage areas surrounding Building 562 may be contaminated with compounds such as pesticides, TPH, metals, and SVOCs. This target area covers approximately 1,000 square feet and has been classified as having a suspect likelihood of impacts. Two surface soil samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-61-1.

Parcel 62 Target Areas

- Target Area 1 (Former Railroad Tracks): This target area runs along former railroad tracks located within the parcel. Compounds potentially present within this target area are TPH, PCBs, lead, and SVOCs. This target area has been classified as having a potential likelihood of environmental impacts. Three surface soil samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-62-1.

Parcel 91 Target Areas

- Target Area 1 (Building 274 Former Location): The soils located at the former location of Building 274 may have been impacted by the plant nursery activities, storage, mixing, and use of banned pesticides may have impacted the soil. This target area covers approximately 250 square feet and has been classified as having a potential likelihood of impacts. One surface soil sample will be collected from this target area and analyzed for pesticides. Samples to be collected in this target area are listed in Table 6-91-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

A total of six surface soil samples will be collected from the locations shown on Figure 6-Z8-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15) environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-38

PARCEL 38 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 38 at NAS Alameda (Figure 6-38-1). The parcel, which is located in the north central portion of the base, is 4.7 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. Therefore, no sampling is proposed at this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for this discussion, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 38, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 39, 60, 61, 62, 63, 91, 92, 93, 94, 95, 96, 97, 101, and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. During the sampling program development, the parcels located in this zone were evaluated together. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. While no sampling has been

Parcel 91 Target Areas

- Target Area 1 (Building 274 Former Location): The soils located at the former location of Building 274 may have been impacted by the plant nursery activities, storage, mixing, and use of banned pesticides may have impacted the soil. This target area covers approximately 250 square feet and has been classified as having a potential likelihood of impacts. One surface soil sample will be collected from this target area and analyzed for pesticides. Samples to be collected in this target area are listed in Table 6-91-1.

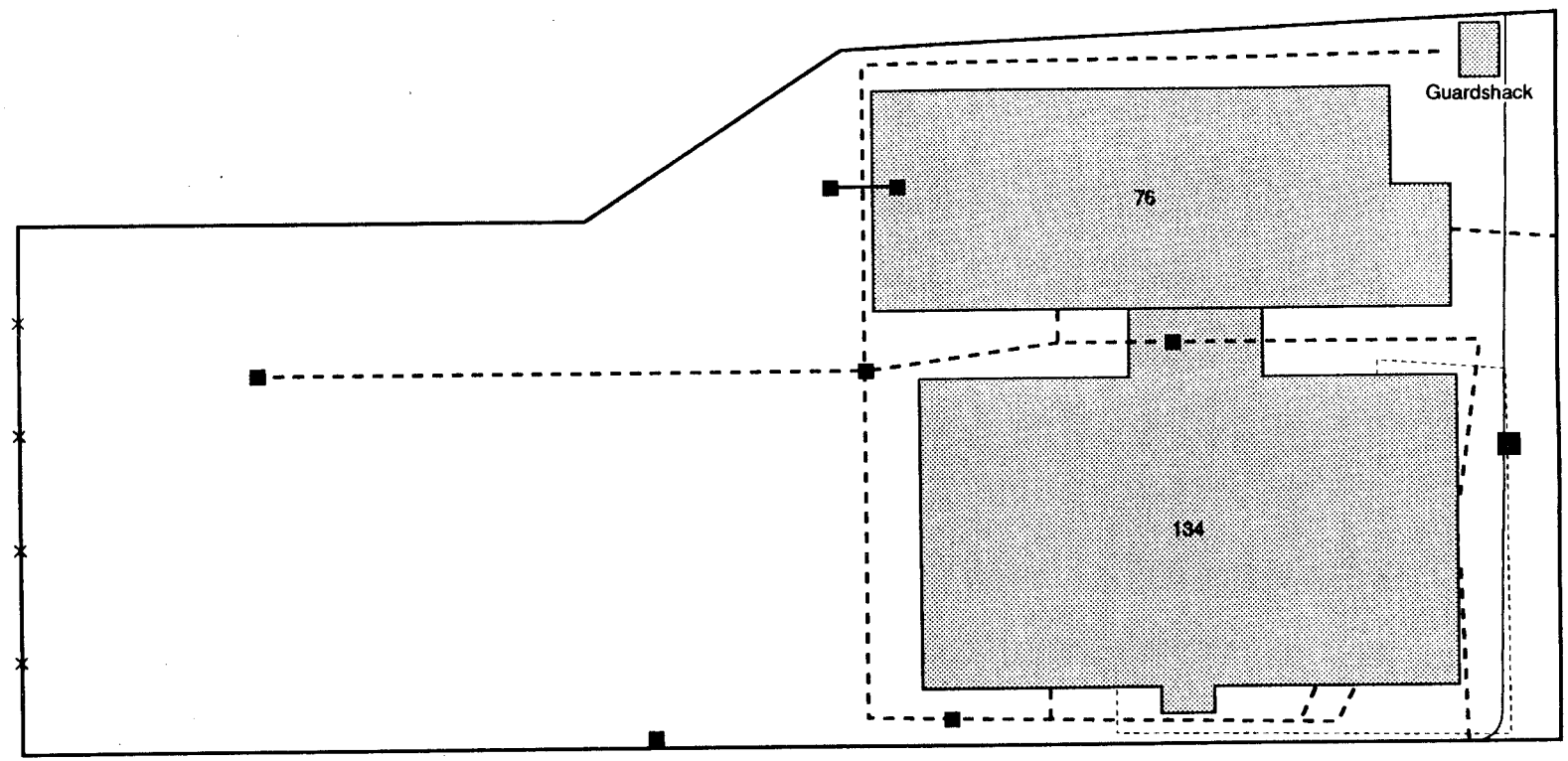
Screening-Level Investigation

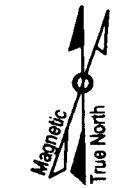
Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

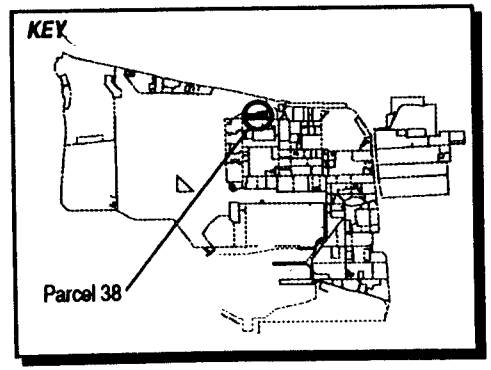
A total of six surface soil samples will be collected from the locations shown on Figure 6-Z8-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15) environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.







LEGEND

- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: *1.) Parcel borders are approximate.*
2.) No screening-level sampling recommended for this parcel.

1"= 90'

Figure 6-38-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/DS/06.29.94A

proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1940. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Building 76 - Swimming Pool; and Building 134 - Gymnasium) cover approximately 30 percent of the parcel. The remaining 70 percent is open space. Current parcel activities include the use and operation of a gymnasium, swimming pool, and parking lot. Seven buildings were formerly located on the parcel and have since been demolished (Buildings 184, 276, 277, 278, 279, 280, and 333). Sewer lines are present at this parcel and are shown on Figure 6-38-1.

Parcel 38 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 38 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 134

Building 134 was constructed in 1945 and serves as a gymnasium (Figure 6-38–1). This one-story building covers approximately 37,000 square feet and is in fair condition. Building 134 is constructed of wood with a concrete floor covered with wood panels. The building features a wood, tar, and gravel covered roof. No previous use is documented for this area prior to the construction of Building 117. Utilities located within and immediately surrounding Building 134 include underground sanitary sewer and storm sewer lines.

Information collected during the EBS indicates that activities conducted within this building included recreation. No previous use is documented for this area prior to the construction of Building 117.

Household cleaning chemicals and wood finish are documented to have been stored in and used in the gymnasium from 1945 to present. Approximately 50 gallons of general cleaning supplies, and 150 gallons of wood finish and nonhalogenated organic compounds are stored in a flammable storage locker.

No spills have been documented in this building. Building 134 is equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 134.

Building 76

Building 76 was constructed in 1942 and serves as a swimming pool facility (Figure 6-38–1). This one-story building covers approximately 25,000 square feet and is in fair condition. Building 76 is constructed entirely of wood, and has a concrete floor. No previous use is documented for this area prior to the construction of Building 76. Utilities located within and immediately surrounding Building 76 include sanitary sewer and storm sewer lines.

Procedures associated with operating a swimming facility include storage and use of chlorine, sodium hypochlorite, and calcium hypochlorite acids and bases. These chemicals have been stored and used in this building since 1942. Approximately 200 gallons of these chemicals are currently stored in the filter room in this building. Disposal of used chemicals is accomplished by discharging into the sanitary sewer and storm sewer lines.

No releases have been documented in this building. Building 76 is equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 76.

Open Space

Open space is defined by the parcel and building boundaries. This space occupies approximately 70 percent of the parcel. Several former buildings were located on this open space. The open space is currently used as a parking area.

Structures located within the open space include a small guard shack at the northeast corner of the parcel and a parking lot (Figure 6-38-1). The guard shack is constructed of metal with glass walls and a concrete floor. The ground surface of the open space is 70 percent paved and 30 percent unpaved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent with concrete. The pavement is generally in fair condition. The unpaved areas of open space are covered with gravel (30 percent), grass and landscaping (30 percent), and bare soil (40 percent). This parcel has open space areas that are landscaped or unpaved. These open space areas are shown on Figure 6-38-1. These areas have been unpaved since the 1940s. Utilities located within and immediately surrounding the open space include sanitary sewer and storm sewer lines.

Building 184 was formerly located in this open space. Its use is unknown and it was demolished in approximately 1966. Building 184 covered approximately 10,000 square feet.

Building 276 was formerly located in this open space. Its use is unknown and it was demolished in approximately 1963. Building 276 covered approximately 5,000 square feet.

Building 277 was formerly located in this open space. It housed the Special Services Issue office and was demolished in approximately 1992. Building 277 covered approximately 850 square feet.

Building 278 was formerly located in this open space. It was a landscaping equipment shed and was demolished in approximately 1992. Building 278 covered approximately 850 square feet.

Building 279 was formerly located in this open space. It was a landscaping equipment shed and was demolished in approximately 1953. Building 279 covered approximately 850 square feet.

Building 280 was formerly located in this open space. Its use is unknown and it was demolished in approximately 1953. Building 280 covered approximately 850 square feet.

Building 333 was formerly located in this open space. Its use is unknown and it was demolished in approximately 1970. Building 333 covered approximately 900 square feet.

No chemicals are documented to have been stored in the open space. No spills or other incidents are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 38 is bounded by Parcel 23 to the north, Parcel 41 to the south, Parcel 37 to the west, and Parcel 60 to the east. Activities on Parcel 23 include normal runway activities. Parcel 41 is part of the Enlisted Barracks Zone; lead-based paint and asbestos are concerns on Parcel 41. An activity of concern at Parcel 37 is the distribution of JP-5 and motor oil. Parcel 60 is a CERFA-eligible parcel.

No parcels contiguous with Parcel 38 are IR sites. No sampling is called for in this PEP in response to the IR sites greater than 500 feet from Parcel 38. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 38, then additional sampling on Parcel 38 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 38, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-38-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 38 because no industrial buildings are present.

TABLE 6-38-1

Summary of Data Gaps
NAS Alameda Parcel 38

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 38.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 38.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• JP-5 fuel distribution from fuel lines at Parcel 37 may potentially result in groundwater contamination migration from this neighboring parcel.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-38-1

Summary of Data Gaps
NAS Alameda Parcel 38

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As noted earlier, Parcel 38 has open space areas that are landscaped or unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 38.

Once the data gaps in Table 6-38-1 are addressed, Parcel 38 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and impacts of the neighboring parcels must be resolved before this parcel can be leased or transferred.

SECTION 6-39

PARCEL 39 EVALUATION PLAN

Parcel 39 is a CERFA-eligible parcel. No further evaluation is required.

SECTION 6-60

PARCEL 60 EVALUATION PLAN

Parcel 60 is a CERFA-eligible parcel. No further evaluation is required.

SECTION 6-61

PARCEL 61 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 61 at NAS Alameda (Figure 6-61–1). The parcel, which is located in the north central portion of the base, is approximately six acres in size and is roughly "T"-shaped. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific target investigation area (target area) has been identified on this parcel. No zone-wide target areas have been identified. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-61-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 61, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 61, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 62, 63, 91, 92, 93, 94, 95, 96, 97, 101 and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. During the sampling program development, the parcels located in this zone were evaluated

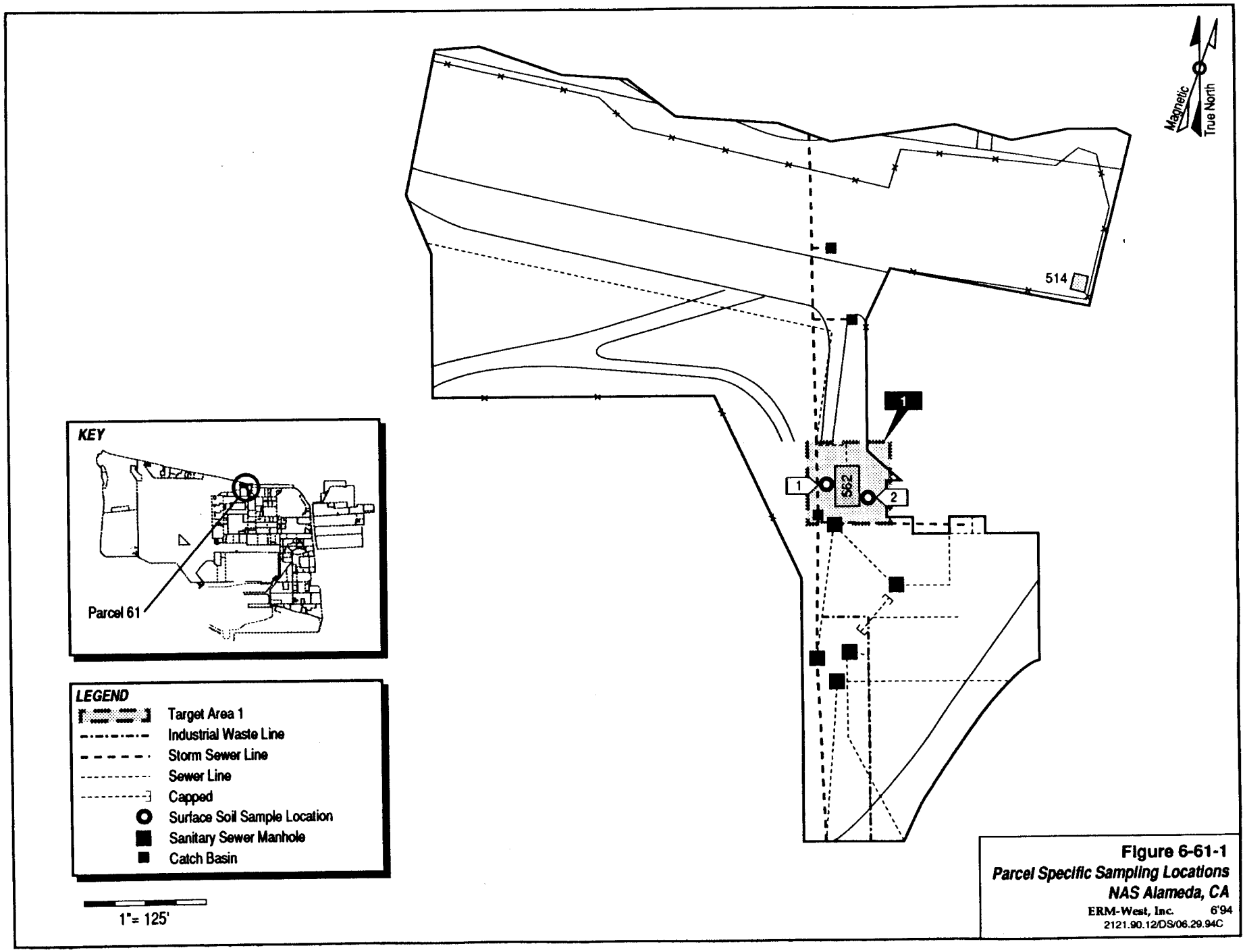


Figure 6-61-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

TABLE 6-61-1

Summary of Recommended Samples
NAS Alameda Parcel 61

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
61-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Metals	TPH, PCBs, SVOCs, Metals	Modified EPA 8015, EPA 8080, CLP RAS, ICAP SCAN
61-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Metals	TPH, PCBs, SVOCs, Metals	Modified EPA 8015, EPA 8080, CLP RAS, ICAP SCAN

together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. The parcels in this zone were considered as a whole during the evaluation. Sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

During the site inspection two buildings were located on the parcel. A semi-permanent structure was moved onto the parcel after the site inspection and was not included in the site inspection. The building is located on the southern edge of the parcel and the use of this building is unknown. The two buildings documented as being located on the parcel are Building 562 (Sewage Pump Station) and Building 514 (Wheels Up / Wave Off Landing Aid). Five CONEX boxes and one structure (exercise/play structure) are also located on the parcel. The buildings and structures located on the parcel cover less than five percent of the parcel. The remaining 95 percent is open space. The parcel area is currently made up of roadways, sidewalks, a landscaped area, and buildings. Two buildings were formerly located on the parcel and have since been demolished (Buildings 29 and 103). Sewer lines are present on this parcel and are shown on Figure 6-61-1.

Parcel 61 is located on the south side of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 61, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 514

Building 514 was constructed in 1964 and served as a wheels up/ wave off landing aid (Figure 6-61-1). This one-story building is constructed of concrete, covers approximately 100 square feet, and is in fair condition.

TABLE 6-61-2

Summary of Data Gaps
NAS Alameda Parcel 61

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 61.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) borders Parcel 61 to the north. This IR site is not expected to impact Parcel 61.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Perimeter of Building 562.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-61-2

Summary of Data Gaps
NAS Alameda Parcel 61

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Utilities located within and immediately surrounding Building 514 include sanitary sewer and storm sewer lines. No chemicals are documented to have been stored in or used at Building 514. No spills or other incidents are documented in this building. Building 514 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 562

Building 562 was constructed around 1965 and served as a sewage pump station (Figure 6-61-1). This one-story building is constructed of concrete, covers approximately 5,000 square feet, and is in fair condition.

Utilities located within and immediately surrounding Building 562 include sanitary sewer, industrial sewer, and storm sewer lines. No chemicals are documented to have been stored in or used at Building 562. No spills or other incidents are documented in this building. Building 562 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Open Space

The open space covers approximately 95 percent of the parcel. The open space is 20 percent paved and 80 percent unpaved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with grass and landscaping (50 percent) and bare soil (50 percent). These areas have always been unpaved.

Structures located within the open space include five CONEX storage containers which were put in place around 1990.

Buildings 29 and 103 were formerly located in this open space. Although the functions of these buildings are unknown, Building 29 covered approximately 100 square feet and Building 103 covered approximately 9,000 square feet. Both buildings were demolished around 1953.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, and industrial sewer lines.

EBS information indicates that the open space is used for the following functions: recreational activities, parking, roadways, sidewalks, dog training, and an aircraft flight approach area.

Solvents, corrosives, paints, dry cleaning solvents, lubricants and detergents are documented to have been stored in and used at the areas around Building 562, and the areas around the CONEX boxes during the site inspection. Approximately 225 gallons of the chemicals listed above were being stored in the open space. Disposal of used chemicals is accomplished by returning all hazardous waste to the hazardous waste collection unit. All excess chemicals are returned to the hazardous materials department.

Site inspection data indicate that undocumented spills may have occurred on the west side of Building 562. These spills appear to be related to the sewage pump station, and to have involved a relatively significant quantity of released material. The staining covers an area measuring approximately 30 feet by 20 feet. No other incidents are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 61 is bounded by Parcels 23, 39, 41, 60, 63, 64, 82, 194, and the Oakland Estuary (IR Site 20). There are no activities of concern on these adjacent parcels. The Oakland Estuary (IR Site 20) borders Parcel 61 to the north. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 61, then additional sampling on Parcel 61 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 61, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-61-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway

to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 61 because no industrial buildings are present.

As noted earlier, Parcel 61 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 61.

Once the data gaps in Table 6-61-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 61 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target area. The nature and location of this area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target area was identified based on possible impacts from activities described above involving potentially hazardous substances.

- Target Area 1 (Open Space Surrounding Building 562): The soil beneath the stained hazardous material storage areas surrounding Building 562 may be contaminated with compounds such as pesticides, TPH, metals, and SVOCs. This target area covers approximately 1,000 square feet and has been classified as having a suspect likelihood of impacts. Two surface soil samples will be collected from the locations shown on Figure 6-61-1. These samples are listed in Table 6-61-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-61-1 summarizes screening-level sampling and analysis for the parcel's target areas. Two surface soil samples will be collected from the locations shown on Figure 6-61-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Surface soil sampling locations shown on Figure 6-61-1 are approximate.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-62

PARCEL 62 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 62 at NAS Alameda (Figure 6-62-1). The parcel, which is located in the north central portion of the base, is 9.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains no RCRA sites. One parcel-specific target investigation area (target area) has been identified on this parcel. No zone-wide target areas have been identified. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-62-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 62, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 62 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61, 63, 91, 92, 93, 94, 95, 96, 97, 101 and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. During the sampling program development, the parcels located in this zone were evaluated

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-62-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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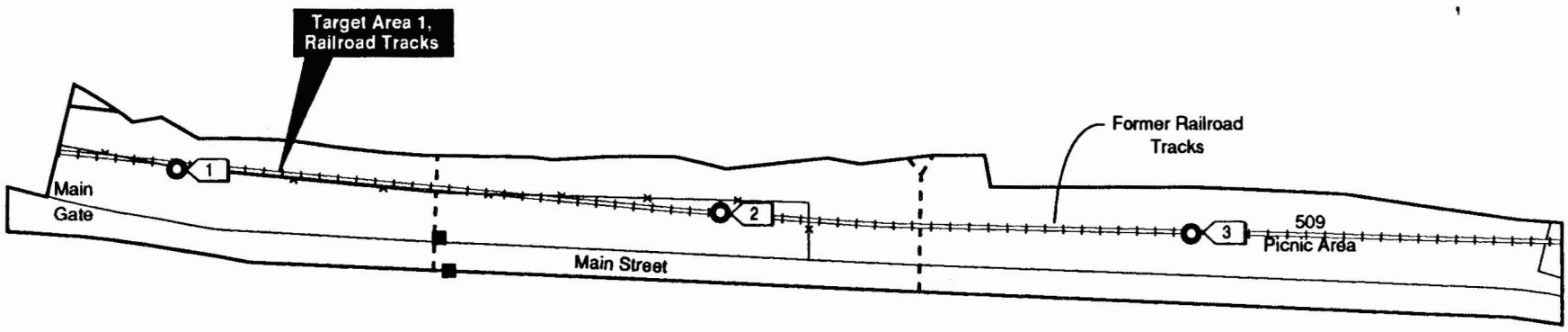
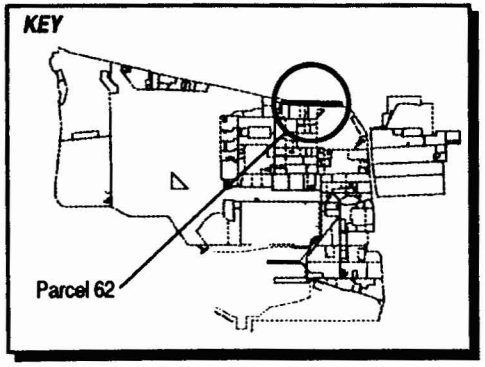
SENSITIVE





LEGEND

- Storm Sewer Line
- Surface Soil Sample Location
- Catch Basin

1"= 250'

Figure 6-62-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

SENSITIVE

TABLE 6-62-1

Summary of Recommended Samples
NAS Alameda Parcel 62

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
62-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, EPA 8080, CLP RAS, ICAP SCAN
62-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, EPA 8080, CLP RAS, ICAP SCAN
62-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, EPA 8080, CLP RAS, ICAP SCAN

together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. The parcels in this zone were considered as a whole during the evaluation. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, no buildings are located on this parcel. The parcel area is open space presently in use as a vehicle parking lot and picnic area. Main Street runs along the entire southern boundary of the parcel. Historically, railroad tracks were located on Parcel 62. Storm sewer lines are present at this parcel and are shown on Figure 6-62-1.

Parcel 62 is located adjacent to one Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 62, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below:

Open Space

The entire parcel is open space. The ground surface of the open space is 75 percent paved and 25 percent unpaved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with gravel or grass. This open space area is shown on Figure 6-62-1. This area has been unpaved since approximately 1965.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, and electrical lines. No chemicals are documented to have been stored or used in the open space. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 62 is bounded by Parcels 61 and 194 to the west and Parcels 39, 91, 92, 93, 94, 96, and 98 to the south. IR Site 20, the Oakland Estuary, borders the parcel to the north. Impacted sediments have been identified in the Oakland Estuary; however, migration of compounds of concern onto Parcel 62 is not probable.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 62, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-62-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 62 because no buildings are present.

As noted earlier, Parcel 62 has open space areas that are landscaped and unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only

TABLE 6-62-2

Summary of Data Gaps
NAS Alameda Parcel 62

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 61.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) borders to the north. This IR site is not expected to impact Parcel 62.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Railroad Tracks.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

SECTION 6-63

PARCEL 63 EVALUATION PLAN

Parcel 63 is a CERFA-eligible parcel. No further evaluation is required.

SECTION 6-91

PARCEL 91 EVALUATION PLAN

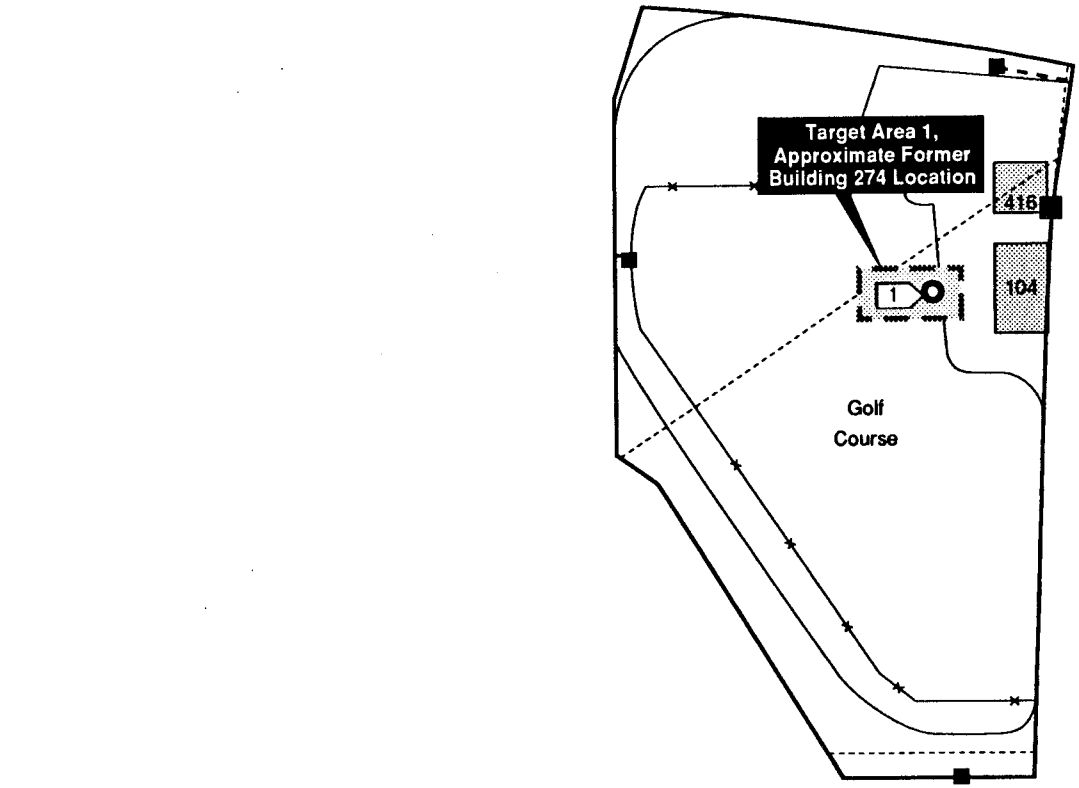
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 91 at NAS Alameda (Figure 6-91-1). The parcel, which is located in the north central portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific target investigation area (target area) has been identified on this parcel. No zone-wide target areas have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-91-1 provides the complete list of samples and analyses prescribed by this plan. To provide a basis for the proposed investigation of Parcel 91, historical activities are discussed below.

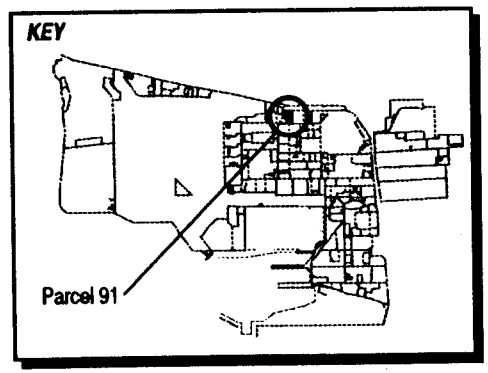
Background and Historical Activities

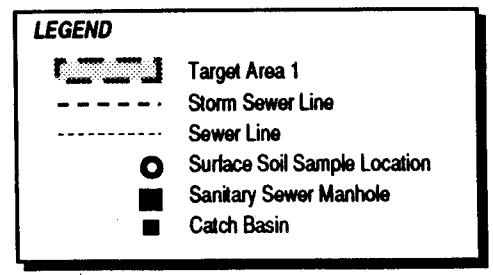
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 91 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61, 62, 63, 92, 93, 94, 95, 96, 97, 101, and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide







1"= 125'

Figure 6-91-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

TABLE 6-91-1

Summary of Recommended Samples
NAS Alameda Parcel 91

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
91-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS

considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1929; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 416) covers less than five percent of the parcel. The remaining area is open space. The parcel area is presently in use for storage and for recreation. Two buildings (Buildings 104 and 274) were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-91-1.

Parcel 91 is located within 500 feet of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 91, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described below.

Building 416

Building 416 was constructed in 1957 and has served as a storage shed (Figure 6-91-1). This building covers approximately 500 square feet and is in fair condition. Building 416 is constructed of wood with a concrete floor and a corrugated metal roof.

Utilities located within and immediately surrounding Building 416 include sanitary sewer, storm sewer, water, and electrical lines.

Information collected during the EBS indicates that activities conducted within this building was primarily confined to equipment storage. Broken lawn mowers, wood, and materials being held for recycling were all present here; the recycling bays are located on the south side of the structure. Available documents indicate the presence of stains on the floor of Building 416.

Building 416 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 416.

Open Space

The open space covers more than 95 percent of the parcel. The open space is 20 percent paved and 80 percent unpaved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with grass (75 percent), sand (10 percent), and bare soil (15 percent). The recreation areas on this parcel are sand volleyball courts, a barbecue area, picnic tables, and grassy areas. The landscaped and unpaved open space area is shown on Figure 6-91-1. This area has been landscaped since approximately 1965.

Structures located within the open space include two flammable materials CONEX boxes.

Buildings 104 and 274 were formerly located in this open space. Building 274, a nursery building for plants, was demolished in 1962. The other building was demolished recently. Banned pesticides may have been stored, mixed or used in and around the former plant nursery. These activities are characteristic of plant nurseries of the period.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, steam, water, and underground electrical lines. One pad-mounted transformer is located on the south side of Parcel 91.

EBS information indicates that activities conducted within this open space include material storage, vehicle parking, disposal, recreation, and drum storage.

Fuels and petroleum products were observed in one of the CONEX boxes by site reviewers. The other CONEX box appeared to be used to store grease, wood stain, transmission fluid, and paint. EBS files indicate that the metal floors of these CONEX boxes were heavily stained. It is possible that the soil and grass area surrounding these storage facilities was impacted by the storage activities. Stains typically associated with vehicle parking are located in the parcel's parking lot.

Additional information collected during the EBS indicates that during the early 1990's, pesticides were applied biannually to the ground

surface within the open space to control grasses and weeds. Although no documentation is available, it is likely that pesticides were also applied to this area prior to 1992.

No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 91 is bounded by Parcels 39, 62, 63, 64, 84, and 92,. No parcels contiguous with Parcel 91 are IR sites; therefore, no sampling is called for in this PEP in response to nearby IR sites.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 91, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-91-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

TABLE 6-91-2

Summary of Data Gaps
NAS Alameda Parcel 91

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 91.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located within 500 feet north of Parcel 91. This IR site is not expected to impact Parcel 91.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Former Building 274).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosures issues, only.

TABLE 6-91-2

Summary of Data Gaps
NAS Alameda Parcel 91

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

No Industrial Hygiene (IH) sampling is required for Parcel 91 because no industrial buildings are present.

As noted earlier, Parcel 91 has had open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a parcel-specific issue for this parcel because of the storage and mixing that occurs in ground sheds.

Once the data gaps in Table 6-91-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 91 may be reclassified from BRAC Category 7 to another BRAC category

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of this area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 274 Former Location): The soils located at the former location of Building 274 may have been impacted by the plant nursery activities, storage, mixing, and use of banned pesticides may have impacted the soil. This target area covers approximately 250 square feet and has been classified as having a potential likelihood of impacts. One surface soil sample will be collected from this area and analyzed for pesticides. The sample to be collected in this target area is listed in Table 6-91-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-91-1 summarizes screening-level sampling and analysis for the parcel's target area. One surface soil sample will be collected from the

location shown on Figure 6-91-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The surface soil sampling location shown on Figure 6-91-1 is approximate. The sample should be collected from the area adjacent to the storage lockers or from areas of visual staining.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-92

PARCEL 92 EVALUATION PLAN

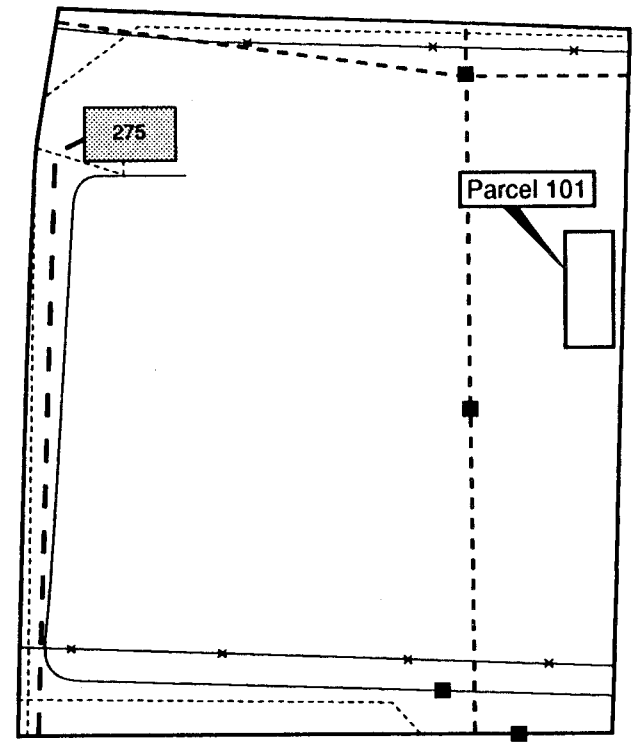
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 92 at NAS Alameda (Figure 6-92-1). The parcel, which is located in the north central portion of the base, is 4.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified at this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 92, historical activities are discussed below.

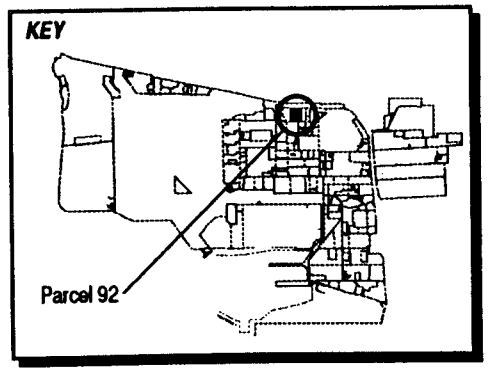
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 92 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61, 62, 63, 91, 93, 94, 95, 96, 97, 101 and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. The parcels in this zone were considered as a whole during the evaluation. While no sampling





LEGEND

- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 125'

Magnetic
True North

Figure 6-92-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. The parcels in this zone were considered as a whole during the evaluation. No sampling is proposed in the PEPs for any of the parcels in the zone; however, other data gaps remain for this parcel and other parcels in this zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1929; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 275) covers less than five percent of the parcel. The remaining area is open space. The parcel area is presently an open grassy area. Parcel 101 is located within Parcel 92. Parcel 101 is a CERFA-qualified parcel and does not require any further investigation. Sewer lines are present on this parcel and are shown on Figure 6-92-1.

Parcel 92 is located within 500 feet of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 92, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 275

Building 275 was constructed in 1946 and served as a pavements/grounds equipment shed (Figure 6-92-1). This building covers approximately 2,000 square feet and is in fair condition. Building 275 is constructed of wood with a cement floor and corrugated metal roof.

Utilities located within and immediately surrounding Building 275 include underground sanitary sewer, storm sewer, steam, water, electrical, industrial sewer, and overhead electrical lines.

Information collected during the EBS indicates that activities conducted within this building included chemical storage. Petroleum products, fuel products, nonhalogenated organic compounds, and batteries are documented to have been stored in Building 275. A maximum of 700 gallons may be stored in this building; 25 gallons were being stored at the time of visual inspections.

Several small stains were noted throughout the workshop. Site reviewers suspect the releases are associated with the oil, grease, and fuel from the gardening equipment motors. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 275.

Open Space

The open space covers more than 95 percent of the parcel. The open space is 20 percent paved and 80 percent unpaved. Approximately 75 percent of the paved area is surfaced with asphalt and 25 percent is covered with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are entirely covered with grass. This open space area is shown on Figure 6-92-1. This area has been unpaved since approximately 1965.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, steam, water, industrial sewer, and electrical lines.

Information collected during the EBS indicates that activities conducted within this open space include equipment parking, material storage, disposal, and recreation (this area is an open grassy field). Mowing equipment is parked on the grass on the north side of Building 275. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 92 is bounded by Parcel 91 to the west, and Parcels 84 and 90 to the south. Parcel 62 borders the to the north, and Parcel 93 borders the parcel to the east. No parcels contiguous with Parcel 92 are IR Sites; therefore no sampling is called for in this PEP in response to nearby IR sites.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 92, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-92-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 92 because no industrial buildings are present.

As noted earlier, Parcel 92 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 92.

Once the data gaps in Table 6-92-1 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-92-1

Summary of Data Gaps
NAS Alameda Parcel 92

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 92.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located within 500 feet of Parcel 92. This IR site is not expected to impact Parcel 92.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosures issues, only.

TABLE 6-92-1

Summary of Data Gaps
NAS Alameda Parcel 92

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 92 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. Staining and associated IH issues throughout the workshop in Building 275 will be inspected as part of a one time compliance plan. However, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before Parcel 92 may be reclassified from BRAC Category 7 to another BRAC category.

SECTION 6-93

PARCEL 93 EVALUATION PLAN

Parcel 93 is a CERFA-eligible parcel. No further evaluation is required.

SECTION 6-94

PARCEL 94 EVALUATION PLAN

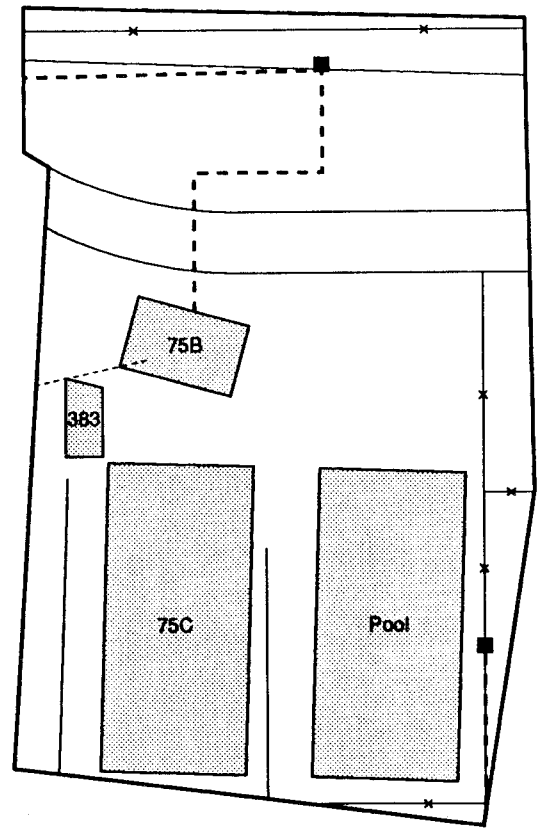
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 94 at NAS Alameda (Figure 6-94-1). The parcel, which is located in the north central portion of the base, is 0.8 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 94, historical activities are discussed below.

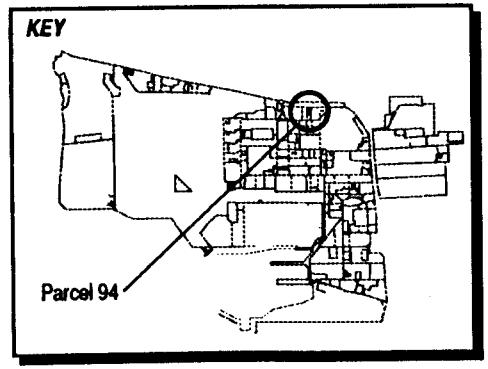
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 94 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61, 62, 63, 91, 92, 93, 95, 96, 97, 101 and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future





LEGEND

- Storm Sewer Line
- Sewer Line
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Figure 6-94-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1929; the ground level and grading have not changed significantly since that time.

The parcel area is presently in use as a material storage and disposal area. Two buildings (Buildings 75B and 32) were formerly located on the parcel and have since been demolished. Structure 75C, a swimming pool, is no longer in use as such; instead it holds rubble from the two demolished buildings. Sewer lines are present on this parcel and are shown on Figure 6-94-1.

Parcel 94 is located within 500 feet of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 94, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below.

Open Space

The open space is 40 percent paved and 60 percent unpaved. Approximately 60 percent of the paved area is the pool. The remaining 40 percent consist of the concrete foundations from the demolished buildings. The pavement is generally in fair condition. The unpaved areas of the open space are covered with grass. This open space area is shown on Figure 6-94-1. This area has been landscaped since approximately 1965. Structures located within the open space include an abandoned swimming pool and concrete foundations.

Utilities located within and immediately surrounding the open space include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space include material storage and disposal. Available documents do not indicate any presence, use, or disposal of chemicals in this open

space. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 94 is bounded by Parcels 62, 93, 95, and 96. No parcels contiguous with Parcel 94 are IR sites; therefore, no sampling is called for in this PEP in response to nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 94, then additional sampling on Parcel 94 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 94, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-94-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 94 because no buildings are present.

TABLE 6-94-1

Summary of Data Gaps
NAS Alameda Parcel 94

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 94.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located within 500 feet of Parcel 94. This IR site is not expected to impact Parcel 94.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosures issues, only.

TABLE 6-94-1

Summary of Data Gaps
NAS Alameda Parcel 94

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, water, natural gas, and electrical lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As noted earlier, Parcel 94 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 94.

Once the data gaps in Table 6-94-1 are addressed Parcel 94 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before Parcel 94 may be reclassified from BRAC Category 7 to another BRAC category.

SECTION 6-95

PARCEL 95 EVALUATION PLAN

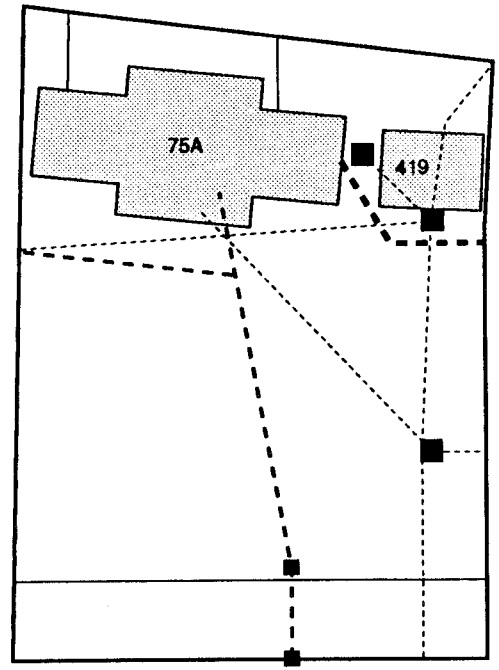
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 95 at NAS Alameda (Figure 6-95-1). The parcel, which is located in the north central portion of the base, is 0.7 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 95, historical activities are discussed below.

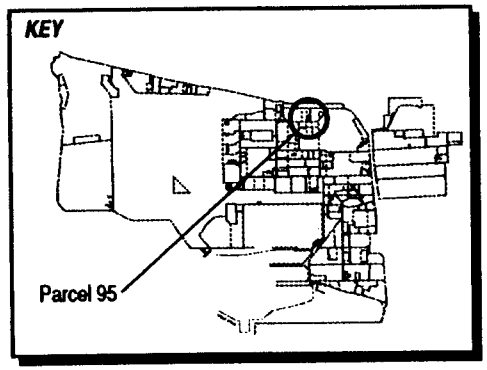
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 95 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61 62, 63, 91, 92, 93, 94, 96, 97, 101, and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Magnetic
True North

Figure 6-95-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1929; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 75A and 419) cover approximately 10 percent of the parcel. The remaining 90 percent is open space. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-95-1.

Site reviewers indicated that there was no apparent use for this parcel. Parcel 95 is located within 500 feet of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 95, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 75A

Building 75A was constructed in 1945 and served as the dressing rooms, baths, shower, toilets, and pumphouse for the pool (Figure 6-95-1). This one-story building is constructed of concrete and is in fair condition.

Utilities located within and immediately surrounding Building 75A include underground natural gas, sanitary sewer, storm sewer, steam, water, and electrical lines.

Information collected during the EBS indicates that activities conducted within this building included the operation of a chlorine storage tank. There is a sign posted outside of the door that requires use of a chlorine mask to enter the building.

No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 75A.

Building 419

Building 419 was constructed in 1956 and served as an outdoor barbecue facility (Figure 6-95-1). This building covers approximately 300 square feet and is in fair condition. Building 419 is constructed of metal and fiberglass.

Utilities located within and immediately surrounding Building 419 include underground gas, sanitary sewer, storm sewer, telephone, steam, water, and electrical lines, and overhead electrical lines.

Information collected during the EBS indicates that activities conducted within this building included mess hall operations. The only chemicals noted in Building 419 were stored beneath a sink. Site reviewers observed 26 gallons of miscellaneous nonhalogenated organic compounds and ten gallons of paint.

Available documents do not indicate that Building 419 is equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 419.

Open Space

The open space covers approximately 90 percent of the parcel. The open space is 10 percent paved and 90 percent unpaved. The entire paved area is surfaced with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with grass. This open space area is shown on Figure 6-95-1. This area has been landscaped since approximately 1965.

Utilities located within and immediately surrounding this open space include underground natural gas, sanitary sewer, storm sewer, steam, water, and electrical lines, and overhead electrical lines. One pad-mounted transformer is located south of Building 419.

No chemical storage, use, or disposal occurs at this open space. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 95 is bounded by Parcels 89, 93, 94, and 96. No parcels contiguous with Parcel 95 are IR sites; therefore, no sampling is called for in this PEP in response to nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 95, then additional sampling on Parcel 95 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 95, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-95-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 95 because no industrial buildings are present.

As noted earlier, Parcel 95 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 95.

Once the data gaps in Table 6-95-1 are addressed Parcel 95 may be leased or transferred, as appropriate.

TABLE 6-95-2

Summary of Data Gaps
NAS Alameda Parcel 95

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 95.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located within 500 feet north of Parcel 95. This IR site is not expected to impact Parcel 95.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, natural gas, electrical, and water lines identified.

[1] Note: These data gaps are disclosures issues, only.

TABLE 6-95-2

Summary of Data Gaps
NAS Alameda Parcel 95

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological concerns must be resolved before this parcel may be reclassified from BRAC Category 7 to another BRAC category.

SECTION 6-96

PARCEL 96 EVALUATION PLAN

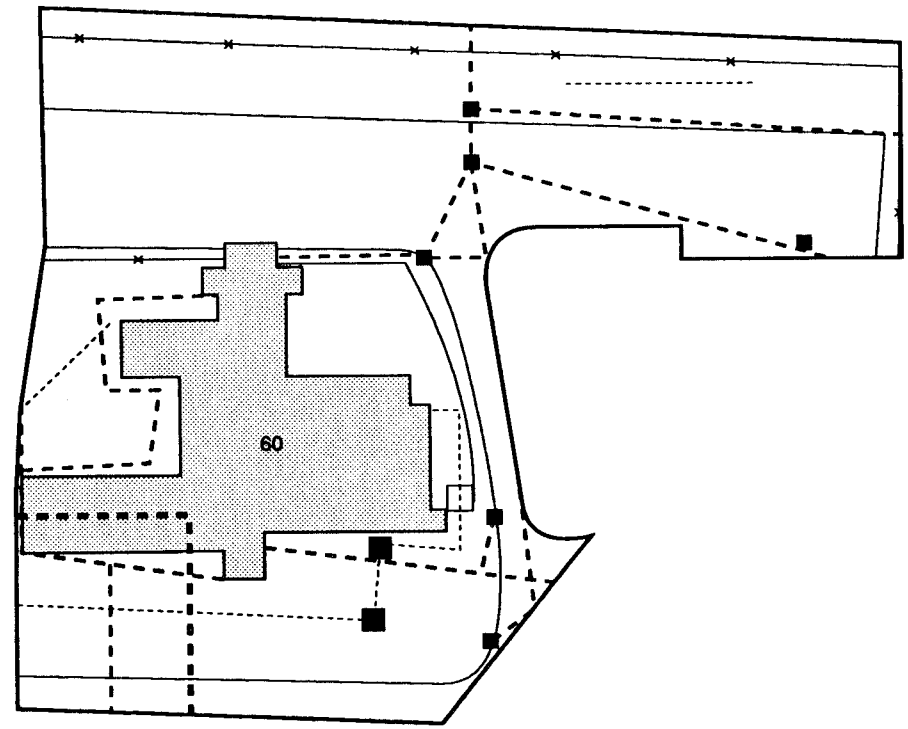
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 96 at NAS Alameda (Figure 6-96-1). The parcel, which is located in the north central portion of the base, is 4.5 acres in size and is roughly L-shaped. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 96, historical activities are discussed below.

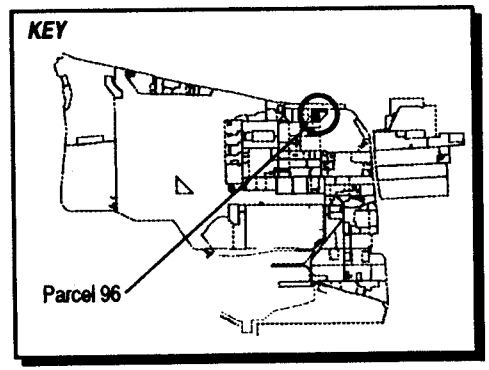
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 96 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61, 62, 63, 91, 92, 93, 94, 95, 97, 101, and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 125'

Magnetic
True North

Figure 6-96-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1929; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 60) covers approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel area is presently in use as the officer's club and the supporting facilities. Available documents do not indicate that any other buildings or structures ever existed on the parcel. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-96-1.

Parcel 96 is located within 500 feet of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). No previous investigations have been conducted at Parcel 96, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 60

Building 60 was constructed in 1941 and served as a mess hall and officer's club (Figure 6-96-1) ever since then. This one-story building is constructed of a wood frame with stucco walls, a concrete floor, and a built-up roof. Building 60 covers 30,000 square feet and is in good condition.

Utilities located within and immediately surrounding Building 60 include sanitary sewer, storm sewer, steam, water, and electrical lines, and overhead electrical lines. Transformers and switchgear were noted around Building 60 during visual inspections.

Information collected during the EBS indicates that activities conducted within this building included kitchen operations and recreation. Cleaning supplies are located in the storage closet behind the kitchen; the closet contains household cleaning products. Two storage bins behind the kitchen on a grassy area contain approximately 50 gallons of lighting fluid and candles. The Terrace room is another

area of chemical storage. Fertilizer is kept in this room and a stand alone storage closet for cleaning supplies is also located there.

One spill is documented in the locked high voltage room of Building 60's kitchen. Site reviewers indicated that the stain is from oil used for electrical equipment and transformers. The release area covers a four foot by two foot area.

Asbestos was removed from all of Building 60 approximately five to six years ago. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 60.

Open Space

The open space covers approximately 85 percent of the parcel. The open space is 80 percent paved and 20 percent unpaved. Approximately 75 percent of the paved area is surfaced with asphalt and five percent is covered with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with grass. Structures located within the open space include two storage lockers (one for flammable materials and the other for non-flammable materials).

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, steam, water, and electrical lines, and overhead electrical lines. Transformers and switchgear were noted around Building 60 during visual inspections.

EBS information indicates that activities conducted within this open space include material storage, washdown operations, vehicle parking, disposal, and recreational activities.

The only indication of chemical storage in this area are the two storage lockers. The nonflammable materials locker is currently empty; the other locker is located near the southeast corner of Building 60 and its contents are unknown. Stains typically associated with vehicle parking were noted in the parking area.

No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated

that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 96 is bounded by Parcels 62, 88, 89, 94, 97, and 98. No parcels contiguous with Parcel 96 are IR sites; therefore, no sampling is called for in this PEP in response to adjacent IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 96, then additional sampling on Parcel 96 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 96, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-96-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 96 because no industrial buildings are present.

As noted earlier, Parcel 96 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 96.

TABLE 6-96-1

Summary of Data Gaps
NAS Alameda Parcel 96

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 96.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located within 500 feet north of Parcel 96. This IR site is not expected to impact Parcel 96.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-96-1

Summary of Data Gaps
NAS Alameda Parcel 96

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-96-1 are addressed Parcel 96 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological concerns must be resolved before this parcel may be reclassified fro;m BRAC Category 7 to another BRAC category.

SECTION 6-97

PARCEL 97 EVALUATION PLAN

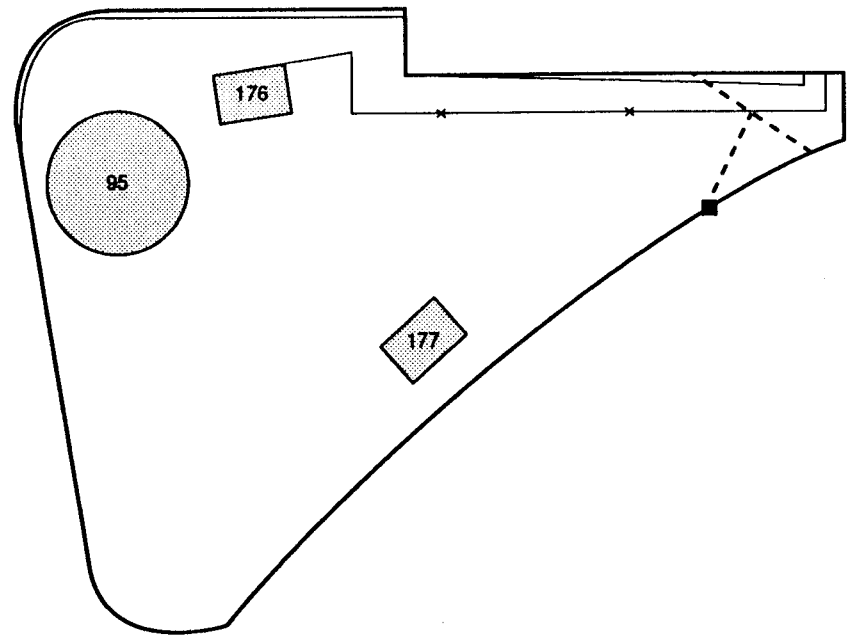
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 97 at NAS Alameda (Figure 6-97-1). The parcel, which is located in the northern portion of the base, is 0.9 acres in size and is roughly triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 97, historical activities are discussed below.

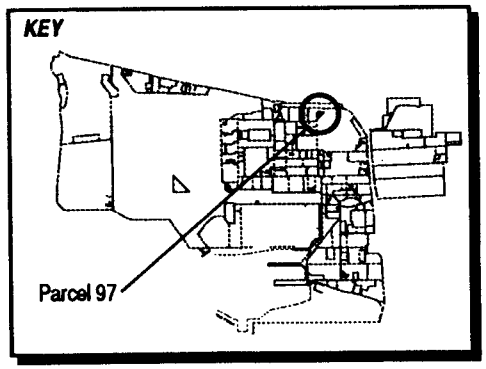
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 97 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 38, 39, 60, 61, 62, 63, 91, 92, 93, 94, 95, 96, 101, and 194. This parcel zone has been designated the North Central Recreational Zone (Zone 8). The North Central Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future





LEGEND

Storm Sewer Line

Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Magnetic
True North

Figure 6-97-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.12/DS/07.06.94

evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 8.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1929; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 95, 176, and 177) cover approximately 15 percent of the parcel. The remaining 85 percent is open space. Site reviewers indicated that there is no apparent use for this open space. Sewer lines are present on this parcel and are shown on Figure 6-97-1.

Parcel 97 is located within 500 feet of an Installation Restoration (IR) Program site (IR Site 20 - Oakland Estuary). Although no specific data regarding chemical occurrence at this parcel are available, groundwater wells have been installed in Building 176. Data from the wells were being compiled at the time of this writing.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 95

This building is a water storage tank for non-potable water. The capacity of the tank is 125,000 gallons. No further information about this tank is available.

Building 176

Building 176 houses a groundwater well installed by the Army. A floor drain, in fair condition, is visible in the building.

Building 177

Building 177 was locked at the time of visual inspections; however, inspectors did note a sign on the building's door that read: "Caution: contains ____ a toxic environmental contaminant 40CFR761, PWC (415) 869-2450." The chemical name of the substance had been

scratched off. However, 40 CFR Part 761 contains the TSCA PCB regulations. This is consistent with the use of the building. According to EBS historical files, Building 177 is a transformer house.

Open Space

The open space covers approximately 85 percent of the parcel. Less than five percent of the open space is paved, and the remaining area is unpaved. All of the paved area is surfaced with concrete. The rest of the open space is covered with grass.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 97 is bounded by Parcels 96 and 98. No parcels contiguous with Parcel 97 are IR sites; therefore, no sampling is called for in this PEP in response to nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 97, then additional sampling on Parcel 97 may be necessary.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 97, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-97-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway

TABLE 6-97-1

Summary of Data Gaps
NAS Alameda Parcel 97

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 97.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located within 500 feet north of Parcel 97. This IR site is not expected to impact Parcel 97.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer and electrical lines identified.
- Steam Lines	• No steam lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-97-1

Summary of Data Gaps
NAS Alameda Parcel 97

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 97 because no industrial buildings are present.

As noted earlier, Parcel 97 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 97.

Once the data gaps in Table 6-97-1 are addressed, Parcel 97 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be leased or transferred.

SECTION 6-101

PARCEL 101 EVALUATION PLAN

Parcel 101 is a CERFA-eligible parcel. No further evaluation is required.

SECTION 6-194

PARCEL 194 EVALUATION PLAN

Parcel 194 is a CERFA-eligible parcel. No further evaluation is required.

SECTION 6-Z9

ZONE 9 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 9 at NAS Alameda (Figure 6-Z9-1). Zone 9 has been designated the Enlisted Barracks Zone and encompasses the parcels that contain or support the enlisted barracks. Zone 9 is comprised of Parcels 40, 41, 42, 43, 44, 45, 64, 65, and 187. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and five parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Figure 6-Z9-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 9, historical activities are discussed below.

Zone 9 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 9 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Zone 9, the Enlisted Barracks Zone encompasses nine parcels that contain or support enlisted barracks facilities. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, eight buildings cover approximately 35 percent of the zone. The remaining 65 percent is open space. Five open space structures (baseball field, football field, flag pole, salute gun pads, and granite memorials) are located in the open space. The zone area is presently in use as barracks, barracks support facilities, and recreational space. Two buildings were formerly located on the parcel and have since been demolished.

Zone 9 is within 500 feet of two Installation Restoration (IR) Program sites, IR Site 5 (Building 5) and IR Site 8 (Building 114, PWC Shop). No previous investigations have been conducted at Zone 9, and specific data regarding chemical occurrence at this zone are not available.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 9 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

One underground storage tank (UST) is documented as potentially existing on Parcel 43. No other information is available regarding this tank.

One underground storage tank was formerly present at Parcel 45 (Tank 2-1). Tank 2-1 was located at the northeastern exterior of Wing 1 of Building 2. The installation date of the tank is unknown. This tank was used to store diesel and had a capacity of 500 gallons. The former presence of this tank was identified from the EBS. No information is available regarding the integrity of the tank that was removed.

One active underground storage tank (Tank T-1-1) is present at Parcel 65. The presence of this tank was identified from the EBS. This tank was installed at an unknown date and is located in the northern part of the southwest parking area (see Figure 6-65-1) of Building 1. Based on the available information, Tank T-1-1 contains automotive gasoline and has a capacity of 500 gallons. This tank was tested for tightness and passed the test in November 1991 and 1993.

One other underground storage tank may be present at Parcel 65. Available UST maps locate another tank (PT-522) on the southwest corner of Parcel 65; however, the location appears to be in the middle of Avenue C. No other information was obtained during the EBS or the site inspection regarding this tank.

RCRA Sites

This zone includes two RCRA sites (on Parcels 41 and 45). These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, neither RCRA site requires further investigation. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 9 is bounded by Zones 6, 8, 10, 12, and 13. Activities of concern on these adjacent zones include aircraft rework and heavy industry on Zone 10, aircraft maintenance and historical fueling activities on Zone 6, and light industry (including metal plating and aircraft rework) and warehousing in Zone 13.

Zone Target Areas and Compounds of Concern

This zone contains five parcel-specific target areas. No zone-wide target areas are located in this zone. This subsection of the ZAP provides an overview of the parcel-specific target areas. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 9 Target Areas

- No zone-wide target areas were identified.

Parcel 40, 41, 42, 44, 64 Target Areas

- No parcel-specific target areas were identified at these parcels.

Parcel 43 Target Areas

- Parcel 43 Target Area 1 (Open Space I): Staining in Open Space I may indicate impacted surface soils in the vicinity of the staining. The potentially impacted area covers less than a total of 1,000 square feet. The compounds of potential concern are TPH. Two surface soil samples will be taken in the most heavily stained areas of Open Space I.

Parcel 45 Target Areas

- Parcel 45 Target Area 1 (Building 2): The soil beneath the perchloroethane recovery unit in Wing 2 of Building 2 may have been impacted by spills or leakage of VOCs contained in degreasers and chlorinated solvents stored in this area. This target area covers approximately 400 square feet and has been classified as having a potential likelihood of impacts. The compounds of potential concern are VOCs. Two subsurface soil samples will be collected from this target area.

- Target Area 2 (Open Space): The open space between Wings 1 and 2 may have been impacted by improper disposal of degreasers and chlorinated solvents used in dry cleaning operations. The area under the air compressor in this vicinity is also a concern. Compounds of concern in this area include VOCs and TPH This target area covers approximately 1,200 square feet and has been classified as having a potential likelihood of impacts. Two surface soil and four subsurface soil samples will be collected from this target area.

Parcel 65 Target Areas

- Target Area 1, Generator Shed: Observed staining and storage of TPH in this area indicate past releases of TPH to the floor of this shed. Soil beneath the shed may also have been impacted. This target area covers less than 1,000 square feet and has been rated as

having a potential likelihood of impacts. Two surface soil samples will be collected from this target area.

Parcel 187 Target Areas

- Parcel 187 Target Area 1 (Open Space): The immediate vicinity of the water box located west of Building 63 may have been impacted by unauthorized dumping into this hole in the ground. Compounds of concern immediately surrounding the water box include VOCs, metals, SVOCs, and TPH. This target area is classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected from the locations shown on Figure 6-187-1, and are listed in Table 6-187-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14).

Table 6-Z9-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. Six surface soil samples and eight subsurface soil samples will be collected from the locations shown on Figure 6-Z9-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the

screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-40

PARCEL 40 EVALUATION PLAN

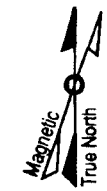
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 40 at NAS Alameda (Figure 6-40-1). The parcel, which is located in the north central portion of the base, is 1,800 square feet in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 40, historical activities are discussed below.

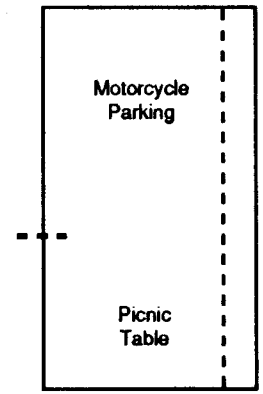
Background and Historical Activities

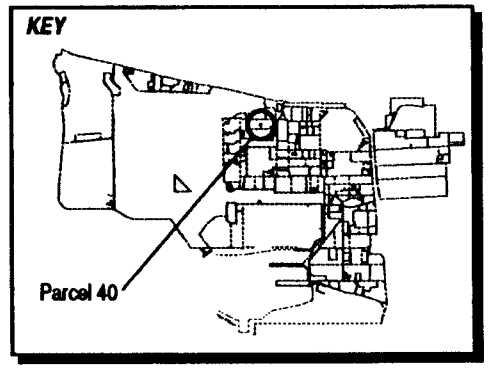
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 40, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records, and historical aerial photographs. This information was used to determine whether sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 41, 42, 43, 44, 45, 64, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.







LEGEND

Storm Sewer Line

Steam Line

Note: *No Screening-Level Sampling Recommended For This Parcel.*

1"= 30'

Figure 6-40-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94A

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 186) covers 100 percent of the parcel. The parcel area is presently in use as a motorcycle parking and maintenance area, and a picnic area. No other buildings or structures have ever been located on the parcel. Sewer lines are present on this parcel and are shown on Figure 6-40-1.

Parcel 40 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 40, and specific data regarding potential chemical occurrence on the parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 186

Building 186 was constructed in approximately 1945. It was associated with the adjacent barracks (Building 4) but its historical function is unknown. The former walls of the building have been removed leaving the concrete floor, wooden frame, and built-up roof. The existing shelter covers the entire parcel (1,800 square feet). The northern half of the shelter is used for motorcycle parking. Picnic tables are present in the southern half of the shelter. The two halves are separated by a low wooden fence. Building 186 was built shortly after filling of the area was completed, so other, prior use of the parcel is unlikely.

Oil and gasoline stains from motorcycles were observed during the parcel site inspection. This staining occurs on a concrete surface, and is relatively minor staining associated with vehicle parking. A battery and equipment reportedly used for cleaning and repairing motorcycles were stored in the northern end of the picnic table area. The equipment consisted of a drum mounted on a frame that allowed it to be tilted. The drum was partially filled with a solution for cleaning motorcycles. Standing water with an oily sheen was observed in the motorcycle repair area.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 40 is contained within Parcel 41. Parcel 41 is currently used for enlisted barracks. No environmental concerns associated with Parcel 41 that could potentially impact Parcel 40 have been identified.

RCRA Sites

No RCRA sites are located on this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 40, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-40-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 40 because no buildings are present.

Once the data gaps in Table 6-40-1 are addressed, Parcel 40 may be leased or transferred, as appropriate.

TABLE 6-40-1

Summary of Data Gaps
NAS Alameda Parcel 40

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 40.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 40.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-40-1

Summary of Data Gaps
NAS Alameda Parcel 40

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, underground lines, and radiological concerns, must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-41

PARCEL 41 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 41 at NAS Alameda (Figure 6-41-1). The parcel, which is located in the north central portion of the base, is 15.6 acres in size and is roughly rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site (SWMU/GAP 6). No zone-wide or parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 41, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 41, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 42, 43, 44, 45, 64, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-41-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

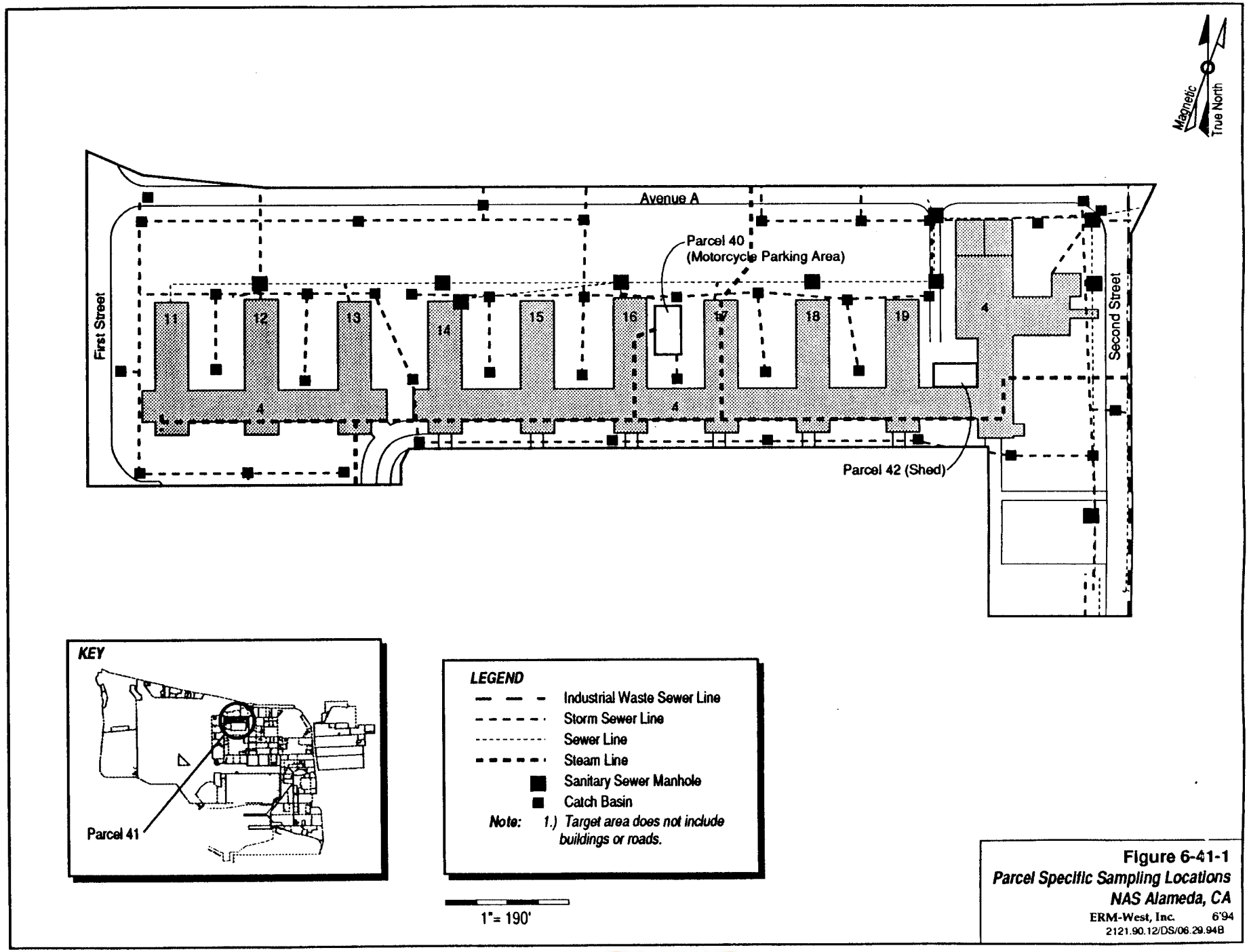


Figure 6-41-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 4) covers approximately 20 percent of Parcel 41. The remaining 80 percent is open space that is partially landscaped and partially paved. The parcel area is presently in use as enlisted personnel barracks and associated recreational open space. Building 185 was formerly located in the current parking area north of Wing 19. This building was constructed in the 1940s and was demolished in the early 1970s. The use of this former building is unknown. Sewer lines are present on this parcel and are shown on Figure 6-41-1.

Parcel 41 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 41 and specific data regarding potential chemical occurrence on the parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on the parcel will be addressed in other sampling programs and are not considered in this PEP. Lead-based paint and friable asbestos are concerns on Parcel 41. Past paint testing of samples from Building 4 has detected lead in paint at concentrations as high as 454 parts per million.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 4

Building 4 was constructed in approximately 1940 to serve as enlisted bachelor barracks. The building is divided into west and east wings. The west wing has three extensions to the north (11, 12, and 13) and the east wing has seven extensions to the north (14 through 20). The building includes a former gym in Wing 20 (the current enlisted club, the "Homeport Club") and areas used as barracks, offices, classrooms, and lounges. The building is generally in good condition. It is constructed of concrete with terrazzo floors and dropped ceilings. The floor plan covers a total of approximately 229,000 square feet on two floors. Building 4 was built shortly after filling of the area was completed.

Small quantities (total amount less than 1,000 gallons) of cleaning and maintenance chemicals are stored in lockers and janitorial closets throughout the building. Stored compounds observed during building inspection included paint, wax, furniture polish, glass cleaner, metal polish, floor cleaner, floor finish, floor sealer, bleach, pine oil, and carpet cleaner. An eye wash station is present in the lobby of Wing 19 of the building. The history and use of this station are not known.

Utilities located within and immediately surrounding Building 4 include underground sanitary sewer, storm sewer, industrial sewer, steam, water, and electrical lines. Concentrations of PCBs greater than 50 parts per million have been detected in several of the transformers located on the parcel.

No spills or staining are documented in Building 4. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 4.

Open Space I

Open Space I is defined as the paved areas surrounding Building 4. This space covers approximately 50 percent of the parcel open space. The ground surface of Open Space I is surfaced with asphalt. The pavement is generally in good condition. Oil stains from vehicles were observed in parking areas. This staining is minor. Building 185 was formerly located in the current parking area north of Wing 19. The building was constructed in the 1940s and was demolished in the early 1970s.

No other spills or staining are documented in Open Space I. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Open Space I.

Open Space II

Open Space II consists of the landscaped areas on the parcel. These areas are planted with grass, shrubs, and trees and cover approximately 50 percent of the parcel open space. Two hazardous materials storage containers (one small locker and one CONEX box) are located on the grass area outside of Wing 13. Paint, gasoline, and other hazardous materials are stored in these lockers. Small scattered paint stains are present on the paved area in front of the lockers. This staining is minor and does not warrant sampling. The majority of the landscaped area of Open Space II has been continuously maintained since approximately 1940.

No other spills or staining are documented in Open Space II. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 40, a motorcycle parking area, and Parcel 42, a detached storage shed, are contained within Parcel 41. Parcel 41 is bounded by First Street, Avenue A, and Second Street to the west, north, and east, respectively. Immediately across these streets or abutting the south side of Parcel 41 are Parcels 43, 191, 192, 37, 38, 60, 61, 63, 64, 45, 44, and 43. Facilities on these parcels include athletic fields, a pool, additional barracks, a mess hall, two hangars, an aviation fuel loading area, and a pavement maintenance equipment shed. Environmental concerns associated with parcels to the west and northwest include the maintenance hangars on Parcels 191 and 192, fuel loading on Parcel 37, and pavement maintenance on Parcel 38.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/GAP 6). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the RCRA site at this parcel does not require sampling because the location of the site could not be determined based on available records and EBS information. SWMU/GAP 6 is comprised of one-gallon containers of waste solvents, and is located in Building 4.

Anecdotal information indicates that SWMU/GII-4 may also be present on Parcel 41. No other indication that SWMU/GII-4 exists on this parcel was found in either the EBS or during the site inspections. It is not clear whether these designations (GII-4 and GAP 6) refer to the same site or different sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 41, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-41-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 41 because no industrial buildings are present.

As noted earlier, Parcel 41 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed.

Once the data gaps in Table 6-41-1 are addressed, Parcel 41 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

TABLE 6-41-1

Summary of Data Gaps
NAS Alameda Parcel 41

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 41.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 41.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program. Lead has been detected in paint from Building 4 at concentrations up to 454 ppm.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-41-1

Summary of Data Gaps
NAS Alameda Parcel 41

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, steam, water, and abandoned electrical lines identified on or near Parcel 41.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-42

PARCEL 42 EVALUATION PLAN

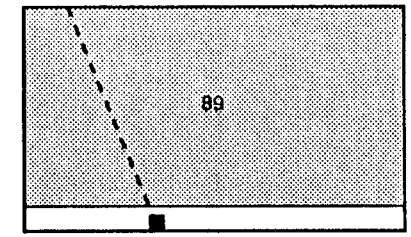
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 42 at NAS Alameda (Figure 6-42-1). The parcel, which is located in the north central portion of the base, is 1,500 square feet in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 42, historical activities are discussed below.

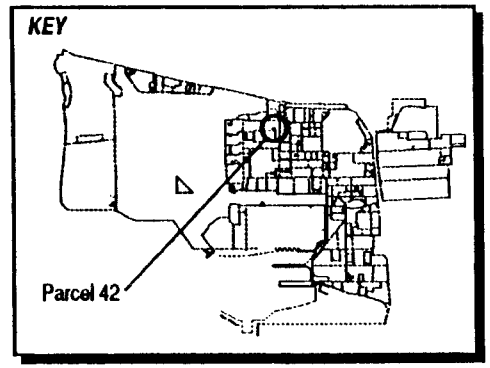
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 42, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 43, 44, 45, 64, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.





LEGEND

- Storm Sewer Line
- Catch Basin

Note: No Screening-Level Sampling Recommended For This Parcel.

1" = 30'

Magnetic
True North

Figure 6-42-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1938; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 89) covers approximately 90 percent of the parcel. The remaining 10 percent is open space. The parcel area is presently in use as an open detached garage, storage area, and associated alleyway. No other buildings or structures are documented to have been formerly located on the parcel. Sewer lines are present on this parcel and are shown on Figure 6-42-1.

Parcel 42 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 42, and specific data regarding potential chemical occurrence on the parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 89

Building 89 was constructed in approximately 1938. It was associated with the adjacent barracks (Building 4) but its specific historical function is unknown. It currently serves as an open detached garage and storage area. The building is constructed with an asphalt floor and a steel frame with a metal roof and corrugated metal siding. Siding on the former north wall has been removed to permit vehicle parking within the building. The asphalt floor is in poor condition. The existing garage covers 90 percent of the parcel. The garage contains five parking stalls, two of which are currently used for parking. Oil stains from vehicles were observed in the parking stalls. This staining is minor. The westernmost stall is gated and locked. It is marked "Marine Storage Area" and contains chairs, tables, ladders, and a container with approximately one gallon of liquid (suspected to be gasoline).

Open Space

An unused asphalt-paved alley exists on the parcel between the south side of Building 89 and the north side of Building 4 (Parcel 41), and takes up approximately 10 percent of the parcel. No spills or staining were noted in this area.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 42 is contained within Parcel 41. Parcel 41 is currently used as enlisted personnel barracks. No environmental concerns associated with Parcel 41 that could potentially impact Parcel 42 have been identified.

RCRA Sites

No RCRA sites are located on this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 42, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-42-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

TABLE 6-42-1

Summary of Data Gaps
NAS Alameda Parcel 42

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 42.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 42.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-42-1

Summary of Data Gaps
NAS Alameda Parcel 42

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

No Industrial Hygiene (IH) sampling is required for Parcel 42 because no industrial buildings are present.

Once the data gaps in Table 6-42-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 42 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be leased or transferred.

SECTION 6-43

PARCEL 43 EVALUATION PLAN

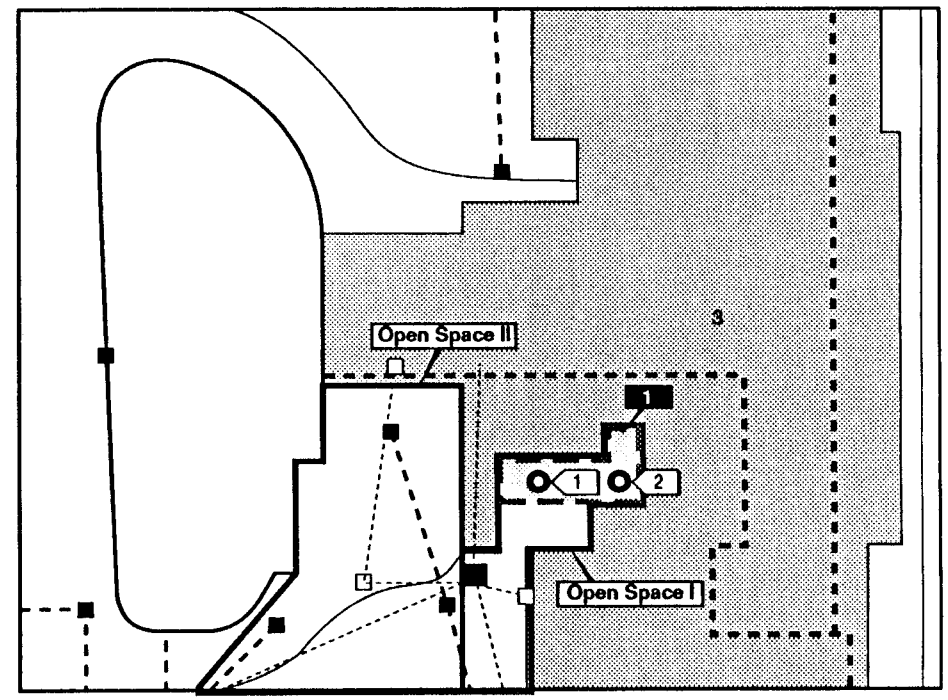
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 43 at NAS Alameda (Figure 6-43-1). The parcel, which is located in the north central portion of the base, is 2.4 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling is the sampling procedure called for in the screening-level investigation in this area. Table 6-43-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 43, historical activities are discussed below.

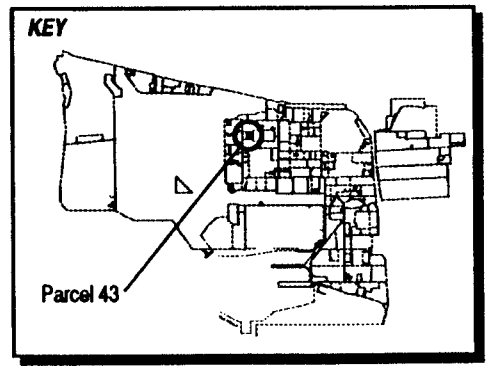
Background and Historical Activities

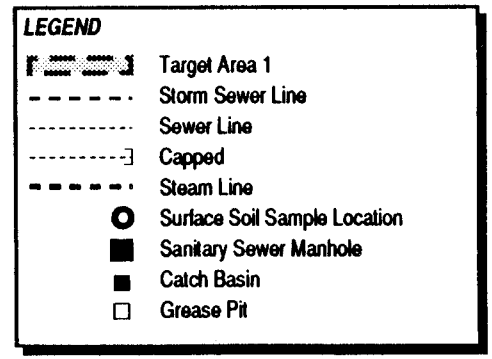
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 43, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 42, 44, 45, 64, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future







1"= 90'

Magnetic
True North

Figure 6-43-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

TABLE 6-43-1

Summary of Recommended Samples
NAS Alameda Parcel 43

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
43-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
43-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
43-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

Filling began in the area covered by this parcel in approximately 1940. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 3) covers approximately 55 percent of the parcel. The remaining 45 percent is open space. The parcel area is presently in use as Enlisted Personnel Barracks and supporting grounds and services. The barracks were constructed shortly after the parcel was filled. No other buildings are documented to have been located at this parcel. Sewer lines are present on this parcel and are shown on Figure 6-43-1.

Parcel 43 is located approximately 300 feet north of an Installation Restoration (IR) Program site (IR Site 5 - Building 5). No previous investigations have been conducted at Parcel 43, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 3

Building 3 was constructed in 1940 and has always served as Enlisted Personnel Barracks (Figure 6-45-1). This building covers approximately 55,000 square feet and is in fair condition. Building 3 is a multi-story building constructed of concrete, with a concrete and tile floor, and a built-up roof.

Utilities located within and immediately surrounding Building 3 include underground natural gas, sanitary sewer, storm sewer, steam, water, and electrical lines. Eleven transformers are documented to be present in Building 3, and staining was noted in the transformer room. This building also contains a mess hall and a laundry.

Latex paint, floor polish, bleach, chlorinated detergents and urinal cakes were documented to be stored in Building 3 during visual

inspections. Less than 100 total gallons of these chemicals are documented to be stored in the corrosive materials lockers in the upper level storeroom and the lower level laundry room. Approximately 300 gallons of non-halogenated organics, corrosives, and petroleum products are also documented to be stored in Building 3. This inventory was obtained by reviewing the authorized use list for Building 3. The authorized use list gives maximum quantities that can be stored in or used at a building over the course of a year. These chemicals were not noted during the site inspection, and no staining was noted in the chemical storage areas.

Pesticides (DURSBAN 2E [2 gallons], FICAM W [3 boxes], DRIONE [one pound], TALON G [30 pounds], and PT-515 [24 cans]) were stored and used in Building 3 from October 1992 to October 1993. Weekly applications in the building were intended to combat insect problems.

One floor drain was noted in the area of the hazardous materials room. A watery substance was visible within the drain. The outfall of this drain is unknown. A storeroom on the west side of the galley was apparently used as a chemical supply room. Visual inspections indicate that concrete pads and berms in the room had areas of deteriorated concrete, which may indicate spillage of materials onto the concrete. No staining was noted in this area.

Peeling paint was noted in the storerooms adjacent to the galley. Potential ACM pipe lagging was also recorded in the Boiler Room. No incidents are documented to have occurred within Building 3.

Open Space I

Open Space I is defined as the rear kitchen area. This space takes up approximately five percent of the parcel (Figure 6-43-1). Open Space I houses a grease pit. The ground surface of Open Space I is 90 percent paved and 10 percent unpaved. The paved area is completely surfaced with concrete and is in fair condition. Grass covers the ground surface of the unpaved area.

Utilities located within and immediately surrounding Open Space I (as well as Open Spaces II and III) include underground natural gas, sanitary sewer, storm sewer, steam, water, and electrical lines.

Structures located within the open space include two empty grease pits. One is a 20 feet by 5 feet by 5 feet (deep) structure and is equipped with eight steel lift plates for access. The other, smaller grease pit is located to the west in Open Space II. The grease pits are part of the sanitary

sewer system. There is no documentation of chemical storage in these areas.

Spills of grease and oils (possibly from cooking) were documented to cover a concrete area of five feet by ten feet in Open Space I. An additional oil spill left a ten foot square mark on the concrete around a sewer clean-out inlet. A 20 foot by 20 foot area of Open Space I is covered with a moderate concentration of paint stains. One isolated paint stain (5 feet by 5 feet) is also located in this part of the parcel. These areas are addressed by Target Area 1.

No other incidents are documented to have occurred within Open Spaces I, II, or III.

Open Space II

Open Space II is defined as the loading dock area. This space takes up approximately ten percent of the parcel (Figure 6-43-1). Open Space II is used as the loading dock for Building 3. The ground surface of Open Space II is completely paved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is surfaced with concrete. The pavement is in fair condition.

EBS information indicates that activities conducted within this open space include loading, vehicle parking, and trash disposal in dumpsters. Surface runoff from the loading docks falls to the surface drains in Open Space II. Only minor vehicle staining was noted in this area.

Open Space III

Open Space III is defined by the area surrounding the buildings on this parcel. This space takes up approximately 30 percent of the parcel.

EBS information indicates that Open Space III is used for vehicle parking and landscaped areas. The ground surface of Open Space III is a combination of concrete sidewalks, asphalt roadways, and grassy areas. There are storm drains scattered throughout the area. The only staining in this area is that typical of vehicle parking stains.

Underground Storage Tanks

One underground storage tank (UST) is documented as potentially existing on this parcel. No other information is available regarding this tank.

Parcel Boundary Conditions

Parcel 43 is bounded by Parcels 41, 44, 45, 187, and 191. Activities of concern on these adjacent parcels include aircraft washdown and fueling on Parcel 191.

If the results of any sampling proposed for Parcels 41, 44, 45, 187, or 191 indicates that activities on these parcels may have impacted Parcel 43, then additional sampling on Parcel 43 may be appropriate.

RCRA Sites

No RCRA sites are located on this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 43, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-43-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 43 because no industrial buildings are present.

As noted earlier, Parcel 43 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for

TABLE 6-43-2

Summary of Data Gaps
NAS Alameda Parcel 43

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 43.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 300 feet south of Parcel 43. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space I).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One underground storage tank (UST) is documented as potentially existing on this parcel. No other information is available regarding this tank.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-43-2

Summary of Data Gaps
NAS Alameda Parcel 43

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

pesticides. Therefore, no pesticide sampling has been proposed on this parcel.

Once the data gaps in Table 6-43-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 43 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. This subsection of the PEP discusses the specific parcel target area. The nature and locations of the parcel-specific target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Parcel 43 Target Area 1 (Open Space I): Staining in Open Space I may indicate impacted surface soils in the vicinity of the oily staining. The potentially impacted area covers less than a total of 1,000 square feet. Two surface soil samples will be taken in the most heavily stained areas of Open Space I. TPH is the chemical of concern in this target area. Samples to be collected in this target area are listed in Table 6-43-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-43-1 summarizes screening-level sampling and analysis for the target area on the parcel. Two parcel-specific surface soil samples will be collected from the locations shown on Figure 6-43-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Surface soil sampling locations shown on Figure 6-43-1 are approximate.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-44

PARCEL 44 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 44 at NAS Alameda (Figure 6-44-1). The parcel, which is located in the north central portion of the base, is approximately seven acres in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide or parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 44, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 44, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 42, 43, 45, 64, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

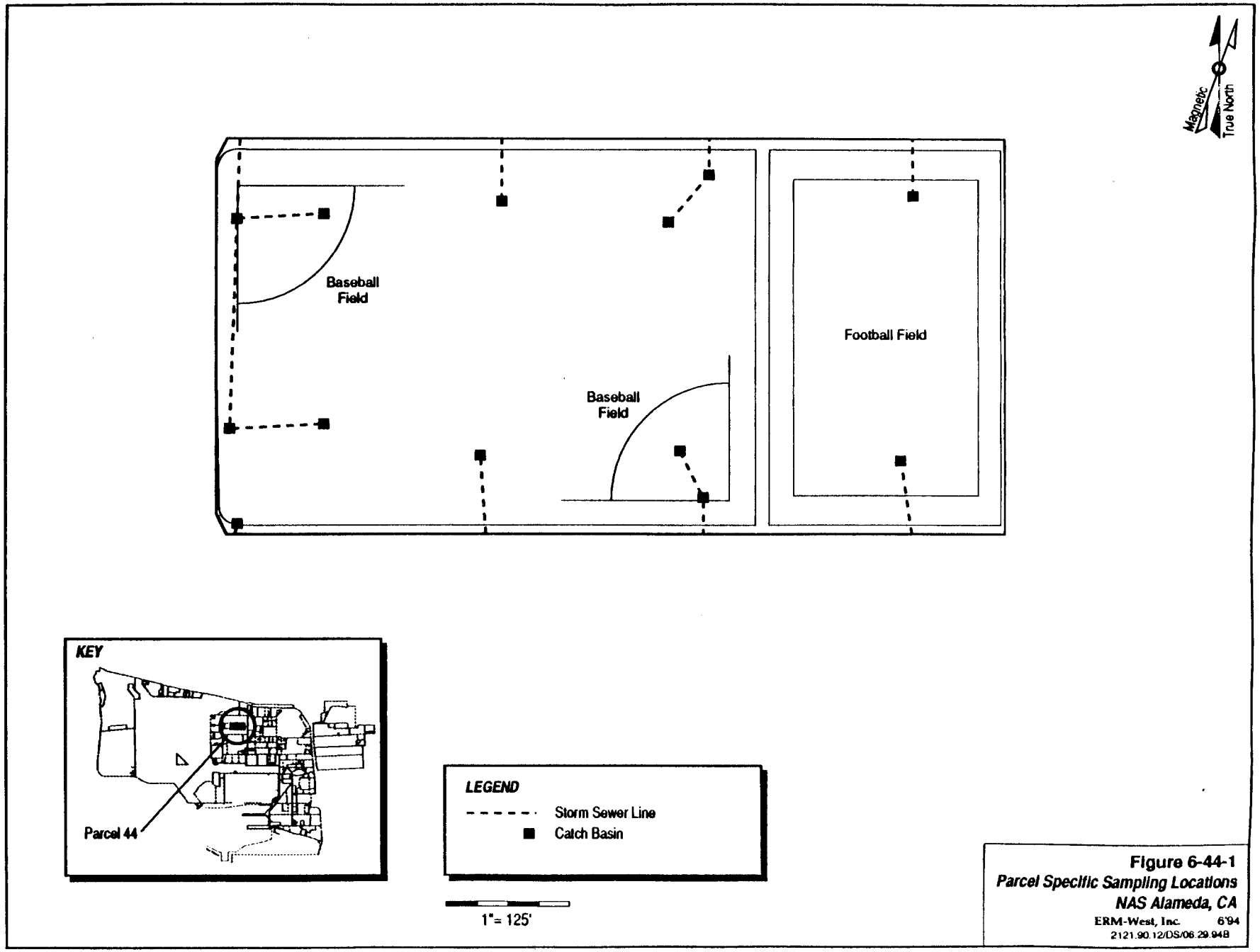


Figure 6-44-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.12/DS/06.29.94B

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, no buildings are present on Parcel 44. It is an open landscaped area used primarily as athletic fields. Historically, small temporary structures associated with the athletic fields (believed to include bleachers, dugouts, and sheds) have existed on the parcel. Storm sewer lines on the parcel are shown in Figure 6-44-1.

Parcel 44 is located 200 feet north of an Installation Restoration (IR) Program site (IR Site 5 - Building 5). No previous investigations have been conducted at Parcel 44, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

Open space covers all of Parcel 44. The parcel has been used for Navy recreational sports and training exercises since the early 1940s. The open space is bordered by concrete sidewalks. A north-south sidewalk separates the space into a large western section and a smaller eastern section. Grass and landscaping cover approximately 95 percent of the parcel.

Currently, two baseball fields are located in the northwest and southeast corners of the western section of the open space. The baseball fields were constructed in approximately 1990 and 1981, respectively. The western space was originally configured as a football field (Michael Field) surrounded by a track. The eastern section of the parcel is currently laid out as a football field. Historically, additional baseball fields have existed in different configurations on both sections of the parcel.

No structures or buildings are currently present on this parcel.

Utilities located within the parcel open space include storm sewer and sprinkler system lines. No permits are known to have been issued for

processes occurring within this open space. The landscaped area of this parcel has been continuously maintained since approximately 1940. No chemicals are known to have been used or stored in Parcel 44 open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 44 is bounded by enlisted barracks on Parcels 41 and 45 to the north and south, respectively. A mess hall associated with the barracks is present to the west on Parcel 43. Environmental concerns associated with Parcel 54 (IR Site 5 - Building 5) may have affected Parcel 44. This site is located 200 feet south of the parcel boundary across Parcel 45.

No parcels contiguous with Parcel 44 are IR sites, therefore, no sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at IR site 5 reveals a cause for concern at Parcel 44, then additional sampling on Parcel 44 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 44, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-44-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration sites. Sampling and imaging associated

TABLE 6-44-1

Summary of Data Gaps
NAS Alameda Parcel 44

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• No ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 44.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 200 feet south of Parcel 43. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-44-1

Summary of Data Gaps
NAS Alameda Parcel 44

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 44 because no buildings are present.

As noted earlier, Parcel 44 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed.

Once the data gaps in Table 6-44-1 are addressed, Parcel 44 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to underground lines, radiological issues, and impacts of the nearby IR site must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-45

PARCEL 45 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 45 at NAS Alameda (Figure 6-45-1). The parcel, which is located in the north-central portion of the base, is 11.2 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. Two parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling and subsurface soil sampling will be used to accomplish the screening-level investigation. Table 6-45-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 45, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 45, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 42, 43, 44, 64, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future

TABLE 6-45-1

Summary of Recommended Samples
NAS Alameda Parcel 45

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
45-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	EPA 8240
45-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	EPA 8240
45-2-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
45-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
45-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
45-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Fuels	VOCs, TPH	EPA 8240, Mod. EPA 8015
45-3-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	Solvents, Fuels	VOCs, TPH	CLP RAS, Mod. EPA 8015
45-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
45-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Fuels	VOCs, TPH	EPA 8240, Mod. EPA 8015
45-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Fuels	VOCs, TPH	EPA 8240, Mod. EPA 8015
45-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, Fuels	VOCs, TPH	EPA 8240, Mod. EPA 8015

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

Filling began in the western portion of this parcel in approximately 1940. Prior to this time, the parcel area was completely inundated by San Francisco Bay. This area was completely filled as of 1941. The eastern section of the parcel was filled between 1930 and 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 2) covers approximately 45 percent of the parcel. The remaining 55 percent is open space. The parcel area is presently in use as enlisted barracks and supporting facilities. Two buildings (Buildings 187 and 87) were formerly located on the parcel. These buildings were used for troop housing and as a laundry, and were built in 1945 and 1942, respectively. They were demolished between 1985 and 1990. Sewer lines are present on this parcel and are shown on Figure 6-45-1.

Parcel 45 is located adjacent to Installation Restoration (IR) Program Site 5 (Building 5). No previous investigations have been conducted at Parcel 45, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concern, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 2

Building 2 was constructed prior to 1947 and has always served as enlisted personnel barracks (Figure 6-45-1). Building 2 is a multi-story building constructed of concrete floors and walls. This building covers approximately 210,000 square feet and is in moderately good condition. The building is divided into wings (1 through 10). Building 2 contains a library, an exchange dry cleaning facility, and an instruction center. Utilities located within and immediately surrounding Building 2 include underground sanitary sewer, water, storm sewer, steam, electrical, and industrial sewer lines. One pad-mounted transformer is located near the mess hall. No staining was noted in the area of the transformer.

Pesticides were stored and used in Building 2 in 1992 through 1993. Weekly applications of the pesticides occurred during this time period. Less than 100 gallons of cleaning compounds and paints were observed in Wing 8. Less than 100 gallons total of various degreasers, spot removers, and solvents were observed in the dry cleaner/laundry storage room. No spills or staining was observed in the laundry storage area. An archived perchloroethane recovery machine is also located in the dry cleaner area. Some staining was present on the concrete below the machine. The dry cleaner/laundry is located in Wing 2 of Building 2. This area is addressed by Target Area 1. Other chemicals stored in Building 2 include gun cleaners, crime scene chemicals, used machine oil, and waste dry cleaning/laundry chemicals.

Paint splatters were observed in the sink in the deep sink rooms, suggesting that paint compounds were flushed down the sink. Waste perchloroethane and used dry cleaning filters are stored in two 55-gallon drums directly on the concrete floor. No staining was noted in this area.

The underground steam lines to this building have access covers and may have ACM insulation. Potential ACM was also observed in the boiler room on the pipes and boiler. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 2.

Open Space

The open space covers approximately 55 percent of the parcel. The open space is 50 percent paved and 50 percent unpaved. The paved area is surfaced with asphalt. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass. The open space is used for vehicle parking and recreation (landscaped areas).

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel (on Parcels 32 and 191), and industrial sewer lines. Several transformers and switch gears are located on the parcel. Some of these are oil-filled and pad-mounted. No staining is evident around the transformers. A sewage lift station is located on the east side of Wing 1 of Building 2. An aboveground storage tank is located next to the lift station. The tank is constructed of double-walled steel and is located within a bermed containment area.

One 55-gallon drum of motor oil (SAE-30) surrounded by sandbags (for containment) was observed north of Wing 1 of Building 2. Minor staining on the sandbags was evident near the pour spout. The motor oil is used in conjunction with a diesel storage tank and diesel generator. The diesel aboveground storage tank has a capacity of 75 gallons.

There is an air compressor with an apparent oil leak located outside the dry cleaner/laundry area, between Wings 1 and 2 of Building 2. The area under the compressor was observed to be heavily stained. A large, black stain was observed on the asphalt behind the laundry. A storm sewer cover is stained with blue and white paint. The asphalt surface of this area is in good condition. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

One underground storage tank was formerly present at this parcel (Tank 2-1). Tank 2-1 was located at the northeastern exterior of Wing 1 of Building 2. The installation date and removal date of the tank are unknown. This tank was used to store diesel and had a capacity of 500 gallons. The former presence of this tank was identified from the EBS. No information is available regarding the integrity of the tank.

Parcel Boundary Conditions

Parcel 45 is bounded by Parcels 32, 41, 43, 44, 46, 54, 59, and 191. Activities of concern on these adjacent parcels include aircraft washdown and fueling on Parcels 191 and 32, and aircraft rework on Parcel 54. If the results of any sampling proposed for any of these adjacent parcels indicates that activities on these parcels may have impacted Parcel 45, then additional sampling on Parcel 45 may be appropriate.

RCRA Sites

This subsection identifies RCRA sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel contains one RCRA site (site number SWMU/GAP 5). Site SWMU/GAP 5 is located at Building 2. It is unknown whether any chemicals have been released from this

site. Site SWMU/GAP 5 is comprised of two 55-gallon drums. The chemicals of concern associated with this site includes used perchloroethane sludge and used dry cleaner filter elements. This site is currently active.

SWMU/GAP 5 was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria this RCRA site does not require further investigation because no staining was noted, although investigation in the vicinity of the RCRA site (near the archived perchloroethane recovery unit) will occur.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 45, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-45-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 45 because no industrial buildings are present.

As noted earlier, Parcel 45 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed on this parcel.

Once the data gaps in Table 6-45-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 45 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-45-2

Summary of Data Gaps
NAS Alameda Parcel 45

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 45.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to Parcel 45. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 2). • Target Area 2 (Open Space).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-45-2

Summary of Data Gaps
NAS Alameda Parcel 45

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One UST (Tank 2-1) was formerly located at the northeastern exterior of Wing 1 of Building 2. No information is available regarding the integrity of the tank. This tank has been removed.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified on adjacent Parcels 32 and 191.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas. The nature and locations of the target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-45-2.

- Target Area 1 (Building 2): The soil beneath the perchloroethane recovery unit in Wing 2 of Building 2 may have been impacted by spills or leakage of VOCs contained in degreasers and chlorinated solvents stored in this area. This target area covers approximately 400 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this target area, and are listed in Table 6-45-1.

- Target Area 2 (Open Space): The open space between Wings 1 and 2 may have been impacted by improper disposal of degreasers and chlorinated solvents used in dry cleaning operations. The area under the air compressor in this vicinity is also a concern. This target area covers approximately 1,200 square feet and has been classified as having a potential likelihood of impacts. Two surface and four subsurface samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-45-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, impacts of the adjacent IR site, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-45-1 summarizes screening-level sampling and analysis for the target areas on Parcel 45. Two surface soil samples and six subsurface soil samples will be collected from the locations shown on Figure 6-45-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-64

PARCEL 64 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 64 at NAS Alameda (Figure 6-64-1). The parcel, which is located in the north central portion of the base, is seven acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide or parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 64, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 64, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 42, 43, 44, 45, 65, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

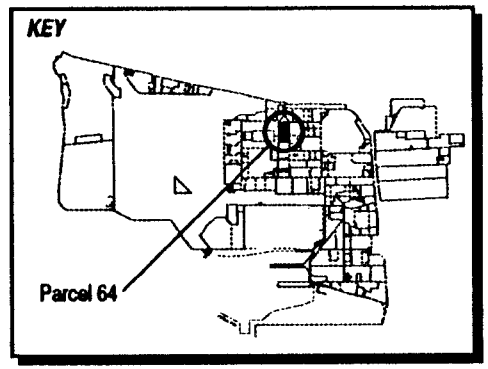
FIGURE 6-64-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



LEGEND

- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Steam Line
- Sanitary Sewer Manhole
- Catch Basin

Note: No Screening-Level Sampling Recommended For This Parcel

1"= 125'

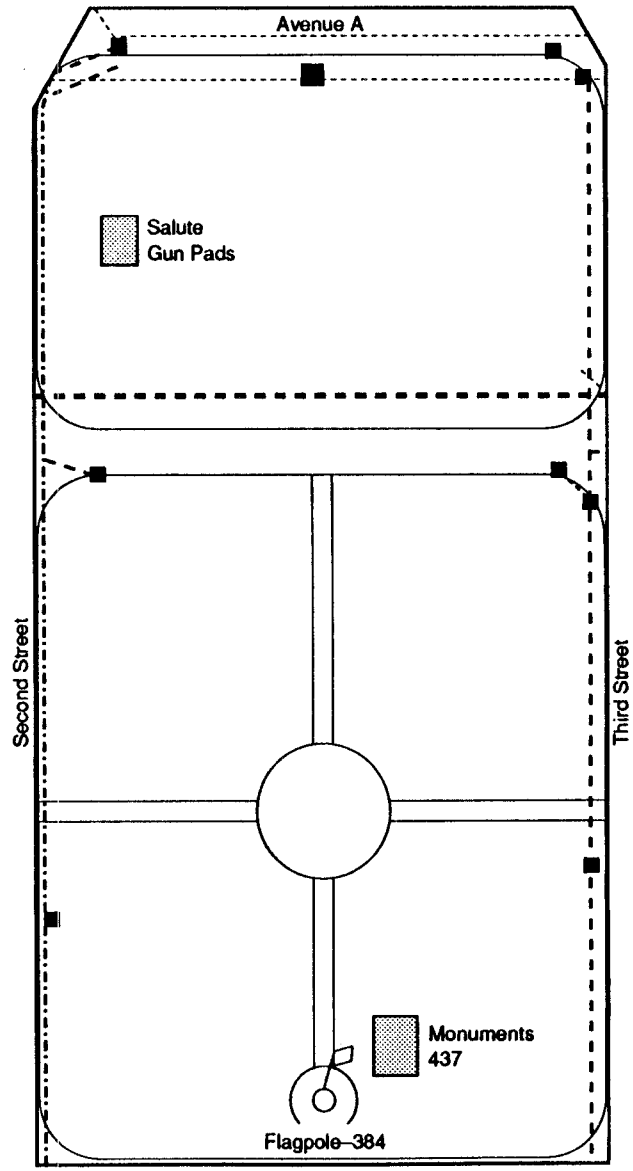


Figure 6-64-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within this parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, three structures (Structures 384, 437, and the salute gun pads) are located on the parcel. Structures 384 and 437 are the flag pole and the historic ship's bell with granite memorials, respectively. The parcel consists entirely of open space. No buildings or other structures were formerly located on the parcel. Storm, sanitary, and industrial waste sewer lines are present on the parcel and are shown on Figure 6-64-1.

Parcel 64 is located within 400 feet of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114, PWC Shop) and IR Site 5 (Parcel 54, Building 5). IR Site 8 and 5 are located to the southeast and southwest, respectively. No previous investigations have been conducted at Parcel 64, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

The parcel consists entirely of open space. The parcel has been used for Navy ceremonies and recreation. The open space is bordered and criss-crossed by concrete sidewalks. An asphalt-paved roadway crosses the space from east to west approximately 300 feet south of the northern border between Parcel 63 and Parcel 64. Grass and landscaping cover approximately 90 percent of the parcel.

Structures located within the open space include the flagpole (Structure 384, erected in approximately 1941), the historic ship's bell and granite memorials (Structure 437, erected in approximately 1956), and salute gun pads (structure number unknown, installed in approximately 1970). A small soccer field is marked off on the northern part of the open space in a 1993 aerial photograph.

No buildings have ever been constructed on Parcel 64. Utilities located within and immediately surrounding the open space include underground natural gas, sanitary sewer, storm sewer, industrial sewer, steam, water, and electrical lines. No permits are known to have been issued for any processes occurring within this open space. The landscaped area of this parcel has been continuously maintained since approximately 1940. No chemicals are documented to have been used or stored on Parcel 64.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 64 is bounded by streets on four sides. Across the streets are Parcels 91 (grassy open space area), 84 (chapel and theater), 16 (clinic), 65 (Building 1), and 45/41 (barracks). Two IR sites are located within 400 feet of Parcel 64, on Parcel 75 (IR Site 8, Building 114 - PWC Shops) and Parcel 54 (IR Site 5, Building 5). These sites are not contiguous with Parcel 64, therefore, no sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 64, then additional sampling on Parcel 64 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 64, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-64-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As

TABLE 6-64-1

Summary of Data Gaps
NAS Alameda Parcel 64

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 64.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located 400 feet southwest of Parcel 64. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor. • IR Site 8 (Building 114 - PWC Shops) is located 400 feet southeast of Parcel 64.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Natural gas, sanitary sewer, storm sewer, industrial sewer, water, and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-64-1

Summary of Data Gaps
NAS Alameda Parcel 64

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 64 because no buildings are present.

As noted earlier, Parcel 64 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed.

Once the data gaps in Table 6-64-1 are addressed, Parcel 64 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to lead-based paint, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-65

PARCEL 65 EVALUATION PLAN

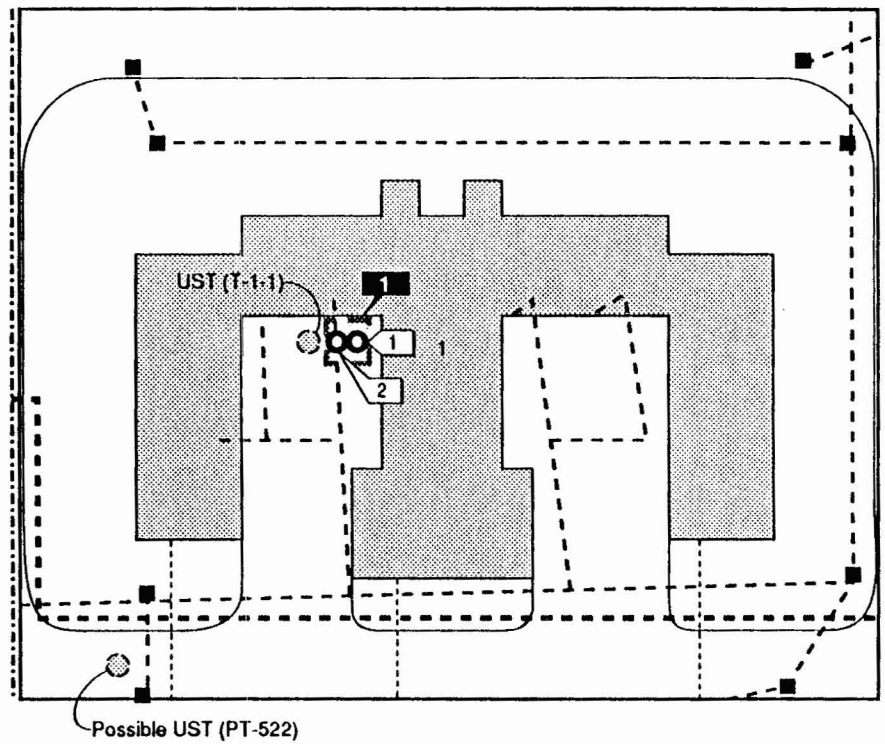
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 65 at NAS Alameda (Figure 6-65-1). The parcel, which is located in the central portion of the base, is 3.3 acres in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1. The parcel does not contain any RCRA sites. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be conducted in the screening-level investigation in this area. Table 6-65-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 65, historical activities are discussed below.

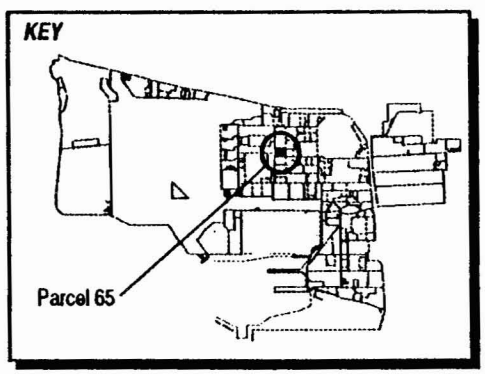
Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 65, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 42, 43, 44, 45, 64, and 187. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the





LEGEND

- Target Area 1
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Steam Line
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 90'

Magnetic
True North

Figure 6-65-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

TABLE 6-65-1

Summary of Recommended Samples
NAS Alameda Parcel 65

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
65-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
65-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
65-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, Building 1, the NAS Alameda Administration Building, covers approximately 25 percent of the parcel. The remainder (75 percent) is open space that is partially landscaped and partially paved. No other buildings or structures are documented to have formerly existed on this parcel. Storm, sanitary, and industrial waste sewer lines on and adjacent to the parcel are shown in Figure 6-65-1.

Parcel 65 is located within 125 feet of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114 - PWC Shop), which is located to the southeast, and within 250 feet of IR Site 5 (Parcel 54, Building 5), which is located to the southwest. No previous investigations have been conducted at Parcel 65, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on the parcel will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental and industrial hygiene concern within the parcel open space and building are described below.

Building 1

Building 1 was constructed in approximately 1940 to serve as the NAS Alameda Administration Building. The building currently houses offices for NAS Alameda and the Naval Aviation Depot. The building also includes a transmitter, a public telephone facility, a stand-by electrical generator, a former classified materials incinerator, and a former classified materials dehydrator room. In the dehydrator room documents were converted to a paper pulp that was then discharged to the sanitary sewer. Building 1 is constructed of concrete and is generally in good condition. The building has linoleum tile and terrazzo flooring, and sheetrock and tile ceilings. The floorplan covers a total of approximately 50,000 square feet on two floors. Building 1 was built shortly after this area was filled, and no other buildings are documented to have existed on this parcel.

Utilities located within and immediately surrounding Building 1 include underground sanitary sewer, storm sewer, industrial sewer, steam, water, and electrical lines. Records indicate that in 1986 at least eight transformers containing PCBs were removed from an area near the center of the building. A total of less than 25 gallons of chemicals, including cleaning compounds, and copier toner and dispersant, were observed in the restrooms and maintenance rooms of the building during the site inspection. A 1993 NAS Alameda chemical inventory noted that a maximum of 125 gallons of chemicals consisting of non-halogenated organic compounds and corrosives were stored at Building 1. The specific storage location was not noted.

Two stained areas were observed on the floor of the Building 1 emergency generator shed. The first was a 10-foot by 10-foot stain around the base of the generator that appeared to be oil or fuel from the generator. The other was a 3-foot by 3-foot stain around batteries next to the generator. These stained areas are addressed by Target Area 1. A 5-gallon can of Freon (dichlorofluoromethane) was also observed adjacent to the generator.

Open Space I

Open Space I is defined as the paved areas surrounding Building 1. This space takes up approximately 30 percent of the parcel open space. Open Space I includes asphalt roadways and parking areas, and concrete sidewalks. The pavement is generally in good to fair condition. Oil stains from vehicles were observed in parking areas. This staining is minor. Two potential fill ports and a possible vent pipe for a UST were observed during the site visit on the north end of the southwest parking area. This area is adjacent to the west side of the emergency generator shed and is likely to correspond with fuel tank T-1-1 identified in EBS records. No information was obtained during the site inspection on another possible UST (PT-522). Available UST maps locate this tank on the southwest corner of Parcel 65; however, the location provided by the map appears to be in the middle of Avenue C.

Open Space II

Open Space II consists of the landscaped areas on the parcel. These areas cover approximately 70 percent of the parcel open space and are planted with trees, shrubs, and grass. No particular concerns in this open space were noted during the site inspection. The majority of the landscaped area of Open Space II has been continuously maintained since approximately 1940.

Underground Storage Tanks

One active underground storage tank (Tank T-1-1) is present at this parcel. The presence of this tank was identified from the EBS. This tank was installed at an unknown date and is located in the northern part of the southwest parking area of Building 1 (see Figure 6-65-1). Two potential fill ports and a possible vent pipe for a UST were observed during the site visit on the north end of the southwest parking area. This area is adjacent to the west side of the emergency generator shed and likely to corresponds to Tank T-1-1 identified in EBS records. Based on the available information, Tank T-1-1 contains automotive gasoline and has a capacity of 500 gallons. This tank was tested and passed tightness tests in November 1991 and 1993.

One other underground storage tank may be present at this parcel. Available UST maps locate another tank (PT-522) on the southwest corner of Parcel 65; however, the location appears to be in the middle of Avenue C. No other information could be obtained during the EBS. The site inspection did not reveal evidence of this tank.

Parcel Boundary Conditions

Parcel 65 is bounded by streets on four sides. Across the streets are Parcels 45, 59, 64, 66, 75, 82, and 83. Environmental concerns associated with Parcel 75 (IR Site 8, Building 114 - PWC Shop) and Parcel 54 (IR Site 5 - Building 5) may have affected the environment at Parcel 65.

No sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 65, then additional sampling on Parcel 65 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 65, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being

reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-65-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 65 because no industrial buildings are present.

Once the data gaps in Table 6-65-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 65 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Generator Shed): Observed staining and storage of TPH in this area indicate past releases of TPH to the floor of this shed. Soil beneath the shed may also have been impacted. This target area covers less than 1,000 square feet and has been rated as having a potential likelihood of impacts. Two surface soil samples will be collected from this target area. The samples are shown on Figure 6-65-1 and listed in Table 6-65-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-65-1 summarizes screening-level sampling and analysis for the target area on Parcel 65. Two surface soil samples will be collected from the locations shown on Figure 6-65-1.

TABLE 6-65-2

Summary of Data Gaps
NAS Alameda Parcel 65

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 65.
Installation Restoration (IR) Sites	• Parcel 65 is located within 250 feet of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114 - PWC Shop) and within 250 feet of IR Site 5 (Parcel 54 - Building 5), located to the southeast and southwest, respectively. Additional subsurface investigation relative to these IR Sites is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Generator Shed).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-65-2

Summary of Data Gaps
NAS Alameda Parcel 65

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One active UST is present at this parcel (Tanks T-1-1). This tank was tested and passed for tightness in November 1991 and 1993. • One UST may be present at this parcel. Available UST maps locate another tank (PT-522) on the southwest corner of Parcel 65. No other information was available regarding this tank.
Underground Utilities	• Sanitary sewer, storm sewer, industrial sewer, water, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Sampling locations shown on Figure 6-65-1 are approximate.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-187

PARCEL 187 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 187 at NAS Alameda (Figure 6-187-1). The parcel, which is located in the north-central portion of the base, is less than an acre in size and is roughly oval in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1. No RCRA sites are located at this parcel. No zone-wide and one parcel-specific target investigation area (target area) has been identified on this parcel. Subsurface Geoprobe soil sampling is the sampling procedure called for in the screening-level investigation in this area. Table 6-187-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 187, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 187, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 40, 41, 42, 43, 44, 45, 64, and 65. This parcel zone has been designated the Enlisted Barracks Zone (Zone 9). The Enlisted Barracks Zone encompasses the parcels that have been used for housing and other residential facilities at NAS Alameda. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the

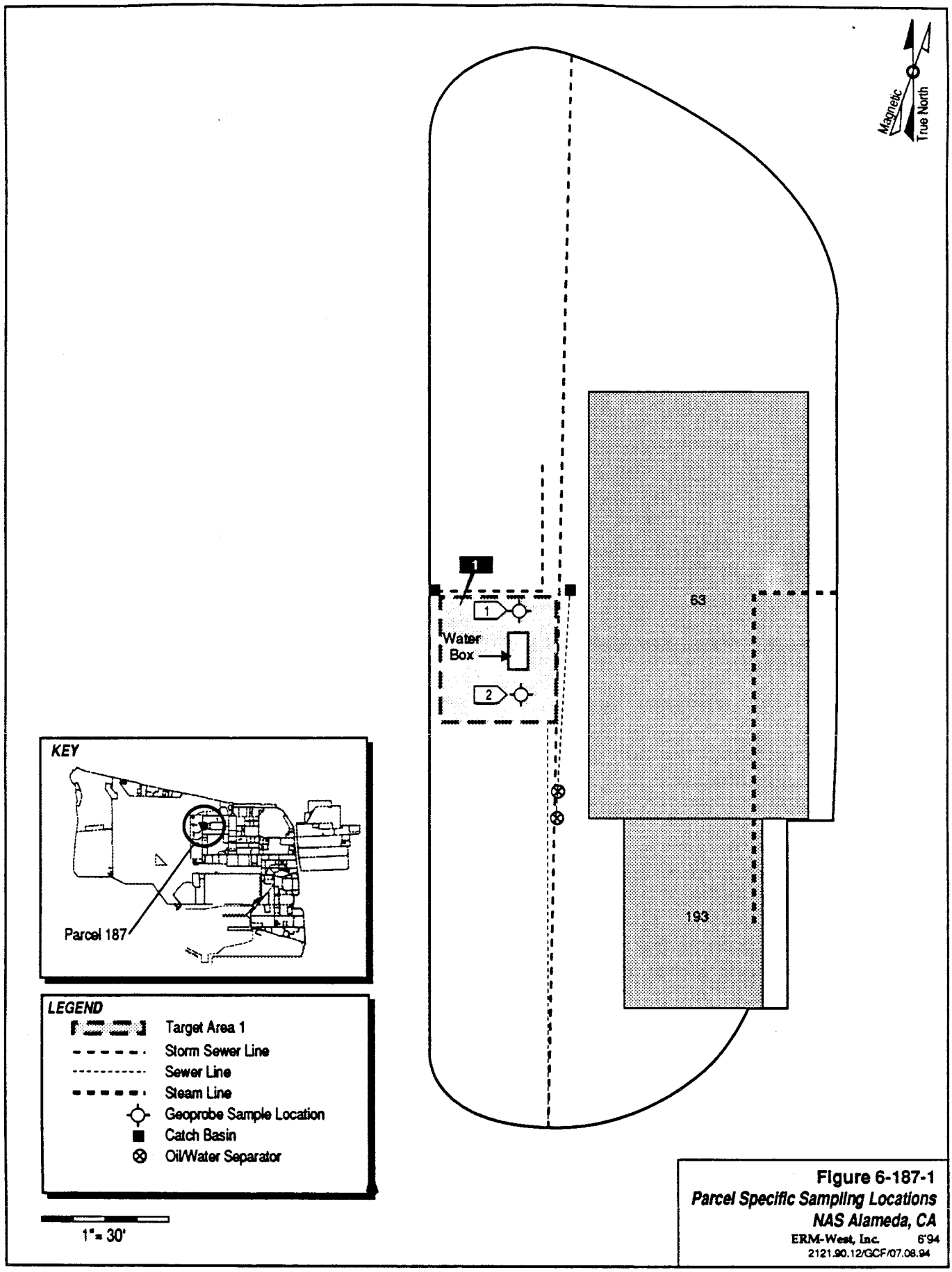


Figure 6-187-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

TABLE 6-187-1

Summary of Recommended Samples
NAS Alameda Parcel 187

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
187-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils, Paints	VOCs, TPH, SVOCs, Metals	EPA 8240, Modified EPA 8015, EPA 8270, ICAP Scan
187-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils, Paints	VOCs, TPH, SVOCs, Metals	EPA 8240, Modified EPA 8015, EPA 8270, ICAP Scan
187-2-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils, Paints	VOCs, SVOCs, Metals, TPH	CLP RAS, Modified EPA 8015

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 9.

Filling began in the area covered by this parcel in approximately 1940. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 63 and 193) cover approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel was formerly used for dry storage and administrative offices. No other buildings or structures were formerly located at this parcel. Sewer lines are present on this parcel and are shown on Figure 6-185-1.

Parcel 187 is located approximately 400 feet north of Installation Restoration (IR) Program Site 5 (Building 5). No previous investigations have been conducted at Parcel 187, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 63

Building 63 is currently used as a fire extinguisher service area by the Fire Department (Figure 6-187-1). There are also kitchen supply and dressing room areas near the mess hall. This building was formerly used as a bakery. This building covers approximately 5,100 square feet and is in fair condition. Building 63 has concrete floors and built up roofing. Utilities located within and immediately surrounding Building 63 include underground natural gas, sanitary sewer, storm sewer, steam, electrical, abandoned fuel, and industrial sewer lines.

Sodium chloride and phosphate (fire fighting agents) are documented to have been stored in the building. Approximately 650 pounds of these chemicals were stored in the building at the time of the site inspection. According to the authorized use list, up to 40,000 gallons of halogenated organics, non-halogenated organics, and corrosives may have been stored in the building in 1993. The authorized use list gives maximum quantities that may be stored in or used in a building over the course of a year. This does not mean that the given quantity has

been stored, but that the location given has the authority to store the amount given over a year's time. No significant chemical storage was noted during the site inspection. One drum of triplex powder, without containment, was observed during visual inspections of Building 63. One of the floor drains in this building was observed to be dirty at the time of the site inspection.

Dust was observed during the site inspection on many surfaces, as were leaks in the roofs and pipes. The exterior and interior surfaces of this building were observed to have excessive peeling paint. No spills or staining were noted during the site inspection. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 63.

Building 193

Building 193 is a wood frame building with a built up wood roof, drywall, and tile floor. It covers approximately 1,000 square feet and is in fair condition. The building has been used for bakery storage, as a typewriter repair room, and for fire department storage. Building 193 is currently empty. Utilities located within and immediately surrounding Building 193 include underground natural gas, sanitary sewer, storm sewer, steam, electrical, abandoned fuel, and industrial sewer lines.

Small quantities of cleaning supplies are stored in the building. No other chemical storage, staining or spills are documented to have occurred in Building 193.

Building 193 is not documented to have a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 193.

Open Space

The open space covers approximately 70 percent of the parcel. The ground surface of the open space consists of grass in a strip surrounding the buildings, and pavement over the rest of the open space. The parking facilities are surfaced with asphalt, while the rest of the paved area is concrete that serves as sidewalks. The pavement is in fair condition.

Utilities located within and immediately surrounding the open space include underground natural gas, sanitary sewer, storm sewer, steam, electrical, industrial sewer lines, and overhead electrical lines.

Structures located within the open space include a covered underground wooden vault (Figure 6-187-1) on the western portion of the parcel, immediately west of Building 63. This vault was observed to contain dirty liquid. The sides of the vault and interior were observed to be caked with dirt and possibly oil. The vault was identified by PWC as a "water box." This "water box" is addressed by Target Area 1. An oil/water separator is documented to be present near the southwest corner of Building 63.

No chemical use, storage or disposal is documented to have occurred in this area. No spills or staining has been documented in the open space, other than that related to vehicle parking. No incidents, such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 187 is surrounded by Parcel 43. If the results of any sampling proposed for Parcel 43 indicate that activities on Parcel 43 may have impacted Parcel 187, then additional sampling on Parcel 187 may be appropriate. First Street borders Parcel 187 to the west.

No parcels contiguous with Parcel 187 are IR sites; therefore, no sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the nearby IR site reveals a cause for concern at Parcel 187, then additional sampling on Parcel 187 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 187, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-187-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with nearby abandoned fuel and sewer lines are also addressed separately. Sampling associated with fuel and sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 187 because no industrial buildings are present.

As noted earlier, Parcel 187 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is proposed for this parcel.

Once the data gaps in Table 6-187-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 187 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. This subsection of the PEP discusses the specific parcel target area. The nature and locations of the target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

TABLE 6-187-2

Summary of Data Gaps
NAS Alameda Parcel 187

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 187.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located approximately 400 feet south Parcel 187. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-187-2

Summary of Data Gaps
NAS Alameda Parcel 187

Data Gap	Status/Description
Underground Utilities	• Natural gas, sanitary sewer, storm sewer, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

- Target Area 1 (Open Space): The immediate vicinity of the water box located west of Building 63 may have been impacted by unauthorized dumping into this hole in the ground. Compounds of concern immediately surrounding the water box include VOCs, metals, SVOCs, and TPH. This target area is classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected from the locations shown on Figure 6-187-1. The samples are listed in Table 6-187-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, and IR sites must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Subsurface Geoprobe soil sampling is the screening-level technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-187-1 summarizes screening-level sampling and analysis for the target area on the parcel. Two Geoprobe subsurface samples will be collected from the locations shown on Figure 6-187-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z10

ZONE 10 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 10 at NAS Alameda (Figure 6-Z10-1). Zone 10 has been designated the Building 5 Heavy Industrial Zone and encompasses Building 5 and the parcels that surround, support or are part of Building 5 activities. Zone 10 is comprised of Parcels 46, 47, 48, 49, 54, 55, 56, 57, 58, and 59. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and 16 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Figure 6-Z10-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. One of the parcels in this zone have been reclassified from BRAC Category 7. Parcel 54 has been reclassified to BRAC Category 6.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 10, historical activities are discussed below.

Zone 10 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 10 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-Z10-1

Summary of Recommended Samples
NAS Alameda Zone 10

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z10-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 10 Target Area 1	PCBs, Fuels, Oils, Creosote, Railroad Tie Tar	PCBs, TPH, SVOCs, Lead	EPA 8080, Modified EPA 8015, CLP RAS, ICAP SCAN

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 10, the Building 5 Heavy Industrial Zone, encompasses ten parcels that support, surround, or are part of activities that occur in Building 5. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 16 buildings and one structure cover approximately 40 percent of the zone. The remaining 60 percent is open space. The zone area is presently in use as a heavy industrial area. Five buildings were formerly located on the zone and have since been demolished.

Zone 10 contains one Installation Restoration (IR) Program site (IR Site 5 - Building 5). Previous investigations have been conducted at Zone 10, and specific data regarding chemical occurrence at this zone are available. Available information on previous and ongoing studies is presented in the appropriate PEP.

Underground fuel, steam, and sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 10 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

Five abandoned tanks are present at this zone (Tanks 5-A, 261-1, 261-2, 261-3, and 615-3). They are located on Parcels 54, 55, and 57. All five of these tanks are scheduled to be removed. The available information

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. Four of these tanks have been identified as RCRA tanks based on their inclusion in the RFI.

Four active tanks are present at this zone (Tanks 614-1, 615-1, 615-2, and 62-1). They are located on Parcels 49, 57, and 59. Based on the available information, these tanks are used for emergency spill control (2), diesel fuel storage (1), and for unknown material storage (1). Two of these tanks were installed in 1981. It is unknown when the other two tanks were installed. One of these tanks has been tested for tightness, and has tested tight. The two spill contol tanks have been identified as RCRA tanks based on their contents and inclusion in the RFI.

One additional tank exists on Parcel 54 (Tank 5A-1). No other information is available regarding this tank.

RCRA Sites

This zone includes 36 RCRA sites located on Parcels 49, 54, 55, and 57. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, of the 36 RCRA sites at this zone, five sites require further investigation. The tanks are being addressed as part of the UST program. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 10 is bounded by Zones 6, 9, 11, and 13. Activities of concern on these adjacent zone include aircraft maintenance, rework, fueling, and washdown on Zones 6 and 11, and light industrial activities including plating, vehicle maintenance and repair, and fuel storage on Zone 13.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and 16 parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-

wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 10 Target Areas

- Zone 10 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Building 5 Heavy Industrial Zone. Railroad tracks are located on Parcels 56 and 57 only. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having a potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the the track areas for a total of one surface soil sample for this zone target area. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target area is listed in Table 6-Z10-1, and shown on Figure 6-Z10-1.

  It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of the compounds of concern are negligible, then the railroad track zone target area may be eliminated in this zone and other zones. Alternately, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then sampling may be modified to analyze for the more limited suite of the compounds of concern, only.

Parcel 46, 47, 48, 56, and 59 Target Areas

No parcel-specific target areas were identified at these parcels.

Parcel 49 Target Areas

- Target Area 1 (Building 405): Target Area 1 includes the northern portion of Building 405, the open space area immediately north of the building, and the stained area adjacent to Building 405 in Open Space I. The soils in this area may have been impacted by the heavy

use of fuels, solvents, and lubricating oils in this area, as evidenced by the heavy staining. Specific areas of concern within the target area include the staining under the winch, in the interior and exterior of the building, in the trench near the winch, in the shop area proper, and adjacent to the ASTs that serve the shop. The compounds of concern are TPH, specifically lubrication oil, hydraulic fluid, and fuels, and VOCs. This target area covers approximately 4,000 square feet and is classified as having a potential likelihood of impacts. Six surface soil samples and eight subsurface Geoprobe soil samples will be collected in this target area.

- Target Area 2 (Open Space II): The soil beneath SWMU/GAP 11 may have been impacted by spills or leakage of used petroleum products, as evidenced by staining in this area. This target area covers approximately 400 square feet and has been classified as having a potential likelihood of impacts. Lubrication oil, hydraulic fluid, and diesel-range fuels are the compounds of concern in this target area. Two surface soil samples will be collected in this target area.

- Target Area 3 (Building 614 Open Space): The soil surrounding Building 614 may have been impacted by spills or leakage of petroleum products or paint-related hazardous materials associated with Building 614 and the historical use of the open space (i.e., aircraft storage). This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this target area.

Parcel 54 Target Areas

- Target Area 1 (Building 5A, Central Area): The aircraft maintenance line in the middle of Building 5A may have been impacted by former metal work shops located in this area, and by used and unused lubrication, hydraulic, and other petroleum-based oils used in this area. Extensive staining was noted in the area covered by this target area. This target area covers approximately 34,000 square feet and has been classified as having a potential likelihood of impacts. Four surface and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for TPH, SVOCs, and metals. The subsurface samples will be analyzed for these constituents as well as VOCs.

- Target Area 2 (Building 5, Southeast Area): The heat treat, pattern, metal manufacturing, foundry, rubber manufacturing, shot peen, and welding shops located in the southeast corner of the building

may have been impacted by the use of chemicals containing VOCs, SVOCs, metals, and TPH. Extensive staining was noted in the areas covered by Target Area 2. This target area covers approximately 43,000 square feet and has been classified as having a potential likelihood of impacts. Six surface and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for SVOCs, metals, and TPH. The subsurface samples will be analyzed for these constituents as well as VOCs.

- Target Area 3 (Building 5, Northeast Area): The rigging, CSD overhaul, and heavy metal work shops located in the northeast corner of the building may have been impacted by use of chemicals containing VOCs, SVOCs, metals, and TPH. Extensive staining was noted in the area covered by this target area. This target area covers approximately 37,000 square feet and has been classified as having a potential likelihood of impacts. Four surface soil and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for TPH, SVOCs, and metals. The subsurface samples will be analyzed for these constituents as well as VOCs.

- Target Area 4 (Building 5, North-Central Area): The small parts painting, inflight refueling, and landing gear shops located in the north-central area of the building may have been impacted by use of chemicals containing VOCs, SVOCs, metals, and TPH. This target area covers approximately 25,000 square feet and has been classified as having a potential likelihood of impacts. Two surface and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for TPH, SVOCs, and metals. The subsurface samples will be analyzed for these constituents as well as VOCs.

- Target Area 5 (Open Space I): The industrial wastewater treatment processes involving metal-contaminated water, reactives, VOCs, and SVOCs may have impacted the stained area in IWTP #5. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this area and analyzed for TPH, SVOCs, VOCs, Reactives, and metals.

- Target Area 6 (Open Space II): The soils beneath the stained area located southwest of the intersection of Second Street and Avenue D may have been impacted by fuels, oils, and metals. The pavement in Open Space II was noted by site inspectors to be in fair to poor condition. This target area covers approximately 6,000 square feet and has been classified as having a potential

likelihood of impacts. Three surface soil samples will be collected in this area and analyzed for TPH, SVOCs, and metals.

Parcel 55 Target Areas

- Target Area 1 (Building 261): The soil beneath the concrete bermed area of Building 261 may have been impacted by spills or leakage of petroleum products formerly stored in the building, as evidenced by a strong fuel odor noted by site inspectors in this area. The compounds of concern in this target area include petroleum-based fuels. This target area covers approximately 100 square feet and has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected from this target area and analyzed for petroleum hydrocarbons and VOCs.

Parcel 57 Target Areas

- Target Area 1 (Building 348): The target area is defined as Building 348, and covers approximately 5,100 square feet. The east and west side of the building interior have abandoned dip tanks, though no staining was noted in those areas. The pervasive use of methylene chloride in parts washing operations with the severely etched floor noted by site inspectors indicate a potential likelihood of impacts from TPH, VOCs, and metals to the soils below the foundation. Three surface and three subsurface soil samples will be collected in this target area.

- Target Area 2 (Building 415): The target area is defined by the edges of the enclosure since the staining is scattered, though the most stained area is the intended target area. Site inspectors noted a continuous release of some petroleum product in the drum storage area. The total stained area in this enclosure is less than 500 square feet. Flammables, petroleum products, solvents, oils, and lubricants have been stored in this building. There is a potential likelihood of impacts from TPH, metals, and VOCs to the soils under the foundation of the building, which is cracked in places. Three surface and three subsurface soil samples will be collected in this target area.

- Target Area 3 (North of Building 348): A petroleum-based stain and several stains noted on a dip tank and the surrounding ground surface on the roadway between Buildings 5 and 348 comprise this target area. The petroleum stain covers an area 20 feet by 15 feet. The entire target area covers less than 1,000 square feet. There is no information about the types of chemicals used near the dip tank.

Therefore, TPH, SVOCs, metals, and reactives have been identified as compounds of potential concern for the area near the dip tank. This target area has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected in this target area.

- Target Area 4 (South of Building 615): The target area is defined as the area south of Building 615 where chemicals being stored include flammables and petroleum products. The soils beneath this chemical storage area may have been impacted by the leakage apparent among the 30 and 55 gallon drums assembled in this area. This area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. TPH and VOCs are the compounds of concern in this area. Two surface and two subsurface soil samples will be collected in this target area.

- Target Area 5 (Grease Interceptor): The target area is the area surrounding the grease interceptor located on the north side of Avenue F, near the southeast corner of the parcel. This has been designated a target area because the runoff from Target Area 4 and the former hazardous waste site drains to this grease receptor, and green, sludge-like material was noted in this area at the time of the site inspection. TPH, VOCs, and metals are the compounds of concern. This target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this target area.

Parcel 58 Target Areas

- Target Area 1 (Open Space): The soil beneath the hazardous materials lockers in the southern portion of the open space may have been impacted by spills or leakage of VOCs, SVOCs, and petroleum compounds contained in solvents, oils, wood stains, adhesives, and thinner stored in these containers. This target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected in this target area.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation

phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14).

Table 6-Z10-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. A total of 42 surface soil and 40 subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-Z10-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-46

PARCEL 46 EVALUATION PLAN

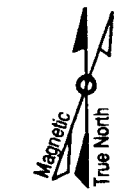
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 46 at NAS Alameda (Figure 6-46-1). The parcel, which is located in the central portion of the base, is approximately one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 46, historical activities are discussed below.

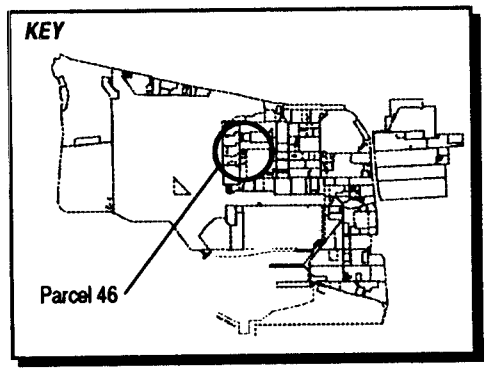
Background and Historical Activities

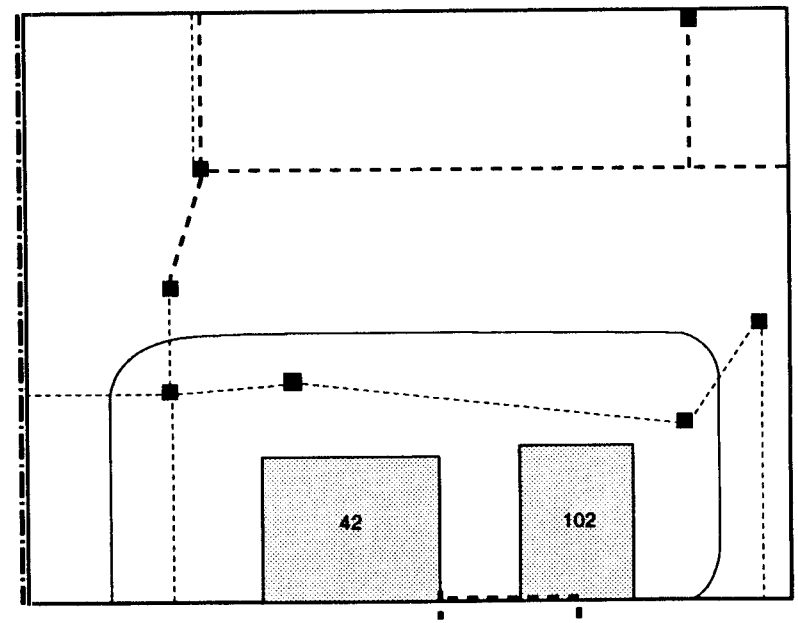
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 46, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other area of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 47, 48, 49, 54, 55, 56, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses Building 5 (Parcel 54) and the parcels that surround the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used as support facilities for Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the







LEGEND

- Abandoned Fuel Line (On Parcel 32)
- Steam Line
- Storm Sewer Line
- Sewer Line
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Figure 6-46-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/PAC/07.11.94

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 102 and 42) cover approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently used for laboratory and office buildings and supporting facilities. No other buildings or structures are documented to have formerly existed on Parcel 46. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-46-1. Abandoned fuel lines are present immediately west of the boundary of Parcel 46 with Parcel 32.

Parcel 46 is located adjacent to Installation Restoration (IR) Program Site 5 (Building 5). No previous investigations have been conducted at Parcel 46, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 42

Building 42 was constructed in 1941 and has been used as an engineering laboratory and for fuel testing (Figure 6-46-1). The building is currently used for electronics testing. Building 42 is constructed of concrete with a new tile floor over a concrete foundation and a drop ceiling. It covers approximately 3,000 square feet and is in moderately good condition. Utilities located within and immediately surrounding Building 42 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines.

No chemical storage, spills or staining have been documented in Building 42. Building 42 was recently equipped with a new heating-ventilation-air conditioning (HVAC) system. Several transformers are located in and near Building 42. Their PCB classifications are unknown and no staining was noted in their vicinities. No incidents

such as fires, mishaps, or flooding are documented to have occurred within Building 42.

Building 102

Building 102 was constructed in 1943 and has served as an ordnance storage area (Figure 6-46-1). This one-story building is in moderately good condition and covers approximately 2,000 square feet. It is presently being used as an office space for ordnance supply for the base, and has a small ammunition vault that is constructed completely of concrete. According to site personnel, all ordnance is imported and exported in packaged condition at NAS Alameda. The remainder of Building 102 is constructed of wood with a drop-tile ceiling. Utilities located within and immediately surrounding Building 102 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines.

Paint, nonhalogenated organic compounds, and petroleum products are documented to have been stored in Building 102. Approximately 50 gallons of these compounds are documented to have been stored in Building 102 in 1993. These chemicals were not seen during the site inspection, and no staining or spills have been documented in the building.

Site inspectors observed peeling paint on the inside of the building that may contain lead. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 102.

Open Space

The open space covers approximately 90 percent of the parcel. The open space is completely paved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is in good condition. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines.

Activities conducted within this open space include vehicle washdown and vehicle parking. The open space has typical staining associated with vehicle parking that does not warrant sampling at this time. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 46 is bounded by Parcels 32, 45, 47, and 54. Activities of concern on these adjacent parcels include aircraft maintenance, washdown, and rework on Parcel 32. Parcel 54 is an IR site (IR Site 5 - Building 5). First Street borders Parcel 46 to the west.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR site or the sampling proposed for Parcel 32 reveal a cause for concern at Parcel 46, then additional sampling on Parcel 46 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 46, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-46-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the

TABLE 6-46-1

Summary of Data Gaps
NAS Alameda Parcel 46

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to Parcel 46. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non IR) parcels identified, though abandoned fuel lines are present near the western parcel boundary.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-46-1

Summary of Data Gaps
NAS Alameda Parcel 46

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified near the western boundary of Parcel 46, on Parcel 32.
Other	• No evidence of other data gaps identified.

Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 42. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-46-1 are addressed, Parcel 46 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and the potential impacts of the adjacent IR site must be resolved before this parcel can be leased or transferred.

SECTION 6-47

PARCEL 47 EVALUATION PLAN

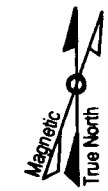
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 47 at NAS Alameda (Figure 6-47-1). The parcel, which is located in the central portion of the base, is 0.7 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 47, historical activities are discussed below.

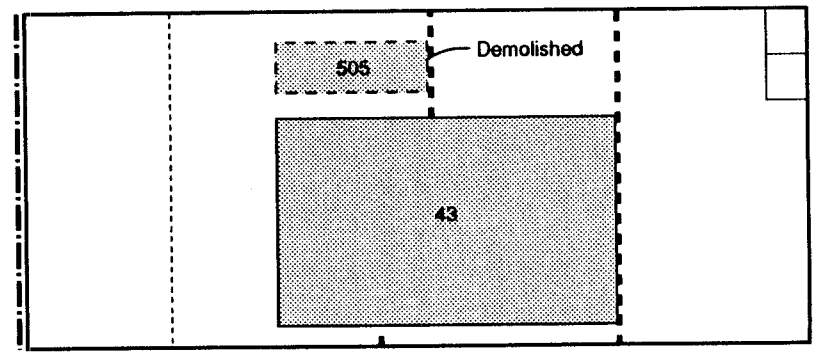
Background and Historical Activities

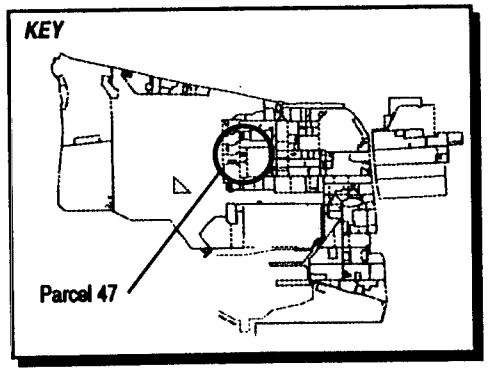
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 47, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 48, 49, 54, 55, 56, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone includes parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-







LEGEND

- Steam Line
- Abandoned Fuel Line (On Parcel 190)
- Sewer Line

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Figure 6-47-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/PAC/07.11.94

wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 43) and one structure (a storage shed) cover approximately 5 percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as recreation area and weapons shop facility. Building 505 formerly existed on this parcel. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-47-1. Abandoned fuel lines are present near the western boundary of Parcel 47, on Parcel 190.

Parcel 47 is located adjacent to an Installation Restoration (IR) Program site (IR Site 5 - Building 5). No previous investigations have been conducted at Parcel 47, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 43

Building 43 was constructed in 1941 and has served as an ammunition overhaul and rework shop (Figure 6-47-1). Building 43 is a two-story building, with concrete walls and floor, and a built-up roof. Building 43 covers approximately 10,000 square feet and is in fair condition. Utilities located within and immediately surrounding Building 43 include underground sanitary sewer, steam, water, electrical, and abandoned fuel lines. Four oil-filled transformers are located in and around Building 43.

The building is currently used for ordnance storage, a recreation area, training area, and office space. The building is shared by NAS weapons administration (east side of building), and explosive ordnance disposal (EOD) on the west side of the building. All ordnance is reportedly imported and exported in a packaged condition at NAS Alameda.

Solvents, waxes, polish, petroleum products, and cleaning agents are stored in Building 43 in cabinets and hazardous materials lockers. Approximately 20 gallons total of these substances were housed in hazardous materials lockers in the equipment room and immediately north of the building. No spills or staining is documented to have occurred in Building 43.

Building 43 is not documented to be equipped with a heating-ventilation-air conditioning (HVAC) system. Peeling paint was noted during the site inspection on the exterior walls of the building. No incidents such as fires, mishaps, or flooding are documented to have occurred within or immediately surrounding Building 43.

Open Space

The open space covers approximately 95 percent of the parcel. The ground surface of the open space is completely paved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is covered with concrete. The pavement is in good condition. The entire area is used for vehicle parking.

Structures located within the open space include a shed on the south side of Building 43. It formerly housed a generator; it is currently used as a smoking area. No staining was noted in the area of the former generator. Utilities located within and immediately surrounding this open space include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines.

There are no records of chemicals being stored or used in this area. Typical staining associated with vehicle parking was the only staining noted during the site inspection. This staining was minor, and does not warrant sampling at this time. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One inactive underground storage tank is present at this parcel (no record regarding the tank number for this tank is available). The tank installation date, capacity, and the material stored during use are unknown. The tank is reportedly located on the east side of this parcel. Investigation of this former tank has not been scheduled. The available information did not identify why the tank was abandoned. However, based on general comments made by NAS Alameda personnel, a tank was most commonly abandoned because it was leaking.

Parcel Boundary Conditions

Parcel 47 is bounded by Parcels 46, 190, 48, and 54. Parcel 54 is IR Site 5 (Building 5). Activities of concern on these adjacent parcels include aircraft maintenance and fueling on Parcel 190, and aircraft rework on Parcel 54. If the sampling proposed for Parcels 54 and 190 indicates that these activities may have impacted Parcel 47, then additional sampling on Parcel 46 may be appropriate. First Street borders Parcel 46 to the west.

No sampling is called for in this PEP in response to the nearby IR site (IR Site 5 - Building 5). If the continuing investigations at the IR site reveals a cause for concern at Parcel 47, then additional sampling on Parcel 47 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 47, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-47-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 47 because no industrial buildings are present.

TABLE 6-47-1

Summary of Data Gaps
NAS Alameda Parcel 47

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 47.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to Parcel 47. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified, though abandoned fuel lines exist near the western parcel boundary, on Parcel 190.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One inactive UST currently exists at Parcel 47. Future actions for this tank are unknown.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-47-1

Summary of Data Gaps
NAS Alameda Parcel 47

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified on a neighboring parcel.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-47-1 are addressed, Parcel 47 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, the impacts of the adjacent IR site, and USTs must be resolved before this parcel can be leased or transferred.

SECTION 6-48

PARCEL 48 EVALUATION PLAN

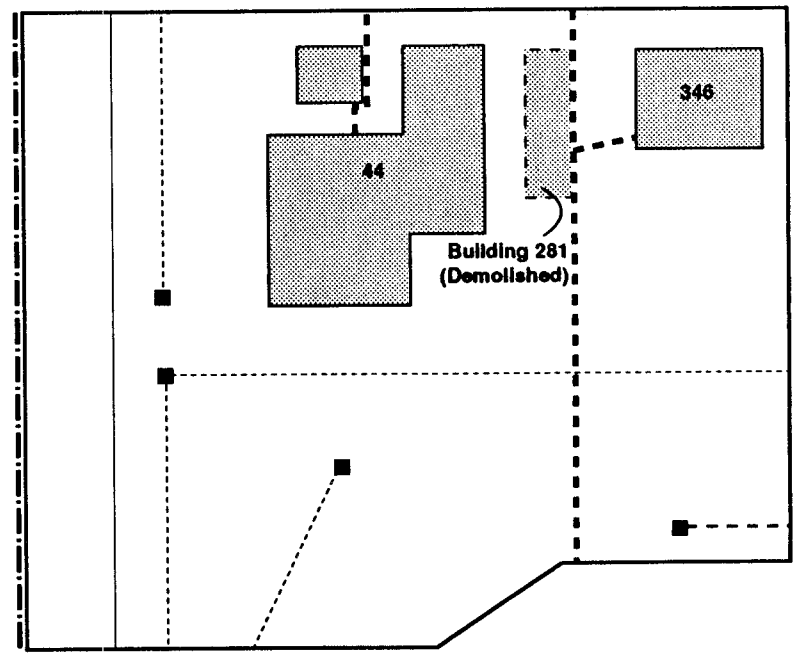
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 48 at NAS Alameda (Figure 6-48-1). The parcel, which is located in the central portion of the base, is approximately one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 48, historical activities are discussed below.

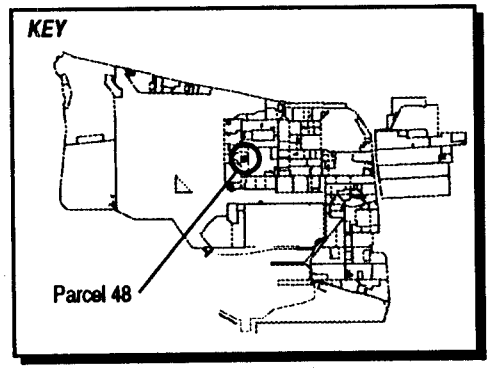
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 48, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 49, 54, 55, 56, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the





LEGEND

- Abandoned Fuel Line (on Parcel 190)
- Steam Line
- Storm Sewer Line
- Sewer Line
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Figure 6-48-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 346 and 44) cover approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel area is presently in use as an engineering lab, office building, and support facilities. Building 281 was formerly located on this parcel, and was used for paint and miscellaneous storage. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-48-1. Abandoned fuel lines are present near the western boundary of Parcel 48, on Parcel 190.

Parcel 48 shares its eastern border with Installation Restoration (IR) Program Site 5 (Building 5). No previous investigations have been conducted at Parcel 48, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 44

Building 44 was constructed in 1941 and is currently used as an administrative building (Figure 6-44-1). This one-story building is in fair condition and is scheduled to be abandoned. Building 44 is constructed of concrete with a wood roof and covers approximately 5,000 square feet. Utilities located within and immediately surrounding Building 44 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines.

Three one-gallon cans of roofing cement were observed on the roof during visual inspections. A sign was noted during the site inspection located on a wall near the southeast corner of Building 44. It read: "Caution Radiation Area." This part of the building had a test bench for aircraft dials and gauges. One dry-type transformer is also stored in the building. No staining was noted in Building 44.

No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 44. Potential radiological hazards may be of concern in Building 44.

Building 346

Building 346 was constructed in 1949 and has served as an administrative office, engineering laboratory, and is currently used to store furniture, supplies, and tools (Figure 6-48-1). This building covers approximately 1,200 square feet and is in moderately good condition. Building 346 is a Quonset hut structure. Utilities located within and immediately surrounding Building 346 include underground sanitary sewer, storm sewer, steam, water, and electrical lines.

A hazardous materials locker containing adhesives and spray paint (approximately ten gallons total) was documented in Building 346 during the site inspection. No other chemical storage was noted, and no spills or staining are documented to have occurred in Building 346.

Peeling paint was noted on the interior walls of the building during the site inspection. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 346.

Open Space

The open space covers approximately 85 percent of the parcel. The open space is entirely paved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is paved with concrete. The pavement is in good condition. This open space is primarily used for vehicle parking, solid waste disposal, and a concrete entrance apron for Building 5. No buildings or structures are documented to have been formerly located in this open space.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel (on Parcel 190), and industrial sewer lines (on Parcel 49). Three transformers known to contain PCBs and up to seven other oil-filled switches and transformers are located between Buildings 43 and 44. The steam lines servicing Buildings 44 and 346 were noted to potentially be insulated with ACM.

There is no available documentation regarding chemical use, storage, or disposal in the open space. No spills are documented to have occurred in the open space. Staining noted during the site inspection

appears to be limited to scattered releases associated with vehicle parking that do not warrant sampling at this time. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 47 is bounded by Parcels 47, 190, 49, and 54. Parcel 54 is IR Site 5 (Building 5). Activities of concern on these adjacent parcels include aircraft maintenance and fueling on Parcel 190, and aircraft rework on Parcel 54. First Street borders Parcel 48 to the west.

No sampling is called for in this PEP in response to the nearby IR site or the activities on Parcel 190. If the continuing investigations at the IR site or Parcel 190 reveal a cause for concern at Parcel 48, then additional sampling on Parcel 48 may be appropriate

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 48, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-48-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground

TABLE 6-48-1

Summary of Data Gaps
NAS Alameda Parcel 48

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings are present on Parcel 48.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to Parcel 48. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified, though abandoned fuel lines exist near the western parcel boundary, on Parcel 190.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program, and may be of concern in Building 44.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-48-1

Summary of Data Gaps
NAS Alameda Parcel 48

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified near the western parcel boundary, on Parcel 190.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

fuel lines (on Parcel 190) and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 48 because no industrial buildings are present.

Once the data gaps in Table 6-48-1 are addressed, Parcel 48 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and the impacts of the adjacent IR site must be resolved before this parcel can be leased or transferred. Radiological concerns are also of concern in Building 44, and will be addressed as part of the basewide radiological survey.

SECTION 6-49

PARCEL 49 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 49 at NAS Alameda (Figure 6-49-1). The parcel, which is located in the central portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains three RCRA sites. Three parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-49-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 49, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 49, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 54, 55, 56, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many

TABLE 6-49-1

Summary of Recommended Samples
NAS Alameda Parcel 49

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
49-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Lube oil	TPH, SVOCs	Modified EPA 8015, CLP RAS
49-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Lube oil	TPH, SVOCs	Modified EPA 8015, CLP RAS
49-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Lube oil	TPH, SVOCs	Modified EPA 8015, CLP RAS
49-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Lube oil	TPH, SVOCs	Modified EPA 8015, CLP RAS
49-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Lube oil	TPH, SVOCs	Modified EPA 8015, CLP RAS
49-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Lube oil	TPH, SVOCs	Modified EPA 8015, CLP RAS
49-7-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-8-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-9-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-10-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-11-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-12-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-13-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-14-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	TPH, VOCs, SVOCs	Modified EPA 8015, CLP RAS
49-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Lube oil	TPH	Modified EPA 8015
49-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Lube oil	TPH	Modified EPA 8015
49-17-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS, ICAP SCAN
49-18-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS, ICAP SCAN

of the parcels surrounding Parcel 54 are used for support facilities for Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Building 614 and 405) cover approximately five percent of the parcel. The remaining 95 percent is open space. A blast fence is present south and west of Building 405. The parcel area is presently in use for airport maintenance support activities and paint storage. Available documents do not indicate that any buildings or structures were formerly located on this parcel. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-49-1.

Parcel 49 shares its western boundary with an Installation Restoration (IR) Program site (IR Site 5 - Building 5). Another IR site (IR Site 10A - Building 400) is located approximately 300 feet southeast of Parcel 49. No previous investigations have been conducted at Parcel 49, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and building are described in detail below.

Buildings 405

Building 405 was constructed in 1958 and has always been used for ground support and equipment rework (Figure 6-49-1). This one-story building is constructed of steel, covers 5,800 square feet, and is in fair condition. The space occupied by Building 405 was formerly open space used for aircraft parking. Staining related to this activity is evident in historical aerial photographs. The exterior building area is used as a non-chemical shipping area. Utilities located within and immediately surrounding Building 405 include underground sanitary sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

EBS information indicates that trichlorofluoroethane, tricresyl phosphate, petroleum products, solvents, and nonchlorinated organics are stored Building 405 directly on the concrete floor without secondary containment. No more than 2,000 gallons of these chemicals are stored in the building. Several portable dispensing carts with absorbent underneath them were observed during the site inspection. Hazardous wastes including halogenated organics, nonhalogenated organics, petroleum products, fuel, paint, and asbestos are documented to have been stored in the building in total quantities up to 1,700 gallons. This quantity of waste was not observed at the time of the site inspection.

Numerous stains were noted on the floor, and appear to be related to storage of lubrication and hydraulic oils in this building. The staining was visible on concrete that appeared to be in good condition. Drip pans and absorbent materials are used to catch and clean up spills when they occur. Approximately 50 percent of the building floor is affected by the scattered oil spills. A trench located north of the shop at the west end of the building is currently filled. Heavy stains were visible in the trench. An electric-powered winch located 100 feet north of the shop has extensive staining below and around it. Extensive staining was observed in the in-flight fueling repair shop area located on the north side of Building 405. This area is addressed by Target Area 1.

According to available documents, Building 405 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Peeling paint was observed on the walls and ceiling. No incidents such as fires, mishaps, or flooding are documented to have occurred within or immediately surrounding Building 405.

Building 614

Building 614 was constructed in 1981 and has always served as a paint storage building (Figure 6-49-1). Building 614 is constructed entirely of corrugated steel and concrete floors. This building covers approximately 1,000 square feet and is in moderately good condition. The space occupied by Building 614 was formerly open space used for aircraft storage.

Utilities located within and immediately surrounding Building 614 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. A drain that runs east-west along the centerline of the building has flakes of paint in the bottom. This drain is part of the industrial sewer system, and will be addressed as part of the underground lines investigation.

Less than 3,000 gallons of polyurethane and urethane coating paints are stored in this building. A general inventory list states that up to 150 gallons of paints, organic compounds, corrosives, and petroleum products are also stored in Building 614. These chemicals were not observed during the site inspection, except as noted above. Site reviewers noted that the building is not an application or use area, but only a storehouse.

During the site inspection, a white stain was noted along the base of the northwest wall. A darkish brown stain is located near the center of the building on the northwest side. This stain is approximately four feet in diameter. Since there is concrete flooring in this building, and these stains appear to be relatively minor, no sampling is recommended in this PEP for the stained areas. Because of the current and former use of Building 614, Cal-EPA has requested that soil samples be collected adjacent to Building 614 and analyzed for TPH, VOCs, SVOCs, and metals.

According to available documents, Building 614 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within or immediately surrounding Building 614.

Building 689

EBS information indicates that Building 689 is Industrial Waste Pump Station 4. No other information regarding this structure is available.

Open Space I

Open Space I is defined by the fenced area outside of Building 614. This space covers approximately 30 percent of the parcel. Open Space I is and has been used as a storage area. The ground surface of Open Space I is paved entirely with asphalt; site inspectors noted that the area appears to have been paved several times.

EBS information indicates that activities conducted within this open space include extensive chemical storage. Solvents, paint, paint thinners, petroleum/lubricating oils, and naphtha are documented to have been stored in Open Space I. These chemicals are contained in several hundred 55-gallon drums. A few of the drums are stacked two high. An oily odor was noted in the area during the site inspection, although the odor could have originated from Building 405 or Open Space II. There is secondary containment in this area in the form of an eight-inch asphalt berm surrounding the fenced area. No signs of

chemical releases were noted during the site inspection of Open Space I, except immediately beside Building 405. The area immediately beside Building 405 is being addressed as part of Target Area 1. Since no sign of chemical release was noted in any other area of Open Space I and because the area is paved and has secondary containment, no other sampling is proposed for this open space.

Open Space II

Open Space II is defined as the remainder of the open space of the parcel. This space covers approximately 65 percent of the parcel. Open Space II contains two GAP sites (11 and 27). The open space is completely paved with concrete (30 percent) and asphalt (70 percent). The pavement is in good condition. Structures located within the open space include two aboveground storage tanks and several abandoned steel storage lockers containing oily rags and batteries. Utilities located within and immediately surrounding Open Spaces I and II include underground sanitary sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

EBS information indicates that activities currently conducted within this open space include aircraft maintenance equipment and vehicle parking. Historically, airplane storage and parking was also conducted on the parcel. Staining associated with this activity was noted on aerial photographs from the 1950s.

Two aboveground storage tanks are located in this open space. One aboveground storage tank, located 100 feet north of Building 405, contains 1,500 gallons of lubrication oil. There is no containment berm, and the area under and surrounding the tank is heavily stained. The second tank, located north of Building 405, is a steel tank with a capacity of 1,500 gallons. Lubrication oil is stored in this tank. There is no containment and the concrete pad is heavily stained. The staining in these areas is addressed by Target Area 1.

Staining was noted at GAP Site 11, located northeast of Building 405. This staining is being addressed by Target Area 2. A combined total of approximately 500 gallons of waste materials are stored at the GAP sites for no more than 60 days. A large stain was noted outside Building 405, on the west side. The stain appeared to be covered by leakage of hydraulic fluids from a portable hydraulic tank and pump that services the shop in Building 405. The resulting stain was ten feet by five feet. This area is part of Target Area 1.

No incidents such as fires, mishaps, or crashes are documented to have occurred within Open Space I or II.

Underground Storage Tanks

One active underground storage tank is present in the northeast portion of this parcel (Tank 614-1). The existence of this tank was identified from the EBS. The installation date and type of material currently stored in this 20,000-gallon tank are unknown. This tank passed 1987 precision testing.

Parcel Boundary Conditions

Parcel 49 is bounded by Parcels 30, 48, 50, 51, and 54. Activities of concern on these adjacent parcels include aircraft washdown and fueling on Parcels 191 and 32, and aircraft rework on Parcel 54. If the results of any sampling proposed for any of these adjacent parcels indicate that activities on these parcels may have impacted Parcel 49, then additional sampling on Parcel 49 may be appropriate.

No sampling is called for in this PEP in response to the adjacent IR site (IR Site - Building 5). If the continuing investigations at the IR site or other neighboring parcels reveal a cause for concern at Parcel 49, then additional sampling on Parcel 49 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes three RCRA sites (site numbers SWMU/GAP 27, SWMU/GAP 11, and SWMU/Unknown). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the three RCRA sites at this parcel, SWMU/GAP 11 requires further investigation, because staining was noted around this site. A brief description of each of the RCRA sites is provided below. The sampling proposed for GAP 11 is described in the Target Areas and Compounds of Concern subsection (Target Area 2).

Site SWMU/GAP 11 is located in Building 405, shop 93532. It is unknown whether any chemicals have been released from this site. Site SWMU/GAP 11 is comprised of 55-gallon drums, aerosol cans, and 30-gallon drums. The chemicals of concern associated with this site include waste hydraulic oil, 1010 oil, batteries, lubrication oil, asbestos, Freon, JP-5, and aerosol paint. Staining was noted at this site, and is addressed by Target Area 2. This site is currently active.

Site SWMU/GAP 27 is located in Building 405, shop 93531. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 27 consists of two 55-gallon drums of hydraulic oil. No staining was noted at this site, and no sampling is specifically proposed for this site. This site is currently active.

Site SWMU/Unknown is comprised of the hazardous materials delivery areas at NADEP Buildings 614, 615, and 616. Known releases of nitric acid, oil and fuel, zyglow penetrant, poly paint, and PD-680 (50 gallons, 250 gallons, unknown quantity, 10 gallons, and 10 gallons, respectively) have occurred at the site. Because this site is spread over three non-contiguous parcels, it cannot be determined from the available documents whether any of these releases occurred on Parcel 49. Since only minor staining was noted on concrete flooring in Building 614, no investigation of this site is believed to be necessary on Parcel 49. Site SWMU/Unknown has a storage capacity of 17,000 cubic feet. This site is currently active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 49, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-49-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 405. The one-time compliance program will determine whether further sampling or

TABLE 6-49-2

Summary of Data Gaps
NAS Alameda Parcel 49

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to Parcel 49, and IR Site 10A (Building 400) is located approximately 300 feet southeast of Parcel 49. Additional subsurface investigation relative to IR Sites 5 and 10A is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 405). • Target Area 2 (SWMU/GAP 11). • Target Area 3 (Building 614 Open Space).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-49-2

Summary of Data Gaps
NAS Alameda Parcel 49

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One active UST currently exists at Parcel 49 (Tank 614-1). Future actions for this tank are unknown.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, industrial sewer, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-49-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 49 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. This parcel contains three parcel-specific target areas. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-49-2.

- Target Area 1 (Building 405): Target Area 1 includes the northern portion of Building 405, the open space area immediately north of the building, and the stained area adjacent to Building 405 in Open Space I. The soils in this area may have been impacted by use of fuels, solvents, and lubricating oils in this area, as evidenced by the heavy staining. Specific areas of concern within the target area include the staining under the winch, in the interior and exterior of the building, in the trench near the winch, in the shop area proper, and adjacent to the ASTs that serve the shop. The compounds of concern are TPH, specifically lubrication oil, hydraulic fluid, and fuels, and VOCs. This target area covers approximately 4,000 square feet and is classified as having a potential likelihood of impacts. Six surface soil samples and eight subsurface Geoprobe soil samples will be collected in this target area. These samples are listed in Table 6-49-1.

- Target Area 2 (SWMU/GAP 11): The soil beneath SWMU/GAP 11 in Open Space II may have been impacted by spills or leakage of used petroleum products, as evidenced by staining in this area. This target area covers approximately 400 square feet and has been classified as having a potential likelihood of impacts. Lubrication oil, hydraulic fluid, and diesel-range fuels are the compounds of concern in this target area. Two surface soil samples will be collected in this target area, and are listed in Table 6-49-1.

- Target Area 3 (Building 614 Open Space): The soil surrounding Building 614 may have been impacted by spills or leakage of

petroleum products or paint-related hazardous materials associated with Building 614 and the historical use of the open space (i.e., aircraft storage). This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this target area. The samples are listed in Table 6-49-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14).

Table 6-49-1 summarizes screening-level sampling and analysis for the target areas on Parcel 49. Eight soil vapor samples and eight surface soil samples will be collected from the locations shown on Figure 6-49-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Surface soil and subsurface soil sampling locations shown on Figure 6-49-1 are approximate. The samples should be located in the areas with the most significant staining. If no staining is evident, then the samples should be distributed evenly over the target area. One sample should be collected from the sludge in the drain in Building 405.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-54

PARCEL 54 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 54 at NAS Alameda (Figure 6-54-1). The parcel, which is located in the central portion of the base, is approximately 21 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains 29 active RCRA sites, of which one requires further investigation. Six parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-54-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 54, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 54, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 49, 55, 56, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many

TABLE 6-54-1

Summary of Recommended Samples
NAS Alameda Parcel 54

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
54-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	SVOCs	SVOCs	CLP RAS
54-2-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-2-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	SVOCs, VOCs	SVOCs, VOCs	CLP RAS
54-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	SVOCs	SVOCs	CLP RAS
54-4-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-4-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	SVOCs, VOCs	SVOCs, VOCs	CLP RAS
54-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	SVOCs	SVOCs	CLP RAS
54-6-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-6-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	SVOCs, VOCs	SVOCs, VOCs	CLP RAS
54-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	SVOCs	SVOCs	CLP RAS
54-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-9-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-9-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-10-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-10-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints, Solvents	SVOCs	CLP RAS
54-12-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-12-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints, Solvents	SVOCs	CLP RAS
54-13-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-13-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints, Solvents	SVOCs	CLP RAS
54-14-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-14-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints, Solvents	SVOCs	CLP RAS
54-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints, Solvents	SVOCs	CLP RAS

TABLE 6-54-1

Summary of Recommended Samples
NAS Alameda Parcel 54

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
54-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints, Solvents	SVOCs	CLP RAS
54-17-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-17-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-18-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-18-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-19-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-19-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Paints, Solvents	SVOCs	CLP RAS
54-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Paints, Solvents	SVOCs	CLP RAS
54-22-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-22-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Paints, Solvents	SVOCs	CLP RAS
54-23-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-23-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Paints, Solvents	SVOCs	CLP RAS
54-24-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-24-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-25-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-25-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-26-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-26-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Paints, Oils, Solvents	SVOCs, VOCs	CLP RAS
54-27-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-27-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Paints, Solvents	SVOCs	CLP RAS
54-28-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-28-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Paints, Solvents	SVOCs	CLP RAS
54-29-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS, ICAP SCAN

TABLE 6-54-1

Summary of Recommended Samples
NAS Alameda Parcel 54

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
54-30-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-30-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Paints, Solvents, VOCs, SVOCs	VOCs, SVOCs	CLP RAS
54-30-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Acids, Bases	Reactives	Chapter 7, SW846
54-31-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Oils, Metal Shavings	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-31-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Paints, Solvents, VOCs, SVOCs	VOCs, SVOCs	CLP RAS
54-31-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Acids, Bases	Reactives	Chapter 7, SW846
54-32-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 6	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-32-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 6	Paints, Solvents	SVOCs	CLP RAS
54-33-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 6	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-33-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 6	Paints, Solvents	SVOCs	CLP RAS
54-34-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 6	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
54-34-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 6	Paints, Solvents	SVOCs	CLP RAS

of the parcels surrounding Parcel 54 are used for support facilities for Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 5 and 347) cover approximately 75 percent of the parcel. The remaining 25 percent is open space. The parcel area is presently in use as an aircraft overhaul and rework site. Two buildings were formerly located on the parcel and have since been demolished (Building 193 - Administrative Office; and Building 560 - Electrical Substation #5). Underground fuel, steam, and sewer lines are present on this parcel and are shown on Figure 6-54-1.

Parcel 54 is an IR site (IR Site 5 - Building 5, Aircraft Rework Facility). Previous investigations have been conducted at Parcel 54 and specific data regarding potential chemical occurrence are available.

In Volume 1 of the *Data Summary Report, RI/FS Phases 2B and 3, Final,* dated October 27, 1992 and prepared by PRC Environmental Management, Inc., and Montgomery Watson for the Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) program, soil analytical results for thirteen borings drilled in Parcel 54 are listed. Monitoring wells were installed in five of the borings (Figure 6-54-1). This investigation was primarily directed at the open space around Building 5.

Fifty-eight soil samples, five of which were duplicates, were analyzed for VOCs, SVOCs, and metals. Only one sample contained a VOC concentration that exceeded the EPA Preliminary Remedial Goals (PRGs) for either the unrestricted use or industrial scenarios. Vinyl chloride was detected at a concentration of 80 µg/kg, which exceeds both the unrestricted use PRG (0.0052 mg/kg) and the industrial PRG (0.011 mg/kg) for vinyl chloride. The SVOCs benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, and bis(2-chloroethyl)ether were detected at concentrations that exceeded the PRGs. Three samples contained benzo(a)anthracene at concentrations that exceeded the unrestricted use PRG of 0.61 mg/kg. Nine samples contained benzo(a)pyrene at levels above the

unrestricted use PRG (0.061 mg/kg); eight of these exceeded the industrial PRG (0.26 mg/kg). Five samples contained benzo(b)fluoranthene at concentrations that exceeded the unrestricted use PRG (0.61 mg/kg); two of these were above the industrial PRG (2.6 mg/kg). Benzo(k)fluoranthene was detected in only one sample at a concentration that exceeded the unrestricted use PRG of 6.1 mg/kg. Dibenzo(a,h)anthracene was detected in two samples at concentrations that exceeded the unrestricted use PRG of 0.061 mg/kg. Four samples contained indeno(1,2,3-cd)pyrene at levels above the unrestricted use PRG (0.61 mg/kg); two of these exceeded the industrial PRG of 2.6 mg/kg. Bis(2-chloroethyl)ether was detected in only one sample at a level exceeding both the unrestricted use PRG (0.074 mg/kg) and the industrial PRG (0.17 mg/kg). PRGs for chloroethane, 2-methylnaphthalene, acenaphthylene, benzo(ghi)perylene, phenanthrene are not available.

Arsenic, beryllium, and manganese were detected at concentrations that exceeded the PRGs. The arsenic levels in 54 of the samples were above the arsenic unrestricted use PRG of 0.97 mg/kg; ten of these exceeded the industrial PRG of 3.3 mg/kg. Beryllium was detected in 25 of the soil samples at concentrations greater than the beryllium unrestricted use PRG of 0.4 mg/kg. Only one sample was greater than the industrial PRG of 1.3 mg/kg. Manganese was detected in only one sample at a level exceeding the unrestricted use PRG of 390 mg/kg. PRGs for calcium, cobalt, iron, magnesium, potassium, sodium, and thallium are not available.

Groundwater samples were analyzed for VOCs, SVOCs, pesticides/PCBs, and metals. VOCs were detected in samples collected from four of the monitoring wells, SVOCs were detected in three wells, metals were detected in all wells, and pesticides/PCBs were not detected in any of the groundwater samples collected. Arsenic, manganese, 1,1-DCE, 1,2-DCE, TCE, vinyl chloride, 1,4-dichlorobenzene, and bis(2-chloroethyl)ether were the only compounds detected or estimated at concentrations exceeding MCLs in groundwater.

Based on this study, additional investigation was proposed by PRC and Montgomery Watson (Figure 6-54-1). Some follow-up sampling has already taken place in the abandoned plating shop, selective plating shop, battery shop, wastewater treatment plant, and the former hazardous waste storage area, which is in Parcel 57. These results will be discussed in the shop-specific information below.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials (ACM) on parcels will be addressed in other

sampling programs and are not considered in this PEP. It should be noted, however, that encapsulation and removal of ACM has been documented in Building 5. Ten PCB-containing transformers are documented to have existed on this parcel in 1986 and 1987. Public Works Center (PWC) information indicates that base wide removal of PCB-containing fluids from oil-filled devices has been accomplished.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 5

Building 5 was constructed in 1940 and has served as an aircraft overhaul and rework facility (Figure 6-54-1). This one-story building covers approximately 910,000 square feet and is in fair condition. Building 5 is steel-framed with concrete and pre-fabricated paneling. It has a concrete floor and a steel-framed, built-up roof. Building 5 was one of the original facilities built on the newly filled Naval Air Station. The northern part of Building 5 is also known as Building 5A and was built between 1943 and 1946. It is similar in construction to Building 5.

Utilities located within and immediately surrounding Building 5 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. Air permits for degreasers, solvent cleaning, bagging/packaging, miscellaneous chemicals, spray booths, furnaces, miscellaneous minerals, dryers, abrasive blasting, waste solvent AST, magnetic particle inspection machine, asbestos removal, cleaning dip tank, and halon recovery/recycling were issued for this building in 1993.

Information collected during the EBS indicates that activities conducted within this building include aircraft and component rework, known as "D-level (depot-level) maintenance." It appears that Building 5 has been used for this and similar purposes since its construction. In general, various metal works, painting, plating, and support equipment shops are located in the southern half of the building. The physical configuration of shops has changed periodically since 1940. The northern half, Building 5A, is used for aircraft electrical, structural, and mechanical maintenance, Ground Support Equipment (GSE) repair and maintenance, material storage, hazardous waste recycling, and administrative office space.

In the past, the northwest and northeast corners of Building 5A were used as aircraft painting bays for approximately 30 years. They are currently used for material storage in the northwest area and aircraft maintenance and chemical recycling in the northeast area. A 10- to 15-

foot deep trench system used as downdraft ventilation with recirculating water to capture paint vapors is located in each bay. Also in the northwest corner, a calibration lab tests various equipment and has been in this location for approximately the past 40 years. A mercury still, marked off-limits due to mercury contamination, is situated on the floor above the lab with an entrance via a men's restroom. The area currently used as a staging area for program support equipment along the northern wall of Building 5A was previously the site of light aircraft maintenance. A recycling and disposal collection area for hazardous waste is also located along the north wall. A recycling system that distills waste solvents and fuels to remove impurities has been in place for approximately one year in the northeast area of Building 5A. A battery shop is also situated in this area and services, stores, and rebuilds batteries for GSE equipment and aircraft. In the 1950s, waste acid was dumped into the shop sink; the drainage line routing is unknown.

As part of follow-up sampling for IR Site 5, the battery shop was identified for detailed investigation and two borings were drilled at this site; a monitoring well was installed in one of these borings (Figure 6-54-1). Results were presented in the *Data Summary Report, Background and Tidal Influence Studies and Additional Work at Sites 4 and 5, Draft Final,* dated August 4, 1992 by PRC and Montgomery Watson. Five soil samples were collected and analyzed for metals, hexavalent chromium, cyanide, pH, VOCs, and SVOCs. None of the VOC and SVOC concentrations reported exceeded either the unrestricted use or industrial PRGs. All five samples contained arsenic at levels above the arsenic unrestricted use PRG of 0.32 mg/kg, while three samples showed hexavalent chromium at levels above the unrestricted use PRG of 30 mg/kg. None of the metals detected were above background levels as computed by PRC and Montgomery Watson. An aircraft maintenance line running east-west through the center of Building 5A, an area known as the ARIES II Modification Area, sequences aircraft through different stages of rework. Although many metal working shops once occupied this area, presently only one small metal shop in the center of the line remains. For 30 years, the GSE shop has provided repair and maintenance for miscellaneous small equipment.

The mezzanine level of Building 5A includes three distinct areas. Two are located in the northwest and northeast corners of the building each, while the third area is found along the south edge of Building 5A adjacent to Building 5. These spaces are used primarily for office space. Building 5A also has three submezzanine areas which are also used as office space (Figure 6-54-2).

Processes historically taking place in Building 5A include paint mixing, acid mixing, corrosion control, metal working, machining, electrical rewiring, engine replacement, aircraft structural modifications, and paint trench cleaning. These industrial processes typically involve the use or generation of chemicals and wastes, including lubricating oil, hydraulic fluid, methyl ethyl ketone (MEK), zinc chromate, paint, sulfuric acid, potassium hydroxide, and heavy metals.

Approximately 120,000 gallons of nonhalogenated organics, petroleum products, metals, halogenated organics, paint, and corrosives are documented to have been stored and used in Building 5 during 1993. The references did not differentiate quantities between Building 5 and Building 5A. During the site inspection, chemicals stored and used in Building 5A were observed to include MEK, plastic filler, hydraulic fluid, lube oil, cylinder oil, zinc chromate sealant, grease, potassium hydroxide, boric acid, sulfuric acid, isopropyl alcohol, resin coating, paint, degreasers, antifreeze, brake fluid, glycols, acetone, and aliphatic naphtha. The total quantity observed was approximately 1,100 gallons. Virtually all chemicals were stored in hazardous materials lockers.

Disposal of used chemicals is presently accomplished by collecting the wastes at one of the 17 active Generator Accumulation Point (GAP) sites (GAP 4, GAP 5, GAP 8, GAP 12, GAP 13, GAP 14, GAP 16, GAP 18, GAP 20, GAP 22, GAP 23, GAP 25, GAP 29, GAP 30, GAP 31 and GAP 70A). In 1993, approximately 13,000 gallons of hazardous wastes, including paint, petroleum products, fuel, nonhalogenated organics, halogenated organics, corrosives, lead, beryllium, mercury, and metals were collected at Building 5. Again, no distinction was made in the references between Building 5 and Building 5A.

No spills were noted during document review in Building 5A. Review of site inspection data and interviews with former employees indicate that undocumented spills may have occurred in the ARIES II Mod area and in the former paint bays in the northwest and northeast corners of the building. The paint stains in the former paint bays are extensive with stains covering approximately 30 percent of the concrete floor. The staining in the ARIES II Mod area appears to be light to moderate in intensity and seem to have involved a minor quantity of released material. The floor is painted concrete in fair to good condition and is cleaned periodically. Each stain covers an area averaging approximately two square feet. This staining is addressed by Target Area 1. Scattered, light to medium intensity staining is also evident in the GSE portion of Building 5A, the southwest corner. This staining is relatively minor, and no sampling is called for in this PEP in response to this staining.

In Building 5, the industrial processes include plating, metal manufacturing, milling, numerical control (NC) machines, heat treating, welding, non-destructive investigation (NDI), rubber manufacturing, painting, film developing, tube bending, GSE maintenance, x-ray, aircraft component rework, and blasting. Shop locations have changed over the lifetime of the building, but the overall type of activity, aircraft overhaul and rework, occurring in Building 5 has not changed. The shop configuration for Building 5 as of May 1994 is shown on Figure 6-54-1.

The heat treat, pattern, foundry, rubber manufacturing, X-ray, shot peen, metal manufacturing, and welding shops are situated in the southeast area of the building. The heat treat shop uses a degreaser, oil quench, and water quench tanks in its processes. This shop has been on this site since 1976. Prior to that time, this area was a fuel tank cleaning and repair area. The pattern shop has been in this location for over 40 years. The foundry manufactures molds for various aircraft parts. Large hydraulic presses and a lead melting furnace are used in this shop. The rubber shop has been present in this location since 1950 when it also serviced oxygen tanks. The rubber shop repairs fuel cells that line an aircraft's fuel tanks. An interview with a current shop employee indicates that the washing sink in this shop is used to rinse empty ketone containers and clean brushes. This drains to a sump under the floor grating and an "Industrial Waste Gravity Sewer" drawing for Building 5 dated 3 June 1989 shows that this sump drains to the stormwater sewer system. An oily sheen was noted on the surface of the water in the sump. The X-ray room is lead-lined and uses a two-stage system to recover silver from photographic fixer. Since 1974, the shot peen shop has employed steel and glass shot to relieve stress in metals. The metal manufacturing area was an aircraft wing rework shop for 25 years (until last year). Current processes included sheet metal shaping, cutting, punching, and sanding. The welding shop employs acetylene torches to weld various metal aircraft parts.

The industrial processes occurring in these shops involve the use or generation of chemicals and wastes, including bases, nonchlorinated hydrocarbons, adhesives, lead, alcohols, ketones, solvents, turpentine, sealants, trichloroethane, silver, and hydraulic fluid. Approximately 3,300 gallons of trichloroethane, oils, methylene glycol, kerosene, hydraulic fluid, MEK, white casting plaster, aerosol paints, epoxy resins, aliphatic polyurethane coating, alcohols, and nonchlorinated hydrocarbons were observed to be stored in these shop areas, some on the concrete floor without secondary containment. Due to a shrinking depot workload in the past few years, the chemical usage in these shops, and for all the shops in this building in general, may have been

significantly greater prior to 1985. The foundry discharged water from use with the molten lead furnace into a floor drain; the "Industrial Waste Gravity Sewer" drawing referenced above also shows this drain leading to the storm sewer system. The fixer solution produced by the X-ray shop is processed through the silver recovery system prior to discharge to the sanitary sewer. The floor drains in the metal manufacturing area were observed to be sealed off. Previous disposal methods related to the other industrial processes are not known; however, documents show that from 1943 to 1975 all industrial wastewater generated by NADEP facilities, then known as Naval Air Rework Facility (NARF), was discharged into the Seaplane Lagoon and Oakland Estuary via the industrial wastewater sewer system without any treatment. An average flow of 150,000 gallons per day has been estimated.

No spills in Building 5 were noted during document review. Review of site inspection data indicates that undocumented spills may have occurred in the above shops. The resultant staining appears to be moderate in intensity and to have involved a minor but continuous quantity of released material. In general, stains occur next to chemical storage areas and machinery. The staining in the shops described above are addressed by Target Area 2.

The northeast area of Building 5 houses shops used for rigging, electrical work, constant speed drive (CSD) and cooling unit overhaul, machining, drilling, milling, and heavy gauge metal work. Lathes, solvent tanks, steam cleaners, parts washers, oil testing units, a machine coolant recycling/recovery unit, and storage areas are found in this general area. These industrial processes typically involve the use or generation of chemicals and wastes, including metal shavings, alkaline batteries, coolant, trichloroethane, hydraulic fluid, and cutting oils. During the site inspection, approximately 1,400 gallons of corrosives, halogenated hydrocarbons, light and heavy organics, machine coolant, and aerosols were observed to be stored in hazardous materials lockers and in 55-gallon drums. Presently, wastes are disposed of at GAP sites. Floor drains in the CSD and cooling unit shops receive wastewater from flow test units and steam cleaners. It is unknown where floor drains lead.

Extensive staining was noted during the site inspection for the shops in the northeast area of Building 5. The concrete floor in this area has been overlain with wood blocks. These blocks help to absorb machinery vibration and cushion the impact of dropped components. Approximately 80 percent, or 49,000 square feet, of the wood blocks exhibited dark, heavy staining. The floor in the rigging shop was not covered by the wood blocks and was noted to be very heavily stained

with an oily residue. Stains, measuring approximately three square feet each, were noted in the CSD shop around floor drains. The staining in these shops are addressed by Target Area 3.

The south-central portion of Building 5 houses the NDI shop, abandoned plating shop, selective plating shop, cleaning shop, blasting shop, and the abandoned paint stripping bay. The NDI shop uses dip tanks, special dyes, heating processes, and magnetic devices to detect fractures and flaws in aircraft components. Closed in June 1990, the plating shop featured many tanks for cleaning, plating, and coating components, including tanks containing nickel, sulfuric acid, alkaline descaling and deoxidizing, sodium hydroxide, copper strike, ammonium nitrate, chromic acid, alodine, nitric acid, sodium dichromate, sodium cyanide, bronze, aluminum cleaner, aluminum etching, and 1,1,1-trichloroethane. Similarly, the selective plating shop processed smaller components for plating by hand and has been abandoned since October 1993. All equipment has been relocated to Building 32.

In accordance with the IR program, follow-up sampling in the plating and selective plating shops was accomplished by PRC and Montgomery Watson and reported in the *Data Summary Report, Background and Tidal Influence Studies and Additional Work at Sites 4 and 5, Draft Final*, dated August 4, 1992 and in the *Letter Report, Additional Site Investigation, Site 5 Plating Shop*, dated November 1, 1993 (Figure 6-54-4). Twenty-three soil samples and two duplicates were collected from ten soil borings in the plating shop and analyzed for metals, hexavalent chromium, cyanide, pH, and VOCs. Ten grab groundwater samples and two duplicates were analyzed for metals, hexavalent chromium, cyanide, VOCs, and total dissolved solids (TDS). Four scrape samples and eight wipe samples were collected from the interior of the plating shop and analyzed for metals, hexavalent chromium, and cyanide.

None of the VOC concentrations in the soil samples exceeded either the unrestricted use or industrial PRGs. The metals analysis revealed that arsenic, beryllium, cadmium, hexavalent chromium, and manganese were detected at levels that exceeded PRGs. All but four of the samples contained arsenic at levels that exceeded the unrestricted use PRG of 0.32 mg/kg. Two samples were greater than the arsenic industrial PRG of 2.0 mg/kg. Beryllium exceeded the unrestricted use PRG (0.14 mg/kg) in four samples. Nine samples had concentrations of cadmium in levels greater than the unrestricted use PRG (9 mg/kg); one sample exceeded the industrial PRG of 850 mg/kg. Hexavalent chromium was detected in five samples at levels exceeded the unrestricted use PRG of 0.2 mg/kg. One sample contained manganese

above the unrestricted use PRG of 380 mg/kg. Cyanide was present in 21 of the samples, ranging from 0.1 mg/kg to 27.2 mg/kg.

For the grab groundwater samples, background concentrations (as computed by PRC and Montgomery Watson) for aluminum, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc were exceeded in many of the samples. Cyanide was detected in all samples, ranging from 42.6 µg/L to 5,150 µg/L.

In the scrape samples, antimony, beryllium, cadmium, total chromium, hexavalent chromium, lead, and nickel were detected at concentrations that exceeded PRGs. One sample contained antimony at a level greater than the unrestricted use PRG of 31 mg/kg. Two samples contained beryllium at concentrations that exceeded both the unrestricted use PRG (0.14 mg/kg) and industrial PRG (1.1 mg/kg). All samples contained cadmium at levels above the unrestricted use PRG of 9 mg/kg; three were above the industrial PRG of 850 mg/kg. Total chromium exceeded the unrestricted use PRG (210 mg/kg) in all samples; three samples had levels above the industrial PRG of 1,600 mg/kg. Hexavalent chromium was found in one sample to be 2,940 mg/kg but was qualified as an estimate because interference from other metals was thought to have occurred.[1] Lead was found to exceed the unrestricted use PRG of 130 mg/kg in three samples; the industrial PRG is 1,000 mg/kg. One sample contained nickel at a level above the unrestricted use PRG of 150 mg/kg. In the wipe samples, aluminum ranged from 5,700 to 83,500 µg/ft^2. Arsenic ranged from 0.88 to 353 µg/ft^2. Cadmium ranged from 23.2 to 5,210 µg/ft^2. Total chromium ranged from 122 to 70,000 µg/ft^2. Iron ranged from 689 to 143,000 µg/ft^2. Zinc ranged from 4,280 to 22,410 µg/ft^2. Cyanide ranged from 1,200 to 541,000 µg/ft^2. Other metals were present as well. The highest concentrations of metals found in all scrape and wipe samples occurred in a sample obtained from the overhead duct work in the south-central area of the shop.

In the selective plating shop, a single soil sample was collected and analyzed for VOCs, metals, and cyanide. Arsenic, beryllium, and cadmium were detected at concentrations that exceeded unrestricted use PRGs of 0.32 mg/kg, 0.14 mg/kg, and 9 mg/kg, respectively. Cyanide was not detected.

The cleaning shop has been in its current location for approximately 30 years. Processes conducted in this shop include beryllium brake

[1] This level of hexavalent chromium is physically impossible. This value indicates that hexavalent chromium was present in the sample at high concentrations.

cleaning, rust removing, part cleaning, and the use of degreasers, steam cleaners, and hot stripper tanks. The blasting shop includes a sand blasting room and bead blasting machines. The abandoned paint stripping bay, also known as the cleaner-brightener bay, was used for stripping and steam cleaning; it is presently used for temporary staging and storage. These types of processes typically involve the use or generation of chemicals and wastes, including oils, emulsifiers, dyes, degreasers, alcohols, and blasting grit. Approximately 1,100 gallons of penetrant, emulsifier, magniflux oil, 1,1,1-trichloroethane, ethanoamine, methylene chloride, and MEK were observed to be stored and used in this area of Building 5. Although detailed disposal practices are not known, wastes and spillage from the plating shop, cleaning room and paint stripping bay are known to have been discharged without treatment into the industrial wastewater collection system prior to the construction of the Industrial Wastewater Treatment Plant (IWTP) #5 in 1973. Also, anodizing waste from Building 167 was documented to have been discharged to drains in this bay.

No spills were found during document review; site inspection data indicate that undocumented spills may have occurred in these shops, as evidenced by staining. In general, stains were noted on all shop floors. The plating shop is built upon a wooden floor, of which approximately 90 percent (3,400 square feet) is stained. Underneath, a concrete subfloor includes a concrete wall to divide the chromium and cyanide sides of the shop, and two 18-foot deep eductor sumps that pump chromium and cyanide process wastewater separately to IWTP #5. Stains remained on the floor of the selective plating shop even though the shop had been evacuated and cleaned up. Stains in the cleaning shop range from dark, oily-type to lighter stains with powder-like residue. The staining in this shop occurs over the entire concrete floor, approximately 8,500 square feet. A 600-square foot area in front of a hot stripping tank was covered with standing wastewater half an inch deep. An interview with the shop foreman indicates that any generated wastewater which overflows and any spills flow into floor drains and trenches, which lead to IWTP #5. The floor in the paint stripping bay is severely etched and eroded. Continuous, medium intensity staining was observed throughout the bay. These areas have already been sampled and/or have sampling proposed by the IR contractor. Thus, while this area is recognized as an area of concern, it will not be addressed by a target area or sampled as part of this PEP.

The northwest and north-central areas of Building 5 contain the small parts paint shops, inflight refueling shop, landing gear shop, GSE shop, and the cryogenics shop. The small parts paint shop has been in this

location for 35 years. Portable spray gun units, water screen recovery systems, and mixing areas are the major work areas in this shop. The inflight refueling shop was previously located in the foundry in the southeast corner of the building but has been at this site for the past 10 years. Auxiliary fuel tanks are serviced and repaired in this shop. The landing gear area processes include NC machines, Freon cleaning units, hydraulic pressure testing, and beryllium brake repair. The cryogenics shop has been located in the extreme northwest corner of Building 5 for over 30 years. Liquid oxygen and nitrogen equipment are filled and serviced here. Immediately adjacent is the GSE shop, which has been on site for the past 12 years and was formerly a Quality Assurance staging area. It presently contains a small welding shop. The typical chemicals and wastes associated with the above shops include paint, solvents, MEK, alcohols, thinner, primer, beryllium-contaminated personal protection equipment (PPE), absorbent rags, hydraulic fluid, and compressed gases. Approximately 1,400 gallons of trichlorotrifluoroethane, corrosion preventative compound, sealant, lubricant, aerosol paint, and ketone were observed to be stored and used in these shops. Waste fluids, aerosol cans, rags, and other used containers are disposed of at GAP sites in the area. Notable staining was observed only in the cryogenics shop. Light stains were found in chemical storage areas and also scattered throughout the shop floor which is concrete with small cracks. These areas of staining are addressed by Target Area 4.

The aircraft service, production control, warehouse, and planning manufacturing order (PMO) kitting areas are found in the southwest corner of Building 5. Aircraft have been brought into this area since the early 1940s for light maintenance. External fuel tanks are tested using 10-10 oil in a self-contained circulation system with a 1,300-gallon aboveground storage tank (AST). The production control section performs production planning and coordination. The warehouse stores various electrical and mechanical equipment, while the PMO kitting area receives, inventories, and packages various aircraft parts and components to support repair activities. There is no chemical usage in these shops with the exception of approximately 1,300 gallons of 10-10 oil stored and used in the aircraft service area and approximately 100 pounds of depleted uranium weights packaged in four canisters being stored in the production control area. During the site inspection, a cumulative 21-square foot stained area with medium intensity adjacent to the AST was noted in the aircraft service area. This staining is relatively minor and will not be sampled as part of this PEP.

Additional shops and work areas exist in Building 5 and Building 5A. These include, but are not limited to, a drawing files room, tool cribs,

storage and supply areas, staging areas, and office spaces. Environmentally significant issues were not noted in these areas.

The mezzanine in Building 5 consists of six areas scattered throughout the building (Figures 6-54-2 and 6-54-3). One mezzanine runs along the entire north side of Building 5, adjacent to Building 5A. It contains ordnance, pneudraulics, bearing, and ejection seat shops in the east end, and upholstery, calibration, and parachute shops in the west end. The processes in the eastern shops include the use of paint booths, blasting booths, high pressure solvent cleaning booths and tanks, and hydraulic fluid test stands. Chemicals and wastes generated as a result of these activities include different types of petroleum products and halogenated solvents. Approximately 900 gallons of hydraulic fluid, lube oil, methanol, 1,1,1-trichloroethane, paint, degreasers, and lubricant were observed to be stored and used in these shops. Disposal of wastes is presently accomplished by accumulation at local GAP sites. Floor drains were observed during the site inspection. The majority of these drains were sealed-off.

Documented spills were not noted for this area. However, extensive staining was observed on the shop floors. Stains averaged approximately seven square feet and ranged from light to medium intensity. The staining was adjacent to test booths and chemical storage areas and appear to be petroleum product based. The floors in these shops were concrete and were generally stained.

In the shops that occupy the western end, clothing, rescue equipment, and aircraft interiors are constructed and various small equipment is tested and calibrated. Approximately 60 gallons of adhesive, MEK, contact cement, paints, resins, dimethyl silicone, and trichloroethane were observed to be stored and used in these shops. All materials were stored in hazardous materials cabinets. Waste chemicals are taken to local GAP sites. No spills, either from document review or site inspection, were noted. No floor drains were noted in the area.

Several other mezzanine areas are located above the shop floor in Building 5 (Figure 6-54-3). The 650 mezzanine, photo shop, central tool crib, and tube bending shops were noted to involve the use of chemicals during the site inspection. The types of processes occurring in these shops include machining, photo development, silver recovery, tool repair, painting, and parts cleaning. Approximately 300 gallons of paint, photographic fixer, PD-680 dry cleaning solvent, lubricant, detergent, and lube oil were observed to be stored in these shops. A solvent dip tank in the tube bending shop is drained when required and disposed of by maintenance personnel at an unknown location. Other wastes are taken to local GAP sites. The photo shop

filters its wastewater through a two stage silver recovery unit before discharging to the sanitary sewer. Staining was noted only in the tube bending shop, possibly from solvent and lubricant spillage, with 30 percent of the wooden and tiled flooring covered with light stains.

The remaining mezzanine areas did not contain any environmental concerns and were used as office space or for other non-industrial purposes.

Building 5 is equipped with a heating-ventilation-air conditioning (HVAC) system. An extensive system is in place to mitigate dusts, vapors, and fumes emitted during the many processes that occur throughout Building 5. Dusty conditions were noted in the foundry, metal working, plating, and former east and west paint areas. The solvent in an abandoned parts washing booth located in the NDI shop was allowed to vaporize via the exhaust hood. A rooftop inspection noted stains on emission stacks and compressor equipment. Also, a roof shed stored approximately 40 gallons of bacteria control, mud and silt remover, roof cement, and adhesive.

Document review revealed that an aircraft instrument dial shop was closed sometime in the 1950s or 1960s. Paint containing Radium 226 was used to provide luminescence for the instrument dials. Documents show that liquid waste from this shop drained directly to the Seaplane Lagoon. During shop decontamination, the drain pipe was sealed at both ends, but reportedly still contained contaminated material. After an extensive records search on the use of radiation sources at NAS Alameda and NASDEP Alameda, the Radiological Affairs Support Office (RASO) has recommended that a radiation survey be conducted for the radium paint shop located on the second floor of Building 5. The exact location of the instrument dial shop within Building 5 is unknown.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 5.

Building 397

Building 397 was constructed in 1946 and served as a general purpose, manufacturing and repair facility (Figure 6-54-1). This building covers approximately 1,200 square feet, but was not inspected because it was not accessible at the time of the site inspection.

Utilities located within and immediately surrounding Building 397 include underground storm sewer and steam lines. No permits were issued for this building in 1993

Very little information was collected during the EBS for Building 397. Data regarding industrial processes, chemical storage, disposal practices, spill incidents, and a potential HVAC system do not exist.

Open Space I

Open Space I is defined by the area to the west and south of Building 5. This open space covers approximately 10 percent of the parcel. Open Space I is used as a storage area and a roadway, and includes both an abandoned and a functional industrial wastewater treatment facility. The ground surface of Open Space I is completely paved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in good condition.

Structures located within the open space include IWTP #5, which was constructed in 1973 (Figure 6-54-1). IWTP #5 contains GAP Sites 33 and 16, and ASTs for neutralization, sludge, clarification, flocculation, mixing, chrome reduction, oil/water separating, and storage. The primary function of this facility was to process wastewater from aircraft paint stripping, washing, and plating operations. Wastewater processing was discontinued eight years ago, but paint booth wastewater, which is received from Buildings 113 and 530, and anodizing waste is still treated at this facility. An abandoned treatment facility is located to the east of this facility, and includes chrome and cyanide spill tanks, pump stations, and an oil/water separator. Effluent permit exceedences have been documented for this IWTP: Cadmium, one permit exceedence in 1989; Cyanide, four times in 1987, twice in 1988, twice in 1989; Phosphorus, once in 1989; Chromium, twice in 1990, six times in 1991; Toxic organics, once each in 1990 and 1991.

As part of follow-up sampling for IR Site 5, the abandoned treatment facility was identified for detailed investigation and two borings were drilled at this site (Figure 6-54-1). Results were presented in the *Data Summary Report, Background and Tidal Influence Studies and Additional Work at Sites 4 and 5, Draft Final*, dated August 4, 1992 by PRC and Montgomery Watson. Two soil samples were collected and analyzed for metals, cyanide, VOCs, and SVOCs. None of the VOC and SVOC concentrations reported exceeded either the unrestricted use or industrial PRGs. Both samples contained arsenic, beryllium, and hexavalent chromium at levels above the unrestricted use PRGs of 0.32 mg/kg, 0.14 mg/kg, and 0.2 mg/kg, respectively. The groundwater analyses detected VOCs and SVOCs. Metals including chromium, zinc, aluminum, beryllium, cobalt, lead, nickel, vanadium were detected above background levels as computed by PRC and Montgomery Watson.

Building 560 (Electrical Substation #5) was formerly located in this open space. This building housed transformer equipment and covered approximately 1,000 square feet. The construction date, construction details, and demolition date of Building 560 are unknown.

Utilities located within and immediately surrounding Open Space I include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits have been issued for processes occurring within this open space.

EBS information indicates that activities conducted within this open space include wastewater processing and equipment storage. Wastewater processing began in 1973; prior to this time, the entire Open Space I was used for equipment storage. Wastewater processing usually involves chemicals and wastes including lime and wastewater in different stages of treatment.

Documentation of chemical storage amounts is not available; however, approximately 70,000 gallons of wastewater in various stages of treatment are stored in the tanks of IWTP #5. Wastewater lines flow through the abandoned treatment facility to IWTP #5 then discharge to the industrial sewer system.

No spills or incidents have been documented in this open space. Review of site inspection data indicates that undocumented spills may have occurred outside Building 347 and within IWTP #5. Multiple paint stains occur on the asphalt adjacent to and on the sides of Building 347. These stains appear old and cover approximately 300 square feet. This staining is minor and will not be sampled as part of this PEP.

The ground cover in the IWTP is concrete in fair to poor condition; a 48-square foot area near the chrome reduction unit is etched. An 18-square foot, medium-intensity stain to the southeast of the clarifier tank was noted, caused by unknown chemicals. Staining in the functioning IWTP is addressed by Target Area 5.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Open Space I.

Open Space II

Open Space II is defined by the areas north and east of Building 5. This space covers approximately 15 percent of the parcel. Open Space II is used for vehicle and equipment parking, roadway, and material storage. The ground surface of Open Space II is completely paved.

Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in fair to poor condition.

Currently, a four AST system, with a total capacity of 29,000 gallons, containing water and glycol is the only structure present in Open Space II. Building 193 was formerly located in this open space and was demolished in 1953. No construction or use information regarding this building is available. Also, three additional ASTs, known only as Tanks 3, 4, and 7 (containing quench oil, glycols, and waste oil, respectively) were noted during document review, but their exact location could not be determined.

Utilities located within and immediately surrounding Open Space II include underground sanitary sewer, storm sewer, steam, water, and electrical lines. No permits have been issued for processes occurring within this open space.

EBS information indicates that activities conducted within this open space include material storage and vehicle parking. It appears that Open Space II was always used for these purposes.

No chemicals are documented to have been stored in Open Space II. No spills were noted during document review. Review of site inspection data indicates that undocumented spills may have occurred in a material and equipment storage area, southwest of the Avenue D and Second Street intersection, as evidenced by staining. The staining appears to be paint and oil based in origin, and to have involved a moderate quantity of released material. The staining covers an area measuring approximately 100 feet by 60 feet. The stains seem to run-off directly to a storm drain along the west edge of Second Street. This staining is addressed by Target Area 8.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Open Space II.

Underground Storage Tanks

One inactive underground storage tank is present at this parcel (Tank 5-A). Tank 5-A was installed in 1940 and is located west of Building 5. This tank, which has a capacity of 40 gallons, was used to store waste oil, solvents, and gasoline. The presence of this tank was identified from the EBS. The available information did not identify why the tank was abandoned. However, based on general comments made by NAS Alameda personnel, a tank was most commonly abandoned because it was leaking. This tank has been identified as a

RCRA tank based on its former contents. Tank 5-A is scheduled to be removed.

One additional underground storage tank has been identified at this parcel (T-5A-1). No other information is available regarding this tank.

Parcel Boundary Conditions

Parcel 54 is bounded by Parcels 45, 46, 47, 48, 49, 51, 52, 55, 56, 57, 58, 59, and 68. Parcel 52 is IR Site 10A (Building 400, Missile Rework Operations). Activities of concern on these adjacent parcels include hazardous waste and materials storage on Parcels 49 and 57. Avenues C, F, and Second Street border Parcel 54 to the north, south, and east, respectively.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel included, at one time, 29 RCRA sites (GAP 2, GAP 3, GAP 4, GAP 5, GAP 8, GAP 10, GAP 12, GAP 13, GAP 14, GAP 16, GAP 17, GAP 18, GAP 20, GAP 21, GAP 22, GAP 23, GAP 24, GAP 25, GAP 26, GAP 27A, GAP 29, GAP 30, GAP 31, GAP 33, GAP 57, GAP 70A, two unknown GAP sites, and UST 5-A). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, none of the 28 former and current RCRA GAP sites at this parcel require further investigation because they are all paved, most are relatively new, and because staining was not noted at GAP sites by site inspectors. The RCRA site at Tank 5-A does require further investigation, and will be addressed by the UST program. A brief description of each of the RCRA sites is provided below.

GAP Site 2 was located in Building 5A in shop 95532; it is unknown whether any chemicals were released from this site. The dimensions of GAP Site 2 are unknown. The chemicals of concern associated with this site included poly paint, thinner, and naphtha wastes. This site has been removed.

GAP Site 3 was located in Building 5A in shop 95723; it is unknown whether any chemicals were released from this site. The dimensions of GAP Site 3 are unknown. The chemicals of concern associated with this site included MEK, Freon, engine oil, and synthetic hydraulic oil. This site has been removed.

GAP Site 4 is located in Building 5A in shop 93532 and it is unknown whether any chemicals were released from this site. GAP Site 4 consists of 15 gallons of acid and one pallet of batteries. The chemicals of concern associated with this site include battery acid and nickel-cadmium solution. This site is currently active.

GAP Site 5 is located in Building 5A in shop 95531 and it is unknown whether any chemicals were released from this site. GAP Site 5 consists of aerosol cans. The chemicals of concern associated with this site include poly paint, thinner, and aerosol paint. This site is currently active.

GAP Site 8 is located in Building 5A in shop 95832 and it is unknown whether any chemicals were released from this site. GAP Site 8 consists of 55-gallon drums. The chemicals of concern associated with this site include hydraulic fluid, JP-5, engine oil, waste oil, and petroleum products. This site is currently active.

GAP Site 10 is located in Building 5 in shop 93534 and it is unknown whether any chemicals were released from this site. GAP Site 10 consists of 5-gallon containers, 55-gallon drums, and 30-gallon drums. The chemicals of concern associated with this site include hydraulic oil, 1010 oil, lube oil, asbestos, Freon, JP-5, and aerosol paint. This site has been combined with GAP 16.

GAP Site 12 is located in Building 5 in shop 93432 and it is unknown whether any chemicals were released from this site. GAP Site 12 consists of aerosol cans, 30-gallon drums, 5-gallon containers, and 55-gallon drums. The chemicals of concern associated with this site include water base primer, poly paint, thinner, MEK, and aerosol paint. This site is currently active.

GAP Site 13 is located in Building 5 and it is unknown whether any chemicals were released from this site. GAP Site 13 consists of 55-gallon drums. The chemicals of concern associated with this site include primer, thinner, and acetone. This site is currently active.

GAP Site 14 is located in Building 5A in shop 95621 and it is unknown whether any chemicals were released from this site. GAP Site 14 consists of 55-gallon drums. The chemicals of concern associated with this site include hydraulic fluid, JP-5, stripper, oil, and fuel. This site is currently active.

GAP Site 16 is located in Building 5 in shop 93431 and it is unknown whether any chemicals were released from this site. GAP Site 16 consists of 55-gallon drums. The chemicals of concern associated with

this site include hydraulic fluid, beryllium, and contaminated wash water. This site is currently active.

GAP Site 17 is located in Building 5 in shop 93433 and it is unknown whether any chemicals were released from this site. GAP Site 17 consists of 30-gallon drums, 55-gallon drums, and large bags. The chemicals of concern associated with this site include SWARF with high nickel and chromium, some cadmium, aluminum oxide, and silicone carbide. This site has been combined with GAP 18.

GAP Site 18 is located in Building 5 in shop 65131 and it is unknown whether any chemicals were released from this site. GAP Site 18 consists of 30-gallon drums, 55-gallon drums, and large bags. The chemicals of concern associated with this site include machine and grinding coolant, SWARF, and heavy metal grindings. This site is currently active.

GAP Site 20 is located in Building 5 in shop 93332 and it is unknown whether any chemicals were released from this site. GAP Site 20 consists of 5-gallon containers, 30-gallon drums, 55-gallon drums, and large bags. The chemical of concern associated with this site was lead contaminated items. This site is currently active.

GAP Site 21 was located in Building 5 in shop 93333 and it is unknown whether any chemicals were released from this site. The capacity and containers of GAP Site 21 are unknown. The chemical of concern associated with this site was lead dust. This site has been removed.

GAP Site 22 is located in Building 5 in shop 93331 and it is unknown whether any chemicals were released from this site. GAP Site 22 consists of 55-gallon drums. Asbestos is the chemical of concern associated with this site. This site is currently active.

GAP Site 23 is located in Building 5 in shop 93422 and it is unknown whether any chemicals were released from this site. GAP Site 23 consists of 55-gallon drums. Ethyl acetate is the chemical of concern associated with this site. This site is currently active.

GAP Site 24 is located in Building 5 in shop 93422 and it is unknown whether any chemicals were released from this site. GAP Site 24 consists of large bags. The chemical of concern associated with this site included blasting grit (glass, garnet, plastic media blast). This site has been combined with GAP 25.

GAP Site 25 is located in Building 5 in shop 93422 and it is unknown whether any chemicals were released from this site. GAP Site 25 consists of 55-gallon drums, and large bags. The chemicals of concern

associated with this site include blasting grit (glass, garnet, plastic media blast), ethyl acetate, and aluminum oxide. This site is currently active.

GAP Site 26 is located in Building 5 in shop 93422 and it is unknown whether any chemicals were released from this site. GAP Site 26 consists of large bags. The chemical of concern associated with this site included blasting grit (glass, garnet). This site has been combined with GAP 25.

GAP Site 27A was located in Building 5 in shop 93440 and it is unknown whether any chemicals were released from this site. The capacity and containers of GAP Site 27A are unknown. The chemical of concern associated with this site was blasting grit (all media). This site has been removed.

GAP Site 29 is located in Building 5 in shop 93542 and it is unknown whether any chemicals were released from this site. GAP Site 29 consists of aerosol cans. The chemicals of concern associated with this site include aerosol paints. This site is currently active.

GAP Site 30 is located in Building 5 in shop 93545 and it is unknown whether any chemicals were released from this site. GAP Site 30 consists of 30-gallon drums and 55-gallon drums. The chemicals of concern associated with this site include hydraulic oil and Freon 113. This site is currently active.

GAP Site 31 is located in Building 5A in shop 95625 and it is unknown whether any chemicals were released from this site. GAP Site 31 consists of 30-gallon drums and 55-gallon drums. The chemicals of concern associated with this site include hydraulic fluid, engine oil, lube oil, aerosol lubrication, solvents, and some paint. This site is currently active.

GAP Site 33 is located in IWTP #5 and it is unknown whether any chemicals were released from this site. GAP Site 33 consists of 55-gallon drums. The chemicals of concern associated with this site include wastewater products and lime bags. This site is currently active.

GAP Site 57 was located in Building 5 in shop 93432 and it is unknown whether any chemicals were released from this site. The capacity and containers of GAP Site 57 are unknown. The chemicals of concern associated with this site included plating solutions and cadmium solution. This site has been removed.

GAP Site 70A is located in Building 5 in shop 93432 and it is unknown whether any chemicals were released from this site. GAP Site 70A

consists of 30-gallon drums and 55-gallon drums. The chemicals of concern associated with this site include cyanide, chromic acid plating solutions, nickel chloride, metex acid, and sulfamic acid. This site is currently active.

The site number and status of a GAP site in Building 5A in shop 96235 is unknown. Historical releases and capacities of containers are also unknown. The chemicals of concern associated with this site included VV-L-800, rust remover, PD-680, Freon TF, and alkaline solvent.

The site number of a GAP site in the container storage area at the southeast corner of Building 5 is unknown. This site consists of three covered storage areas, 2,600 square feet, for 55-gallon drums with a 5,000 gallon total capacity. The chemicals of concern associated with this site included spent solvents (toluene, MEK, 1,1,1-TCA, methylene chloride), waste flammable liquids, beryllium, and mercury. This site has not been used for storage of hazardous waste for a number of years.

UST 5-A has been identified as a RCRA tank based on its former contents. This tank is scheduled to be removed, and any necessary investigation will be implemented as part of the UST program. A description of this tank may be found in the Underground Storage Tank subsection provided previously.

The Hazardous Waste Facility Permit (Permit) for NAS Alameda included an RFA. The RFA identified Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). The permit requires NAS Alameda to investigate all SWMUs and AOCs identified in the permit and any other sites which NAS Alameda may discover. Usually, the investigation is conducted through an RFI. At NAS Alameda, however, the requirements of the permit are being met through PEPs and the UST Program. Sites requiring remediation will not go through RCRA Corrective Action. Instead, they will be remediated through the Installation Restoration Program, consistent with CERCLA, or through the UST Program.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[2] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

[2] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-54-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are of concern in Building 5, as noted above as part of the Building 5 discussion. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-54-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 54 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. This parcel contains eight parcel-specific target areas. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-54-2.

- Target Area 1 (Building 5A, Central Area): The aircraft maintenance line in the middle of Building 5A may have been impacted by former metal work shops located in this area, and by used and unused lubrication, hydraulic, and other petroleum-based

TABLE 6-54-2

Summary of Data Gaps
NAS Alameda Parcel 54

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located on Parcel 54. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-54-2

Summary of Data Gaps
NAS Alameda Parcel 54

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 5A, Central Area). • Target Area 2 (Building 5, Southeast Area). • Target Area 3 (Building 5, Northeast Area). • Target Area 4 (Building 5, North-Central Area). • Target Area 5 (Open Space I). • Target Area 6 (Open Space II).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Two USTs currently exist at Parcel 54 (Tanks 5-A and 5A-1). • Tank 5-A: Inactive. Scheduled to be removed. • Tank 5A-1: Unknown. Future actions for this tank are unknown.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

oils used in this area. Extensive staining was noted in the area covered by this target area. This target area covers approximately 34,000 square feet and has been classified as having a potential likelihood of impacts. Four surface and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for TPH, SVOCs, and metals. The subsurface samples will be analyzed for these constituents as well as VOCs. The samples are listed in Table 6-54-1.

- Target Area 2 (Building 5, Southeast Area): The heat treat, pattern, metal manufacturing, foundry, rubber manufacturing, shot peen, and welding shops located in the southeast corner of the building may have been impacted by the use of chemicals containing VOCs, SVOCs, metals, and TPH. Extensive staining was noted in the areas covered by Target Area 2. This target area covers approximately 43,000 square feet and has been classified as having a potential likelihood of impacts. Six surface and three subsurface soil samples will be collected in this area, and are listed in Table 6-54-1. The surface soil samples will be analyzed for SVOCs, metals, and TPH. The subsurface samples will be analyzed for these constituents as well as VOCs.

- Target Area 3 (Building 5, Northeast Area): The rigging, CSD overhaul, and heavy metal work shops located in the northeast corner of the building may have been impacted by use of chemicals containing VOCs, SVOCs, metals, and TPH. Extensive staining was noted in the area covered by this target area. This target area covers approximately 37,000 square feet and has been classified as having a potential likelihood of impacts. Four surface soil and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for TPH, SVOCs, and metals. The subsurface samples will be analyzed for these constituents as well as VOCs. The samples are listed in Table 6-54-1.

- Target Area 4 (Building 5, North-Central Area): The small parts painting, inflight refueling, landing gear, and cryogenics shops located in the north-central area of the building may have been impacted by use of chemicals containing VOCs, SVOCs, metals, and TPH. This target area covers approximately 27,000 square feet and has been classified as having a potential likelihood of impacts. Two surface and three subsurface soil samples will be collected in this area. The surface soil samples will be analyzed for TPH, SVOCs, and metals. The subsurface samples will be analyzed for these constituents as well as VOCs. The samples are listed in Table 6-54-1.

- Target Area 5 (Open Space I): The industrial wastewater treatment processes involving metal-contaminated water, reactives, VOCs, and SVOCs may have impacted the stained area in IWTP #5. This target area covers approximately 2,000 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this area and analyzed for TPH, SVOCs, VOCs, Reactives, and metals. The samples are listed in Table 6-54-1.

- Target Area 6 (Open Space II): The soils beneath the stained area located southwest of the intersection of Second Street and Avenue D may have been impacted by fuels, oils, and metals. The pavement in Open Space II was noted by site inspectors to be in fair to poor condition. This target area covers approximately 6,000 square feet and has been classified as having a potential likelihood of impacts. Three surface soil samples will be collected in this area and analyzed for TPH, SVOCs, and metals. The samples are listed in Table 6-54-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14).

Table 6-54-1 summarizes screening-level sampling and analysis recommended for the target areas on Parcel 54. Fifteen subsurface Geoprobe samples and 19 surface soil samples will be collected from the locations shown on Figure 6-54-1. The sample locations shown on this figure are approximate; actual locations will be determined in the field based on areas exhibiting the most significant staining. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The actual locations of the subsurface and surface soil samples, in all of the target areas, will be in the areas of most extensive and severe staining, concentrating also in areas where the floor is cracked and/or deteriorated. Also, the sampling proposed in Target Area 3 will be conducted through the concrete floor underlying the wood blocks covering the shop floor areas.

The overall characterization of the parcel will be accomplished by considering the results of the IR program as well as this PEP. Certain areas, such as the abandoned plating shop, and most of Open Spaces I and II, the northwest corner of Building 5A, and the northeast corner of Building 5A, will not be sampled because the IR program has conducted sufficient sampling.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-55

PARCEL 55 EVALUATION PLAN

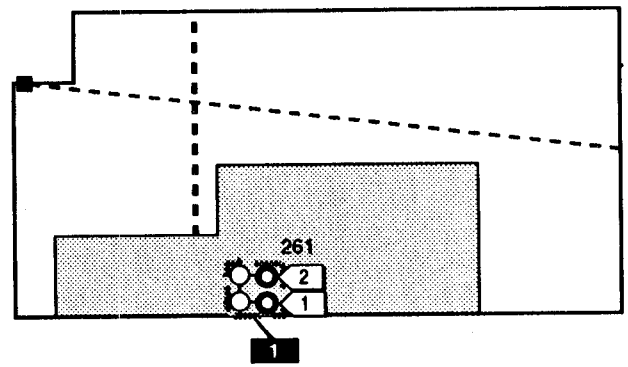
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 55 at NAS Alameda (Figure 6-55-1). The parcel, which is located in the central portion of the base, is less than one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site is located at this parcel. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-55-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 55, historical activities are discussed below.

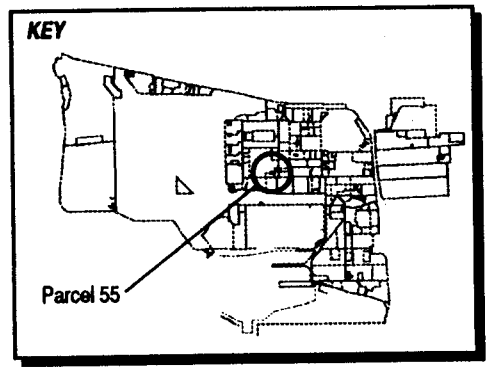
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 55, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 49, 54, 56, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for





LEGEND

- Target Area 1
- Storm Sewer Line
- Steam Line
- GeoProbe Sample Location
- Surface Soil Sample Location
- Catch Basin

1" = 30'

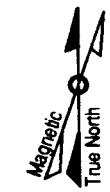


Figure 6-55-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94

TABLE 6-55-1

Summary of Recommended Samples
NAS Alameda Parcel 55

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
55-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
55-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels	VOCs	CLP RAS
55-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
55-2-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels	VOCs	CLP RAS

Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 261) covers approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel area is presently in use as a NADEP storage area. There is no record of any former buildings on the parcel. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-55-1.

Parcel 55 is located adjacent to Installation Restoration (IR) Program Site 5 (Building 5), 250 feet northeast of IR Site 10A (Building 400), and 300 feet west of IR Site 12 (Building 10). No previous investigations have been conducted at Parcel 55 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 261

Building 261 was constructed in 1943 and historically served as a storehouse for hazardous and flammable materials including oils and greases (Figure 6-55-1). It is currently used for storage of electrical equipment and absorbent electrical parts. Building 261 is a metal shack, with an asphalt coated floor. There is evidence that portions of the USTs associated with this building are located directly underneath it. Vent pipes are located on the west side of the building. Building 261 covers approximately 1,400 square feet and is in fair condition.

Utilities located within and immediately surrounding Building 261 include underground sanitary sewer, storm sewer, steam, and water lines. An air permit (source number 2754) was issued for one of the USTs associated with Building 261.

On the south side within this building is a concrete bermed area that was thought by site inspectors to be representative of a spill. The area was covered with cardboard and had a strong fuel-like odor associated with it (this bermed area is addressed by Target Area 1). No other significant staining or odors were noted by site inspectors.

An asbestos removal action was noted during the site inspection, and the insulation on piping was encapsulated. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 261.

Open Space

The open space covers approximately 70 percent of the parcel. The open space is entirely paved with concrete. A liquid argon storage tank is located on the north side of the parcel. The open space is used as a driveway to Buildings 5 and 261. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, and water lines.

No chemical storage, spills or releases are documented to have occurred in this open space. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within this open space.

Underground Storage Tanks

Three inactive underground storage tanks are listed present at this parcel (Tanks 261-1, 261-2, and 261-3). The tanks were installed in 1943 and are located near Building 261. Tank 261-3 is likely located on Parcel 57, south of Building 261. These tanks were used to store kerosene, JP-5, and PD-680, and have capacities of 500 gallons, 500 gallons, and 4,500 gallons, respectively. The presence of these tanks was identified from the EBS. These tanks were emptied on November 20, 1989. A total of approximately 4,000 gallons of chlorinated solvents and kerosene were stored in the USTs at one time. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. These tanks have been identified as RCRA tanks based on their former contents and inclusion in the RFI. Tanks 261-1, 261-2, and 261-3 are scheduled to be removed.

Parcel Boundary Conditions

Parcel 55 is bounded by Parcels 54 and 57. Parcel 54 is IR Site 5 (Building 5). Activities of concern on these adjacent parcels include aircraft rework, painting, finishing, metal working, fuels storage and use, and other chemical storage.

No sampling is called for in this PEP in response to IR Site 5. If the continuing investigations at IR Site 5 reveal a cause for concern at Parcel 55, then additional sampling on Parcel 55 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (the USTs). Chromium and cyanide were detected in soil and groundwater samples taken near Tank 261-3. These tanks were identified as RCRA tanks based on their former contents and inclusion in the RFI.

The Hazardous Waste Facility Permit (Permit) for NAS Alameda included an RFA. The RFA identified Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). The permit requires NAS Alameda to investigate all SWMUs and AOCs identified in the permit and any other sites which NAS Alameda may discover. Usually, the investigation is conducted through an RFI. At NAS Alameda, however, the requirements of the permit are being met through PEPs and the UST Program. Sites requiring remediation will not go through RCRA Corrective Action. Instead, they will be remediated through the Installation Restoration Program, consistent with CERCLA, or through the UST Program. These tanks are scheduled to be removed, and any necessary investigation will be implemented as part of the UST program. A description of the tanks is provided in the Underground Storage Tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 55, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being

TABLE 6-55-2

Summary of Data Gaps
NAS Alameda Parcel 55

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 55 is located adjacent to Installation Restoration (IR) Program Site 5 (Building 5), 250 feet northeast of IR Site 10A (Building 400), and 300 feet west of IR Site 12 (Building 10). Additional subsurface investigation relative to IR Sites 5, 10, and 12 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 261).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-55-2

Summary of Data Gaps
NAS Alameda Parcel 55

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Three USTs currently are listed as present at Parcel 55 (Tanks 261-1, 261-2, and 261-3). Tank 261-3 is likely located south of Building 261 (on Parcel 57). All three tanks are inactive and scheduled to be removed.
Underground Utilities	• Storm sewer, sanitary sewer, and water lines identified.
- Steam Lines	• Steam lines identified. .
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-55-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 261. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-55-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 55 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target areas evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 261): The soil beneath the concrete bermed area of Building 261 may have been impacted by spills or leakage of petroleum products formerly stored in the building, as evidenced by a strong fuel odor noted by site inspectors in this area. The compounds of concern in this target area include petroleum-based fuels. This target area covers approximately 100 square feet and has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected from this target area and analyzed for petroleum hydrocarbons and VOCs. The approximate locations of the samples are shown on Figure 6-55-1 and listed in Table 6-55-1.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, the impacts of the adjacent IR site, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-55-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 55. Two surface and two subsurface soil samples will be collected from the locations shown on Figure 6-55-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The site-specific conditions at Target Area 1 results in a density of field surface soil samples equal to the protocol standard stated in Table 3-1. The samples should be located in the areas with the most significant staining.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-56

PARCEL 56 EVALUATION PLAN

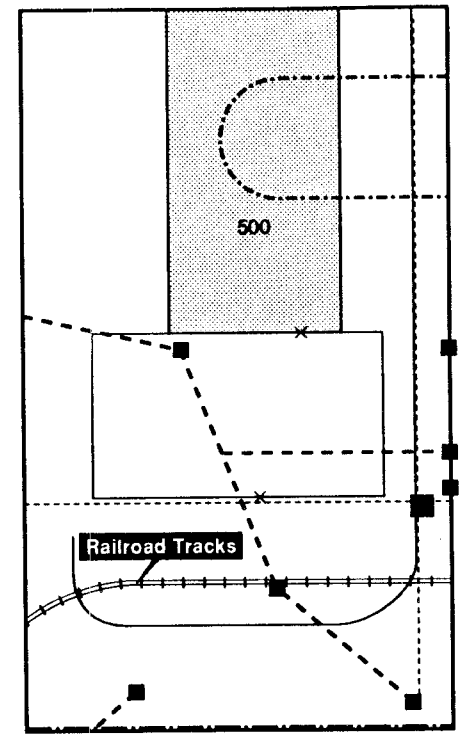
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 56 at NAS Alameda (Figure 6-56-1). The parcel, which is located in the central portion of the base, is less than an acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation area (target area) have been identified on this parcel. However, no zone-wide target area samples are located at this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-56-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 56, historical activities are discussed below.

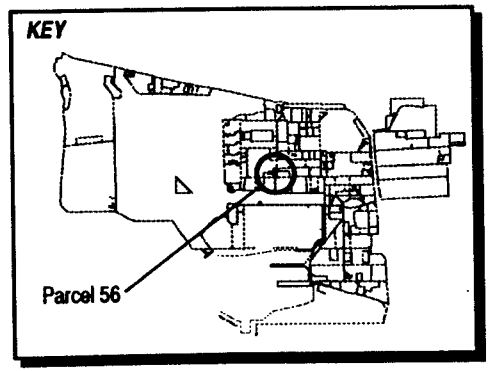
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 56, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 49, 54, 55, 57, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for





LEGEND

- Fuel Lines Abandoned
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1" = 60'

Figure 6-56-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 500) covers approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel area is presently in use as an administration office area and for vehicle and equipment parking. No buildings are documented to have formerly existed at Parcel 56. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-56-1.

Parcel 56 is adjacent to Installation Restoration (IR) Program Sites 5 and 12 (Buildings 5 and 10, respectively), and is located 400 feet northeast of IR Site 10A (Building 400). No previous investigations have been conducted at Parcel 56, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 500

Building 500 was constructed between 1958 and 1963 and currently serves as an administration office building (Figure 6-56-1). The building is reported to have been used historically for equipment handling and transfer (a receiving and delivering shelter was constructed in 1966 to facilitate these activities). This building covers approximately 4,200 square feet and is in moderately good condition. Building 500 has a steel-frame with metal facing and a concrete foundation.

Utilities located within and immediately surrounding Building 500 include underground sanitary sewer, storm sewer, steam, water, and

electrical lines. Abandoned underground fuel lines are located along the southern border of Parcel 56.

Information collected during the EBS indicates that activities conducted within this building include office operations, as well as chemical and equipment storage. A wood shop is located within this building. Woodworking typically involves the use of chemicals including oils, stains, paints, solvents, and glue. Less than 50 gallons of these chemicals were being stored in flammable materials cabinets in the vicinity of the wood shop at the time of the site inspection. There is no further documentation of chemical storage, spills, or staining in Building 500.

A hazardous waste accumulation area was present in the southeast corner of Building 5, which is less than 50 feet from Building 500. Waste chemicals documented to have been stored in this area include chlorinated organics, non-chlorinated organics, beryllium, and mercury. This hazardous waste container area had a 5,000-gallon capacity, and is currently inactive.

A heating-ventilation-air conditioning (HVAC) system is not documented to be present in Building 500. Insulation that may contain asbestos was noted around a heater on the north side of Building 500. No incidents such as fires, mishaps, flooding, or crashes are documented to have impacted Building 500.

Open Space

The open space covers approximately 85 percent of the parcel. The ground surface of the open space is paved with concrete, with an asphalt road running along the south border of Parcel 56. The pavement is generally in good condition. Old railroad tracks cross the parcel, trending east-west, on the south side. A large fenced enclosure is located in the open space on Parcel 56 south of Building 500.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines. Abandoned underground fuel lines are located along the southern border of Parcel 56.

EBS information indicates that activities conducted within this open space include material storage, equipment and vehicle parking, and washdown. Storage of plywood in metal bins and wood-shop equipment, and equipment parking was noted in this area during the site inspection.

No spills were noted during visual inspections, although staining typical of vehicle parking areas was noted on the concrete. Because the pavement is in good condition, and this is minor staining associated vehicle parking, no sampling will be performed in this area as part of this PEP. A storm drain located on the east side of the parcel serves as a receptacle for the runoff from the downspouts of Building 500, and had black staining around it. The staining around the storm drain will not be addressed by sampling in this PEP.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 56 is bounded by Parcels 53, 54, 57, 58, 69, 70, and 186. Parcel 54 is IR Site 5 (Building 5). Activities of concern at these parcels include aircraft rework, maintenance, and fueling on Parcels 54 and 70, and activities related to the fuel storage activities on Parcels 69 and 186. A release of fuel from a UST is known to have occurred on Parcel 186.

If the continuing investigations at the IR site or any neighboring parcels reveal a cause for concern at Parcel 56, then additional sampling on Parcel 56 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 56, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being

reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-56-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 56 because no industrial buildings are present.

Once the data gaps in Table 6-56-2 are addressed, Parcel 56 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel is contained in a zone with a zone-wide target area. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 10. The nature and location of the zone-wide target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 10 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Building 5 Heavy Industrial Zone. Railroad tracks are located in the southern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. No soil samples for this zone target area are located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by

TABLE 6-56-2

Summary of Data Gaps
NAS Alameda Parcel 56

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 56.
Installation Restoration (IR) Sites	• Parcel 56 is adjacent to IR Sites 5 and 12 (Buildings 5 and 10, respectively), and is located 400 feet northeast of IR Site 10A (Building 400). Additional subsurface investigation relative to IR Sites 5, 10A, and 12 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from neighboring Parcel 186 identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-56-2

Summary of Data Gaps
NAS Alameda Parcel 56

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

historical maps, shallow exploratory excavations, metal detectors, or other appropriate means.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-57

PARCEL 57 EVALUATION PLAN

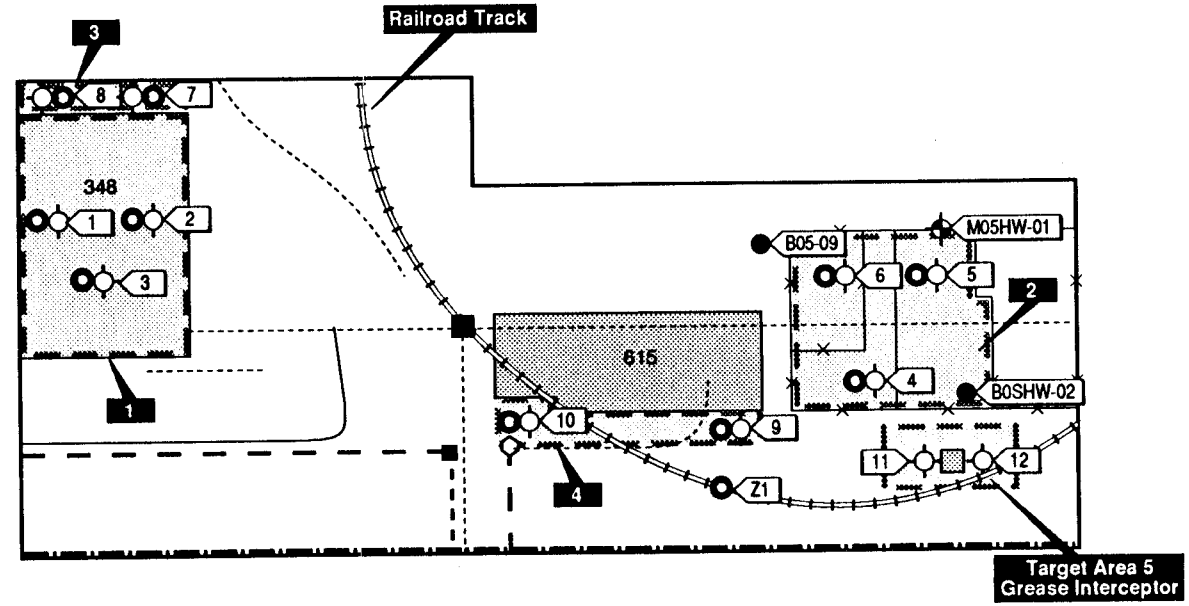
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 57 at NAS Alameda (Figure 6-57-1). The parcel, which is located in the central portion of the base, is 1.3 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains three RCRA sites. One zone-wide and five parcel-specific target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-57-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 57, historical activities are discussed below.

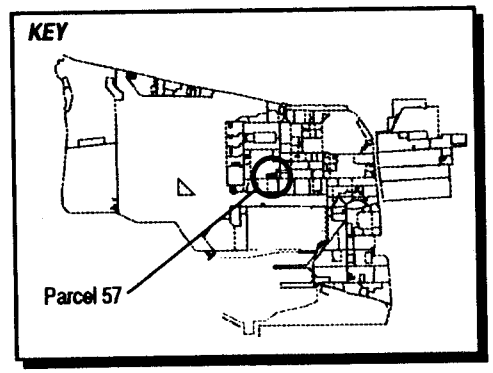
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 57, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 49, 54, 55, 56, 58, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for





LEGEND

- Target Areas 1-5
- Fuel Lines Abandoned
- Fuel Lines in Use
- Storm Sewer Line
- Sewer Line
- CappedSurface
- Surface Soil Sample Location
- GeoProbe Sample Location
- Boring Sample Location
- Monitoring Well Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin (Industrial Waste)

1"= 60'

Magnetic
True North

Figure 6-57-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94

TABLE 6-57-1

Summary of Recommended Samples
NAS Alameda Parcel 57

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
57-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
57-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-2-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
57-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-3-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
57-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-4-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents	VOCs	CLP RAS
57-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-5-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents	VOCs	CLP RAS
57-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-6-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents	VOCs	CLP RAS
57-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Acids	Reactives	Chapter 7, SW 846
57-7-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Solvents	VOCs	CLP RAS
57-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Acids	Reactives	Chapter 7, SW 846
57-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Solvents	VOCs	CLP RAS
57-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Lube Oil	TPH	Modified EPA 8015
57-9-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Fuels	VOCs	CLP RAS
57-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Lube Oil	TPH	Modified EPA 8015
57-10-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 4	Fuels	VOCs	CLP RAS
57-11-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Waste Oil, Fuels	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-11-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Fuels	VOCs	CLP RAS

TABLE 6-57-1

Summary of Recommended Samples
NAS Alameda Parcel 57

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
57-12-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP SCAN
57-12-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 5	Fuels	VOCs	CLP RAS
Z10-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 10 Target Area 1	PCBs, Fuels, Oils	PCBs, TPH, Lead	EPA 8080, Modified EPA 8015, ICAP SCAN
Z10-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 10 Target Area 1	Creosote, Railroad Tie Tar	SVOCs	CLP RAS

Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 348, 415, and 615) cover approximately 20 percent of the parcel. The remaining 80 percent is open space. The parcel area is presently in use as a general storage area. No former buildings are documented to have existed on this parcel. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-57-1.

Parcel 57 is located immediately south of an Installation Restoration (IR) Program site (IR Site 5 - Building 5, Aircraft Rework Facility). Previous investigations have been conducted at Parcel 57, and specific data regarding potential chemical occurrence are available.

Volume 1 of the *Data Summary Report, RI/FS Phases 2B and 3, Final* dated October 27, 1992 and prepared by PRC Environmental Management, Inc. and Montgomery Watson for the Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) program contains soil analytical results for four samples taken from one boring drilled in Parcel 57. Benzo(a)pyrene was the only organic compound detected at a level exceeding its EPA Preliminary Remedial Goal (PRG) for unrestricted use (0.061 mg/kg). Arsenic, beryllium, and manganese were the only metals detected at levels exceeding PRGs. Arsenic was found above the unrestricted use PRG of 0.32 mg/kg in all samples; two were above the industrial PRG of 2.0 mg/kg. Beryllium exceeded the unrestricted use PRG (0.14 mg/kg) in two samples. One sample contained manganese at a concentration that exceeded the unrestricted use PRG of 380 mg/kg.

As part of part of follow-up sampling, two additional borings were drilled near Building 415; results for the eight soil samples are presented in the *Data Summary Report, Background and Tidal Influence Studies and Additional Work at Sites 4 and 5, Volume 1 of 2, Draft Final*, dated August 4, 1992. A monitoring well was installed in one of the two borings. The soil samples were analyzed for VOCs, SVOCs, metals, and cyanide. Only one sample contained organic compounds above unrestricted use PRGs. This sample contained benzo(b)fluoranthene, benzo(a)pyrene, and indeno(1,2,3-cd)pyrene at

levels that exceeded the unrestricted use PRGs of 0.61 mg/kg, 0.061 mg/kg, and 0.61 mg/kg, respectively. The benzo(a)pyrene concentration was also above the industrial PRG of 0.26 mg/kg. Among the metals, arsenic, beryllium, and hexavalent chromium were detected at levels exceeding the PRGs. All samples contained arsenic above the unrestricted use PRG of 0.32 mg/kg. Beryllium was detected in one sample at a level above the unrestricted use PRG of 0.14 mg/kg, while hexavalent chromium exceeded the unrestricted use Cal-Modified PRG (0.2 mg/kg) in two samples. Cyanide was not detected in any of the samples.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 348

Building 348 was constructed in the early 1960s and has served as a Corrosion Control Shop since then (Figure 6-57-1). This building covers approximately 5,100 square feet and is in poor condition; the concrete floors are severely etched. Building 348 was constructed with metal walls and roof. The space occupied by Building 348 was formerly open space used for storage.

Utilities located within and immediately surrounding Building 348 include underground sanitary sewer, storm sewer, water, electrical, abandoned fuel, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included aircraft outer surface and parts steam cleaning. Methylene chloride was previously used in this practice. The east and west side of the building interior contain abandoned dip tanks. No staining was noted in the area of the tanks by site inspectors. Available documents contain no information regarding chemical storage or disposal methods in this building.

The severely etched and eroded concrete floor of Building 348 is 80 percent pitted. It is also sloped, allowing drainage of spills to the streets. A hole in the curb at the west end of the building allows liquids to enter and exit.

The wastewater from steam cleaning and piece part stripping (methylene chloride) is discharged to the gutter and drain. This system leads to the waste treatment plant. The berm for this area has a hole in it, allowing liquids to flow in and out of the bay. Although no staining was noted, and wastewater is supposed to be routed to the industrial wastewater system, the former activities in the building and the current condition of the floor indicate that methylene chloride used in parts washing may have impacted soils under the building. This potential impact is addressed as part of Target Area 1.

A heating-ventilation-air conditioning (HVAC) system does not exist in Building 348. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within or immediately surrounding Building 348.

Building 415

Building 415 was constructed in 1956 and served as a miscellaneous liquid storage area (Figure 6-57-1). Currently, it serves as a hazardous waste accumulation area. Building 415 is a shed with a slanted metal roof covering the fence walls and a coated concrete floor. This building is in fair condition. The space occupied by Building 415 was formerly open space used for miscellaneous storage.

Utilities located within and immediately surrounding Building 415 include underground sanitary sewer, storm sewer, water, electrical, abandoned fuel, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included hazardous waste storage. Currently there is a sign that reads: "Previous hazardous waste site — closure pending."

Flammables, petroleum products, resins, solvents, oils, and lubricants are documented to have been recently stored in the drum storage rack. Approximately 1,900 gallons of these chemicals were observed there. Hazardous waste materials that are present in this building include spent halogenated solvents and waste metals. The total storage capacity is 5,000 gallons. Disposal procedures for used chemicals are unknown.

An eight-foot by twelve-foot stain, likely from petroleum products, was observed at the northwest corner of this area. Another suspected petroleum product stain was noted near a east to west crack next to the dispensing area. A 20-foot by 5-foot stain runs north to south. Absorbent material was present on this stain at the time of visual inspections. The total stained area in this enclosure is less than

500 square feet. These stained areas are addressed by Target Area 2. There appears to be a continuous release of some petroleum product in the drum storage area. There is some secondary containment, in addition to absorbent and drip pans in the area, though this containment is cracked.

No incidents such as fires, flooding, or crashes are documented to have occurred within or immediately surrounding Building 415.

Building 615

Building 615 was constructed in 1982 and serves as a storage area for electrical equipment and assorted electrical parts (Figure 6-57-1). This one-story building covers approximately 5,000 square feet and is in fair condition. Building 615 is constructed of metal siding, metal roofing, and concrete floors. The space occupied by Building 615 was formerly open space used for storage.

Utilities located within and immediately surrounding Building 615 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included hazardous materials storage. Respirators are kept in a cabinet in this building in case of spills or fires. Resins and adhesives are being stored in their original containers on shelving in Building 615. A total of 100 gallons of chemicals were observed. In addition, hazardous waste was being stored on metal pallets in the building at the time of site inspections. Because no staining was noted in these areas of chemical storage during the site inspection, no sampling is proposed in this PEP for Building 615.

EBS files do not include any information about chemical releases on the premises of Building 615. An informal assessment indicated that there is a potential for ACM in the building.

Building 615 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 615.

Open Space

The open space covers approximately 80 percent of the parcel. The open space is used for storage. The ground surface of the open space is

almost entirely paved. The open space is surfaced with concrete and isolated patches of asphalt. The pavement is in fair condition.

Structures located within the open space include two inactive underground storage tanks (Tanks 261-3 and 615-3) and two active underground storage tanks (Tanks 615-1 and 615-2). Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel lines, and industrial sewer lines.

EBS information indicates that activities conducted within this open space include material storage, vehicle and equipment parking, outdoor repair, and washdown. The area of the open space south of Building 5 is used as a hazardous waste storage site. Railroad tracks begin at the south side of Building 5 and travel southeast, cutting through the southwest corner of Building 615. The tracks then travel east along the north side of Avenue E through the parcel.

A petroleum-based stain was observed on the roadway between Buildings 5 and 348. It covered an area 20 feet by 15 feet. Several stains were noted on a dip tank and the ground surrounding it. Because operations have ceased, there is no indication of which types of chemicals were used there. This staining is addressed by Target Area 3.

Chemicals being stored south of Building 615 include flammables and petroleum products. Leakage is apparent among the 30- and 55-gallon drums assembled in this area. This area is addressed by Target Area 4. The runoff from this area and the former hazardous waste site goes to a nearby storm drain collection channel. A drain, which contains a brownish/green residue, has a metal plate along the south edge labeled "grease receptor." This area is sandbagged, and will be addressed by Target Area 5.

Staining is present in the open space area. Oil-like stains (up to six feet in diameter) are located on the concrete in the southern portion of the parcel. A four-foot by twenty-foot area in the vacuum pump/lube oil storage area is also stained. Stains in the flammable paints and oils storage area are apparently the result of small releases.

The area between Buildings 400 and 5 has been the site of documented spills. The ground surface in this area is partially surfaced by asphalt. The first spill in this area involved the release of diesel oil. One and one-half gallons leaked from an aboveground storage tank onto the asphalt. Absorbent pads were used to clean up this incident. Another incident involved a spill of hexavalent chromium. Three thousand gallons of the wastewater containing hexavalent chromium was released when the truck overturned in January 1992. A vacuum truck

and absorbent material were used to clean up the spill. However, some of the wastewater flowed into the storm sewers on Avenue F. Any resulting impacts to the storm sewers in this area will be addressed by the underground utility investigations.

No other incidents such as fires, mishaps, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

Four underground storage tanks (USTs) exist at this parcel (Tanks 261-3, 615-1, 615-2, and 615-3). Two USTs are in use (Tanks 615-1 and 615-2) and two USTs have been abandoned (Tanks 261-3 and 615-3). Tank 261-3 is described in the Underground Storage Tank section for Parcel 55, because it is associated with Building 261, located on Parcel 55. Tank 615-3 was installed on an unknown date, and is located approximately 70 feet east of Building 615. Tank 615-3 was used to store used diesel fuel and waste oil and has a capacity of 1,000 gallons. The presence of these tanks were identified from the EBS. These tanks are scheduled to be removed. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking.

These tanks have been identified as RCRA tanks based on their former contents and inclusion in the RFI. Tank 615-3 is listed as a SWMU of medium priority in the RFA, and Tank 261-3 is considered to be an Area of Concern (AOC).

The two active USTs at this parcel (Tanks 615-1 and 615-2) were identified from the EBS. These tanks were installed in 1981 and are located in front of Building 615. Based on the available information, these tanks are used as spill control for Building 615, and are used in emergencies only. Tanks 615-1 and 615-2 have a capacities of 10,000 gallons and 5,000 gallons, respectively. No data pertaining to tightness or tank integrity has been identified. These tanks correspond, with Tank 615-3, to SWMU Site UST-19. These tanks were identified as RCRA tanks based on their use, potential contents, and inclusion in the RFI.

Parcel Boundary Conditions

Parcel 57 is bounded by Parcels 53, 54, 55, and 56. Parcel 54 is IR Site 5 (Building 5). Activities of potential environmental concern on

these parcels include aircraft rework, maintenance, fueling, and washdown.

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 57, then additional sampling on Parcel 57 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites, consistent with objectives described in Section 1 of the Shell Workplan. This parcel contains three RCRA sites (site number SWMU/Unknown, UST-19, and the AOC associated with Tank 261-3). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the three RCRA sites at this parcel, two sites (AOC and UST-19) require further investigation. These sites, which are both tanks, are being addressed as part of the UST program. The tanks are scheduled to be removed, and any necessary investigation will be implemented as part of the UST program.

Site SWMU/Unknown is comprised of the hazardous materials delivery areas at NADEP Buildings 614, 615, and 616. Known releases of nitric acid, oil and fuel, zyglow penetrant, poly paint, and PD-680 (50 gallons, 250 gallons, unknown quantity, 10 gallons, and 10 gallons, respectively) have occurred at the site. Because this site is spread over three non-contiguous parcels, it is not known from the available documents whether any of these releases occurred on Parcel 57. Because no staining was noted on the concrete flooring in Building 615, no investigation of this site is necessary on Parcel 57. Site SWMU/Unknown has a storage capacity of 17,000 cubic feet and is currently active.

The Hazardous Waste Facility Permit (Permit) for NAS Alameda included an RFA. The RFA identified Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). The permit requires NAS Alameda to investigate all SWMUs and AOCs identified in the permit and any other sites which NAS Alameda may discover. Usually, the investigation is conducted through an RFI. At NAS Alameda, however, the requirements of the permit are being met through PEPs and the UST Program. Sites requiring remediation will not go through RCRA Corrective Action. Instead, they will be remediated through the Installation Restoration Program, consistent with CERCLA, or through the UST Program. These tanks are

scheduled to be removed, and any necessary investigation will be implemented as part of the UST program. A description of the tanks is provided in the Underground Storage Tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 57, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-57-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 348. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-57-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 57 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains five parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-

TABLE 6-57-2

Summary of Data Gaps
NAS Alameda Parcel 57

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) and IR Site 10A are adjacent to Parcel 57. Additional subsurface investigation relative to IR Sites 5 and 10A is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 348). • Target Area 2 (Building 415). • Target Area 3 (North of Building 348). • Target Area 4 (South of Building 615). • Target Area 5 (Grease Interceptor).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-57-2

Summary of Data Gaps
NAS Alameda Parcel 57

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Four USTs currently exist at Parcel 57 (Tanks 261-3, 615-1, 615-2, and 615-3). • Tanks 615-1, 615-2: Active. Future actions for these tank are unknown. • Tanks 261-3, 615-3: Inactive. Scheduled to be removed.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, industrial sewer, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 10. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-57-2.

- Target Area 1 (Building 348): The target area is defined as Building 348, and covers approximately 5,100 square feet. The east and west side of the building interior have abandoned dip tanks, though no staining was noted in those areas. The pervasive use of methylene chloride in parts washing operations with the severely etched floor noted by site inspectors indicate a potential likelihood of impacts from TPH, VOCs, and metals to the soils below the foundation. Three surface and three subsurface soil samples will be collected in this target area. The samples are listed in Table 6-57-1.

- Target Area 2 (Building 415): Because the staining is scattered, the target area is defined by the edges of the enclosure, though the most stained areas are the intended target area. Site inspectors noted a continuous release of some petroleum product in the drum storage area. The total stained area in this enclosure is less than 500 square feet. Flammables, petroleum products, solvents, oils, and lubricants have been stored in this building. There is a potential likelihood of impacts from TPH, metals, and VOCs to the soils under the foundation of the building, which is cracked in places. Three surface and three subsurface soil samples will be collected in this target area. The samples are listed in Table 6-57-1.

- Target Area 3 (North of Building 348): This target area encompasses a petroleum-based stain and several stains noted on a dip tank and the surrounding ground surface observed on the roadway between Buildings 5 and 348. The petroleum stain covers an area 20 feet by 15 feet. The entire target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. There is no information regarding the types of chemicals used near the dip tank; therefore, the samples will be analyzed for TPH, SVOCs, metals, and reactives. Two surface and two subsurface soil samples will be collected in this target area. The samples are listed in Table 6-57-1.

- Target Area 4 (South of Building 615): The target area is defined as the area south of Building 615 where chemicals being stored include

flammables and petroleum products. The soils beneath this chemical storage area may have been impacted by the leakage apparent among the 30- and 55-gallon drums assembled in this area. This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. TPH and VOCs are the compounds of concern in this area. Two surface and two subsurface soil samples will be collected in this target area. The samples are listed in Table 6-57-1.

- Target Area 5 (Grease Interceptor): The target area is the area surrounding the grease interceptor located on the north side of Avenue F, near the southeast corner of the parcel. This has been designated a target area because the runoff from Target Area 4 and the former hazardous waste site goes to this grease receptor, and green, sludge-like material was noted at the time of the site inspection. TPH, VOCs, and metals are the compounds of concern. This target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this target area at a depth corresponding to the bottom of the grease collector. The samples are listed in Table 6-57-1.

- Zone 10 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Building 5 Heavy Industrial Zone. Railroad tracks are located in the southern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. The one soil sample for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. Samples to be collected in this target area are listed in Table 6-57-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14).

Table 6-57-1 summarizes screening-level sampling and analysis for the target areas on Parcel 57. Twelve subsurface Geoprobe soil samples and ten surface soil sample will be collected from the locations shown on Figure 6-57-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-58

PARCEL 58 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 58 at NAS Alameda (Figure 6-58-1). The parcel, which is located in the central portion of the base, is less than an acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in this area include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-58-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 58, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 58, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 49, 54, 55, 56, 57, and 59. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-58-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

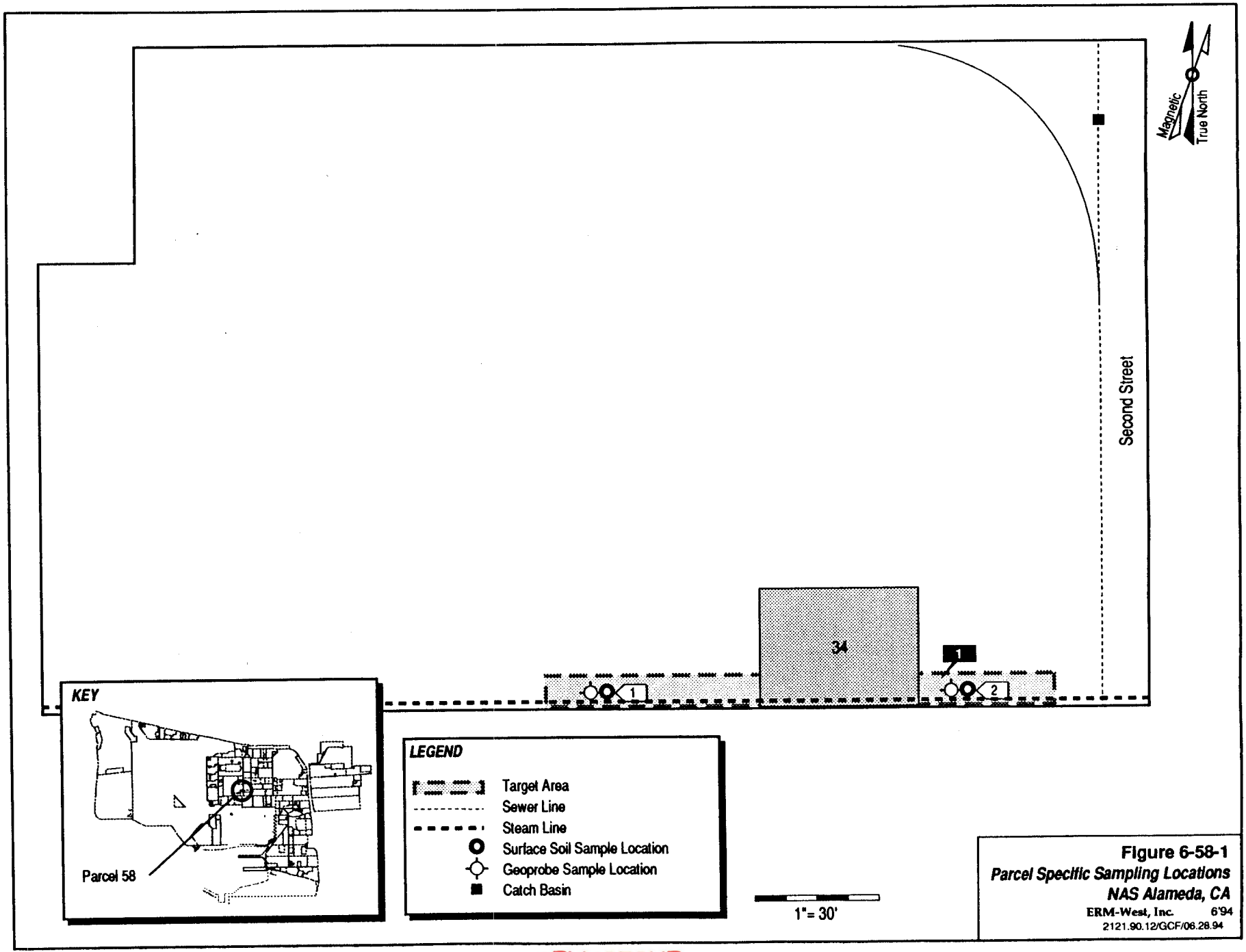


Figure 6-58-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.28.94

SENSITIVE

TABLE 6-58-1

Summary of Recommended Samples
NAS Alameda Parcel 58

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
58-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Oils, Stains, Adhesives	SVOCs	CLP RAS
58-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Solvents, Oils, Stains, Adhesives	TPH	Modified EPA 8015
58-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
58-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Oils, Stains, Adhesives	SVOCs	CLP RAS
58-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Solvents, Oils, Stains, Adhesives	TPH	Modified EPA 8015
58-2-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS

Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 34) covers less than five percent of the parcel. The remaining area is open space. The parcel area is presently in use as a material storage and vehicle parking area. There are no available records documenting buildings or structures previously located on Parcel 58. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-58-1.

Parcel 58 is located adjacent to Installation Restoration (IR) Program Site 5 (Building 5) and within 100 feet of IR Site 12 (Building 10). No previous investigations have been conducted at Parcel 58, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 34

Building 34 has always served as an electrical substation; it currently contains vacuum circuit breakers (Figure 6-58-1). This building is a concrete pad with no walls or roof (though it was given an official building number). Building 34 covers approximately 2,300 square feet and is in fair condition. Based on aerial photograph review, this building appears to have been constructed between 1975 and 1981. The space occupied by Building 34 was formerly open space used for storage.

Utilities located within and immediately surrounding Building 34 include underground sanitary sewer, steam, water, electrical, and industrial sewer lines.

No chemical storage other than transformer oils in transformers is documented for this building. Historically, PCB-containing transformers were located in this area. Site reviewers noted that one of the transformers had a "no PCBs" label. Two smaller transformers did not have "no PCBs" labeling. Some staining was noted on the concrete pads that the transformers are mounted on. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 34.

Open Space

The open space covers more than 95 percent of the parcel. Concrete covers the entire ground surface of the open space and is in good condition. There are no records of former buildings existing on this open space. Utilities located within and immediately surrounding the open space include underground sanitary sewer, steam, water, electrical, and industrial sewer lines

EBS information indicates that activities conducted within this open space include material storage, current small scale drum storage, and vehicle and equipment parking.

Fifty gallons of solvents, oils, wood stains, adhesives, thinner, and cutting oil are documented to have been stored in lockers in the open space at the south end of the parcel. Site inspectors reported that apparent small periodic releases of oils, paint and resins had resulted in staining on the ground next to the lockers. The staining in this area is addressed by Target Area 1.

Drums containing hazardous waste were noted in the southwestern portion of the parcel, including a 55-gallon drum of MEK and another 55-gallon drum of shop debris mixed with oil; this is a designated hazardous waste accumulation site. This site may correspond to SWMU/GAP Unknown that is listed as located at the southeast corner of Building 5. The GAP site is discussed in the PEP for Parcel 54, since it is associated with activities in Building 5. No staining was noted in this area by site inspectors.

Stains related to vehicle parking were also noted scattered on the concrete. Oil-like stains that may be related to equipment leakage were also observed on the pavement during visual inspections. This staining was relatively minor, and does not warrant sampling as part of this PEP.

No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 58 is bounded by Parcels 54, 56, 68, and 186. Activities of concern on these adjacent parcels include aircraft rework on Parcel 54, and fuel storage on Parcels 68 and 186. A documented fuel spill occurred on Parcel 186.

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 58, then additional sampling on Parcel 58 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 58, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-58-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

TABLE 6-58-2

Summary of Data Gaps
NAS Alameda Parcel 58

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 58.
Installation Restoration (IR) Sites	• Parcel 58 is located adjacent to IR Site 5 (Building 5) and within 100 feet of IR Site 12 (Building 10). Additional subsurface investigation relative to IR Sites 5 and 12 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from neighboring Parcel 186 identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer, electrical, and water lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-58-2

Summary of Data Gaps
NAS Alameda Parcel 58

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

No Industrial Hygiene (IH) sampling is required for Parcel 58 because no industrial buildings are present.

Once the data gaps in Table 6-58-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 58 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release area described above and listed in Table 6-58-2.

- Target Area 1 (Open Space): The soil beneath the hazardous materials lockers in the southern portion of the open space may have been impacted by spills or leakage of VOCs, SVOCs, and petroleum compounds contained in solvents, oils, wood stains, adhesives, and thinner stored in these containers. This target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected in this target area. These samples are listed in Table 6-58-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the impacts of the nearby IR sites must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-58-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 58. Two surface soil

samples and two subsurface soil samples will be collected from the locations shown on Figure 6-58-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The site-specific conditions at the target area results in a density of field samples equal to the protocol standards stated in Table 3-1. The samples in this target area should be located in the areas with the most significant staining. If no staining is evident, then the samples should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-59

PARCEL 59 EVALUATION PLAN

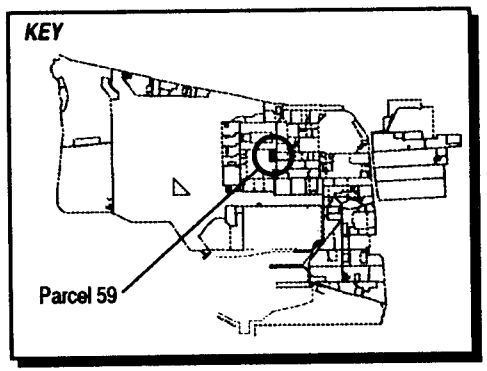
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 59 at NAS Alameda (Figure 6-59-1). The parcel, which is located in the central portion of the base, is 3.6 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 59, historical activities are discussed below.

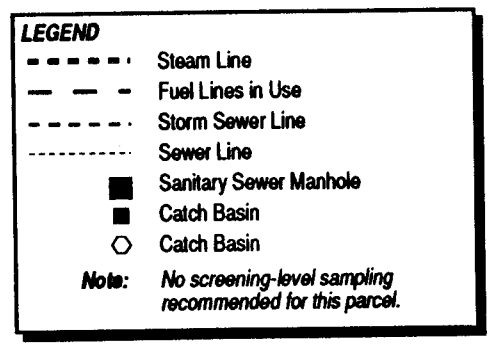
Background and Historical Activities

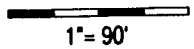
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 59, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 46, 47, 48, 49, 54, 55, 56, 57, and 58. This parcel zone has been designated the Building 5 Heavy Industrial Zone (Zone 10). The Building 5 Heavy Industrial Zone encompasses the parcels that surround and encompass the aircraft rework and maintenance facilities located on Parcel 54. Many of the parcels surrounding Parcel 54 are used for support facilities for Building 5. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the







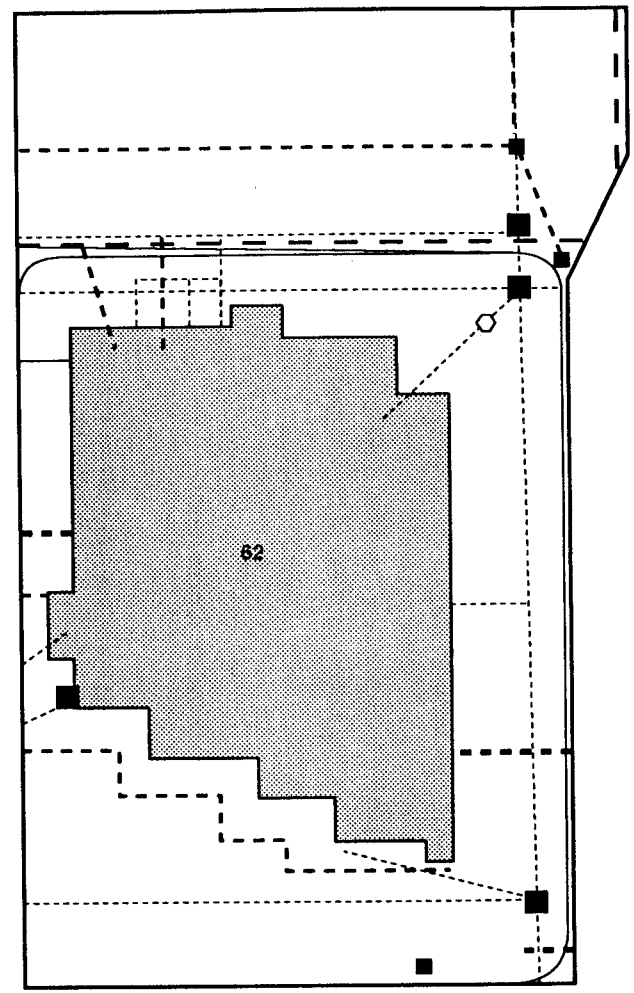


Figure 6-59-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 10.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 62) covers approximately 35 percent of the parcel. The remaining 65 percent is open space. The parcel area is presently in use as a data processing center. The old PWC housing office (Building 534) formerly existed on this parcel. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-59-1.

Parcel 59 shares its western and southern borders with an Installation Restoration (IR) Program site (IR Site 5 - Building 5). No previous investigations have been conducted at Parcel 59, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 62

Building 62 was constructed prior to 1947 and served as a cafeteria and credit union (Figure 6-59-1). This building is constructed of wood, with stucco walls, a concrete floor, and a built-up roof. Building 62 is in fair condition. Utilities located within and immediately surrounding Building 62 include sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines. Four oil-filled transformers are located primarily in the southwest corner of Building 62.

Corrosives, scaling inhibitor, paint, battery water, cleaning/household supplies, WD-40, TCE, and refrigerant are documented to have been stored in Building 62 in small quantities. Approximately 200 gallons of scaling inhibitor were stored in containers on the roof of the building. No other chemical storage, or staining or spills are documented to have occurred in Building 62.

Building 62 is equipped with a heating-ventilation-air conditioning (HVAC) system. The cooling system uses 25 percent outside air and 75 percent recycled air and is maintained every month. Peeling paint was observed inside some rooms of this building. ACM may be present in the insulation materials of the former boiler room. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 62.

Open Space

The open space covers approximately 65 percent of the parcel. The open space is 60 percent paved and 40 percent unpaved. The entire paved area is covered with concrete. The pavement is in moderately good condition. The unpaved areas of the open space are covered with gravel (five percent) and grass (35 percent). Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, fuel, electrical, and industrial sewer lines.

EBS information indicates that activities conducted within this open space have included vehicle parking. No chemicals were stored in this area at the time of visual inspections, and no spills or stains were noted. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

One active underground storage tank is located on the southwest side of Building 62 (Tank 62-1). The presence of this tank was identified from the EBS. Based on the available information, Tank 62-1 is used to store up to 2,000 gallons of diesel fuel. The installation date of this tank is unknown. Tank 62-1 passed a November 1991 tank and line test, and a 1993 tank and piping tightness test.

Parcel Boundary Conditions

Parcel 59 is bounded by Parcels 45, 54, 65, 66, and 67. Activities of concern on these adjacent parcels include aircraft rework on Parcel 54 (IR Site 5) and metal plating on Parcel 66.

No sampling is called for in this PEP in response to the nearby IR site or activities on adjacent parcels. If the continuing investigations at the IR site or surrounding parcels reveal a cause for concern at Parcel 59, then additional sampling on Parcel 59 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 59, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-59-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 59 because no industrial buildings are present.

As noted earlier, Parcel 59 has open space areas that are landscaped or unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 59.

Once the data gaps in Table 6-59-1 are addressed, Parcel 59 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-59-1

Summary of Data Gaps
NAS Alameda Parcel 59

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 59.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to Parcel 59. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST currently exists at Parcel 59 (Tank 62-1). • Tank 62-1: Active. Future actions for this tank are unknown.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-59-1

Summary of Data Gaps
NAS Alameda Parcel 59

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, industrial sewer, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, the impacts of the adjacent IR site, and USTs must be resolved before this parcel can be leased or transferred.

SECTION 6-Z11

ZONE 11 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 11 at NAS Alameda (Figure 6-Z11-1). Zone 11 has been designated the Southern Hangar Zone and encompasses the parcels located north of Taxiway 7 and Parking Apron 4, north of the former Seaplane Lagoon, that are used as hangars and hangar support facilities. Zone 11 is comprised of Parcels 50, 51, 52, 53, 70, 71, 72, 195, and 196. During sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and 23 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil gas sampling. Figure 6-Z11-1 illustrates all parcel-specific sampling locations for the entire zone. This zone analysis plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 11, historical activities are discussed below.

Zone 11 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 11 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the parcel-specific evaluation plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling

1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

was deemed necessary to delineate potential impacts of compounds of concern.

Zone 11, the Southern Hangar Zone, encompasses nine parcels that are primarily used for aircraft parking, maneuvering, washdown, fueling, and maintenance activities. During sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the Parcel Evaluation Plans (PEPs) for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1941; the ground level and grading have not changed significantly since that time.

Currently, six large hangar buildings and approximately 12 small support buildings and structures cover approximately 40 percent of the zone. The remaining 60 percent is open space, which is mostly paved. The zone is presently used primarily for aircraft maintenance and support activities. Two buildings (Building 197 on Parcel 51 and Building 199 on Parcel 195) were formerly located in this zone and have since been demolished. Underground fuel and sewer lines present in this zone are illustrated in the individual PEP figures.

Zone 11 contains two Installation Restoration (IR) Program sites (IR Site 6, Building 41-Aircraft Intermediate Maintenance Department; and IR Site 10A, Missile Rework Operations). Previous investigations have been conducted at Zone 11, and specific data regarding chemical occurrence at this zone are available. Previous investigations have been conducted at parcels 52 and 53. Additional sampling at parcels 50, 51, 71, and 196 has been proposed by the IR contractor as part of the IR Program investigation associated with IR Sites 6 and 10. Investigations at IR sites immediately north of Zone 11 (IR Site 5, Building 5; and IR Site 12, power plant) are ongoing.

Lead-based paint, PCBs, radiological considerations, industrial hygiene issues, and asbestos-containing materials are suspected to be concerns in Zone 11 but will be addressed in other sampling programs and are not considered in this ZAP. Industrial hygiene concerns potentially exist in several buildings including Buildings 11, 12, 39, 40, 41, and 400.

Underground Storage Tanks

Four tanks have been identified in Zone 11 on Parcels 52, 70, 71, and 195. Tanks on parcels 71 and 195 are listed as inactive and active, respectively. No additional information is available about these tanks. Tank H-39 on Parcel 70 was a 500-gallon fuel tank that has been removed. Tank 400-1 located on Parcel 52 is a 500-gallon diesel fuel tank that is currently inactive and scheduled for removal. No data pertaining to tightness or tank integrity of tanks in Zone 11 has been identified.

RCRA Sites

This zone includes nine RCRA sites on Parcels 51, 52, 195, and 196. These sites were evaluated consistent with the criteria applied to other potential target areas in the zone. Under these criteria, of the nine RCRA sites at this zone, only one (SWMU/GAP 7 on Parcel 51) requires further investigation. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 11 is bounded by Zones 4, 6, 10, 13, 14, and 17. Parking Apron 4 and Avenue F border Zone 11 to the south and north, respectively. Activities of concern in adjacent zones include heavy industrial operations in Zone 10 and storage of fuel and hazardous materials in Zone 13 (Parcel 69) and Zone 17 (Parcel 124).

Zone Target Areas and Compounds of Concern

This zone contains no zone-wide target areas and 23 parcel-specific target areas. This subsection of the ZAP provides an overview of the parcel-specific target areas. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 11 Target Areas

- There are no zone-wide target areas in Zone 11.

Parcel 50 Target Areas

- No parcel-specific target areas were identified on this parcel.

Parcel 51 Target Areas

Five parcel-specific target areas were identified for Parcel 51 as indicated below. Eight surface soil samples and 34 soil vapor samples will be collected from this parcel. Samples are shown on Figure 6-51-1.

- Target Area 1 (Building 11): The entire floor area of the building will be targeted, although sampling will be biased toward areas where aircraft are positioned for maintenance. The sampling strategy will be based on the observation that 25 percent of the floor was stained. This results in approximately 23,000 square feet of suspect area for VOCs. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 2, (Building 11, Fiberglass Shop): The fiberglass shop along the north side of the building will be targeted, specifically in the vicinity of the hazardous materials locker, as a potential area for VOCs and metals. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 3 (Building 11, Metal Working Shop): The metal working shop located along the north side of the building will be targeted as a potential area for TPH, VOCs, and metals because of the staining observed at the base of equipment. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 4 (SWMU/GAP 7): The GAP site located in the southwest portion of Building 11 will be targeted as a potential area for VOCs, TPH, and metals. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 5 (Open Space): The entire open space area to the west and south of Building 11 will be targeted as a potential area for VOCs and TPH because of the staining evident in aerial photographs and reported aircraft refueling activities conducted in this area. The likelihood of environmental impact having occurred

level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

within this target area is classified as potential. Samples to be collected in this Target Area are listed on Table 6-51-1.

Parcel 52 Target Areas

Three parcel-specific target areas were identified for Parcel 52 as indicated below. Fifteen soil vapor samples will be collected from this parcel. Sample locations are shown on Figure 6-52-1.

- Target Area 1 (Building 400, Fiberglass Shop): The fiberglass shop in the northwest corner on the first floor will be targeted as a potential area for VOCs. Although the total square footage for the entire fiberglass shop is approximately 8,000 square feet, sampling will be concentrated in the areas of specific concern. Therefore, the sampling density will be changed to one sample per 2,000 square feet (for a total of two samples). Actual sampling locations will be determined on-site. Samples to be collected in this target area are listed in Table 6-52-1.

- Target Area 2 (Building 400, Motor Test Room and Cleaning Room): The motor test room and cleaning room, both located along the east side of the first floor, covering approximately 1,600 square feet, will be targeted as a potential area for VOCs. Samples to be collected in this target area are listed in Table 6-52-1.

- Target Area 3 (Building 400, Hangar Floor): The hangar floor in the southern half of the building will be targeted as a potential area for VOCs due to the years of usage as an aircraft maintenance hangar and the multiple stains observed on the 60,000 square feet of floor area during the site inspection. Samples to be collected in this target area are listed in Table 6-52-1.

Parcel 53 Target Areas

Three parcel-specific target areas were identified for Parcel 53 as indicated below. Six surface soil samples and 22 soil vapor samples will be collected from this parcel. Sample locations are shown on Figure 6-53-1.

- Target Area 1 (Building 12, Former Metal Grinding Shop): The former metal grinding shop (located on the northwest side of the building and spanning approximately 900 square feet), will be targeted as a potential area for VOCs, TPH, and metals. Two surface soil samples will be collected from this shop. Samples to be collected in this Target Area are listed on Table 6-53-1.

- Target Area 2 (Building 12, Floor): The floor will be targeted as a potential area for VOCs. Soil vapor sampling will be collected along the perimeter and under an aircraft maintenance station. Based on the extensive aircraft maintenance activity that was conducted in this building, approximately 43,000 square feet of floor will be sampled. Samples to be collected in this Target Area are listed on Table 6-53-1.

- Target Area 3 (Open Space): The entire open space to the east and south of Building 12 will be targeted as a potential area for VOCs because of staining evident in aerial photographs and the reported refueling activities that conducted in this area. Samples to be collected in this Target Area are listed on Table 6-53-1.

Parcel 70 Target Areas

Four parcel-specific target areas were identified for Parcel 70 as indicated below. Six surface soil samples and 21 soil vapor samples will be collected from this parcel. Sample locations are shown on Figure 6-70-1.

- Target Area 1 (Building 39): The soils located under the concrete in the open hangar area may have been impacted by ongoing lubrication activities. The target area covers approximately 1,000 square feet and is classified as having a potential likelihood of impacts. This target area is intended to be a small area representative of the full hangar area. Samples to be collected in this Target Area are listed in Table 6-70-1.

- Target Area 2 (Open Space): The soil beneath the hazardous materials and hazardous waste lockers located on the west side of Building 39 may have been impacted by spills of petroleum products stored in these containers. The compounds of concern in this area are VOCs and TPH. The potential impact from VOCs will be addressed as part of Target Area 3. Target Area 2 covers approximately 100 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-70-1.

- Target Area 3 (Open Space): The soils located under the concrete in the eastern, western, and southern areas of the parcel may have been impacted by VOCs and TPH from fueling operations in these areas. The target area covers approximately 130,000 square feet and is classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-195-1.

- Target Area 4 (Open Space): The soils located under the concrete in stained areas of the helicopter landing pads may have been impacted with TPH compounds. One landing pad will be sampled, and will be considered representative of the remaining four. This target area covers 500 square feet, and is classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-70-1.

Parcel 71 Target Areas

- Target Area 1 (Equipment Shed and Fenced Area): This target area addresses the possible release of compounds of concern associated with metals, fuel, solvents, and lubricating oil stored and used within the equipment shed and fenced area in the northeast portion of the parcel. The size of this target area is approximately 5,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. Four soil vapor samples will be collected in this target area. Samples to be collected in this Target Area are listed in Table 6-71-1.

Parcel 72 Target Areas

- Target Area 1 (Open Space): Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. This target area covers approximately 6,200 square feet and has been classified as having a potential likelihood of impacts. Three surface soil samples will be collected in this Target Area. Samples to be collected in this Target Area are listed in Table 6-72-1.

Parcel 195 Target Areas

Two parcel-specific target areas were identified for Parcel 195 as indicated below. Two surface soil samples and 18 soil vapor samples will be collected from this parcel. Sample locations are shown on Figure 6-195-1.

- Target Area 1 (Building 40): The soils under the concrete in the open hangar area and in the northeast slide door lubrication area may have been impacted by TPH. The target area covers approximately 1,000 square feet and is classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-195-1.

- Target Area 2 (Open Space): The soils under the concrete in the eastern and southern areas of the parcel may have been impacted by fueling operations in these areas. The target area covers approximately 110,000 square feet and is classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-195-1.

Parcel 196 Target Areas

Two parcel-specific target areas were identified for Parcel 196 as indicated below. Two surface soil samples will be collected from this parcel. Sample locations are shown on Figure 6-196-1.

- Target Area 1 (Northeast Corner of Building 41): This target area addresses the possible release of petroleum products in the northeast corner of Building 41. The size of this target area is approximately 100 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. One surface soil sample will be collected in this target area. Samples to be collected in this target area are listed in Table 6-196-1.

- Target Area 2 (Center of Building 41): This target area addresses the possible release of petroleum products in the central area of Building 41. The size of this target area is approximately 100 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. One surface soil sample will be collected in this target area. Samples to be collected in this target area are listed in Table 6-196-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level techniques that will be employed to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Figure 6-Z11-1 illustrates screening-level sample locations for the parcel-specific target areas in this zone. For the parcel-specific target areas, a total of 27 surface soil samples and 114 soil gas samples will be collected. No zone-wide samples will be collected as no zone-wide target areas were identified for Zone 11. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-

SECTION 6-50

PARCEL 50 EVALUATION PLAN

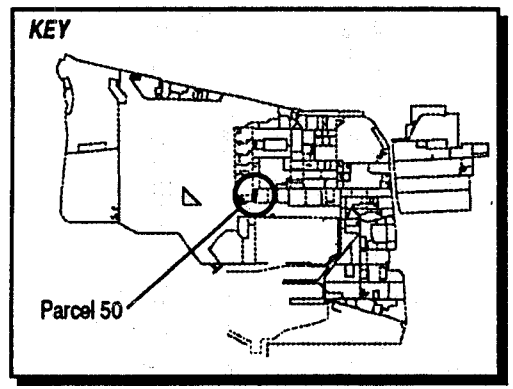
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 50 at NAS Alameda (Figure 6-50-1). The parcel, which is located in the central portion of the base, is 1.5 acres in size and rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with the Preliminary Endangerment Assessment requirements. Historical activities for Parcel 50 are discussed below.

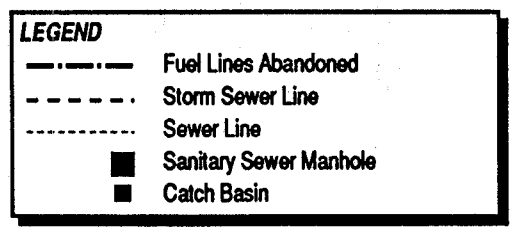
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 50 consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies other areas of concern on the parcel.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 51, 52, 53, 70, 71, 72, 195, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.





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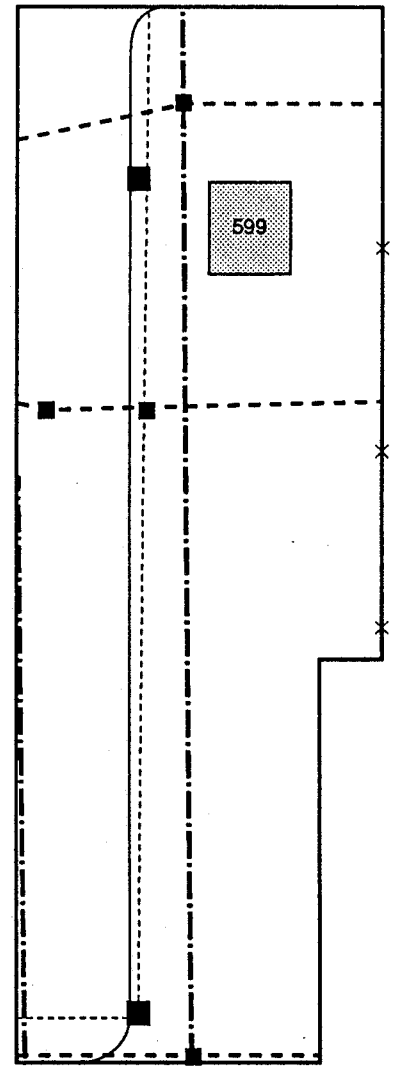


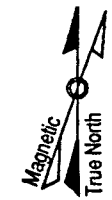


Figure 6-50-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94B

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 599) covers approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as a storage area and an electrical substation. No buildings or structures were formerly located on the parcel. Underground sewer lines are present on this parcel and are shown on Figure 6-50-1.

Parcel 50 is located approximately 300 feet southwest of an Installation Restoration (IR) Program site (IR Site 5-Building 5). No previous investigations have been conducted at Parcel 50 and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 599

Building 599 was constructed between 1975 and 1981 and is an electrical substation (Figure 6-50-1). Although listed as a building on the NAS Alameda building inventory, Building 599 is actually not a building, but a fenced enclosure with a concrete foundation. The building is in good condition and covers approximately 1,600 square feet. The space occupied by Building 599 was formerly open space used for parking and storage.

Utilities located within and immediately surrounding Building 599 include underground sanitary sewer, storm sewer, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that the activities conducted within this building included storage and electrical substation functions. No chemicals are documented to have been stored or used in Building 599, except one large transformer that is oil-filled. The transformer was labeled as not containing PCBs. PCB-

containing transformers are documented to have been present on Parcel 50, but none were noted during the site inspections. No spills or staining were noted in the enclosure. No other incidents (e.g., fires, mishaps, flooding, crashes) are documented to have occurred within or near Building 599.

Open Space

The open space covers over 95 percent of the parcel. Open space on Parcel 50 has been used for vehicle parking. The open space is completely paved with concrete. The pavement is in good condition.

No buildings were formerly located in this open space. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, electrical, abandoned fuel, and industrial sewer lines. No permits appear to have been issued for processes occurring within this open space.

No chemicals are documented to have been stored or used in the open space. No spills or staining other than that typical of vehicle parking areas were noted during the EBS review and site inspections. No other incidents (i.e. fires, mishaps, flooding, etc.) are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 50 is bounded by Parcels 23, 29, 30, 49, and 51. Activities of concern on these adjacent parcels include aircraft rework, fueling, painting and finishing, and maintenance on Parcels 30 and 51.

No parcels contiguous with Parcel 50 are IR sites, therefore, no sampling is called for in this PEP in response to any nearby IR site. If the continuing investigations at nearby IR sites reveals a cause for concern at Parcel 50, then sampling on Parcel 50 may be appropriate. Activities on Parcel 51 may potentially impact Parcel 50. Sampling for this boundary is being proposed in the Parcel 51 PEP. If the results of this sampling reveals that sampling is warranted on Parcel 50, then appropriate sampling will be conducted.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 50, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-50-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers and lead-based paint. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 50 because no industrial buildings are present.

Once the data gaps in Table 6-50-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 50 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas have been identified. However, the remaining data gaps (concerns pertaining to: lead-based paint, PCBs, underground lines, and nearby IR sites) must be resolved before this parcel can be leased or transferred.

TABLE 6-50-1

Summary of Data Gaps
NAS Alameda Parcel 50

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 50.
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located 300 feet northeast of Parcel 50. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Fuel lines identified.

TABLE 6-50-1

Summary of Data Gaps
NAS Alameda Parcel 50

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-51

PARCEL 51 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 51 at NAS Alameda (Figure 6-51-1). The parcel, which is located in the south central portion of the base, is approximately 5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains two RCRA units (SWMU/GAP 6 and SWMU/GAP 7); however, none are listed in the Part B permit as requiring a RCRA Facility Investigation (RFI). Five parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface GeoProbe, and soil gas sampling. Table 6-51-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 51, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 51, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 52, 53, 70, 71, 72, 195, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the

TABLE 6-51-1
Summary of Recommended Samples
NAS Alameda Parcel 51

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
51-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-4-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	TPH	TPH	CLP RAS
51-5-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-5-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	TPH	TPH	CLP RAS
51-6-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-6-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	TPH	TPH	CLP RAS
51-7-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-8-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-9-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-10-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-11-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-12-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-13-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-14-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-15-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-16-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC

TABLE 6-51-1

Summary of Recommended Samples
NAS Alameda Parcel 51

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
51-17-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-18-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-19-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-20-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-21-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-22-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
51-23-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
51-24-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
51-25-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Metals	Metals	CLP RAS
51-26-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
51-26-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Metals, VOCs	Metals, VOCs	CLP RAS
51-27-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
51-27-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Metals, VOCs	Metals, VOCs	CLP RAS
51-28-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Modified EPA 8015
51-28-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 4	Metals	Metals	CLP RAS
51-29-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 4	VOCs	VOCs	GC
51-30-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-31-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC

TABLE 6-51-1

Summary of Recommended Samples

NAS Alameda Parcel 51

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
51-32-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-33-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-34-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-35-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-36-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-37-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-38-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	GC
51-39-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	TPH	TPH	Test Kit
51-40-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	TPH	TPH	Test Kit
51-41-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	TPH	TPH	Test Kit
51-42-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 5	TPH	TPH	Test Kit
51-42-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 5	TPH	TPH	CLP RAS

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 11, 311, and 312) cover approximately 55 percent of the parcel. The remaining 45 percent is open space. The parcel area is presently in use as an aircraft maintenance and rework area, with vehicle parking space and material and drum storage in the open space. One building (Building 197) was formerly located on the parcel and has since been demolished. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-51-1.

Parcel 51 is located immediately west of an Installation Restoration (IR) Program site (IR Site 10A, Building 400) and approximately 250 feet south of IR Site 5 (Building 5). No previous investigations have been conducted at Parcel 51 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 11

Building 11 was constructed in 1941 and has since served as an aircraft maintenance and rework hangar (Figure 6-51-1). This building is in fair condition. Building 11 is a one story building constructed of concrete with a steel frame. It has a concrete floor, a redwood plank and tar paper roof, and covers approximately 91,000 square feet. Building 11 is approximately 250 feet wide and 360 feet long. There are offices located in built-up loft areas on the north and south sides of the building. Building 11 is the original facility constructed at this location.

Utilities located within and immediately surrounding Building 11 include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines. Air permits for solvent cleaning were issued for this building in 1993.

Information collected during the EBS indicates that activities conducted within this building include aircraft and component rework, known as "D-level (depot-level) maintenance." It appears that Building 11 has been used for this and similar purposes since its construction. Aircraft and component rework processes involve disassembly of and corrosion control for all major subsections of the aircraft, removal and replacement of panels, wings, landing gear, wiring systems, and electronic equipment, and the inspection and repair of various aircraft components. In short, every major system aboard an aircraft undergoes some maintenance in this hangar. Additionally, an ejection seat shop and fiberglass shop are located along the north side of the hangar, while a metal working shop is located along the south side. The fiberglass shop was formerly used as a plating shop. The industrial processes occurring in Building 11 typically involve the use or generation of chemicals and wastes, including solvents, degreasers, lubricating oils, primers, and corrosives. These processes and related chemical use and storage have occurred within Building 11 from 1941 to the present. It should be noted that rooms 143 (transformer room) and 148 (private contractor's janitor closet) could not be inspected because of accessibility restrictions.

Non-halogenated organics, halogenated organics, petroleum products, and paint are documented to have been stored and used in Building 11 during 1993. Approximately 2,000 gallons of the above chemicals, including acetone, hydraulic fluid, grease, and alcohol, were stored in Building 11 during 1993. Disposal of used chemicals is accomplished by collecting the wastes at the Generator Accumulation Point (GAP) sites GAP site 6 and GAP site 7. GAP site 6 is located in the northwest corner of the building, and GAP site 7 is located in the southwest corner of the building. During 1993, approximately 1,600 gallons of hazardous wastes, including paint, petroleum products, fuel, non-halogenated organics and metals were collected at Building 11.

No spills were noted during document review; however, information collected from former employee interviews indicate that many undocumented spills as a result of aircraft maintenance activities have occurred at various areas within Building 11. A typical spill or leak might involve anywhere from one to ten gallons of hydraulic fluid, lube oil, and JP-5 (jet fuel). Slow, continuous leaks from parked aircraft are usually captured by drip trays. The current concrete hangar floor has been painted over many times and is approximately 20 years old.

Site inspection notes indicate that the floor has experienced severe settling because of earthquakes. Reportedly, any spills are cleaned up, and wastes are sent to the GAP sites. The stains on the floor of Building 11 vary in size and have a medium intensity. Approximately 25 percent of the hangar floor was stained. These stains are being investigated under Target Area 1.

During the site inspection, an oily stain was observed at the base of sheet metal equipment in the metal working shop located along the north side of Building 11. The stain covered approximately five percent of the concrete floor. Also, evidence of a spill at GAP site 7 was noted; a five-foot by six-foot patch of paint on the concrete floor seemed to have been dissolved away. In the southwest corner of the building, oily stains were observed to cover roughly 30 percent of the area along the hangar door tracks. Lastly, a two-foot by four-foot stain was also noted at the base of a hazardous materials locker in the fiberglass shop, located at the north side of the building. The chemicals involved are unknown but are likely to be acetone, enamel, adhesives, sealants or anti-seize compounds.

Building 11 does not appear to have a heating-ventilation-air conditioning (HVAC) system. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 11. Potential radiological hazards do not appear to be of concern in Building 11, however, radioactive waste and depleted uranium are known to have been stored within the adjacent facility (Building 400). Radiological considerations will be addressed in other sampling programs and are not considered in this PEP.

Building 311

Building 311 was constructed in 1942 and served as a material and equipment storage area. This building was not inspected because of accessibility limitations. Building 311 is a one story building constructed of concrete, and covers approximately 100 square feet. This building is scheduled for demolition. The space occupied by Building 311 was formerly part of the apron area associated with Building 11.

Utilities located within and immediately surrounding Building 311 include underground sanitary and storm sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that this building was consistently used as a material and equipment storage area. No detailed records were available specifying the types and quantities of material stored in Building 311. No documented spills were found for

Building 311. Building 311 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents, such as fires, mishaps, or flooding, are documented to have occurred within Building 311. Radioactive waste and depleted uranium are known to have been stored within the adjacent parcel (Buildings 400 and 310). Radiological considerations will be addressed in other sampling programs and are not considered in this PEP.

Building 312

Building 312 was constructed in 1942 and has served as a miscellaneous storage locker. This building is in moderately good condition. Building 312 is a one story building constructed of concrete with a metal floor and door, and covers approximately 100 square feet. The space occupied by Building 312 was formerly part of the apron area associated with Building 11.

Utilities located within and immediately surrounding Building 312 include underground sanitary sewer, and storm sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that activities conducted within this building included storage of solvents and class E explosives. It is currently used to store aircraft parts. It does not appear that any industrial processes were ever conducted within Building 312. No detailed records were available specifying the types and quantities of material stored in Building 312.

No documented spills were noted during document review. No staining was noted during the site inspection. Building 312 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents, such as fires, mishaps, or flooding, are documented to have occurred within Building 312. Radioactive waste and depleted uranium are known to have been stored within the adjacent parcel (Buildings 400 and 310). Radiological considerations will be addressed in other sampling programs and are not considered in this PEP.

Building 197

Building 197 was constructed in 1945 and served as a general warehouse. This building was demolished in 1975. Building 197 was a Quonset hut structure and covered approximately 750 square feet. Construction materials used for this building are unknown. It is unknown whether any chemicals were stored in this building.

Open Space

The open space occupies approximately 45 percent of the parcel. In general, the open space on Parcel 51 has consistently been used for aircraft and vehicle parking and material storage. The ground surface of the open space is 100 percent paved. Approximately 30 percent of the paved area is surfaced with asphalt and 70 percent is paved with concrete. The pavement is generally in good condition. There are no structures located within the open space.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, fuel, and industrial sewer lines.

EBS information indicates that activities conducted within this open space have always included aircraft and vehicle parking and material storage. Currently, the open space is also used for empty drum storage along the west side of Building 11. These activities have occurred on Parcel 51 from 1941 to the present. Information collected from an interview with a long-time NAS sailor and former employee indicates that aircraft refueling operations took place on the open space at the south side of Building 11.

No chemicals are documented to have been stored in the open space. No spills have been documented to occur in the open space. Undocumented spills may have occurred as part of the refueling operations. No staining other than typical staining related to vehicle and maintenance equipment parking was noted during the site inspection. Review of aerial photographs indicates that aircraft were parked on the apron along the west, south, and east (prior to the construction of Building 400) sides of Building 11. Staining is evident but relatively light in intensity. No other incidents, including fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 51 is bounded by Parcel 23 to the south, Parcel 50 to the west, Parcel 49, Avenue F, and Parcel 54 to the north, and Parcel 52 to the east. Parcels 54 and 52 are IR sites (Sites 5 and 10A, respectively). Concerns to be noted on these adjacent parcels include aircraft refueling on Parcel 23 and the industrial and non-industrial wastes targeted in the IR program for Parcels 54 and 52.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with these sites on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (site numbers SWMU/GAP 6 and SWMU/GAP 7). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the two RCRA sites at this parcel, one (SWMU/GAP 7: Target Area 4) requires further investigation. A brief description of each of the RCRA sites is provided below. The sampling proposed for the site that requires sampling is described in the Target Areas and Compounds of Concern subsection.

SWMU/GAP 6 is located in the northwest portion of Building 11 and is managed by Shop 95823. It is unknown whether any chemicals were released from this site. Site inspection did not reveal any staining and no sampling has been proposed for this GAP Site. The chemicals of concern associated with this site include sweeping compound with oil and fuel wastes. This site is currently active.

SWMU/GAP 7 is located in the southwest portion of Building 11 and is managed by Shop 95821. It is unknown whether any chemicals were released from this site. The chemicals of concern associated with this site include petroleum oil, JP-5, and Freon 113. This site is currently active. Inspection of this site noted that a 30 square foot area of paint appeared to be dissolved away, this may be evidence of a possible spill or leak.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 51, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient

TABLE 6-51-2

Summary of Data Gaps
NAS Alameda Parcel 51

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• Identified in Building 11.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Building 11 is an industrial facility that requires inspection by an industrial hygienist.
Installation Restoration (IR) Sites	• Building 400 (IR Site 10A) located immediately west of Parcel 51.
Lead-Based Paint (LBP)	• Potentially present within/outside Buildings 11, 311, 312.
PCB-Containing Equipment	• 4 PCB-containing transformers formerly located in Building 11.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 52, IR Site 10A (Building 400) • Parcel 54, IR Site 5 (Building 5).
Potential Zone-Wide Release Areas	• No zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Building 11, entire floor area. • Building 11, Fiberglass Shop. • Building 11, Metal Working Shop. • Building 11, SWMU/GAP 7. • Parcel 51, Open Space.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of USTs identified.
Underground Utilities	• Abandoned fuel lines, storm sewer, industrial sewer, sanitary sewer, steam, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.

TABLE 6-51-2

Summary of Data Gaps
NAS Alameda Parcel 51

Data Gap	Status/Description
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands have been identified at this parcel.
Other	• Radioactive wastes and depleted uranium waste stored on adjacent parcel (Parcel 52).

information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-51-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 11. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-51-2 are addressed and screening-level sampling results from the target areas described below are compared to appropriate screening levels, Parcel 51 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. No zone-wide target areas were identified for this parcel. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following five parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-51-2.

- Target Area 1 (Building 11): The entire floor area of the building will be targeted, although sampling will be biased toward areas where aircraft are positioned for maintenance. The sampling strategy will be based on the observation that 25 percent of the floor was stained. This results in approximately 23,000 square feet of suspect area for VOCs. Three soil vapor and subsurface samples will be collected from Target Area 1 from three locations with the highest concentrations of VOCs in soil vapor. These subsurface sample are currently collocated with sample number's 4, 5, and 6 but may be collocated with those soil vapor samples in Target Area 1 with the highest concentrations instead. The likelihood of environmental impact having occurred within this target area is

classified as potential. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 2, (Building 11, Fiberglass Shop): The fiberglass shop along the north side of the building will be targeted, specifically in the vicinity of the hazardous materials locker, as a potential area for VOCs and metals. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 3 (Building 11, Metal Working Shop): The metal working shop located along the ~~north~~ south side of the building will be targeted as a potential area for TPH, VOCs, and metals because of the staining observed at the base of equipment. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 4 (SWMU/GAP 7): The GAP site located in the southwest portion of Building 11 will be targeted as a potential area for VOCs, TPH, and metals. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in this Target Area are listed on Table 6-51-1.

- Target Area 5 (Open Space): The entire open space area to the west and south of Building 11 will be targeted as a potential area for VOCs and TPH because of the staining evident in aerial photographs and reported aircraft refueling activities conducted in this area. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this Target Area are listed on Table 6-51-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6) and subsurface GeoProbe sampling (SOP 14). Table 6-51-1 summarizes screening-level sampling and analysis for the parcel's target areas. Eight surface soil samples, three subsurface GeoProbe, and 34 soil vapor samples will be collected from the locations shown on Figure 6-51-1. Sampling will be conducted in accordance with the

referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

In Target Area 1, the perimeter of Building 11 will be sampled for VOCs at approximately 100-foot intervals using soil vapor sampling. Ten soil vapor samples will be collected around the perimeter immediately outside of the building to allow for greater accessibility during sampling, and four soil vapor samples will be collected along the western perimeter within the building. Within Building 11, eight soil vapor samples will be collected from two representative aircraft maintenance stations. Three soil vapor and subsurface samples will be collected from Target Area 1 from three locations with the highest concentrations of VOCs in soil vapor. These subsurface sample are currently collocated with sample number's 4, 5, and 6 but may be collocated with those soil vapor samples in Target Area 1 with the highest concentrations instead. At each of the two selected maintenance stations, one sample will be collected from the area of heaviest staining, and three samples will be collected from the perimeter of the maintenance station.

Since the open space in Target Area 5 is nearly 70,000 square feet, the sampling density for soil vapor samples will be decreased to one sample per 7,800 square feet, yielding nine samples. Additionally, four surface soil samples will be collected from this area and analyzed for TPH. Furthermore, the PEP for Parcel 23 targets the open space above Taxiway No. 7 and below Parcel 51 for metals, TPH and VOCs as well, which ensures sufficient screening-level coverage for this area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-52

PARCEL 52 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 52 at NAS Alameda (Figure 6-52-1). The parcel, which is located in the south central portion of the base, is approximately 4.3 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains five RCRA sites, however, none are listed in the Part B permit as requiring an RFI. Three target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include soil gas sampling and subsurface GeoProbe sampling. Table 6-52-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 52, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 52, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 53, 70, 71, 72, 195, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the

TABLE 6-52-1

Summary of Recommended Samples
NAS Alameda Parcel 52

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
52-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
52-1-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 1	VOCs	VOCs	CLP RAS
52-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	VOCs	GC
52-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
52-3-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	CLP RAS
52-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
52-5-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
52-6-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-6-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS
52-7-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-7-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	CLP RAS
52-8-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-9-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-10-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-11-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-12-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-13-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC

TABLE 6-52-1

Summary of Recommended Samples
NAS Alameda Parcel 52

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
52-14-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
52-15-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC

parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 400) covers approximately 85 percent of the parcel. The remaining 15 percent is open space. The parcel area is presently in use for avionics components rework, with vehicle parking in the open space. Fuel and sewer lines are present on this parcel and are shown on Figure 6-52-1.

Parcel 52 is an Installation Restoration (IR) Program site (IR site 10A) and is located approximately 200 feet south of Building 5 (IR site 5). In Volume 1 of the *Data Summary Report, RI/FS Phases 2B and 3, Final,* prepared by PRC Environmental Management, Inc. and Montgomery Watson for the Navy Comprehensive Long-Term Environmental Action Navy (CLEAN) program, soil analytical results for borings drilled in Parcel 52 are listed. Monitoring wells were installed in these three borings (Figure 6-52-1). Thirteen soil samples were analyzed for Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), metals, and pesticides/Polychlorinated Biphenyls (PCBs). None of the VOC and SVOC concentrations reported exceeded the EPA Preliminary Remedial Goals (PRGs) for either the unrestricted use or industrial scenarios. For metals, only arsenic and beryllium were detected in levels exceeding the PRGs. The arsenic levels in all samples exceeded the arsenic unrestricted use PRG of 0.97 mg/kg. One sample was greater than the industrial PRG of 3.3 mg/kg. Beryllium was detected in five of the soil samples at concentrations greater than the beryllium unrestricted use PRG of 0.4 mg/kg. No concentrations exceeded the industrial PRG for beryllium. Pesticides and PCBs were not detected in any of the soil samples.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 400

Building 400 was constructed in 1957 and has served as a missile, armament, and avionics rework facility (Figure 6-52-1). This building is in good condition. Building 400 is a three story building in the ~~northern~~ southern half, and is constructed of reinforced concrete with a concrete floor and built up asphalt-construction roof. Building 400 covers approximately 126,000 square feet. The south half of the building is a high-bay hangar space, also referred to as Building 400A. The space occupied by Building 400 was formerly apron open space used for aircraft parking and maneuvering.

Utilities located within and immediately surrounding Building 400 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. Air permits for degreaser, spray booth, abrasive blasting, fiberglass operation, dryers, fabricating, solvent use, silk screening use, printing ink, laminating, and ovens were issued for this building in 1993.

Information collected during the EBS indicates that activities conducted within this building included armament and missile rework, aircraft maintenance and rework, and since 1966, avionics components repair. It appears that Building 400 has been used for avionics repair in the northern half of the building and aircraft rework in the southern half consistently since 1966. Processes that occur in Building 400 include solvent cleaning, degreasing, painting, sanding, soldering, silk screening, and equipment calibration. These types of industrial processes typically involve the use or generation of chemicals and wastes. The above processes occurred within Building 400 from 1966 to the present.

On the first floor, the following types of shops exist (from west to east): fiberglass/plastics, Public Works Center (PWC) facility maintenance, radar repair and testing, electronic testing, electrical test room for rotating devices (in the southeast corner), motor test room, and a cleaning room with ultrasonic, high pressure, and heavy duty parts cleaners. The staining in these areas is being investigated in Target Areas 1, 2, and 3.

The second floor is primarily used for general electronic repair workstations. A graphic arts shop complete with a silk screen room, photo development room, and a silver recovery unit, lies toward the south end of the building. A cleaning room with solvent cleaning booths is located along the north edge, while a lead handling room and paint room are in the northwest corner of the building. Releases in this area will be investigated by an industrial hygienist, under a one time compliance plan.

Similarly, the third floor is reserved for general electronic repair with a paint spray booth in the southeast corner. Releases in this area will be investigated by an industrial hygienist, under a one time compliance plan.

The hangar space in the southern half of the building is dominated by aircraft maintenance stations, where rework on many of the major areas of the aircraft is accomplished. The remaining space is used to store miscellaneous aircraft parts.

Non-halogenated organics, halogenated organics, metals, paint, corrosives, and petroleum products are documented to have been stored in hazardous materials lockers and used throughout Building 400 during 1993. Approximately 50,000 gallons of acetone, freon, paint thinner, isopropyl alcohol, methyl ethyl ketone (MEK), naphtha, primers, paint, lube oil, and others were stored in Building 400. Disposal of used chemicals is accomplished by collecting the wastes at a one of the five Generator Accumulation Point (GAP) sites in the area. GAP sites 36, 37 and 38 are located on the first floor of the building, GAP site 39 is located on the second floor, and GAP site 42 is located on the third floor. For 1993, approximately 1,400 gallons of hazardous wastes, including paint, petroleum products, non-halogenated and halogenated organics, corrosives, and metals, were collected.

No spills were noted during the document review. Review of site inspection data indicates that undocumented spills occurred at multiple locations, many at the individual shops, while other incidents occurred in the hangar space in the southern half of the building. The staining in these areas is being investigated in Target Areas 3.

On the first floor as noted during the site inspection, staining covers 30 square feet in the generator test shed (motor test room), located along the east side of the building. Also, the concrete floor area beneath the machinery and paint spray booth found in the fiberglass shop, located in the northwest corner of the building, exhibited many stains. The staining in these areas is being investigated in Target Areas 1, and 2.

On the second floor, the silk screen room was found to have a six square foot area of heavy staining on the concrete floor. Similarly, a four square foot black and white paint stain on concrete was found in the paint room along the west wall. Also a 10 square foot stain on floor tile from unknown chemicals was observed in midst of electronic repair workstations 160 feet west and 90 feet south of the northeast corner of Building 400. Two floor drains, both on the second floor, were observed to be sealed, one intentionally with masking tape, and the other, located near chemical storage, by dirt and grime. Releases in

this area will be investigated by an industrial hygienist, under a one time compliance plan.

On the third floor, small stains were found in the spray paint booth in the southeast corner. Releases in this area will be investigated by an industrial hygienist, under a one time compliance plan.

The largest collection of stains was found in the hangar area of Building 400. Several large stains ranging in area from 60 to 100 square feet seem to be caused by spills from aircraft or maintenance equipment; all were light in intensity and on concrete. A pattern of dark stains was also evident along maintenance vehicle concrete roadways. The staining in these areas is being investigated in Target Areas 3.

Building 400 is equipped with a heating-ventilation-air conditioning (HVAC) system. Soot and dust were noted at the supply and exhaust registers. Stains on ceiling tiles were observed near ducts. Dust was also noted on vertical surfaces within the building. During the rooftop inspection, the northwest corner of the roof was noted to have an arrangement where one exhaust unit pushes air into the intake path of another unit. The routings of these branches of the HVAC system are unknown. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 400.

Open space

The open space on Parcel 52 covers approximately 15 percent of the parcel and consists of the area surrounding Building 400. In general, the open space on Parcel 52 has consistently been used for aircraft and vehicle parking. The ground surface of the open space is completely paved. Approximately 70 percent of the paved area is surfaced with asphalt and 30 percent is paved with concrete. The pavement is generally in good condition.

There are no structures located within the open space.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. No permits have been issued for processes occurring within this open space.

EBS information indicates that activities conducted within this open space have always included aircraft and vehicle parking. Information collected from an interview with a long-time NAS sailor and former

employee indicates that aircraft refueling operations took place on the open space at the south side of Building 400.

No chemicals are documented to have been stored in the open space.

Spills of hexavalent chromium and diesel oil were documented and occurred in 1992. Approximately 3,000 gallons of hexavalent chromium and 1.5 gallons of diesel oil were both spilled onto asphalt between Building 400 and Building 5. The spills were immediately cleaned up using a vacuum truck and absorbent material, respectively; however, an unknown quantity of hexavalent chromium escaped into the storm drains on Avenue F. No staining other than typical staining related to vehicle and maintenance equipment parking was noted during the site inspection. Review of aerial photographs dated 1940 to 1953 indicates that aircraft parking occurred on the apron open space which is now occupied by Building 400. The area appears entirely paved and medium intensity staining is evident. In the aerial photographs after 1953 to present, aircraft are observed to be parked on the apron to the south of Building 400.

No other incidents, including fires, mishaps, or flooding are documented to have occurred within the open space. Also, potential radiological hazards do not appear to be of concern in the open space of Parcel 52.

Underground Storage Tanks

One underground storage tank (UST) exists at this parcel. An abandoned UST, that formerly held diesel oil, is located in the northeast corner of the parcel and is scheduled to be removed. The tank has a 500 gallon capacity and failed tightness testing in July of 1990.

Parcel Boundary Conditions

Parcel 52 is bounded by Parcels 23, 51, 54, and 57. Activities of concern on these adjacent parcels include aircraft refueling on Parcel 23 and the storage and handling of industrial and non-industrial wastes targeted in the IR program for Parcel 54. Avenue F borders Parcel 52 to the north.

RCRA Sites

This subsection identified RCRA Sites and requirements associated with these sites on the parcel, consistent with objectives 2, 6, and 7 in

Section 1. This parcel includes five RCRA sites (SWMU/GAP 36, SWMU/GAP 37, SWMU/GAP 38, SWMU/GAP 39, SWMU/GAP 42). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the five RCRA sites at this parcel, none require further investigation. A brief description of each RCRA site is provided below. The sampling proposed for the sites that require sampling is described in the Target Areas and Compounds of Concern subsection.

SWMU/GAP 36 is located on the first floor of Building 400. It is unknown whether any chemicals were released from this site. No staining was noted during the site inspection. The chemicals of concern associated with this site include aerosol paint, MEK, acetone, and naphtha. This site is currently active.

SWMU/GAP 37 is located on the first floor of Building 400 and is managed by Shop 94212. It is unknown whether any chemicals were released from this site. No staining was noted during the site inspection. The chemicals of concern associated with this site include aerosol paint, Calla 800 detergent, hydraulic and lube oil, 1, 1, 1-TCA, and Freon TF. This site is currently active.

SWMU/GAP 38 is located on the first floor of Building 400 and is managed by Shop 94216. It is unknown whether any chemicals were released from this site. No staining was noted during the site inspection. The chemicals of concern associated with this site include water base primer, paints, alcohol, poly thinner, epoxy paint, and MEK. This site is currently active.

SWMU/GAP 39 is located on the second floor of Building 400 and is managed by Shop 94132. It is unknown whether any chemicals were released from this site. No staining was noted during the site inspection. The chemicals of concern associated with this site include aerosol paint, lacquer, zinc chromate primer, Freon 113, paint stripper sludge, synthetic hydraulic oil, silicone oil, P-D-680, alcohol, naphtha, and thinners. This site is currently active.

SWMU/GAP 42 is located on the third floor of Building 400 and is managed by Shop 94215. It is unknown whether any chemicals were released from this site. No staining was noted during the site inspection. The chemicals of concern associated with this site include batteries, beryllium, aerosol paint, petroleum oil, silicone oil, solvents, hydraulic fluid, alcohol, mercury and PCBs. This site is currently active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 52, fulfilling objectives 3, 4, 5, 8, 9, and 10 in Section 1 of the Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-52-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines is also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 400. An Industrial Hygienist will inspect the interior of Building 400 and make a case-by-case determination if further sampling or cleanup measures are required within this building before this parcel can be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following three parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-52-2.

- Target Area 1 (Building 400, Fiberglass Shop): The fiberglass shop in the northwest corner on the first floor will be targeted as a potential area for VOCs. Although the total square footage for the entire fiberglass shop is approximately 8,000 square feet, sampling will be concentrated in the areas of specific concern. Therefore, the sampling density will be changed to one sample per 2,000 square feet (for a total of two samples). Actual sampling locations will be determined on-site. Samples to be collected in this target area are listed in Table 6-52-1.

TABLE 6-52-2

Summary of Data Gaps
NAS Alameda Parcel 52

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 5 (Building 5) is located adjacent to the northside of Parcel 52. Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 23, Aircraft Refueling
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Building 400, fiberglass shop • Building 400, motor test room, cleaning room • Building 400, silk screening room • Building 400, general workspace • Building 400, hangar floor
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-52-2

Summary of Data Gaps
NAS Alameda Parcel 52

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One UST located in the northeast corner of the parcel. Future actions for this tank are unknown
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

- Target Area 2 (Building 400, Motor Test Room and Cleaning Room): The motor test room and cleaning room, both located along the east side of the first floor, covering approximately 1,600 square feet, will be targeted as a potential area for VOCs. Samples to be collected in this target area are listed in Table 6-52-1.

- Target Area 3 (Building 400, Hangar Floor): The hangar floor in the southern half of the building will be targeted as a potential area for VOCs due to the years of usage as an aircraft maintenance hangar and the multiple stains observed on the 60,000 square feet of floor area during the site inspection. Samples to be collected in this target area are listed in Table 6-52-1.

Screening-Level Investigation

Soil vapor sampling (SOP 6) and subsurface GeoProbe soil sampling (SOP 14), are the screening-level techniques that will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase.

Table 6-52-1 summarizes screening level sampling and analysis for the parcel's target areas. Fifteen soil vapor samples and four subsurface GeoProbe samples will be collected from the locations shown on Figure 6-52-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix B, the screening-level protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix B, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-53

PARCEL 53 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 53 at NAS Alameda (Figure 6-53-1). The parcel, which is located in the south central portion of the base, is approximately five acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site, however, it is not listed in the Part B permit as requiring an RCRA Facility Investigation (RFI). Five parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface GeoProbe sampling, and soil gas sampling. Table 6-53-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 53, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 53, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 52, 70, 71, 72, 195 and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar

TABLE 6-53-1
Summary of Recommended Samples
NAS Alameda Parcel 53

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
53-1-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Mod. EPA 8015
53-1-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals, VOCs	Metals, VOCs	CLP RAS
53-2-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Mod. EPA 8015
53-2-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals, VOCs	Metals, VOCs	CLP RAS
53-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-5-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-6-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-7-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-8-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-9-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-10-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-11-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-12-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-13-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC

TABLE 6-53-1
Summary of Recommended Samples
NAS Alameda Parcel 53

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
53-13-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	CLP RAS
53-14-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-14-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	CLP RAS
53-15-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
53-15-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	CLP RAS
53-16-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-17-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-18-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-19-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-20-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-21-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-22-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-23-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-24-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
53-25-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	VOCs	VOCs	CLP RAS

TABLE 6-53-1
Summary of Recommended Samples
NAS Alameda Parcel 53

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
53-26-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	VOCs	VOCs	CLP RAS
53-27-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	VOCs	VOCs	CLP RAS
53-28-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	VOCs	VOCs	CLP RAS

support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 12, 309, and 310) cover approximately 50 percent of the parcel. The remaining 50 percent is open space. The parcel area is presently in use as an aircraft maintenance and rework area with vehicle parking space and material and drum storage in the open space. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-53-1.

Parcel 53 is located immediately east of Installation Restoration (IR) Program site (IR Site 10A, Building 400) and approximately 250 feet south of IR Site 5 (Building 5). No previous investigations have been conducted at Parcel 53, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 12

Building 12 was constructed in 1941 and has since served as an aircraft maintenance and rework hangar (Figure 6-53-1). This building is in fair condition. Building 12 is a one story building constructed of concrete with a steel frame. It has a concrete floor, a wood roof, and covers approximately 91,000 square feet. Building 12 is approximately 250 feet wide and 360 feet long. Building 12 is the original facility constructed at this location.

Utilities located within and immediately surrounding Building 12 include underground sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines. Air permits for storage tanks,

abrasive blasting, and fiberglass operations were issued for this building in 1993.

Information collected during the EBS indicates that activities conducted within this building include aircraft and component rework, known as "D-level (depot-level) maintenance." It appears that Building 12 has been used for this and similar purposes since its construction, although gaps in the historical records exist. Aircraft and component rework processes involve disassembly of and corrosion control for all major subsections of the aircraft. This includes removal and replacement of panels, wings, landing gear, wiring systems, electronic equipment, and the inspection and repair of various aircraft components. In short, every major system aboard an aircraft undergoes some maintenance in this hangar. Additionally, an oxygen shop and a former metal grinding shop are located in the northwest and southeast corners of Building 12, respectively. The industrial processes occurring in Building 12 typically involve the use or generation of chemicals and wastes, including solvents, degreasers, lubricating oils, primers, and corrosives. These processes and related chemical use and storage have occurred within Building 12 from 1941 to the present.

Non-halogenated organics, paint, metals, and petroleum products are documented to have been stored and used in Building 12 during 1993. Approximately 1,500 gallons of the above chemicals, including epoxy, solvent, enamel, sealant, Freon 113, acetone, alcohol, bromochloroethane, dibromodifluoromethane, and halon, were stored in Building 12 during 1993. Disposal of used chemicals is accomplished by collecting the wastes at the central Generator Accumulation Point (GAP) Site 33 in the area. Seven 55-gallon drums containing primer, hydraulic fluid, absorbent, sealant, beryllium, and uranium were observed at GAP Site 33. During 1993, approximately 450 gallons of hazardous wastes, including paint, petroleum products, and non-halogenated organics were collected at Building 12.

No spills were noted during the document review; however, site inspection records indicate that a former metal grinding shop located in the southeast corner of Building 12 exhibited scattered staining on 50 percent of the shop floor (approximately 900 square feet in area). The staining appears black and the chemical origin is unknown. Review of site inspection data and interviews with former employees indicate that undocumented spills may have occurred at multiple locations within Building 12, as a result of aircraft maintenance activitites. The stains range in size from one to ten square feet and are light to medium in intensity. The chemical releases in this area will be investigated in Target Area 2.

Building 12 does not appear to be equipped with a heating-ventilation-air conditioning (HVAC) system. The only significant dusts or residues on surfaces that were noted occurred in the former metal grinding shop. Approximately 20 percent of the floor was observed to be covered with metal shavings. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 12.

Building 309

Building 309 was constructed in 1942 and served as a general maintenance and aircraft parts storage shed. This building was not inspected because of accessibility limitations. Building 309 is a one story building constructed of concrete covering approximately 100 square feet. The space occupied by Building 309 was formerly the apron area associated with Building 12.

Utilities located within and immediately surrounding Building 309 include underground sanitary sewer and storm sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicates that this building was consistently used as a maintenance and parts storage shed. An unspecified amount of chemicals, including degreasers and hydraulic fluid, were also stored in the building. Currently, Building 309 is vacant. No detailed records were available specifying the types and quantities of materials stored in Building 309.

No documented spills were observed for Building 309. Building 309 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 309. Radioactive waste and depleted uranium are known to have been stored within adjacent Building 12. Radiological considerations will be addressed in other sampling programs and are not considered in this PEP.

Building 310

Building 310 was constructed in 1942 and serves as a general maintenance and aircraft parts storage shed. This building is in moderate condition. Building 310 is a one story building constructed of concrete with a concrete floor, and covers approximately 100 square feet. The space occupied by Building 310 was formerly part of the apron area associated with Building 12.

Utilities located within and immediately surrounding Building 310 include underground sanitary sewer and storm sewer lines. No permits appear to have been issued for this building.

Information collected during the EBS indicate the primary use for Building 310 was aircraft parts storage. Site inspections noted presently, the building functions to store depleted uranium. The uranium is stored in four shielded metal boxes, eight cubic feet in volume, each.

No chemicals were documented to have been stored in Building 310. Also, no documented spills were noted to have occurred. No staining was visible inside the building during the site inspection. Building 310 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 310.

The building functions to store depleted uranium and radioactive waste and depleted uranium are also known to have been stored within the adjacent Building 12. Radiological considerations will be addressed in other sampling programs and are not considered in this PEP.

Open Space

The open space on Parcel 53 covers approximately 50 percent of the parcel. In general, the open space on Parcel 53 has been used for aircraft and vehicle parking, and material and drum storage. The ground surface of the open space is completely paved. Approximately 30 percent of the paved area is surfaced with asphalt and 70 percent is paved with concrete. The pavement is generally in good condition. There are no structures located within the open space.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, fuel, and industrial sewer lines. No permits have been issued for processes occurring within this open space.

EBS information indicates that activities conducted within this open space have always included aircraft and vehicle parking. Currently, a fenced material storage area near the northeast corner of Building 12, contains empty corrosives and flammable liquid drums, and aircraft engine containers. This area is reportedly a former paint stripping area. The material storage area was inaccessible and not directly inspected, however, a suspected oil/water separator was observed within the area. To the south of this fenced area there were several large, steel trailers on concrete slabs labeled for hazardous waste storage. Information

collected from an interview with a long-time NAS sailor and former employee indicated that aircraft refueling operations were conducted on the open space at the south side of Building 12.

No chemicals are documented to have been stored in the open space. Also, no spill reports were observed during document review. No staining other than typical staining related to vehicle and maintenance equipment parking was noted during the site inspection. Review of aerial photographs indicates that aircraft were parked on the apron along the east, south, and west (prior to the construction of Building 400) sides of Building 12. Staining is evident and ranges from light to medium intensity. Chemical releases in this area will be addressed in the sampling for Target Area 3.

No other incidents, including fires, mishaps, or flooding are documented to have occurred within the open space. Radioactive waste and depleted uranium are known to have been stored within adjacent Building 12. Radiological considerations will be addressed in other sampling programs and are not considered in this PEP.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 53 is bounded by Parcel 23 to the south, Parcel 52 to the west, Parcels 57 and 56 to the north, and Parcel 70 to the east. Parcel 54, located north of Parcel 53, and Parcel 52 are IR sites (Sites 5 and 10A, respectively). Activities of concern on these adjacent parcels include aircraft refueling on Parcel 23 and the industrial and non-industrial wastes targeted in the IR program for Parcels 54 and 52. Avenue F borders Parcel 53 to the north.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/GAP 33). This site was evaluated consistent with the criteria

applied to other potential target areas at the parcel. Under these criteria, it does not require further investigation. A brief description of the RCRA site is provided below.

SWMU/GAP 33 is located in Building 12 and is managed by Shop 95923. It is unknown whether any chemicals were released from this site. The chemicals of concern associated with this site include aerosol paint, lacquer, beryllium, and stripper. This site is currently active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 53, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-51-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines, and sewers is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 12. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-53-2 are addressed and screening-level sampling results from the target areas described below are compared to appropriate screening levels, Parcel 53 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. No zone-wide target areas were identified for this parcel. The nature and locations of these areas were evaluated to determine field investigation

TABLE 6-53-2

Summary of Data Gaps
NAS Alameda Parcel 53

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 10A (Building 400) is located immediately east Parcel 53 and approximately 250 feet south of IR Site 5 (Building 5). Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-53-2

Summary of Data Gaps
NAS Alameda Parcel 53

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following five parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-53-2.

- Target Area 1 (Building 12, Former Metal Grinding Shop): The former metal grinding shop (located on the northwest side of the building and spanning approximately 900 square feet), will be targeted as a potential area for VOCs, TPH, and metals. Two surface soil samples will be collected from this shop. Samples to be collected in this Target Area are listed on Table 6-53-1.

- Target Area 2 (Building 12, Floor): The floor will be targeted as a potential area for VOCs. Soil vapor samples and subsurface GeoProbe samples will be collected along the perimeter and under an aircraft maintenance station. Based on the extensive aircraft maintenance activity that was conducted in this building, approximately 43,000 square feet of floor will be sampled. Samples to be collected in this Target Area are listed on Table 6-53-1.

- Target Area 3 (Open Space): The entire open space to the east and south of Building 12 will be targeted as a potential area for VOCs because of staining evident in aerial photographs and the reported refueling activities that conducted in this area. Samples to be collected in this Target Area are listed on Table 6-53-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil gas sampling (SOP 6), and subsurface GeoProbe sampling (SOP 14). Table 6-53-1 summarizes screening-level sampling and analysis for the parcel's target areas. The sample locations are shown on Figure 6-53-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

In Target Area 2, the perimeter of the workspace in Building 12 will be sampled for VOCs at approximately 100-foot intervals using soil vapor sampling. Therefore, eight soil vapor samples samples will be collected around the perimeter. Five soil vapor samples will be collected from under Building 12, three of these will be collocated with subsurface GeoProbe samples. One representative aircraft maintenance station

will be selected for the remaining four samples, with one sample at the heaviest stained area and three placed at the perimeter of the station. Therefore, actual sampling locations must be determined on-site. Because of this and the large size of the target area (43,000 square feet), the total number of samples, twelve, reflects a decrease of the sampling density to approximately two samples for every 7,200 square feet.

Target areas 3 and 5 will undergo field-screening using Geiger-Mueller counters equipped with probes. Where measurements indicate surface radiation above background, surface soil samples for laboratory analysis will be collected from zero to six inches below ground surface in exposed soil in accordance with SOP 3.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-70

PARCEL 70 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 70 at NAS Alameda (Figure 6-70-1). The parcel, which is located in the central portion of the base, is approximately 8.6 acres in size and roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site, however, it is not listed in the Part B permit as requiring a RCRA Facility Investigation (RFI). Four parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface GeoProbe sampling, and soil gas sampling. Table 6-70-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 70, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 70 consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 52, 53, 71, 72, 195, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar

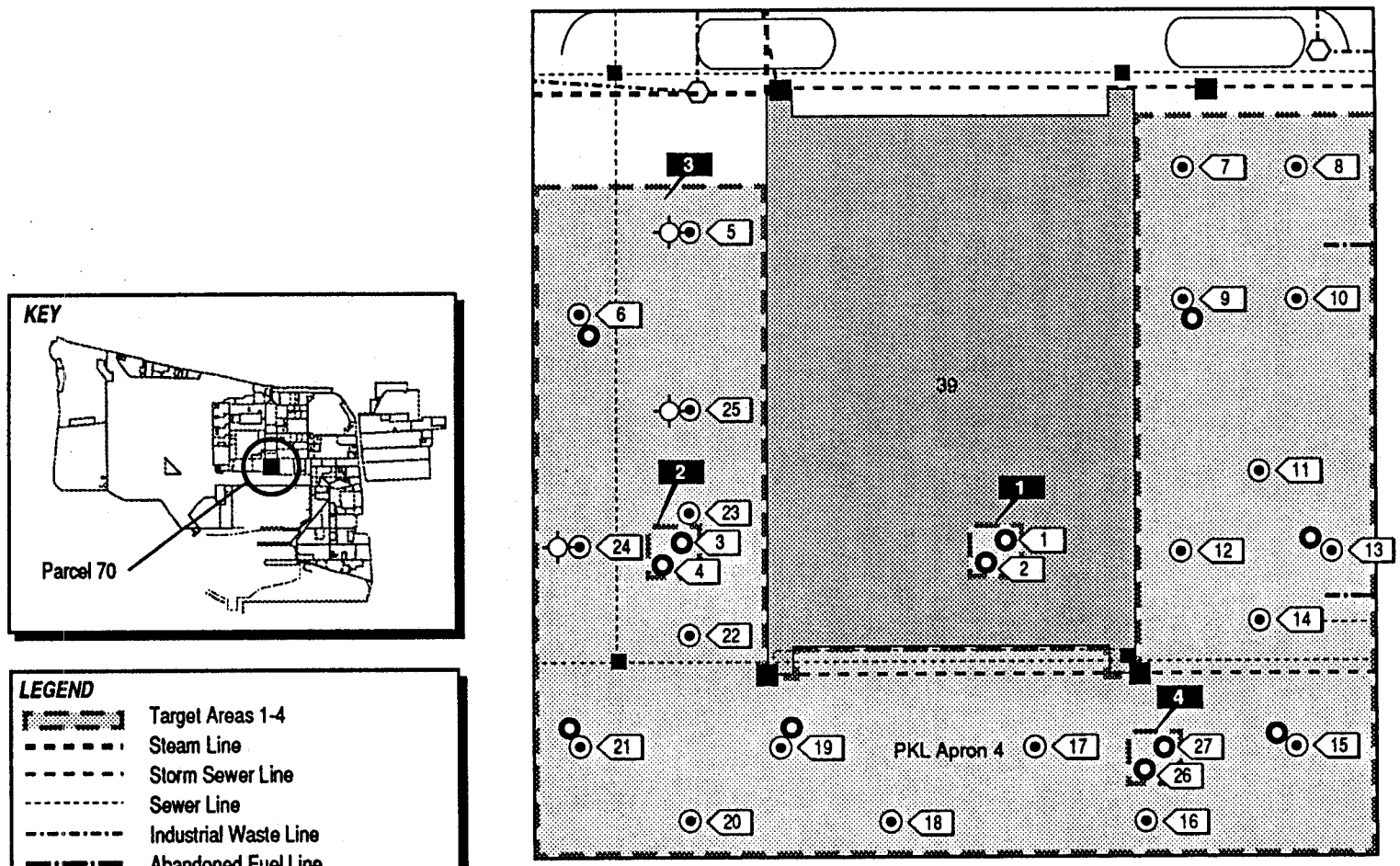


Figure 6-70-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

TABLE 6-70-1

Summary of Recommended Samples
NAS Alameda Parcel 70

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
70-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubricating oils	TPH	Test Kit
70-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lubricating oils	TPH	Test Kit
70-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Lubricating oils	TPH	Modified EPA 8015
70-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Test Kit
70-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Test Kit
70-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
70-5-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-5-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS
70-6-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-6-0-S-S-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
70-7-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-8-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-9-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Test Kit
70-10-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	
70-11-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-12-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-13-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC

TABLE 6-70-1

Summary of Recommended Samples
NAS Alameda Parcel 70

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
70-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Test Kit
70-14-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-15-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-15-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Test Kit
70-16-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-17-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-18-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-19-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-19-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
70-20-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-21-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-21-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Test Kit
70-22-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-23-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-24-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-24-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS
70-25-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
70-25-3-S-V-DDMMYY	3'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	CLP RAS

TABLE 6-70-1

Summary of Recommended Samples
NAS Alameda Parcel 70

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
70-26-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
70-27-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Test Kit
70-27-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	Modified EPA 8015

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described int the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 39) covers approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel area is presently in use as an aircraft maintenance hangar and supporting facilities. One building (Building 300) was formerly located on the parcel, and has been removed. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-70-1.

Parcel 70 is located adjacent to an Installation Restoration (IR) Program site (IR Site 12, Building 10) and 200 feet from another IR site (IR Site 5, Building 5). No previous investigations have been conducted at Parcel 70, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 39

Building 39 was constructed in 1944 and has since served as an aircraft maintenance hangar (Figure 6-70-1). Building 39 is a two-story building constructed of a steel frame, metal siding, and concrete walls. The floors are primarily concrete with tiles in the offices on the second floor. During the site inspection, the concrete floor was noted to be stained an in poor condition. The hangar covers approximately 123,000 square feet and has built-up roofing. The building is in fair condition.

Utilities located within and immediately surrounding Building 39 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included light aircraft maintenance and painting. Light aircraft maintenance typically involves oil changes, minor repairs, and changing of worn equipment, such as tires. These maintenance activities were presumably conducted in most areas of the building. These activities typically involved the use of chemicals, including solvents and petroleum products (especially lubricating oils), and the generation of waste products, including waste oils. These types of industrial processes typically involved the use or generation of chemicals and wastes including aircraft fuels and oils. These processes occurred within Building 39 from 1944 to the present.

The building currently houses helicopters and sleds, a navy standard lab, and offices. Two sheds are located in Building 39 and are used for calibration of measurement instruments. The floor in the area is cleaned monthly.

Non-halogenated organics, explosives (flares), solvents, petroleum products, and metals are documented to have been stored in Building 39. The chemicals are either stored in the flammable material locker or in the northwest portion of the first floor of the building. Approximately 1,500 gallons of these chemicals are documented to have been stored in Building 39. This inventory was obtained by reviewing the authorized use list for Building 39. The authorized use list gives maximum quantities that can be stored in, or used in a building over the course of a year. This does not mean that the given quantity has been stored, but that the location given has the capacity to store the amount given. Less than 100 gallons of non-halogenated organics, and 30 pounds of mercury in a sealed manometer were observed during the site inspection. Flammable liquid hazardous waste is stored in a metal can in the flammable materials cabinet. Up to 500 gallons of hazardous waste can be stored at the GAP site in Building 39. The wastes stored here include petroleum products, paint, and non-halogenated organics. No spills were noted during the document review or the site inspecstion.

Building 39 is equipped with a heating-ventilation-air conditioning (HVAC) system. The ventilation system intake was dusty at the time of visual inspections. A PCB sign was observed on an exterior door in the northwest corner of the building, possibly leading to a transformer room. The door could not be opened during the site inspection. The tranformer room in the southwest corner of the hangar contains three transformers. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 39.

Open Space

The open space covers approximately 70 percent of the parcel. The open space is used for vehicle parking, and has historically been used for aircraft fueling in the southern and eastern portions of the parcel. Extensive staining was noted on historical aerial photographs from 1947 to 1970. The ground surface of the open space is completely paved with concrete (approximately 75 percent of the open space) and asphalt (25 percent). The pavement is generally in fair condition. Utilities located within and immediately surrounding the open space associated with Building 39 include sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

Seven large metal storage lockers (CONEX boxes) are located on the west side of Parcel 70. They are used to store alodine, corrosives, paint, solvents, and miscellaneous hazardous waste. Occaisionally, the lockers function as mobile facility shops. The hazardous waste stored in one of the lockers is comprised of empty aerosol cans, oil cans, hydraulic fluid cans, engine oil, and transmission fluid. Staining and cracked concrete were noted in this area. On the west side of the hangar, adjacent to the ground services equipment (GSE) storage area, light oil and paint stains were observed. The stains were scattered throughout a thirty-foot by ten-foot area. Additional small oil and paint stains were documented near the southeast corner of Building 39.

Flammable liquids and miscellaneous materials in unknown quantities are stored in the open space on the south side of Building 39. These chemicals were kept in COMNAVPAC mobile facility containers. GSE storage is located adjacent to the mobile facilities containers. The quantities stored are unknown; site reviewers were unable to access the containers.

Five helipcopter landing pads are located on the south side of the parcel. Each pad is heavily stained (a twenty-foot by twenty-five foot area each).

No other incidents, such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One underground storage tank exists at parcel 70. No information was available regarding the tank's integrity or capacity.

Parcel Boundary Conditions

Parcel 70 is bounded by Parcels 53, 195, 69, and 23. Activities of concern on these adjacent parcels include fuel use and storage on Parcel 69, and aircraft maintenance and refueling on Parcels 53, 195, and 23. If the results of any sampling proposed for any of these adjacent parcels indicates that activities on these parcels may have impacted Parcel 70, then additional sampling on Parcel 70 may be appropriate.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (site number SWMU/GAP 23). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the RCRA site at this parcel does not require further investigation. Site SWMU/GAP 23 is located in Building 39 and it is unknown whether any chemicals were released from this site. Site SWMU/GAP 23 contains 55-gallon drums. The chemicals of concern associated with this site include oil, solvents, and paint-related materials.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 70, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-70-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 12. A one-time

TABLE 6-70-2

Summary of Data Gaps
NAS Alameda Parcel 70

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 12 (Building 10) is located adjacent to Parcel 70 and approximately 200 feet south of IR Site 5 (Building 5). Additional subsurface investigation relative to IR Site 5 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST currently exists at Parcel 70. • Tank ID # Unknown. • Future actions for this tank are unknown.

TABLE 6-70-2

Summary of Data Gaps
NAS Alameda Parcel 70

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-70-2 are addressed and screening-level sampling results from the target areas described below are compared to appropriate screening levels, Parcel 70 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. No zone-wide target areas were identified for this parcel. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following four parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-70-2.

- Target Area 1 (Building 39): The soils located under the concrete in the open hangar area may have been impacted by ongoing lubrication activities. Lubricating oils are the compounds of concern. The target area covers approximately 1,000 square feet and is classified as having a potential likelihood of impacts. This target area is intended to be a small area representative of the full hangar area. Samples to be collected in this Target Area are listed in Table 6-70-1.

- Target Area 2 (Open Space): The soil beneath the hazardous materials and hazardous waste lockers located on the west side of Building 39 may have been impacted by spills of petroleum products stored in these containers. The compounds of concern in this area are VOCs and TPH. The potential impact from VOCs will be addressed as part of Target Area 3. Target Area 2 covers approximately 100 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-70-1.

- Target Area 3 (Open Space): The soils located under the concrete in the eastern, western, and southern areas of the parcel may have been impacted by VOCs and TPH from fueling operations in these areas. The target area covers approximately 130,000 square feet and is classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-70-1.

- Target Area 4 (Open Space): The soils located under the concrete in stained areas of the helicopter landing pads may have been impacted with TPH compounds. One landing pad will be sampled, and will be considered representative of the remaining four. This target area covers 500 square feet, and is classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-70-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), subsurface GeoProbe soil sampling (SOP 14), and soil gas sampling (SOP 6).

Table 6-70-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Six surface soil samples, three subsurface GeoProbe samples, and 21 soil vapor samples will be collected from the locations shown on Figure 6-70-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Surface soil sampling locations shown on Figure 6-70-1 are approximate. The samples should be collected from the area immediately in front of the hazardous materials storage lockers for Target Area 1, and in the areas with the most significant staining for Target Areas 1, 2, and 4. If no staining is evident, then the samples should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the

screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-71

PARCEL 71 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 71 at NAS Alameda (Figure 6-71-1). The parcel, which is located in the southeast portion of the base, is approximately six acres in size and is roughly U-shaped. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains no RCRA sites. One parcel-specific and no zone-wide target investigation areas (target area) have been identified on this parcel. Subsurface GeoProbe sampling will be used to accomplish the screening-level investigation. Table 6-71-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 71, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 71, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 52, 53, 70, 72, 195, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the

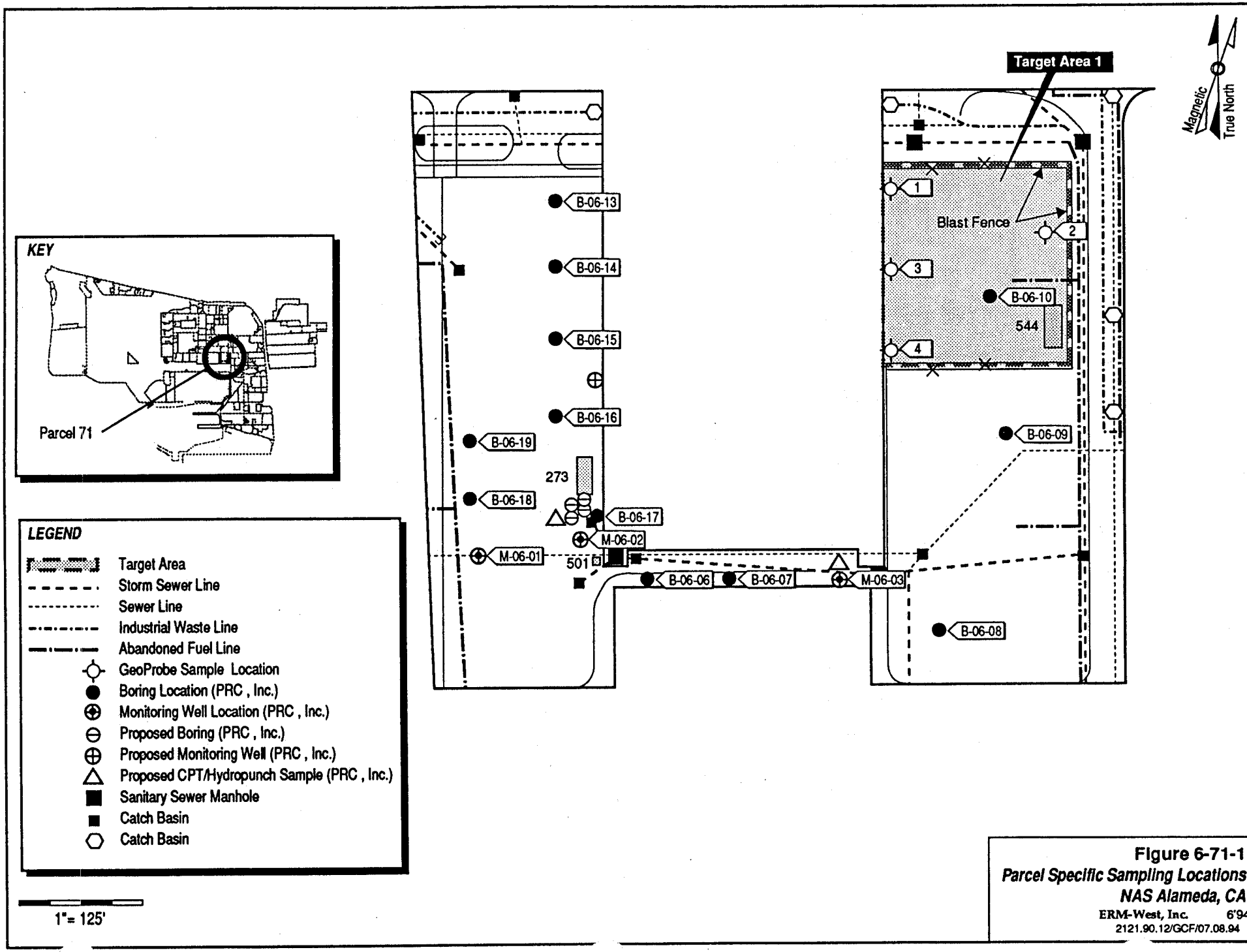


Figure 6-71-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

TABLE 6-71-1

Summary of Recommended Samples
NAS Alameda Parcel 71

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
71-1-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	VOCs	metals, VOCs, TPH	CLP RAS, Modified EPA 8015
71-2-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	VOCs	metals, VOCs, TPH	CLP RAS, Modified EPA 8015
71-3-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	VOCs	metals, VOCs, TPH	CLP RAS, Modified EPA 8015
71-4-3-S-V-DDMMYY	3.0'	GeoProbe	Soil	Target Area 1	VOCs	metals, VOCs, TPH	CLP RAS, Modified EPA 8015

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 273, 501, and 544) cover approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use primarily for aircraft parking. One building (Building 45B) reportedly located on this parcel could not be found during site inspection. Base personnel could not identify or locate this building. According to EBS files, Building 45B is a general storage shed covering an area of 4,800 square feet. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-71-1.

Parcel 71 is located adjacent to IR Site 6. Previous investigations have been conducted at Parcel 71 and specific data regarding potential chemical occurrence are available.

Releases associated with IR Site 6 (the Aircraft Intermediate Maintenance Facility located on Parcel 196) may have impacted this parcel. Previous soil and groundwater sampling results for this IR site have been compiled in a 1993 report prepared by PRC Environmental Management, Inc., (under contract N62474-88-D-5086) entitled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 2B and 3.* Ongoing (follow-up) sampling is being performed by the IR contractor.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 273

Building 273 was built in 1943 and has always served as an airframe shop (Figure 6-71-1). For the past 15 years, space within this building has also been used as an X-ray room. This building is in fair condition. Building 273 is a Quonset hut with a concrete floor and covers approximately 850 square feet.

Information collected during the EBS indicates that activities conducted within this building included chemical storage. These chemicals included aircraft tire rim cleaner and a tank of solvents. There were approximately 30 gallons of these chemicals stored on the south side of the building in a parts cleaner tank. The concrete around the tank did not exhibit evidence of staining.

Building 501

Building 501 serves as a sewage pumping station. This 40 square foot structure is in fair condition. Based on documentation and aerial photographs, it is unclear when Building 501 was constructed. It is an all steel structure. There is no record of chemical releases, storage, or use in this area. The concrete floors were noted to be clean during visual inspections. The building appeared to be abandoned.

Building 544

Building 544 was built in 1974 and serves as a liquid oxygen facility that covers 960 square feet. This all steel structure is in fair condition. The floors are concrete and were painted at one time. There is no record of chemical releases, storage, or use in this area.

Open Space

The open space covers approximately 97 percent of the parcel. The open space is paved with both concrete and asphalt. The concrete surfaces are in good condition, while the asphalt surfaces are cracked.

EBS information indicates that activities conducted within this open space include equipment and vehicle parking and maintenance gear and equipment washdown areas. Structures and items located in the open space include equipment storage sheds, a concrete slab, vehicle parking, storage containers, and a former maintenance gear washdown tank. No documented storage of chemicals has occurred in the open space. The majority of the open space is used for vehicle parking. The concrete slab is located in the vehicle parking area, east of Building 41. The former maintenance equipment washdown area is located in the open space adjacent to the northeast corner of Building 41. The equipment washdown area is located at the southwest corner of Building 41. The storage lockers are primarily located in the open space adjacent to Building 41.

Batteries were stored on pallets next to a storage locker located by the northeast corner of Building 41. Two drains are present in this area that have been used in connection with washdown practices. One drain is located along the southwest corner of Building 41. The other drain is located in the street and collects washdown from maintenance gear.

An equipment storage shed is located in the northeast corner of the parcel. There is no record of chemical releases, storage, or use in this area. There were numerous large stained areas observed on the asphalt in and around the storage shed and fenced area. The stained areas covered more than 50 percent of the total area. Releases of oil, diesel, and engine fluids are likely responsible for the staining. Kitty litter was applied as an absorbent as part of a cleanup process.

Aerial photographs reveal extensive staining in the open space around Buildings 40 and 41 because of aircraft activity. Visual inspectors did note gray stains located along the northeast corner of the parcel; there was no indication of the type of compound that was released. Some oily stains from runoff were apparent in a 20-foot by 5-foot area.

Underground Storage Tanks

One abandoned tank is present at this parcel. No record regarding the tank number for this tank is available. The installation date, the capacity, and the material stored are unknown. The presence of this tank was identified during the site inspection. The available information did not identify why the tank was abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking.

Parcel Boundary Conditions

Parcel 71 is bounded by Parcels 109, 185, 196, and 206 to the north, Parcels 110 and 124 to the east, Parcel 23 to the south, and Parcel 195 to the west. Parcel 196 is IR Site 6 (Building 41, AIMD). Activities of concern on these adjacent parcels include storage, use, and generation of various aircraft related hazardous compounds. The former Seaplane Lagoon, IR Site 17, is located to the south of Parcel 71. If the continuing investigations at IR Sites 6 and 17 or at adjacent parcels reveal a cause for concern at Parcel 71, then additional sampling on Parcel 71 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 71, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-71-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Buildings 273, 501, and 544. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

The majority of the of the parcel open space is paved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 71.

Once the data gaps in Table 6-71-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 71 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One parcel-specific and no zone-wide target areas were identified for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for

TABLE 6-71-2

Summary of Data Gaps
NAS Alameda Parcel 71

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 6 (Building 41, AIMD) is located adjacent to Parcel 71. Additional subsurface investigation relative to IR Site 6 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1: Equipment Shed and Fenced Area
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One abandoned UST currently exists at Parcel 71. Future actions for this tank are unknown.

TABLE 6-71-2

Summary of Data Gaps
NAS Alameda Parcel 71

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified at Parcel 71.
Other	• No evidence of other data gaps identified.

Zone 11. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. Samples to be collected in the target areas are listed on Table 6-71-1.

- Target Area 1 (Equipment Shed and Fenced Area): This target area addresses the possible release of compounds of concern associated with metals, fuel, solvents, and lubricating oil stored and used within the equipment shed and fenced area located in the northeast portion of the parcel. The size of this target area is approximately 5,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. Four subsurface GeoProbe samples will be collected in this target area and analyzed for metals, VOCs and TPH.

Screening-Level Investigation

Subsurface Geoprobe soil sampling (SOP 14) will be the screening-level technique employed to assess conditions in the target area and to identify areas that require further sampling in the follow-up detailed evaluation phase. Table 6-71-1 summarizes screening-level sampling and analysis recommended for the parcel's target area. Four subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-71-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Previous investigations have assessed conditions in the open space at Parcel 71. Follow-up detailed evaluations are being conducted by the IR contractor. As part of a former screening-level sampling effort summarized in the 1993 PRC report titled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 2B and 3*, a total of 60 soil samples have been collected at different depths from 12 soil borings and three monitoring wells throughout Parcel 71. One surface and three subsurface soil samples were collected from each boring and monitoring well. This investigation was conducted by PRC in 1992. Soil and groundwater samples were analyzed for metals, PCBs, VOCs, SVOCs, pesticides, and TPH. These soil borings (B-06-06, B-06-07, B-06-08, B-06-09, B-06-10, B-06-13, B-06-14, B-06-15, B-06-16, B-06-17, B-06-18, and B-06-19) and monitoring wells (M-06-01, M-06-02, and M-06-03) are located on or adjacent to Parcel 71 as shown in Figure 6-71-1.

The 1993 PRC report indicated that all metals and organic compounds were detected at concentrations below USEPA's January 1994 industrial

and unrestricted use PRGs for soil, except for SVOCs, arsenic, and beryllium. In all borings within Parcel 71, benzo(a)pyrene was the primary semivolatile detected above unrestricted use and industrial PRGs (or the detection limit was above the PRG) in both surface and subsurface soil samples. Other semivolatiles detected above restricted use and/or industrial PRGs (or the detection limits were above PRGs) from borings include anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(ghi)perylene, benzo(k)fluoranthene, and indeno(1,2,3-cd)pyrene.

Groundwater sampling results from the three monitoring wells located on Parcel 71 indicate that most metals, except arsenic and manganese, detected in groundwater were below USEPA's December 1993 MCLs. The VOCs, 1,2-DCE, TCE, and vinyl chloride were detected above USEPA's December 1993 MCLs in two of the monitoring wells (M-06-01 and M-06-02).

The IR contractor has proposed follow-up sampling for the open space of Parcel 71 including four borings, two CPT/HydroPunch, and one monitoring well as shown in Figure 6-71-1. Final sample locations may vary from that shown on Figure 6-71-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the previous investigations. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-72

PARCEL 72 EVALUATION PLAN

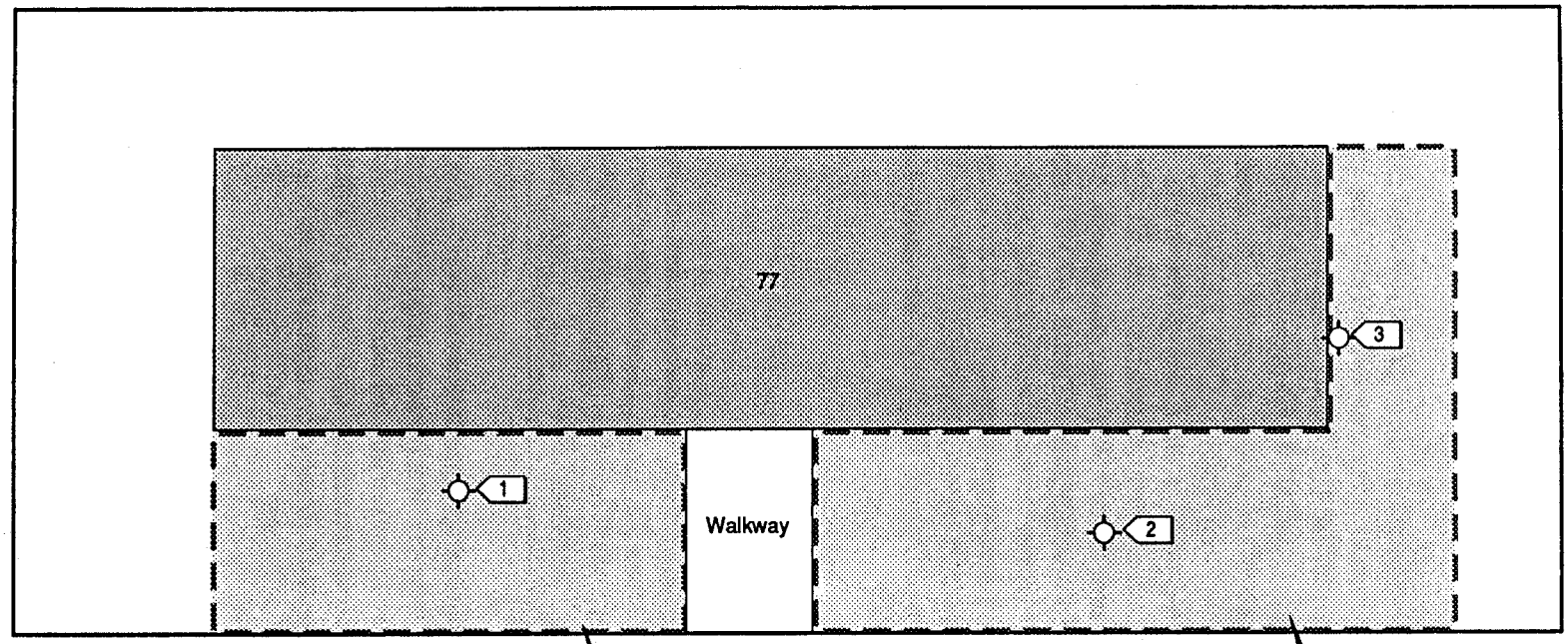
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 72 at NAS Alameda (Figure 6-72-1). The parcel, which is located in the central portion of the base, is approximately a half acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling and subsurface GeoProbe sampling will be used to accomplish the screening-level investigation. Table 6-72-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 72, historical activities are discussed below.

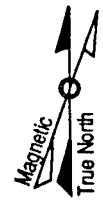
Background and Historical Activities

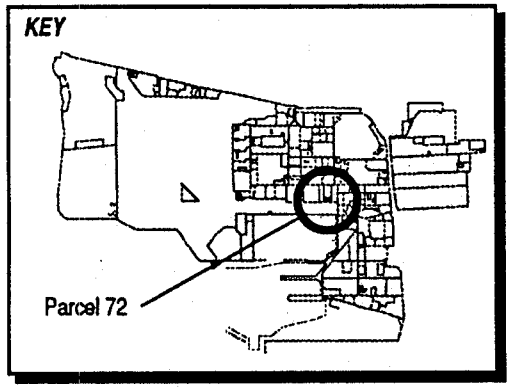
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 72, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

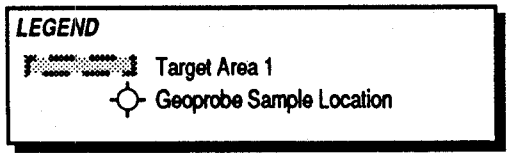
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 52, 53, 70, 71, 195, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future









1"= 30'

Figure 6-72-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

TABLE 6-72-1

Summary of Recommended Samples

NAS Alameda Parcel 72

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
72-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS
72-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS
72-3-2-S-V-DDMMYY	2.0'	GeoProbe	Soil	Target Area 1	Chlordane	Pesticides	CLP RAS

data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 77) and one structure (an old storage building located at the northwest corner of Building 77) cover approximately 55 percent of the parcel. The remaining 45 percent is open space. The parcel area is presently in use as an air terminal. There is no available documentation indicating former structures or buildings. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-72-1.

Parcel 72 is located approximately 50 feet south of Installation Restoration (IR) Program Site 6 (Building 41) and within 500 feet of IR Site 17 (Former Seaplane Lagoon). No previous investigations have been conducted at Parcel 72, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 77

Building 77 was constructed in 1942 and was intended to be a heating plant, electric distribution area, and air cargo terminal (Figure 6-72-1). This building is in fair condition. Building 77 is a three-story building constructed of concrete with a concrete floor, and has a floor plan area of approximately 21,000 square feet. Utilities located within and immediately surrounding Building 77 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and overhead electrical lines.

The building is currently used as an operations air terminal, aviation support, an NAS Alameda supply depot, and as air terminal offices. Four oil-filled switches (marked "not sampled") and five transformers (unknown PCB content) are located in the building's transformer

room. An additional transformer may have been removed from this area approximately 10 to 15 years ago.

Small quantities of cleaning supplies are stored in the deep sink room on the first floor of Building 77. A chemical inventory lists 40 gallons of corrosives and non-halogenated organic compounds in Building 77.

An oily residue was observed by site inspectors underneath one of the oil-filled switches in the electrical room of Building 77. A three-foot by two-foot stain on the concrete below the switch appears to result from leakage from the switch. The switch and the stain should be considered as part of the program addressing PCB issues. An elevator motor was observed to be leaking a small amount of oil in the elevator mechanics room located on the roof.

Building 77 does not appear to be equipped with a heating-ventilation-air conditioning (HVAC) system. Decayed paint and floor tiles were noted during the site inspection. Significant peeling paint was found in the deep sink room located on the second floor of Building 77. Asbestos-containing piping insulation is reported to have been removed from beneath the warehouse. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 77.

Open Space

The open space covers approximately 45 percent of the parcel. The ground cover of the open space is partially paved and partially landscaped with grass. The pavement is in moderately good condition. This parcel previously has open space areas that are currently landscaped. These open space areas are shown on Figure 6-72-1. These areas have been landscaped or unpaved since the parcel was completely filled in 1939.

The only structure within the open space is a storage structure located at the northwest corner of Building 77. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, and abandoned fuel lines.

EBS information indicates that the use of this open space has included vehicle parking. Review of aerial photographs indicates significant staining in the areas surrounding the parcel from 1947 to 1970. Aircraft fueling is also reported to have occurred south of Buildings 39 through 41. The staining is not apparent on Parcel 72. No incidents, such as

fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 72 is bounded by Parcels 71 and 23. Parcel 196 is IR Site 6 (Building 41), and is located less than 100 feet north of Parcel 72. Activities of concern on these adjacent parcels include aircraft maintenance, washdown, and fueling on Parcels 71 and 23. If the sampling proposed for Parcels 23 and 71 indicate that these activities may have impacted Parcel 72, then additional sampling on Parcel 72 may be appropriate. The former Seaplane Lagoon lies less than 500 feet south of Parcel 72.

No parcels contiguous with Parcel 72 are IR sites, therefore, no sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 72, then additional sampling on Parcel 72 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 72, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-72-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and

TABLE 6-72-2

Summary of Data Gaps
NAS Alameda Parcel 72

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 6 (Building 41, AIMD) is located within 500 feet of Parcel 72. Additional subsurface investigation relative to IR Site 6 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels that are not IR sites identified.
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space): Pesticides may have impacted the long-term landscaped area on Parcel 72.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-72-2

Summary of Data Gaps
NAS Alameda Parcel 72

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, abandoned fuel, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 77. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, only minimal pesticide sampling has been proposed for Parcel 72 in the parcel-specific target area.

Once the data gaps in Table 6-72-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 72 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. No zone-wide target areas were identified on Parcel 72. The nature and location of this area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Space): Landscaped and unpaved areas maintained since approximately 1940 may have been impacted by pesticide residues. This target area covers approximately 6,200 square feet and has been classified as having a potential likelihood of impacts. Two surface soil samples and one subsurface GeoProbe sample (at two feet bgs) will be collected in this Target Area as listed in Table 6-72-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14), are the screening-level investigation techniques that will be used to assess conditions in the target area and to identify areas that

may require further sampling in the follow-up detailed evaluation phase. Table 6-72-1 summarizes screening-level sampling and analyses recommended for the parcel's target area. Two surface soil samples and one subsurface GeoProbe sample (at two feet bgs) will be collected from the locations shown on Figure 6-72-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Surface soil sampling locations shown on Figure 6-72-1 are approximate. Samples should be collected from a variety of areas including open grass areas and edges of sidewalks and building foundations.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-195

PARCEL 195 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 195 at NAS Alameda (Figure 6-195-1). The parcel, which is located in the central portion of the base, is approximately seven acres in size and roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site, however, it is not listed in the Part B permit as requiring a RCRA Facility Investigation (RFI). Two parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling is the sampling technique called for in the screening-level investigation for these areas. Table 6-195-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 195, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 195 consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 52, 53, 70, 71, 72, and 196. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the

parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 40) and two storage sheds (Buildings 307 and 308) cover approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as a maintenance area for aircraft. One building (Building 199) was formerly located on the parcel and has since been demolished. Evidence of chemical storage in former Building 199 exists in the form of drum ring and paint stains on the old foundation of the building. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-195-1.

Parcel 195 is located less than 500 feet west of Installation Restoration (IR) Program Site 6 (Building 41, Parel 196). No previous investigations have been conducted at Parcel 195, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 40

Building 40 was constructed in 1941 and has served as an aircraft maintenance hangar (Figure 6-195-1) since that time. It was also used historically as a painting hangar. The building is in fair condition. Building 40 is constructed of a metal frame, with a built-up composite roof, and a concrete floor and walls. The hangar covers approximately 128,000 square feet.

Utilities located within and immediately surrounding Building 40 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. An oil/water separator is located in the northeast corner of the building adjacent to a

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

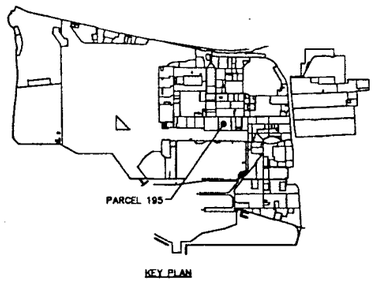
FIGURE 6-195-1 – PARCEL 195
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

SURFACE SOIL SAMPLE & No.

TARGET AREA & No.

FUEL LINE LEGEND

FUEL LINES ABANDONED

SANITARY SEWER LINE LEGEND

SANITARY SEWER MANHOLE & No.

GREASE TRAP

SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM LINE LEGEND

STEAM LINE

INDUSTRIAL WASTE LINE LEGEND

INDUSTRIAL WASTE MANHOLE

INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

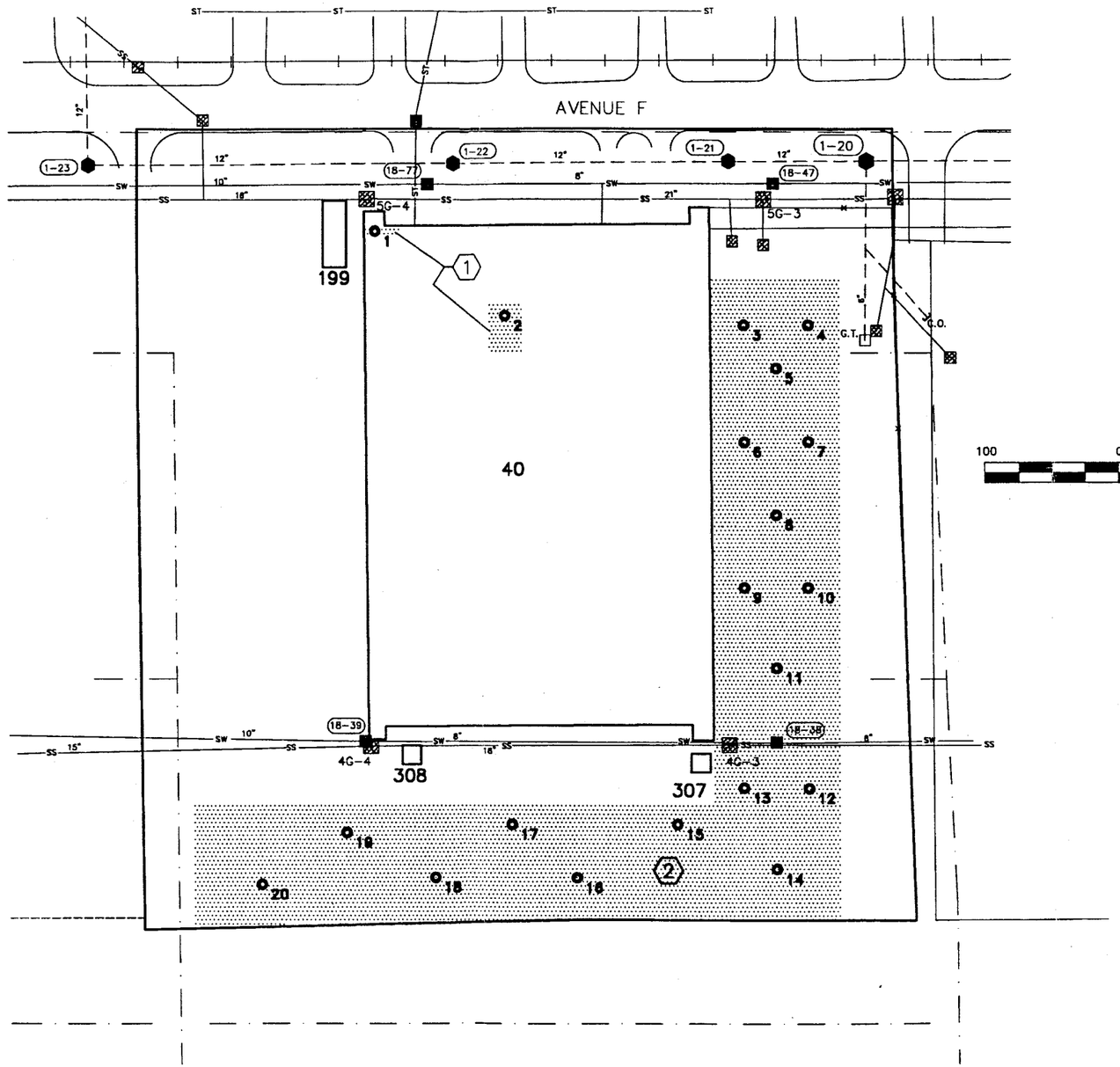
MANHOLE & No.

CATCH BASIN

STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



SCALE IN FEET

100 0 100 200 300

1" = 100'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-195-1
PARCEL 195
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590195.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 3.07.95/2121.96.45 SHEET 1 OF 1

SENSITIVE

TABLE 6-195-1

Summary of Recommended Samples
NAS Alameda Parcel 195

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
195-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Modified EPA 8015
195-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Modified EPA 8015
195-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-12-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-13-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-14-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015

TABLE 6-195-1

Summary of Recommended Samples
NAS Alameda Parcel 195

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
195-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-18-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-19-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015
195-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Modified EPA 8015

high pressure sprinkler system. An air quality permit was issued for Building 40 for painting operations.

Information collected during the EBS indicates that activities conducted within this building included light aircraft maintenance and painting. Light aircraft maintenance typically involves oil changes, minor repairs, and changing of worn equipment, such as tires. These maintenance activities are believed to have been conducted in most areas of the building. This activity typically involves the use of chemicals including solvents and petroleum products (especially lubricating oils) and the generation of waste products including waste oils. These types of industrial processes typically involve the use or generation of chemicals and wastes including aircraft fuels and oils. These processes occurred within Building 40 from 1941 to the present.

Approximately 30 gallons of paints, epoxy, alcohol, and metal solutions are documented to have been stored in the fireproof cabinet located in Building 40. This is just a temporary storage measure for the materials. Available documents do not include information regarding past and present disposal of used chemicals.

Hazardous materials, including waste oil, solvents, and lubricants, were stored in hazardous and flammable materials lockers. The doors to the cabinets were locked, and no significant staining was noted near the lockers. Hazardous wastes including used petroleum products, non-halogenated organics, and paint are documented to be stored in Building 40 in quantities up to 500 gallons.

Stains were noted in the building. Two stains approximately 25 feet by 20 feet were noted in the central, open portion of the building. Another stain, approximately one foot by 25 feet, was noted in the northeast corner of the building. These stains are likely related to maintenance activities and lubrication of the sliding doors of the hangar, respectively.

Available documents do not indicate Building 40 is equipped with a heating-ventilation-air conditioning (HVAC) system. Strong vapors were noted in the facility by site inspectors. Leaky roofs, peeling paint, and potential ACM wallboard were observed by site inspectors. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 40.

Buildings 307 and 308

Buildings 307 and 308 are constructed of concrete cinderblocks with metal roofing. The buildings cover 100 square feet each and were constructed in 1942. The buildings are in poor condition.

Utilities located within and immediately surrounding Buildings 307 and 308 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within these buildings have been confined to inert storage. Site reviewers noted stains of unknown origin located inside and outside of Building 307. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Buildings 307 and 308.

Open Space

The open space covers approximately 60 percent of the parcel. The open space on the parcel has been used for auto and equipment storage, and aircraft washdown. The ground surface of the open space is entirely paved with asphalt and concrete. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

Building 199 was formerly located in this open space. Evidence of chemical storage in former Building 199 exists in the form of drum ring and paint stains on the old foundation of the building.

An unlabelled metal locker and a hazardous materials storage locker are located on the eastern portion of the parcel. A large stain (approximately 20-feet by 20-feet) was observed beneath the hazardous materials locker.

Typical oil stains associated with vehicle parking and minor paint stains were observed throughout the open space on Parcel 195. Extensive staining was noted on historical aerial photographs from 1947 to 1970. Aviation gasoline (AVGAS) fueling is reported to have occurred on the south side of Building 40.

No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

One active underground storage tank (UST) is present at this parcel. No record regarding the tank number, capacity, or integrity is available.

Parcel Boundary Conditions

Parcel 195 is bounded by Parcels 185, 70, 71, and 23. Activities of concern on these adjacent parcels include materials storage on Parcel 185 and aircraft maintenance and refueling on Parcels 70, 71, and 23. If results of any sampling proposed for these adjacent parcels indicate activities on these parcels may have impacted Parcel 195, then additional sampling on Parcel 195 may be appropriate.

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 195, then additional sampling on Parcel 195 may be appropriate.

RCRA Sites

This subsection identifies the RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (site number SWMU/GAP 24). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the RCRA site at this parcel does not require further investigation. Site SWMU/GAP 24 is located in Building 40. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 24 is comprised of 55-gallon drums. The chemicals of concern associated with this site include oil, solvents, and paint-related materials.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 195, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-195-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As

TABLE 6-195-2

Summary of Data Gaps
NAS Alameda Parcel 195

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 6 (Building 41) is located approximately 500 feet east of Parcel 195. Additional subsurface investigation relative to IR Site 6 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One active UST currently exists at Parcel 195. • Tank ID # Unknown. • Future actions for this tank are unknown.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.

TABLE 6-195-2

Summary of Data Gaps
NAS Alameda Parcel 195

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 40. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-195-2 are addressed and screening-level sampling results from the target areas described below are compared to appropriate screening levels, Parcel 195 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. No zone-wide target areas were identified for this parcel. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-195-2.

- Target Area 1 (Building 40): Soils under the concrete in the open hangar area and in the northeast slide door lubrication area may have been impacted by TPH. The target area covers approximately 1,000 square feet and is classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-195-1.

- Target Area 2 (Open Space): Soils under the concrete in the eastern and southern areas of the parcel may have been impacted by fueling operations. TPH is the compound of concern in this area. The target area covers approximately 110,000 square feet and is classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-195-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3).

Table 6-195-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Twenty surface soil samples will be collected from the locations shown on Figure 6-195-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: and soil gas sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-196

PARCEL 196 EVALUATION PLAN

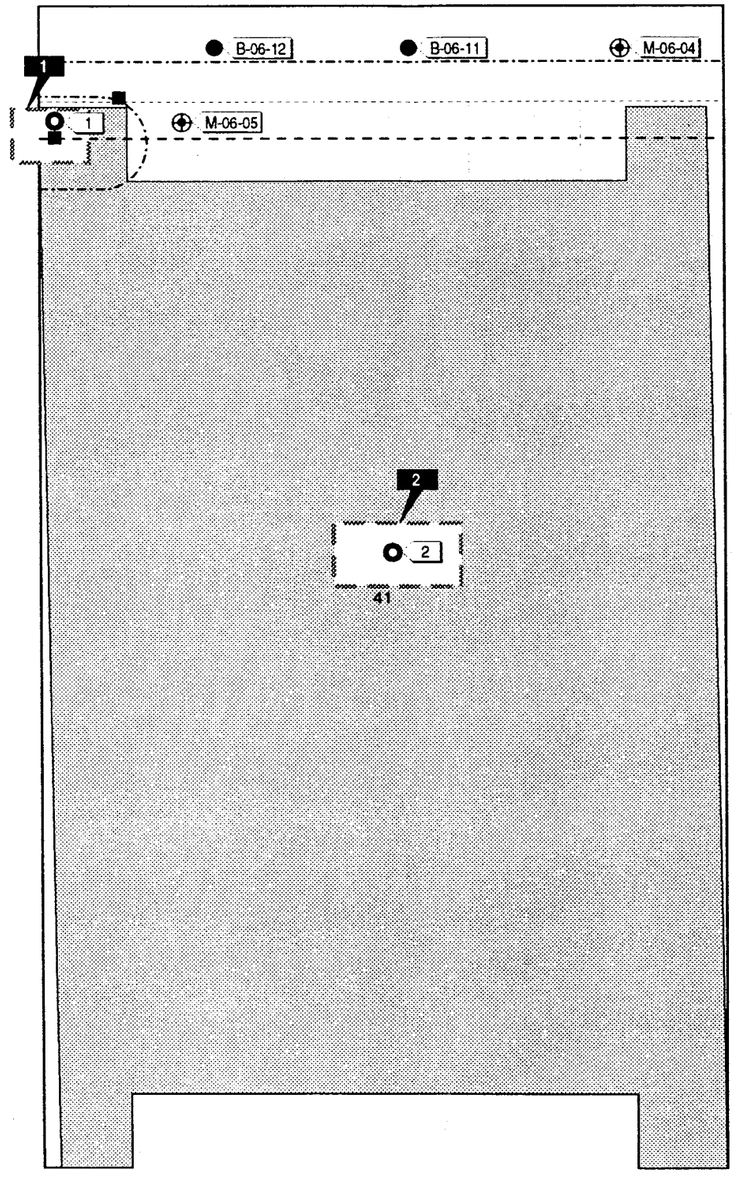
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 196 at NAS Alameda (Figure 6-196-1). The parcel, which is located in the southeast portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. Two parcel-specific and no zone-wide target investigation areas (target areas) have been identified for this parcel. Soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-196-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 196, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 196, consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies the Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 50, 51, 52, 53, 70, 71, 72, and 195. This parcel zone has been designated the Southern Hangar Zone (Zone 11). The Southern Hangar Zone encompasses the parcels located south of Building 5 that are used as hangars and hangar support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the



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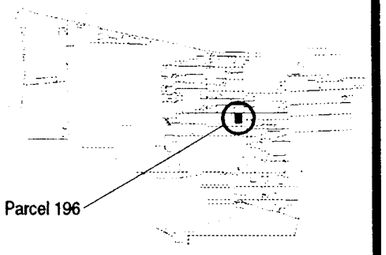

LEGEND

- Target Areas 1 and 2
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample
- Monitoring Well Location (PRC , Inc.)
- Boring Location (PRC , Inc.)
- Catch Basin

Note: See Figure 6-71-1 for location of existing and proposed sampling in the open space surrounding Building 41.

1"= 60'

Figure 6-196-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.13.94

TABLE 6-196-1
Summary of Recommended Samples
NAS Alameda Parcel 196

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
196-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	Test Kit
196-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	Test Kit
196-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	EPA 8015-Modified

* This is the suggested location for the confirmation samples. Actual locations will be determined in the field.

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 11.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 41) covers approximately 85 percent of the parcel. The remaining 15 percent is open space. The parcel area is presently used for aircraft component maintenance. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-196-1.

Parcel 196 contains Building 41 which is identified as IR Site 6. Previous investigations have been conducted at Parcel 196 and specific data regarding potential chemical occurrence are available.

Releases associated with IR Site 6 may have impacted this parcel. Soil and groundwater sampling results have been compiled in a 1993 report prepared by PRC Environmental Management, Inc. (under contract N62474-88-D-5086) titled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 2B and 3*. Ongoing (follow-up) sampling is being performed by the IR contractor.

In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials (ACM) on parcels will be addressed in other sampling programs and are not considered in this PEP. Lead paint was found in Building 41. Insulation and floor tiles from Building 41 possibly contains ACM.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 41

Building 41 was constructed prior to 1945. This building is in fair condition. Building 41 is constructed with a metal frame. A built-up wood roof covers the 118,000 square feet of building area. The floors are painted and consist of asphalt and concrete. A suspected oil/water separator is located in the southwest corner of Building 41. Aircraft hangar operations occurred within Building 41 from 1945 to 1985.

Utilities located within and immediately surrounding Building 41 include sanitary sewer, storm sewer, telephone, steam, water, electrical, fuel, industrial sewer lines, and underground electrical lines. An air quality permit has been issued for Building 41 for the operation of a paint spray booth, a fiberglass repair shop, a solvent cleaning dip tank, a de-gasser, a dryer, and an abrasive blasting process.

Information collected during the EBS indicates that activities conducted within this building have included operations associated with aircraft hangars. Such activities typically involve the use or generation of chemicals and wastes including aviation fuels and oils. Approximately 120 gallons of petroleum products, alcohol, solvents, adhesives, and metals were stored in the repair area of Building 41 at the time of the site inspection. Off-site disposal of used solvents is reportedly performed on a weekly basis. Silver, recovered and recycled from photgraphic operation associated with aircraft component testing. is covered under a tiered permit. This recovery operation began in 1993 at this facility; prior to this, the silver-containing waste stream was reportedly discharged directly to the sewer system. In addition to these chemicals, approximately 1,500 gallons of non-halogenated organic compounds, halogenated organic compounds, petroleum products, corrosives, and metals are stored in Building 41. Hazardous wastes stored in this building include used petroleum products, spent solvents, asbestos brakes/linings, and floor washdown fluid (oil/water). The floors are cleaned daily; the washdown from this process is routed to an unknown location.

Staining was noted on the floors of a large open-faced storage shed located on the northeast side of Building 41. Releases of oil, diesel, and engine fluids are likely responsible for the staining. While this shed is attached to Building 41, it is located in Parcel 71.

Available documents do not indicate if Building 41 is equipped with a heating-ventilation-air conditioning (HVAC) system. A potential ACM concern may exist in Building 41 because of dust from the use, maintenance, and repair of aircraft brakes and linings. The insulation and floor tiles within this building may contain asbestos. Lead paint was found in Building 41 with a lead concentration of 127 ppm.

Open Space

The open space covers approximately 15 percent of the parcel. The open space is entirely paved with concrete and asphalt and is currently in use as a parking lot. Typical stains associated with vehicle parking were noted in this area. During site inspection, a suspected oil/water separator was noted to be located on the southwest corner of Building 41. A 10-foot by 15-foot stain was observed outside the northeast corner of the building, apparently originating from inside the building.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, telephone, steam, water, electrical, fuel, industrial sewer lines, and underground electrical lines. An oil-filled transformer is located at the northwest corner of Building 41.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 196 is bounded by Parcel 206 to the north and Parcel 71 to the west, south, and east. The activities conducted on Parcels 71 and 206 include aircraft maintenance facilities and material storage. No parcels contiguous with Parcel 196 are IR sites, and no sampling has been called for in this PEP in response to nearby IR sites. The former Seaplane Lagoon (IR Site 17) is located to the south of Parcel 196. Building 5 (IR Site 5) is located to the west of Parcel 196.

If the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 196, then additional sampling on Parcel 196 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (GAP Site 25). GAP Site 25 was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this site does not require sampling. GAP Site 25 is located

within Building 41. There are no documented releases from this site. This site is currently active. The storage capacity of this site includes 55-gallon drums and Bowser drums. The chemicals of concern include oil, solvent, thinner, hydraulic fluid, and paint. Based on the available information, no further investigation is required at this site.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 196, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-196-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Buildings 273, 501, and 544. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

The majority of the parcel open space is paved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 196.

Once the data gaps in Table 6-196-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 196 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-196-2

Summary of Data Gaps
NAS Alameda Parcel 196

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 6 (Building 41, AIMD) is located on Parcel 196. Additional subsurface investigation relative to IR Site 6 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1: Northeast Corner of Building 41 • Target Area 2: Center of Building 41
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-196-2

Summary of Data Gaps
NAS Alameda Parcel 196

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Two parcel-specific and no zone-wide target areas were identified for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 11. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. Samples to be collected in these target areas are listed on Table 6-196-1.

- Target Area 1 (Northeast Corner of Building 41): This target area addresses the possible release of petroleum products in the northeast corner of Building 41. The size of this target area is approximately 100 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. One surface soil sample will be collected in this target area.

- Target Area 2 (Center of Building 41): This target area addresses the possible release of petroleum products in the central area of Building 41. The size of this target area is approximately 100 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. One surface soil sample will be collected in this target area.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-196-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Two surface soil samples will be collected from the locations shown on Figure 6-196-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Previous investigations have assessed conditions in the open space at Parcel 196. Follow-up detailed evaluations are being conducted by the IR contractor. As part of a former screening-level sampling effort summarized in the 1993 PRC report, a total of 16 soil samples were collected at different depths from two soil borings and two monitoring wells located on the north side of Parcel 196. One surface and three

subsurface soil samples were collected from each boring and monitoring well. Soil and groundwater samples have also been collected in the open space of neighboring parcels. This investigation was conducted by PRC in 1992. Soil and groundwater samples were analyzed for metals, PCBs, VOCs, SVOCs, pesticides, and TPH. These soil borings (B-06-11 and B-06-12) and monitoring wells (M-06-04 and M-06-05) are located on or adjacent to Parcel 196 as shown in Figure 6-196-1.

The 1993 PRC report indicates that all metals and organic compounds were detected at concentrations below USEPA's January 1994 industrial and unrestricted use PRGs for soil, except for benzo(a)pyrene, arsenic, and beryllium. Benzo(a)pyrene, arsenic, and beryllium were detected in both the surface and the subsurface soil samples of the two borings.

Groundwater sampling results from the three monitoring wells on Parcel 196 indicate that all VOCs detected were below USEPA's December 1993 MCLs. All metals detected (aluminum, antimony, and manganese) were above USEPA's December 1993 MCLs.

The IR contractor has proposed follow-up sampling for the open space of Parcel 196 including three borings, two CPT/HydroPunch, and three monitoring wells as shown in Figure 6-196-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the previous investigations. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z12

ZONE 12 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 12 at NAS Alameda (Figure 6-Z12-1). Zone 12 has been designated the Medical and Commercial Zone and encompasses the parcels that contain medical and commercial facilities. Zone 12 is comprised of Parcels 81, 83, 84, and 207. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide or parcel-specific target investigation areas (target areas) have been identified in this zone. None of the parcels in this zone have been reclassified from BRAC Category 7. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 12, historical activities are discussed below.

Zone 12 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 12 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 12, the Medical and Commercial Zone encompasses four parcels that contain or support medical or commercial facilities. During the

1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

sampling program development, the parcels located in this zone were evaluated together to better address potential zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1935. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, six buildings and no structures cover approximately 30 percent of the zone. The remaining 70 percent is open space. The zone area is presently in use as a commercial area. No other buildings or structures were formerly located on the parcel.

Zone 12 is within 500 feet of one Installation Restoration (IR) Program site (IR Site 8 (Building 114)). No previous investigations have been conducted at Zone 12, and specific data regarding chemical occurrence at this zone are not available. Previous investigations at nearby IR Site 8 are presented in a 1992 report by PRC entitled *Data Summary Report RI/FS Phases 2B and 3.*

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 12 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

One tank may be present at this zone on Parcel 83. Site inspection records indicate that several pipes with an unknown function were identified in this area.

RCRA Sites

This zone includes one RCRA site on Parcel 83. This site was evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, the RCRA site at this zone does not require further investigation. A brief description of the RCRA site is provided in the PEP for Parcel 83.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 4-Z12-1 – NAVAL AIR STATION, ALAMEDA
ZONE 12

FOR ADDITIONAL INFORMATION, CONTACT:

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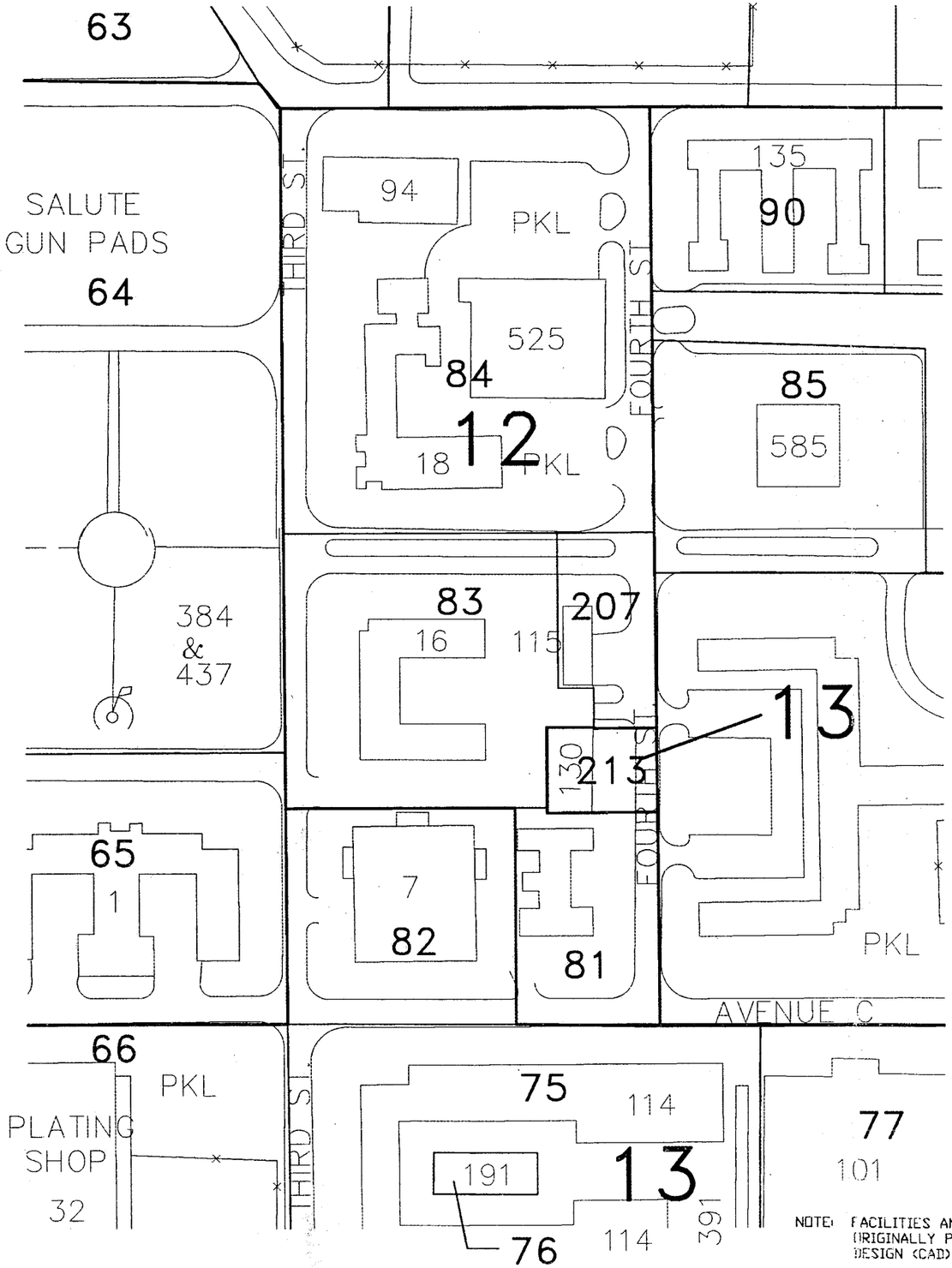
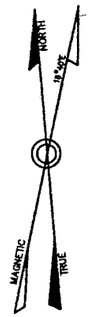


LEGEND

ZONE BOUNDARY



SCALE IN FEET

150 0 150 300 450

1" = 150'

FINAL

5-19-95

FIGURE 4-Z12-1

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL AIR STATION, ALAMEDA

ZONE 12

SIZE	ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,627; 17,628; 17,630; 17,631; 17,627A; 17,629
F	21219612.DWG	
SCALE AS NOTED	DATE: 5.19.95/2121.97.10	SHEET 1 OF 1

NOTE: FACILITIES AND/OR STRUCTURES SHOWN REFLECT THOSE ORIGINALLY PROVIDED TO ERM-WEST IN COMPUTER AIDED DESIGN (CAD) FORMAT AND MAY NOT BE CURRENT.

ERM

Zone Boundary Conditions

Zone 12 is bounded by Zones 8, 9, 13, and 15. Activities of concern on these adjacent zones include light industrial facilities including metal shops and hazardous material storage in Zone 13.

Zone Target Areas and Compounds of Concern

This zone contains no parcel-specific or zone-wide target areas.

SECTION 6-81

PARCEL 81 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 81 at NAS Alameda (Figure 6-81-1). The parcel is located in the north-central portion of the base, is one acre in size, and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 81, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 81, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 83, 84, and 207. This parcel zone has been designated the Medical and Commercial Zone (Zone 12). The Medical and Commercial Zone encompasses the parcels that have been used as medical or commercial facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 12.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-81-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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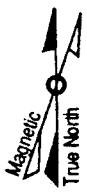
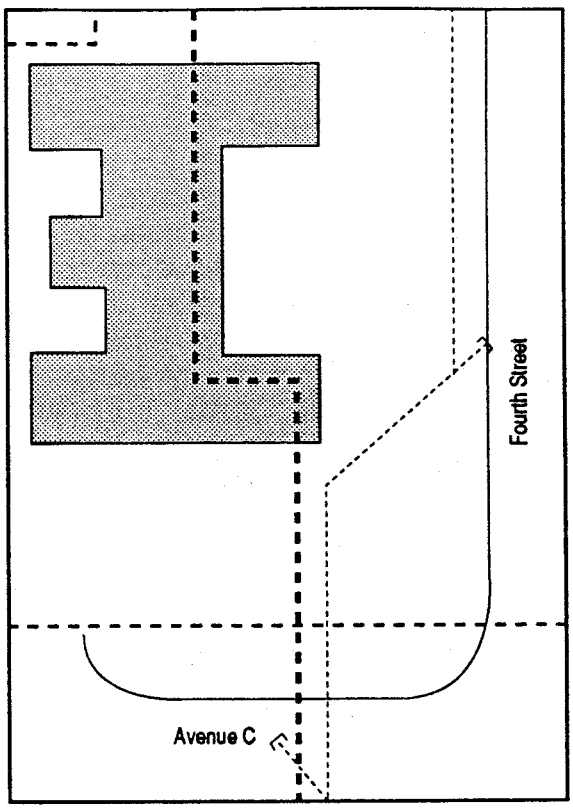
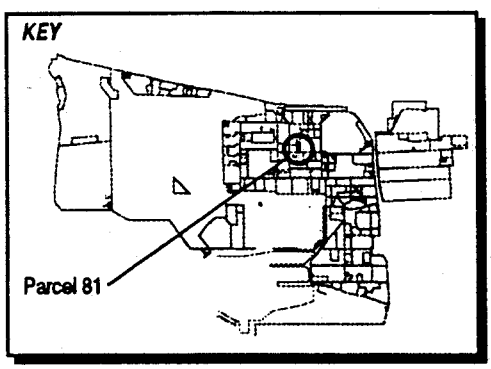
SENSITIVE







LEGEND

- Steam Lines
- Storm Sewer Line
- Sewer Line
- Capped

1"=45'

Figure 6-81-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.30.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, Building 116, a counseling center, covers approximately 25 percent of the parcel. The remainder (75 percent) is open space that is partially landscaped and partially paved. No other buildings appear to have existed on this parcel. Sewer lines exist on this parcel, and are shown in Figure 6-81-1.

Parcel 81 is located immediately north of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114, PWC Shop). No previous investigations have been conducted at Parcel 81 and specific data regarding potential chemical occurrence are not available for this parcel. Previous investigations at nearby IR Site 8 are presented in a 1992 report by PRC entitled *Data Summary Report RI/FS Phases 2B and 3*.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Based on the age of the building on the parcel and EBS observations, peeling lead-based paint (window frames) and friable asbestos (boiler room, radiators, steam lines, and building materials) are potential concerns on Parcel 81.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 116

Building 116 was constructed in approximately 1943. It is currently used as a counseling center; particularly for drug and alcohol rehabilitation counseling. It has reportedly always been an office building, and may potentially have once served as a barracks. This building is in fair condition. Building 116 is a wood frame building constructed on a cinder block foundation. The floor plan covers a total of approximately 10,000 square feet on one floor. Building 116 was built shortly after the area was filled, and no other building or structures are documented to have been located within the space currently occupied by Building 116.

Utilities located within and immediately surrounding Building 116 include underground sanitary sewer, storm sewer, water, steam, and electrical lines. No transformers are located on the parcel. A total of

approximately 20 gallons of cleaning and office supplies are stored in the building's kitchen, janitor's closet, and restrooms. Stored supplies include detergent, pine oil, naphthalene cake, pine oil, fuel, photocopier toner, and photocopier dispersant. No spills or staining are documented in this building.

Open Space

The parcel open space is 70 percent paved with concrete sidewalks and asphalt driveways/roadways. The remaining 30 percent of the open space is landscaped with grass, bushes, and trees. Paved areas are used for vehicle parking. The majority of the landscaped area of the open space has been continuously maintained since the early 1940s. No spills or staining was noted in this open space during the EBS review and site inspections.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 81 is bounded by Fourth Street and Avenue C to the east and south, respectively. Across the streets are Parcels 80 (bachelor officers' quarters) and 75 (IR Site 8, PWC Shop). Parcels 83 (clinic), 82 (materials testing laboratory), and 213 (PWC vector control building) border Parcel 81 to the northwest, north, and west, respectively. Activities of concern at these adjacent parcels include those associated with adjacent Parcel 75 (IR Site 8, Building 114--PWC Shop). VOCs and SVOCs have been detected in groundwater during previous investigations at IR Site 8. Additional monitoring well installation and sampling are proposed by the IR contractor to further delineate nature and extents of groundwater impacts from IR Site 8. Past surface soil sampling results from the northeast corner of the IR site have indicated impacts by the following: pesticides and herbicides (4,4'-DDE, 4,4'-DDT, and Dieldrin), PCBs (Aroclor 1260), and metals (barium, chromium, copper, lead, and zinc). Additional sampling is currently proposed by the IR contractor.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigation at the IR site reveals a cause for concern at Parcel 81, then additional sampling on Parcel 81 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 81, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-81-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 81 because no industrial buildings are present.

As noted earlier, Parcel 81 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed on this parcel.

Once the data gaps in Table 6-81-1 are addressed, Parcel 81 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-81-1

Summary of Data Gaps
NAS Alameda Parcel 81

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 81.
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) adjacent to and south of Parcel 81. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer, storm sewer, water, and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-81-1

Summary of Data Gaps
NAS Alameda Parcel 81

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, underground lines, radiological issues, and the adjacent IR site must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-83

PARCEL 83 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 83 at NAS Alameda (Figure 6-83-1). The parcel is located in the central portion of the base, is 3.6 acres in size, and is roughly square. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site is located at this parcel. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 83, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 83, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present uses of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 81, 84, and 207. This parcel zone has been designated the Medical and Commercial Zone (Zone 12). The Medical and Commercial Zone encompasses the parcels that have been used as medical or commercial facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Potential zone-wide concerns are described in the Zone Analysis Plan for Zone 12.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-83-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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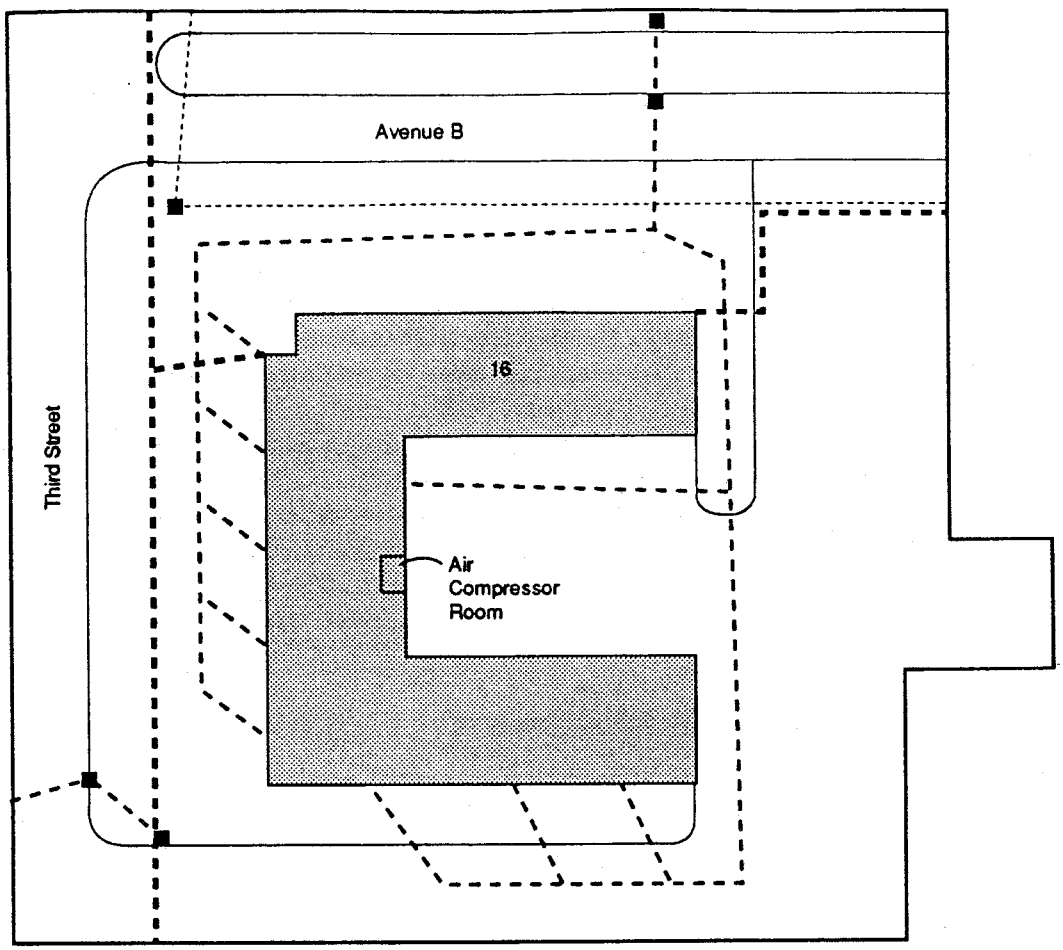
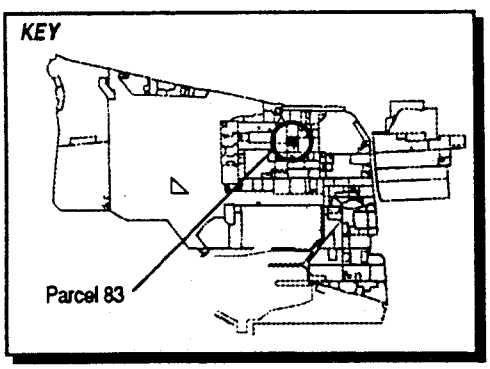
SENSITIVE





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Catch Basin

1" = 60'

Figure 6-83-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.12/AMR/06.28.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, Building 16, the medical and dental clinic, covers approximately 15 percent of the parcel. The remainder (85 percent) is open space that is partially landscaped and partially paved. Storm and sanitary sewer lines on the parcel are shown in Figure 6-83-1.

Parcel 83 is located 250 feet north of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114, PWC Shop). No previous investigations have been conducted at Parcel 83 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. X-ray equipment is used in Building 16; however, the equipment is self-contained.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 16

Building 16 was constructed in approximately 1942 for use as a hospital. The building currently houses medical and dental clinics. The clinics include two culture laboratories, two x-ray laboratories, and a physical therapy department. The medical and dental clinics are located on the first and second floors of the building, respectively. Building 16 is constructed with concrete floors and walls and a built-up roof. The building is generally in good condition. The floor plan covers a total of approximately 70,000 square feet on three floors. Building 16 was built shortly after the area was filled, and no other buildings are documented to have existed in this space.

Utilities located within and immediately surrounding Building 16 include underground sanitary sewer, storm sewer, steam, water, and electrical lines. Plans indicate that a transformer is present near the center of the building. A total of less than 100 gallons of chemicals were observed in the building during the site inspection. Chemicals were stored in janitors' closets, in laboratory cabinets, under sinks, and on shelves. Minor spillage and leakage (less than one quart) was noted in several storage areas. Chemicals present included x-ray film developer and fixer, alcohol, adhesives, dental tray cleaner, peroxide,

resins, medical specimen staining compounds, sodium hypochlorite, germicide, and various janitorial supplies. Wastes produced at Building 16 include the following:

- Approximately 100 pounds of silver sludge are generated per quarter from x-ray developer effluent processing. Sludge is picked up by Defense Reutilization and Marketing Office (DRMO) personnel. Treated x-ray developer wastewater is discharged to the sanitary sewer under an EBMUD permit.

- Approximately 100 pounds of biohazardous waste is generated each week by the clinics. The waste includes used needles, scalpels, bandages, and similar materials. Waste is stored temporarily in a locked cabinet outside of Building 16. Waste is picked up weekly by Integrated Environmental Systems of Oakland.

- Used x-ray film, averaging 700 pounds per year, is picked up by DRMO personnel.

- The dental clinic generates approximately one to two pounds per quarter of amalgam scraps containing silver and mercury.

A four-foot by 6-foot stained area was observed on the floor of an air compressor room accessed from the courtyard parking area of Building 16. The stained area appeared to have a relatively thick accumulation of oil released from the compressor. Since this room has a concrete floor in good condition, the soil beneath this stain will not be sampled as part of this PEP.

Peeling paint that may contain lead was observed on the exterior of the building. Asbestos ceiling tiles and piping insulation were reportedly removed from the building in 1989. Asbestos was not removed from lines in a crawl space under the building. Insulation that may contain asbestos was noted on lines entering the northeast and southeast corners of the building, and on the ventilation system on the northeast side of the south wing. Several lengths of insulated piping that may contain asbestos were observed on the Building 16 loading dock during the site inspection.

Open Space

The open space in Parcel 83 consists of paved and landscaped areas surrounding Building 16. This space takes up approximately 85 percent of the parcel. The paved portion of the open space includes asphalt roadways and parking areas, and concrete sidewalks. The pavement is in fair condition. Minor oil staining from vehicle parking was

observed in parking areas. Three unidentified pipes potentially indicating the existence of an abandoned UST adjacent to the northwest corner of Building 16 were observed during the site visit. No other evidence was available regarding this potential UST. A new backup diesel generator was being installed east of Building 16 at the time of the site inspection.

Less than 100 gallons of latex adhesive and plastic pipe cement were observed stored under a temporary construction trailer present on the parcel for the generator project. A possible former concrete building foundation was present on the southeast corner of the parcel. A biohazardous waste locker, a flammable materials locker, and an oxygen tank locker are present on a grass strip between the north wall of the southeastern wing of Building 16 and the courtyard parking area. No staining was noted in these storage areas.

The landscaped areas of the parcel cover approximately 50 percent of the open space and are planted with trees, shrubs, and grass. The majority of the landscaped area of has been continuously maintained since approximately 1940.

Underground Storage Tanks

One underground storage tanks may be present at this parcel. Site inspection information indicated that piping potentially associated with a UST was present at the time of the site inspection. No other information is available regarding this potential tank.

Parcel Boundary Conditions

Parcel 83 is bounded by Third Street and Avenue B to the west and north, respectively. Parcels adjacent to Parcel 83 include Parcel 84 (theater and bowling alley), Parcel 207 (former ambulance garage), Parcel 213 (shed), Parcel 81 (substance abuse rehabilitation center), Parcel 82 (materials testing laboratory), Parcel 65 (administration building), and Parcel 64 (open space). IR Site 8 (Building 114) is located approximately 250 feet south of Parcel 83.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigation at the IR site reveals a cause for concern at Parcel 83, then additional sampling on Parcel 83 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (site number SWMU/GAP 13). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, SWMU/GAP 13 does not require sampling because no staining was noted in the area of the GAP site, and the materials handled were handled in small quantities.

Site SWMU/GAP 13 is located in Building 16 and it is unknown whether any chemicals were released from this site. Site SWMU/GAP 13 is composed of scrap amalgam, X-ray film, and X-ray solution bagged in plastic.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 83, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-83-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 83 because no industrial buildings are present.

As noted earlier, Parcel 83 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use

TABLE 6-83-1

Summary of Data Gaps
NAS Alameda Parcel 83

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 83.
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) is located approximately 250 feet south of Parcel 83. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One suspect UST may exist at this parcel.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-83-1

Summary of Data Gaps
NAS Alameda Parcel 83

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, storm sewer, water, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for this parcel.

Once the data gaps in Table 6-83-1 are addressed, Parcel 83 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, the nearby IR site, and the potential UST must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-84

PARCEL 84 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 84 at NAS Alameda (Figure 6-84-1). The parcel is located in the central portion of the base, is approximately five acres in size, and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 84, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 84, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 81, 83, and 207. This parcel zone has been designated the Medical and Commercial Zone (Zone 12). The Medical and Commercial Zone encompasses the parcels that have been used as medical or commercial facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 12.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-84-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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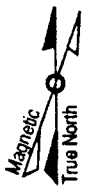
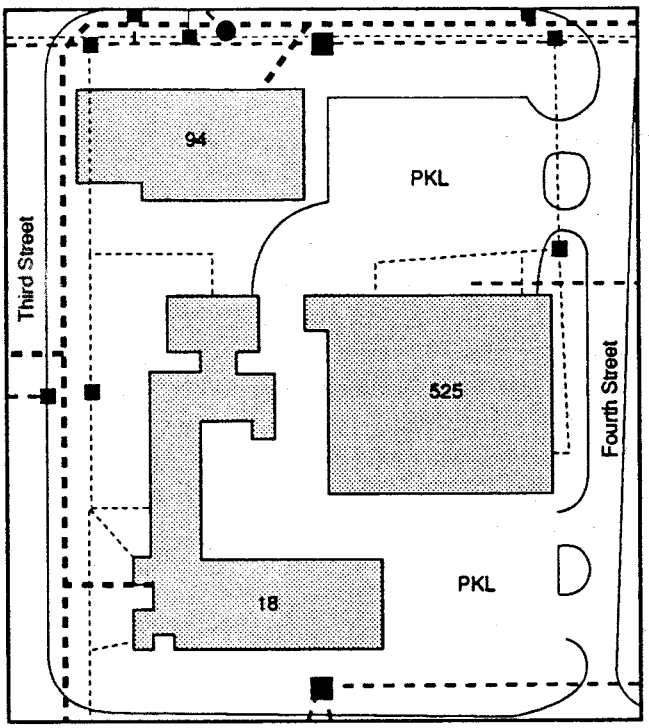
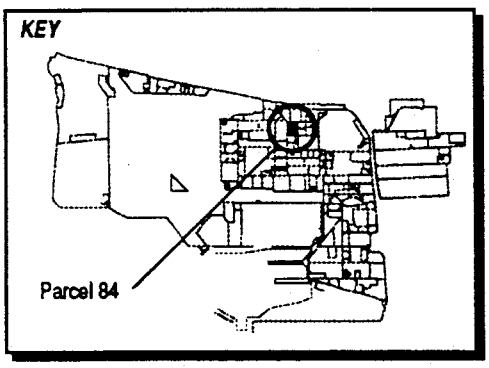
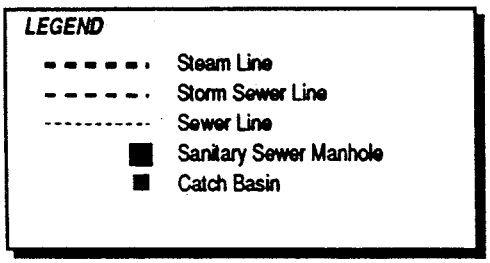
SENSITIVE









1"= 125'

Figure 6-84-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, three buildings (18--theater/post office/safety office, 94--chapel, and 525--bowling alley/exchange cafeteria) cover 30 percent of the parcel. The remainder (70 percent) is open space. A 4,300-square-foot building (former Building 93) housing the chaplain's office was demolished during construction of Building 525 in approximately 1970. The chaplain's office was built in 1942.

Parcel 84 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 84 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 525

Building 525 was constructed in approximately 1970 and houses a large bowling alley and a cafeteria (Figure 6-84-1). This building is in good condition. Building 525 is a one-story building, is constructed of masonry block with a concrete floor, and covers approximately 23,000 square feet. The space occupied by Building 525 was formerly a parking area and former Building 93 (see above). No chemical storage, spills, or staining are documented in this building.

Utilities located within and immediately surrounding Building 525 include underground sanitary sewer, storm sewer, steam, water, and electrical lines.

Building 118

Building 118 was constructed in approximately 1942 and houses a theater, post office, and safety office. The building has concrete walls and floors and covers approximately 26,000 square feet. No chemical storage, spills, or staining are documented in this building.

Building 94

Building 94 was constructed in approximately 1942. It has been used as a chapel since it was built. This building is in good condition. It is constructed of wood with a concrete floor and raised shingle roof, and covers approximately 9,000 square feet. No chemical storage, spills, or staining are documented in this building.

Open Space

The open space on Parcel 84 takes up approximately 70 percent of the parcel. The ground surface is 50 percent paved and 50 percent unpaved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is paved with concrete. The pavement is generally in fair condition. The asphalt area west of Building 525 has numerous cracks and shows some settling areas along the building foundation. The unpaved areas are landscaped with grass and shrubs. The majority of the landscaped area has been continuously maintained since approximately 1940.

Bowling alley maintenance chemicals including waxes, solvents, cleaners, degreasers, paint, and lubricants, are stored in two storage lockers on the west side of Building 525 on an asphalt-paved parking area. The duration of storage of these materials in these containers is not known, but may date to construction of Building 525 in approximately 1970. Currently a total of approximately 150 gallons of chemicals are stored collectively in the two lockers. Small stains are evident on the floors of the containers. No sampling is proposed because no staining was noted on the ground surrounding the lockers.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 84 is bounded by Parcels 64, 91, 92, 90, 86, 85, 207, and 83. There are no activities associated with these parcels that are likely to affect the environmental conditions at Parcel 84.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 84, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-84-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 84 because no industrial buildings are present.

As noted earlier, Parcel 84 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed on this parcel.

Once the data gaps in Table 6-84-1 are addressed, Parcel 84 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-84-1

Summary of Data Gaps
NAS Alameda Parcel 84

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 84.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 84.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Natural gas, sanitary sewer, storm sewer, water, and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-84-1

Summary of Data Gaps
NAS Alameda Parcel 84

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-207

PARCEL 207 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 207 at NAS Alameda (Figure 6-207-1). The parcel, which is located in the north central portion of the base, is 0.5 acres in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 207, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 207, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 81, 83, and 84. This parcel zone has been designated the Medical and Commercial Zone (Zone 12). The Medical and Commercial Zone encompasses the parcels that have been used as medical or commercial facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 12.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-207-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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SENSITIVE

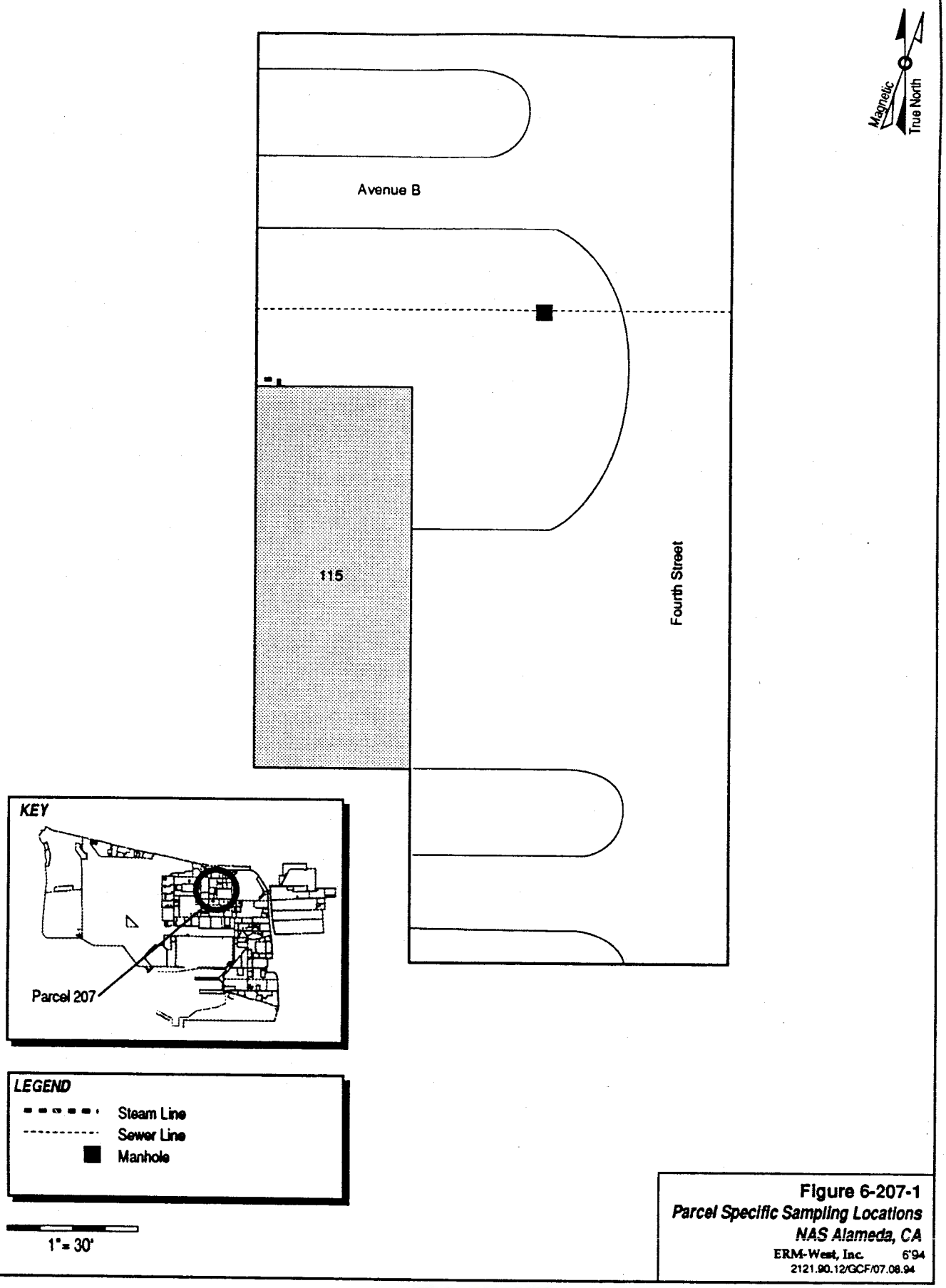

Figure 6-207-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently Building 115, a former ambulance garage, covers approximately 15 percent of the parcel. The remainder (85 percent) is open space that is partially landscaped and partially paved. No other buildings were formerly located on this parcel.

Parcel 207 is located within 500 feet of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114, PWC Shop). No previous investigations have been conducted at Parcel 207 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 115

Building 115 was constructed in approximately 1943 to serve as an ambulance garage for the adjacent hospital (Building 16, Parcel 83). Currently, the building is used for offices and storage. This building is in fair condition. Building 115 is a wood frame building constructed on a concrete slab foundation. The floor plan covers a total of approximately 2,800 square feet on one floor.

Utilities located within and immediately surrounding Building 115 include underground sanitary sewer, steam, and electrical lines. No transformers are located on the parcel.

A total of approximately 100 gallons of maintenance, cleaning, and medical supplies are stored on wooden shelves and in a cabinet in the building. Stored materials include latex paint, adhesives, sanitizing compounds for medical instruments, floor wax, scouring powder, x-ray fixer, and x-ray film. The floor of the storage area was free of stains.

Open Space

Seventy percent of the parcel open space is paved with concrete sidewalks and asphalt driveways/roadways. The remaining 30 percent

of the open space is landscaped with grass, bushes, and trees. Paved areas are used for vehicle parking. A picnic table is present on the grass on the northeast side of the building. The majority of the landscaped area of the open space has been continuously maintained since the early 1940s.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 207 is bounded by Fourth Street and Avenue B to the east and north, respectively. Across these streets are Parcels 80 (bachelor officers' quarters) and 84 (bowling alley and theater). Parcel 83 (clinic) and Parcel 213 (PWC vector control) border Parcel 207 to the west and south, respectively.

IR Site 8 is located approximately 300 feet south of Parcel 207, and the extent of the concerns associated with this site have not yet been fully defined. Additional monitoring well installation and sampling are proposed at IR Site 8 by the IR contractor. No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigation at the IR site reveals a cause for concern at Parcel 207, then additional sampling on Parcel 207 may be appropriate.

RCRA Sites

No RCRA sites are located on this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 207, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-207-1 must be addressed before the parcel can be

TABLE 6-207-1

Summary of Data Gaps
NAS Alameda Parcel 207

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 207.
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) is located approximately 300 feet south of Parcel 207. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-207-1

Summary of Data Gaps
NAS Alameda Parcel 207

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 207 because no industrial buildings are present.

As noted earlier, Parcel 207 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed at this parcel.

Once the data gaps in Table 6-207-1 are addressed, Parcel 207 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, underground lines, radiological issues, and the nearby IR site must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-Z13

ZONE 13 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 13 at NAS Alameda (Figure 6-Z13-1). Zone 13 has been designated the Central Light Industrial Zone and encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. Zone 13 is comprised of Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. During the sampling program development, the parcels located in this zone were evaluated together. Two zone-wide target investigation areas (target areas) and four parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-Z13-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z13-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. Two of the parcels in this zone have been reclassified from BRAC Category 7. Parcels 75 and 76 have been reclassified to BRAC Category 6.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 13, historical activities are discussed below.

Zone 13 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 13 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-Z13-1

Summary of Recommended Samples
NAS Alameda Zone 13

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	Pesticides, Fuels, Oils	PCBs, TPH, Lead	EPA 8080, Modified EPA 8015, ICAP SCAN
Z13-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	Creosote, Tie Tar	SVOCs	CLP RAS
Z13-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	Pesticides, Fuels, Oils	PCBs, TPH, Lead	EPA 8080, Modified EPA 8015, ICAP SCAN
Z13-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	Creosote, Tie Tar	SVOCs	CLP RAS
Z13-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	Pesticides, Fuels, Oils	PCBs, TPH, Lead	EPA 8080, Modified EPA 8015, ICAP SCAN
Z13-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	Creosote, Tie Tar	SVOCs	CLP RAS
Z13-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS
Z13-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS
Z13-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS
Z13-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 13, the Central Light Industrial Zone encompasses 21 parcels that have laboratory, electronics, plating, and vehicle maintenance activities on or near them. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1942; the ground level and grading have not changed significantly since that time.

Currently, 26 buildings and three structures cover approximately 70 percent of the zone. The remaining 30 percent is open space. Eleven buildings and one structure were formerly located on the zone and have since been demolished.

Zone 13 contains two Installation Restoration (IR) Program sites (IR Site 8 - Building 114; and IR Site 12 - Building 10). Previous investigations have been conducted at Zone 13, and specific data regarding chemical occurrence at this zone are available.

Underground fuel, steam, and sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 13 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

Three abandoned underground storage tanks are present at Parcel 68 (Tanks 6-1, 6-2, and 6-3). The tanks were installed at an unknown date and are located on the west side of Building 6. Tanks 6-1 and 6-2 were used to store solvents and have capacities of

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

1,000 gallons, each. Tank 6-3 was used to store solvents and waste oil and has a capacity of 1,000 gallons. These tanks have been identified as RCRA tanks based on their former contents and their inclusion in the RFI. Five other tanks are listed in the EBS documents as existing on Parcel 68. No other information is available regarding these tanks. These tanks are scheduled to be removed.

Five inactive underground storage tanks are present at Parcel 69 (Tanks 10-1, 10-2, 10-3, 10-4, and 10-5). These tanks are currently filled with sand. It is unknown when the tanks were installed, or what was stored in the tanks. The tanks are located near the northeast corner of Building 10. The tanks have capacities ranging from 16,400 to 24,000 gallons. One 4,000-gallon capacity tank (Tank 10-6) formerly existed near the southeast corner of Building 10 (Parcel 69). It is unknown what was stored in this tank. Tank 10-6 was removed in 1993.

One underground storage tank may be present at Parcel 79 (Tank 392-1). The *NAS Alameda, Impediment Map with Tanks and IR Sites,* indicates that Tank 392-1 is located on Parcel 79. However, Building 392 is located on Parcel 189, and this tank may actually be located on that parcel.

One active underground storage tank is present at Parcel 82 (Tank 7-1). The installation date of this tank is unknown, though it is likely congruent with the construction of Building 7. The tank has been reported to be located on both the west and north sides of Building 7. Based on the available information, Tank 7-1 is used to store used fuel samples. The capacity of the tank is not known. No data pertaining to tightness or tank integrity have been identified. The tank is periodically checked and emptied by environmental group personnel.

Two active underground storage tanks are present at Parcel 186 (Tanks 282-1 and 282-2). The presence of these tanks was identified from the EBS. These tanks are located east of Building 282. Tanks 282-1 and 282-2 contain unleaded gasoline and diesel and have capacities of 5,000 gallons, each. These tanks passed an October 1991 tank and line test. The tanks and piping also passed precision tests in 1993 and 1994.

One underground storage tank was formerly present at Parcel 189 (Tank 392-1). Tank 392-1 was installed on an unknown date, and was located near Building 392. This tank was used to store unleaded gasoline and had a capacity of 500 gallons. Based on the available information, this tank passed a November 18, 1991 tank and line test, prior to removal. This tank is being investigated under the RCRA closure plan.

An unknown number of underground storage tanks may be present at Parcel 203, as evidenced by a large concrete pad with numerous pipeways and potential UST inlets observed during the site inspection. No other evidence exists indicating USTs at this parcel.

RCRA Sites

This zone includes 12 RCRA sites on Parcels 66, 68, 69, 75, 82, 186, and 213. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, of the 12 RCRA sites at this zone, three require further investigation, either as part of the tank program, an RFI, or within the PEPs. The tanks are being addressed as part of the UST program. Any necessary investigation will be implemented as part of the UST program. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 13 is bounded by Zones 9, 10, 11, 12, 14, and 15. Activities of concern on these adjacent zones include aircraft rework, maintenance and fueling on Zones 10 and 11, and material storage and warehousing on Zone 14.

Zone Target Areas and Compounds of Concern

This zone contains two zone-wide target areas and four parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 13 Target Areas

- Zone 13 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Central Light Industrial Zone. Railroad tracks are located

throughout the zone. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas for a total of three surface soil samples for this zone target area. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-Z13-1. The approximate sampling locations are shown on Figure 6-Z13-1.

It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of the compounds of concern are negligible, then the railroad track zone target area may be eliminated in this zone and other zones. Alternately, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then sampling may be modified to analyze for the more limited suite of the compounds of concern, only.

- Zone 13 Target Area 2, (Unpaved/Landscaped Areas): Based on historical aerial photographs, portions of the unpaved open spaces of Zone 13 have been unpaved since 1940. Zone 13 Target Area 2 includes all landscaped, and current and former unpaved areas within the Central Light Industrial Zone. Unpaved and landscaped areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts, and is identified because of the potential recreational use of portions of this zone (Parcels 104, 105, 109, and 203). Four surface soil samples for pesticides will be collected from the locations shown on Figure 6-Z13-1. Samples to be collected in this zone-wide target area are listed in Table 6-Z13-1.

Parcels 66, 67, 69, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 203, and 213 Target Areas

No parcel-specific target areas were identified at these parcels.

Parcel 68 Target Areas

- Target Area 1 (Building 6): The soils beneath the shop areas and in the interior courtyard of Building 6 may have been impacted by the documented spillage that resulted in scattered staining covering approximately 30 percent of the floor. The compounds of concern include metals and TPH. This target area covers approximately 20,000 square feet and has been classified as having a potential likelihood of impacts. Four surface and four subsurface soil samples will be collected in this target area.

- Target Area 2 (South Parcel Boundary): The southern portion of Parcel 68 may have been impacted by the documented spillage of fuel on Parcel 186. The compounds of concern include TPH and VOCs. This target area covers approximately 1,500 square feet and has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected in this target area.

Parcel 75 Target Area

- Target Area 1 (Building 114 Pesticide Storage Shed): The soils adjacent to the pesticide storage shed may have been impacted by releases of the pesticides stored in the shed, since the pavement is in poor condition on this parcel. This target area covers approximately 500 square feet and has been classified as having a potential likelihood of impacts. Two surface soil samples will be collected from this target area.

Parcel 189 Target Area

- Target Area 1 (Building 392): The soil underneath the heavily stained area around the generator will be sampled for TPH. The area covers approximately 100 square feet and has been classified as having a potential likelihood of environmental impacts, due to the fair condition of the pavement of this parcel. Two surface soil samples will be collected in this target area.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level technique that will be employed to assess conditions in the zone and parcel-specific target

areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-Z13-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. A total of 17 surface soil and six subsurface soil samples will be collected from the locations shown on Figure 6-Z13-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-66

PARCEL 66 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 66 at NAS Alameda (Figure 6-66-1). The parcel is located in the central portion of the base, is 2.7 acres in size, and is rectangular in shape. This parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains two RCRA sites described in the Part B permit. No parcel-specific or zone-wide target investigation areas (target areas) have been identified at this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 66, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 66, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1942; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 32) covers approximately 35 percent of the parcel. The remaining 65 percent is open space. The parcel area is presently in use as a metal treatment shop and associated parking lot. No former buildings or structures were located at this parcel that have since been demolished. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-66-1.

Parcel 66 is located immediately west of Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114, Pest Control Area and Separator Pit), approximately 200 feet east of IR Site 5 (Parcel 54, Building 5), and 500 feet north of IR Site 12 (Building 10, Power Plant). No previous investigations have been conducted at Parcel 66, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the open space and building are described in detail below.

Building 32

Building 32 was constructed in 1990 and serves as a metal plating shop (Figure 6-66–1). This two-story building covers approximately 56,600 square feet and is in good condition. Building 32 is constructed with a steel frame and metal siding, concrete floors, and a steel frame roof. The space occupied by Building 32 was formerly open space used for parking from 1942 to 1990.

Utilities located within and immediately surrounding Building 32 include sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines. A Resource Conservation and Recovery Act (RCRA) Part B permit and an air quality permit were issued for this building in 1990.

Information collected during the EBS indicates that activities conducted within this building include plating and metal finishing. Electric drying in ovens, welding, ion vapor deposition, chrome anodizing, chrome plating, degreasing, abrasive blasting, chromium/magnesium/aluminum finishing, cadmium conversion coating, and acid etching and stripping processes were conducted throughout the building. These processes typically involve the use or generation of chemicals and wastes including mixed metals, cyanide waste, cadmium waste, chromium, acids, alkalis, chrome waste, and nickel precipitates. Metal finishing processes occurred within Building 32 since its construction in 1990 to the present.

Metals (nickel, chromium, aluminum, magnesium, and copper), degreasers including VOCs, sodium salts, reactives, corrosives (including hydrochloric acid), and lubricants are documented to have been stored and used in Building 32 since its construction. Approximately 110,000 gallons of compounds and solutions are stored in Building 32. Disposal of used chemicals is accomplished by treatment at the industrial waste treatment plant located within Building 32 followed by discharge into the sanitary sewer.

No records of spills were found during the site history review. Undocumented spills may have occurred at various locations within Building 32, as evidenced by scattered, small stains throughout the building. These spills are of unknown and various origins, as indicated by varying colors and intensities of the stains. Because this is a relatively new building with a concrete floor, it is unlikely that this minor staining has resulted in impacts to the underlying soils, and no sampling is proposed in response to this staining.

Building 32 is equipped with a heating-ventilation-air conditioning (HVAC) system partially designed to mitigate vapor and fume accumulation to acceptable Occupational Safety and Health Administration (OSHA) levels. There is a significant accumulation of dusts on interior building surfaces including floors and walls. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 32.

Open Space

The open space covers approximately 65 percent of the parcel. The open space is 90 percent paved and 10 percent unpaved. Approximately 70 percent of the open space is surfaced with asphalt and 20 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass and landscaping.

Structures located within the open space include two Baker tanks and one dumpster. The Baker tanks are constructed of plastic and store wastewater from the treatment plant located in Building 32.

EBS information indicates that activities conducted within this open space include vehicle parking and storage of treated wastewater in the Baker tanks prior to discharge to the sanitary sewer.

No spills or staining has been documented in the open space of Parcel 66. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space of Parcel 66.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 66 is bounded by Parcels 59, 65, 67, and 75. Parcel 75 contains IR Site 8 (Pest Control Area and Separator Pit). Elevated concentrations of VOCs, SVOCs, TPH, metals, pesticides, and PCBs have been detected in soil and/or groundwater at least one of the nearby IR sites. The IR contractor has proposed installation of a monitoring well (M05-08) on the southwest corner of Parcel 66 to assess possible groundwater impacts on the parcel from IR Site 5.

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 66, then additional sampling on Parcel 66 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (SWMU/32-1 and SWMU/32-2). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, these sites do not require sampling because the sites are located within Building 32, which has concrete flooring that appears relatively new.

Both sites consist of areas where 55-gallon drums of wastes containing copper, silver, cyanide, sodium, cadmium, nickel sulfamate, and chromic acid are stored. These sites are currently active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 66, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-66-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos, transformers, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Building 32, a RCRA Part B Permitted Facility, because this facility will be closed in accordance with its RCRA Closure Plan.

As noted earlier, Parcel 66 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 66.

Once the data gaps in Table 6-66-2 are addressed, Parcel 66 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-66-2

Summary of Data Gaps
NAS Alameda Parcel 66

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 66 is located immediately west of IR Site 8 (Parcel 75, Building 114, Pest Control Area and Separator Pit), approximately 200 feet east of IR Site 5 (Parcel 54, Building 5), and 500 feet north of IR Site 12 (Building 10, Power Plant). Additional subsurface investigation relative to IR Sites 5 and 8 are proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-66-2

Summary of Data Gaps
NAS Alameda Parcel 66

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to PCBs, asbestos, underground lines, radiological concerns, and impacts of the nearby IR sites must be resolved before this parcel can be leased or transferred.

SECTION 6-67

PARCEL 67 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 67 at NAS Alameda (Figure 6-67-1). The parcel, which is located in the central portion of the base, is less than one acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 67, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 67, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

N00236_003722
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SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-67-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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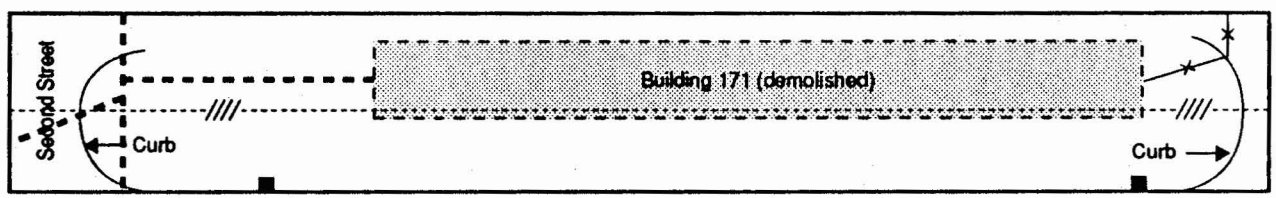
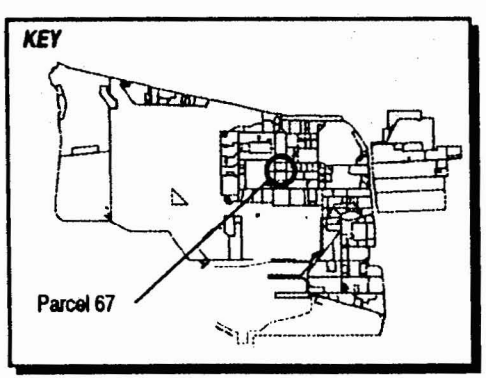
SENSITIVE





LEGEND

- Steam Line
- Sewer Line Abandoned In Place
- Catch Basin

Note: No screening-level sampling recommended for this parcel.

1"= 60'

Figure 6-67-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.30.94

SENSITIVE

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, there are no buildings located on the parcel. The parcel is presently in use as a parking area. Two buildings (Buildings 171 and 317) were formerly located on the parcel and have been demolished. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-67-1.

Parcel 67 is adjacent to two Installation Restoration (IR) Program sites (IR Sites 5 and 8, Buildings 5 and 114, respectively). No previous investigations have been conducted at Parcel 67, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental within the parcel open space and buildings are described in detail below.

Buildings 171 and 317

Buildings 171 and 317 were constructed in 1945 and 1953, respectively. These buildings were both demolished between 1985 and 1990. Building 171 was a bus station and an administrative office building. No information regarding the use of Building 317 is available. No available information exists regarding chemical usage, storage, or disposal in these buildings. The concrete foundation of Building 171 still partially exists on Parcel 67. No documented spills, staining, or other incidents (e.g., fires, mishaps, flooding, or crashes) have occurred within or near these former buildings.

Open Space

The parcel consists entirely of open space, and is entirely paved with concrete. The concrete foundation of former Building 171 is part of the pavement. Utilities located within and immediately surrounding the open space include underground sanitary sewer, steam, water,

electrical, and industrial sewer lines. EBS information indicates that activities conducted within this open space include vehicle parking. No chemical storage or usage is documented to have occurred in this area.

There is a two-foot by four-foot piece of wood on the south side of the parcel that covers a one and a half foot deep hole. Two covered pipes were visible in the hole. Assorted debris and bare earth was visible at the bottom of the hole. The origin of the pipes are unknown, though it is likely that the hole is used for utility access. No staining was noted in or surrounding the hole. Old piping connections that used to serve Building 171 are also present in the area.

Small oil-like stains related to vehicle parking were noted on the parcel. These are minor stains and will not be sampled in this PEP. No other staining, documented spills or incidents are documented to have occurred at this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 67 is bounded by Parcels 54, 66, 68, and 75. Activities of concern on these adjacent parcels include metal plating on Parcel 66, aircraft rework on Parcel 54, storage of pesticides, painting, and woodworking on Parcel 75, and automobile repair and rework on Parcel 68. Second Street borders Parcel 67 to the west.

No sampling is called for in this PEP in response to the nearby IR sites or other boundary conditions. If the continuing investigations at the IR sites and other surrounding parcels reveal a cause for concern at Parcel 67, then additional sampling on Parcel 67 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 67, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-67-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 67 because no buildings are present.

Once the data gaps in Table 6-67-2 are addressed, Parcel 67 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to PCBs, underground lines, radiological concerns, and the impacts of the adjacent IR sites must be resolved before this parcel can be leased or transferred.

TABLE 6-67-1

Summary of Data Gaps
NAS Alameda Parcel 67

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 67.
Installation Restoration (IR) Sites	• Parcel 67 is adjacent to IR Site 5 (Building 5) and IR Site 8 (Building 114). Additional subsurface investigation relative to IR Sites 5 and 8 are proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-67-1

Summary of Data Gaps
NAS Alameda Parcel 67

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• Other data gaps identified include the hole with piping within.

SECTION 6-68

PARCEL 68 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 68 at NAS Alameda (Figure 6-68-1). The parcel, which is located in the central portion of the base, is approximately three acres in size and is rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains two RCRA sites (SWMU GAP 1, and USTs). Two parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-68-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 68, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 68, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-68-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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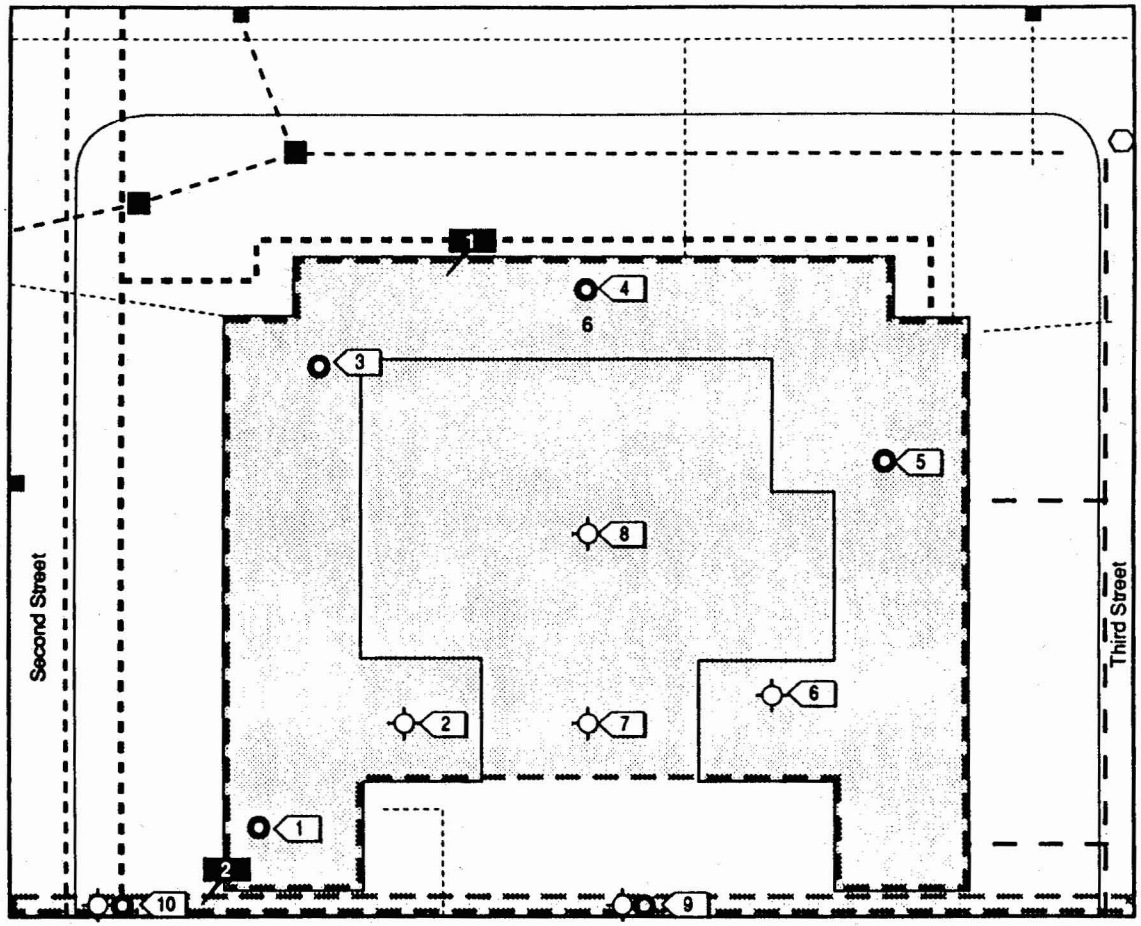
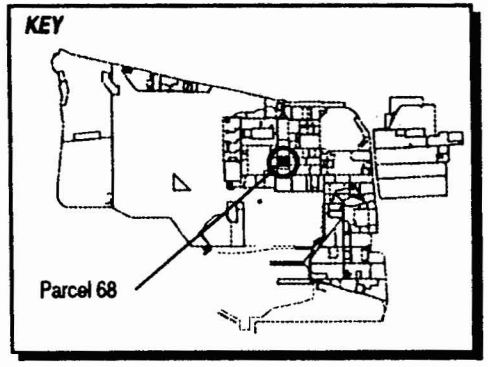
SENSITIVE





LEGEND

- Target Areas 1-2
- Steam Line
- Storm Sewer Line
- Sewer Line
- Fuel Line In Use
- GeoProbe Sample Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin

1"= 70'

Magnetic
True North

Figure 6-68-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.30.94

SENSITIVE

TABLE 6-68-1

Summary of Recommended Samples
NAS Alameda Parcel 68

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
68-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-2-4-S-V-DDMMYY	TBD*	Subsurface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-6-4-S-V-DDMMYY	TBD*	Subsurface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-7-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Lube Oil, Waste Oil, Metals	TPH, Metals	Modified EPA 8015, ICAP SCAN
68-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels	TPH	Modified EPA 8015
68-9-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Gasoline	VOCs	CLP RAS
68-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels	TPH	Modified EPA 8015
68-10-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Gasoline	VOCs	CLP RAS

* These samples should be collected from a depth corresponding to the bottom of the hydraulic lifts.

maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 6) covers approximately 35 percent of the parcel. The remaining 65 percent is open space. This building is currently used as a repair shop, steam cleaning facility, electromotor shop, storage area, and fire station. Two buildings (Buildings 194 and 195) were formerly located on this parcel, and have been demolished. Underground fuel, steam, and sewer lines are present on this parcel and are shown on Figure 6-68-1.

Parcel 68 is located adjacent to Installation Restoration (IR) Sites 5 and 8 (Building 5 and Building 114, respectively), and less than 200 feet north of IR Site 12 (Building 10). No previous investigations have been conducted at Parcel 68, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 6

Building 6 was constructed in 1940 and has served as a fire station and vehicle maintenance and repair facility (Figure 6-68-1). Building 6 was formerly Buildings 6 and 7. These buildings became one building (Building 6) in the 1960s. Building 6 is constructed with concrete walls and floors, and a gravel-composite roof. It covers approximately 40,000 square feet. There are hydraulic lift systems located in the garage bays, two of which are no longer in use. The reserve tanks and lines are still in place. An oil/water separator is located in the steam cleaning bay.

Utilities located within and immediately surrounding Building 6 include underground sanitary sewer, storm sewer, steam, water, electrical, fuel (on Parcel 186), and industrial sewer lines. Five transformers are documented to have been used in Building 6. Three of these transformers are filled with PCB oil containing greater than 50 parts per million PCBs. These transformers were not observed during the site inspection. No permits appear to have been issued for this building.

Information collected during the EBS indicates that activities conducted within this building included vehicle and equipment (i.e., forklift) repair, steam cleaning, equipment and supply storage, and electromotive repair. The equipment storage bay was formerly used as a paint bay. These activities are conducted in various shops throughout the building. Oil changing processes, which were conducted in the tire/auto shop area of the building, generated waste oil. These processes typically involve the use of chemicals including solvents and petroleum products (i.e., lubrication oils). Fire truck maintenance activities conducted at the fire station generate waste oil and used antifreeze. Nonchlorinated wash solvents and petroleum products are used and stored in the building. These processes appear to have occurred within Building 6 from its construction to the present.

Petroleum products, cleaning agents, adhesives, antifreeze, solvents, paints, acids, and acetylene/oxygen (compound gases) are documented to have been stored in various locations in Building 6. An approximate total of 300 gallons of the above listed chemicals were documented to be stored in Building 6 during the site inspection, and the majority was found in the fire station bays. This building is authorized to store up to 500,000 gallons of petroleum products, halogenated and nonhalogenated organics, paints, and corrosives. This inventory was obtained by reviewing the authorized use list for Building 6. The authorized use list gives maximum quantities allowed to be stored in or related to a building on an annual basis. This does not mean that the maximum quantity has actually been stored in the building.

Disposal of used chemicals is accomplished by discharging into the oil/water separator or by accumulation in chemical storage tanks and drums. Used petroleum products, nonhalogenated organics, metals, and corrosives are also documented to be stored in Building 6 as hazardous waste in total quantities of 200 gallons. Eleven 55-gallon drums were observed during the site inspection containing waste antifreeze, oil, rags, and oil-contaminated absorbent material. These were found in the various shops of the building.

Stains potentially resulting from releases of paints, solvents, and petroleum products were documented during the site inspection. Ongoing releases of various materials were observed occurring in the PWC mechanics shop during the site inspection. Staining is present in the PWC shops, fork lift shop, tire and auto shop, fire department, electromotive shop, steam cleaning bay, and the equipment storage (former paint) bay. The spills are sometimes cleaned up using a quick dry absorbent, followed by a rinsing with water. The repair and parking bays are cleaned with a soap and water solution that is swept out the roll-up doors for disposal/evaporation. The concrete is noted to be heavily cracked in localized areas throughout the building. Disposal via the drainage system does not occur because the drainage system has not functioned since the Loma Prieta earthquake. However, heavy staining around the sealed drains in the auto shop indicates possible drain contamination. The staining in these various areas is addressed by Target Area 1.

Building 6 is equipped with a heating-ventilation-air conditioning (HVAC) system. The accumulation of paint blow-down from air vents in the equipment storage bay (former paint bay) may contain lead. Accumulation of paint residue was observed on and in the exhaust fan and vents. Building 6 contains a steam line that may be insulated with ACM. There are two HEPA vacuums on the premises for use when brake pads with ACM are replaced. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 6.

Open Space

The open space covers approximately 65 percent of the parcel. The open space is used for vehicle and equipment parking, outdoor repair, and storage. The open space is 95 percent paved and five percent unpaved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is in fair condition. The unpaved areas of the open space are covered with grass and landscaping. No structures are located within the open space. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, fuel, and industrial sewer lines.

The open space has apparently served the above listed purposes since its development. Target Area 1 encompasses the outdoor repair areas in the Building 6 Courtyard. No documented industrial processes were conducted here. There is also a storm drain located in the center of the open space which receives drainage from the machine shop.

Several flammable materials storage lockers are located on the rear side of Building 6. Grease and oils are documented to have been used within the open space. A concrete hole filled with dirt was noted in front of the emergency generator. It is unclear what this hole was used for.

No documented spills have occurred in the open space. Small oil and paint stains are present throughout the area, and are apparently mainly related to vehicle and equipment parking. One stain (10 feet by 15 feet) is located southeast of the emergency generator. This staining is relatively minor and does not warrant sampling at this time. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

Three abandoned underground storage tanks are on the west side of Building 6 (Tanks 6-1, 6-2, and 6-3). The presence of these tanks was identified from the EBS. Tanks 6-1 and 6-2 were used to store solvents and have capacities of 1,000 gallons, each. Tank 6-3 was used to store solvents and waste oil and has a capacity of 1,000 gallons. The installation dates of these tanks are unknown. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. These tanks have been identified as RCRA tanks based on their inclusion in the RFI. Tanks 6-1, 6-2, and 6-3 are scheduled to be removed.

Five other tanks are listed in the EBS documents as existing on Parcel 68. No other information is available regarding these tanks.

Parcel Boundary Conditions

Parcel 68 is bounded by Parcels 54, 67, 75, and 186. Activities of concern on these adjacent parcels include aircraft rework on Parcel 54, storage of pesticides, painting, and woodworking on Parcel 75, and fuel storage and dispensing on Parcel 186. A release of fuel is documented to have occurred on the north side of Parcel 186, and is currently part of the RCRA Corrective Action Program. This fuel release is addressed by Target Area 2. Second Street borders Parcel 68 to the west. If the sampling proposed for the surrounding parcels indicate that these activities may have impacted Parcel 68, then additional sampling on Parcel 68 may be appropriate.

No sampling is called for in this PEP in response to the two nearby IR sites (IR Sites 5 and 8; Buildings 5 and 114, respectively). If the continuing investigations at the IR sites reveal a cause for concern at Parcel 68, then additional sampling on Parcel 68 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and the requirements associated with such sites, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (site number SWMU/GAP 1, and the inactive USTs). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, SWMU/GAP 1 does not require sampling because the location of the site could not be determined based on available records and EBS information.

The Hazardous Waste Facility Permit (Permit) for NAS Alameda included an RFA. The RFA identified Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs). The permit requires NAS Alameda to investigate all SWMUs and AOCs identified in the permit and any other sites which NAS Alameda may discover. Usually, the investigation is conducted through an RFI. At NAS Alameda, however, the requirements of the permit are being met through PEPs and the UST Program. Sites requiring remediation will not go through RCRA Corrective Action. Instead, they will be remediated through the Installation Restoration Program, consistent with CERCLA, or through the UST Program. Three tanks are scheduled to be removed, and any necessary investigation will be implemented as part of the UST program. A description of the tanks is provided in the Underground Storage Tank subsection above. These tanks were identified as RCRA tanks based on their former contents and their inclusion in the RFI.

It is unknown whether any chemicals have been released from SWMU/GAP 1. This site consists of 55-gallon drums (unspecified number). Oily liquids are the chemicals of concern associated with this site.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 68, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for

which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-68-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) Sampling is required for Parcel 68 because no industrial buildings are present.

As noted earlier, Parcel 68 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 68.

Once the data gaps in Table 6-68-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 68 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas. This subsection of the PEP discusses the specific parcel target areas. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-68-2.

TABLE 6-68-2

Summary of Data Gaps
NAS Alameda Parcel 68

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings are present on Parcel 68.
Installation Restoration (IR) Sites	• Parcel 68 is located adjacent to IR Site 5 (Building 5) and IR Site 8 (Building 114), and less than 200 feet north of IR Site 12 (Building 10). Additional subsurface investigation relative to IR Sites 5, 8, and 12 are proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from neighboring Parcel 186 identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 6). • Target Area 2 (South Parcel Boundary).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-68-2

Summary of Data Gaps
NAS Alameda Parcel 68

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Three abandoned underground storage tanks are present at this parcel (Tanks 6-1, 6-2, and 6-3). Tanks 6-1, 6-2, and 6-3 were used to store solvents and waste oil and have capacities of 1,000 gallons, each. These tanks have been identified as RCRA tanks and are scheduled to be removed. • Five other tanks are listed in the EBS documents as existing on Parcel 68. No other information is available regarding these tanks.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified on neighboring Parcel 186.
Wetlands	• No wetlands identified.
Other	• A concrete hole filled with dirt was noted in front of the emergency generator. It is unclear what this hole was used for.

- Target Area 1 (Building 6): The soils beneath the shop areas of Building 6 may have been impacted by the documented spillage that resulted in scattered staining covering approximately 30 percent of the floor. In addition, the courtyard area may have been impacted by outdoor repair activities. The compounds of concern include metals and TPH, specifically lubrication oils. This target area covers approximately 20,000 square feet and has been classified as having a potential likelihood of impacts. Four surface and four subsurface soil samples will be collected in this target area. The samples are listed in Table 6-68-1.

- Target Area 2 (South Parcel Boundary): The southern portion of Parcel 68 may have been impacted by the documented spillage of fuel on Parcel 186. The compounds of concern include TPH and VOCs, specifically gasoline- and diesel-range fuels. This target area covers approximately 1,500 square feet and has been classified as having a potential likelihood of impacts. Two surface and two subsurface soil samples will be collected in this target area. These samples are listed in Table 6-68-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level techniques that will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-68-1 summarizes screening-level sampling and analysis for the target areas on the parcel. Six surface soil samples and six subsurface soil samples will be collected from the locations shown on Figure 6-68-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The site-specific conditions at Target Area 1 results in a density of field surface soil samples below the protocol standard stated in Table 3-1. The sample density is below the standard because of the large size of the target area. The samples should be located in the areas with the most significant staining. If no staining is evident, then the samples should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-69

PARCEL 69 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 69 at NAS Alameda (Figures 6-69-1). The parcel, which is located in the southeast portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains IR Site 12 (Building 10) and one RCRA site. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-69-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 69, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 69, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development,

the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

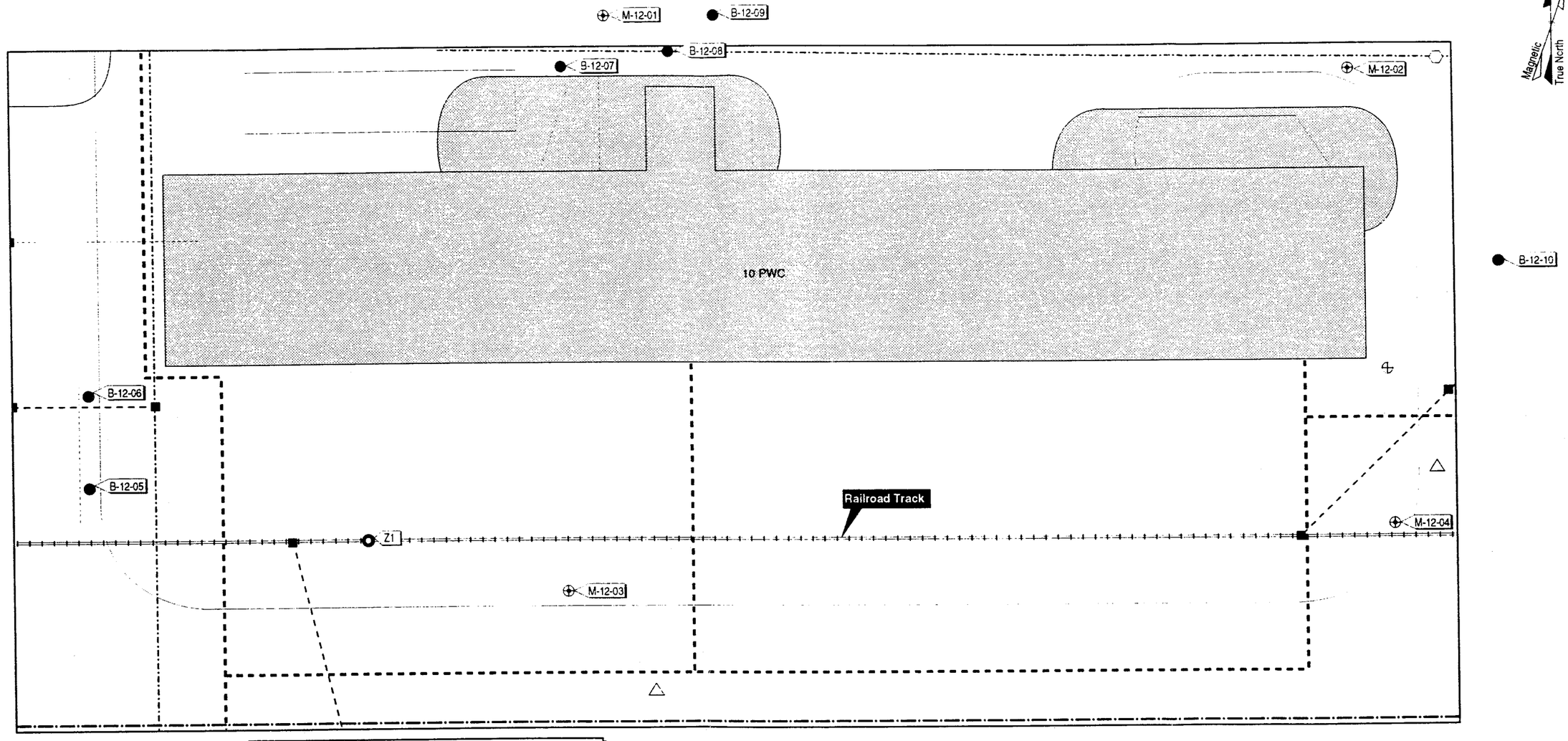
Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

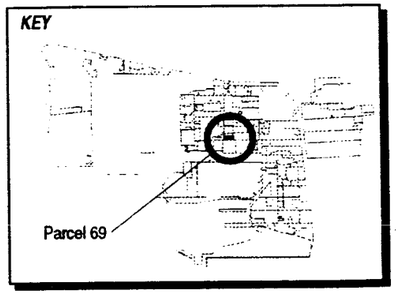
Currently, one building (Building 10) covers approximately 25 percent of the parcel. The remaining 75 percent is open space. The parcel area is presently in use as a PWC power plant. No buildings or structures are known to have previously existed on this parcel. Underground fuel, steam, and sewer lines are present on this parcel and are shown on Figure 6-69-1.

Parcel 69 is an Installation Restoration (IR) Program site (IR Site 12 - Power Plant). Previous investigations have been conducted at Parcel 69 and specific data regarding potential chemical occurrence are available. Releases associated with IR Site 12 (Power Plant), fuel storage, and aircraft engine testing may have historically impacted the open space of this parcel. Soil and groundwater sampling results have been compiled in a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, titled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 2B and 3.* Ongoing (follow-up) sampling is being performed by the IR contractor.

Previous investigations have assessed conditions in the open space at Parcel 69. Follow-up detailed evaluations are being conducted by the IR contractor. As part of a former screening-level sampling effort, 40 soil samples have been taken at different depths from six soil borings and four monitoring wells throughout IR Site 12. One surface and three subsurface soil samples were taken from each boring and monitoring well. This investigation was conducted by PRC in 1992. Soil and groundwater samples were analyzed for metals, PCBs, VOCs, SVOCs, pesticides, and TPH. These soil borings (B-12-05, B-12-06, B-12-07, B-12-08, B-12-09, and B-12-10) and monitoring wells (M-12-01, M-12-02, M-12-03, and M-12-04) are located on and adjacent to Parcel 69 as shown in Figure 6-69-1.

With the exception of the following, all metals were found at concentrations below USEPA's January 1994 industrial and unrestricted use Preliminary Remediation Goals (PRGs) for soil. Arsenic, beryllium, and manganese exceeded PRGs. Most organic compounds were present below PRGs. Only certain SVOCs were detected above PRGs. Benzo(a)pyrene and dibenzo(a,h)anthracene were the primary





LEGEND

- Steam Line
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Abandoned Fuel Line
- Surface Soil Sample Location
- Boring (Canonie Environmental, Inc.)
- Monitoring Well Location(Canonie Environmental, Inc.)
- Proposed Monitoring Well Location (PRC, Inc.)
- Proposed CPT/Hydropunch Location (PRC, Inc.)
- Catch Basin
- Catch Basin

1"= 30'

Figure 6-69-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-69-1

Summary of Recommended Samples
NAS Alameda Parcel 69

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	PCBs, Fuels, Solvents, Lubrication Oils, Waste Oils, and Creosote	SVOCs, TPH, PCBs, Lead	CLP RAS, Modified EPA 8015, EPA 8080, ICAP SCAN

semivolatiles detected above unrestricted use and industrial PRGs or had detection limits above the PRGs. Benzo(a)pyrene and dibenzo(a,h)anthracene were detected above PRGs in all borings, in both surface and subsurface soil samples. Other semivolatiles detected above restricted use and/or industrial PRGs (or with detection limits above PRGs) include benzo(a)anthracene, benzo(b)fluoranthene, and indeno(1,2,3-cd)pyrene.

Groundwater sampling results from the three monitoring wells on Parcel 69 indicate that all detected volatile organic compounds were below USEPA's December 1993 MCLs. Certain metals, including aluminum, antimony, and manganese, were detected above USEPA's December 1993 MCLs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Nine transformers are located at Building 10; seven have PCB classifications. Eight oil-filled switch gears are located on the east end of the Building 10.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 10

Building 10 was constructed in the late 1930s and currently serves as the PWC power plant (Figure 6-69-1). This two-story building covers approximately 21,000 square feet of the parcel and is in fair condition. Building 10 is a warehouse building constructed of steel girder supports, with a concrete floor, and a concrete-construction roof.

An abandoned fuel line runs along the southern border of the parcel. Utilities located within and immediately surrounding Building 10 and the open space include sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included steam generation and air compression. There is little documentation regarding the past uses of Building 10. During visual inspection, an oil/water separator was observed in the building.

Petroleum products, lab chemicals, plant treatment chemicals, microbiocide, morpholine, and corrosives are documented to have been stored in Building 10. Approximately 1,200 gallons of these

chemicals are stored in the building. Hazardous waste in the form of filters contaminated with oil and waste petroleum products are stored in drums at GAP Site 2 located within the building. Only minor staining was observed around the drums on the concrete floor.

Nine aboveground storage tanks are located on the south side of Building 10; an additional tank is located on the northeast side of the building. All of the tanks are used for fuel storage and have a combined capacity of more than 150,000 gallons. Six underground storage tanks, currently abandoned and filled with sand, were formerly used to store fuel. These underground tanks were in use until the early 1970s.

Spills of diesel and petroleum products were documented to have impacted the concrete foundation of the building. During the site inspection, staining was noted in various locations throughout the first floor of the building. Stains were observed around the base of a diesel generator at the east end of the building. Leakage was observed from two of the four primary compressors at the west end of the building. Cleanup activities involved the use of quick dry and absorbent rags in this area. A four-foot by eight-foot stain was observed in the outside storage room on the north side under the loading dock. Although this staining has impacted the concrete floor, no sampling is recommended in these areas because no migration route to the underlying soils was noted (such as cracking in the concrete) during the site inspection.

Building 10 is equipped with a heating-ventilation-air conditioning (HVAC) system, according to available documents. Air quality permits were issued for boilers, aboveground storage tanks, and an emergency generator.

Open Space

The open space covers approximately 75 percent of the parcel. The open space is primarily surfaced in concrete and asphalt, and also includes a grassy area. Structures located within the open space include 10 aboveground storage tanks. No staining was noted around these tanks.

EBS information indicates that activities conducted within this open space include material storage and vehicle parking. Available documents do not indicate any other uses of this open space. One aboveground storage tank is located in the open space by the southwest corner of Building 10. It is used for fuel storage. The only staining noted in the open space during visual inspections were oil-like stains

apparently related to vehicle parking, which do not warrant sampling at this time.

Underground Storage Tanks

Five inactive underground storage tanks are located near the northeast corner of Building 10 (Tanks 10-1, 10-2, 10-3, 10-4, and 10-5). These tanks are currently filled with sand. The installation dates and the types of materials stored in these tanks are unknown. These tanks have capacities ranging from 16,400 to 24,000 gallons. The presence of these tanks was identified from the EBS. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because it they were leaking.

One 4,000-gallon capacity underground storage tank (Tank 10-6) formerly existed near the southeast corner of Building 10. The installation date and the types of materials stored in this tank are unknown. Tank 10-6 was removed in 1993.

Parcel Boundary Conditions

Parcel 69 is bounded by Parcels 56, 70, 185, and 186. The major activities on the adjacent parcels are aircraft maintenance and material storage. IR Site 4 is located approximately 500 feet southwest of Parcel 69, and IR Site 5 is located approximately 200 feet east of Parcel 69.

If the continuing investigations at the IR sites reveal a cause for concern at Parcel 69, then additional sampling on Parcel 69 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one active RCRA site (SWMU/GAP Site 2). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this site does not require sampling because the site location could not be determined based on available records and EBS information (i.e., the site was not singled out because of staining). A brief description of SWMU/GAP Site 2 is provided below.

GAP Site 2 is located in Building 10. The chemicals of concern include waste oil. GAP Site 2 is approximately 10 feet by 10 feet and contains 55-gallon drums. There are no documented releases in this area. This RCRA site is currently active.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-69-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 10. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 69 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use

1 This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-69-2

Summary of Data Gaps
NAS Alameda Parcel 69

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 12 (Building 10) is located on Parcel 69. Additional subsurface investigation relative to IR Site 12 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from neighboring Parcel 186 (i.e., known release) identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-69-2

Summary of Data Gaps
NAS Alameda Parcel 69

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Five inactive USTs are present at this parcel (Tanks 10-1, 10-2, 10-3, 10-4, and 10-5). These tanks have capacities ranging from 16,400 to 24,000 gallons and are currently filled with sand. • One 4,000-gallon UST (Tank 10-6) formerly existed at this parcel. It is not known what was stored in this tank. It was removed in 1993.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 69.

Once the data gaps in Table 6-69-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 69 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 69. No parcel-specific target areas were identified for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 13. This zone-wide target area includes:

- Zone 13 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Central Light Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One surface soil sample for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target area is listed in Table 6-69-1. The approximate sampling location is shown on Figure 6-69-1.

SECTION 6-75

PARCEL 75 EVALUATION PLAN

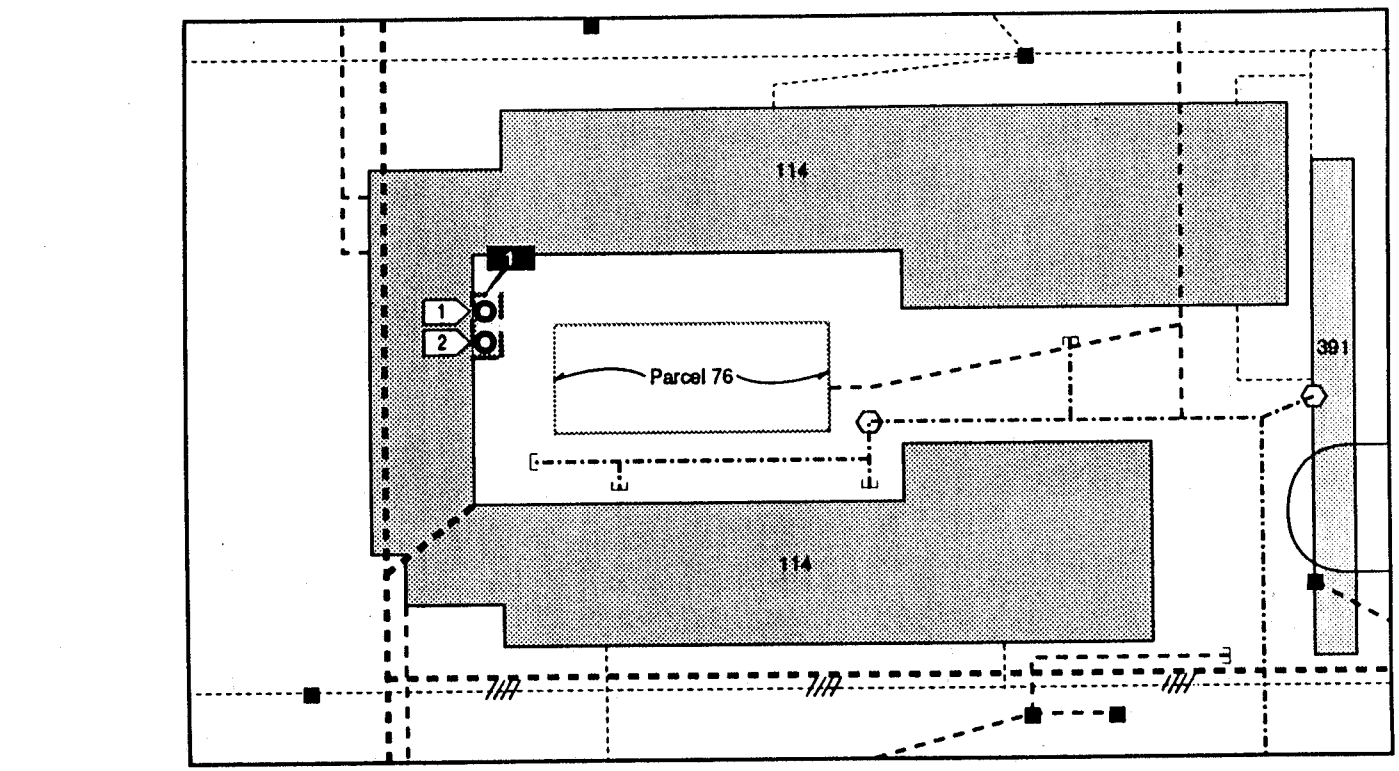
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 75 at NAS Alameda (Figure 6-75-1). The parcel is located in the central portion of the base, is approximately four acres in size and is rectangular. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site (Site SWMU/GAP 3). One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-75-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 75, historical activities are discussed below.

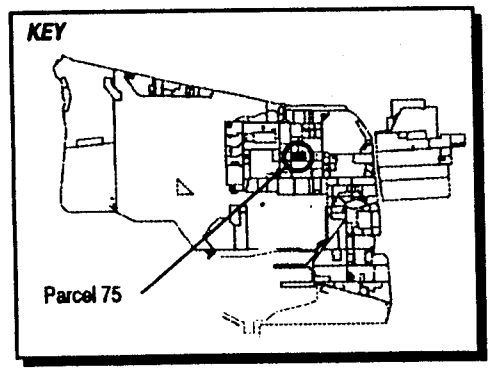
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 75, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,





LEGEND

- Target Area 1
- Steam Line
- Storm Sewer Line
- Sewer Line
- Sewer Line Abandoned In Place
- Industrial Waste Line
- Capped
- Surface Soil Sample Location
- Catch Basin
- Catch Basin

1"= 90'

Magnetic
True North

Figure 6-75-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.30.94

TABLE 6-75-1

Summary of Recommended Samples
NAS Alameda Parcel 75

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
75-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Banned Pesticides, Petroleum Compounds	Pesticides, TPH	CLP RAS, Modified EPA 8015
75-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Banned Pesticides, Petroleum Compounds	Pesticides, TPH	CLP RAS, Modified EPA 8015

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 114 and 391) cover approximately 60 percent of the parcel. The remaining 40 percent is open space. The parcel area is presently in use as a mixed-use public works shop area, including a machine shop, tool room, paint room, and carpentry shop. No buildings are documented to have formerly existed at this parcel. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-75-1.

Parcel 75 is an Installation Restoration (IR) Program site (IR Site 8 - Building 114). Previous investigations have been conducted at Parcel 75, and specific data regarding potential chemical occurrence are available.

The objective of previous investigations at IR Site 8 was to assess if surface spills or leaks from the industrial sewer line associated with Building 114 had introduced contamination into surface or subsurface soils. Twelve soil borings were drilled at the site, and groundwater monitoring wells were constructed in five of these borings. Soil borings were drilled in the central courtyard area and around the perimeter of Building 114 near the junction points in storm, sanitary, and industrial sewer lines that received effluent from activities at the site.

No VOCs were detected in soil samples at concentrations above than the residential or industrial PRGs. SVOCs were detected in most soil samples at IR Site 8. All of the detected SVOCs were polycyclic aromatic hydrocarbons (PAHs), except for bis-(2-ethylhexyl) phthalate and di-n-butyl phthalate. PAH concentrations ranged from 91 mg/kg to 160,000 mg/kg, with the highest concentrations occurring in the samples from 14 feet in B08-04, B08-06, B08-08, and B08-11. The industrial and residential PRGs for soil were exceeded for several of these PAHs. The phthalates were detected at concentrations below the residential and industrial PRGs for soil. PCBs (Aroclor 1260) exceeded the residential PRGs in at least one soil sample. The industrial PRG was not exceeded for PCBs. Dieldrin, an herbicide, was detected in one soil sample just below the residential PRG for that compound. The industrial and residential PRGs for beryllium and lead in soil were exceeded in at least one soil sample each.

The state and/or federal MCLs were exceeded in at least one groundwater sample for benzene, total 1,2-dichloroethene, acenaphthene, anthracene, fluoranthene, fluorene, naphthalene, phenanthrene, and pyrene.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 114

Building 114 was constructed in 1944 and has served as a public works maintenance and storage shop, office equipment storage and appliance repair, and administrative office (Figure 6-75-1). This one-story building covers approximately 77,000 square feet and is in fair condition. Building 114 is constructed of wood with a concrete floor.

Utilities located within and immediately surrounding Building 114 include underground sanitary sewer, storm sewer, steam, water, industrial sewer lines, and electrical lines.

Information collected during the EBS indicates that activities conducted within this building include machine shop, carpentry shop, sandblasting, and painting operations. Paints, adhesives, fuels, oils, solvents, and cleaners are documented to have been stored and used at Building 114. A sandblasting area is located on the north side of the south wing of Building 114, and a pesticide storage shed is located on the east side of the west wing. Potential impacts associated with the pesticide storage area are addressed by Target Area 1.

Several stained areas of asphalt measuring approximately three feet by one foot were observed on the exterior east side of the west wing of Building 114 during the site inspection. This staining is also addressed by part of Target Area 1. The staining appeared to be petroleum products. In addition, a stained area of concrete was observed on the north side the building near a transformer. Transformers and underlying pads are dealt with under a separate investigation.

Building 114 is equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 114.

Building 391

Building 391 was constructed at an unknown date and has served as a general storage/paint building (Figure 6-75-1). This two-story building covers approximately 2,000 square feet and is in fair condition. Building 391 is constructed of metal with a concrete floor.

Utilities located within and immediately surrounding Building 391 include underground sanitary sewer, storm sewer, industrial sewer, steam, water, and electrical lines.

Information collected during the EBS indicates that activities conducted within this building include painting operations and storage of hazardous materials. Paints, degreasers, and petroleum products are documented to have been stored and used at Building 391. Used chemicals are accumulated in hazardous materials rooms and disposed of by the NAS hazardous materials department. Several paint lockers and battery storage sheds are located on the north end of Building 391.

Scattered staining was observed in the area of the paint and battery storage sheds on the north end of Building 391 during the site inspection. This staining is relatively minor, and sampling is not called for in this PEP in response to it. Building 391 is equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 391.

Open Space

Open space covers approximately 40 percent of the parcel. The open space has been used for parking and storage of vehicles and equipment. The ground surface of the open space is 80 percent paved and 20 percent unpaved. The pavement is generally in poor condition. The unpaved areas of the open space are covered with grass.

Structures located within the open space include a groundwater monitoring well located near the hazardous waste accumulation area near Building 391. In addition, several storm drains are located in the courtyard/work yard area of Building 114 and along the north side of Building 114. A washdown area is located near the northwest corner of Building 114.

Building 192 was formerly located in this open space. The construction and demolition dates of this building are unknown. The operations conducted in Building 192 are also unknown.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, industrial sewer, and electrical lines.

EBS information indicates that the open space is used for vehicle parking and vehicle and equipment storage. No chemicals are documented to have been stored in the open space. Scattered staining was noted throughout the courtyard/work yard area of Building 114 during the site inspection, but is minor staining likely related to vehicle parking, and will not be sampled. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 75 is bounded by Parcels 65, 66, 67, 68, 74, 77, 80, 81, and 82. Activities of potential environmental concern at these parcels include vehicle maintenance and fuel storage on Parcel 68, and the operations relating to the metal shop on Parcel 66.

No sampling is called for in this PEP in response to the IR site located on the parcel. If the continuing investigations at the IR site reveals additional cause for concern at Parcel 75, then additional sampling may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (site number SWMU/GAP-3). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, no sampling is required for this RCRA site because the location of the site could not be determined based on available records and EBS information (i.e., the site was not singled out because of staining, etc.).

Site GAP 3 is located in Building 114. Chemicals of concern associated with GAP-3 include paints, solvents, acids, Freon, petroleum products, and PCBs. Site SWMU/GAP 3 is composed of 55-gallon drums on pallets. It is unknown whether any chemicals were released from this site. The status of this site is currently unknown. Although it was identified during the document search, this site was not found during the site inspection.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-75-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 114. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 75 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy,

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-75-2

Summary of Data Gaps
NAS Alameda Parcel 75

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) is located on Parcel 75. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 114 Pesticide Storage Shed).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-75-2

Summary of Data Gaps
NAS Alameda Parcel 75

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, industrial sewer, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for the landscaped areas of Parcel 75.

Potential concerns related to pesticides have been identified as a parcel-specific data gap for Parcel 75, because of the former used of the building for pesticide storage and disposal. Pesticide sampling for this parcel has been limited to the pesticide storage shed (Target Area 1).

Once the data gaps in Table 6-75-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 75 may be leased or transferred, as appropriate.

Target Area and Compounds of Concern

This parcel contains one parcel-specific target area. This subsection of the PEP discusses the specific parcel target area. The nature and locations of the parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release areas described above and listed in Table 6-75-2.

- Target Area 1 (Building 114 Pesticide Storage Shed): The soils adjacent to the pesticide storage shed may have been impacted by releases of the pesticides stored in the shed. The pavement is in poor condition in this area, and staining was noted in this area. This target area covers approximately 500 square feet and has been classified as having a potential likelihood of impacts. The two surface soil samples to be collected in this target area are listed in Table 6-75-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-75-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 75. Two surface soil samples will be collected from the locations shown on Figure 6-75-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-76

PARCEL 76 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 76 at NAS Alameda (Figure 6-76-1). The parcel is located in the north central portion of the base, is 0.1 acres in size, and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains no RCRA sites. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 76, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 76, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

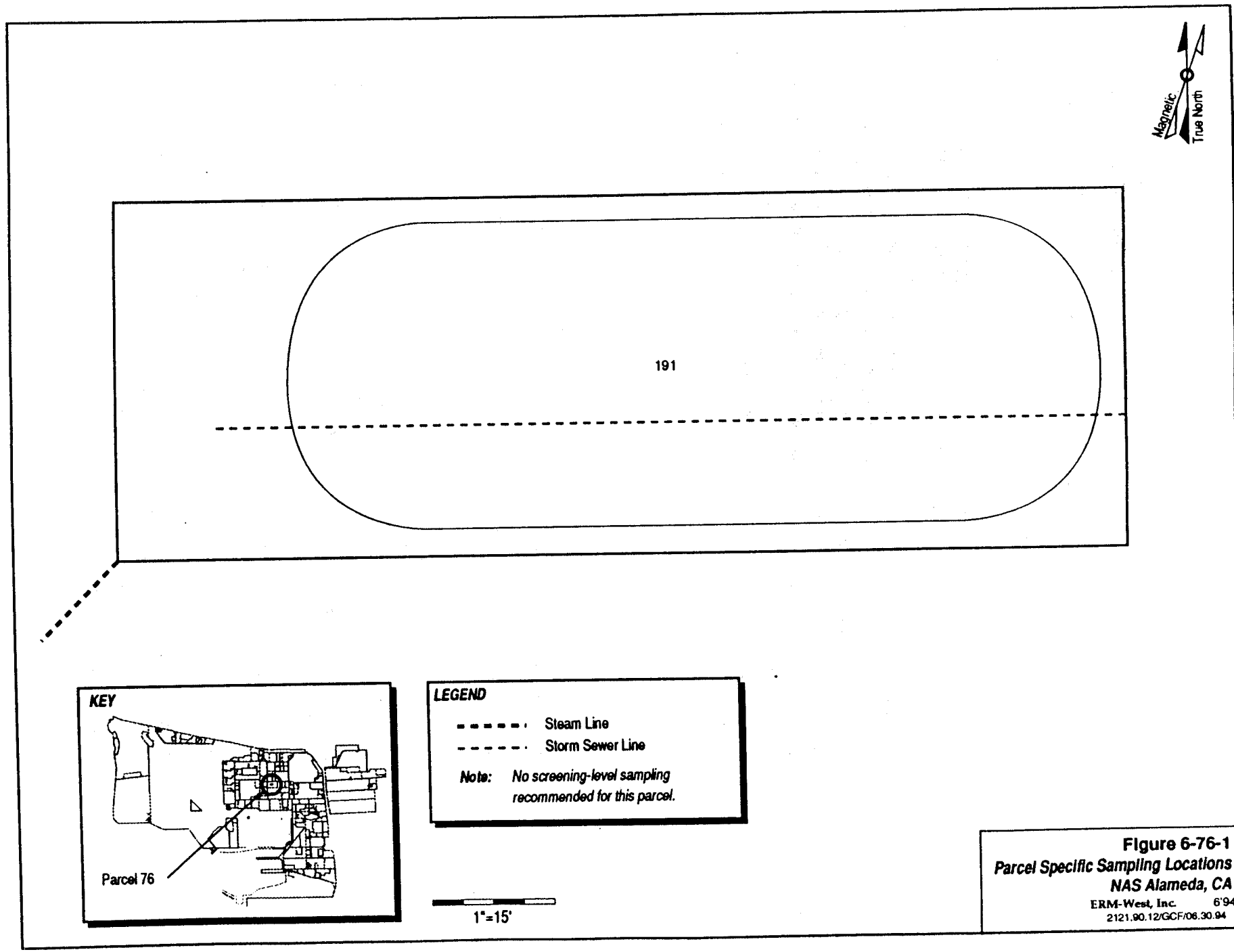


Figure 6-76-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.30.94

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in the early 1900s. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 191) covers 100 percent of the parcel. There is no open space on this parcel. The parcel is presently in use as a storage area for dry construction materials. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-76-1.

Parcel 76 is surrounded by Installation Restoration (IR) Program Site 8 (Parcel 75, Building 114). No previous investigations have been conducted at Parcel 76, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the building is described in detail below.

Building 191

Building 191 was constructed in 1944 and serves as a storage building in support of the public works shops located in adjacent Building 114 (Figure 6-76-1). Building 191 covers approximately 5,000 square feet and is in good condition. Building 191 is an open-sided one-story building constructed of corrugated metal walls and an asphalt floor.

Utilities immediately surrounding Building 191 include underground storm sewer, water, steam, and industrial sewer lines.

No chemicals are documented to have been stored or used at Building 191. Building 191 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, spills, mishaps, or flooding are documented to have occurred within Building 191. No staining was noted in the building.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 76 is located entirely within Parcel 75 and is surrounded by Building 114. Building 114 is IR Site 8. Concerns associated with Parcel 75 include public works shops operations (i.e., carpentry and metal shop activities).

No sampling is called for in this PEP in response to the surrounding IR site. If the continuing investigations at the IR site reveals a cause for concern at Parcel 76, then additional sampling on Parcel 76 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified because it is surrounded by an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-76-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, radiological concerns, and Installation

1 This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-76-1

Summary of Data Gaps
NAS Alameda Parcel 76

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 76.
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) surrounds Parcel 76. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-76-1

Summary of Data Gaps
NAS Alameda Parcel 76

Data Gap	Status/Description
Underground Utilities	• Storm sewer, water, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 76 because no industrial buildings are present.

Once the data gaps in Table 6-76-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 76 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to lead-based paint, PCBs, underground lines, radiological concerns, and the impacts of the adjacent IR site must be resolved before this parcel can be leased or transferred.

SECTION 6-77

PARCEL 77 EVALUATION PLAN

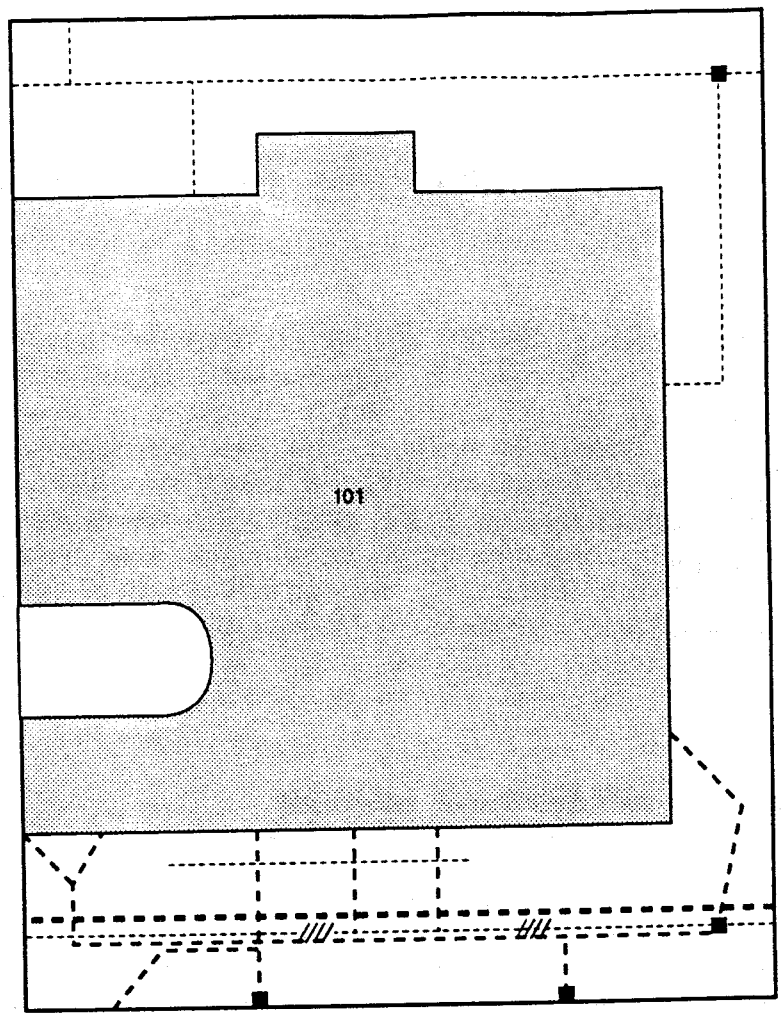
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 77 at NAS Alameda (Figure 6-77-1). The parcel is located in the central portion of the base, is 2.7 acres in size, and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 77, historical activities are discussed below.

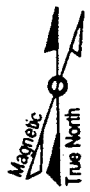
Background and Historical Activities

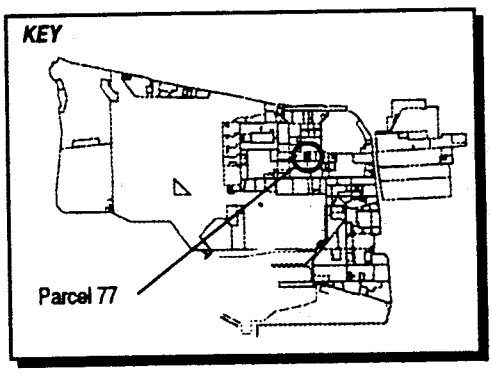
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 77, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.







LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sewer Line Abandoned In Place
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"=60'

Figure 6-77-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/08.30.94

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 101) covers approximately 60 percent of the parcel. The remaining 40 percent is open space. The parcel area is presently in use as a warehouse storage area and vehicle parking facility. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-77-1.

Parcel 77 is located adjacent to an Installation Restoration (IR) Program site (IR Site 8 - Building 114). IR Site 8 is located immediately west of Parcel 77. No previous investigations have been conducted at Parcel 77, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 101

Building 101 was constructed in 1942 and houses a heating plant, public works storage area, administrative offices, and training facilities (Figure 6-77-1). This two-story building covers approximately 70,000 square feet and is in fair condition. Building 101 is a constructed of wood with a concrete floor. The building is separated into three distinct areas based on the occupant and associated use. The eastern third of the building is utilized for administrative and educational training purposes by NADEP and NAS. The central portion of the building is used as a locked storage area by PWC. This central area contains a former theater that is no longer functional. The western third of the building is occupied by MWR and is used as a storage area for discarded equipment.

Utilities located within and immediately surrounding Building 101 include sanitary sewer, storm sewer, steam, water and electrical lines.

Information collected during the EBS indicates that activities conducted within this building include apprentice training. The building is currently occupied by NADEP, NAS, MWR, PWC, and Disaster

Prevention. The tenants are using the building for classrooms, offices, and warehouse space.

Metals and organics are documented to have been stored in Building 101. The compounds, used for solvent epoxy and soldering purposes, are stored in a maximum quantity of 10 gallons. More significant chemical storage was noted in the MWR and PWC warehouses. During visual inspections, these areas housed pine oil, floor finish, handcleaner, general purpose cleaner, lubricating oil, disinfectant, stripper, acrathane, and masonry sealer. Over 100 pounds of decontamination agent, in powder form, was noted in the disaster preparation warehouse. This chemical is kept on wooden pallets on the concrete floor. Cleaning supplies were noted in the janitor's closet on the second floor of Building 101. These chemicals are stored on wood pallets on a concrete floor.

Dark staining was noted throughout the warehouses during site inspections. A dark and white stain, covering 20 square feet, was observed in the northwest corner of the disaster preparation warehouse. Storage Room A also contained evidence of a chemical release; there was a six foot by five foot stain in this area. Although this stain has impacted the concrete floor, no sampling is recommended in this area because no migration route to the underlying soils was noted (such as cracking in the concrete) during the site inspection.

A 10-foot by 20-foot room located at the southeast corner of Building 101 is currently used for aluminum can storage. The area was reportedly formerly used for ammunition storage. The concrete floor exhibits evidence of multiple stains of varying ages and appears etched in areas. In addition, seams and cracks are present. No sampling is recommended in this area because no chemical storage is documented to have occurred in this room.

Building 101 is equipped with a heating-ventilation-air conditioning (HVAC) system. Tank insulation debris on the floor of the HVAC room may contain ACM. Records document the removal of asbestos from the second floor of Building 101. No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 101.

Open Space

The parcel open space covers approximately 40 percent of the parcel. The open space is mostly paved. The area immediately surrounding the building perimeter is covered with grass. A CONEX box is also located to the east of Building 101.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, steam, water and electrical lines. There is a transformer located in the northeast corner of the parcel.

EBS information indicates that activities conducted within this open space include material storage, equipment parking, training, and vehicle parking. The only staining noted in the area corresponded to vehicle parking locations, and will not be sampled. One gallon of hydraulic fluid was observed in the CONEX box located on the parcel.

No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space. Peeling paint (potentially lead-based) was noted on the southern and eastern exterior walls of Building 101.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 101 is bounded by Parcels 73, 74, 75, 78, and 80. Parcel 75 is IR Site 8 (Pest Control Area and Separator Pit). Activities of concern on this adjacent parcel include storage of pest control chemicals.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR site reveals a cause for concern at Parcel 77, then additional sampling on Parcel 77 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 77, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data

gaps shown in Table 6-77-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 77 because no industrial buildings are present.

As noted earlier, Parcel 77 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 77.

Once the data gaps in Table 6-77-1 are addressed, Parcel 77 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and the impacts of the adjacent IR site must be resolved before this parcel can be leased or transferred.

TABLE 6-77-1

Summary of Data Gaps
NAS Alameda Parcel 77

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 77.
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) is located adjacent to Parcel 77. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-77-1

Summary of Data Gaps
NAS Alameda Parcel 77

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-78

PARCEL 78 EVALUATION PLAN

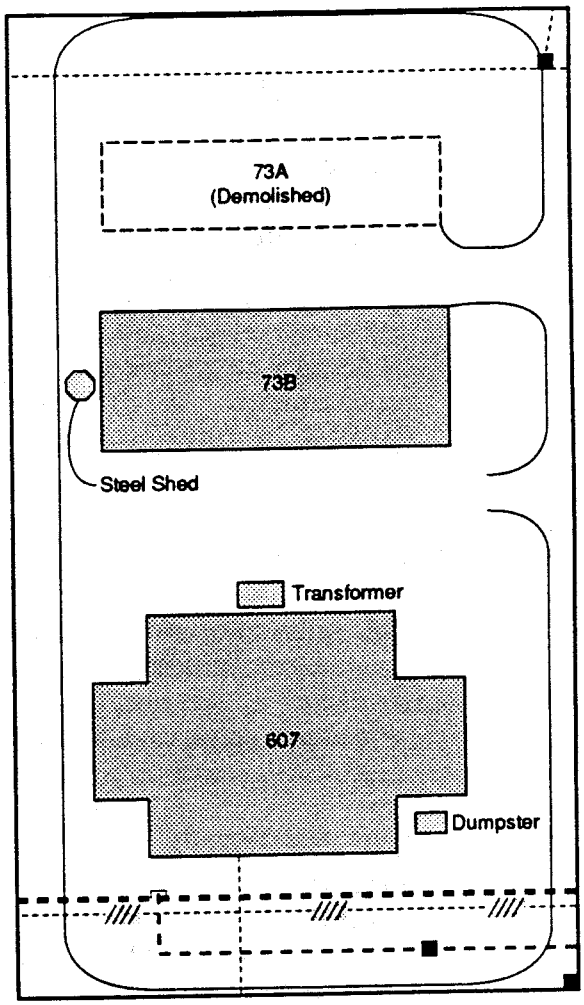
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 78 at NAS Alameda (Figure 6-78-1). The parcel is located in the northeast portion of the base, is 1.4 acres in size, and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed evaluation of Parcel 78, historical activities are discussed below.

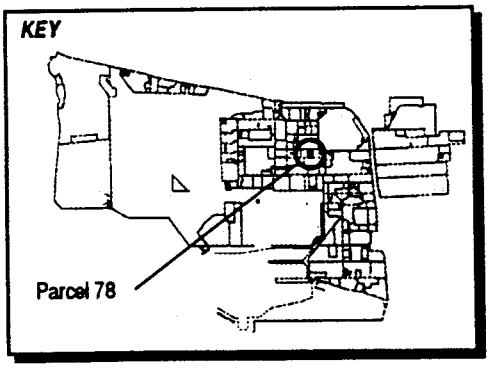
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 78, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks (USTs), and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sewer Line Abandoned In Place
- Capped
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"=60'

Figure 6-78-1
Parcel Specific Sampling Locations
NAS Alameda, CA

ERM-West, Inc. 6'94
2121.90.12/GCF/06.30.94

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 607 and 73B) and an octagonal-shaped steel structure cover approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as a recreation and hobby center and storage area. Three buildings were formerly located on the parcel (Building 131 - Navigational Training; Building 73A - Storage Garage; and an unidentified building). Underground steam and sewer lines are present on this parcel and are shown on Figure 6-78-1.

Parcel 78 is located approximately 400 feet east of an Installation Restoration (IR) Program site (IR Site 8 - Building 114). Pesticides and herbicides were reportedly disposed of on IR Site 8 from 1942 to 1974. No previous investigations have been conducted at Parcel 78, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Building 73B was constructed in 1941 and contains wallboard with "Asbestos Hazard" posted on the material. Several areas were damaged and/or cracked at the time of the site visit. According to documents there has been an informal assessment of the material; however, there is no supporting documentation.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 73A (Demolished)

Building 73A was constructed in 1941 and used for vehicle storage. This building covered approximately 2,500 square feet and was located north of Building 73B. Based on aerial photographs, Building 73A was demolished after 1992. Given the similarities to Building 73B, it is likely that Building 73A was of a similar construction type.

Building 73B

Building 73B was constructed in 1941 and serves as a storage area for miscellaneous construction materials. This building covers 5,000 square foot and is constructed of wood with a concrete foundation. Garage doors are located along the north and south walls. An interior wall divides the two sides of the building. The interior walls of Building 73B are covered with transite wallboard, which is labeled with "Asbestos Hazard" stickers. The northern half of the building was not accessible at the time of the site visit. It is reportedly used by base personnel for storage.

Utilities located within and immediately surrounding Building 73B include sanitary sewer, storm sewer, steam, water, and electrical lines. An octagonal-shaped steel structure is located at the west end of the building. Base plans indicate this may be a transformer location; however, the interior of the structure could not be accessed.

Information collected during the EBS indicates that activities conducted within this building included vehicle storage. The building currently stores such materials as lumber, concrete mix, piping, wire, and paint. Approximately 150 gallons of latex paint was stored in the building on wooden pallets.

Building 131 (Demolished)

Historic information reveals that Building 131 was constructed in 1945 and was used for navigational training. This building was constructed of wood and was located at the current site of Building 607. Aerial photographs show the presence of this building from 1947 to 1975. Based on aerial photographs, the building was demolished between 1975 and 1981. These aerial photographs also show four large unidentified cylindrical structures protruding from the roof of the building. An unidentified building was also located to the south of Building 131. This unidentified building appears in aerial photographs from 1947 to 1958 and is not present in the 1963 photograph. No other information concerning this building is available.

Building 607

Building 607 was constructed in 1980 and serves as a recreation and hobby center (Figure 6-78-1). This one-story building covers 9,700 square feet and is occupied by an outdoor equipment rental operation, a woodworking shop, a craft shop, and a computer graphics

group. Building 607 is a concrete block structure with a steel-paneled exterior and a concrete foundation.

Utilities located within and immediately surrounding Building 607 include underground sanitary sewer, storm sewer, steam, water, and electrical lines.

Small quantities (total amount less that 300 gallons) of cleaning and maintenance chemicals are stored in lockers and janitorial closets throughout the building. Small quantities of wood finish, ceramic glaze, latex paint, paint thinner, and antifreeze were also stored within the building.

The woodworking shop has a mechanical room located above it. The room houses an air compressor and the HVAC system for the building. At the time of the site visit, the concrete floor at the base of the air compressor showed evidence of leakage and/or spillage. An oily, brown liquid was noted around the base of the compressor covering a 4 foot by 4 foot area. Because no migration pathway for such a spill into underlying soils through the concrete floor was noted, no sampling will be done in response to this release.

The outdoor equipment rental area is located at the east end of Building 670. The area is primarily used for storage of recreational equipment; however, some light maintenance activities also occur. Small amounts of lubricants and solvents are used for bicycle repairs and paint thinner is used for ski wax removal. The floor in the area contains several floor drains. A non-skid surface has recently been applied to the concrete. There was evidence of this paint and sand mixture present on the floor drain screens. Paint containers, labeled latex paint, were located in the immediate area.

Open Space

The open space covers approximately 60 percent of the parcel. It is defined by Avenues C and D (on the north and south sides, respectively), West Fifth Street on the east, and a service road to the west. The northern portion of the parcel is predominantly grass covered. Areas immediately surrounding Buildings 607 and 73B consist primarily of asphalt and concrete paving. Landscaped areas are predominately located on the southern portion of the parcel surrounding Building 607.

The open space of Parcel 78 contains storm sewer, sanitary sewer, electrical, steam, and water lines. An octagonal-shaped steel structure is located near the west end of Building 73B. According to EBS

documents, this structure may contain a transformer; however, the structure was not accessible at the time of the site inspection. A second transformer is located along the north side of Building 607. A paved access drive extends north to Building 607 from the south edge of the parcel. Within this paved area is a solid waste dumpster and a storm sewer drain.

Underground Storage Tanks

No evidence of USTs has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 78 is bounded by Parcel 80 to the north, Parcel 73 to the south, Parcel 77 to the west, and Parcel 79 to the east. No parcels contiguous with Parcel 78 are IR sites; therefore, no sampling is called for in this PEP in response to IR sites. If the continuing investigation at nearby IR sites reveals a cause for concern at Parcel 78, then additional sampling on Parcel 78 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 78, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-78-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A

TABLE 6-78-1

Summary of Data Gaps
NAS Alameda Parcel 78

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings are present on Parcel 78.
Installation Restoration (IR) Sites	• Parcel 78 is located approximately 400 feet east of IR Site 8 (Parcel 75 Building 114). Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-78-1

Summary of Data Gaps
NAS Alameda Parcel 78

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for this parcel because no industrial buildings are present.

As noted earlier, Parcel 78 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 78.

Once the data gaps in Table 6-78-1 are addressed, Parcel 78 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas to the environment are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and impacts of the nearby IR sites must be resolved before this parcel can be leased or transferred.

SECTION 6-79

PARCEL 79 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 79 at NAS Alameda (Figure 6-79-1). The parcel, which is located in the central portion of the base, is approximately two acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed evaluation of Parcel 79, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 79, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-79-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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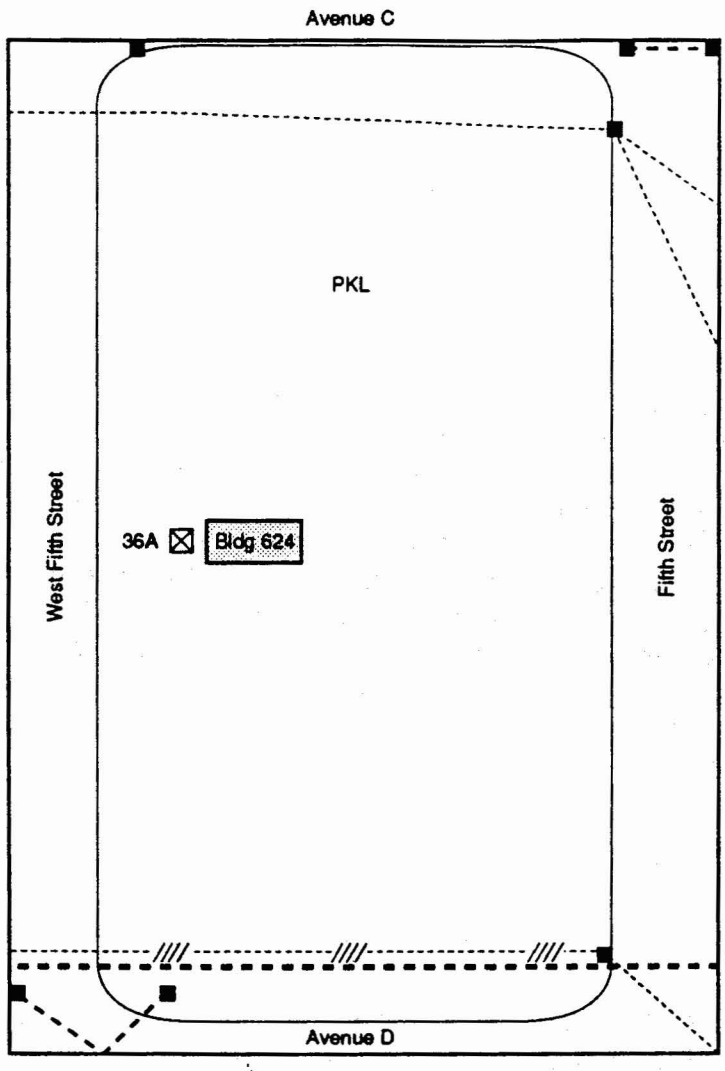
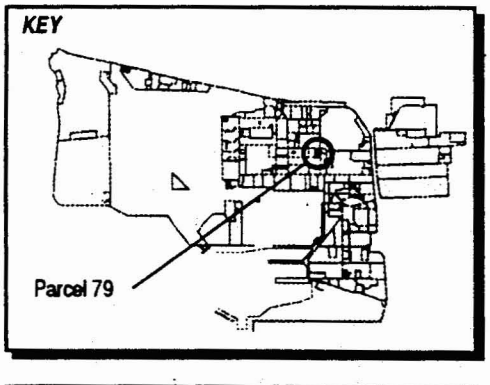
SENSITIVE





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sewer Line Abandoned In Place
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"=60'

Figure 6-79-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/08.30.94

SENSITIVE

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 36A and 624) cover approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as a parking lot, and has been a parking area since 1953. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-79-1.

Parcel 79 is located within 500 feet of Installation Restoration (IR) Program Site 8 (Parcel 75 Building 114). No previous investigations have been conducted at Parcel 79, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 36A

According to EBS documents, Building 36A was constructed in 1953 to serve as a communications antenna (Figure 6-79-1). This steel tower has a base that covers approximately 500 square feet.

Utilities located within and immediately surrounding Building 36A include storm sewer, steam, water, and electrical lines. Information collected during the EBS indicates that activities conducted within this building included processes associated with radio tower operations. There is no indication of chemical use or storage ever occurring within this building.

Building 624

Building 624 is a prefabricated communications center set on a concrete slab (Figure 6-79-1). Site reviewers indicated that this building is in fair condition and covers approximately 100 square feet. Building 624 is located immediately west of Building 36A. Utilities located within and

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 79, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-79-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 79 because no industrial buildings are present.

Once the data gaps in Table 6-79-1 are addressed, Parcel 79 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, impacts of the nearby IR site, and the potential UST must be resolved before this parcel can be leased or transferred.

TABLE 6-79-1

Summary of Data Gaps
NAS Alameda Parcel 79

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 79.
Installation Restoration (IR) Sites	• Parcel 79 is located approximately 500 feet east of IR Site 8 (Building 114). Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-79-1

Summary of Data Gaps
NAS Alameda Parcel 79

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One UST is potentially located within the open space (Tank 391-1). Based on its identification number, this tank may actually be located on Parcel 189.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

immediately surrounding Building 624 include storm sewer, steam, water, and electrical lines. Available documents do not indicate any chemical use or storage in this building.

Open Space

The parcel open space covers approximately 95 percent of the parcel. The open space is completely paved and is used for vehicle parking. Structures located within the open space include a steam access vault in the southeast corner of the parcel. According to EBS documents, an abandoned UST may be located near the northern edge of the parcel.

Utilities located within and immediately surrounding this area include storm sewer, steam, water, and electrical lines. Transformers were noted throughout the parcel. Staining observed in this open space were typical of that associated with vehicle parking, and will not be sampled. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One underground storage tank may be present at this parcel. The *NAS Alameda, Impediment Map with Tanks and IR Sites,* indicates that Tank 392-1 is located on Parcel 79. However, Building 392 is located on Parcel 189, and this tank may actually be located on that parcel.

Parcel Boundary Conditions

Parcel 79 is bounded by Parcels 73, 78, 80, 106, and 168. No parcels contiguous with Parcel 79 are IR sites, therefore, no sampling is called for in this PEP in response to the nearby IR site (IR Site 8). If the continuing investigations at the IR site reveal a cause for concern at Parcel 79, then additional sampling on Parcel 79 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

SECTION 6-82

PARCEL 82 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 82 at NAS Alameda (Figure 6-82-1). The parcel, which is located in the central portion of the base, is 1.4 acres in size and is square. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains three RCRA sites. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed evaluation of Parcel 82, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 82, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 104, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-82-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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SENSITIVE

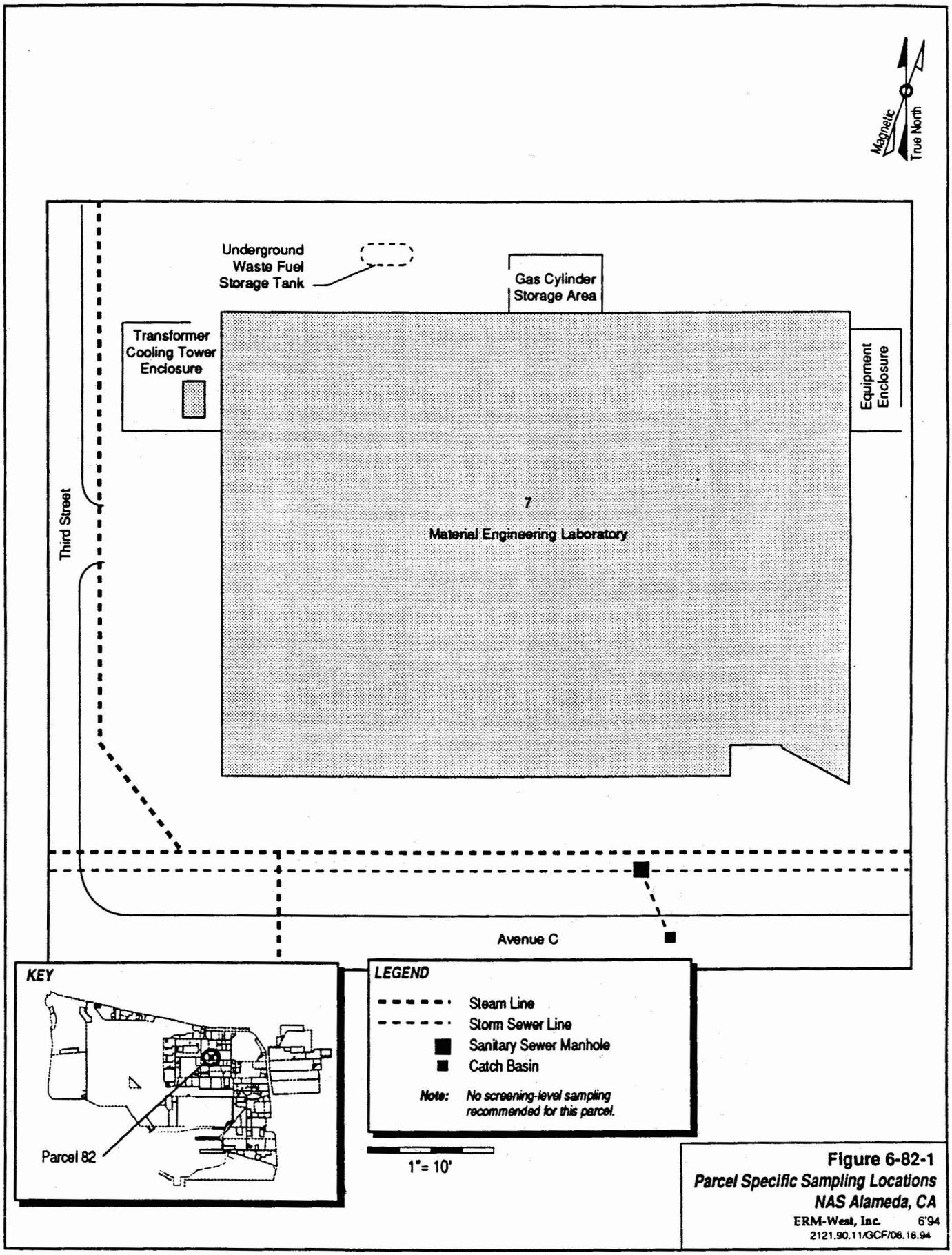

Figure 6-82-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 7) covers approximately 25 percent of Parcel 82. The remaining 75 percent is open space. The building is presently in use as a materials testing laboratory. The parcel was formerly a paved parking lot for the adjacent administrative and medical facilities. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-82-1.

Parcel 82 is located approximately 50 feet north of an Installation Restoration (IR) Program site (IR Site 8 - Building 114). No previous investigations have been conducted at Parcel 82, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials (ACM) on parcels will be addressed in other sampling programs and are not considered in this PEP. Lead-based paint, PCBs, and ACM are not anticipated to be issues in Building 7 based on its age (approximately 10 years old).

Activities of potential environmental or industrial hygiene concern within the parcel open space and buildings are described below.

Building 7

This building is referred to as the Material Engineering Laboratory. It was built in approximately 1985 in a former paved parking lot area. The building is constructed of concrete and features linoleum tile floors. It contains two stories of offices and laboratories including the following: a fuels testing laboratory, an inorganics laboratory, an oil analysis laboratory, an X-ray laboratory, a physical testing laboratory, and a non-destructive testing (NDT) laboratory. Air quality permits exist for laboratory hoods, a dryer, spray booths, and a spectrometer vent. Utilities located within and immediately surrounding Building 7 include underground sanitary sewer, storm sewer, steam, water, and electrical lines.

Chemicals stored in Building 7 include paint, solvents, corrosives, fuel samples, waste cyanides, waste acids, compressed gases, and miscellaneous laboratory reagents. Site inspection data indicate that chemicals were present in relatively small quantities and were

generally stored properly. No staining associated with chemical storage or use was reported.

A spill of two gallons of sodium hydroxide occurred in June 1992. The material spilled from containers in the back of a truck at the intersection of Third Street and Avenue C. The USEPA was notified and the spill was cleaned up by Navy personnel.

Nickel 63 is contained in microcurie quantities within one analytical instrument used in the building.

Open Space

The open space surrounding Building 7 consists of landscaped areas, sidewalks, driveways, and parking areas. EBS information does not indicate chemical storage or use at present or in the past in parcel open space. The previous use of the area as a paved parking lot and the age of the building and associated landscaped areas preclude the use of pesticides of concern on the parcel. Utilities located within the open space include underground sanitary sewer, storm sewer, steam, water, and electrical lines. A transformer is also located in the open space.

An underground waste fuel tank is located on the north side of Building 7, as shown in Figure 6-82-1. The tank receives waste fuels from the fuels testing laboratory on the second floor of Building 7. A NAS Alameda drawing, dated July 3, 1990 and entitled "Disposal and Impediment Map," indicates that an underground storage tank (T-7) is located on the west side of Building 7. This tank is probably the same one described previously on the north side of Building 7.

Underground Storage Tanks

One active underground storage tank is present at this parcel (Tank 7-1). Although the installation date of this tank is unknown, it is likely consistent with the construction of Building 7. The tank has been reported to be located on both the west and north sides of Building 7. Based on the available information, Tank 7-1 is used to store used fuel samples. The capacity of the tank is not known. No data pertaining to tightness or tank integrity have been identified. The tank is currently active. It is periodically checked and emptied by environmental group personnel. This tank has been identified as a RCRA tank based on its contents.

Parcel Boundary Conditions

Parcel 82 is bounded by Parcels 65, 66, 75, 81, and 83. Parcel 75 is IR Site 8 (PWC shop and pesticide storage area). Elevated concentrations of VOCs, SVOCs, PCBs, metals, and pesticides have been detected in samples of soil and/or water from IR Site 8. Expanded investigations associated with this site have been proposed by the IR contractor to further delineate impacts from this site.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR site reveals a cause for concern at Parcel 82, then additional sampling on Parcel 82 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes four RCRA sites (SWMU/GAP 81, 82, 83, and Tank T-7). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the three GAP sites at this parcel do not require sampling because no staining was noted in the area of the sites. The tank will be addressed by the UST program. A brief description of each of the RCRA sites is provided below.

Each of the three GAP sites consists of a small active chemical storage area in three laboratories in Building 7. Chemicals are stored in five-gallon containers. Historical releases are unknown at these sites. Wastes stored at the three sites reportedly consist of the following:

- GAP 81 -- water base primer, alcohol, poly paint and thinners, paint strippers;
- GAP 82 -- JP-5 and JP-4, ICP and AA laboratory analysis wastes, hydraulic fluid, heavy metal titration solutions; and,
- GAP 83 -- acidic metal etchant rinse water.

The UST contains waste fuel and is described in the underground storage tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 82, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-82-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 7. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 82 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 82.

Once the data gaps in Table 6-82-1 are addressed, Parcel 82 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-82-1

Summary of Data Gaps
NAS Alameda Parcel 82

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) is located adjacent to Parcel 82. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-82-1

Summary of Data Gaps
NAS Alameda Parcel 82

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One UST currently exists at Parcel 82 (Tank 7-1). • Tank 7-1: Active. Future actions for this tank are unknown. This tank is a RCRA Tank due to its contents.
Underground Utilities	• Sanitary sewer, storm sewer, water, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to PCBs, underground lines, radiological concerns, asbestos, impacts of the adjacent IR site, and USTs must be resolved before this parcel can be leased or transferred.

SECTION 6-104

PARCEL 104 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 104 at NAS Alameda (Figure 6-104-1). The parcel, which is located in the central portion of the base, is less than one-half acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-104-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 104, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 104, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 105, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,

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PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-104-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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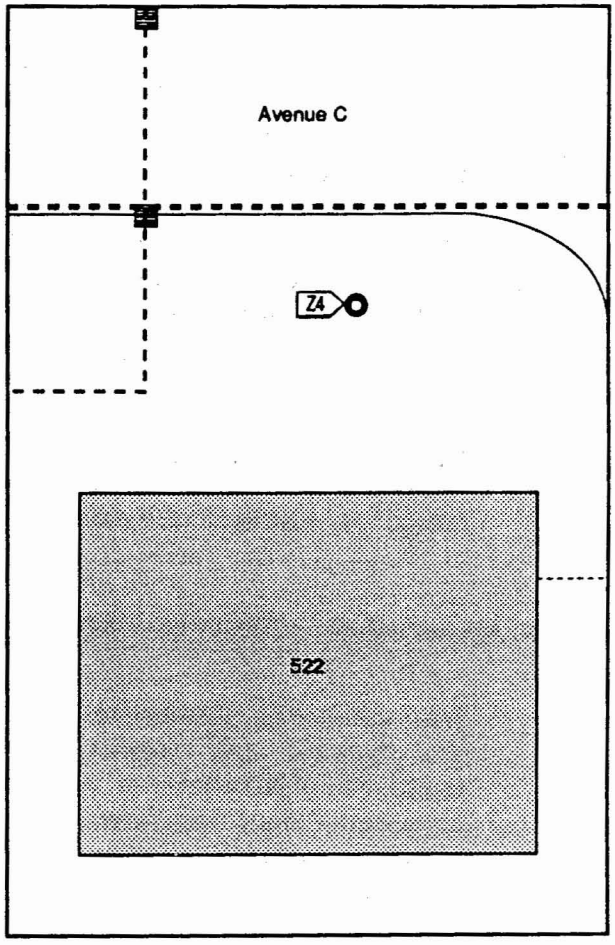

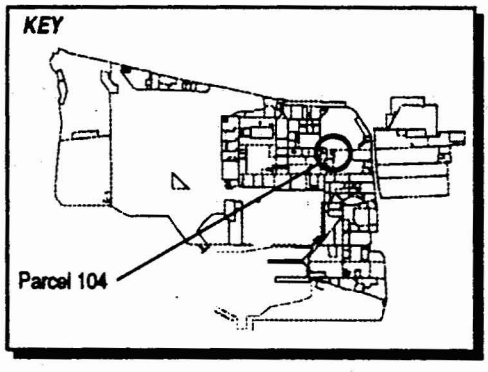

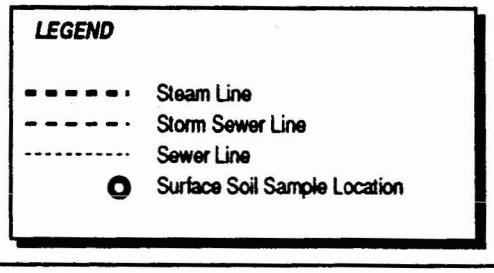

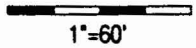

Figure 6-104-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

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TABLE 6-104-1

Summary of Recommended Samples
NAS Alameda Parcel 104

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 522) covers approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is currently composed of roadways, sidewalks, landscaped areas, and Building 522. A portion of one building (Building 129 - Applied Instruction Center and Barracks) was formerly located on the parcel and has since been demolished. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-104-1.

Parcel 104 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 104, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 522

Building 522 was constructed in 1990 and serves as an office building for civilian employee welfare and recreation administration (Figure 6-104-1). This one-story building covers approximately 2,500 square feet is in fair condition. Building 522 is constructed of wood with a concrete floor. The space currently occupied by Building 522 was formerly landscaped open space.

Utilities located within and immediately surrounding Building 522 include underground sanitary sewer, storm sewer, steam, and overhead electrical lines. Less than ten gallons of general household cleaning chemicals are documented to have been stored in and used at Building 522. No spills or staining are documented within Building 522. Building 522 is not reported to be equipped with a

heating-ventilation-air conditioning (HVAC) system. No incidents are documented to have occurred within Building 522.

Open Space

The open space covers approximately 60 percent of the parcel. The open space is 50 percent paved and 50 percent unpaved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass and landscaping.

No structures are located within the open space. Utilities located within and immediately surrounding the open space include underground sanitary sewers, storm sewers, steam lines, and overhead electrical lines. A portion of Building 129 was formerly located in this open space. It housed the applied instruction center and barracks and was demolished around 1975. Building 129 was a two-story building, was constructed of wood, and covered approximately 33,000 square feet.

No chemicals are documented to have been stored in or used at the open space. No spills or staining are documented for the open space. No other incidents are documented to have occurred within the open space

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 104 is bounded by Parcels 98, 103, and 105. No activities of potential environmental concern were identified on these adjacent parcels. The adjacent parcels are currently in use as open space and residential areas.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 104, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-104-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 104 because no industrial buildings are present.

As noted earlier, Parcel 104 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for four of the parcels located in Zone 13 (Parcels 104, 105, 109, and 203), because these parcels are located directly adjacent to a residential area. Limited pesticide sampling has been proposed to address any potential concerns regarding their future use resulting from their proximity to a residential area.

Once the data gaps in Table 6-104-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 104 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-104-2

Summary of Data Gaps
NAS Alameda Parcel 104

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 104.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 104.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term landscaped areas on Parcels 104, 105, 109, and 203, that may be used as recreation areas by children living on adjacent Parcels 98 and 103.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-104-2

Summary of Data Gaps
NAS Alameda Parcel 104

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer and sanitary sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 104. No parcel-specific target areas were identified for this parcel.

- Zone 13 Target Area 2 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the unpaved open spaces of Zone 13 have been unpaved since 1940. Zone 13 Target Area 2 includes current and former unpaved areas within the Central Light Industrial Zone that are directly adjacent to family housing located on Parcels 98 and 103. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any from historical pesticide application. This target area is classified as having potential likelihood of impacts, and is identified because of the potential recreational use of portions of this zone by children living in the adjacent residential areas. One surface soil sample for pesticides will be collected from the location shown on Figure 6-104-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-105

PARCEL 105 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 105 at NAS Alameda (Figure 6-105-1). The parcel, which is located in the central portion of the base, is less than one-half acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-105-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 105, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 105, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 106, 107, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,

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FIGURE 6-105-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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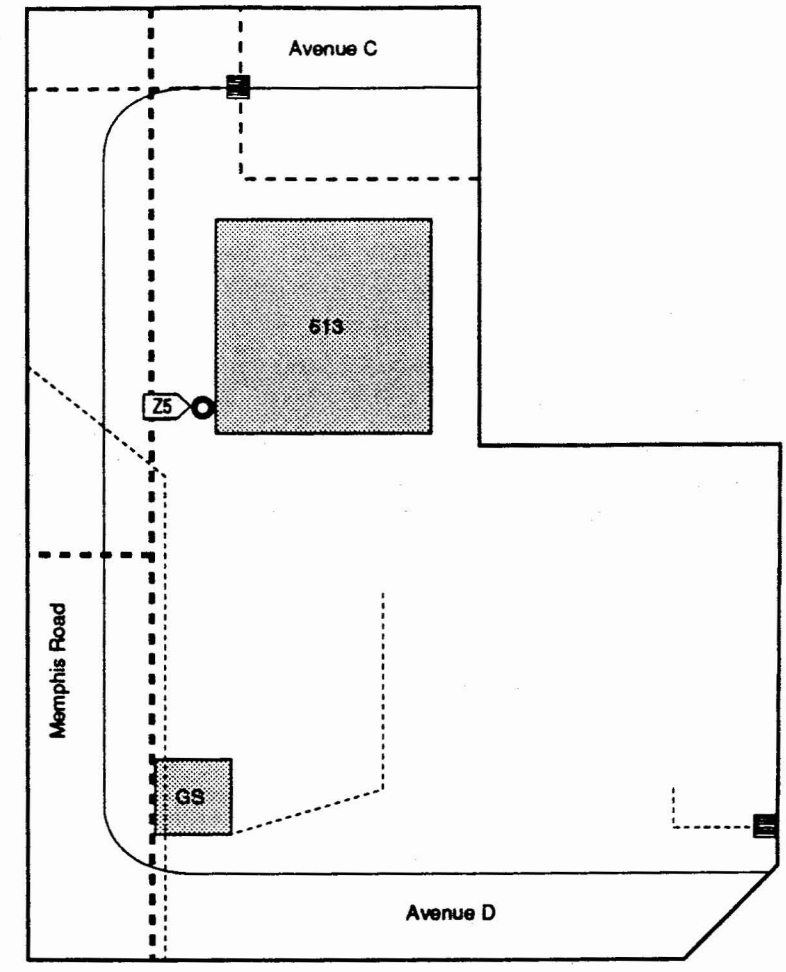

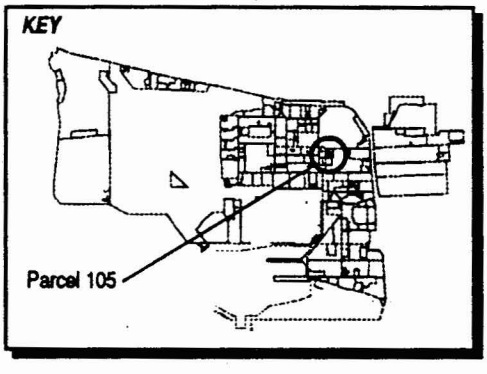

LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location

Note: *Sampling locations are approximate.*

1"=60'

Figure 6-105-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

SENSITIVE

TABLE 6-105-1

Summary of Recommended Samples
NAS Alameda Parcel 105

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Building 613 and a guard shack) cover approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is currently made up of roadways, sidewalks, a landscaped area, the guard shack, and Building 613. A portion of one building (Building 129 - Applied Instruction Center and Barracks) was formerly located on the parcel and has since been demolished. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-105-1.

Parcel 105 is not located within 500 feet any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 105, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 613

Building 613 was constructed around 1985 and serves as a family services and counseling center (Figure 6-105-1). This one-story building is in good condition. Building 613 is constructed of wood, sheet rock and concrete, and covers approximately 4,500 square feet. The space occupied by Building 613 was formerly landscaped open space. Utilities located within and immediately surrounding Building 613 include sanitary sewer, storm sewer, electrical, and steam lines.

No chemical storage, use, spills, or staining are documented to have occurred within this building. Building 613 is not reported to be equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents are documented to have occurred within Building 613.

Open Space

The open space covers approximately 60 percent of the parcel. The open space is 50 percent paved and 50 percent unpaved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass and landscaping.

No structures are located within the open space. Utilities located within and immediately surrounding the open space include sanitary and storm sewers, electrical, and steam lines. A portion of Building 129 was formerly located in this open space. Building 129 housed the applied instruction center and barracks and was demolished around 1975. Building 129 was a two-story building, was constructed of wood, and covered approximately 33,000 square feet.

No chemicals are documented to have been stored or used in the open space. No spills or staining are documented for the open space. No other incidents are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 105 is bounded by Parcels 98, 103, 105, 106, 108, 189, and 203. There appears to be no activities of environmental concern on these adjacent parcels.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 105, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-105-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Based on the age of Building 613, it is unlikely that ACM or lead-based paint are of concern. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 105 because no industrial buildings are present.

As noted earlier, Parcel 105 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for four of the parcels located in Zone 13 (Parcels 104, 105, 109, and 203), because these parcels are located directly adjacent to a residential area. Limited pesticide sampling has been proposed to address any potential concerns regarding their future use resulting from their proximity to a residential area.

Once the data gaps in Table 6-105-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 105 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-105-2

Summary of Data Gaps
NAS Alameda Parcel 105

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 105.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 105.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term landscaped areas on Parcels 104, 105, 109, and 203, that may be used as recreation areas by children living on adjacent Parcels 98 and 103.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-105-2

Summary of Data Gaps
NAS Alameda Parcel 105

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 105. No parcel-specific target areas were identified for this parcel. This zone-wide target area includes:

- Zone 13 Target Area 2 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the unpaved open spaces of Zone 13 have been unpaved since 1940. Zone 13 Target Area 2 includes current and former unpaved areas within the Central Light Industrial Zone that are directly adjacent to family housing located on Parcels 98 and 103. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any from historical pesticide application. This target area is classified as having potential likelihood of impacts, and is identified because of the potential recreational use of portions of this zone by children living in the adjacent residential areas. One surface soil sample for pesticides will be collected from the location shown on Figure 6-105-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

In addition, concerns pertaining to PCBs, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-106

PARCEL 106 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 106 at NAS Alameda (Figure 6-106-1). The parcel, which is located in the central portion of the base, is 1.2 acres in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. However, no sampling is called for on this parcel in the screening-level investigation. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 106, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 106, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies other Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 107, 108, 109, 186, 188, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-

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FIGURE 6-106-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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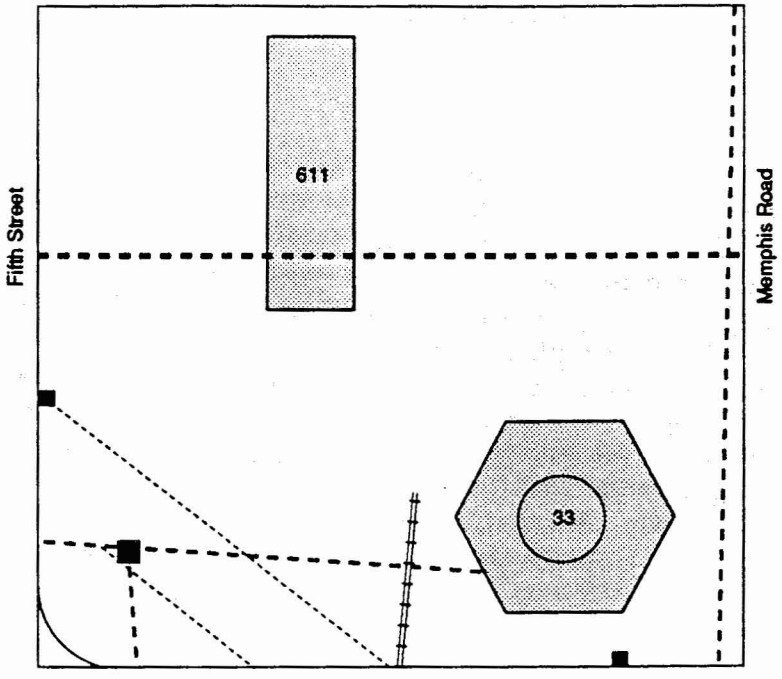
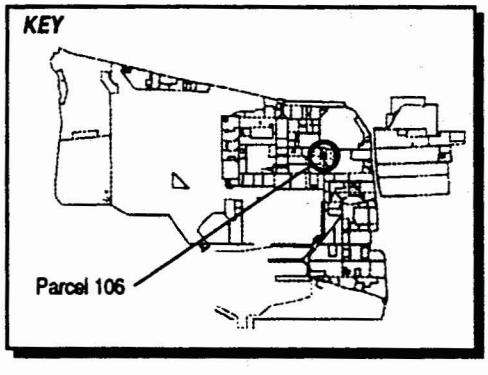
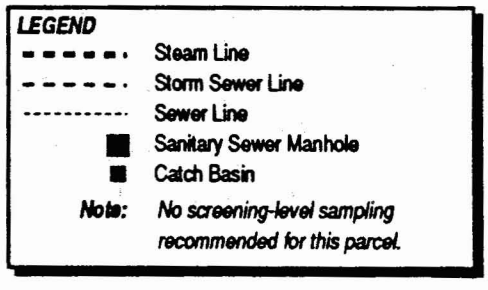






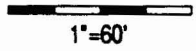


Figure 6-106-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.12/GCF/08.30.94

SENSITIVE

wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel area was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 611, Electronic Repair Garage) and one structure (Water Tower) cover approximately ten percent of the parcel. The remainder (90 percent) is open space. Land usage on the parcel currently includes of a small automobile parking area, railroad tracks, an open grassy area, a sidewalk, and a roadway. No other buildings are documented to have formerly existed at this parcel. Underground steam and sewer lines are present at this parcel and are shown in Figure 6-106-1.

Parcel 106 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 106 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Structure 33

Structure 33 was constructed in 1933 and serves as a water tower (Figure 6-106-1). This structure covers approximately 5,000 square feet and is in fair condition. Structure 33 is constructed of steel and can store up to 200,000 gallons of water. No chemicals are documented to have been stored in or used at Structure 33 from 1933 to 1992.

No spills or other incidents are documented to have occurred at this structure.

Building 611

Building 611 was constructed in 1961 and serves as a electronics/communications maintenance shop (Figure 6-106-1). Mobile communications equipment repairs occur in the north half of the building and a garage for mobile repairs occupies the south half of the building. This one-story building covers approximately 970 square feet and is in fair condition. Building 611 is constructed of corrugated steel walls and roof, and a concrete floor. The space occupied by Building 611 was formerly open space used for parking.

Utilities located within and immediately surrounding Building 611 include sanitary sewer, storm sewer, steam, electrical, and water lines.

A hazardous material storage locker is located on the northwest side of the building. It holds small quantities of paints, solvents, and lubricants. There is a battery storage locker on the southwest side of the building that contains Nicad batteries. These materials are used for electronics maintenance inside Building 611. Electronics maintenance has occurred in Building 611 since 1961. No hazardous wastes were noted during the site inspection. There are no documented spills or staining at this building. No other documented incidents have occurred at this building.

Open Space

This open space covers approximately 90 percent of the parcel. The open space has been used for parking areas, sidewalk, and a landscaped area. The undeveloped and landscaped area of this parcel has existed in its present state since this parcel was filled.

Structures located within the open space include railroad tracks and a water tower. The ground surface of the open space is 75 percent paved and 25 percent grass. Approximately 80 percent of the paved area is covered with asphalt and 20 percent of the paved area is concrete. The pavement is in fair condition. Utilities located within and immediately surrounding the open space include underground sanitary sewer, electrical, water, steam, and storm sewer lines.

During the site inspection in May 1994, small quantities of paint, solvents, Nicad batteries, and lubricants were stored in hazardous materials lockers on the west side of Building 611. Approximately 100 gallons total of paint, solvents, and lubricants were stored in the open space. No evidence of spills or stains was noted during site inspection, and no other incidents are documented to have occurred within the open space of this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 106 is bounded by Parcels 73, 79, 107, 108, 188, 189, and 203. Activities in these parcels include parking, child care, offices, water storage, and warehousing. No activities of potential environmental concern have been identified at these parcels.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 106, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-106-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern Building 611. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

TABLE 6-106-1

Summary of Data Gaps
NAS Alameda Parcel 106

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings are located at Parcel 106.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 106.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-106-1

Summary of Data Gaps
NAS Alameda Parcel 106

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

No Industrial Hygiene sampling is required for Parcel 106 because no industrial buildings are present.

As noted earlier, Parcel 106 has open space areas that are landscaped or unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 106.

Once the data gaps in Table 6-106-1 are addressed, Parcel 106 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 106. No parcel-specific target areas were identified for this parcel. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling has been proposed for this parcel.

- Zone 13 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Central Light Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. No surface soil samples for this zone target area are located on this parcel. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-107

PARCEL 107 EVALUATION PLAN

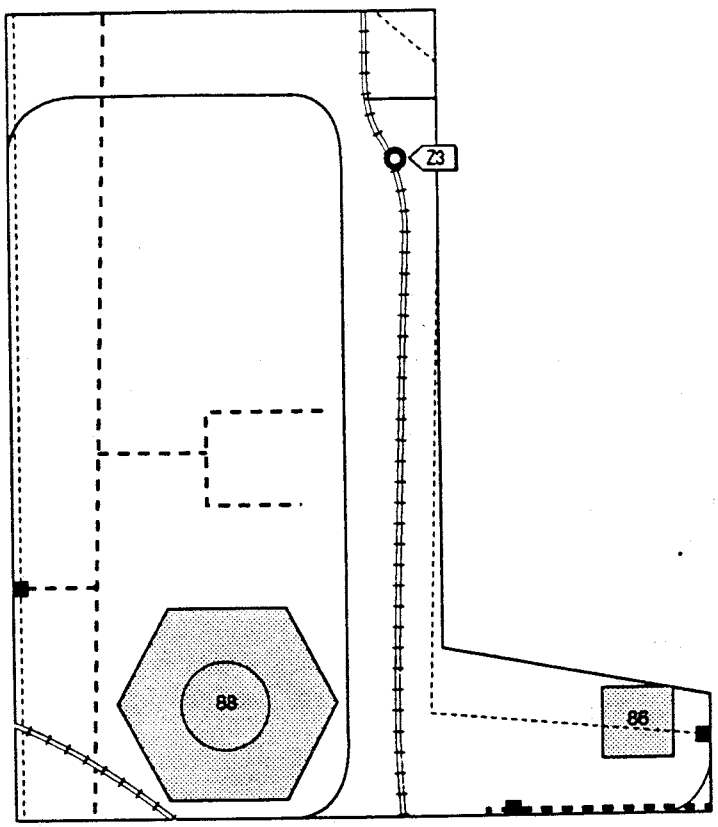
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 107 at NAS Alameda (Figure 6-107-1). The parcel, which is located in the central portion of the base, is approximately one acre in size and is roughly "L"-shaped. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-107–1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 107, historical activities are discussed below.

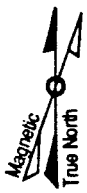
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 107, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 108, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,





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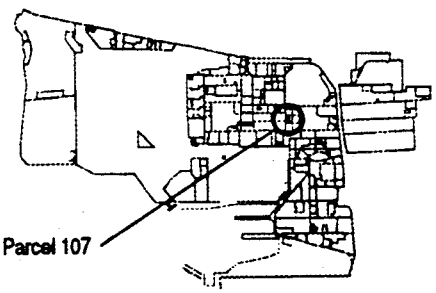

LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location
- Catch Basin

Note: *1) Parcel Borders Are Approximate*
2) Railroad Track Samples Are Taken Directly Under Track

1"=60'

Figure 6-107-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/08.30.94

TABLE 6-107-1

Summary of Recommended Samples
NAS Alameda Parcel 107

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	PCBs, Fuels, Oils, Creosote, Railroad Tie Tar	PCBs, TPH, SVOCs, Metals	EPA 8080, Modified EPA 8015, CLP RAS, ICAP SCAN

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 86 - Sewage Pump Station) and one structure (Water Tower) cover approximately five percent of the parcel. The remaining 95 percent is open space. In general, the parcel area is presently an open grassy area with a small automobile parking area, sidewalk and roadway. One additional water tower was formerly located on the parcel and has since been demolished. No other buildings or structures are documented to have formerly existed at this parcel. Underground steam and sewer lines are present at this parcel and are shown in Figure 6-107-1.

Parcel 107 is located approximately 400 feet northeast of an Installation Restoration (IR) Program site (IR Site 6). No previous investigations have been conducted at Parcel 107, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Structure 61

Structure 61 was constructed in 1933 and served as a water tower (Figure 6-107–1). This structure was demolished in 1992. Structure 61 was constructed of steel and covered approximately 5,000 square feet. This structure could store up to 200,000 gallons of water. No chemicals are documented to have been stored or used in Structure 61.

No spills are documented concerning this structure. No other incidents are documented to have occurred at this structure.

Building 86

Building 86 was constructed prior to 1947 and served as a sewage pump station (Figure 6-107–1). This one-story building covers approximately 100 square feet and is in fair condition. Building 86 is constructed of concrete with a concrete floor and concrete roof. Utilities located within and immediately surrounding the building include sanitary sewer, storm sewer, steam, electrical, and water lines.

Chlorine gas is documented to have been in continual use at Building 86 since its construction. The gas is used to treat the sewage that is passed through this pump station. No spills are documented in existing files concerning this building. No other incidents are documented to have occurred at this building.

Structure 88

Structure 88 was constructed in 1933 and has served as a water tower (Figure 6-107–1). This structure is constructed of steel, covers approximately 5,000 square feet, and is in fair condition. Structure 88 can store up to 200,000 gallons of water. No chemicals are documented to have been stored in or used in Structure 88 from 1933 to 1992.

No spills are documented relating to this structure. No other incidents are documented to have occurred at this building.

Open Space

Open space occupies approximately 95 percent of the parcel. In general, open space has been used for railroad tracks, roadways, automobile parking, and as grassy open space.

Structures located within the open space include a water tower, a sewage pump station, and railroad tracks (Figure 6-109–1). The ground surface of the open space is approximately 50 percent paved and 50 percent unpaved. Approximately half of the paved area is surfaced with asphalt and the other half is paved with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with gravel (10 percent), grass and landscaping (80 percent), and bare soil (10 percent). Utilities located within and immediately surrounding open space include underground sanitary sewer, storm sewer, electrical, water, and steam lines.

Structure 68 was formerly located in this open space. It was a water tower and was demolished shortly after 1992.

No chemicals are documented to have been stored or used in this open space. No spills are documented in existing files concerning this building. Site inspection data indicate that staining is present at the railroad tracks. This staining is of unknown origin. The staining is typically within three feet of the railroad tracks. This staining is addressed by Zone 13 Target Area 1.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 107 is bounded by Parcels 73, 103, 106, 108, 109, 203, and 206. Activities of concern on these parcels include material storage on Parcels 73 and 206. Parcel 196 is IR Site 6 (Building 41) and is located approximately 400 feet southwest of Parcel 107.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR site reveals a cause for concern at Parcel 107, then additional sampling on Parcel 107 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 107, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-107-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-

TABLE 6-107-2

Summary of Data Gaps
NAS Alameda Parcel 107

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 107.
Installation Restoration (IR) Sites	• IR Site 6 (Building 41) is located within 400 feet southwest of Parcel 107. Additional subsurface investigation relative to IR Site 6 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-107-2

Summary of Data Gaps
NAS Alameda Parcel 107

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 107 because no industrial buildings are present.

As noted earlier, Parcel 107 has open space areas that are landscaped or unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 107.

Once the data gaps in Table 6-107-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 107 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 107. No parcel-specific target areas were identified for this parcel.

- Zone 13 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Central Light Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One surface soil sample for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target

area is shown on Figure 6-107-1 and listed in Table 6-107-1. The approximate sampling location is shown on Figure 6-107-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the impacts of the nearby IR site must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-108

PARCEL 108 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 108 at NAS Alameda (Figure 6-108-1). The parcel, which is located in the central portion of the base, is approximately one-half acre in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 108, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 108, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 109, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

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FIGURE 6-108-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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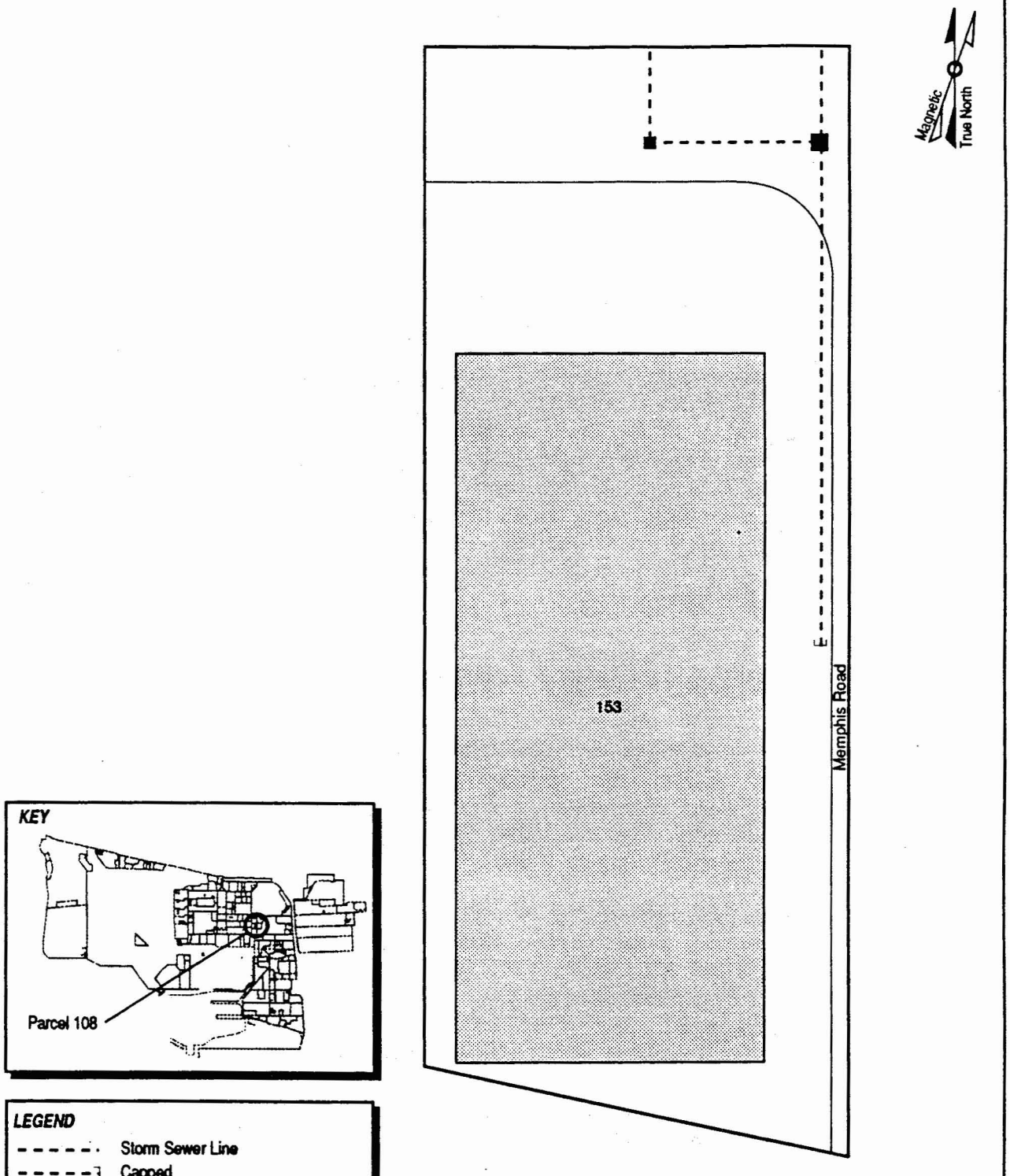

Figure 6-108-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.28.94

SENSITIVE

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 153) covers approximately 50 percent of the parcel. The remaining 50 percent is open space. No former buildings are documented to have existed at this parcel. Sewer lines are present at this parcel and are shown in Figure 6-108–1.

Parcel 108 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 109, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 153

Building 153 was constructed in 1945 and served as a family services center and a cold storage facility (Figure 6-108-1). This one-story building covers approximately 9,700 square feet and is in fair condition. Building 153 is constructed of wood and concrete. This building has a concrete and asbestos tile floor and a tar and gravel roof. No previous use is documented for this area prior to the construction of Building 153.

Utilities located within and immediately surrounding Building 153 include sanitary sewer, electrical, steam, storm sewer, and water lines.

Information collected during the EBS indicates that activities conducted within this building included cold storage of food products and a family services center. Currently the building is used for fire department storage and janitorial service offices. Stored compounds include various chemical agents (e.g., firefighting foam, cleaners, and polishes). These items are currently stored in the cold storage lockers.

Approximately 1,500 gallons of these chemicals are currently being stored in this building.

No spills are documented to have occurred in this building. No staining was noted during the site inspection.

Building 153 has a non-industrial HVAC system that was not designed to mitigate vapors and fumes. The location of ventilation system components indicates that fume and vapor accumulation inside the building is a potential concern. Site inspectors noted the presence of trapped fumes. There is a significant accumulation of dusts on interior building surfaces. Also present are ceiling tiles, floor tiles, and insulation that are of sufficient age as to potentially be composed of asbestos-containing materials (ACM).

No other incidents are documented to have occurred within this building.

Open Space

The space covers approximately 50 percent of the parcel. Fifty percent of the open space is paved with asphalt, which is in fair condition. The remaining 50 percent is covered with grass.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, electrical, and steam lines.

EBS information indicates that activities conducted within this open space included vehicle parking for Building 153. There are no chemicals documented to have been stored in or used at the open space.

Staining is present on the loading dock portion of Building 153 and north of the building. One set of stains appears to be due to petroleum products and is probably related to vehicle parking. Another stain appears to be a large spot of white paint. The paint stain is approximately two feet by ten feet. These stains are minor and do not warrant sampling. No other incidents are documented to have occurred within this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated

that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 108 is bound by Parcels 105, 106, 107, and 203. Parcel 108 is located 50 feet northeast of IR Site 6. Parcel 106 is located to the north and contains an electronic communications building. Parcel 107 contains railroad tracks and water towers. Parcel 203 contains office buildings and is located to the east. Parcel 105, which contains a parking lot and a family service center, is located northeast of Parcel 108.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 108, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-108-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 153. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

TABLE 6-108-1

Summary of Data Gaps
NAS Alameda Parcel 108

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 108.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-108-1

Summary of Data Gaps
NAS Alameda Parcel 108

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As noted earlier, Parcel 108 has open space areas that are landscaped or unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 108.

Once the data gaps in Table 6-108-1 are addressed, Parcel 108 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological concerns must be resolved before this parcel can be leased or transferred.

SECTION 6-109

PARCEL 109 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 109 at NAS Alameda (Figure 6-109–1). The parcel is located in the central portion of the base, is 1.5 acres in size, and is square. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites area located at this parcel. Two zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-109–1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 109, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 109, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 186, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,

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PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-109-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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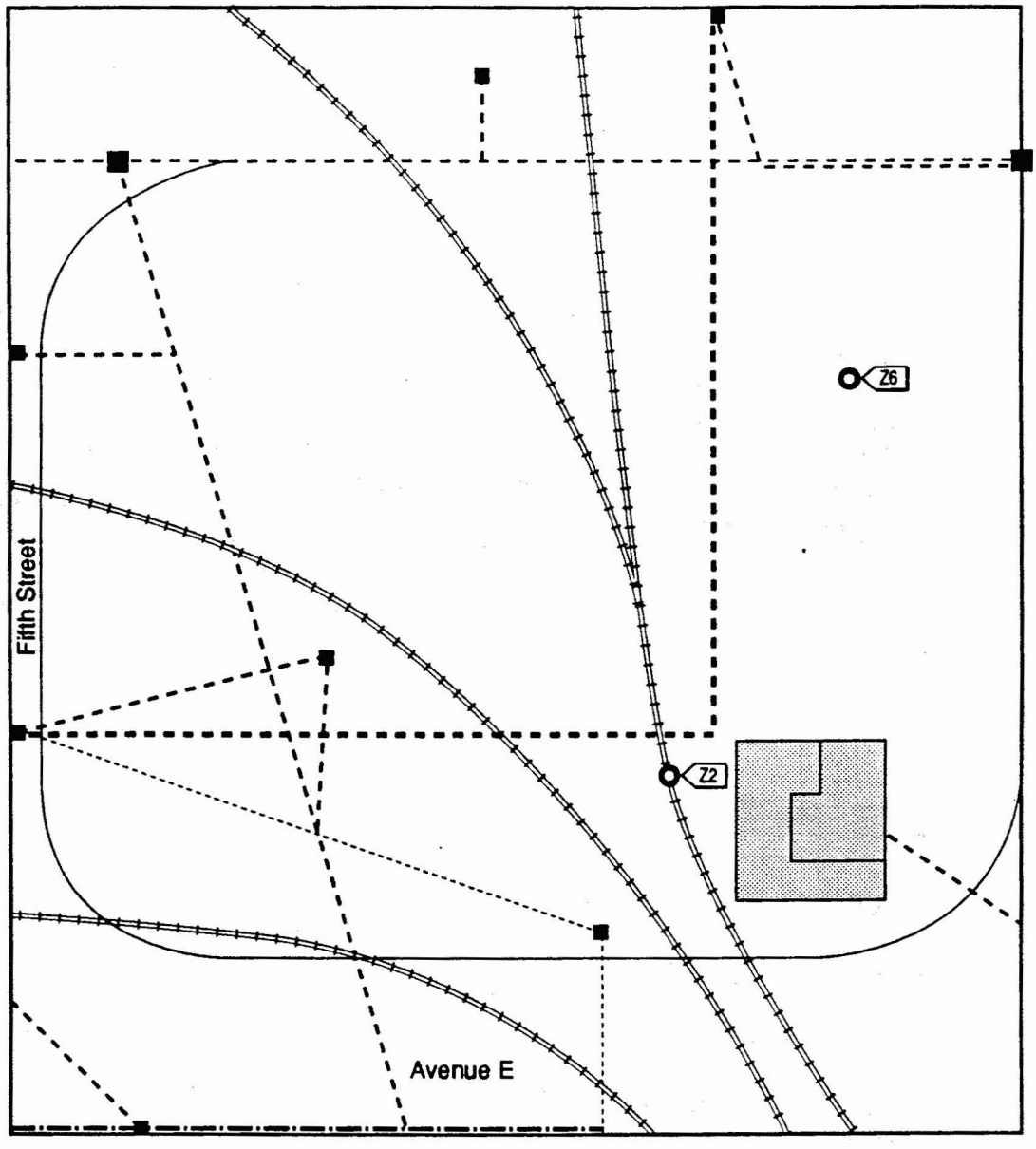
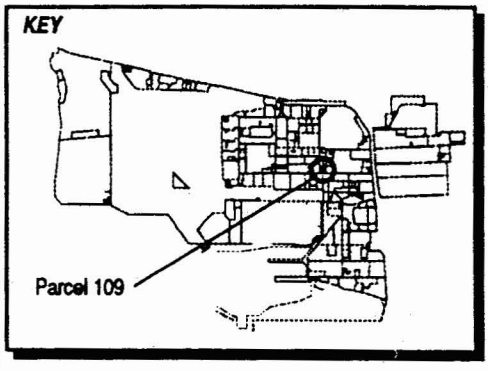
SENSITIVE





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Abandoned Fuel Line
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

Note:
1) *Parcel Borders Are Approximate*
2) *Railroad Track Samples Are Taken Directly Under Track*

1"= 45'

Figure 6-109-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.28.94

SENSITIVE

TABLE 6-109-1

Summary of Recommended Samples
NAS Alameda Parcel 109

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1	PCBs, Fuels, Oils	PCBs, TPH, Lead	EPA 8080, ICAP SCAN, Modified EPA 8015
Z13-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 1 2	Creosote, Tie Tar, Banned Pesticides	SVOCs, Pesticides	CLP RAS

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Before this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one structure (a steam and condensate station) covers less than five percent of the parcel area. The remaining 95 percent is open space. In general, the parcel area is used for open grassy space with a small automobile parking area, sidewalks, and roadways. One building (Building 90) was formerly located on the parcel and has since been demolished. Underground steam and sewer lines are present at this parcel and are shown in Figure 6-109–1.

Parcel 109 is located approximately 200 feet northeast of an Installation Restoration (IR) Program site (IR Site 6 - Building 41). No previous investigations have been conducted at Parcel 109, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 90 (Demolished)

Building 90 was constructed before 1947 and was demolished shortly after 1953. The former use of this building is unknown. Utilities located within and immediately surrounding former Building 90 include sanitary sewers, storm sewers, and steam lines. Abandoned fuel lines are located along the southern border of Parcel 109. No chemicals are known to have been used or stored in this building. There are no documented releases for this building. No other incidents documented to have occurred at this building.

Open Space

The open space covers approximately 95 percent of Parcel 109. In general, the open space has been used for railroad passage, roadways,

and automobile parking. Some areas consist of grassy open space. The ground surface of the open space is 25 percent paved and 75 percent unpaved. Approximately 60 percent of the paved area is surfaced with asphalt and 40 percent with concrete. The pavement is in fair condition. The unpaved areas of open space are covered with gravel (15 percent), grass and landscaping (70 percent), and bare soil (15 percent).

The only structure located within the open space is a steam pipe access station which was constructed before 1947 (Figure 6-109-1). Building 90 was formerly located in this open space.

EBS information indicates that activities conducted within this open space included railroad transport and automobile parking. Utilities located within and immediately surrounding open space include underground sanitary sewer, storm sewer, abandoned fuel, electrical, and steam lines.

No chemicals are documented to have been stored in or used at this parcel. No spills are documented in existing files concerning this building. Site inspection data indicate that undocumented spills may have occurred at the railroad tracks. The resultant staining typically occurs approximately three feet on either side of the railroad tracks. The railroad tracks are addressed in Zone 13 Target Area 1. No other incidents are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 109 is bounded by Parcels 71, 103, 107, 110, 203, and 206. Parcel 196 is identified as IR Site 6 (Building 41), and is located southwest of Parcel 109. Activities of concern on adjacent parcels include material storage on Parcel 206.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR site reveals cause for concern at Parcel 109, then additional sampling on Parcel 109 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 109, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-109-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 109 because no buildings are present.

As noted earlier, Parcel 109 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for four of the parcels located in Zone 13 (Parcels 104, 105, 109, and 203), because these parcels are located directly adjacent to a residential area. Limited pesticide sampling has been proposed to address any potential concerns regarding their future use resulting from their proximity to a residential area.

Once the data gaps in Table 6-109-2 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-109-2

Summary of Data Gaps
NAS Alameda Parcel 109

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 109.
Installation Restoration (IR) Sites	• IR Site 6 (Building 41) is located 200 feet southwest of Parcel 109.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks. • Pesticides may have impacted the long-term landscaped areas on Parcels 104, 105, 109, and 203, that may be used as recreation areas by children living on adjacent Parcels 98 and 103.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-109-2

Summary of Data Gaps
NAS Alameda Parcel 109

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 109 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two zone-wide target areas were identified for Parcel 109. No parcel-specific target areas were identified for this parcel.

- Zone 13 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Central Light Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One surface soil sample for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target area is listed in Table 6-109-1. The approximate sampling location is shown on Figure 6-109-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

- Zone 13 Target Area 2 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the unpaved open spaces of Zone 13 have been unpaved since 1940. Zone 13 Target Area 2 includes current and former unpaved areas within the Central Light Industrial Zone that are directly adjacent to family housing located on Parcels 98 and 103. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any from historical pesticide application. This target area is classified as having potential likelihood of impacts, and is identified because of the potential recreational use of portions of this zone by children living in the adjacent residential areas. One surface soil sample for pesticides will be collected from the location shown on Figure 6-109-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

In addition, concerns pertaining to asbestos, underground lines, the nearby IR site, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Z13

SECTION 6-186

PARCEL 186 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 186 at NAS Alameda (Figure 6-186-1). The parcel, which is located in the central region of the base, is approximately one acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 186, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 186, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 188, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

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SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-186-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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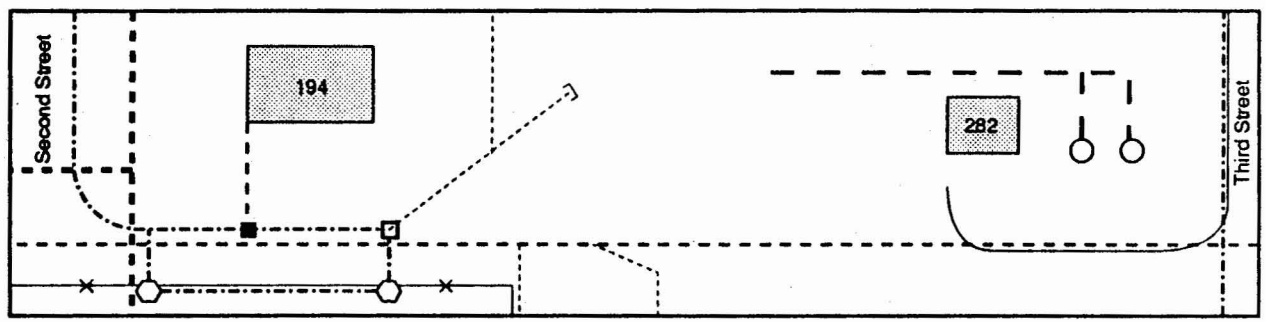

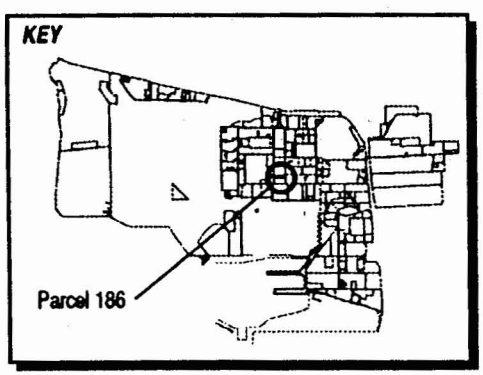

LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Industrial Waste Line
- Fuel Line In Use
- Capped
- Pump Station
- Catch Basin
- Catch Basin

Note: No screening-level sampling recommended for this parcel.

Figure 6-186-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.28.94

SENSITIVE

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed since that time.

Currently, two buildings (Buildings 282 and 194) cover approximately five percent of the parcel. There are also several storage sheds located on the parcel. The remainder (95 percent) is open space. The parcel area is presently in use as a storage area. Two buildings were formerly located in this open space. One building was demolished in the early 1970s. Building 556 (sewage lift station) is listed as a current structure on Parcel 186; however, this building could not be located during the site inspection. Underground fuel, steam, and sewer lines are present on this parcel and are shown on Figure 6-186-1.

Parcel 186 is located adjacent to Installation Restoration (IR) Program Site 12 (Building 10) and less than 200 feet east of IR Site 5 (Building 5). No previous investigations have been conducted at Parcel 186, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 194

Building 194 is a maintenance storage structure (Figure 6-186-1). This building covers approximately 850 square feet and is in fair condition. Utilities located within and immediately surrounding Building 194 include underground sanitary sewer, steam, industrial sewer, storm sewer, water, fuel, and electrical lines.

Information collected during the EBS indicates that activities conducted within this building include chemical storage. There is equipment storage and drum storage within the structure, and a flammable materials locker is located southeast of Building 194. Detailed information is not available regarding types and quantities stored. No staining or spills are documented in or immediately surrounding Building 194.

No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within or near Building 194.

Building 282

Building 282 is a diesel and motor gasoline (MOGAS) station on the west side of the parcel. It was constructed in 1944 and covers approximately 300 square feet. It is not known how long Building 282 has been in use as a service station facility. There is no other information available about the building construction, except a notation on building plans that asbestos-containing cement board was specified for use in the office. Utilities located within and immediately surrounding Building 282 include underground sanitary sewer, steam, industrial sewer, storm sewer, water, fuel, and electrical lines.

Storage of fuels and other petroleum products may have occurred in and around Building 282 since its construction in 1944. Current storage quantities are unknown. A 1993 hazardous waste inventory indicates that a maximum of 10,000 gallons of petroleum products may be stored as hazardous waste. It is unknown if this inventory reflects spilled or stored material.

A documented fuel (diesel) spill occurred north of Building 282. Information on the quantity released is unavailable. This area has been added to the RCRA Corrective Action Program. Site inspection information indicates the hoses used during tank refueling leave residue drips around the tanks and the hose storage area. The resulting stains noted are three feet by two feet and one foot by two feet in area. These spills are located near hose equipment on the east side of Building 282. No sampling is called for in response to this staining because it is minor, and any remediation related to the documented spill, should also include staining related to tank filling activities.

No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within or near Building 282.

Open Space

The open space covers approximately 95 percent of Parcel 186. In general, the open space is used for material storage, vehicle parking, outdoor repair activities, drum storage, equipment parking, and disposal. The ground surface of the open space is entirely paved with asphalt except for the service station dispensing area, which is paved with concrete. The pavement is in moderately good condition

Structures located within the open space include three CONEX boxes and a hazardous waste accumulation area. Two buildings (Building 556 - Sewage Lift Station; and an unknown building) were formerly located in this open space. The former location of Building 556 could not be determined during the site inspection. The other building was demolished in the 1970s. There is no information available regarding the purpose of this other building. Utilities located within and immediately surrounding the open space include sanitary sewer, steam, industrial sewer, storm sewer, water, fuel, and electrical lines.

Two automated fuel service stations are located in the open space; one is to the north and the other is to the west of Building 282. Fuel stains, measuring up to six feet in diameter, were observed on the concrete north of Building 282, in sizes up to six feet in diameter. These stains are believed to be due to releases of diesel and unleaded gasoline. The staining corresponds to the area involved in the RCRA Corrective Action site at this parcel. A transformer and a hazardous waste storage area are located in the southwest portion of the parcel. Site reviewers noted that the transformers in storage appeared old and may potentially contain PCBs. No staining was noted in this area. Next to this storage facility, reviewers noted the presence of a flammable storage cabinet. Typical staining associated with equipment parking is present in the equipment parking area. This area will not be sampled because the pavement on this parcel was noted by site inspectors to be in relatively good condition.

No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

Two active underground storage tanks are east of Building 282 (Tanks 282-1 and 282-2). The presence of these tanks was identified from the EBS. Tanks 282-1 and 282-2 contain unleaded gasoline and diesel and have capacities of 5,000 gallons, each. These tanks passed an October 1991 tank and line test. The tanks and piping also passed precision tests in 1993 and 1994.

Parcel Boundary Conditions

Parcel 186 is bounded by Parcels 56, 58, 68, 69, and 185. Activities of concern on adjacent parcels include those in Building 6 (Parcel 68) related to vehicle repair and maintenance. Concerns also exist that

TABLE 6-186-1

Summary of Data Gaps
NAS Alameda Parcel 186

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 186.
Installation Restoration (IR) Sites	• Parcel 186 is located adjacent to IR Site 12 (Building 10) and less than 200 feet east of IR Site 5 (Building 5).
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Two active USTs exist at this parcel (Tanks 282-1 and 282-2).

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-186-1

Summary of Data Gaps
NAS Alameda Parcel 186

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, industrial sewer, storm sewer, water, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Parcel 186 may be impacted by the large volumes of petroleum products stored on Parcel 69.

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 186, then additional sampling on Parcel 186 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/Unknown). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the RCRA site at this parcel requires further investigation.

The RCRA site is associated with contaminated soil at and north of Building 282, and has had known releases. The dimensions of the impacted soil area are unknown. The chemicals of concern associated with this site include petroleum products. This site is currently being investigated as part of the RCRA Corrective Action program, and thus does not require sampling under this PEP.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 186, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-186-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the

Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 186 because no industrial buildings are present.

Once the data gaps in Table 6-186-1 are addressed, Parcel 186 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel that are not being investigated under separate programs (e.g., RCRA site), no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, the impacts of the nearby and adjacent IR sites, and USTs must be resolved before this parcel can be leased or transferred.

SECTION 6-188

PARCEL 188 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 188 at NAS Alameda (Figure 6-188-1). The parcel is located in the central portion of the base, is approximately one-half acre in size, and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel may contain one RCRA site. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 188, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 188, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 189, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

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SENSITIVE RECORD

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FIGURE 6-188-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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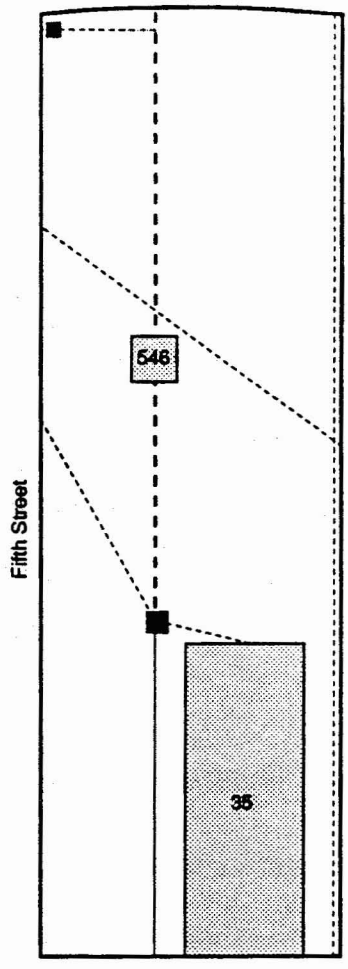
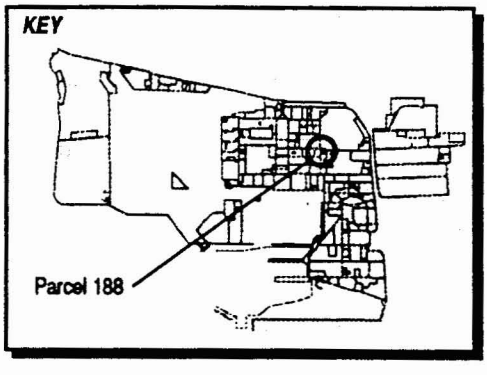
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"=45'

Figure 6-188-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.30.94

SENSITIVE

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Building 36 - Transmitter Building; and Building 546 - Bus Stop) cover approximately 20 percent of the parcel. The remaining 80 percent is open space. The parcel area is presently in use as a parking lot. Sewer lines are present on this parcel and are shown on Figure 6-188-1.

Parcel 188 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 188, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 35

Building 35 was constructed in 1940 and has served as a transmitter station (Figure 6-188-1). This one-story building covers approximately 2,800 square feet and is in fair condition. Building 35 is constructed of concrete with a wood roof.

Utilities located within and immediately surrounding Building 35 include underground sanitary sewer, storm sewer, and electrical lines. Information collected during the EBS indicates that this building has been used for communications and office activities.

General purpose cleaning chemicals are documented to have been stored and used in Building 35 during the site inspection. There are no spills or staining documented in this building.

Building 546

Building 546 was constructed in 1970 and serves as a bus stop (Figure 6-188-1). This one-story building covers approximately 80 square feet and is in good condition. Building 546 is constructed of glass and metal with a concrete floor. The space occupied by Building 546 was formerly a sidewalk. Utilities located within and immediately surrounding Building 546 include underground sanitary sewer, storm sewer, and electrical lines. No chemicals are stored or used in this building. No spills, staining, or other incidents are documented within this building.

Open Space

The open space covers approximately 80 percent of the parcel. The open space is 95 percent paved and five percent unpaved. Approximately 95 percent of the paved area is surfaced with asphalt and five percent is covered with concrete. The pavement is in fair condition. The unpaved areas of the open space are completely covered with grass and landscaping.

There are no structures located within the open space. There were no buildings formerly located here. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, and electrical lines. EBS information indicates that the open space has been used for vehicle parking, roadway, and sidewalk.

No chemicals are documented to have been stored in or used in the open space. No spills or other incidents are documented within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 188 is bounded by Parcels 79, 98, 106, and 189. No activities of potential environmental concern were identified at these parcels.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (site number SWMU/GAP 14) may be located at this parcel. However, while this site is listed on Parcel 188, it is also listed in Building 130, which does not exist on this parcel. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this RCRA site does not require sampling because the location of the site could not be determined based on available records and EBS information (i.e., no GAP site was noted during the site inspection). There are no activities on this parcel that would suggest a GAP site is required on this parcel. A brief description of the RCRA site is provided below.

It is unknown whether any chemicals were released from Site SWMU/GAP 14. This site is composed of less than 100 milliliters of dilute pesticide and rinse solution. This is consistent with the uses of Building 130, and indicates that this site is actually located on Parcel 213.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 188, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-188-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 188 because no industrial buildings are present.

TABLE 6-188-1

Summary of Data Gaps
NAS Alameda Parcel 188

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 188.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 188.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-188-1

Summary of Data Gaps
NAS Alameda Parcel 188

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As noted earlier, Parcel 188 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 188.

Once the data gaps in Table 6-188-1 are addressed, Parcel 188 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological concerns must be resolved before this parcel can be leased or transferred.

SECTION 6-189

PARCEL 189 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 189 at NAS Alameda (Figure 6-189-1). The parcel, which is located in the central portion of the base, is approximately one-half acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-189-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 189, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 189, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 203, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development,

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FIGURE 6-189-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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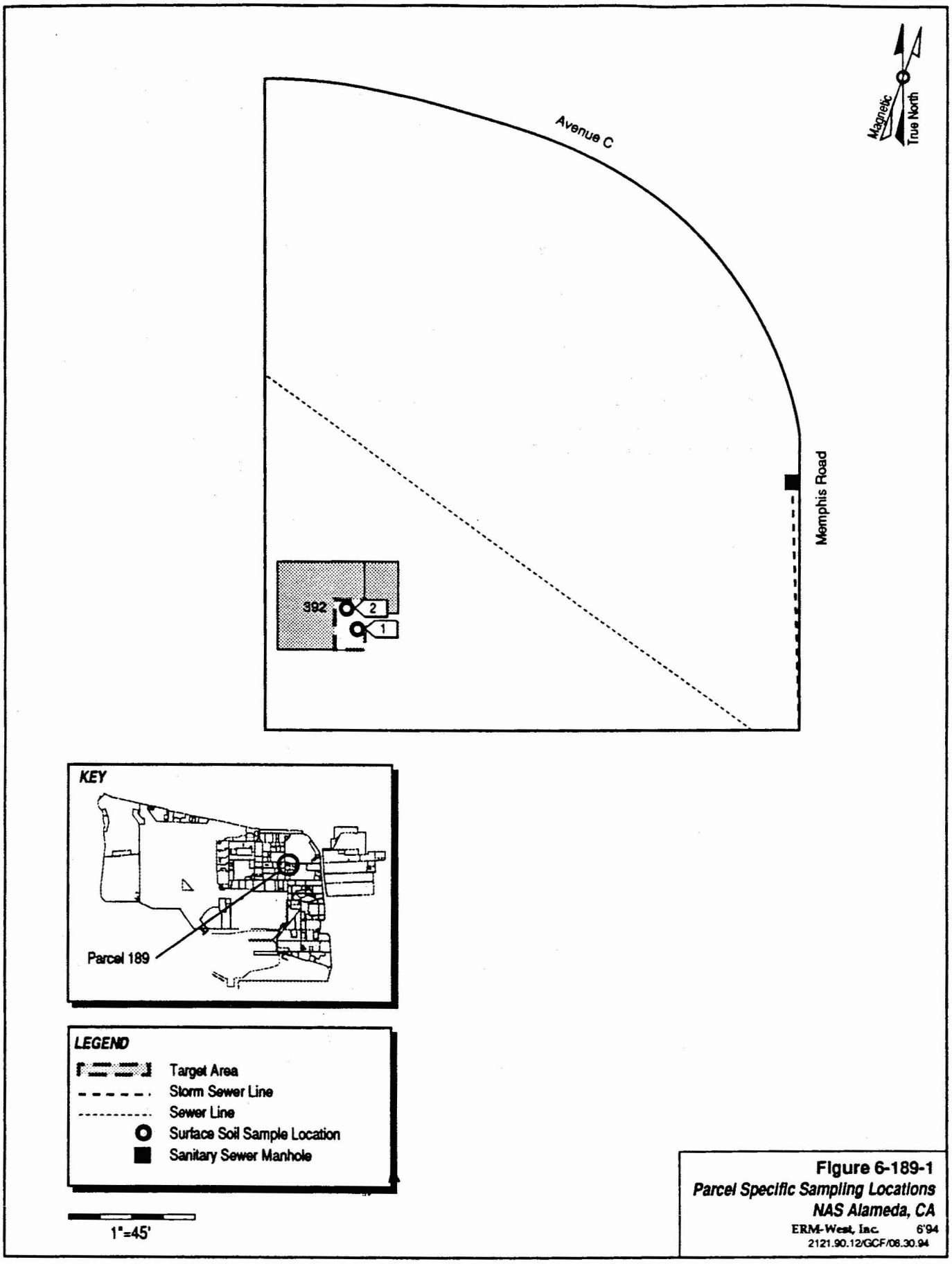

Figure 6-189-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/08.30.94

SENSITIVE

TABLE 6-189-1

Summary of Recommended Samples
NAS Alameda Parcel 189

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
189-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015
189-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015

the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 392) covers less than five percent of the parcel. The remaining area is open space. The parcel area is presently in use for vehicle parking. No buildings are documented to have formerly existed at this parcel. Sewer lines are present on this parcel and are shown on Figure 6-189-1.

Parcel 189 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 189, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 392

Building 392 was constructed in 1956 and housed a standby generator (Figure 6-189-1). This one-story building is constructed of concrete and is in fair condition. Building 392 covers approximately 240 square feet. The space occupied by Building 392 was formerly open space used for vehicle parking. Utilities located within and immediately surrounding Building 392 include sanitary sewer, storm sewer, and electrical lines. Information collected during the EBS indicates that activities conducted within this building were restricted to generator operations.

Fuels are documented to have been stored and used in Building 392 from 1956 to the present. Approximately 500 gallons of fuel were stored in the UST next to Building 392.

Diesel spills were documented and occurred periodically during the generator's existence. Minor quantities of diesel were apparently spilled onto concrete and the surfaces around the UST fill pipe and the generator pad, as evidenced by staining in these areas. No attempt to cleanup or remove the stains was noted during the site inspection. These spills appear to be diesel. The staining covers an area measuring approximately 10 feet by 10 feet. This staining is addressed by Target Area 1.

Open Space

The open space covers more than 95 percent of Parcel 189. The open space completely paved with asphalt. The pavement is generally in fair condition.

EBS information indicates that vehicle parking is the only activity conducted within this open space. No chemicals are documented to have been stored in or used at the open space. There are no spills, significant staining, or other incidents documented for this parcel.

Underground Storage Tanks

One underground storage tank was formerly near Building 392 (Tank 392-1). The former presence of this tank was identified from the EBS. Tank 392-1 was used to store unleaded gasoline and had a capacity of 500 gallons. The installation date of this tank is unknown. Based on the available information, Tank 392-1 passed a November 18, 1991 tank and line test prior to removal. This tank is being investigated under the RCRA closure plan.

Parcel Boundary Conditions

Parcel 189 is bounded by Parcels 98, 105, 106, and 188. No activities of particular environmental concern have been identified on these parcels.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel contains one RCRA site (the tank described in the UST section, above, that was removed under RCRA closure). This tank is being addressed as part of the UST

program. This tank has been removed, and any necessary investigation will be implemented as part of the UST program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 189, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-189-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 189 because no industrial buildings are present.

Once the data gaps in Table 6-189-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 189 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. No zone-wide target areas were identified on this parcel. This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 392): The soil underneath the heavily stained area around the generator will be sampled for TPH. The

TABLE 6-189-2

Summary of Data Gaps
NAS Alameda Parcel 189

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 189.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 189.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 392).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST formerly existed at Parcel 189 and has been removed (Tank 392-1).
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-189-2

Summary of Data Gaps
NAS Alameda Parcel 189

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

area covers approximately 100 square feet and is classified as having a potential likelihood of environmental impacts, due to the fair condition of the pavement of this parcel. Two surface soil samples will be collected in this target area. The samples are listed in Table 6-189-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-189-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 189. Two surface soil samples will be collected from the locations shown on Figure 6-189-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-203

PARCEL 203 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 203 at NAS Alameda (Figure 6-203-1). The parcel, which is located in the northeastern portion of the base, is approximately two acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-203-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 203, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 203, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, and 213. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-203-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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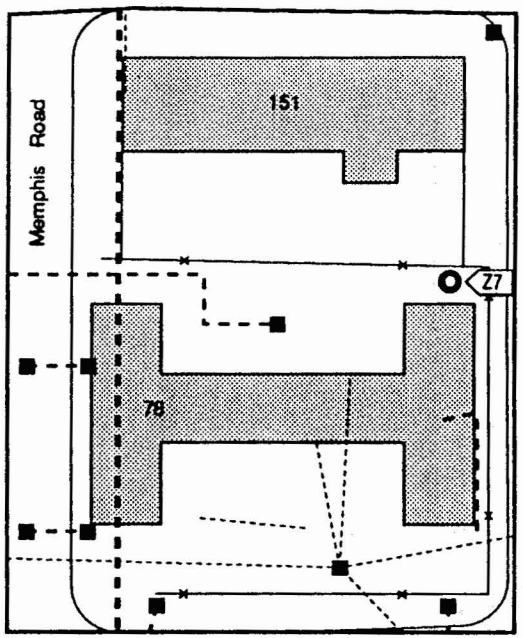

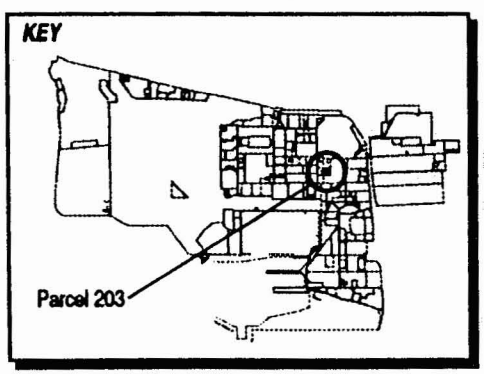

LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Capped
- Surface Soil Sample Location
- Catch Basin

1"= 90'

Magnetic
True North

Figure 6-203-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 794
2121.90.12/DS/07.13.94

SENSITIVE

TABLE 6-203-1

Summary of Recommended Samples
NAS Alameda Parcel 203

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z13-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 13 Target Area 2	Banned Pesticides	Pesticides	CLP RAS

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 78 and 151) cover approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as support facilities for the two buildings. Underground steam and sewer lines are present on this parcel and are shown on Figure 6-203-1.

Parcel 203 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 203, and specific data regarding chemical occurrence at this parcel are not available

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 78

Building 78 was constructed in 1942 and serves as an administrative office (Figure 6-203-1). This building covers approximately 18,000 square feet and is in fair condition. Building 78 has a concrete foundation with a wood frame and wood ceilings. The structure has old tile floors; carpet covers sixty percent of this old tile.

Utilities located within and immediately surrounding Building 78 include sanitary sewer, storm sewer, steam, water, and overhead electrical lines. A generator used to be located in a shed at the southwest corner of the building; its panels are still present. It is unclear how the generator was fueled.

Information collected during the EBS indicates that activities conducted within this building included training. This building was primarily used as barracks or office space but its present use is as a mobile technical unit.

Corrosives and paint are documented to have been stored in the hazardous materials storage locker at the northwest corner of the building. Less than ten gallons were stored in the steel lockers at the time of visual inspections. The storage cabinets were not kept locked. An additional 200 gallons of nonhalogenated organics, metals, petroleum products, and corrosives are stored within Building 203. There is evidence that storage took place underneath the building; however, only empty wash buckets were observed during the site inspection.

Ten to twenty feet of corroded asphalt were observed on both sides of the boiler room during the site inspection. Peeling paint was also noted on Building 78. No incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 78

Building 151

Building 151 was constructed in 1944 and served as barracks (Figure 6-203-1). Building 151 is a semi-permanent structure that was condemned in 1989 after severe earthquake damage.

Utilities located within and immediately surrounding Building 151 include sanitary sewer, storm sewer, steam, water, and overhead electrical lines.

Information collected during the EBS indicates that activities conducted within this building included housing and schooling.

A concrete pad with a large number of inset pipes was evident adjacent to the south side of the building at the time of the site visit. The only indication of chemical releases in the area was a four-square foot paint spill on the concrete pad. This staining is minor and will not be sampled as part of this PEP.

No incidents such as fires, mishaps, or flooding are documented to have occurred within Building 151. However, the 1989 Loma Prieta Earthquake impacted this building considerably.

Open Space

The open space covers approximately 60 percent of Parcel 203. The ground surface has grass and shrub landscaping, concrete sidewalks, asphalt roadways, an asphalt basketball court, and bare soil.

There is no evidence of former buildings or structures within this open space. Utilities located within and immediately surrounding the open

space include sanitary sewer, storm sewer, steam, water, and overhead electrical lines.

EBS information indicates that this open space was used for vehicle parking and a basketball court.

There is no information regarding chemical use, release, or storage in conjunction with this open space. No incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

An unknown number of underground storage tanks may be present at this parcel, as evidenced by a large concrete pad with numerous pipeways and potential UST inlets observed during the site inspection.

Parcel Boundary Conditions

Parcel 203 is bounded by Parcels 103, 105, 107, and 108. No activities of potential environmental concern were identified at these parcels.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 203, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-203-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program

TABLE 6-203-2

Summary of Data Gaps
NAS Alameda Parcel 203

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 203.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 203.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term landscaped areas on Parcels 104, 105, 109, and 203, that may be used as recreation areas by children living on adjacent Parcels 98 and 103.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-203-2

Summary of Data Gaps
NAS Alameda Parcel 203

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• USTs are potentially located within the open space.
Underground Utilities	• Storm sewer, sanitary sewer, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• Potential chemical storage in the basement of Building 203 should be verified or refuted.

presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 203 because no industrial buildings are present.

As noted earlier, Parcel 203 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for four of the parcels located in Zone 13 (Parcels 104, 105, 109, and 203), because these parcels are located directly adjacent to a residential area. Limited pesticide sampling has been proposed to address any potential concerns regarding their future use resulting from their proximity to a residential area.

Once the data gaps in Table 6-203-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 203 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 203. No parcel-specific target areas were identified for this parcel.

- Zone 13 Target Area 2 (Unpaved/Landscaped Areas): Based on historical aerial photographs, the unpaved open spaces of Zone 13 have been unpaved since 1940. Zone 13 Target Area 2 includes current and former unpaved areas within the Central Light Industrial Zone that are directly adjacent to family housing located on Parcels 98 and 103. Unpaved areas may have been impacted by pesticides that were used to suppress vegetation. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. A range of unpaved areas will be sampled to assess potential risk, if any from historical pesticide application. This target area is classified as having potential likelihood of impacts, and is identified because of the potential recreational use of portions of this zone by children living in the adjacent residential areas. One surface soil sample for pesticides

will be collected from the location shown on Figure 6-203-1. All samples to be collected in this zone-wide target area are listed in Table 6-Z13-1 and shown on Figure 6-Z13-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, underground storage tanks, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-213

PARCEL 213 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 213 at NAS Alameda (Figure 6-213-1). The parcel is located in the north central portion of the base, is 0.4 acres in size, and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site may be located on this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 213, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 213, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 66, 67, 68, 69, 75, 76, 77, 78, 79, 82, 104, 105, 106, 107, 108, 109, 186, 188, 189, and 203. This parcel zone has been designated the Central Light Industrial Zone (Zone 13). The Central Light Industrial Zone encompasses the parcels that have laboratory, electronics, plating, and vehicle maintenance activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 13.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-213-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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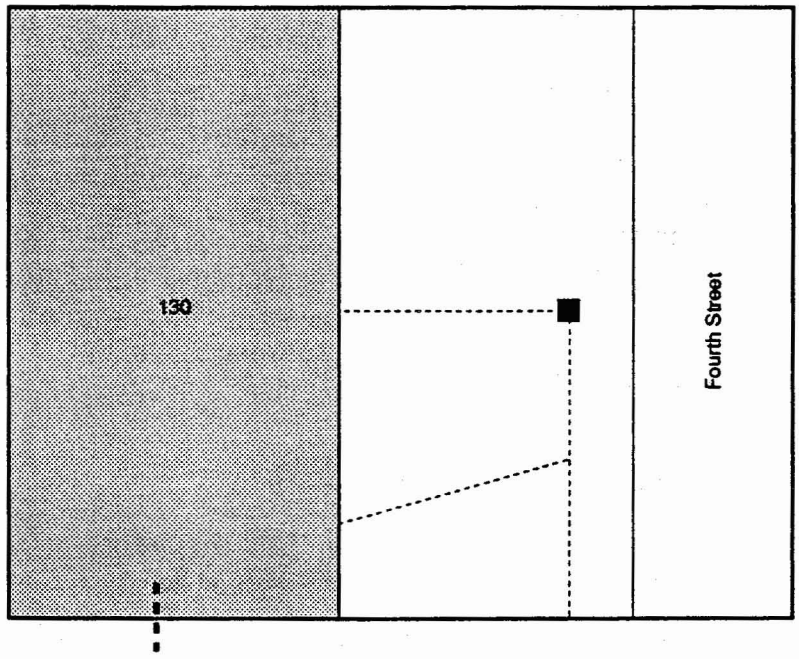
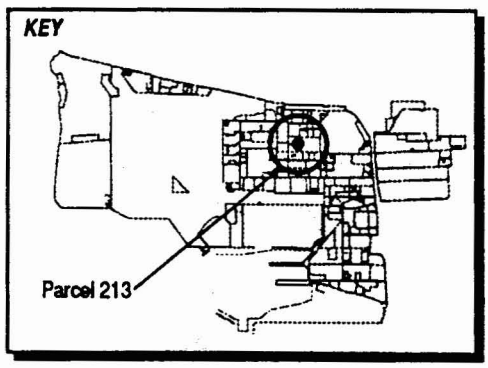
SENSITIVE





LEGEND

- Steam Line
- Sewer Line
- Sanitary Sewer Manhole

Note: No screening-level sampling recommended for this parcel.

1" = 30'

Figure 6-213-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 130 - Offices and Insect Research Facility) covers approximately 40 percent of the parcel. The remainder (60 percent) is open space that is partially landscaped and partially paved. Underground steam and sewer lines are present on the parcel and are shown on Figure 6-213-1.

Parcel 213 is located 200 feet north of an Installation Restoration (IR) Program site (IR Site 8 - Building 114, PWC Shop). No previous investigations have been conducted at Parcel 213, and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental concern within the parcel open space and building are described below.

Building 130

Building 130 was constructed in approximately 1944. It currently houses offices, a laboratory, and an insect research facility. Records identify the building either as the environmental preventative medicine laboratory or the PWC vector control shop. This building covers approximately 10,000 square feet of the parcel and is in fair condition. Building 130 is a constructed of wood on a cinder block foundation.

Utilities located within and immediately surrounding Building 130 include underground sanitary sewer, storm sewer, water, steam, and electrical lines. A transformer is located on a concrete pad on the east side of Building 130. Two hazardous materials storage lockers were observed in the building. The lockers were not accessed during the site inspection. One pint of technical petroleum was observed to be stored on a shelf in the building. Limited quantities of pesticides are reportedly tested on insects raised in the building's insectary. The pesticides are not stored on Parcel 213. Insects raised in the insectary include exotic cockroaches and pests captured on Navy ships at NAS Alameda and abroad. No spills, staining, or incidents are documented in this building.

Open Space

The open space on the parcel is 50 percent paved with concrete sidewalks and asphalt roadways. The remaining 50 percent of the open space is landscaped with grass, bushes, and trees. The majority of the landscaped area of the open space has been continuously maintained since the early 1940s.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 213 is bounded by Fourth Street to the east. Across the street is Parcel 80 (Bachelor Officers' Quarters). Parcels 83 (Clinic), 207 (former Ambulance Garage), and 81 (Counseling Center) border Parcel 213 to the west, north, and south, respectively.

IR Site 8 (Building 114, PWC Shop) is located approximately 200 feet south of Parcel 213. Previous investigations at the IR site have detected VOCs and SVOCs in groundwater. Additional monitoring well installation and sampling are proposed by the IR contractor to further delineate the nature and extent of impacts from IR Site 8. No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigation at the IR site reveals a cause for concern at this parcel, then additional sampling on Parcel 213 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. One RCRA site (site number SWMU/GAP 14) may be located at this parcel. This site is listed as being located on Parcel 188; however, it is also listed as being located in Building 130, which exists on Parcel 213. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this RCRA site does not require sampling because no staining was noted in Building 130. A brief description of the RCRA site is provided below.

It is unknown whether any chemicals were released from Site SWMU/GAP 14. This site is composed of less than 100 milliliters of dilute pesticide and rinse solution. This is consistent with the uses of Building 130, and indicates that this site is most likely located on Parcel 213.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 213, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-213-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 213 because no industrial buildings are present.

As noted earlier, Parcel 213 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 213.

Once the data gaps in Table 6-213-1 are addressed, Parcel 213 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-213-1

Summary of Data Gaps
NAS Alameda Parcel 213

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 213.
Installation Restoration (IR) Sites	• IR Site 8 (Building 114) is located approximately 200 feet south of Parcel 213. Additional subsurface investigation relative to IR Site 8 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-213-1

Summary of Data Gaps
NAS Alameda Parcel 213

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and impacts of the nearby IR site must be resolved before this parcel can be leased or transferred.

SECTION 6-Z14

ZONE 14 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 14 at NAS Alameda (Figure 6-Z14-1). Zone 14 has been designated the Central Warehouse Zone and encompasses the parcels that are located in the warehouse area in the central part of the base. Zone 14 is comprised of Parcels 73, 74, 185, and 206. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and one parcel-specific target area have been identified in this zone. Surface soil sampling will be used to accomplish the screening-level investigation for this zone. Table 6-Z14-1 provides a list of samples and analyses prescribed for this zone, and Figure 6-Z14-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 14, historical activities are discussed below.

Zone 14 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 14 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

was deemed necessary to delineate potential impacts of compounds of concern.

Zone 14, the Central Warehouse Zone, encompasses four parcels that are used for warehousing materials. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, five buildings cover approximately 50 percent of the zone. The remaining 50 percent is open space. The zone area is presently in use as a warehousing area. No other buildings or structures were formerly located on the parcel.

Zone 14 is within 500 feet of three Installation Restoration (IR) Program sites: IR Site 6 (Building 41), IR Site 8 (Building 114), and IR Site 12 (Building 10). No previous investigations have been conducted at Zone 14, and specific data regarding chemical occurrence at this zone are not available.

Sewer and fuel lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 14 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

The EBS indicates that one underground storage tank may exist at this zone on Parcel 206. No other information regarding the tank is available.

RCRA Sites

No RCRA sites are located in this zone.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 4-Z14-1 – NAVAL AIR STATION, ALAMEDA
ZONE 14

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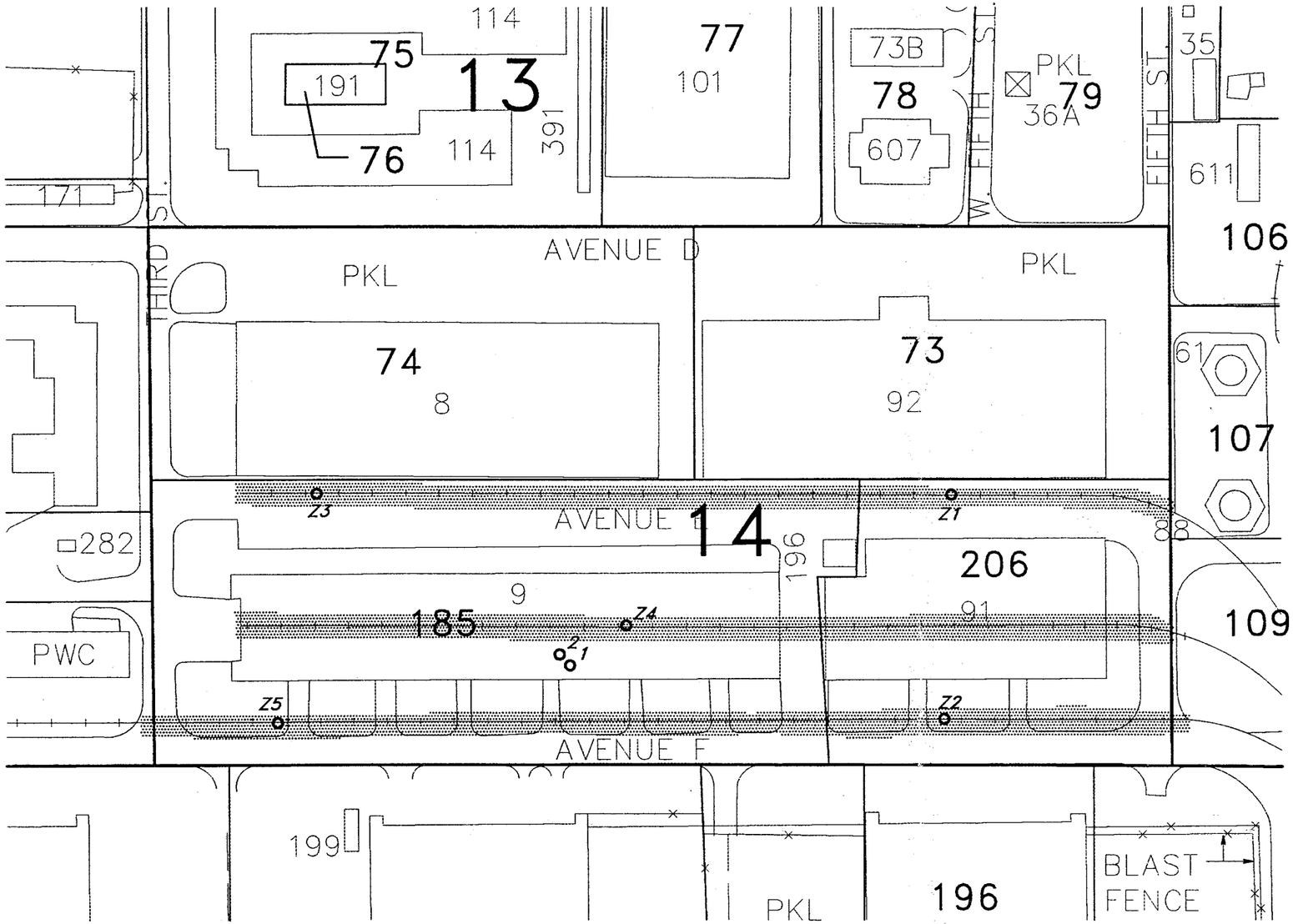
SENSITIVE



LEGEND

1 o	ZONE BOUNDARY SURFACE SOIL SAMPLE & No.
	PAVED TRACKS IN LOADING AREAS

NOTES

Z1 – Z5 ZONE 14 TARGET AREA 1 (RAILROAD TRACKS)

SCALE IN FEET

150 0 150 300

1" = 150'

FINAL

5–19–95

NOTE: FACILITIES AND/OR STRUCTURES SHOWN REFLECT THOSE ORIGINALLY PROVIDED TO ERM-WEST IN COMPUTER AIDED DESIGN (CAD) FORMAT AND MAY NOT BE CURRENT.

FIGURE 4–Z14–1

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL AIR STATION, ALAMEDA

ZONE 14

SIZE	ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,627; 17,628; 17,630; 17,631; 17,627A; 17,629	
E	21219614.DWG		
SCALE	AS NOTED	DATE: 5.19.95/2121.97.10	SHEET 1 OF 1

ERM

SENSITIVE

TABLE 6-Z14-1

Summary of Recommended Samples
NAS Alameda Zone 14

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z14-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z14-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z14-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z14-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	CLP RAS, Modified EPA 8015
Z14-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z14-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

Zone Boundary Conditions

Zone 14 is bounded by Zones 11 and 13. Activities of potential environmental concern on these adjacent zones include aircraft maintenance, fueling, and washdown on Zone 11, and various light industrial activities on Zone 13.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and one parcel-specific target area. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target area and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 14 Target Area

- Zone 14 Target Area 1 (Railroad Tracks): This target area includes paved railroad track areas within or adjacent to the Central Warehouse Zone that are current or former loading areas. Railroad tracks are located throughout the zone. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas for a total of five surface soil samples for this zone target area. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. The samples to be collected in this target area are listed in Table 6-Z14-1. The approximate sampling locations are shown on Figure 6-Z14-1.

  It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of the compounds of concern are negligible, then the railroad track zone target area may be eliminated in this zone and other zones. Alternately, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then

sampling may be modified to analyze for the more limited suite of the compounds of concern, only.

Parcel 73 Target Areas

- No parcel-specific target areas were identified at this parcel.

Parcel 74 Target Area

- No parcel-specific target areas were identified at this parcel.

Parcel 185 Target Areas

- Target Area 1 (Portion of Building 9): The soil beneath the waste oil accumulation area in the maintenance area near the middle of the building may have been impacted by spills or leakage of waste oil. The compounds of concern in this area include TPH and metals. This target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Two surface soil samples will be collected in this target area.

Parcel 206 Target Area

- No parcel-specific target areas were identified at this parcel.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-Z14-1 summarizes screening-level sampling and analysis for the zone-wide target area. Two parcel-specific surface soil samples and five zone-wide surface soil samples will be collected from the locations shown on Figure 6-Z14-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-73

PARCEL 73 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 73 at NAS Alameda (Figure 6-73-1). The parcel is located in the central portion of the base, is approximately four acres in size, and is rectangular in shape. The parcel has been classified as requiring low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 73, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 73, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 74, 185, and 206. This parcel zone has been designated the Central Warehouse Zone (Zone 14). The Central Warehouse Zone encompasses the parcels that are or were formerly used as a warehouse area. During the sampling program development, the parcels located in this zone were evaluated together. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. However, other data gaps remain for this parcel. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 14.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-73-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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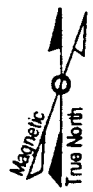
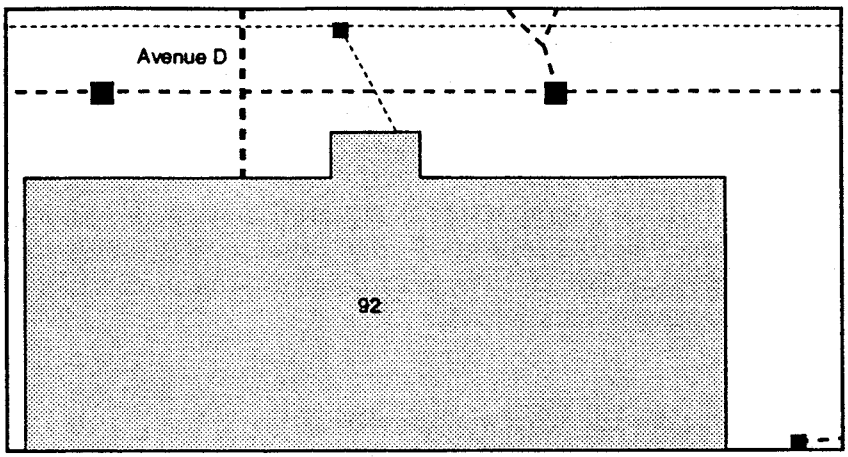
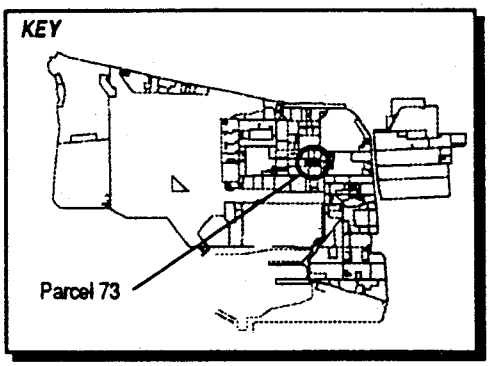
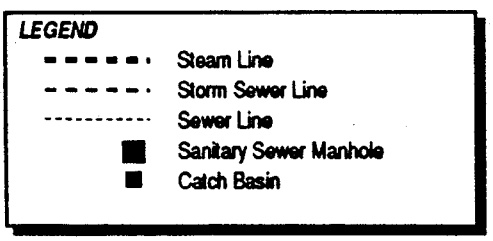
SENSITIVE









1"= 125'

Figure 6-73-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 92) covers approximately 55 percent of the parcel. The remaining 45 percent is open space. The parcel area is presently in use as a general warehouse and supporting facilities. No other buildings appear to have historically existed on Parcel 73. Sewer lines are present on this parcel and are shown on Figure 6-73-1.

Parcel 73 is located approximately 400 feet north of Installation Restoration (IR) Program Site 6 (Building 41) and 300 feet southeast of IR Site 8 (Building 114). No previous investigations have been conducted at Parcel 73, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 92

Building 92 was constructed in 1942 and, according to available documents, has always served as a warehouse (Figure 6-73-1). This building is in good condition. Building 92 is constructed of wood with a concrete floor and wood-construction roof, and covers approximately 89,000 square feet. Utilities located within and immediately surrounding Building 92 include underground sanitary sewer, storm sewer, steam, water, and electrical lines.

Available documents do not include any information indicating the storage of chemicals in this building, and anecdotal reports indicate that the building warehoused "clean" (i.e., non-chemical) materials. The building is currently used to store avionics parts.

Site reviewers noted white and black staining in the north central area of the building near offices that appeared to be the result of spillage of a corrosive material. The spill/overflow occurred on a concrete surface and resulted in etching of the concrete. Staining from forklift operations was also documented during the site inspection. Approximately 20 percent of the entire floor area was covered with

scattered brown-black oily stains two to three inches in diameter that appeared to result from ongoing forklift operation. These areas of staining are relatively minor on concrete in good condition, and will not be sampled.

A heating-ventilation-air conditioning (HVAC) system is not documented to be present in Building 92. Significant dust was noted in the building during visual inspections. Site inspections also revealed considerable roof leaks, and peeling paint on the exterior and interior walls of Building 92. The steam lines have insulation that is in poor condition in some areas, and piping in the building is coated with materials potentially containing asbestos. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 92.

Open Space

The open space covers approximately 45 percent of the parcel. The open space is completely paved and is primarily used for vehicle parking. The pavement is in good condition. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, steam, water, and electrical lines.

No chemical storage is documented to have occurred in the open space of Parcel 73. One transformer was noted east of Building 92. No spills were documented in the open space, and staining is limited to that related to vehicle parking.

No other incidents, such as fires, mishaps, or flooding are documented to have occurred within the open space. Railroad tracks run near the southern parcel boundary, but are located within Parcel 206.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 73 is bounded by Parcels 77, 78, 79, 106, 107, 185, 206, and 74. The storage facility on Parcel 206 was identified as an area of potential concern.

No parcels contiguous with Parcel 73 are IR sites, therefore, no sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 73, then additional sampling on Parcel 73 may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 73, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-73-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 73 because no industrial buildings are present.

Once the data gaps in Table 6-73-1 are addressed, Parcel 73 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-73-1

Summary of Data Gaps
NAS Alameda Parcel 73

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 73.
Installation Restoration (IR) Sites	• Parcel 73 is located approximately 400 feet north of IR Program Site 6 (Building 41) and 300 feet southeast of IR Site 8 (Building 114).
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program. LBP was noted by site reviewers as a potential issue at this parcel.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-73-1

Summary of Data Gaps
NAS Alameda Parcel 73

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified at this parcel. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and impacts of the nearby IR sites must be resolved before this parcel can be leased or transferred.

SECTION 6-74

PARCEL 74 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 74 at NAS Alameda (Figure 6-74-1). The parcel is located in the central portion of the base, is approximately nine acres in size, and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 74, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 74, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 73, 185, and 206. This parcel zone has been designated the Central Warehouse Zone (Zone 14). The Central Warehouse Zone encompasses the parcels that are or were formerly used as a warehouse area. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Other data gaps also remain for this parcel and other parcels in this zone. Zone-wide

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ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-74-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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SENSITIVE

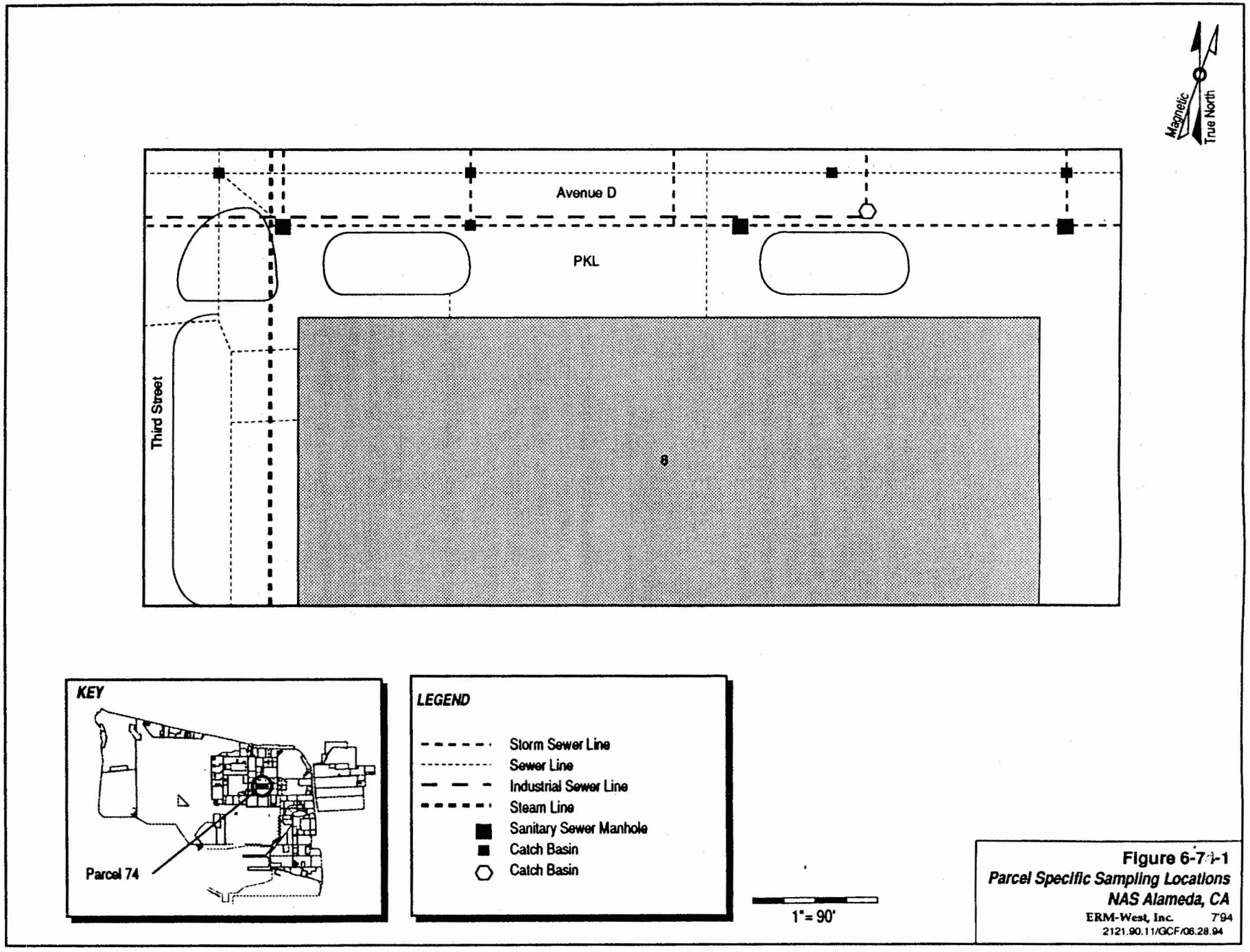

Figure 6-7[illegible]-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7/94
2121.90.11/GCF/06.28.94

SENSITIVE

considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 14.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 8) covers approximately 75 percent of the parcel. The remaining 25 percent is open space. The parcel area is presently in use as a warehouse area. No other buildings or structures were formerly located on the parcel. Sewer lines are present on this parcel and are shown on Figure 6-74-1.

Parcel 74 is located adjacent to Installation Restoration (IR) Program Site 8 (Building 114), and 400 feet northwest of IR Site 6 (Building 41). No previous investigations have been conducted at Parcel 74, and specific data regarding chemical occurrence at this parcel are not available. Railroad tracks are located near the southern boundary of Parcel 74 with Parcel 185, but are located completely within Parcel 185.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 8

Building 8 was constructed in 1940 and has served as a general warehouse since that time (Figure 6-74-1). This building is in fair condition. Building 8 is a three-story building constructed of concrete, with wood exterior siding and built-up roofing; it covers approximately 282,000 square feet.

Utilities located within and immediately surrounding Building 8 include underground sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines. Several transformers are documented to have been used in Building 8; thirteen are currently located in Vault B in the southern portion of the building. (The vault entry is located outside the building). Leakage from the top of at least one transformer was noted, and PCB-containing transformers have been used in Building 8.

The Navy Regional Data Automation Center (NARDAC) section of Building 8 has a tile floor and a drop ceiling and is located on the first floor. Sections of the second and third floors of Building 8 comprise the Defense Logistics Area (DLA). The DLA is used for packaging airplane parts. A conveyor system is located on the second floor in the DLA.

A portion of Building 8 serves as an administrative office and was formerly a warehouse for the NAS Alameda Command. The NAS Alameda Command warehouse was used to store aircraft and dry parts. A former print shop was located in the NAS Alameda Command area. A sink present in the former print shop was used for microfiche processing. Processing chemicals may have been flushed or rinsed down the sink. The NAS Alameda Command area has damaged ceiling tiles, which may contain asbestos, and significantly decayed wall surfaces.

Approximately 400 gallons of polymeric isocyanate urethane foam resin, adhesive, and urethane foam resin were observed in the DLA area. Foam resin is stored in original large, plastic containers. Expired yellow fever vaccine is stored on the third floor in the DLA.

The NTCC area of Building 8 houses the communication for the entire base. Hazardous waste was formerly stored here in a hazardous waste cabinet. All hazardous wastes are currently sent to a controlled accumulation area.

Chemicals stored in the southeast portion Building 8 on the first floor include aerosols, corrosion preventatives, adhesives, enamels, and sodium hydroxide. All of these are stored on pallets, in either metal containers or cardboard boxes. The total quantity of these stored chemicals is approximately 160 gallons. Radionucleides were noted to be stored in this area during the site inspection as well. They were reportedly pending shipment to Oakland. The type(s) of radionucleides present could not be determined from the packaging. A total chemical inventory for Building 8 dated 1993 lists paint, non-halogenated and halogenated organic compounds, petroleum products, fuel, and corrosives present in quantities up to 550,000 gallons. Because only a small fraction of this quantity was noted during the site inspection, this number likely reflects the yearly authorized capacity of the building, and not actual inventories.

Evidence of polymer or urethane spillage (a two foot by two foot stain) was noted during the site inspection in the DLA. Drips, leaks, and overflow of oil and battery fluid also caused staining in the DLA on the second floor. Staining was also noted near the conveyor belt and air compressor in this area of the second floor. Site reviewers noted

scattered oil staining in the vicinity of the forklift recharging units. Kitty litter/sand was spread across the these stains during visual inspections as a partial clean up measure. Since the only staining noted in this building occurred on the upper floors, no sampling is called for in this PEP in response to the staining. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 8.

Open Space

The open space covers approximately 25 percent of the parcel. The ground surface of the open space contains both paved and landscaped areas. The paved areas contain a mix of asphalt and concrete pavement. The north and east areas of the open space are paved, and the western area (approximately five percent of the parcel area) is covered with grass. The pavement is generally in moderately good condition. Utilities located within and immediately surrounding Building 8 include underground sanitary sewer, storm sewer, steam, water, electrical, and industrial sewer lines.

EBS information indicates that activities conducted within this open space include material storage, and equipment and vehicle parking. A receiving area is located on the north side of Building 8. A diesel fuel storage area exists outside of the southeast corner of Building 8. The fuel is held in a large metal, rectangular container, and is used to fuel a back-up generator located on the concrete dock. Approximately 100 gallons of diesel fuel are stored here. Stains were observed on the concrete around the storage area, and outside the southeast corner of Building 8. This stained area is addressed by Target Area 1. One spill of oily wastewater and detergent was noted by site reviewers on Third Street, next to the north driveway for Building 6. This spill is minor and is not addressed by sampling.

No other incidents are documented to have occurred within this open space. Railroad tracks lie near the southern border of parcel 74, but are located on Parcel 185.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 74 is bounded by Parcels 75, 68, 73, and 185. Parcel 75 is IR Site 8 (Building 114). Activities of concern on these adjacent parcels include warehouse activities on Parcels 73 and 185, fuel storage on Parcel 68, and PWC shop activities and storage of pesticides on Parcel 75. Third Street borders Parcel 74 to the west. If the results of any sampling proposed for adjacent parcels indicates that activities on these parcels may have impacted Parcel 74, then additional sampling on Parcel 74 may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 74, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-74-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 74 because no industrial buildings are present.

As noted earlier, Parcel 74 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use

TABLE 6-74-1

Summary of Data Gaps
NAS Alameda Parcel 74

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 74.
Installation Restoration (IR) Sites	• Parcel 74 is located adjacent to IR Program Site 8 (Building 114) • Parcel 74 is located 400 feet northwest of IR Site 6 (Building 41).
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-74-1

Summary of Data Gaps
NAS Alameda Parcel 74

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 74.

Once the data gaps in Table 6-74-1 are addressed, Parcel 74 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, IR Sites, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-185

PARCEL 185 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 185 at NAS Alameda (Figure 6-185-1). The parcel, which is located in the central portion of the base, is approximately seven acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling is the procedure called for in the screening-level investigation in these areas. Table 6-185-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 185, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 185, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 73, 74, and 206. This parcel zone has been designated the Central Warehouse Zone (Zone 14). The Central Warehouse Zone encompasses the parcels that are or were formerly used as a warehouse area. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-185-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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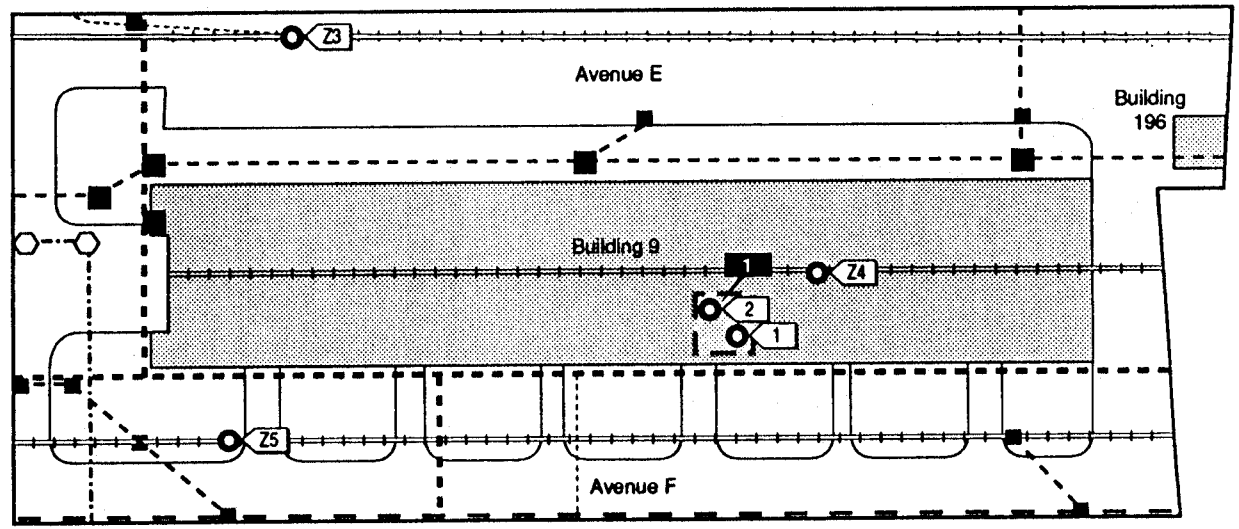
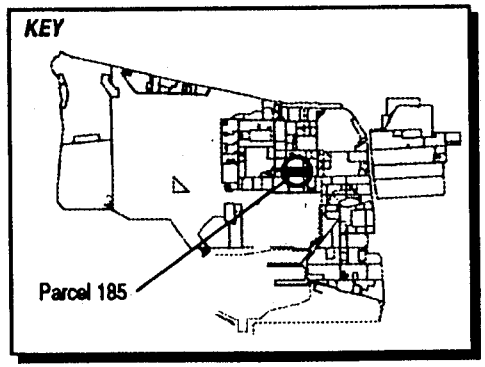
SENSITIVE





LEGEND

- Target Area 1
- Industrial Waste Line
- Steam Line
- Storm Sewer Line
- Sewer Line
- Fuel Lines Abandoned
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin

1"= 125'

Figure 6-185-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7/94
2121.90.11/GCF/06.28.94

SENSITIVE

TABLE 6-185-1

Summary of Recommended Samples
NAS Alameda Parcel 185

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
185-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP Scan
185-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil	TPH, Metals	Mod.EPA 8015, CLP RAS
185-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil	TPH, Metals	Modified EPA 8015, ICAP Scan
Z14-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z14-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	CLP RAS, Modified EPA 8015
Z14-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z14-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Creosote, Tie Tar, PCBs, Fuels, Oils	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

consider the data collected for the entire zone. Other data gaps also remain for this parcel and other parcels in this zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 14.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 9 and 196) cover approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as a general warehouse and supporting facilities. Available documents indicate that no other buildings were ever located on this parcel. Sewer lines are present on this parcel and are shown on Figure 6-185-1.

Parcel 185 is located adjacent to Installation Restoration (IR) Program Site 12 (Building 10), approximately 100 feet northwest of IR Site 6 (Building 41), and approximately 300 feet south of IR Site 8 (Building 114). No previous investigations have been conducted at Parcel 185, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 9

Building 9 was constructed in 1940 and has served as a general warehouse (Figure 6-185-1) since that time. This building is in fair condition. Building 9 is constructed of a steel frame with plastic siding and a concrete floor; it covers approximately 120,000 square feet. Utilities located within and immediately surrounding Building 9 include underground storm sewer, steam, water, electrical, industrial sewer, and abandoned fuel lines.

Available EBS information indicates that activities conducted within this building have included general storage, maintenance, and aircraft storage. The eastern portion of the building is currently used as office space and the western portion is used as a storage/processing area for

aircraft parts. The storage area has multi-level racks used to store goods, and the north side of the building is open-sided to allow storage of large, bulky items. Tracks for a material retrieval system run along the east-west length of the building. Electric-powered cabs run along the rail and retrieve and place inventory.

Small amounts (less than 10 gallons) of paint, bleach, and floor finish are documented to have been stored on the ground of Building 9. Lubricating oil (less than 20 gallons) for the cabs of the storage retrieval system is stored in the maintenance area near the middle of the building. Less than ten gallons of used lubricating oil was stored in Building 9 during the site inspection. The stored oil is an accumulation of used oil collected in drip pans attached under the conveyor belt motors. The ground surface in the waste oil storage area was heavily stained at the time of the site inspection. Site reviewers also observed cracks and openings in the foundation of Building 9. This stained area is addressed by Target Area 1. The areas under the drip pans on the conveyor belt appeared relatively stain-free.

Several oily stains were noted along the wall in the northeast corner adjacent to the air compressor. The stains did not appear to site reviewers to be associated with the compressor, and were relatively minor. A yellowish-white stain was noted in the area adjacent to the forklifts, approximately three feet in diameter. Oily stains exist along the entire length of all eight cab rails in Building 9. These stains area addressed as part of the zone-wide railroad track target area. The stains are most likely due to leaks of lubricating oils, transmission fluid and/or hydraulic oil. None of the chemical releases in this building appeared to have been cleaned up.

Significant dust was noted on interior surfaces and paint was peeling off of the exterior surfaces of the building. Several transformers of both known and unknown PCB classification are documented to have been stored in Building 9. Only one transformer of unknown PCB classification was noted during the site inspection. It was located in a covered storage bay on the north side of the building. No incidents, such as fires, mishaps, flooding, or crashes, are documented to have occurred within Building 9. Radioactive materials and ordnance are reported to have formerly been stored along the north edge of Building 9.

Building 196

Building 196 was constructed in 1943 and served as a storage area for flammable substances (Figure 6-185-1). This building is in fair condition. Building 196 has metal walls and roofing and a concrete

floor, and covers approximately 1,000 square feet. Utilities located within and immediately surrounding Building 196 include underground storm sewer, steam, water, electrical, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included hazardous and flammable materials storage. Site reviewers were unable to enter the building; the doors were locked. Employee interviews indicated that the building currently houses oil for forklifts. According to the employee interviews, two to three 55-gallon drums of oil are stored in Building 196.

No information is available regarding the presence of a heating-ventilation-air conditioning (HVAC) system in Building 196. No incidents, such as fires, mishaps, flooding, or crashes, are documented to have occurred within Building 196.

Open Space

The open space covers approximately 60 percent of the parcel, and is completely paved with concrete and asphalt. The pavement is in moderately good condition.

Two oil-filled electrical switches and one dry transformer are located within the open space. No former buildings appear to have previously existed within the open space. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines.

EBS information indicates that activities conducted within this open space have included material storage and vehicle parking. Railroad tracks run east-west through the parcel on both the north and south sides of Building 9.

No chemical storage or spills are documented to have occurred in the open space of Parcel 185. A blue stain was noted in the northwest area near the loading area for Building 8 that was thought by site reviewers to be the result of a minor paint spill or overspray.

No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel. Two active and five abandoned tanks are located within 100 feet of Parcel 185 on adjacent parcels.

Parcel Boundary Conditions

Parcel 185 is bounded by Parcels 68, 186, 69, 70, 195, 74, 73, 206, and 71. Parcel 69 is IR Site 12 (Building 10). Activities of concern on adjacent parcels include materials storage on Parcels 73, 74, and 206; fuel storage and dispensing on Parcels 68, 186 and 69; and aircraft maintenance, fueling, and washdown on Parcels 70, 71, and 195. Surface and subsurface soil samples collected at IR Site 12 as part of previous investigations detected high levels of TPH, and known releases of fuels have occurred on Parcel 186. Avenues E and F border Parcel 185 to the north and south, respectively.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 185, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-185-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with abandoned fuel lines and sewer lines are also addressed separately. Sampling associated with sewer and abandoned fuel lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other

TABLE 6-185-2

Summary of Data Gaps
NAS Alameda Parcel 185

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 185.
Installation Restoration (IR) Sites	• Parcel 185 is located adjacent to IR Program Site 12 (Building 10). • Parcel 185 is located approximately 100 feet northwest of IR Site 6 (Building 41). • Parcel 185 is located approximately 300 feet south of IR Site 8 (Building 114).
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• West Parcel Boundary: The soil on the west side of Parcel 185 may have been impacted by spills or leakage of petroleum products stored and dispensed on Parcels 69 and 186.
Potential Zone-Wide Release Areas	• Paved Railroad Tracks in Loading Areas.
Potential Parcel-Specific Release Areas	• Target Area 1 (Portion of Building 9)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-185-2

Summary of Data Gaps
NAS Alameda Parcel 185

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 185 because no industrial buildings are present.

Once the data gaps in Table 6-185-2 are addressed, and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 185 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 14. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-185-2.

- Target Area 1 (Portion of Building 9): The soil beneath the waste oil accumulation area in the maintenance area near the middle of the building may have been impacted by spills or leakage of waste oil, as evidenced by staining in this area. The compounds of concern in this area include TPH and metals. This target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Two surface soil samples will be collected from this target area. The samples are listed in Table 6-185-1.

- Zone 14 Target Area 1 (Railroad Tracks): This target area includes current and former railroad track areas within or adjacent to the Central Warehouse Zone that have been used as loading areas. Railroad tracks are located in the northern, central, and southern portions of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. Three of the five surface soil samples for this zone target area are located on

this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. The samples to be collected in this target area are listed in Table 6-185-1. The approximate sampling locations are shown on Figure 6-185-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-185-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 185. Two surface soil samples will be collected from the parcel-specific locations shown on Figure 6-185-1. Three surface soil samples will be collected from the zone-wide location as shown on Figure 6-185-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The site-specific conditions at Target Area 1 results in a density of field surface soil samples equal to the protocol standard. Soil sampling locations shown on Figure 6-185-1 are approximate and should be adjusted in the field to reflect specific field conditions. The samples in Target Area 1 should be located in the areas with the most significant staining.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-206

PARCEL 206 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 206 at NAS Alameda (Figure 6-206-1). The parcel is located in the central portion of the base, is approximately three acres in size, and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide target investigation area (target area) and no parcel-specific target areas have been identified on this parcel. Surface soil sampling is the procedure called for in the screening-level investigation in these areas. Table 6-206-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 206, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 206, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 73, 74, and 185. This parcel zone has been designated the Central Warehouse Zone (Zone 14). The Central Warehouse Zone encompasses the parcels that are or were formerly used as a warehouse area. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should

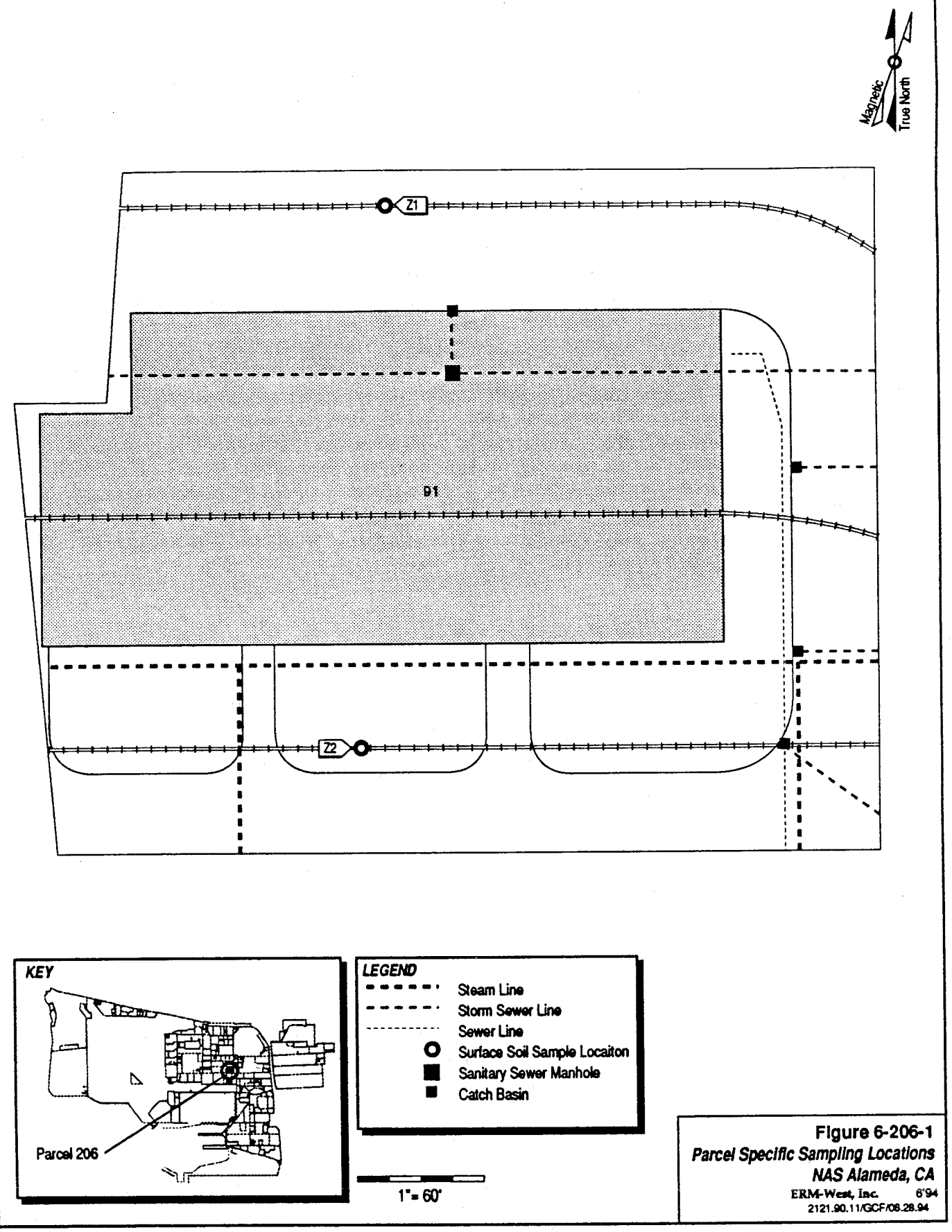


Figure 6-206-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/08.28.94

TABLE 6-206-1

Summary of Recommended Samples
NAS Alameda Parcel 206

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z14-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Fuels, Oils, PCBs, Creosote, Tie Tar	Lead, TPH, PCBs, SVOCs	ICAP Scan, Mocified EPA 8015, EPA 8080, EPA 8270
Z14-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 14 Target Area 1	Fuels, Oils, PCBs, Creosote, Tie Tar	Lead, TPH, PCBs, SVOCs	ICAP Scan, Mocified EPA 8015, EPA 8080, EPA 8270

consider the data collected for the entire zone. Other data gaps also remain for this parcel and other parcels in this zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 14.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 91) covers approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as a storage and transfer area for aviation parts. There is no available documentation regarding the presence of former buildings or structures on Parcel 206. Underground abandoned fuel lines and sewer lines are present on this parcel and are shown on Figure 6-206-1.

Parcel 206 is adjacent to Installation Restoration (IR) Program Site 6 (Parcel 196, Building 41). IR Site 6 is located directly south of Parcel 206. No previous investigations have been conducted at Parcel 206, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 91

Building 91 was constructed in 1942 and has served as a wood shop. It is currently used as a storage and transfer warehouse for aviation parts including rotor assemblies, turbines, and ejection seats (Figure 6-206-1). This building is in moderately good condition. Building 91 is constructed of wood with a concrete floor, and covers approximately 53,000 square feet. Railroad tracks partially covered with asphalt run east-west through the building.

Utilities located within and immediately surrounding Building 91 include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. A transformer

with oils containing 50 ppm PCBs is documented to have been stored in and subsequently removed from Building 91.

Approximately 12 gallons of adhesives and non-halogenated organic compounds are documented to have been stored in the northwest corner of the warehouse on a wooden bench. These chemicals were observed during visual inspections, and were located approximately 15 feet away from a floor drain. Fire resistant hydraulic fluid was stored on the north side of Building 91 during the site inspection. Thirty-five gallons of the fluid were stored in containers on an open wooden platform.

Oil and fuel stains were observed scattered throughout the concrete warehouse floor during the site inspection. These stains are relatively minor and located on concrete, and will not be sampled. The floor also appeared to have been buffed with oil. The washdown from the warehouse floor flows into drains located throughout the building. Scraps and floor residue were reportedly washed down the drains when the building was used as a wood shop.

There is an old sawdust collection system at the west end of Building 91 that is not longer in use. Paint chips and peeling paint were noted on the exterior walls and roof during the site review. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 91.

Open Space

Open space covers approximately 60 percent of the parcel. The open space is completely paved with a combination of asphalt and concrete. Some areas of the pavement were observed to be in poor condition. This open space is currently used for support activities for the warehouse, and vehicle parking.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, electrical, abandoned fuel, and industrial sewer lines. Railroad tracks run through the open space on both the north and south sides of Building 91, and enter Building 91 from the east.

There are two above ground storage tanks (ASTs) located near the northeast corner of Building 91. One AST stores approximately 200 gallons of propane, and is mounted on a concrete pad that appeared clean during the site inspection. The second AST appeared to contain natural gas or propane. The contents of this tank were seeping out, and

the odor was detectable from 100 feet away. This area is addressed as Target Area 1.

Potential ACM was observed by the site reviewers on the connecting steam lines, south of Building 91. Site reviewers also observed a cover with "gasoline" embossed on it on the east side of Building 91. The covers could not be removed. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One underground storage tank may be present at this parcel. An embossed cover for "gasoline" was observed during a visual inspection at this parcel. No other information regarding the potential tank is available.

Parcel Boundary Conditions

Parcel 206 is bounded by Parcels 73, 107, 185, 109, 71, and 196. Parcel 196 is IR Site 6 (Building 41). Activities of concern on these adjacent parcels include aircraft maintenance, washdown, and materials storage.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 206, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-206-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with abandoned fuel and sewer lines are also addressed separately. Sampling associated

TABLE 6-206-2

Summary of Data Gaps
NAS Alameda Parcel 206

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 206.
Installation Restoration (IR) Sites	• Parcel 206 is adjacent to IR Program Site 6 (Parcel 196, Building 41).
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• (Railroad Tracks): Paved tracks in current or former loading areas.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST is potentially located on Parcel 206.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-206-2

Summary of Data Gaps
NAS Alameda Parcel 206

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• Other data gaps identified include an observed cover with "gasoline" embossed on it on the east side of Building 91.

with sewer and abandoned fuel lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 206 because no industrial buildings are present.

Once the data gaps in Table 6-206-2 are addressed, and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 206 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains no parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 14. The nature and location of the zone-wide target area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 14 Target Area 1 (Railroad Tracks): This target area includes railroad track areas within or adjacent to the Central Warehouse Zone that are in current or former loading areas. Railroad tracks are located in the northern, southern, and central portions of this parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. Two of the five surface soil samples for this zone target area are located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. The samples to be collected in this target area are listed in Table 6-206-1. The approximate sampling locations are shown on Figure 6-206-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the zone target area and to identify any areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-206-1 summarizes screening-level sampling and analysis for the zone target area on Parcel 206. Two surface soil samples will be collected from the locations shown on Figure 6-206-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-Z15

ZONE 15 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 15 at NAS Alameda (Figure 6-Z15-1). Zone 15 has been designated the Bachelor Officer's Quarters Zone. Zone 15 is comprised of Parcels 80, 85, 86, 87, 88, 89, and 90. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide or parcel-specific target investigation areas (target areas) have been identified in this zone. None of the parcels in this zone have been reclassified from BRAC Category 7. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 15, historical activities are discussed below.

Zone 15 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 15 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 15, the Bachelor Officer's Quarters Zone encompasses seven parcels that include Bachelor Officer's Quarters or related support facilities. During the sampling program development, the parcels

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1935. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, five buildings cover approximately 25 percent of the zone. The remaining 75 percent is open space. Four buildings were formerly located on the parcel and have since been demolished.

Zone 15 is within 500 feet of one Installation Restoration (IR) Program site (IR Site 8 (Building 114)). No previous investigations have been conducted at Zone 15, and specific data regarding chemical occurrence at this zone are not available.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 15 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this zone. Neither the document review nor the site inspection identified any information that indicated that any tanks are or may have been present at this zone.

RCRA Sites

No RCRA sites are located in this zone

Zone Boundary Conditions

Zone 15 is bounded by Zones 8, 12, 13, and 16. Activities of concern on these adjacent zones include light industrial activities in Zone 13.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 4-Z15-1 – NAVAL AIR STATION, ALAMEDA
ZONE 15

FOR ADDITIONAL INFORMATION, CONTACT:

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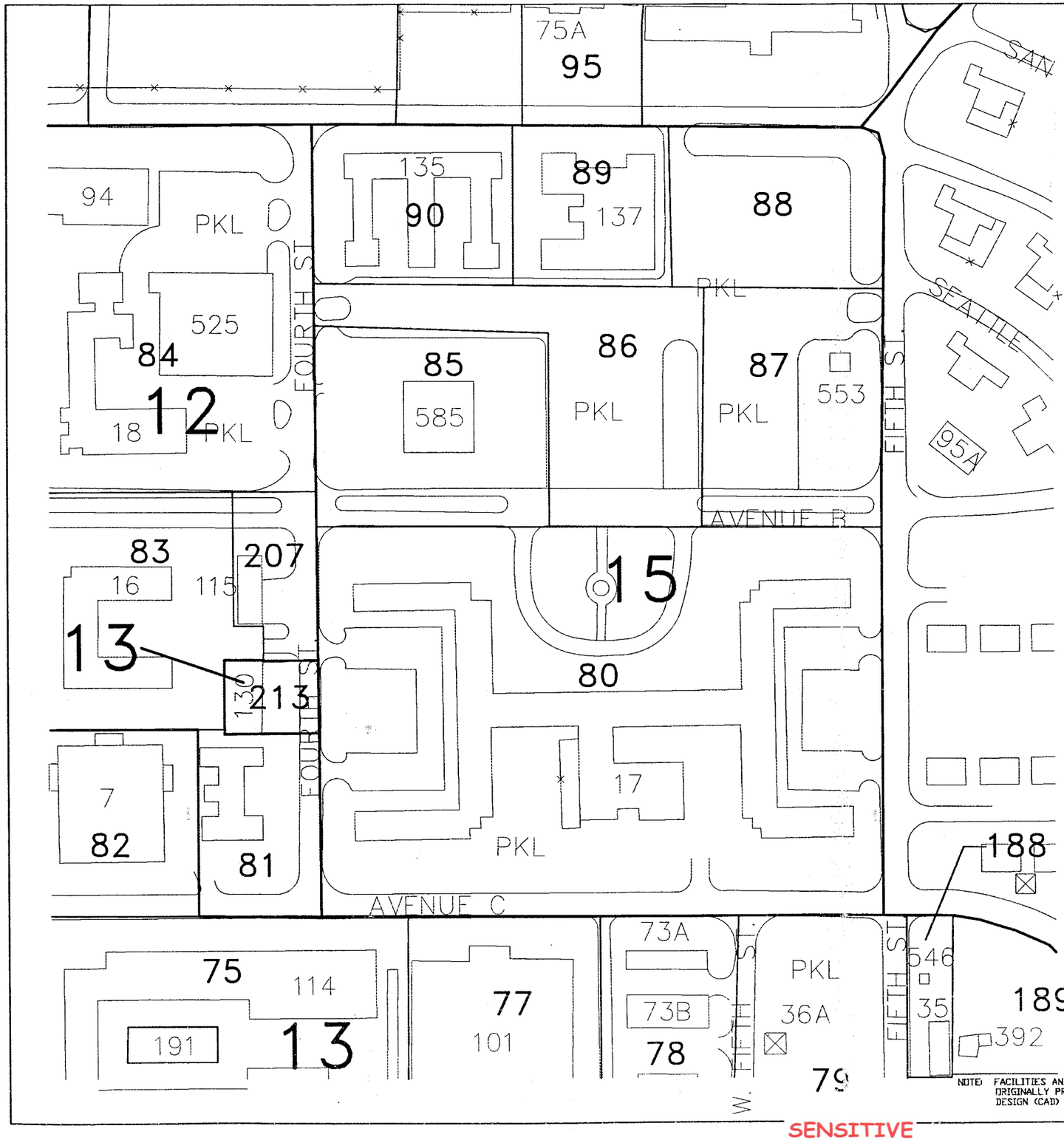
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



LEGEND

ZONE BOUNDARY

SCALE IN FEET

150 0 150 300 450

1" = 150'

FINAL

5-19-95

NOTE: FACILITIES AND/OR STRUCTURES SHOWN REFLECT THOSE ORIGINALLY PROVIDED TO ERM-WEST IN COMPUTER AIDED DESIGN (CAD) FORMAT AND MAY NOT BE CURRENT.

FIGURE 4-Z15-1

NAVAL FACILITIES ENGINEERING COMMAND

NAVAL AIR STATION, ALAMEDA
ZONE 15

SIZE	ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,627; 17,628; 17,630; 17,631; 17,627A; 17,629
B	21219615.DWG	
SCALE AS NOTED	DATE: 5.19.95/2121.97.10	SHEET 1 OF 1

SENSITIVE

Zone Target Areas and Compounds of Concern

No target areas were identified in this zone.

SECTION 6-80

PARCEL 80 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 80 at NAS Alameda (Figure 6-80-1). The parcel is located in the central portion of the base, is 10.6 acres in size, and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 80, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 80, consistent with objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 85, 86, 87, 89, and 90. This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that primarily have housing for Navy personnel. The parcels in this zone were considered as a whole during the evaluation. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 15.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-80-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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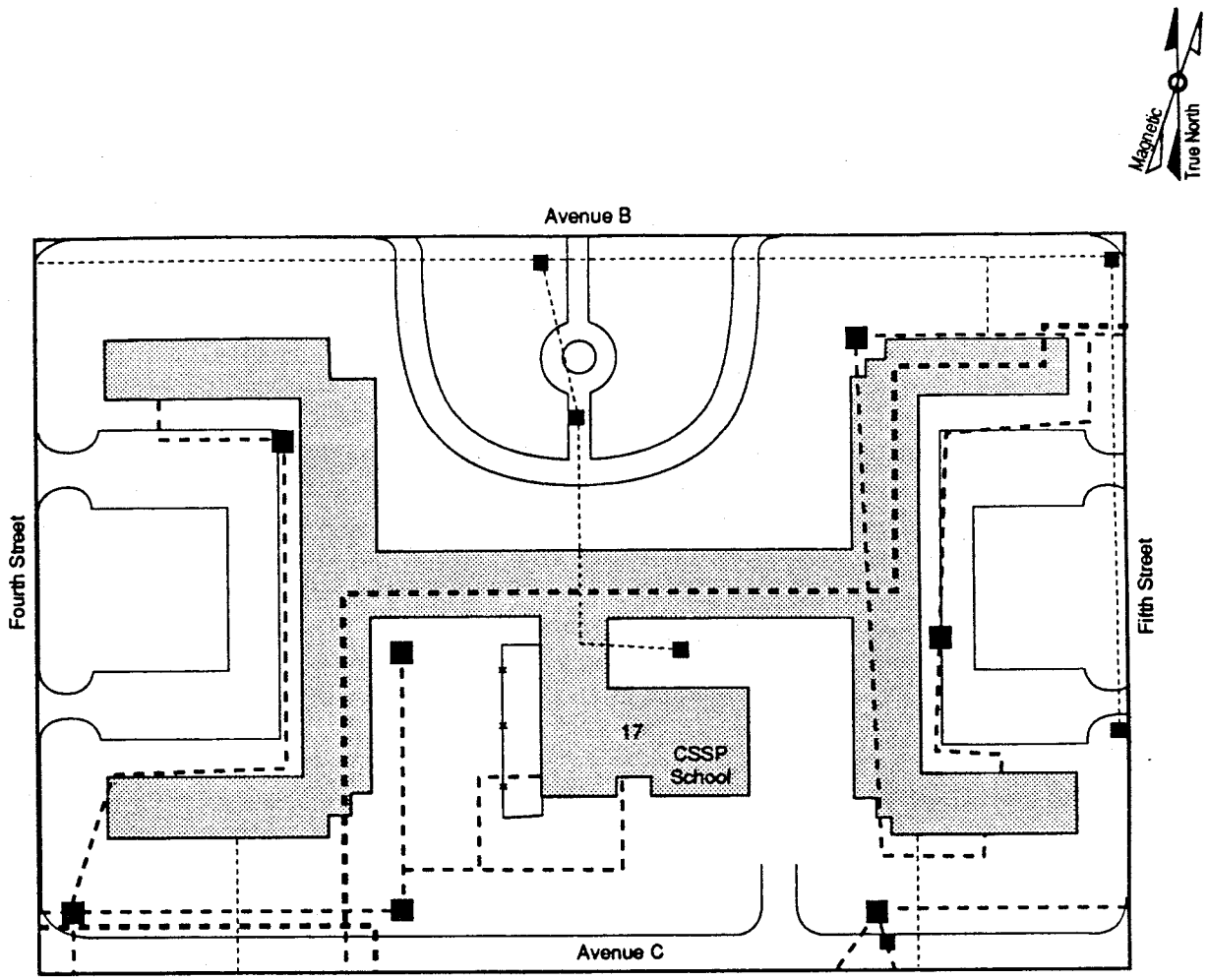
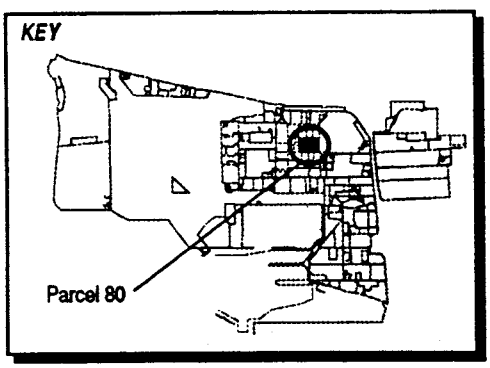
E-MAIL: diane.silva@navy.mil

SENSITIVE





LEGEND

- Steam Line
- Storm Sewer Line
- Sanitary Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

1"= 125'

Figure 6-80-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently Building 17, the Bachelor Officers' Quarters, covers 15 percent of the parcel. The remaining 85 percent is open space that is partially landscaped and partially used for parking. No other buildings are documented to formerly have existed at this parcel. Underground sewer lines are present on this parcel and are shown on Figure 6-80-1.

Parcel 80 is located immediately northeast of an Installation Restoration (IR) Program site (IR Site 8, (Building 114, PWC Shop)). Previous investigations have not been conducted at Parcel 80; however, specific data regarding potential chemical occurrence are available from Parcel 75. Previous investigations in the northeast corner of Parcel 75 have included surface soil sampling, subsurface soil sampling, and groundwater sampling. Surface soil sampling results indicated the presence of the following compounds of concern: pesticides and herbicides (4,4'-DDE, 4,4'-DDT, and Dieldrin), PCBs (Aroclor 1260), and metals (barium, chromium, copper, lead, and zinc). Additional sampling is currently proposed by the IR contractor.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on the parcel will be addressed in other sampling programs and are not considered in this PEP. Based on the age of Building 17 and EBS observations, peeling lead-based paint (exterior of building) and friable asbestos (phone room, former walk-in coolers) are potential concerns on Parcel 80.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 17

Building 17 was constructed in approximately 1941 to serve as the Bachelor Officers' Quarters. This building is generally in good condition. The building is a two-story structure, constructed of a wood frame covered with stucco. The building's floor is concrete, tile, and carpet. The floor plan covers a total of approximately 145,000 square feet. The building has approximately 290 rooms and includes a former mess hall and a secure area that could not be accessed during the site inspection known as the CSSP School (Figure 6-80-1).

Utilities located within and immediately surrounding Building 17 include underground sanitary sewer, storm sewer, steam, water, and electrical lines. One transformer is located in the south-central part of Building 17, and a second transformer is located in the open space east of Building 17.

Open Space I

Open Space I is defined as the paved areas surrounding Building 17. This space covers approximately 50 percent of the parcel open space. The ground surface of Open Space I is surfaced with asphalt. The pavement is generally in good condition. According to site inspection data, the asphalt south of the central wing of the building was stained with what appeared to be white paint. Oil stains from vehicles were also observed in the parking areas. This staining is minor and will not be addressed by sampling.

Open Space II

Open Space II consists of the parcel grassy areas and a small garden area. These areas cover approximately 50 percent of the parcel open space. A four foot by eight foot grease trap is located within this open space outside the former kitchen, southwest of the building. The trap was filled with water and debris when inspected. A small compost pile, a probable grease drum, a one-quart oil container, and a plastic oil drip pan were located adjacent to it. The majority of the landscaped area of Open Space II has been continuously maintained since approximately 1941.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 80 is bounded by parcels 81, 213, 207, 85, 86, 87, 98, 79, 78, 77, and 75. Activities associated with Parcel 75 (IR Site 8, Building 114-PWC Shop) are of potential environmental concern for Parcel 80. Parcel 75 is located southwest of Parcel 80, across Avenue C. A portion of Building 114 was historically used for PWC maintenance activities including pesticide storage and blending.

No sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR site reveal a cause for concern at Parcel 80, then additional sampling on Parcel 80 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 80, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-80-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 80 because no industrial buildings are present.

As noted earlier, Parcel 80 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed at this parcel.

Once the data gaps in Table 6-80-1 are addressed, Parcel 80 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-80-1

Summary of Data Gaps
NAS Alameda Parcel 80

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 80.
Installation Restoration (IR) Sites	• IR site 8 (Building 114, PWC shop) is located adjacent (south) to Parcel 80. Additional investigation relative to IR site 8 is proposedby the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-80-1

Summary of Data Gaps
NAS Alameda Parcel 80

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, storm sewer, water, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and Installation Restoration Sites must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-85

PARCEL 85 EVALUATION PLAN

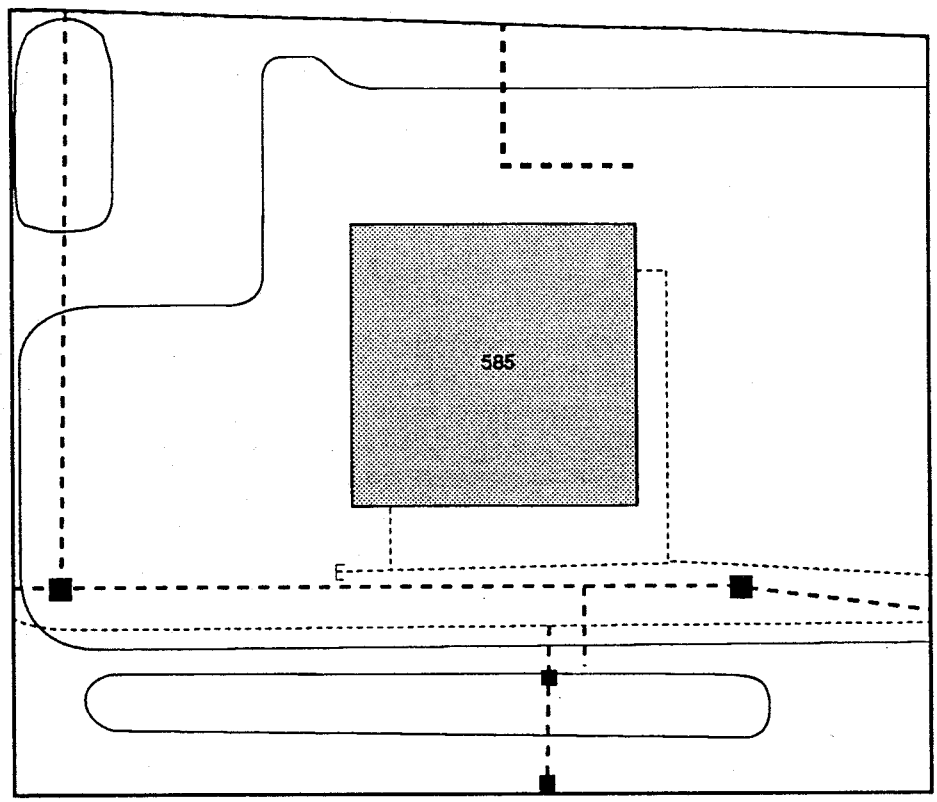
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 85 at NAS Alameda (Figure 6-85-1). The parcel, which is located in the north central portion of the base, is 1.6 acres in size and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 85, historical activities are discussed below.

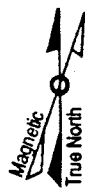
Background and Historical Activities

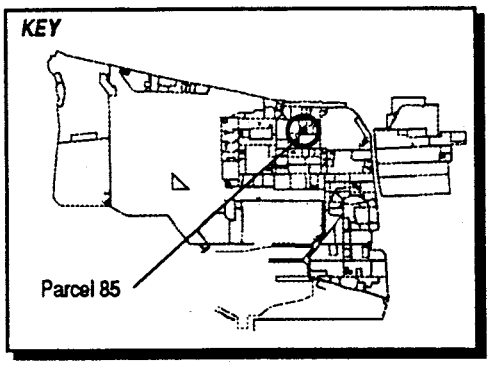
This subsection summarizes EBS information available for the open space and boundaries of Parcel 85, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

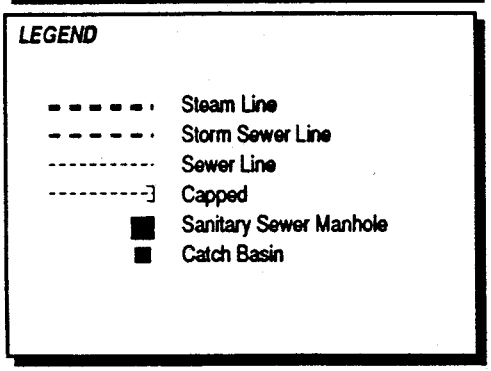
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 80, 86, 87, 88, 89, and 90. This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that primarily have housing for Navy personnel. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 15.









1"= 60'

Figure 6-85-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, fifteen percent of the parcel is covered by Building 585, which contains a night club. The remaining 85 percent is open space. One former building is documented to have existed at this parcel. Sewer lines on the parcel are shown in Figure 6-85-1.

Parcel 85 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 85. Therefore, specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 585

Building 585 was constructed in 1976 and serves as a night club known as the "Top 4 Club." Building 585 is a one story building constructed with a stucco-covered wooden frame and a raised shingled roof. The building covers approximately 10,600 square feet. Transformers are present in an enclosure on the southeast corner of the building. The space occupied by Building 585 was formerly occupied by Building 84, which served as bachelor officers' quarters between its construction in 1942 and its demolition in approximately 1975. Building 84 covered 33,000 square feet and was similar to the existing Building 135 on Parcel 90. Utilities located within and immediately surrounding Building 585 include underground water, storm sewer, sanitary sewer, steam, and electrical lines.

A total of less than 100 gallons of chemicals were observed in the building during the site inspection. A 1993 chemical inventory of the building reported storage of 250 gallons of chemicals. Chemicals were stored in a janitor's closet, in a kitchen storeroom, and in the kitchen and bar areas. Chemicals present included cleaners, disinfectants, dishwashing soap, latex paint, concrete sealer, degreaser, and liquid paraffin fuel.

Chemicals were also stored outside (east) of the building in and around a partially paved fenced area used to wash off buckets, mops, pallets, and other equipment used in the building. There were also indications that maintenance and repair activities, including painting, were conducted in this area. Chemicals observed in the area included refrigeration oil, acrylic floor finish, paint thinner, scouring powder, dichlorodifluoromethane (refrigeration fluid), and "ultra duty stripper." The total quantity of chemicals stored outdoors was approximately 15 gallons. Stressed vegetation and staining were observed adjacent to the washdown area. Two compressors (one with a leaking line) and a backup battery system were present on the east side of the building. The eastern side of the building is addressed by Target Area 1. A food storage trailer was observed on the southern end of this area.

Open Space

Parcel 85 open space consists of landscaped areas, an asphalt-paved driveway located in the northwest corner of the parcel, an asphalt-paved parking area along the north side of the parcel, and a loading dock area and driveway east of Building 585. The paved areas of the parcel cover approximately 25 percent of the open space. The landscaped areas comprise approximately 75 percent of the parcel open space and are covered with grass, bushes, trees, and dirt. The southern and western edges of the landscaped area have been continuously maintained since the early 1940s. Much of the rest of the open space was covered by former Building 84 (see above) and the west wing of Building 124. Building 124 also served as bachelor officers' quarters. Two-thirds of Building 124 formerly existed on the current Parcel 86 adjacent to Parcel 85 to the east.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 85 is bounded by Fourth Street to the west and Avenue B to the south. Across the streets are Parcels 84 (bowling alley), 207 (former garage), and 80 (bachelor officers' quarters). Parking lots on Parcel 86 border Parcel 85 to the north and east.

RCRA Sites

No RCRA sites are located on Parcel 85.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 85, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-85-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 85 because no industrial buildings are present.

As noted earlier, Parcel 85 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed on this parcel.

Once the data gaps in Table 6-85-1 are addressed, Parcel 85 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-85-1

Summary of Data Gaps
NAS Alameda Parcel 85

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 85.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 85.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Water, storm sewer, sanitary sewer, and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-85-1

Summary of Data Gaps
NAS Alameda Parcel 85

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-86

PARCEL 86 EVALUATION PLAN

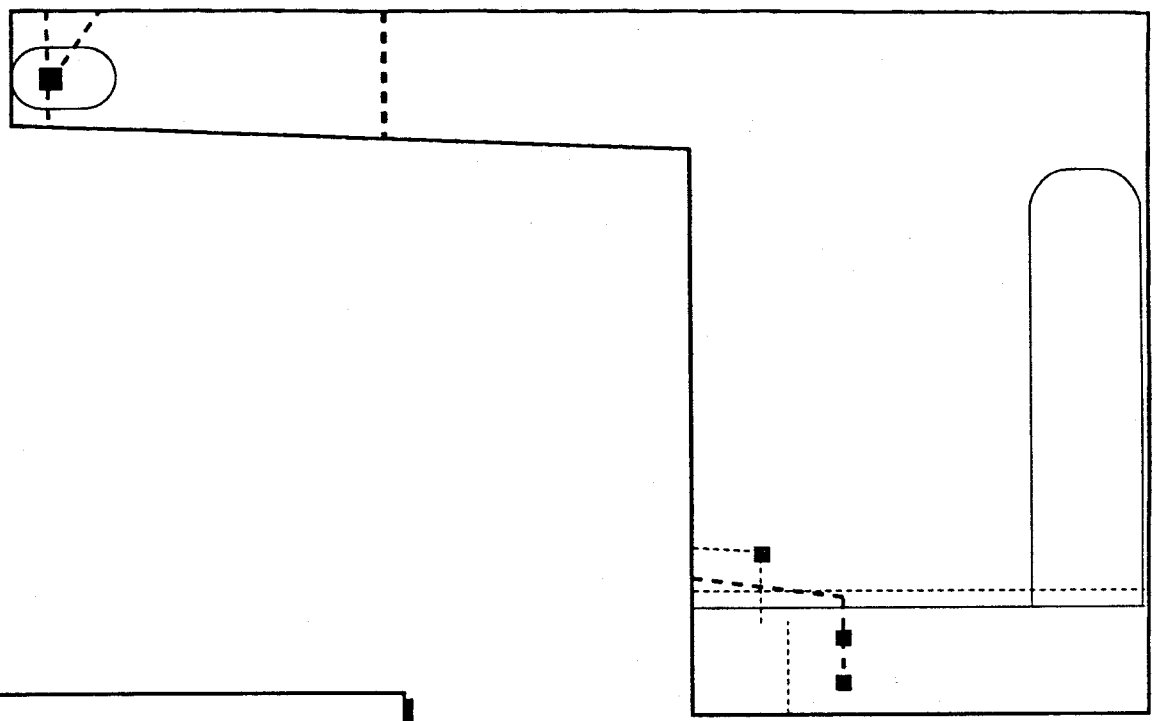
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 86 at NAS Alameda (Figure 6-86-1). The parcel, which is located in the north central portion of the base, is two acres in size and is irregular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 86, historical activities are discussed below.

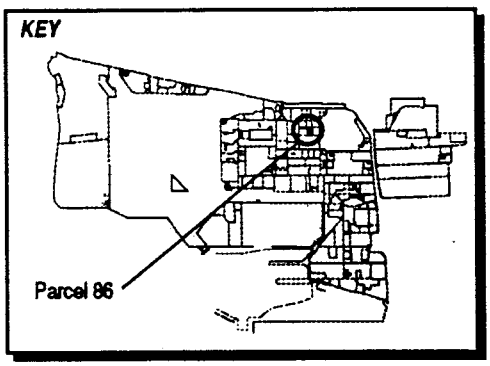
Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 86, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records and historical aerial photographs. This information was used to determine whether sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 80, 85, 87, 88, 89, and 90. This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that primarily have housing for Navy personnel. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 15.





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

1"=90'

Figure 6-86-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

The parcel is 100 percent open space. The space is primarily used as a parking lot, with landscaped strips along the eastern and western edges of the parcel. A portion of Building 124 was formerly located at this parcel. Building 136 was also formerly located at this parcel. Sewer lines are present at this parcel and are shown on Figure 6-86-1.

Parcel 86 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 86. Therefore, specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

The open space on Parcel 86 is used primarily as a paved parking area. Approximately 85 percent of the parcel area is paved with asphalt, and landscaped areas cover the remaining area. The pavement in the parking lot is generally in good condition and contains approximately 150 parking stalls. The landscaped areas are covered with grass, bushes, trees, and dirt. These areas have been continuously maintained since the early 1940s. Utilities present on the parcel include storm sewer, sanitary sewer, natural gas, water, and steam lines.

Oil stains from vehicles were observed in the parking lot. This staining is minor and will not be sampled. Two dumpsters were present in the southwest corner of the open space at the time of the site inspection. A former bachelor officers' quarters building (Building 124) covering 20,000 square feet was constructed in this open space in 1944. Approximately 20 percent of the former building footprint extended onto the current Parcel 85. Building 136 was demolished between 1958 and 1963. The area was subsequently paved and has been used as a parking lot since that time.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 86 is bounded by Fourth Street to the west and Avenue B to the south. Across the streets are Parcels 80 (bachelor officers' quarters) and 84 (bowling alley). Parcel 89 (general warehouse) and Parcel 90 (education and equipment rental) border Parcel 86 to the north. Parking lots contiguous with the one on Parcel 86 are present to the northeast on Parcel 88 and to the east on Parcel 87. A night club is located on Parcel 85 to the southwest.

RCRA Sites

No RCRA sites are located at Parcel 86.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 86, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-86-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gap at this parcel: radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 86 because no buildings are present.

TABLE 6-86-1

Summary of Data Gaps
NAS Alameda Parcel 86

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 86.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 86.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• No PCB issued identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Natural gas, water, storm sewer, and sanitary sewer identified.
- Steam Lines	• Steam lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-86-1

Summary of Data Gaps
NAS Alameda Parcel 86

Data Gap	Status/Description
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As noted earlier, Parcel 86 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed at this parcel.

Once the data gaps in Table 6-86-1 are addressed, Parcel 86 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to underground lines and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-87

PARCEL 87 EVALUATION PLAN

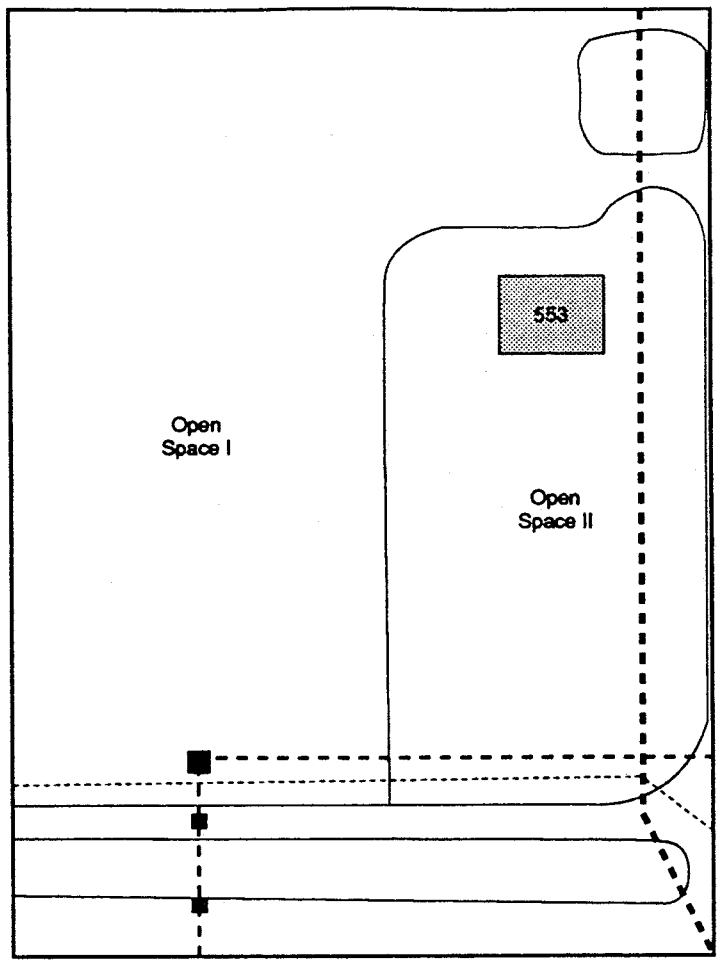
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 87 at NAS Alameda (Figure 6-87-1). The parcel is located in the north central portion of the base, is 1.8 acres in size, and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 87, historical activities are discussed below.

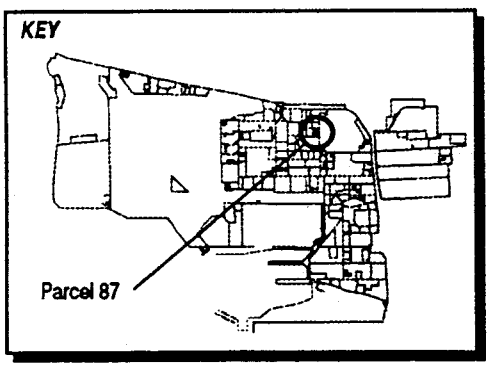
Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 87, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 80, 85, 86, 88, 89, and 90. This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that primarily have housing for Navy personnel. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 15.





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

1" = 60'

Figure 6-87-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 553) covers less than five percent of the parcel. The remainder of the parcel is open space. The parcel is primarily used as a parking lot, with a wide landscaped strip along the eastern side. One building was formerly located at this parcel. Sewer lines are present at this parcel and are shown in Figure 6-87-1.

Parcel 87 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 87. Therefore, specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 553

Building 553 was constructed between 1970 and 1975 and serves as an electrical substation. Building 553 is a one-story building constructed with concrete walls and a flat concrete roof, and covers approximately 1,000 square feet. The space occupied by Building 553 was formerly occupied by Building 85, which served as bachelor officers' quarters between its construction in 1942 and its demolition in approximately 1970. Building 85 covered 33,000 square feet and was similar to the existing Building 135 on Parcel 90.

Utilities located within this parcel include underground steam, sanitary sewer, storm sewer and electrical lines are present on this parcel. On March 31, 1986 a transformer located on a fenced pad adjacent to the west side of Building 553 ruptured due to overheating. The transformer sprayed PCB-containing oil on the west wall of the building, the pad, the fence, surrounding grass, and trees approximately 15 feet to the west. The amount of oil released was unknown. Available information indicates that cleanup of the area was performed by IT Corporation. Contaminated material, possibly including the transformer, pad, fence, soil, and trees, was removed and disposed of by personnel from the Defense Reutilization and

Marketing Office (DRMO). The pad was observed in 1985 aerial photographs but was not present in 1990 photographs.

Open Space I

Open Space I is defined as the paved parking lot area of the parcel. This space takes up approximately 60 percent of the parcel open space. The Open Space I parking lot is surfaced with asphalt and contains approximately 125 parking stalls. The asphalt is in fair condition. Oil stains from vehicles were observed in Open Space I. This staining is minor and will not be sampled. Former Building 85 (see above) covered a large portion of this open space.

Open Space II

Open Space II consists of the landscaped areas on the parcel. These areas comprise approximately 40 percent of the parcel open space and are covered with grass, bushes, trees, and soil. This area separates the parking lot from Fifth Street. The eastern half of the landscaped area of Open Space II has been continuously maintained since the early 1940s. The western half of the existing landscaped area was covered by former Building 85 until the building was demolished in approximately 1970.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 87 is bounded by Fifth Street to the east and Avenue A to the north. Across the streets are Parcels 98 (officers' family housing) and 80 (bachelor officers' quarters). Parking lots contiguous with the one on Parcel 87 are present to the west on Parcel 86 and to the north on Parcel 88.

RCRA Sites

No RCRA sites are located at Parcel 87.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 87, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-87-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 87 because no industrial buildings are present.

As noted earlier, Parcel 86 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for this parcel.

Once the data gaps in Table 6-87-1 are addressed, Parcel 87 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to transformers, lead-based paint, asbestos, radiological issues, and underground lines must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

TABLE 6-87-1

Summary of Data Gaps
NAS Alameda Parcel 87

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 87.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 87.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer, storm sewer and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-87-1

Summary of Data Gaps
NAS Alameda Parcel 87

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-88

PARCEL 88 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 88 at NAS Alameda (Figure 6-86-1). This parcel is located in the north central portion of the base, is 1.4 acres in size, and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 88, historical activities are discussed below.

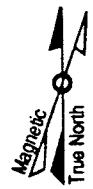
Background and Historical Activities

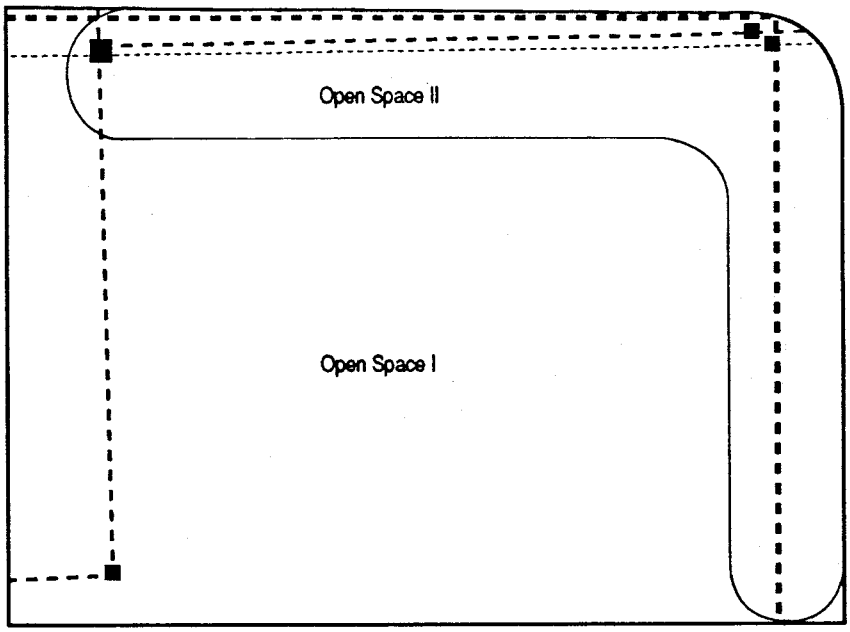
This subsection summarizes EBS information available for the open space and boundaries of Parcel 88, consistent with objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

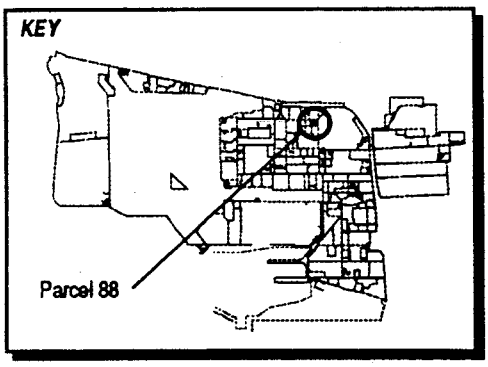
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of historical records and historical aerial photographs. This information was used to determine whether sampling was necessary to delineate potential impacts of compounds of concern.

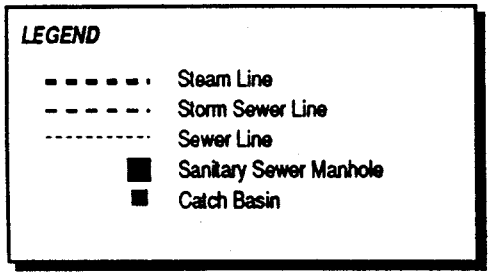
This parcel has been grouped into a zone with Parcels 80, 85, 86, 87, 89, and 90 (Table 6-4). This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that have primarily housing for Navy personnel. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations.

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay.









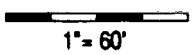


Figure 6-88-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, Parcel 88 is all open space that is primarily used as a parking lot. Landscaped strips are present along the northern and eastern edges. The open space of Parcel 88 has been subdivided into Open Space I and Open Space II. One building was formerly located on this parcel. Sewer lines are present on this parcel and are shown on Figure 6-88-1.

Parcel 88 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 88. Therefore, specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel open space areas are described below.

Open Space I

Open Space I, which contains approximately 80 percent of the open space, is defined as the asphalt-paved parking lot area of the parcel. This parking lot contains approximately 90 parking stalls. The pavement is generally in good condition. Site inspection data indicate that oil stains from vehicles were observed in Open Space I. This staining is minor and will not be sampled. A former bachelor officers' quarters and administration building (Building 136) was constructed on Parcel 88 in the open space area in 1944. The building covered 33,000 square feet and was of similar construction to the existing Building 135 on Parcel 90. Building 136 was demolished some time between 1970 and 1975. Underground steam, storm sewer, sanitary sewer, electrical, and natural gas lines are present in Open Space I.

Open Space II

Open Space II consists of the landscaped areas on the parcel. These areas comprise approximately 20 percent of the parcel open space and are covered with grass, bushes, trees, and bare soil. The majority of the landscaped area of Open Space II has been continuously maintained since the early 1940s. Utilities present in Open Space II include underground storm sewer, sanitary sewer, steam, electrical, and natural gas lines.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 88 is bounded by Fifth Street to the east and Avenue A to the north. Across the streets are Parcels 98 (officers' family housing) and 96 (officers' club). Parcel 89 (general warehouse) borders Parcel 88 to the west. Parking lots contiguous with the one on Parcel 88 are present to the south on Parcels 86 and 87.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 88, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-88-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gap at this parcel: radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 88 because no buildings are present.

As noted earlier, Parcel 88 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely

TABLE 6-88-1

Summary of Data Gaps
NAS Alameda Parcel 88

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• No ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 88.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 88.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-88-1

Summary of Data Gaps
NAS Alameda Parcel 88

Data Gap	Status/Description
Underground Utilities	• Natural gas, storm sewer, sanitary sewer, and electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for this parcel.

Once the data gaps in Table 6-88-1 are addressed, Parcel 88 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to underground lines and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-89

PARCEL 89 EVALUATION PLAN

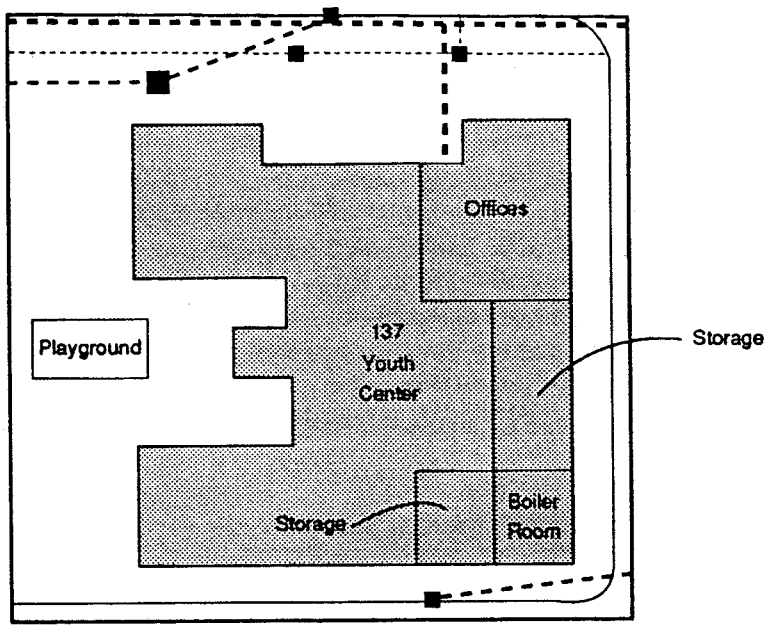
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 89 at NAS Alameda (Figure 6-89-1). The parcel is located in the north central portion of the base, is 1.2 acres in size, and is square. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 89, historical activities are discussed below.

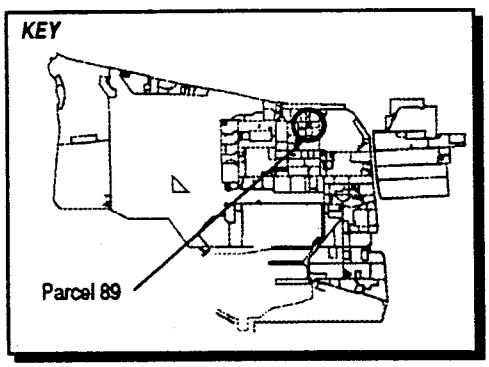
Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 89, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 80, 85, 86, 87, 88, and 90. This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that primarily have housing for Navy personnel. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 15.





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

1" = 60'

Figure 6-89-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/08.28.94

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently Building 137, a youth center and storage building, covers approximately 25 percent of the parcel. The remainder (75 percent) is open space that is partially landscaped and partially paved. No other buildings formerly existed at this parcel. Sewer lines on the parcel are shown in Figure 6-89-1.

Parcel 89 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 89 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials (ACM) on the parcel will be addressed in other sampling programs and are not considered in this PEP. Based on the age of the building on the parcel and EBS observations, peeling lead-based paint (interior and exterior of building) and friable asbestos (steam lines and building materials) are potential concerns on Parcel 89. Asbestos has reportedly been previously removed from the building. Non-hazardous ACM is reported to remain in places.

Activities of potential environmental concern within the parcel open space and building are described below.

Building 137

Building 137 was constructed in approximately 1944. Currently, the building houses a youth center, a personal property office, and storage areas for the Top 4 Club (Building 585, Parcel 85) and the Officers' Club (Building 60, Parcel 96). In the past the building housed a mess hall, communications offices, a teen club, a Boy Scouts' office, storage for the USO and Navy Exchange, and other administrative offices. This building is generally in fair to poor condition. Rainwater reportedly leaks through building joints during storms. The water previously flowed through floor drains to the street and parking areas. The drains were sealed in 1992. The second floor of the building has been condemned and is sealed off. Building 137 is a wood frame building with a built-up roof constructed on a concrete slab foundation. The floor plan covers a total of approximately 27,000 square feet on two floors.

Utilities located within and immediately surrounding Building 137 include underground natural gas, sanitary sewer, storm sewer, telephone, steam, water, and electrical lines. No transformers are located on the parcel. A boiler room is present in the southeast corner of the building.

Materials stored in the building by the Top 4 Club and Officers' Club included holiday decorations, wine, furniture, glasses, dishes, paper goods, files, barbecue grills, office supplies, and cleaning supplies. A total of approximately 250 gallons of office and cleaning/maintenance supplies were observed during the site inspection. Two small stains were observed on the floor of the building. Records indicate that other compounds stored previously included latex paint, drain cleaner, sanitizer, pine oil, corrosives, motor oil, and stainless steel polish.

Open Space

Forty percent of the parcel open space is paved with concrete sidewalks and 60 percent is landscaped (this includes a small sand-covered playground). A steam line vault is present on the north side of the parcel. The majority of the landscaped area of Open Space II has been continuously maintained since the early 1940s.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 89 is bounded by Avenue A to the north. Across the street is Parcel 95 (bathhouse). Parcel 89 borders Parcel 90 (chaplain's office and Red Cross) to the west. Parking lots on Parcels 86 and 88 are present to the south and east.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 89, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-89-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 89 because no industrial buildings are present.

As noted earlier, Parcel 89 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for this parcel.

Once the data gaps in Table 6-89-1 are addressed, Parcel 89 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

TABLE 6-89-1

Summary of Data Gaps
NAS Alameda Parcel 89

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 89.
Installation Restoration (IR) Sites	• No IR sites are located within 500 feet of Parcel 89.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Natural gas, sanitary sewer, storm sewer, telephone, water, and electrical lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-89-1

Summary of Data Gaps
NAS Alameda Parcel 89

Data Gap	Status/Description
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SEWER

SECTION 6-90

PARCEL 90 EVALUATION PLAN

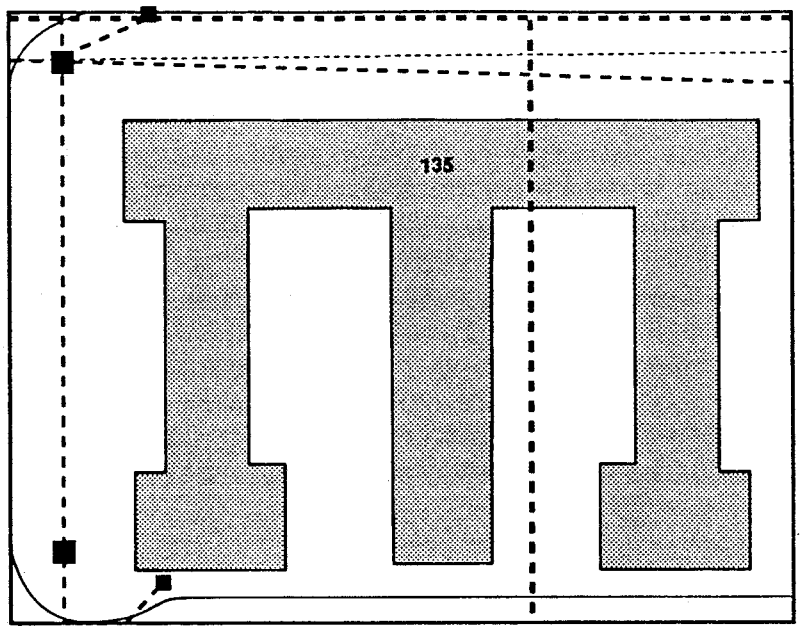
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 90 at NAS Alameda (Figure 6-90-1). The parcel is located in the north central portion of the base, is 1.6 acres in size, and is rectangular. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel does not contain any RCRA sites. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 90, historical activities are discussed below.

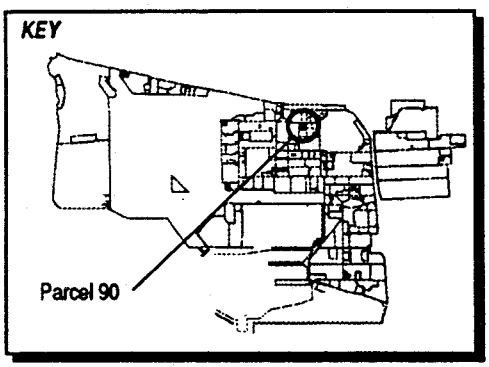
Background and Historical Activities

This subsection summarizes EBS information available for the building, open space, and boundaries of Parcel 90, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 80, 85, 86, 87, 88, and 89. This parcel zone has been designated the Bachelor Officers' Quarters Zone (Zone 15). The Bachelor Officers' Quarters Zone encompasses the parcels that primarily have housing for Navy personnel. During the sampling program development, the parcels located in the zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 15.





LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

1" = 60'

Figure 6-90-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

Filling began in the area covered by this parcel in approximately 1935. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently Building 135, former bachelor officers' quarters, covers approximately 25 percent of the parcel. The remainder (75 percent) is open space that is partially landscaped and partially paved. Sewer lines on the parcel are shown in Figure 6-90-1.

Parcel 90 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 90 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene considerations, and asbestos containing materials on the parcel will be addressed in other sampling programs and are not considered in this PEP. Based on the age of the building on the parcel and EBS observations, peeling lead-based paint (interior and exterior of building) and friable asbestos (steam lines and building) are potential concerns on Parcel 90.

Activities of potential environmental concern within the parcel open space and building are described below.

Building 135

Building 135 was constructed in approximately 1944 as bachelor officers' quarters. Recently the building has housed a chaplain's office, the Navy/Marine Corps Relief Society, the Red Cross, a child care center, education offices/classrooms, and equipment rental offices. This building is in fair to poor condition. Portions of the building have been gutted and cannot be occupied. Building 135 is a wood frame building with a built-up roof constructed on a concrete slab foundation. The floor plan covers a total of approximately 33,000 square feet on two floors.

Utilities located within and immediately surrounding Building 135 include underground natural gas, sanitary sewer, storm sewer, telephone, steam, water, and electrical lines. No transformers are located on the parcel. Storage of a total of less than 50 gallons of cleaning supplies and paint was observed at various locations throughout the building. No spills or staining were observed.

Open Space

The parcel open space is 20 percent paved with concrete sidewalks and 80 percent landscaped. The following features were observed within the open space during the site inspection: an overgrown playground area, a thrift shop drop-off box on the south side of the building (washer, furniture, and clothes adjacent), two utility access vaults in the northwest corner of the parcel, and a CONEX storage locker labeled "NAS Chapel." The majority of the landscaped area of Open Space II has been continuously maintained since the early 1940s.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 90 is bounded by Fourth Street and Avenue A to the west and north, respectively. Across the streets are Parcels 93 (tennis courts), 92 (open grassy area), and 84 (bowling alley). Parcel 89 (youth center and storage) borders Parcel 88 to the west. A parking lot on Parcel 86 is present to the south. Environmental concerns associated with adjacent parcels are not likely to have affected the boundary areas of Parcel 88.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 90, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-90-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway

TABLE 6-90-1

Summary of Data Gaps
NAS Alameda Parcel 90

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 90.
Installation Restoration (IR) Sites	• No IR sites are located within 500 feet of Parcel 90.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Natural gas, sanitary sewer, storm sewer, water, and electrical lines identified.
- Steam Lines	• Steam lines identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-90-1

Summary of Data Gaps
NAS Alameda Parcel 90

Data Gap	Status/Description
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

to address the following data gaps at this parcel: lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 90 because no industrial buildings are present.

As noted earlier, Parcel 90 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for this parcel.

Once the data gaps in Table 6-90-1 are addressed, Parcel 90 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-98

PARCEL 98 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 98 at NAS Alameda (Figure 6-98-1). The parcel, which is located in the northeastern corner of the base, is approximately 45 acres in size and is roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two parcel-specific and two zone-wide target investigation areas (target areas) were identified on this parcel. Sampling procedures called for in the screening-level investigation in these target areas include surface soil sampling and soil vapor sampling. Table 6-98-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 98, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 98, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also describes any areas of concern identified.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 99, 100, 103, 170, 171, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-98-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
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SENSITIVE

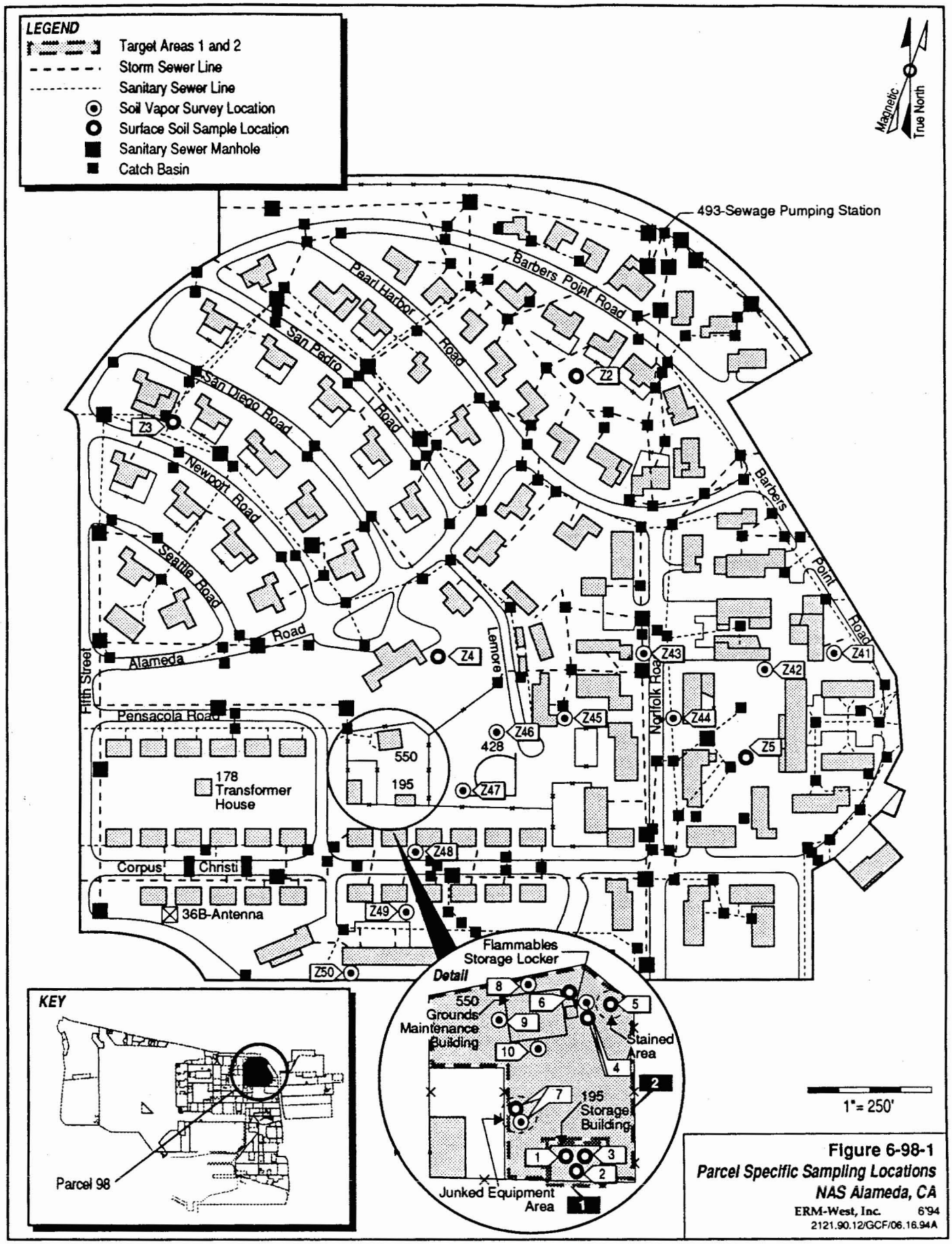


Figure 6-98-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.16.94A

SENSITIVE

TABLE 6-98-1

Summary of Recommended Samples
NAS Alameda Parcel 98

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
98-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	PCBs, gasoline, diesel, motor oil	Pesticides, TPH	CLP RAS, Modified EPA 8015
98-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	PCBs, gasoline, diesel, motor oil	Pesticides, TPH	CLP RAS, Modified EPA 8015
98-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	PCBs, gasoline, diesel, motor oil	Pesticides, TPH	CLP RAS, Modified EPA 8015
98-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Gasoline, diesel, motor oil	TPH	Modified EPA 8015
98-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Solvents	VOCs	GC
98-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Gasoline, diesel, motor oil	TPH	Modified EPA 8015
98-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	PCBs, gasoline, diesel, motor oil	Pesticides, TPH	CLP RAS, Modified EPA 8015
98-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	PCBs, gasoline, diesel, motor oil	Pesticides, TPH	CLP RAS, Modified EPA 8015
98-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Solvents	VOCs	GC
98-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Solvents	VOCs	GC
98-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Solvents	VOCs	GC
98-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	Solvents	VOCs	GC

TABLE 6-98-1

Summary of Recommended Samples
NAS Alameda Parcel 98

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-41-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-42-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-43-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-44-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-45-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-46-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

TABLE 6-98-1

Summary of Recommended Samples
NAS Alameda Parcel 98

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-47-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-48-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-49-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-50-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was composed of approximately 40 percent salt marsh and tidal flats and 60 percent inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1931; the ground level may have been raised slightly between 1931 and 1940. The fill initially sloped to the south but was later made nearly flat.

Currently, approximately 115 buildings cover approximately 20 percent of the parcel (Figure 6-98-1). The remaining 80 percent of the parcel is open space. In general, the parcel area is currently used for family housing. Approximately 20 buildings, which were mostly temporary barracks and associated facilities, were formerly located on the parcel in the area between Norfolk Road and Barbers Point Road. These buildings have since been demolished and replaced with multi-family residences. Sewer lines are present on this parcel and are shown on Figure 6-98-1.

Parcel 98 is located approximately 350 feet south of an Installation Restoration (IR) site (IR Site 20, Oakland Estuary). No previous investigations have been conducted at Parcel 98, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and are not considered in this PEP. Results of radon tests conducted in two of the parcel buildings were negative. Interiors of individual housing units were not inspected during the EBS.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

The family housing units on the parcel were constructed in two phases. The first phase of construction took place in the early 1940s which included construction of most of the units along Pensacola Road and Corpus Christi Road, and the units in the area bounded by Alameda Road and Pearl Harbor Road. The remaining housing units on Parcel 98 (located along Barbers Point Road and Norfolk Road) were added after 1961, after barracks in that area were demolished. Utilities located within and immediately surrounding these buildings include

underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Building 550

This building is a metal maintenance shed with concrete floors. It covers approximately 1,000 square feet. The construction date of Building 550 is unknown. The building is currently occupied by a maintenance contractor who is supervised by PWC. The building and surrounding area are enclosed by a fence. The area has reportedly been used by grounds maintenance personnel for approximately 20 to 30 years.

Building 195

Building 195 is a metal Quonset hut used for storage of fertilizers and pesticides. The potential use and storage of pesticides will be addressed by Target Area 1 of this PEP. It is approximately 40 feet long and 20 feet wide. The building has an earthen floor. The construction date of Building 195 is unknown.

Building 278

Building 278 is a small stucco transformer house. When the building was inspected during the EBS, the transformer had been removed from the concrete pad inside the building and was located on the ground approximately four feet east of the building. No evidence of transformer leakage was noted and no evidence of chemical storage or use was observed. The construction date of Building 278 is unknown.

Facility 493

This facility is a sewage pumping station that is located below ground beneath a concrete pad which is surrounded by a chain link fence. Assorted vent pipes, access ports, and other equipment extend above the pad. The facility is also referred to as "sewage station 3." A sign at the facility indicates its number is 492 rather than 493, as shown on facility maps. No chemicals were observed to be present at the facility. The construction date of Facility 493 is unknown.

Structure 36B

This structure is the base of a former radio communications antenna that has been demolished. The construction and demolition dates of Structure 36B are unknown.

Facility 428

This facility is a baseball field with a backstop and a small set of bleachers.

Open Space

The open space of Parcel 98 has been subdivided into two open spaces. The first open space is the fenced area of the maintenance yard associated with Building 550. Eighty percent of this area consists of bare soil and gravel and 20 percent is covered with grass and weeds. The second open space area consists of the landscaped and paved portions of the parcel between the housing units. Utilities located within the open space include underground electrical, storm sewer, sanitary sewer, water, and natural gas lines. Pad-mounted and pole-mounted transformers are also located in the open space.

Interviews indicate that banned pesticides and possibly PCBs may have been used in grounds maintenance at NAS Alameda. This may have impacted landscaped areas of both parcel open spaces. In addition, the open space associated with Building 550 may have been impacted by chemical use and storage activities associated with maintenance operations. The use and storage of chemicals associated with the maintenance yard will be addressed by Target Area 2. Three stained areas were noted outside Building 550. These stains are believed to be the result of leaks and spills of petroleum products and/or pesticides. The stains are located in the gravel area east of Building 550, around the flammables storage locker located at the exterior east wall of Building 550, and along the northern half of the east side of the Building 550 foundation. An additional concern in this open space is the presence of discarded equipment between Building 550 and Building 195. An abandoned 55-gallon waste oil drum was also observed in this area.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified

any information that indicated any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 98 is bordered by Parcels 62, 79, 80, 87, 88, 96, 97, 99, 100, 102, 103, 104, 105, 188, 189, and 900. The only activities of concern are the shipyard-related operations that occurred at the former Todd Shipyard (located northeast of Parcel 98, off-base).

No parcels contiguous with Parcel 98 are IR sites; therefore, no sampling is called for in this PEP in response to any IR sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 98, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-98-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, radiological concerns, and asbestos. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 98 because no industrial buildings are present.

As noted earlier, Parcel 98 has open space areas that are unpaved and landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides.

Potential concerns related to pesticides have been identified as a parcel-specific data gap for Parcel 98. Pesticide sampling for this parcel has been limited to Building 195 and the maintenance yard associated with Building 550 (See detail on Figure 6-98-1), based on the potential intensive use and storage activities at these locations and the stains

TABLE 6-98-2

Summary of Data Gaps
NAS Alameda Parcel 98

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 98.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located approximately 350 feet north of Parcel 98. Additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 900 (The former Todd Shipyard).
Potential Zone-Wide Release Areas	• Landscaped/Unpaved Areas. • Filled wetlands.
Potential Parcel-Specific Release Areas	• Maintenance Yard. • Building 195.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.

TABLE 6-98-2

Summary of Data Gaps
NAS Alameda Parcel 98

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Other data gaps identified include assorted vent pipes and access ports at Facility 493 (sewage pumping station).

observed during the site inspection. Pesticide sampling outside the intensive-use area described above has been addressed as a zone-wide issue for the parcels located in Zone 16. Pesticide sampling for the landscaped areas of Parcel 98 are described in the Zone Analysis Plan for Zone 16.

As noted earlier, Parcel 98 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 98; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-98-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 98 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also affected by two zone-wide target areas. This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 195): The unpaved floor of Building 195 may have been impacted by the storage and use of potentially hazardous substances including pesticides, PCBs, and petroleum products (gasoline, diesel fuel, and motor oil). This target area covers approximately 950 square feet. The likelihood that environmental impacts have occurred in this target area is classified as suspect. Samples to be collected in Target Area 2 are listed in Table 6-98-1.

- Target Area 2 (Maintenance Yard): The Maintenance Yard covers approximately 60,000 square feet. The soil in the area along the eastern side of Building 550 may have been impacted by the storage and use of potentially hazardous substances related to grounds maintenance activities. Staining around Building 550 (Grounds Maintenance) indicates that releases have occurred. In addition, staining observed in the junked equipment area (abandoned vehicles, etc.), which is located to the southwest of Building 550, indicates that releases have occurred. Potential compounds of concern in Target Area 1 include pesticides, herbicides, PCBs, solvents, and petroleum products (gasoline, diesel fuel, and motor oil). The likelihood that environmental impacts have occurred in this target area is classified as potential. Samples to be collected in Target Area 1 are listed in Table 6-98-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 98 are part of this zone-wide target area. Four of the 21 proposed zone-wide surface soil samples for pesticides are located on Parcel 98. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. The proposed zone-wide target area samples that are located on Parcel 98 are listed on Table 6-98-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Ten of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 98. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 98 are listed on Table 6-98-1.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and soil vapor sampling (SOP 6), will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-98-1 summarizes screening-level sampling and analyses for the parcel's target areas. Seven soil vapor samples and eleven surface soil samples will be collected from the locations shown on Figure 6-98-1 (note detail area). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Five parcel-specific soil vapor samples will be collected from the maintenance yard. Seven parcel-specific surface soil samples will be collected at the following locations: three samples from the stained areas inside Building 195, one sample from the junked equipment area, one sample from the stained area east of Building 550, one sample from the stained area in front of the door of the flammables storage locker, and one sample from the soil adjacent to the staining at the northeast corner of the Building 550 foundation. Four zone-wide surface soil samples and ten zone-wide soil vapor samples will be collected from this parcel. These sample locations are shown in Figure 6-98-1. These locations are based on the evaluation of historic activities inside the buildings and in open spaces described above. Minor adjustments in the sample locations may be made in the field based on visual observations and accessibility.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-99

PARCEL 99 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 99 at NAS Alameda (Figure 6-99-1). The parcel, which is located in the northeastern portion of the base, is 3.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific target areas were identified at this parcel; however, two zone-wide target areas encompass this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-99-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 99, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 99, consistent with objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 100, 103, 170, 171, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected

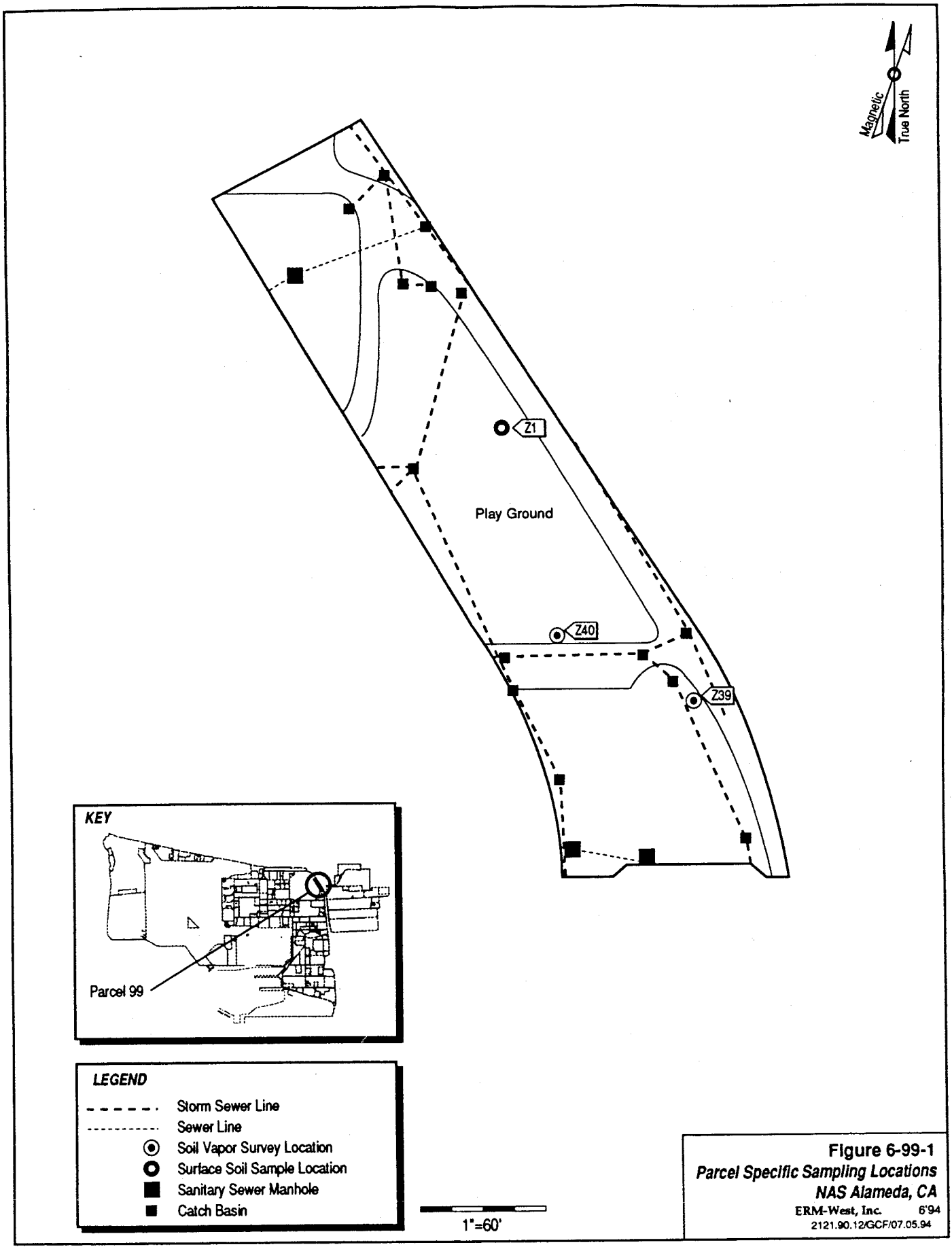


Figure 6-99-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-99-1

Summary of Recommended Samples
NAS Alameda Parcel 99

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-39-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-40-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was covered by tidal flats and/or wetlands. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, no buildings or structures are present on the parcel. The parcel is 100 percent open space. The parcel is presently in use as a playground and parking area. Three temporary barracks (Buildings 143, 145, and 147) were formerly located on the parcel and have since been demolished. Sewer lines are present on the parcel and are shown on Figure 6-99-1.

Parcel 99 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 99, and specific data regarding chemical occurrence at this parcel are not available; however, investigations have been conducted at Parcel 178 located to the east of Parcel 99 (east of Main Street). Specific data regarding chemical occurrence are available for Parcel 178.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential concern within the parcel open space are described in detail below.

Open Space

The open space covers 100 percent of the parcel. Ninety percent of the open space is landscaped with grass, bushes, and trees, and a park/playground area is present in the center of the parcel. The remaining ten percent of the open space is paved with asphalt roadways and parking areas.

The parcel formerly contained part of several temporary barracks (Buildings 143, 145, and 147) that were built in the early 1940s and demolished in the late 1960s. The landscaped areas along the western side of the parcel appear to have been continuously maintained since the 1940s when they bordered the former barracks. The other landscaped areas of the parcel date to the late 1960s, after demolition of the barracks.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 99 is bounded by parcel 98 (housing area) to the north and west, and Parcel 100 (Navy Lodge) to the south. The northeastern and eastern borders of the parcel are bounded by the former Todd Shipyard and Main Street, respectively. To the east and south east of Main Street are Parcels 178 and 174 (former warehouse within FISC, Alameda Annex), respectively. While some compounds of concern have been detected at Parcel 178, the concentrations have been relatively low, and impacts to Parcel 99 from Parcel 178 are unlikely.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 99, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-99-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 99 because no buildings are present.

As noted earlier, Parcel 99 had and currently has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) need to be sampled for pesticides.

TABLE 6-99-2

Summary of Data Gaps
NAS Alameda Parcel 99

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 99
Installation Restoration (IR) Sites	• No IR sites are located on or within 500 feet of Parcel 99.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The former Todd Shipyard is located northeast of Parcel 99.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.

TABLE 6-99-2

Summary of Data Gaps
NAS Alameda Parcel 99

Data Gap	Status/Description
Wetlands	• No wetlands identified as currently being located on-site.
Other	• No evidence of other data gaps identified.

Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 99. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 99 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 99; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-99-2 are addressed and screening-level sampling results from the zone-wide target areas described below are compared to the appropriate screening levels, Parcel 99 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

No parcel-specific and two of the three zone-wide target areas encompass this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The two zone-wide target areas identified at this parcel are listed in Table 6-99-2.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 99 are part of this zone-wide target area. One of the 21 proposed zone-wide surface soil samples for pesticides is located in Parcel 99. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-99-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 99. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-99-1.

Screening-Level Investigation

Several screening-level investigation techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase is necessary. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Table 6-99-1 summarizes screening-level sampling and analysis for the parcel's zone-wide target areas. One surface soil sample and two soil vapor sample will be collected from the zone-wide locations shown on Figure 6-99-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above on a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

1 SBsoil for PCB/Pest
2 S.vapor for VOC

PARCELS 100 AND 212 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 100 and 212 at NAS Alameda (Figure 6-100-1). Parcel 212 is being considered concurrently with Parcel 100 because the histories and former uses of these parcels are very similar. Parcel 212 is completely contained within Parcel 100 (see Figure 6-100-1). The parcels, which are located in the northeastern portion of the base, are four acres in size and together are roughly rectangular in shape. These parcels have been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. One parcel-specific target investigation area (target area) and two zone-wide target areas encompass these parcels. Subsurface Geoprobe soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-100-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 100 and 212, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 100 and 212, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of these parcels was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 103, 170, 171, 178, 179, 180, 181, 182, 183, and 184. This parcel zone has been

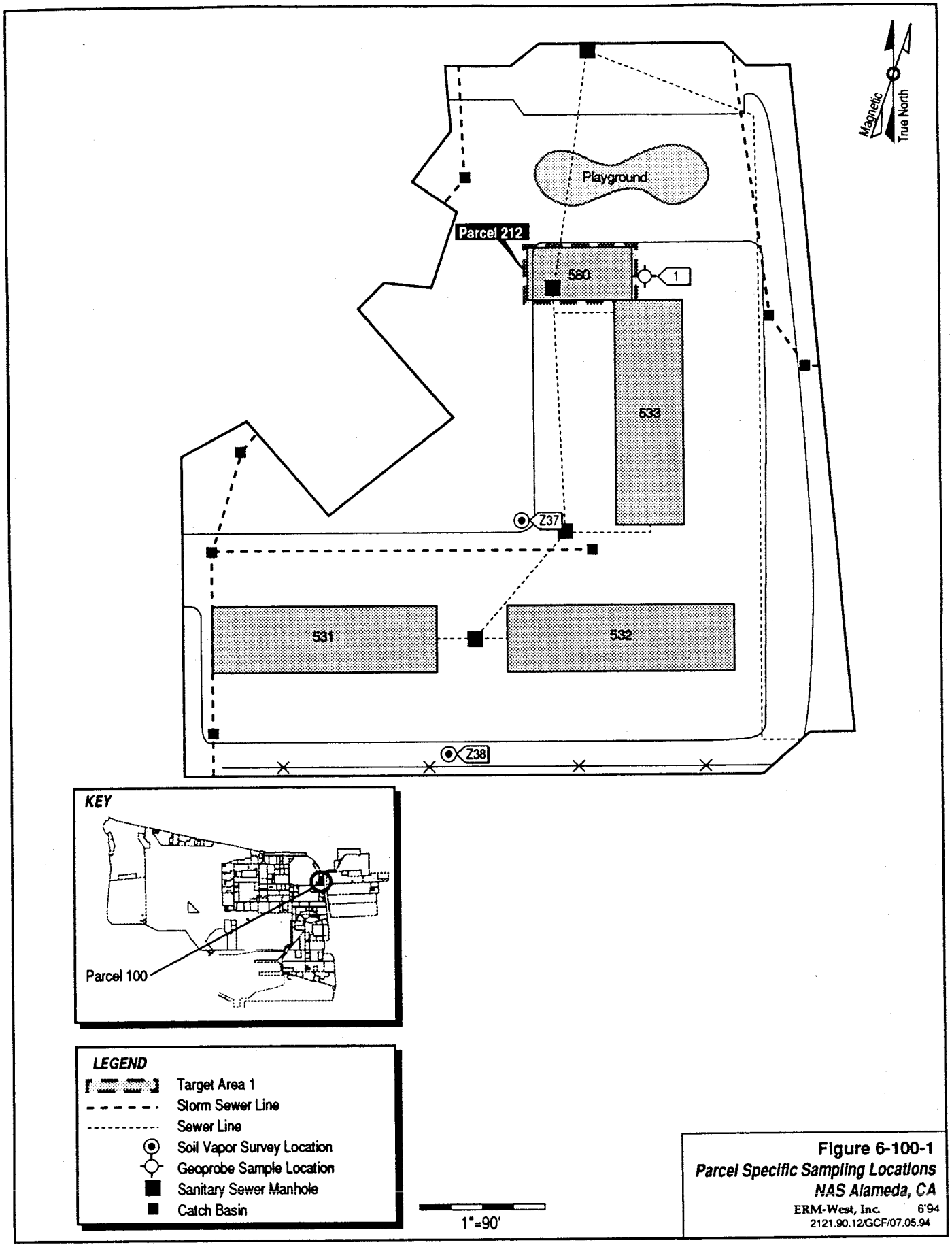


Figure 6-100-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-100 & 212 -1

Summary of Recommended Samples
NAS Alameda Parcels 100 & 212

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
100-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	VOCs, corrosives, gasoline	VOCs, TPH	CLP RAS, Modified EPA 8015
Z16-37-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-38-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in the early 1930s. Prior to this time, the parcel area was covered by tidal flats and/or wetlands. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, a Navy motel consisting of Buildings 531, 532, and 533 covers approximately 15 percent Parcel 100. The remainder (85 percent) of Parcel 100 is open space that is partially landscaped and partially paved. Parcel 100 formerly contained all or part of several temporary barracks (Buildings 139, 141, 148, and 149) built in the early 1940s and demolished in the late 1960s. Currently, two Conex boxes and a shed used by the adjacent Navy Lodge motel cover approximately five percent Parcel 212. The remainder (95 percent) of Parcel 212 is open space that is partially landscaped and partially paved. Parcel 212 formerly contained part of Building 141, a temporary barracks building built in the early 1940s and demolished in the late 1960s. Sewer lines on Parcels 100 and 212 are shown in Figure 6-100-1.

Parcels 100 and 212 are not located within 500 feet of any Installation Restoration (IR) Program sites. Previous investigations have not been conducted at Parcels 100 or 212; however, investigations have been conducted at Parcel 178 located to the east of Parcel 100 east of Main Street. Specific data regarding chemical occurrence are available for Parcel 178.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 531, 532, and 533

Buildings 531, 532, and 533 were constructed in approximately 1971. The buildings have always been used as the Navy Lodge, a 70-room motel operated by the Navy Exchange. These buildings are two-story

buildings and are generally in good condition. The buildings are of wood frame construction with stucco exteriors. Each building covers approximately 10,000 square feet. As described above, barracks existed on the parcel from shortly after the area was filled until shortly before the motel buildings were built, therefore prior use of the parcel area is not of concern.

Utilities located within and immediately surrounding Buildings 531, 532, and 533 include underground sanitary sewer, storm sewer, water, natural gas, and electrical lines. Three pole-mounted transformers are located on the parcel northwest of Building 532. A total of less than 30 gallons (combined) of cleaning and maintenance supplies are stored in the laundry rooms and boiler rooms of the buildings.

Building 580 (Existing and Former)

The existing Building 580 is a Conex box with a roof vent used as a storage shed. The building is located on the west end of the parcel. During the site inspection the building was observed to contain less than ten gallons of gasoline and two pounds of fertilizer. The potential use and storage of gasoline and fertilizer within Building 580 will be addressed by Target Area 1. The age of this building is unknown. The building rests on a concrete pad that is the floor of a former dog kennel also known as Building 580. The concrete pad covers approximately 300 square feet. Underground sanitary sewer lines are located near the building. Drains observed in the concrete pad may lead to the sanitary sewer.

Building 2

Building 2 is a metal storage shed used for laundry supplies storage located on the north end of the former Building 580 pad. (Note that another Building 2 exists at the base. It is used as enlisted personnel barracks and is located on Parcel 45 in the central part of the base.) Approximately 50 gallons of corrosives and up to thirty gallons of cleaning supplies were observed to be stored in the building. The potential use and storage of chemicals within Building 2 will be addressed by Target Area 1. The building covers approximately 100 square feet. The age of the building is unknown.

Building CHB-3

Building CHB-3 is a Conex box (no roof vent) located on the grass on the northwest corner of the parcel. Less than 10 gallons of paint were

observed to be stored in the building. The age of the building is unknown.

Open Space

Parcel open space is 60 percent paved (with concrete sidewalks and asphalt parking areas). The remaining 40 percent of the open space is landscaped with grass, bushes, and trees. A playground area is present near the north end of Building 533. The landscaped areas along the western and southern sides of the parcel appear to have been continuously maintained since the early 1940s when they bordered the former barracks. The other landscaped areas of the parcel date to the early 1970s, after construction of the motel buildings.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcel 100 is bounded by Main Street, Avenue C, and Barber Point Road to the east, south, and northwest, respectively. Across the streets to the east is Parcels 178 (housing, former warehouse), and Parcels 98 (housing) and 102 (parking lot and commissary) are located to the west. Parcel 99 (playground/park) borders Parcel 100 to the north. While some constituents of concern have been detected at Parcel 178, the concentrations have been relatively low, and impacts to Parcels 100/212 from Parcel 178 are unlikely.

Parcel 212 is entirely contained within Parcel 100.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 100 and 212, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-100-2 must be addressed before these parcels can

TABLE 6-100 & 212-2

Summary of Data Gaps
NAS Alameda Parcels 100 & 212

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 99
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcels 100 and 212.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The Todd Shipyard is located northeast of Parcel 100.
Potential Zone-Wide Release Areas	• Landscaped/Unpaved Areas. • Filled wetlands.
Potential Parcel-Specific Release Areas	• Buildings 2 and 580.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.

TABLE 6-100 & 212-2

Summary of Data Gaps
NAS Alameda Parcels 100 & 212

Data Gap	Status/Description
Wetlands	• No wetlands identified as currently being located on-site.
Other	• No evidence of other data gaps identified.

be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at these parcels: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling appears to be required for Parcels 100 and 212 because no industrial buildings are present.

As noted earlier, Parcels 100 and 212 previously had and currently has open space areas that were landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) need to be sampled for pesticides. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcels 100 and 212 were previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 100; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-100-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcels 100 and 212 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Parcels 100 and 212 contain one parcel-specific target area and are affected by two zone-wide target areas. However, no zone-wide target area samples are located on these parcels. Sampling for the two zone-wide target areas is described in the Zone Analysis Plan for Zone 16. This subsection of the PEP discusses specific parcel target area. The nature and location of the parcel-specific target area were evaluated to

determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Buildings 2 and 580): Potential releases of TPH and VOCs from leaks or spills in or near these storage sheds is a concern in this area. This target area covers approximately 300 square feet and has been classified as having a potential likelihood of impacts. One subsurface Geoprobe soil sample will be collected from Target Area 1 as indicated in Table 6-100-1.

The following zone-wide target areas were identified on Parcel 100 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 1 (Landscaped/Unpaved Areas): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 60 proposed zone-wide soil vapor samples for VOCs is located in Parcel 100. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 100 are listed on Table 6-100-1.

Screening-Level Investigation

Subsurface Geoprobe soil sampling (SOP 14) and soil vapor sampling (SOP 6) are the screening-level investigation techniques that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-100-1 summarizes the screening-level sampling and analysis recommended for the parcel-specific target area on Parcel 100. One subsurface Geoprobe soil sample will be collected from the parcel-specific target area on this parcel. Two of the 60 soil vapor samples will be collected from the approximate locations shown on Figure 6-100-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-103

PARCEL 103 EVALUATION PLAN

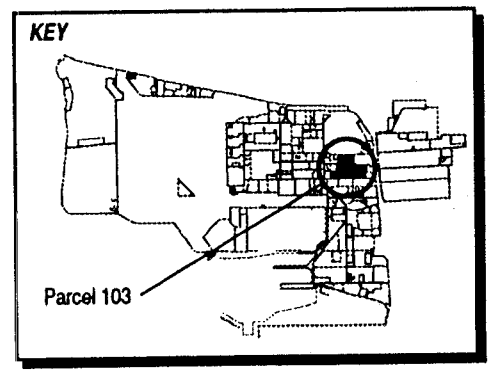
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 103 at NAS Alameda (Figure 6-103-1). The parcel, which is located in the central eastern portion of the base, is approximately 25 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one of the three zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-103-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 103, historical activities are discussed below.

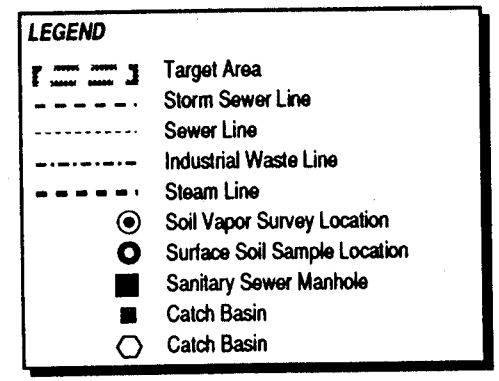
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 103, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 170, 171, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected





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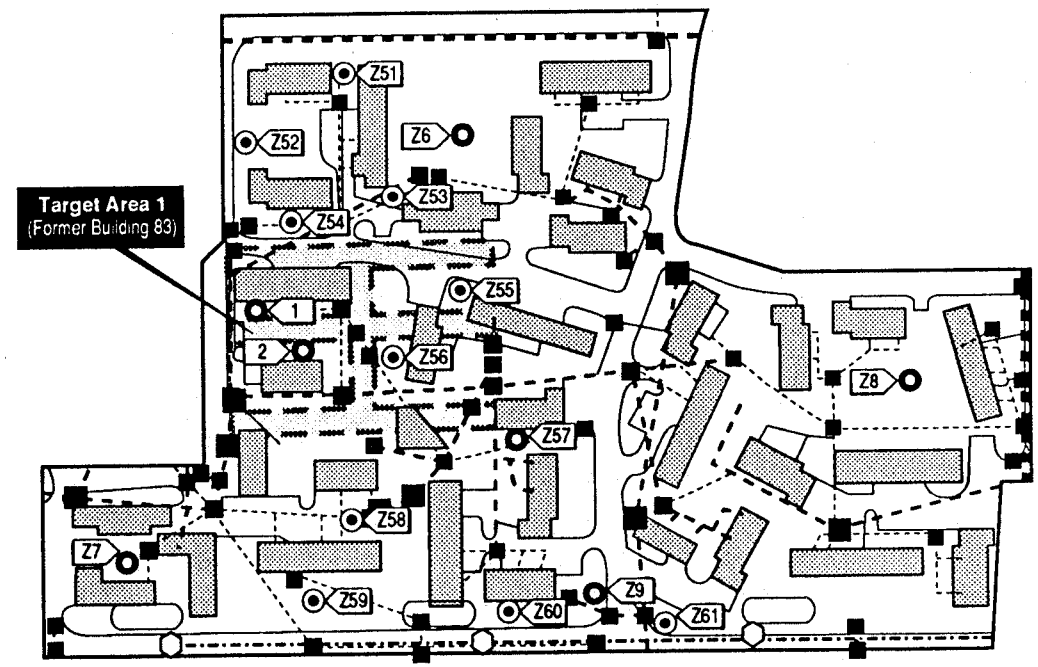

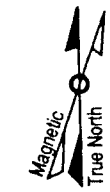

Figure 6-103-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-103-1

Summary of Recommended Samples
NAS Alameda Parcel 103

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
103-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	PCBs, DDT	Pesticides	CLP RAS
103-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-51-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	PCBs, DDT VOCs, Benzene, Napthalene	VOCs	GC
Z16-52-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-53-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-54-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-55-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

TABLE 6-103-1

Summary of Recommended Samples
NAS Alameda Parcel 103

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-56-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-57-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-58-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-59-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-60-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-61-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 34 houses cover approximately 50 percent of the parcel. The remaining 50 percent is open space. The parcel area is presently a residential area. Thirteen buildings and one structure were formerly located on the parcel and have since been demolished. The demolished buildings were used as barracks, an insect vector control office, a combat training pool and a baseball field. Sewer lines are present on this parcel and are shown on Figure 6-103-1.

Parcel 103 is located directly west of an Installation Restoration (IR) Program site (IR Site 7A, Navy Exchange Service Station). Previous investigations have been conducted at Parcel 103; however specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 83 (Demolished)

Former Building 83 was constructed in 1945 and served both as a barracks and a public works storage area for insect vector control (Figure 6-103-1). This building was demolished in approximately 1960. Former Building 83 was a two story building, constructed of wood and covered approximately 26,000 square feet.

Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. Pesticide disposal methods for that period are unknown. Potential pesticide use and storage will be addressed by Target Area 1 of this PEP. There are no documented spills within former Building 83.

Open Space

The open space covers approximately 50 percent of the parcel. The open space is 50 percent paved and 50 percent unpaved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass and landscaping.

A baseball field, constructed in 1945, was formerly located within the open space. The field was removed in approximately 1960.

Buildings 79, 80, 81, 82, 125, 126, 127, 128, 150, 157, 159 were formerly located in this open space. These buildings housed barracks and related activities and were demolished in approximately 1960. These buildings were two story buildings constructed of wood and covered approximately 25,000 square feet each. Building 160 was formerly located in this open space. It housed a combat training swimming pool and was demolished in approximately 1960. Building 160 covered approximately 25,000 square feet. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, and industrial sewer lines.

EBS information indicates that activities conducted within this open space included normal residential activities. No chemicals are documented to have been stored in the open space. There are no other spills or incidents documented for this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 103 is bounded by Parcels 98, 104, 105, 203, 110, 111, 197, 113, 112, and 102. Parcel 113 is IR Site 7A (Navy Exchange Service Station). If the continuing investigations at the IR site reveal a cause for concern at Parcel 103, then additional sampling on Parcel 103 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 103, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-103-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 103 because no industrial buildings are present.

As noted earlier, Parcel 103 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., unpaved agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-103-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 103 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained within two of the three zone-wide target areas.

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan

TABLE 6-103-2

Summary of Data Gaps
NAS Alameda Parcel 103

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 103.
Installation Restoration (IR) Sites	• IR Site 7A (Service Station) is located adjacent to the east boundary of Parcel 103. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Potential groundwater contamination migration from IR Site 7A.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term landscaped areas of this parcel. • Release from the Pacific Coast Oil Refinery may have impacted the former wetlands area.
Potential Parcel-Specific Release Areas	• Pesticides may have impacted the long term intensive use areas (i.e., storage and distribution areas, etc.) at Bldg. 83 on Parcel 103
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-103-2

Summary of Data Gaps
NAS Alameda Parcel 103

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Area of Former Building 83): Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. This target area covers approximately 26,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-103-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. Four of the 21 proposed zone-wide surface soil samples for pesticides are located within Parcel 103. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Eleven of the 60 proposed zone-wide soil vapor samples for VOCs is located in Parcel 103. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 103 are listed on Table 6-103-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level investigation techniques that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-103-1 summarizes screening-level sampling and analysis for the parcel's target areas. Two parcel-specific surface soil samples, four zone-wide surface soil samples, and eleven zone-wide soil vapor samples will be collected from the locations shown on Figure 6-103-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Surface soil sampling locations shown on Figure 6-103-1 are approximate.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-170

PARCEL 170 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 170 at NAS Alameda (Figure 6-170-1). The parcel, which is located in the northeast portion of the base, is approximately 34 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel; however, two of the three zone-wide target areas affect this parcel. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-170-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 170, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 170, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 171, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development,

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SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-170-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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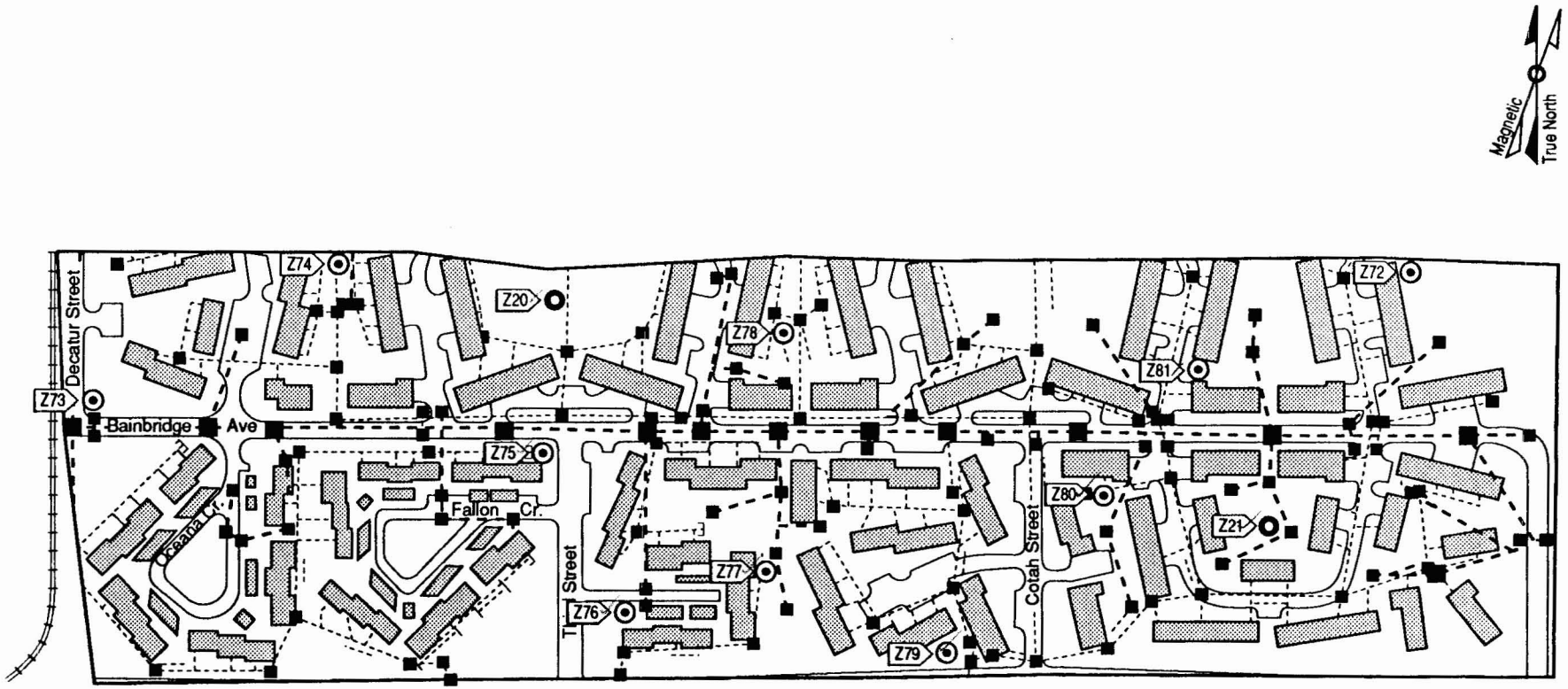
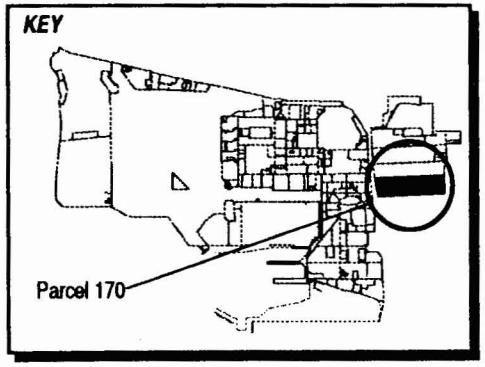
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1" = 250'

Figure 6-170-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7/94
2121.90.11/DS/07.07.94

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the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. This parcel is adjacent to Old Alameda Point, which was part of the original island. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, approximately 65 family housing units are located on the parcel (Figure 6-170-1). No industrial buildings are located on this parcel. These dwellings cover approximately 25 percent of the parcel. The remainder (75 percent) is open space. Based upon aerial photographs, temporary barracks were present on Parcel 170 prior to the early 1940s. These barracks were demolished and replaced with multifamily residences between the mid and late 1960s. Utilities located within and immediately surrounding the family housing and open space include underground natural gas, sanitary sewer, storm sewer, potable and fire protection water, and electrical lines.

Parcel 170 is not located within 500 feet any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 170, and specific data regarding potential chemical occurrence at this parcel are not available.

Sewer lines present at this parcel are shown in Figure 6-170-1. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

Construction of the current family housing units on the parcel was completed by the fall of 1970. Based upon aerial photographs, the former barracks were constructed prior to late April 1942. The barracks on the eastern portion of the parcel were demolished prior to late

July 1963. New family housing was constructed on the eastern side of the parcel by April 1966 and on the western side of the parcel by September 1970.

Open Space

Currently, the open space areas between family dwellings on Parcel 170, cover approximately 75 percent of the parcel. Open space areas are primarily covered by grass and weeds (70 percent), and secondarily covered by asphalt (20 percent) and concrete (10 percent) roadways. These open space areas are shown on Figure 6-170-1. The landscaped areas on this parcel have been landscaped since the early 1940s.

EBS information indicates that the activity conducted within this open space has consisted solely of residential housing. Minor stains in the open space and oil stains on roads and driveways are considered to be the result of normal vehicle traffic and parking. Transformers that may contain PCBs are also present. Railroad tracks associated with the Alameda Railroad are located on the western side of the parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 170 is bounded by Parcel 171 to the north. Activities of concern on this adjacent parcel are similar to those on Parcel 170. The Alameda Railroad runs along Main Street on the western border of this parcel. The railroad also runs on the southern side of Atlantic Avenue, which borders the southern boundary of Parcel 170. This segment of tracks most likely has not impacted Parcel 170. Private property is located to the east of Parcel 170.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 170. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being

reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-170-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: asbestos, transformers, radiological concerns, and lead-based paint. Sampling and imaging associated with underground sewer lines is also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 170 because no industrial buildings are present.

As noted earlier, Parcel 170 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate use areas (i.e. unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. No parcel-specific pesticide sampling has been proposed for Parcel 170; however, the ZAP for Zone 16 addresses potential pesticide concerns in landscaped areas on a zone-wide basis.

Once the data gaps in Table 6-170-2 are addressed and screening-level sampling results from the zone-wide target area described in the Zone Analysis Plan are compared to PRGs and background concentrations, Parcel 170 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas affect this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 170 are part of this zone-wide target area. Two of the 21

TABLE 6-170-2

Summary of Data Gaps
NAS Alameda Parcel 170

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 170.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 170.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.

TABLE 6-170-1

Summary of Recommended Samples
NAS Alameda Parcel 170

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-72-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-73-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-74-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-75-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-76-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-77-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-78-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-79-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

TABLE 6-170-1

Summary of Recommended Samples
NAS Alameda Parcel 170

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-80-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-81-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

TABLE 6-170-2

Summary of Data Gaps
NAS Alameda Parcel 170

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

proposed zone-wide surface soil samples for pesticides are located in Parcel 170. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 170 are listed on Table 6-170-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Ten of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 170. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 170 are listed on Table 6-170-1.

In addition, data gaps pertaining to asbestos, lead-based paint, transformers, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Table 6-170-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcel 170. Two surface soil samples and ten soil vapor samples will be collected from the zone-wide locations shown on Figure 6-170-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1

and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6 -171

PARCEL 171 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 171 at NAS Alameda (Figure 6-171-1). The parcel, which is located in the northeast portion of the base, is approximately 24 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel; however, two of the three zone-wide target areas have been identified that affect this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-171-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 171, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 171, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future

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SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-171-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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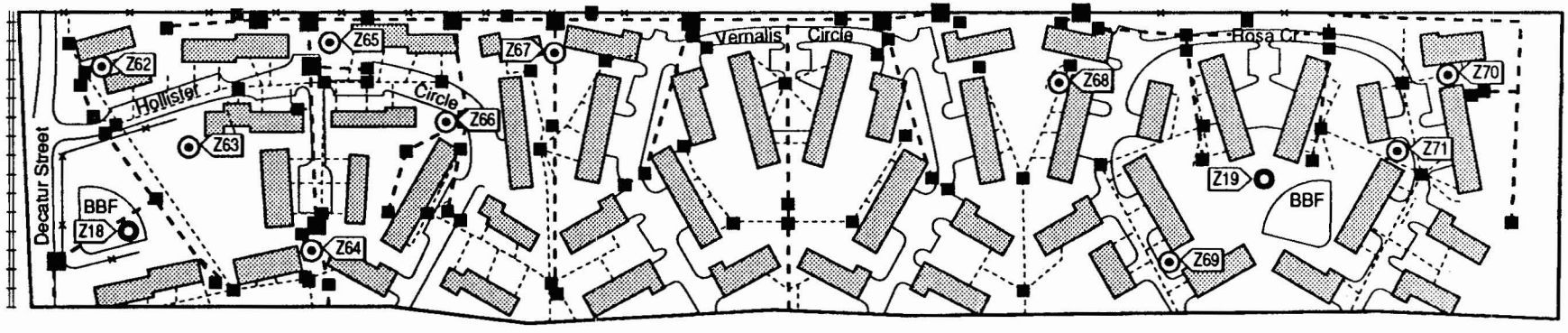
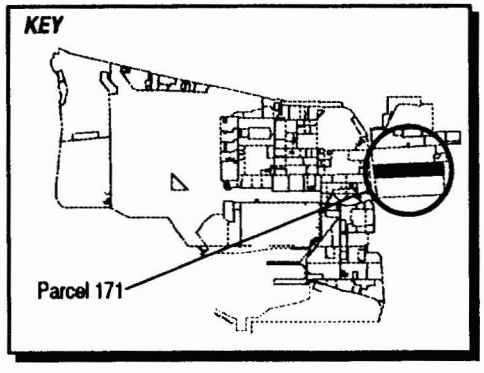
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

Figure 6- 171-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.07.94

SENSITIVE

TABLE 6-171-1

Summary of Recommended Samples
NAS Alameda Parcel 171

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-18-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-19-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-62-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-63-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-64-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-65-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-66-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-67-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-68-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-69-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

TABLE 6-171-1

Summary of Recommended Samples
NAS Alameda Parcel 171

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-70-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-71-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

data evaluation for this parcel should consider the data collected for the entire zone. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. This parcel is adjacent to Old Alameda Point. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, approximately 50 family units are located on the parcel (Figure 6-171-1). These dwellings cover approximately 20 percent of the parcel. The remainder (80 percent) is open space. Based upon aerial photographs, temporary barracks were present on Parcel 171 prior to the early 1940s. These barracks were demolished and replaced with multifamily residences between the early and mid-1960s. No industrial buildings are located on this parcel. Utilities located within and immediately surrounding the family housing and open space include underground natural gas, sanitary sewer, storm sewer, potable and fire protection water, and electrical lines. Sewer lines present at this parcel are shown in Figure 6-171-1.

Parcel 171 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 171 and specific data regarding potential chemical occurrence at this parcel are not available.

Current investigations are being performed at the Fleet and Industrial Supply Center (FISC) Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 178 and 184, 179 and 180, 181, and 182 within NAS Alameda, and Parcels 172, 173, 174, 175, 176, 177 within FISC, Alameda Annex. Parcel 171 is located within 500 feet of Parcels 172, 173, 174, and 175. The parcels within 500 feet of the study area were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented,

approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

Based upon aerial photographs, the former barracks were constructed prior to late April 1942. The structures on the eastern portion of the parcel were demolished prior to July 1963. By April 1966, all of the new family housing had been constructed on the parcel.

Open Space

Currently, approximately 80 percent of Parcel 171 consists of open space between family dwellings. This open space area is primarily covered by grass and weeds (70 percent), and secondarily covered by asphalt (20 percent) and concrete (10 percent) roadways. This parcel presently has open space areas that have been landscaped since the early 1940s. These open space areas are shown on Figure 6-171-1.

Transformers that may contain PCBs are also present. Railroad tracks associated with the Alameda Railroad are located on the western edge of the parcel. EBS information does not indicate any evidence of spills in the open spaces.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 171 is bounded by Parcel 170 to the south, and Parcels 172 and 174 within FISC, Alameda Annex to the north. Activities on Parcel 170 are similar to Parcel 171. The Alameda Railroad runs along Main Street on the western border of Parcel 171. Private property is located to the east of Parcel 171. Activities of concern on the other adjacent parcels include hazardous material storage on Parcel 172, and storage and/or use of petroleum products, spray paint, paint thinner, corrosives, halogenated organic compounds, metals, petroleum products, and pesticides within buildings on Parcel 174.

Monitoring wells were installed on Parcel 172 (MW-10) and Parcel 174 (MW-12) as indicated in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area.* The Warehouse and Scrapyard Area (Scrapyard) is an IR site located on Parcel 176, and the site investigation has been extended beyond the Scrapyard boundaries. Prior to monitoring well installation, earlier investigations on these parcels included soil sampling. The monitoring well on Parcel 172 (MW-12) is approximately 50 feet north of the boundary between Parcels 171 and 172. Concentrations of cadmium, chromium, lead, and nickel in groundwater exceeded 1993 MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. The data from these investigations will provide the necessary boundary conditions for Parcel 171. Ongoing follow-up sampling and radiological sampling at the Scrapyard IR site are being performed by the Navy IR contractor.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 171, consistent with the objectives in Section 1 of the Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-171-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: asbestos, radiological concerns, transformers and lead-based paint. Sampling and imaging associated with underground sewer lines is also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

TABLE 6-171-2

Summary of Data Gaps
NAS Alameda Parcel 171

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 171.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 171.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse) indicate the presence of benzene and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.

TABLE 6-171-2

Summary of Data Gaps
NAS Alameda Parcel 171

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

No Industrial Hygiene (IH) sampling is required for Parcel 171 because no industrial buildings are present.

As noted earlier, Parcel 171 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate use areas (i.e. unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 171. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-171-2 are addressed and screening-level sampling results from the zone-wide target area described in the Zone Analysis Plan is compared to PRGs and background concentrations, Parcel 171 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas affect this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 171 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 171, and are listed on Table 6-171-1. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Ten of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 171. The samples were located on this parcel to ensure an

appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 171 are listed on Table 6-171-1.

In addition, data gaps pertaining to asbestos, PCBs, lead-based paint, underground lines, potential groundwater contamination migration, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level techniques that will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-171-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcel 171. Two surface soil samples and ten soil vapor samples will be collected from the zone-wide locations shown on Figure 6-171-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

PARCEL 178 & 184 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 178 and 184 at NAS Alameda (Figure 6-178-1). Parcel 184 is being considered concurrently with Parcel 178 because the histories and former uses of these parcels are very similar. Parcel 184 is completely contained within Parcel 178 (see Figure 6-178-1). The parcels, which are located in the northeastern portion of the base, are approximately 22.5 acres in size and together are roughly L-shaped. These parcels have been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. No parcel-specific target investigation areas (target areas) have been identified on these parcels; however three zone-wide target areas encompass these parcels. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-178-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 178 and 184, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 178 and 184, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern. Past and present uses of these parcels were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 179, 180, 181, 182, 183, and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-178-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
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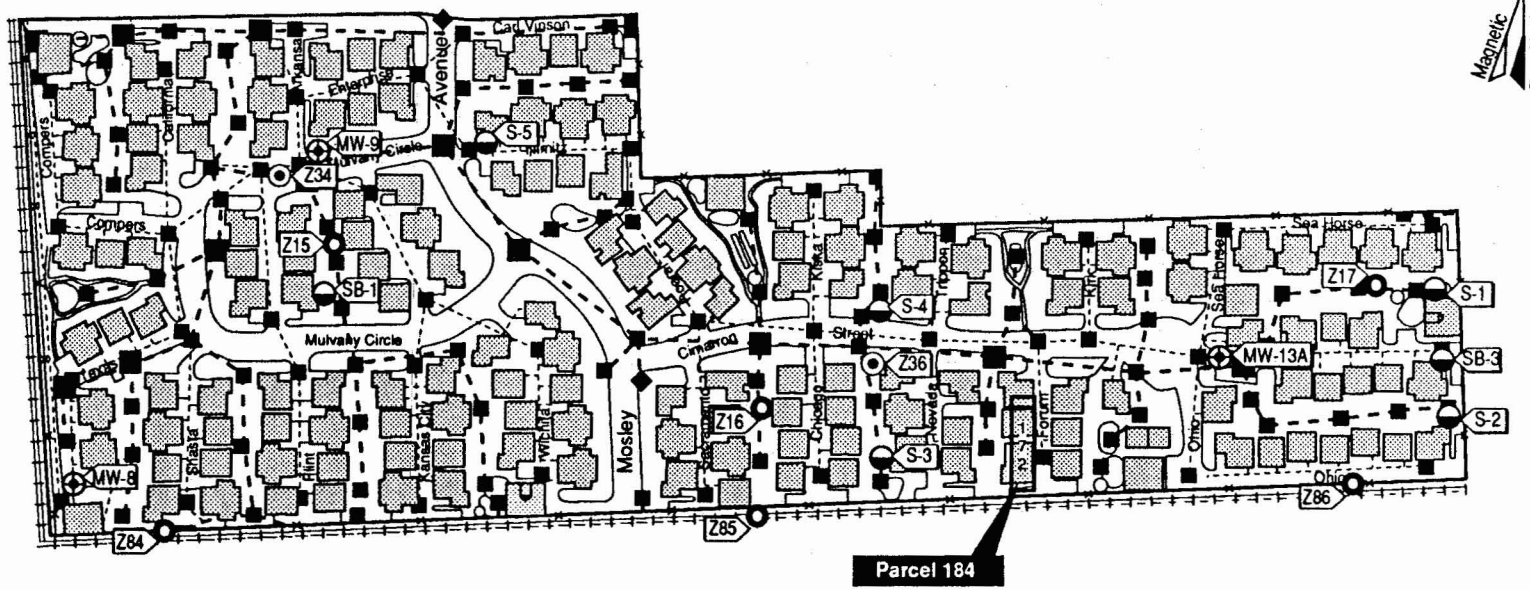
SENSITIVE



LEGEND

- Storm Sewer Line
- Sewer Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Boring Location
- Monitoring Well Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

KEY

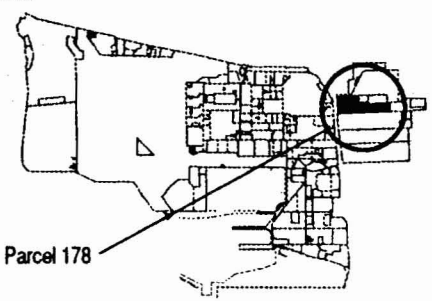


Figure 6-178-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

SENSITIVE

TABLE 6-178-1

Summary of Recommended Samples
NAS Alameda Parcel 178

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-34-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-36-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-84-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	SVOCs	SVOCs	CLP RAS
Z16-84-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	TPH, PCBs, lead	TPH, PCBs, lead	Test Kits, XRF
Z16-84-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	TPH, PCBs, lead	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-85-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	SVOCs	SVOCs	CLP RAS
Z16-85-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	TPH, PCBs, lead	TPH, PCBs, lead	Test Kits, XRF
Z16-86-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	SVOCs	SVOCs	CLP RAS
Z16-86-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zoen 16 Target Area 3	TPH, PCBs, lead	TPH, PCBs, lead	Test Kits, XRF

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

(e.g., Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the Parcel 178 and 184 boundaries were completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Approximately 160 family dwellings currently cover approximately 50 percent of these parcels. The remaining 50 percent of the parcels consists of open space. The parcel areas are presently in use as a residential subdivision. One building (Building 369) was formerly located in the southwestern portion of Parcel 178, and Building 172 was formerly located on Parcel 184. Sewer lines are present at these parcels and are shown in Figure 6-178-1.

Parcels 178 and 184 are located to the west of the Scrapyard Installation Restoration (IR) Program site. This IR site is part of the Fleet Industrial Supply Center (FISC) Oakland, Alameda Annex, and not part of NAS Alameda. Previous investigations have been conducted at Parcel 178, and specific data regarding potential chemical occurrence are available. Parcels 178 and 184 were formerly used as a warehouse area adjacent to the Scrapyard. Parcels 178 and 184 were investigated in a March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area*. Two monitoring wells (MW-9 and MW-13) and 10 soil borings were installed on Parcel 178 as part of this previous investigation. A total of 14 soil samples were collected from depths of zero to five feet below ground surface from the 10 soil borings.

Data from soil and groundwater samples collected from the borings and monitoring wells on Parcel 178 between March 1987 and January 1988 are summarized in Tables 6-178-2 and 6-178-3. Only Arsenic was detected in soil samples above August 1994 residential PRG. Groundwater samples collected in August 1987 were above May 1993 USEPA or Cal-EPA MCLs for cadmium, chromium, lead, nickel, and benzene. Only benzene was detected above USEPA and Cal-EPA MCLs in groundwater samples collected in January 1988. Data indicate that activities on Parcel 178 and adjacent parcels have impacted Parcel 178. Current monitoring well data is not yet available to fully characterize the impacts to Parcel 178.

TABLE 6-178-2

March 1987 Soil Sample Results in mg/kg
NAS Alameda Parcel 178

Sample Number	Depth	Arsenic	Cadmium	Chromium	Lead	Nickel
B-9	2'-4'	16	1	56	43	90
B-13	2'-4'	5.9	1	34	14	130
S-1	2'-4'	12	1	53	22	85
S-2	2'-4'	6	1	38	25	37
S-3	2'-4'	8	1	86	31	270
S-4	2'-4'	16	1	62	47	84
S-5	2'-4'	16	1	59	37	79
S-6	2'-4'	4.3	1	150	24	690
SB-1	0.0'-0.5'	3	3	360	9	580
SB-1	1'-1.5'	21	3.5	120	23	80
SB-1	4.5'-5'	8	2.5	90	18	66
SB-3	0.0'-0.5'	6	2.5	190	5	430
SB-3	1'-1.5'	6.2	3	250	18	450
SB-3	4.5'-5'	5.2	1	54	11	48
Detection Limit		0.005	0.001	0.005	0.005	0.05
August 1994 Residential PRGs		1.9	38	380	400	1500

Source: ERM-West, March 1988

TABLE 6-178-3

Groundwater Sample Results in mg/L
NAS Alameda Parcel 178

Sample Number	Date	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
MW-9	Aug-87	ND	0.04	0.03	0.32	0.14	0.25	1.1
MW-9	Jan-88	0.009	ND	ND	ND	ND	0.26	7.8
MW-13	Aug-87	ND	0.06	0.07	0.78	0.31	0.57	0.73
MW-13	Jan-88	0.004	ND	ND	ND	ND	0.74	1.8
Detection Limit		0.005	0.001	0.005	0.005	0.05	0.0005	40
USEPA MCL		0.05	0.005	0.1	0.015	0.1	0.005	---
May 1993 CA MCL		0.05	0.01	0.05	0.05	---	0.001	---

Source: ERM-West, March 1988

Construction requirements for the new family housing project for fiscal year 1988 considered the results of the ERM-West, March 1988 report. Based upon the investigation by ERM-West, the top six inches of soil at Parcels 178 and 184 was removed and replaced with a minimum of two feet of clean imported fill. To be able to place residences in this area, the Navy installed an impermeable barrier below building foundations to reduce potential exposure to impacted soil and groundwater. Building foundations for family housing units were underlain by a minimum of 2 inches of sand over a 40 mil impermeable barrier.

Current investigations are being performed at the Fleet and Industrial Supply Center, Oakland Alameda Facility and Alameda Annex. This investigation affects numerous parcels in the Housing Zone. The parcels located within 500 feet of the study area within NAS Alameda include Parcels 178 and 184, 179 and 180, 181, and 182. Previous and current investigations at and around the Scrapyard have been conducted on Parcels 178 and 181 within NAS Alameda and Parcels 172, 173, 174, 175, 176, and 177 within FISC, Alameda Annex. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Residential Housing

The residential housing currently located on these parcels was built between 1990 and 1992. The space now occupied by the houses was an open space storage area between the mid 1960s and 1990. Prior to this, the northern section housed a barracks area built in the 1940s. The southwestern portion of Parcel 178 had a large warehouse that was built between 1947 and 1953. The warehouse was demolished between 1985 and 1990. Detailed information about the buildings presently located on the parcel is not available; visual building visual inspections were not conducted within residences.

Utilities located within and immediately surrounding the parcels include underground sanitary sewer, water, natural gas, storm sewer, and electrical lines. Twenty-four small, pad-mounted transformers were noted throughout the parcel. Because of the recent development of the parcel, PCB-containing transformers are not likely to be present. A small oil stain was noted on the concrete pad of a transformer at the north part of Mosley Avenue.

No chemical storage is documented to have occurred in the current or former buildings on the parcels. No other incidents such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Parcels 178 and 184.

Building 369 (Demolished)

Building 369 (Parcel 178) was constructed in the early 1950s and was used as a warehouse (Figure 6-178-1). This 172,000 square foot building was demolished between 1985 and 1990. A portion of this warehouse was sealed off prior to its demolition due to the deterioration of asbestos fire-proof material.

Building 172 (Demolished)

Building 172 (Parcel 184) was constructed in 1946 and was used as an equipment storage shed. This 5,000 square foot building was demolished between 1990 and 1992. No chemical storage, spills or staining are documented to have occurred in or near Building 172.

Open Space

Open space covers approximately 50 percent of the parcels. The open space of Parcel 178 had been used for vehicle and equipment parking, warehousing of unknown materials, and is currently used for

residential and recreational purposes. The open space of Parcel 184 was covered by an equipment storage shed, as described above.

No structures are currently located in the open space on Parcels 178 and 184. The ground surface of the open space consists of 75 percent asphalt and concrete pavement and 25 percent unpaved areas. The pavement is in good condition. The unpaved areas of the open space have been landscaped since 1990. This parcel previously had open space areas that were storage areas from 1960 to 1990.

Utilities located on the parcels include underground sanitary sewers, water, natural gas, electrical, and storm sewer lines. No chemical storage is documented to have occurred on Parcels 178 and 184. No documented spills or staining were noted on the parcel, except for a paint stain on a storm drain that was observed during the site inspection. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcels 178 and 184.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcel 178 is bounded by Parcels 180 and 181 to the north, Parcel 176 within FISC, Alameda Annex to the east, Parcel 174 within FISC, Alameda Annex to the south, and Main Street to the west. Parcel 184 is bounded by Parcel 178 to the north, west, and east, and Parcel 174 within FISC, Alameda Annex to the south. Parcel 176 within FISC, Alameda Annex is part of the Scrapyard IR Site. Activities of concern on these adjacent parcels include hazardous materials storage and use. Previous investigations by ERM-West, Inc. and PRC Environmental Management, Inc. have been conducted at Parcels 176 and 177 within FISC, Alameda Annex, and Parcels 178 and 184 within NAS Alameda. Data indicate that activities on these parcels have impacted Parcels 178 and 184. Ongoing follow-up sampling and radiological sampling at the Scrap Yard IR site are being performed by the IR contractor.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 178 and 184, consistent with the objectives in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-178-4 must be addressed before the parcels can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, asbestos, radiological considerations, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated sewers is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 178 or Parcel 184 because no industrial buildings are present.

As noted earlier, Parcel 178 previously had open space areas that were unpaved, and currently has open space areas that are landscaped. Parcel 184 was previously covered by Building 172, and currently has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 178 was previously occupied by wetlands, and may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-178-4 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcels 178 and Parcel 184 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-178-4

Summary of Data Gaps
NAS Alameda Parcel 178 & 184

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 178 or Parcel 184.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the east of Parcel 178. Additional subsurface investigation relative to the Scrapyard IR Site is ongoing by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse) and Parcel 178 indicate the presence of benzene and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Landscaped or long-term unpaved areas. • Filled wetlands. • Railroad tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-178-4

Summary of Data Gaps
NAS Alameda Parcel 178 & 184

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

The following zone-wide target areas were identified on Parcel 178 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcels 178 and 184 are part of this zone-wide target area. Three of the 21 proposed zone-wide surface soil samples for pesticides are located within Parcels 178 and 184. The samples were located on these parcels to ensure an appropriate distribution of samples throughout the zone-wide target area. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 2 includes all land area north of Atlantic Avenue within the Housing Zone, which overlie former wetlands. Parcels 178 and 184, which are part of this zone-wide target area, overlie former wetlands. Two of the 60 samples proposed to be collected from this zone-wide target area are located on Parcels 178 and 184. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. The railroad borders the western and southern boundaries of Parcels 178 and 184. Three of the five samples proposed to be collected from this zone-wide target area are located on Parcels 178 and 184. The zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

In addition, data gaps pertaining to transformers, asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and soil vapor sampling (SOP 6), will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-178-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcels 178 and 184. Six surface soil samples and two soil vapor samples will be collected from the zone-wide locations shown on Figure 6-178-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

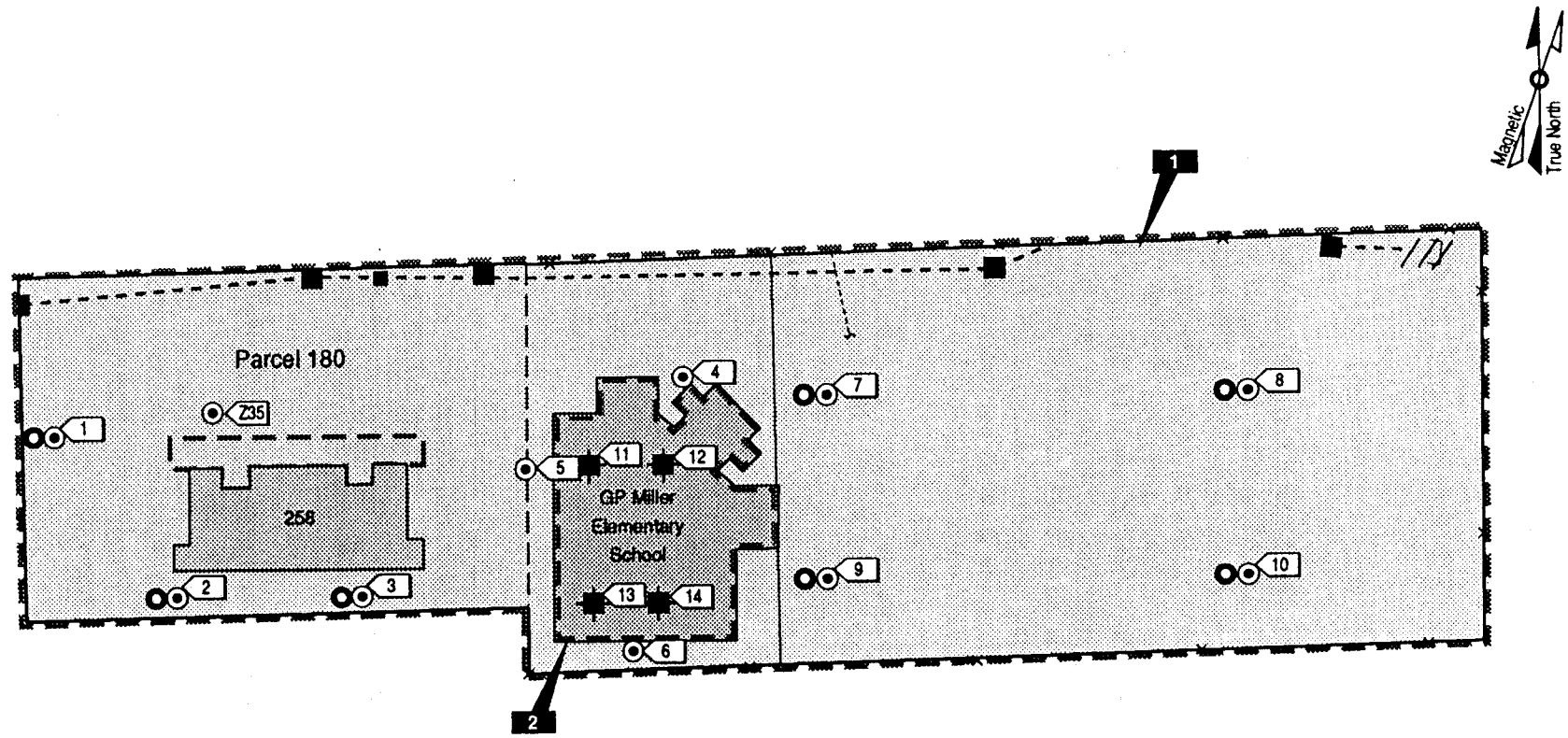
PARCELS 179 AND 180 EVALUATION PLAN

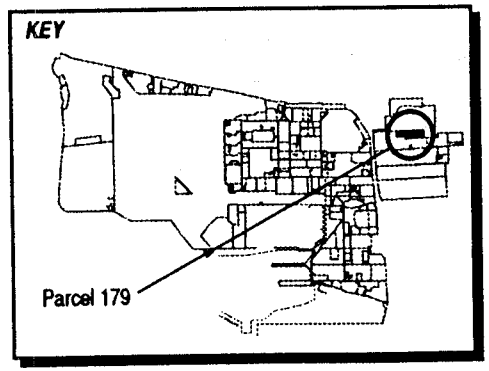
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 179 and 180 at NAS Alameda (Figure 6-179-1). Parcel 180 is being considered concurrently with Parcel 179 because the histories, former uses, and current users of these parcels are very similar. Parcel 180 is located to the west of Parcel 179 (see Figure 6-179-1). The parcels, which are located in the northeastern portion of the base, are approximately five acres in size and are roughly rectangular in shape. The parcels have been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. One zone-wide and two parcel-specific target investigation areas (target areas) have been identified on these parcels. Surface soil sampling, soil vapor sampling, and environmental air sampling will be used to accomplish the screening-level investigation for the target areas. In addition, air monitoring will be performed within the crawl space of the school. Table 6-179-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 179 and 180, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 179 and 180, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of these parcels was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcels where sampling was deemed necessary to delineate potential impacts of compounds of concern.





LEGEND

- Target Area 1 & 2
- Storm Sewer Line
- Sewer Line
- Capped
- Sewer Line Abandoned In Place
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Air Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 125'

Figure 6-179-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-179-1

Summary of Recommended Samples

NAS Alameda Parcels 179 and 180

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
180-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, Metals, Dioxins	TPH, SVOCs, Pesticides, Metals, Dioxins	Modified EPA 8015, CLP RAS, 8280/SAS B
180-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
180-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
180-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, Metals, Dioxins	TPH, SVOCs, Pesticides, Metals, Dioxins	Modified EPA 8015, CLP RAS, 8280/SAS B
180-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, Metals, Dioxins	TPH, SVOCs, Pesticides, Metals, Dioxins	Modified EPA 8015, CLP RAS, 8280/SAS B
179-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC

TABLE 6-179-1

Summary of Recommended Samples

NAS Alameda Parcels 179 and 180

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
179-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, metals	TPH, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PAHs, PCBs, Metals, Dioxins	TPH, SVOCs, Pesticides, Metals, Dioxins	Modified EPA 8015, CLP RAS, 8280/SAS B
179-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
179-11-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	Solvents	VOCs	CLP RAS
179-12-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	Solvents	VOCs	CLP RAS
179-13-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	Solvents	VOCs	CLP RAS
179-14-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	Solvents	VOCs	CLP RAS
Z16-35-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	Solvents	VOCs	GC

These parcels have been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 178, 181, 182, 183, 184, and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the Parcel 179 and 180 boundaries was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, the George P. Miller Elementary School and Building 258 (the child care center) cover approximately 30 percent of the Parcels 179 and 180. The remaining 70 percent is open space. The parcel areas are presently in use as a public elementary school. Sewer lines are present at these parcels and are shown in Figure 6-179-1.

Parcels 179 and 180 are located approximately 100 feet west of the Scrapyard Installation Restoration (IR) Program site. The parcels located within 500 feet of the study area within NAS Alameda include Parcels 178 and 184, 179 and 180, 181, and 182. Previous and current investigations at and around the Scrapyard have been conducted on Parcels 178 and 181 within NAS Alameda and Parcels 172, 173, 174, 175, 176, and 177 within FISC, Alameda Annex. No previous investigations have been conducted at the parcel and specific data regarding potential chemical occurrence are not available; however, previous investigations have been performed and current investigations are being performed at adjacent parcels. Previous and current investigations affecting adjacent parcels are discussed in the following sections, which are summarized in the Zone Analysis Plan for Zone 16.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Previous Investigations

Previous and current investigations have been performed at neighboring Parcels 172, 173, 174, 175, 176, and 177 within Fleet Industrial Supply Center (FISC), Alameda Annex, and Parcels 178 and 184 within NAS Alameda. Previous investigations on Parcels 178 and 184 and the western portion of Parcel 176 are within 500 feet of the boundaries for Parcels 179 and 180, and will be summarized in this section.

MS-reference ERM 1987, Sept ?

Parcels 178 and 184 within NAS Alameda (along with Parcels 172, 173, 174, 175, 176, and 177 within FISC, Alameda Annex) were investigated during 1987 and 1988 by ERM-West, Inc. A March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area* summarizes the results of these investigations. As part of these previous investigations, two of 14 monitoring wells (MW-9 and MW-13) and 10 of 52 soil borings were installed on Parcel 178. A total of 14 soil samples were collected from these 10 borings at a depth of zero to five feet below ground surface. Data from soil and groundwater samples collected from the borings and monitoring wells on Parcel 178 are summarized in the PEP for Parcel 178 in Tables 6-178-2 and 6-178-3. Only Arsenic was detected in soil samples above August 1994 Residential Use PRGs. Groundwater samples collected in August 1987 contained concentrations of cadmium, chromium, lead, nickel, and benzene above May 1993 USEPA and Cal-EPA MCLs. However, only benzene was detected above USEPA and Cal-EPA MCLs in groundwater samples collected in January 1988. Current monitoring well data are not available to fully characterize the impacts to Parcel 178.

Construction requirements for the new family housing project for fiscal year 1988 considered the soil data results of the ERM-West, Inc. March 1988 report. Based upon the investigation by ERM-West, the top six inches of soil from Parcels 178 and 184 was removed and replaced with a minimum of two feet of clean imported fill. Prior to construction of residences in this area, the Navy installed an impermeable barrier below building foundations to reduce potential exposure from impacted soil and groundwater. Building foundations for family housing units were underlain by a minimum of 2 inches of sand placed over a 40-mil thick impermeable synthetic barrier.

Four soil borings were installed on the western portion of Parcel 176 by ERM-West in 1987. Six soil samples were collected from these borings at depths of zero to five feet below ground surface. Only arsenic was detected above August 1994 Residential Use PRGs.

A screening-level sampling effort documented in a 1993 report by PRC indicated that a comprehensive soil vapor survey was performed for the Scrapyard IR Site (Parcels 176 and 177). In addition, soil, groundwater, and air samples were collected throughout these parcels, including the railroad track area.

Soil vapor sampling was performed at the Scrapyard IR Site on a 50-foot interval grid. The 1993 PRC report stated that TCA, PCE, TCE, and TPH were detected in Parcel 176 soil vapor at maximum concentrations of 0.1 µg/L, 100 µg/L, 1 µg/L, and 1,000 µg/L, respectively.

Subsequent, soil boring locations were chosen based on a 150-foot by 150-foot grid, locations of suspected chemicals of concern, potential exposure pathways, and soil vapor survey results. One hundred thirty two soil samples were collected from the soil boring locations. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides, PCBs, VOCs, and SVOCs. Samples from five of the soil borings were located on the western portion of Parcel 176 within FISC, Alameda Annex. The 1993 PRC report indicated the presence of chromium, nickel, and mercury in these soil samples. The concentrations of these metals were all below USEPA's August 1994 industrial PRGs for soil.

One of the four air monitoring sample locations was located on the western portion of Parcel 176 within FISC, Alameda Annex. According to the 1993 PRC report, arsenic and lead were detected in the air at concentrations of 0.54 and 51 ng/SCM, respectively.

Four monitoring wells are located on the western portion of Parcel 176. The 1993 PRC report for groundwater sampling results from these four monitoring wells indicated the presence of vinyl chloride, fluorene, naphthalene, and barium. The concentrations were slightly above USEPA and Cal-EPA December 1993 MCLs for most compounds. Any further groundwater investigation requirements will be defined after the screening-level investigation has been completed. The screening-level data collected under this program and the groundwater data to be gathered from new wells at adjacent parcels will be evaluated together to assess the need for any further groundwater investigation.

Current Investigations

Current investigations are being performed at the FISC, Oakland - Alameda Facility/Alameda Annex. Figure Z-16-2 shows the general site layout of this study area. The sample locations for these investigations are often within 500 feet of Parcels 179 and 180. A May 1991 report and an October 1993 addendum were prepared by PRC

Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan,* summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are completed, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area. Soil samples are proposed to be collected at depths of 0.0 feet, 0.5 feet, 2.0 to 2.5 feet, 5.0 to 5.5 feet, and one directly above the soil/groundwater table interface.

Current and proposed boring and monitoring well locations are illustrated in Figure 6-Z16-3 of the Zone Analysis Plan for Zone 16. A total of seven monitoring wells and nine borings are currently being installed throughout the study area. Three of the seven monitoring wells (S45, S46, and S47) are located within Zone 16. The three monitoring wells are within 500 feet of Parcel 179 and 180. None of the Phase II-C soil borings are located in Zone 16.

Current results of unvalidated data from soil samples taken in the vicinity of Parcels 179 and 180 are summarized below. The three new wells are located northeast of Parcels 179 and 180 in Parcel 181 as illustrated on Figure 6-181-1. Several compounds were detected in soil samples from these three monitoring well locations including VOCs, SVOCs (including PAHs), TPH, and metals.

VERSAR, Inc. indicated that preliminary soil sampling results at monitoring wells S45, S46, and S47 detected high benzene concentrations at the former wetlands crust (10,000 µg/kg benzene detected at boring S46 at a depth of 16 feet bgs); however analytical results were not available to confirm this assertion. The concentration of benzene in the soil sample at S45 at a depth of 16 feet bgs and S47 at a depth of 17.5 feet bgs were 4 µg/kg and 1,100 µg/kg respectively.

Most SVOCs were detected above both industrial and residential PRGs in soil samples from monitoring wells S45, S46, and S47 between 13.0 and 16.0 feet bgs. Most inorganic compounds were detected below residential August 1994 PRGs; however, arsenic was commonly detected above both industrial and residential August 1994 PRGs and chromium was commonly detected above residential August 1994 California modified PRGs. Most soil samples indicated the presence of aluminum above residential August 1994 PRGs.

TPH-gasoline, TPH-motor oil, and TPH-diesel were detected in soil samples from this study area. TPH-gasoline concentrations ranged from 0.750 mg/kg in monitoring well S45 at 13 feet bgs to 250 mg/kg in

monitoring well S47 at 14.5 feet bgs. TPH-motor oil concentrations ranged from 7,100 µg/kg in monitoring well S47 at 5.5 feet bgs to 9,700 mg/kg in monitoring well S47 at 14.5 feet bgs. TPH-diesel concentrations ranged from 20 mg/kg in monitoring well S47 at 16 feet bgs to 2,500 mg/kg in monitoring well S47 at 14.5 feet bgs.

An abandoned 12,000-gallon underground storage tank (Tank AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the NSC Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 0.50 mg/kg to 11,000 mg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

George P. Miller Elementary School

The George P. Miller Elementary School Building (the school) was constructed between 1975 and 1981 and has served as a public elementary school (Figure 6-179-1) since that time. The school is a one-story building constructed with a concrete floor/foundation and a composite roof. The school covers approximately 22,500 square feet and is in good condition. The space occupied by the building was formerly an open space used for storage, parking, and residential housing.

Utilities located within and immediately surrounding the school include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. No environmental permits appear to have been issued for this building.

Cleaning agents and solvents are documented to have been used in the building and stored in the janitor's room in quantities totaling approximately 110 gallons. Other chemicals including toner, duplicating fluid, glue, and paints are also stored in small quantities throughout the school. The disposition of the used chemicals is not known. No staining was noted in the school during the site inspections or the EBS review.

The building is equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near the school.

Building 258

Building 258 was constructed in 1985 and has served as a child care center (Figure 6-180-1) since that time. This building is in good condition. Building 258 has ten classrooms; there is no other available information about the center's construction. There is a wood, modular structure located east of the main building that is used as an office and lending library. The space occupied by Building 258 was formerly open space used for storage and parking between 1963 and 1981. It is not immediately clear from aerial photographs whether the parking/storage area was paved, or consisted of bare ground. Prior to this time the parcel area was part of a residential housing development. The housing was demolished sometime between 1958 and 1963.

Utilities located within and immediately surrounding Building 258 include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for this area.

Less than four gallons of pesticides (drione, ficam W, diazinon 4E, bait blocks), cleaning solvents, and bleach were stored in the building at the time of visual inspections. These chemicals were found in the janitor's closet. Approximately twelve gallons of degreaser, floor polish, and concentrated cleaner were documented during the site inspection. Copier toner is located in the modular office located east of the main building. The process employed at this building for disposing of chemical waste is unknown.

Review of site inspection data and historical records indicates that no documented spills have occurred on this parcel, and no staining was noted during the site inspection.

There is no available information pertaining to an HVAC system in Building 258. The building's water supply was found to contain high levels of lead between 1987 and 1988. Filters are currently used and changed every six months to reduce lead levels in water. Floor tile in the building was sampled and tested for asbestos; none was detected. No incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 258.

Open Space I

Open Space I covers approximately 40 percent of the parcel, and consists of the open space in Parcel 179. In general, Open Space I is used as a

playground. Historically, Open Space I was used for vehicle parking, storage, and residential housing.

The ground surface of Open Space I is almost completely paved. However, two "play pits" containing bark chips are located immediately east of the school building. Most of the paved area is surfaced with asphalt. The pavement is in good condition. Utilities located within and immediately surrounding the open space on Parcel 179 include underground gas, sanitary sewer, storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space include recreational activities and vehicle parking. No chemicals are documented to have been stored in Open Space I. Two oil-filled transformers on poles are located near the northeast corner of the school building.

No documented spills have occurred in the open space. The only staining noted during the site inspection is a stain located along the base of the brick wall near the southeastern corner of the school. This stain is approximately four feet long. Minor staining related to vehicle parking was also noted in the asphalt parking lot north of the school. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near the school.

Open Space II

Open Space II covers approximately 30 percent of the parcel, and consists of the open space in Parcel 180. In general, Open Space II is used for parking. A playground and a small landscaped area are also located in this open space.

One pole-mounted transformer is located on Open Space II. It was observed along the western edge of the parcel. The ground surface of Open Space II is 80 percent paved and 20 percent unpaved. Approximately 50 percent of Open Space II is surfaced with asphalt and 40 percent is concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with landscaping. A storage shed located in front of the center is used to store earthquake supplies.

Numerous buildings were formerly located on Open Space II. Parcel 180 was formerly used for residential housing (prior to 1963), with approximately 60 percent of Parcel 180 existing as grassy and landscaped open space at that time. Utilities located within and immediately surrounding this open space include underground

natural gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for processes occurring within this open space.

No incidents such as fires, mishaps, or flooding are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcels 179 and 180 are bounded by Parcels 178 to the south, west, and east, and Parcel 181 to the north. Parcels 178 and 181 are currently residential areas. Parcel 176 within FISC, Alameda Annex is part of the Scrapyard IR Site and is located approximately 150 feet southwest of Parcel 179. Activities of concern on Parcel 176 within FISC, Alameda Annex include storage and disposal of hazardous substances. Previous investigations on Parcel 176 within FISC, Alameda Annex and Parcels 178 and 184 indicated the presence of heavy metals in the soil and groundwater, and benzene in the groundwater. Current investigations on Parcel 181 indicate the presence of benzene in the soil at the wetlands crust.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 179 and 180, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-179-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps at this parcel: asbestos, lead-based paint, transformers, radiological considerations, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewer lines is discussed

TABLE 6-179-2

Summary of Data Gaps
NAS Alameda Parcel 179 & 180

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 179 or Parcel 180.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located 150 feet to the east of Parcel 179. Additional subsurface investigation relative to the Scrapyard IR Site is ongoing.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse), Parcel 181 (Residential) and Parcel 178 (Residential) indicate the presence of benzene, vinyl chloride, fluorene, barium, and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Filled wetlands.
Potential Parcel-Specific Release Areas	• Open Spaces I and II may have been impacted by activities on Parcels 176 and 177 (the Scrapyard IR Site), and the filled wetlands. • The School Crawl Space may have been impacted by accumulation of VOCs from the filled wetlands.

TABLE 6-179-2

Summary of Data Gaps
NAS Alameda Parcel 179 & 180

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcels 179 and 180 because no industrial buildings are present.

As noted earlier, Parcels 179 and 180 have, and previously had open space areas that are or were unpaved or landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 179 and 180 were previously occupied by wetlands, and may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-179-2 are addressed and screening-level sampling results from the target areas are collected, Parcels 179 and 180 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target area. The zone-wide target area addressing former wetlands is also addressed in detail in both parcel-specific target areas. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Spaces I and II): This target area may have been impacted by activities at adjacent Parcels 178 and 181, nearby Scrapyard IR Site (Parcels 176 and 177 within FISC, Alameda Annex), and the filled wetlands. The target area covers

approximately 130,000 square feet. This target area has been classified as having a potential likelihood of impacts. Three surface soil samples and three soil vapor samples will be collected from three locations in the grassy or unpaved areas of Parcel 180. A total of four surface soil samples and four soil vapor samples will be collected from four locations in the grassy and paved areas of Parcel 179. One soil vapor sample will be collected at the boundary between Parcels 179 and 180 to the west of the George P. Miller Elementary School. Two additional soil vapor samples will be collected on the north and south sides of the George P. Miller School's building foundation on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

- Target Area 2 (The School Crawl Space): This target area may have been impacted by the accumulation of VOCs that may have off-gassed from the filled wetlands. The target area covers approximately 22,500 square feet. This target area has been classified as having a potential likelihood of impacts. A minimum of four environmental air samples will be collected from the crawl space below the school on Parcel 179. Air monitoring will be performed over an extended period of time in the crawl space of the school to determine the change in VOC concentration over time, if any. Samples to be collected in this target area are listed in Table 6-179-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. VOC sampling has been addressed as a zone-wide issue for these parcels. One of the 60 zone-wide soil vapor samples are located on this parcel. As an extra level of caution, VOC sampling is also being addressed as a parcel-specific issue for these parcels.

Screening-Level Investigation

Three screening-level techniques will be employed to assess conditions in the target area and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), and air sampling (SOP 22). Table 6-179-1 summarizes screening-level sampling and analysis for the parcel-specific target area. Seven surface soil, ten soil vapor, and a minimum of four environmental air samples will be collected from the parcel-specific locations shown on Figure 6-179-1. In addition, air monitoring will be performed within the crawl space of

the school. One soil vapor sample will be collected from the zone-wide location shown on Figure 6-179-1.

All soil vapor samples will be analyzed in the field for VOCs. All surface soil samples will be analyzed at a contract laboratory for TPH, PCBs, SVOCs, pesticides, and metals (including Chromium VI). Four of the surface soil samples will be analyzed for dioxins. All air samples will be analyzed at a contract laboratory for the same suite of VOCs that are analyzed for soil vapor samples. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Follow-up air sampling of the school crawl space will be performed in the summer season to determine if seasonal temperature increases affect the potential volatilization and accumulation of VOCs in the crawl space. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-180

PARCEL 180 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 180 at NAS Alameda has been incorporated into the PEP for Parcel 179. Parcel 180 is located to the west of Parcel 179. A child care center is located on Parcel 180. The George P. Miller Elementary School is located on Parcel 179. Parcels 179 and 180 have very similar histories and uses. Parcel 180 is located in the northeastern portion of the base and is approximately two acres in size.

SECTION 6-181

PARCEL 181 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 181 at NAS Alameda (Figure 6-181-1). The parcel, which is located in the northeastern portion of the base, is approximately 29 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Three parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil vapor sampling. Table 6-181-1 provides the complete list of samples and analyses prescribed by this plan. This PEP has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 181, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 181, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 178, 179, 180, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-181-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

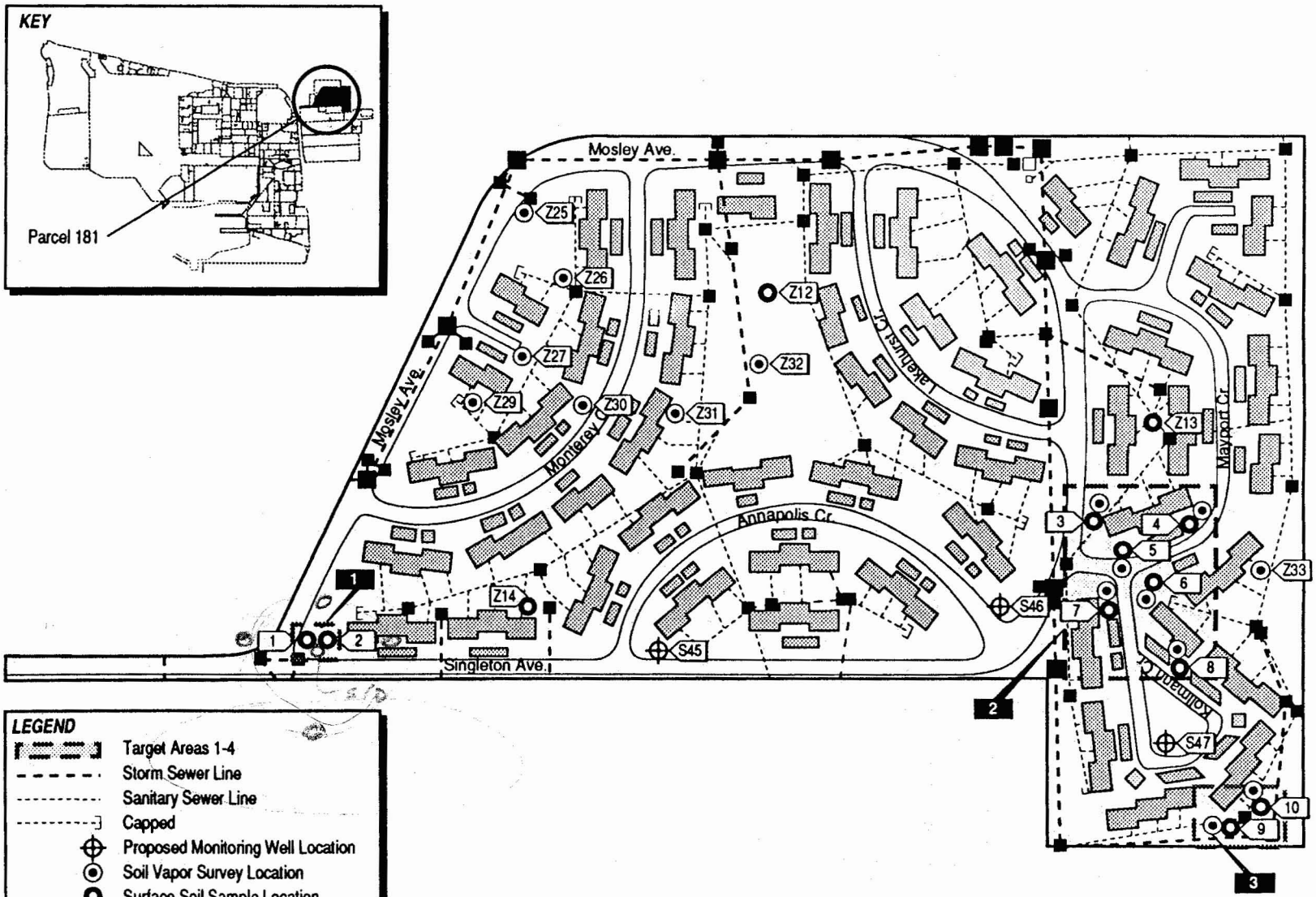


Figure 6-181-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94B

SENSITIVE

TABLE 6-181-1

Summary of Recommended Samples
NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
181-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals	Metals	XRF
181-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1 3	Metals	Metals	XRF
181-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Metals	Metals	CLP RAS
181-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
181-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
181-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
181-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
181-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
181-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
181-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
181-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
181-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2 14	VOCs	VOCs	GC
181-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
181-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
181-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Test Kit, XRF
181-8-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
181-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	VOCs	GC
181-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, PAHs, metals	TPH, PCBs, Metals	Test Kits, XRF
181-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC

TABLE 6-181-1

Summary of Recommended Samples
NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
181-10-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, PAHs, metals	TPH, PCBs, Metals	Test Kits, XRF
181-10-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3 5	TPH, PAHs, metals	TPH, PCBs, Metals	Modified EPA 8015, CLP RAS
181-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	VOCs	GC
Z16-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1 3	PCBs, DDT	Pesticides	CLP RAS
Z16-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-25-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-26-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2 8	VOCs, Benzene, Napthalene	VOCs	GC
Z16-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-29-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-30-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

TABLE 6-181-1

Summary of Recommended Samples
NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-31-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-32-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-33-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 51 buildings and one structure (a sanitary sewage pump station) cover approximately 30 percent of the parcel (Figure 6-181-1). The remaining 70 percent is open space. Aerial photographs from 1947 and 1958 show an area covered with large structures and a configuration of housing units that is different than the current configuration of housing units. These former housing units were reportedly City of Alameda housing projects. The use of the large structures is unknown. Between 1958 and 1963, the housing units at the east end of Parcel 181 were razed, yielding a large open space. In 1969, the remainder of the older housing units were demolished and the present configuration of housing complexes and surface streets was constructed. Sewer lines are present on this parcel and are shown on Figure 6-181-1.

Parcel 181 is located immediately northwest of the Scrapyard Installation Restoration (IR) Program site (the Scrapyard). The parcels located within 500 feet of the study area within NAS Alameda include Parcels 178 and 184, 179 and 180, 181, and 182. Previous and current investigations at and around the Scrapyard have been conducted on Parcels 178 and 181 within NAS Alameda and Parcels 172, 173, 174, 175, 176, and 177 within FISC, Alameda Annex. Current investigations are being performed at this facility. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Three monitoring wells (S45, S46, and S47) are currently being installed on Parcel 181 by the Navy IR contractor as part of the Phase IIC investigation at the Scrapyard IR Site (Figure 6-181-1). Preliminary soil sampling results at these monitoring wells indicate elevated benzene concentrations at the depth of the former wetlands crust (10,000 µg/kg benzene detected at 16 ft below ground surface in boring S46).

TANK

An abandoned 12,000-gallon underground storage tank (Tank AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the FISC Alameda Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 0.5 mg/kg to 11,000 mg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Multiple-Unit Housing

The multiple-unit housing presently on-site was constructed in 1969 and have served Navy personnel and their dependents (Figure 6-181-1). These buildings are generally in good condition. The buildings are two stories tall, constructed of stucco walls, and feature composition tar and gravel roofs. Each complex covers approximately 5,400 to 7,200 square feet.

Utilities located within and immediately surrounding these buildings include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Site inspections, interviews, and a review of historical records, and permits do not suggest that these buildings were used for any significant type of industrial purpose. This area is currently occupied by housing. The source and composition of this stain cannot be determined from the aerial photograph. The aerial photographs from 1947 through 1963 also show a collection of larger buildings that do not appear to be housing. These building occupy the eastern half of the parcel. Because detailed information regarding the construction and usage of these buildings is unknown, the former occurrence of industrial processes within the buildings cannot be excluded.

Site inspections of this parcel did not include the interior of housing complexes per instructions provided by the Navy. In addition, because this parcel is exclusively residential, industrial hygiene issues (other than potential ACM or lead-based paint) are not a concern. It is important to note that documents show that two samples collected from Singleton Avenue 103(A) and 2002 Monterey Circle contained lead at concentrations of 9,440 parts per million (ppm) and 47,100 ppm, respectively.

Open Space

The open space covers approximately 70 percent of the parcel. Approximately 20 percent of the open space is paved with asphalt and concrete in good condition. The remaining 80 percent is unpaved and covered with grass.

One structures is located within the open space: Facility 591, a sanitary sewage pump station. Facility 591 is located along the northern edge of the parcel near the southeast corner of Estuary Park. This pump station has a capacity of 1,000 gallons per minute. No chemical storage has been documented for this structure.

Utilities located within and immediately surrounding this open space include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. Pole-mounted transformers are also located within the open space.

No chemicals are documented to have been stored in the open space. Also, no spills reports were found during document review. No staining other than typical staining related to vehicle parking was noted during the site inspection; however, a 1966 aerial photograph indicates the former presence of a stained area on the large open space in the eastern portion of the parcel. This staining will be addressed by Target Area 2 of this PEP. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 181 is bounded by Parcels 178, 180, 179, and the Scrapyard to the south, Parcels 182 and 183 to the west and north, and by the FISC Oakland, Alameda Facility to the east.

Several areas adjacent to Parcel 181 may be sources of potential chemical migration. To the southeast of Parcel 181, the Scrapyard have been identified collectively as an IR site. This site was used as an airport facility in the 1930s and was converted to its present use in the 1950s. Currently, processes at the Scrapyard include the handling and storage of old electrical equipment, office furniture, aircraft parts, and junked automobiles. Previous site investigations have identified the presence of metals, VOCs, PCBs, and PAHs in the soil, and benzene, naphthalene, barium, and cadmium in the groundwater. Potential impacts for the Scrapyard IR site will be addressed by Target Area 3 of this PEP.

Parcel 178 comprises the former warehouse area, which was included in the above-mentioned site investigations. Soil samples in the northern part of Parcel 178 contained elevated concentrations of nickel and chromium. Benzene and naphthalene were also detected in the groundwater samples collected in this area. The presence of compounds of concern (heavy metals) in soil will be addressed by Target Area 1 of this PEP.

The FISC Oakland (previously the Naval Supply Center (NSC) Oakland) Alameda Facility is situated directly east of Parcel 181. Site inspection data revealed that aircraft engine containers, 55-gallon drums, JP-5 fuel storage tanks, diesel generators, and air compressors were stored at this facility. These items are located immediately adjacent to the northeastern and eastern boundaries of Parcel 181.

If the continuing investigations at any of these nearby sites show a cause for concern at Parcel 181, than additional sampling on Parcel 181 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 181, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-181-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in

TABLE 6-181-2

Summary of Data Gaps
NAS Alameda Parcel 181

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 181.
Installation Restoration (IR) Sites	• Scrapyard IR Site adjacent to Parcel 181.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 178, former warehouse area
Potential Zone-Wide Release Areas	• Landscaped Areas. • Former Wetlands.
Potential Parcel-Specific Release Areas	• Southwest Area (potential release of heavy metals contamination from Parcel 178-former warehouse area) • Southeast Area (Target Area 3, stains observed in 1966 aerial photograph) • Northeast and Eastern Border (adjacent to FISC Oakland storage area) • Southeast Corner (proximity to Parcel 176-Scrapyard IR site)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-181-2

Summary of Data Gaps
NAS Alameda Parcel 181

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 181 because no industrial buildings are present.

As noted earlier, Parcel 181 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. Three parcel-specific and two of the three zone-wide target areas were identified at this parcel based on the potential release areas described above and listed in Table 6-181-2.

- Target Area 1 (Southwest Area): Based on soil sampling results in the northern portion of Parcel 178 (former warehouse area), which abuts the southwestern boundary of Parcel 181, elevated concentrations of metals may also be present in Target Area 1. This area has been classified as having a potential likelihood of impacts. Two surface soil samples will be analyzed for metals. Samples to be collected in Target Area 1 are listed in Table 6-181-1.

- Target Area 2 (Southeast Area): Based on stains that were observed in a 1966 aerial photograph, six locations in Target Area 2 will be sampled for VOCs, TPH, and metals. Although the staining was approximately 63,000 square feet in area, only six locations will be sampled because of subsequent housing development and accessibility issues. Samples to be collected in Target Area 2 are listed in Table 6-181-1.

- Target Area 3 (Southeast Corner): This corner of the parcel will be targeted as a potential area for VOCs, TPH, metals and PCBs due to its proximity to the Scrapyard IR site. Only two locations will be sampled from this area. Samples to be collected in Target Area 3 are listed in Table 6-181-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 181 are part of this zone-wide target area. Three of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 181. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-181-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Eight of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 181. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-181-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone-wide and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques are surface soil sampling (SOP 3) and soil vapor sampling (SOP 6).

Table 6-181-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 181. Eight parcel-specific soil vapor samples, ten parcel-specific surface soil samples, eight zone-wide soil vapor samples, and twelve zone-wide surface soil samples will be collected from the locations shown on Figure 6-181-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level

investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-182

PARCEL 182 EVALUATION PLAN

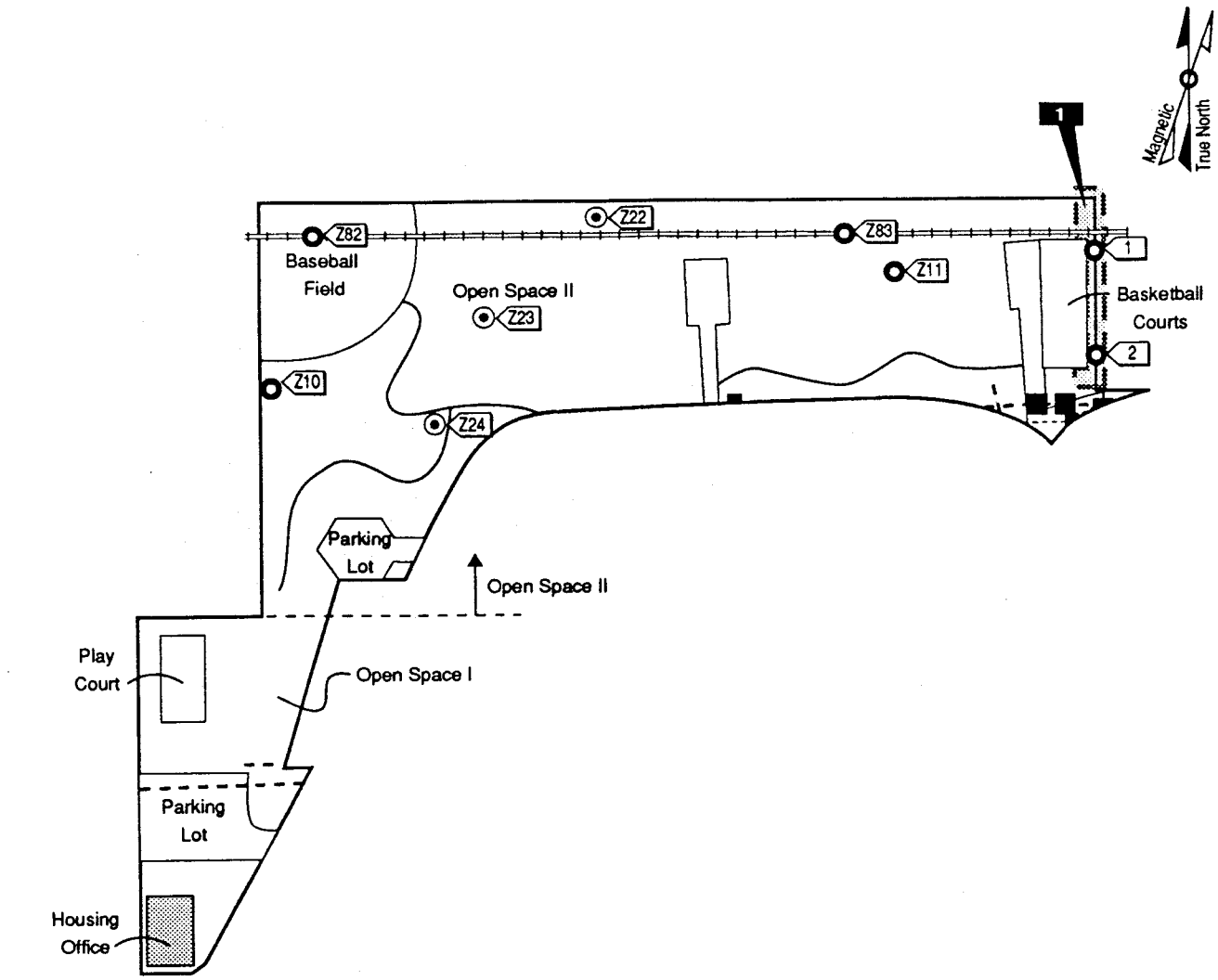
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 182 at NAS Alameda (Figure 6-182-1). The parcel, which is located in the northeastern corner of the base, is approximately 13 acres in size and is roughly shaped like an irregular triangle. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and three zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening level investigation. Table 6-182-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 182, historical activities are discussed below.

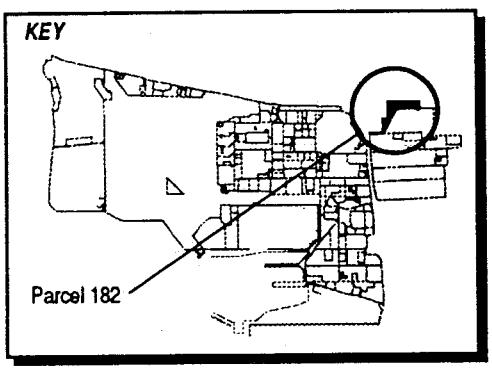
Background and Historical Activities

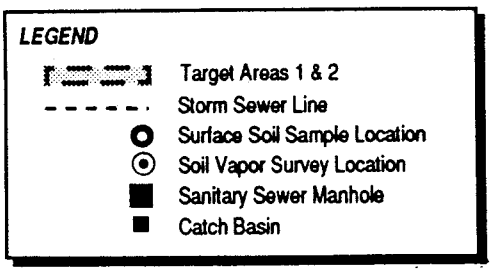
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 182, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 178, 179, 180, 181, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore,







1"= 250'

Figure 6-182-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-182-1

Summary of Recommended Samples
NAS Alameda Parcel 182

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
181-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Test Kit, XRF
182-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
182-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	TPH, Metals	Test Kit, XRF
Z16-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	PCBs, DDT	Pesticides	CLP RAS
Z16-22-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-23-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC
Z16-82-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	SVOCs	CLP RAS
Z16-82-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	TPH, PCBs, lead	Test Kit, XRF
Z16-83-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	TPH, PCBs, lead	Modified EPA 8015, CLP RAS

TABLE 6-182-1

Summary of Recommended Samples
NAS Alameda Parcel 182

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-83-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	SVOCs	CLP RAS

* Suggested location of confirmatory samples. The actual location will depend on field analytical results. The suggested location for the Zone 16 Target Area 3 confirmation sample is found in Parcel 178 and 184.

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 534) covers less than five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as the housing office building and related support facilities. This was a residential area with barracks from at least 1947 to 1966. Numerous buildings and structures were formerly located on the parcel and were demolished and cleared sometime between 1966 and 1970. Sewer lines are present on this parcel and are shown on Figure 6-182-1.

Parcel 182 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 182 and specific data regarding potential chemical occurrence are not available.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan,* summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area. Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of

potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 534

Building 534 (PWCSFB Housing Office) was constructed between 1990 and 1992 and has served as office space since that time (Figure 6-182-1). This building is in good condition. There is no available information regarding the construction of the Housing Office.

Utilities located within and immediately surrounding Building 534 include underground gas, sanitary sewer, storm sewer, telephone, water, and electrical lines. A transformer associated with Building 534 is present on the parcel. This transformer appeared to site reviewers to have been recently placed (i.e., within the past five years). It is pad-mounted and contained within a metal case. No leakage was noted.

Information collected during the EBS indicates that activities conducted within this building included office type work. Approximately six gallons of cleaners, disinfectants, and vandal remover compounds are documented to have been stored in the janitor's closet. It is unknown how the disposal of used chemicals is accomplished in Building 534. There is no documentation of spills in this building. No staining was noted in the building during the site inspection.

No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Building 534. Potential radiological hazards do not appear to be of concern in this building.

Open Space I

The open space covers over ninety-five percent of the parcel. Open Space I is defined as the recreation area north of Mosley Avenue (Estuary Park). This space takes up approximately 75 percent of the parcel. Open Space I is used for grassy areas, a baseball field, picnic areas, a sport court, and basketball courts. Five percent of the ground surface of Open Space I is paved with asphalt. Ninety-five percent of the area is unpaved. The paved area consists of basketball and sports courts. The unpaved areas of Open Space I are covered with grass and minor amounts of bare soil. The vegetation is healthy and no stains were observed in the area.

Structures located within Open Space I include Sewage Lift Station 7, along the eastern edge of the parcel, and an abandoned sewage lift

station in the northeast corner of the parcel. Painted bleachers were noted on the baseball field, in addition to two control boxes associated with the irrigation system.

Several buildings were formerly located on this open space when it was part of the barracks area. The barracks existed on the parcel from at least 1947 (earliest aerial photograph) to 1966, and were demolished between 1966 and 1970. Utilities located within and immediately surrounding Open Space I include natural gas, sanitary sewer, storm sewer, water, and electrical lines.

An aboveground storage tank (250-gallon capacity) is present off-site to the north of Parcel 182. The tank has a flammable materials label on it. There was a floating object in the estuary on the day of the site inspection; it appeared to be a 10,000-gallon underground storage tank.

No chemical storage, stains or spills are documented to have occurred within Open Space I. No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within or near Open Space I.

Open Space II

Open Space II covers approximately 20 percent of the parcel. Open Space II is defined by the area surrounding and immediately north of Building 534. Open Space II is a support facility for Building 534. The ground surface of Open Space II is 90 percent paved and 10 percent unpaved. Approximately 60 percent of this open space is surfaced with asphalt (parking lot) and 30 percent is covered with concrete (sidewalks). The pavement is in good condition. The unpaved area in Open Space II is covered with landscaping. Structures located within this open space include a small storage locker labeled "Self Help Store."

Several buildings were formerly located on this open space when it was part of the barracks area. The barracks existed on the parcel from at least 1947 (earliest aerial photograph) to 1966, and was demolished between 1966 and 1970. Utilities located within and immediately surrounding Open Space II include natural gas, sanitary sewer, storm sewer, water, and electrical lines.

No chemical storage, stains or spills are documented to have occurred in Open Space II. No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 182 is bounded by Parcels 183 and 181. Railroad tracks and the Todd Shipyard border Parcel 182 to the north, and the Fleet Industrial Supply Center (FISC) Oakland Alameda Facility borders Parcel 182 to the east. Ongoing storage activities at FISC Oakland will be addressed by Target Area 1 of this PEP. Parcels 181 and 183 are predominantly residential.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 182, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-182-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, a separate investigation is currently underway to address the asbestos, transformer, and lead based paint data gaps at this parcel. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 182 because no industrial buildings are present.

As noted earlier, Parcel 182 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

TABLE 6-182-2

Summary of Data Gaps
NAS Alameda Parcel 182

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 182.
Installation Restoration (IR) Sites	• No IR sites are located on or within 500 feet of Parcel 182.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The soil and groundwater at the FISC Oakland Alameda Facility east of Parcel 182 may have been impacted by ongoing storage activities at the facility.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands. • Railroad Tracks.
Potential Parcel-Specific Release Areas	• Potential impacts from Alameda Facility along the eastern boundary.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-182-2

Summary of Data Gaps
NAS Alameda Parcel 182

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-182-2 are addressed Parcel 182 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in all three zone-wide target areas. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The two zone-wide target areas identified at this parcel are listed in Table 6-182-2.

- Target Area 1 (Eastern Parcel Boundary): The soil adjacent to the FISC Oakland Alameda Facility east of Parcel 182 may have been impacted by ongoing storage activities at the facility. This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-182-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 182 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 182. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 182 are listed on Table 6-182-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Three of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 182. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-182-1.

- Zone 16 Target Area 3 (Railroad Tracks): Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing

Zone. Railroad tracks currently located along the northern boundary of Parcel 182 are part of this zone-wide target area. Two of the five samples proposed to be collected from this zone-wide target area are located on Parcel 182. The proposed zone-wide target area samples that are located on Parcel 182 are listed on Table 6-182-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level techniques that will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-182-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 182. Two parcel-specific surface soil samples, four zone-wide surface soil samples, and three zone-wide soil vapor samples will be collected from the locations shown on Figure 6-182-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-183

PARCEL 183 EVALUATION PLAN

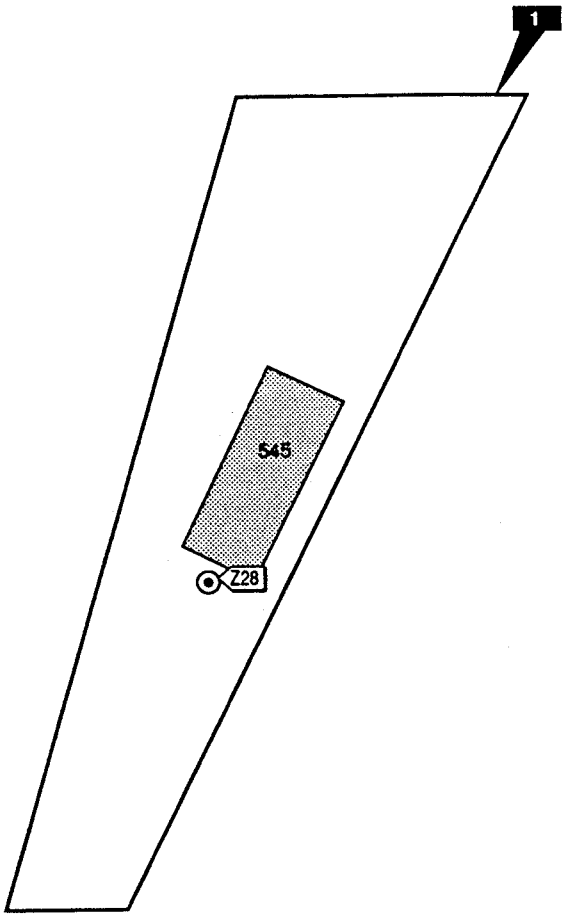
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 183 at NAS Alameda (Figure 6-183-1). The parcel, which is located in the northeast portion of the base, is less than one acre in size and is roughly triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two zone-wide target investigation area (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil vapor sampling. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 183, historical activities are discussed below.

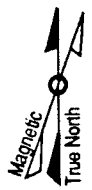
Background and Historical Activities

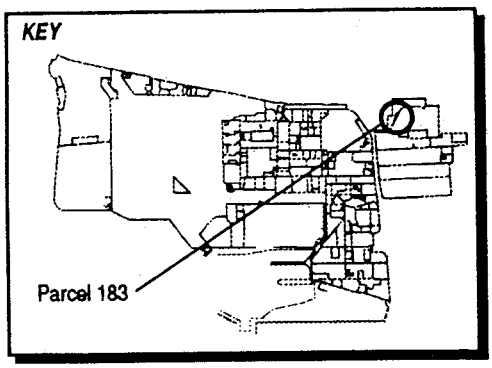
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 183, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies any Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 178, 179, 180, 181, 182, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected







LEGEND

⊙ Soil Vapor Survey Location

1"= 60'

Figure 6-183-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-183-1

Summary of Recommended Samples
NAS Alameda Parcel 183

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z16-28-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs, Benzene, Napthalene	VOCs	GC

for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 545) covers approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently in use as community center and temporary child care center. Aerial maps show that historically the site was part of a barracks area. The barracks were demolished between 1966 and 1970. Sewer lines are present on this parcel.

Parcel 183 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 183 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 545

Building 545 was constructed between 1970 and 1975. It is used as a community and child care center, and appears to have been used for these purposes since its construction. This building is in moderately good condition. Building 545 has wood-faced construction, a concrete foundation, and a composite roof. Building 545 covers approximately 1,800 square feet.

Utilities located within and immediately surrounding Building 545 include underground sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for this building.

Household cleaning agents and paint are documented to have been stored and used in Building 545. Less than 10 gallons of the cleaning agents and paint were stored in Building 545. One transformer is present outside Building 545, on the south side. No documented spills have occurred in this parcel, and no staining was noted in or adjacent

to Building 545 during the site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 545.

Open Space

The open space covers approximately 90 percent of the parcel. The open space is 20 percent paved and 80 percent unpaved. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass, landscaping and bare soil.

EBS information indicates that activities conducted within this open space are recreational and educational. Historically, the open space was used as a barracks area. It later became a vacant field.

Less that 15 gallons of paint and turpentine are documented to have been stored at the north side of the parcel, in a Conex box that rests on the grass. No spills are documented to have occurred in the open space. No staining was noted during the site inspection, except for vehicle staining in the parking area. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 183.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 183 is bounded by Parcels 181 and 182. The former Todd Shipyard is located to the northwest of Parcel 183. Environmental concerns associated with these areas include potential impacts associated with former shipyard activities.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 183, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient

information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-183-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos, transformers, and lead-based paint. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 183 because no industrial buildings are present.

As noted earlier, Parcel 183 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-183-2 are addressed, Parcel 183 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas have been identified for this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped/Unpaved Areas): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. One of the 60 proposed zone-wide soil vapor samples for VOCs are located in Parcel 183. The samples were located on this parcel to ensure an

TABLE 6-183-2

Summary of Data Gaps
NAS Alameda Parcel 183

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 183.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 183.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.

TABLE 6-183-2

Summary of Data Gaps
NAS Alameda Parcel 183

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 183 are listed on Table 6-183-1.

Screening-Level Investigation

Soil vapor sampling (SOP 6) is the screening-level techniques that will be employed to assess conditions in zone-wide Target Area 2 for this parcel and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-183-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 183. One soil vapor sample will be collected from the zone-wide target areas on this parcel as shown on Figure 6-183-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-184

PARCEL 184 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 184 at NAS Alameda has been incorporated into the PEP for Parcel 178. Parcel 184 is a small parcel located entirely within Parcel 178. Parcels 178 and 184 have very similar histories and uses. Parcel 184 is located in the northeastern portion of the base and is less than one acre in size.

SECTION 6-212

PARCEL 212 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 212 at NAS Alameda has been incorporated into the PEP for Parcel 100. Parcel 212 is a small parcel located entirely within Parcel 100. Parcels 100 and 212 have very similar histories and uses. Parcel 212 is located in the northeastern portion of the base and is less than one acre in size.

SECTION 6-Z16

ZONE 16 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 16 at NAS Alameda (Figure 6-Z16-1). Zone 16, which is located in the northeast corner of the base, has been designated the Housing Zone and encompasses parcels that contain family housing units, parks, a motel, a school, warehouses, and a scrapyard. Zone 16 is comprised of Parcels 98, 99, 100, 103, 170-184, and 212. During the sampling program development, the parcels located in this zone were evaluated together. Three zone-wide target investigation areas (target areas) and 18 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface Geoprobe sampling, soil vapor sampling, and HydroPunch groundwater sampling. Table 6-Z16-1 provides the complete list of zone-wide samples and analyses prescribed for this zone, and Figure 6-Z16-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 16, historical activities are discussed below.

Zone 16 Background and Historical Activities

This subsection briefly summarizes EBS information available for Zone 16, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, nearby underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the parcel-specific evaluation plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

TABLE 6-Z16-1

Summary of Recommended Samples
NAS Alameda Zone 16

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-12-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-13-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-14-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-18-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-19-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-22-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-23-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC

TABLE 6-Z16-1

Summary of Recommended Samples
NAS Alameda Zone 16

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-25-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-26-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-28-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-29-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-30-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-31-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-32-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-33-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-34-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-35-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-36-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	SVOCs	CLP RAS
Z16-36-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, lead	Test Kits, XRF
Z16-37-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	SVOCs	CLP RAS
Z16-37-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, lead	Test Kits, XRF
Z16-38-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	SVOCs	CLP RAS
Z16-38-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, lead	Test Kits, XRF
Z16-38-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-39-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	SVOCs	CLP RAS
Z16-39-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, lead	Test Kits, XRF
Z16-40-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	SVOCs	CLP RAS
Z16-40-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, lead	Test Kits, XRF

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 16, the Housing Zone, encompasses parcels that contain family housing units, parks, a motel, a school, warehouses, and a scrapyard. During sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the Parcel Evaluation Plans (PEPs) for individual parcels.

Filling began in the area covered by this zone in approximately the late 1920s. Prior to this time, the zone area was approximately 60 percent salt marsh and tidal flats, and 40 percent inundated by San Francisco Bay. Heavy industries located nearby prior to filling included an oil refinery (on Old Alameda Point--IR Site 13) and two gas manufacturing plants (across the estuary in Oakland). Releases from these plants may have impacted nearby wetlands in the late 1800s and early 1900s. The area within Zone 16 was completely filled as of 1935; the ground level and grading have not changed significantly since that time.

Currently, approximately 500 buildings cover 20 percent of the zone. The remaining 80 percent is open space. Numerous buildings including warehouses and temporary barracks were formerly located on various parcels in the zone and have since been demolished.

Zone 16 contains one Installation Restoration (IR) Program site, the Scrapyard, on Parcels 176 and 177. Previous and current investigations at and around the Scrapyard have been conducted on Parcels 172, 173, 174, 175, 176, 177, 178, and 181. Details of previous investigation activities are described in the corresponding PEPs and in the subsection below. Data tables from previous investigations are provided in Zone 16 Attachment A.

An investigation in 1988 revealed impacts from chromium and nickel to surface soil on Parcels 178 and 184. Six inches of surface soil were removed and replaced with two feet of clean fill prior to the construction of additional housing units on these parcels in approximately 1989. Impermeable 40-mil membranes were reportedly placed on soil beneath concrete floor slabs of the new housing units. Records do not indicate that environmental sampling was conducted on Parcels 180 and 179 prior to the construction of the existing day care center and school on these parcels.

Sewer lines present in this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 16 will be addressed in other sampling programs and are not considered in this ZAP. These issues are all potential concerns in this zone, particularly in and near the scrapyard area.

Previous Investigations

Previous investigations have been performed at Parcels 172, 173, 174, 175, 176, 177, and 178. These parcels were investigated during 1987 and 1988 by ERM-West, Inc. A March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area,* summarizes the results of these investigations. As part of these previous investigations, 14 monitoring wells and 52 soil borings were installed throughout these parcels. A total of 62 soil samples were collected from depths of zero to five feet below ground surface. The following compounds were detected in soil samples at concentrations below residential PRGs: TCE, TCA, benzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, toluene, xylenes, ethylbenzene, t-1,2-dichloroethene, c-1,2-dichloroethene, cadmium, chromium, lead, and nickel. Only arsenic, PCBs, and beryllium were detected above August 1994 residential PRGs. The concentrations of cadmium, chromium, lead, nickel, and benzene in groundwater samples collected in August 1987 exceed May 1993 USEPA or CalEPA MCLs. Current monitoring well data are not available to fully characterize the impacts to the parcels in Zone 16.

Another screening-level sampling effort documented in a 1993 PRC report indicated that soil, groundwater, air, and soil vapor samples were collected throughout Parcels 176 and 177, including the railroad track area. Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. TCA, PCE, TCE, and TPH were detected in Parcel 176 soil vapor at maximum concentrations of 0.1 µg/L, 100 µg/L, 1 µg/L, and 1,000 µg/L, respectively TCA, TCE, and TPH were detected in Parcel 177 soil vapor at maximum concentrations of 0.1 µg/L, 0.1 µg/L, and 10,000 µg/L, respectively. Soil boring locations were chosen based on a 150-foot by 150-foot grid and locations of suspected chemical pathways and soil vapor survey results. A total of 132 soil samples were collected from the soil boring locations throughout Parcels 176 and 177. These soil samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides/PCBs, VOCs, and SVOCs. Soil samples from Parcels 176 and 177 detected arsenic,

lead, and mercury, although only lead and arsenic exceeded the USEPA's August 1994 industrial PRGs for soil.

A total of 17 monitoring wells were installed throughout Parcels 176 and 177. Groundwater sampling results indicated the presence of heavy metals and volatile organic compounds. The concentrations of metals and volatile organic compounds detected were typically above USEPA and CalEPA December 1993 MCLs. Ambient air samples were also collected from Parcels 176 and 177. Arsenic, lead, and asbestos were detected at maximum concentrations of 0.81 ng/SCM, 84 ng/SCM, and 0.0039 f/cc, respectively.

In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific and zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Current Investigations

Current investigations are being performed at the Fleet and Industrial Supply Center, Oakland Alameda Facility/Alameda Annex Alameda, California. Figure 6-Z16-2 shows the general site layout of this study area. This investigation affects parcels in the Housing Zone within 500 feet of the study area including Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA, IIB, and IIC investigative plans. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area. Table 6-Z16-2 summarizes the total number of soil borings, monitoring wells, soil samples, and groundwater samples performed within the study area within each phase of the RI/FS. Soil samples are proposed to be collected at depths of 0.0 feet, 0.5 feet, 2.0 to 2.5 feet, 5.0 to 5.5 feet, and one directly above the soil/groundwater table interface. A radiological survey is proposed on a 50-foot grid for the screening lot

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FIGURE 6-Z16-2 – GENERAL SITE LAYOUT

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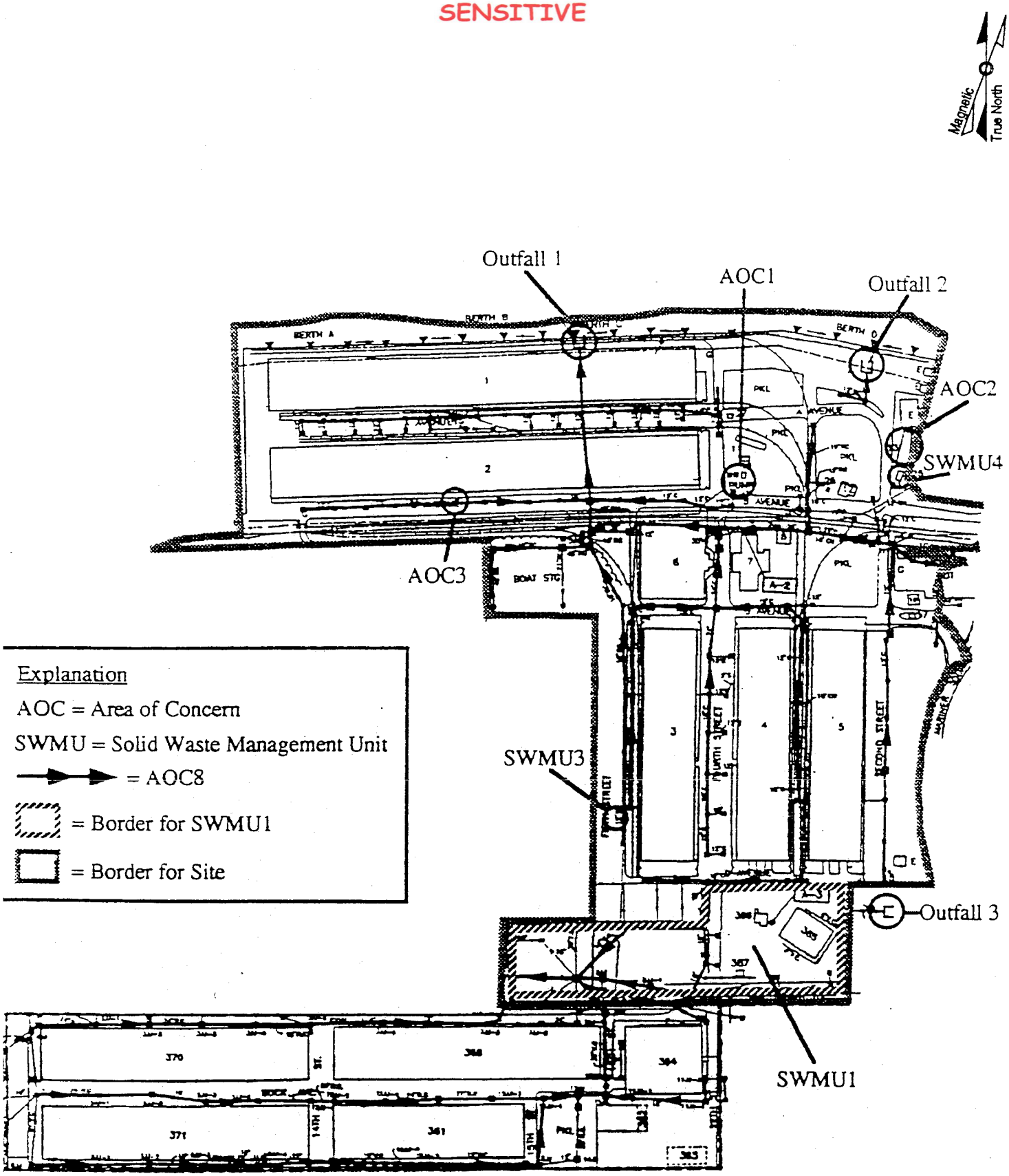

ource: PRC & Versar
ctober 27, 1993

1"=400'

Figure 6-Z16-2
General Site Layout
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.12/GCF/07.05.94

TABLE 6-Z16-2

Phase II Estimated Number of Borings, Monitoring Wells, Soil Samples, and Groundwater Samples
NAS Alameda Zone 16

FLEET AND INDUSTRIAL SUPPLY CENTER, OAKLAND
ALAMEDA FACILITY/ALAMEDA ANNEX SITE

Site	Borings	Wells	Soil Samples[a]	Groundwater Samples[b]
Phase IIA				
SWMU 1	18	10	134	12
SWMU 3	3	0	14	0
SWMU 4	2	0	10	0
AOC 1	4	0	19	0
AOC 2	4	0	19	0
AOC 3	2	0	10	0
Phase IIA Subtotal	33	10	206	12
Phase IIB				
SWMU 1	18	5	110	6
SWMU 3	3	3	29	3
SWMU 4	0	2	9	3
AOC 1	6	4	48	5
AOC 2	4	3	33	3
AOC 3	4	4	38	5
Phase IIB Subtotal	35	21	267	25
Phase IIC				
SWMU 1	0	0	0	28
SWMU 3	3	3	29	4
SWMU 4	0	0	0	0
AOC 1	4	3	33	3
AOC 2	5	3	38	4
AOC 3	3	0	14	0
Phase IIC Subtotal	15	9	114	39
Estimated Total of Phases IIA, IIB, and IIC	83	40	587	76

[a] Soil sample number is based on a calculation of 4 samples per boring and 4 samples per well plus 20 percent for quality assurance samples.

[b] Groundwater samples will be collected from existing groundwater monitoring wells on a quarterly basis. Total samples shown are based on one round of sampling of Phase II, Phase I and other wells, plus 20 percent quality assurance samples.

Source: PRC and VERSAR., 1993

and scrapyard area. Lastly, three stormwater outfall locations are proposed to be sampled.

The status of current and proposed boring and monitoring well locations is illustrated in Figures 6-Z13-1 and 6-Z16-3. As part of Phase I of the RI/FS, VERSAR, Inc. installed 10 monitoring wells. This figure shows the current locations of 49 shallow and four deep monitoring wells installed by VERSAR, Inc., 14 monitoring wells installed by ERM-West, Inc., and 115 to 117 boring locations. The "PW" series of number indicates RA monitoring wells; the "S" series indicates VERSAR, Inc. shallow monitoring wells; the "D" series indicates VERSAR, Inc. deep monitoring wells; the "MW" series indicates ERM-West, Inc. monitoring wells; and the "EW" series indicates extraction wells. The "A" designation indicates soil borings.

Boring and monitoring well locations for Phase IIC of the RI/FS are not shown on Figures 6-Z16-1 and 6-Z16-3. A total of seven monitoring wells and nine borings are currently being installed throughout the study area. None of the soil borings and only three of the seven monitoring wells (S45, S46, and S47) are located within Zone 16 in Parcel 181 as illustrated on Figure 6-181-1.

Current results of unvalidated data are summarized below. Several compounds were detected in soil samples including VOCs, SVOCs (including PAHs), TPH, and metals. Vinyl chloride was the only VOC detected at concentrations above both industrial and residential August 1994 PRGs in a soil sample from boring A109 at a depth of 6.5 feet below ground surface (bgs). VERSAR indicated that preliminary soil sampling results at monitoring wells S45, S46, and S47 detected high benzene concentrations at the former wetlands crust (10,000 µg/kg benzene detected at boring S46 at a depth of 16 feet bgs); however analytical results were not available to confirm this assertion. The concentration of benzene in the soil sample at S45 at a depth of 16 feet bgs and S47 at a depth of 17.5 feet bgs were 4 µg/kg and 1,100 µg/kg respectively.

Most SVOCs were detected above both industrial and residential PRGs in soil samples from monitoring wells S45, S46, and S47 between 13.0 and 16.0 feet bgs. Most inorganic compounds were detected below residential August 1994 PRGs; however, arsenic was commonly detected above both industrial and residential August 1994 PRGs and chromium was commonly detected above residential August 1994 California modified PRGs. Most soil samples indicated the presence of aluminum above residential August 1994 PRGs.

TPH gasoline, TPH motor oil, and TPH diesel were detected in soil samples from this study area. TPH gasoline concentrations ranged

from 750 µg/kg in monitoring well S45 at 13 feet bgs to 250,000 µg/kg in monitoring well S47 at 14.5 feet bgs. TPH motor oil concentrations ranged from 7,100 µg/kg in monitoring well S47 at 5.5 feet bgs to 9,700,000 µg/kg in monitoring well S47 at 14.5 feet bgs. TPH diesel concentrations ranged from 20,000 µg/kg in monitoring well S47 at 16 feet bgs to 2,500,000 µg/kg in monitoring well S47 at 14.5 feet bgs.

An abandoned 12,000-gallon underground storage tank (AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the NSC Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 500 µg/kg to 11,000,000 µg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

In addition to comparing the current data to PRGs, it is recommended that the parcel-specific and zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Underground Storage Tanks

No evidence of underground storage tanks has been identified in this zone. Neither the document review nor the site inspection identified any information that indicated that any tanks are or may have been present in this zone. The boundary conditions discussion below provides for additional information about underground storage tanks outside the zone boundaries.

RCRA Sites

No RCRA sites are located in this zone.

Zone Boundary Conditions

Zone 16 is bounded by (clockwise from north central boundary) the Todd Shipyard, Naval Supply Center Facility Alameda, College of

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FIGURE 6-Z16-3 – SCREENING LOT AND SCRAPYARD AREA BORING/WELL LOCATION MAP

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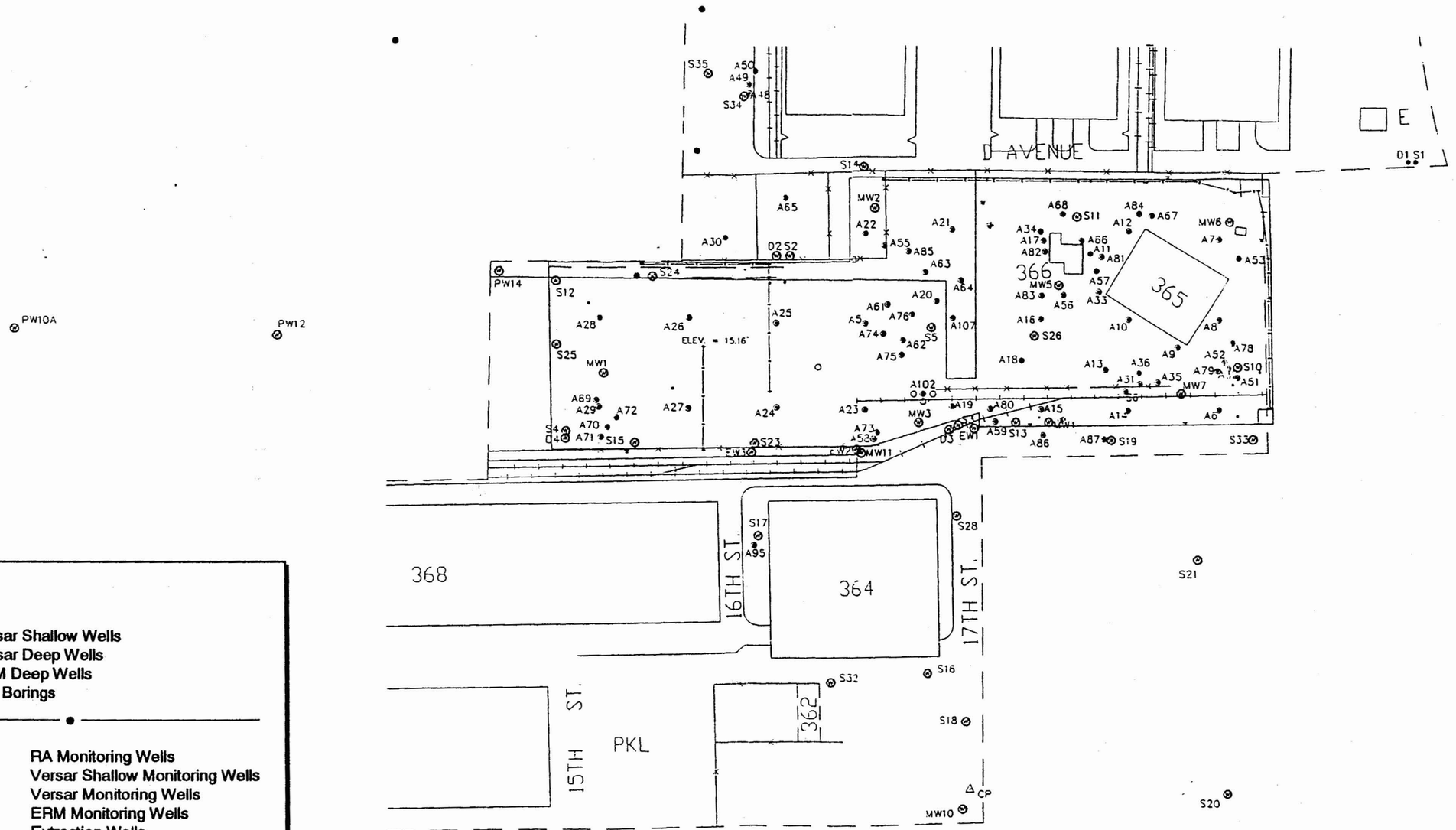
SENSITIVE



Legend

Totals:

49	Versar Shallow Wells
4	Versar Deep Wells
14	ERM Deep Wells
115-117	Soil Borings

PW Series	RA Monitoring Wells
S Series	Versar Shallow Monitoring Wells
D Series	Versar Monitoring Wells
MW Series	ERM Monitoring Wells
EW Series	Extraction Wells
"A" Designation	Soil Borings

Source: PRC Environmental Management, Inc.
August 31, 1994

1"=200'

Figure 6-Z16-3
Screening Lot and Scrapyard Area Boring/Well Location Map
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

SENSITIVE

Alameda, private multi-family housing complexes, Zone 21 (Naval Exchange Commercial Zone), Zone 20 (Service Station Zone-IR Site 7A), Zone 17 (Engine Testing and Hazardous Materials Storage Zone), Zone 13 (Central Light Industrial Zone), Zone 15 (Bachelor Officers' Quarters Zone), and Zone 8 (North Central Recreational Zone). Concerns in adjacent zones are detailed in corresponding ZAPs and PEPs. Potentially significant concerns include surface soil impacts from heavy metals carried in fugitive dust from Todd Shipyard, and organic compounds including fuel and solvents present in groundwater beneath several nearby IR sites (IR Sites 3, 6, 7A, and 7B).

One UST (tank T10-1 in AOC-1) was removed during the week of September 26, 1994 from the Naval Supply Center facility located approximately 700 feet northeast of Parcel 181. The 12,000-gallon tank formerly held gasoline. Based on soil and groundwater sampling that were performed prior to removal, this tank was determined to be leaking prior to removal. Five of the eight USTs associated with the service station in Zone 20 (IR Site 7A) are inactive. Based on previous investigations, some or all of these five tanks may have previously impacted surrounding soil and groundwater. The inactive tanks formerly contained gasoline (Tanks 459-4, 459-5, and 459-6), waste oil (Tank 459-7), and solvents (Tank 459-8).

Zone Target Areas and Compounds of Concern

This zone contains three zone-wide target areas and 18 parcel-specific target areas. This subsection of the ZAP discusses specific zone-wide target areas and provides an overview of the specific parcel target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. In addition, parcel-specific data gaps pertaining to asbestos, lead-based paint, PCBs, underground sewer lines, radiological concerns, and USTs must be resolved before this zone can be leased or transferred.

Zone 16 Target Areas

- Target Area Z1 (Landscaped Areas): This target area includes all landscaped and current/former unpaved areas within the Housing Zone. Landscaped and unpaved areas maintained since

approximately 1940 may have been impacted by pesticide residues. Pesticides that may have been applied historically in this target area include persistent compounds such as DDT and PCBs. As a special precaution for this residential zone, a range of landscaped and unpaved areas will be sampled to assess potential risk, if any, from historical pesticide application. This target area is classified as having potential likelihood of impacts. Surface soil samples for pesticides will be collected from 21 zone-wide locations. Samples should be collected from a variety of areas including open grass areas, edges of sidewalks and building foundations, and in unpaved areas that are not landscaped. The surface soil sampling density for pesticides and PCBs has been decreased from the base density promulgated in the protocols in Section 5 based on the large size of the landscaped area. Samples to be collected in this target area are listed in Table 6-Z16-1. Approximate sampling locations are shown on Figure 6-Z16-1.

In addition to potential zone-wide pesticide releases in the landscaped and unpaved areas in Zone 16, certain parcels within this zone also contain potential parcel-specific pesticide concerns. Potential parcel-specific pesticide concerns have been identified in Parcels 98, 103, 179 and 180. These concerns are associated with potential high use (e.g. storage) areas that are not representative of the zone as a whole, or where an extra level of caution is desired. These parcel-specific concerns are summarized in the following subsections and are described in detail in the individual PEPs.

- Target Area Z2 (Filled Wetlands): Target Area Z2 includes all parcel areas in the Housing Zone north of Atlantic Avenue that overlie former wetlands (Parcels 100, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, and 212). This target area also includes portions of Parcels 98, 99, and 103. These areas may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Figure 6-Z16-4 shows the sloughs associated with the former wetlands at Alameda Annex. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). This impacted horizon was encountered approximately 8 to 12 feet below the water table and was interpreted as the top of the pre-fill marsh sediments. Preliminary sampling results indicate that benzene concentrations for saturated soil samples from this layer were as high as 10 ppm. Groundwater concentrations were much lower (in the parts per billion range) than the soil concentrations. Fourteen

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

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FIGURE 6-Z16-4 – NAVAL AIR STATION, ALAMEDA
ZONE 16

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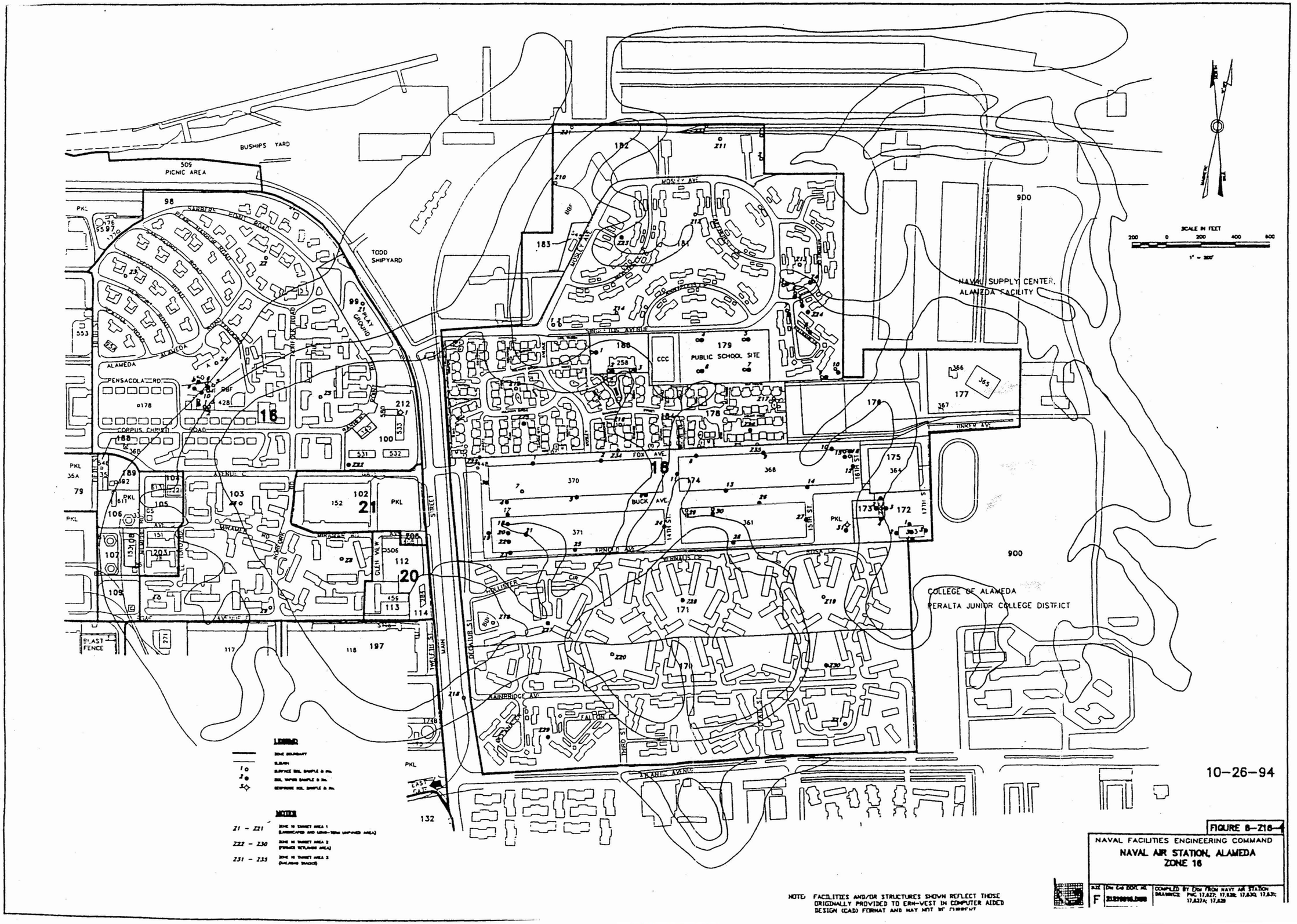

NOTE: FACILITIES AND/OR STRUCTURES SHOWN REFLECT THOSE ORIGINALLY PROVIDED TO ERM-WEST IN COMPUTER AIDED DESIGN (CAD) FORMAT AND MAY NOT BE CURRENT.

FIGURE 8-Z16-1

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION, ALAMEDA
ZONE 16

SIZE F | DWG NO. | COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,627; 17,628; 17,630; 17,631; 17,627A; 17,629

soil vapor samples will be collected in Zone 16 to assess potential migration of VOCs to soil vapor in unsaturated fill. This target area is classified as having potential likelihood of impacts. The soil vapor sampling density for VOCs has been decreased from the base density promulgated in the protocols in Section 3 based on the large size of the landscaped area. Samples to be collected in this target area are listed in Table 6-Z16-1. Approximate sampling locations are shown on Figure 6-Z16-1.

Subsequent (detailed evaluation phase) investigations may include the collection of Geoprobe subsurface soil samples from the affected horizon. Geoprobe subsurface soil sampling is not required during this phase of the investigation because soil vapor data will provide an adequate assessment of potential risks to human health, and because the general extent of the affected area has been established from prior investigations and document review.

- Target Area Z3 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Housing Zone. Railroad track locations include the northern boundary of Parcel 182 (former railroad tracks), the eastern side of Main Street, and the border between Parcels 174 and 178. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars, engines, and ties. This target area is classified as having potential likelihood of impacts. Surface soil samples will be collected approximately every 800 linear feet along the three track areas for a total of five zone-wide sampling locations. Samples should be taken from a variety of locations along the railroad tracks including switches, in front of buildings, and along long stretches of track. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by use of historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. Samples to be collected in this target area are listed in Table 6-Z16-1. Approximate sampling locations are shown on Figure 6-Z16-1.

<u>Parcels 99, 170, 171, 175, 176, 177, 178, 183, 184, and 212 Target Areas</u>

No parcel-specific target areas were identified on these parcels.

Parcel 98 Target Areas

Two parcel-specific target areas were identified for Parcel 98 as indicated below. Seven surface soil and five soil vapor samples will be collected from this parcel. Sample locations are shown on Figure 6-98-1.

- Target Area 1 (Building 195): The unpaved floor of Building 195 may have been impacted by the storage and use of hazardous substances including pesticides, PCBs, and petroleum products (gasoline, diesel fuel, and motor oil). This target area covers approximately 950 square feet. The likelihood that environmental impacts have occurred in this target area is classified as suspect. Samples to be collected in Target Area 1 are listed in Table 6-98-1.

- Target Area 2 (Maintenance Yard): The Maintenance Yard covers approximately 60,000 square feet. The soil in the area along the eastern side of Building 550 may have been impacted by the storage and use of potentially hazardous substances related to grounds maintenance activities. Staining around Building 550 (Grounds Maintenance) indicates that releases have occurred. In addition, staining observed in the junked equipment area (abandoned vehicles, etc.), which is located to the southwest of Building 550, indicates that releases have occurred. Potential compounds of concern in Target Area 2 include pesticides, herbicides, PCBs, solvents, and petroleum products (gasoline, diesel fuel, and motor oil). The likelihood that environmental impacts have occurred in this target area is classified as potential. Samples to be collected in Target Area 2 are listed in Table 6-98-1.

Parcel 100 Target Areas

- Target Area 1, Buildings 2 and 580: Potential releases of TPH and VOCs from leaks or spills in or near these storage sheds is a concern in this area. One subsurface Geoprobe soil sample will be collected from this target area. The sample to be collected in this target area are listed on Table 6-100-1.

Parcel 103 Target Area

- Target Area 1 (Area of former Building 83): Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. This target area covers approximately 26,000 square feet and has been classified as having a potential likelihood of impacts. Two surface soil samples are to be collected from this target area and are listed in Table 6-103-1.

Parcel 172 Target Area

- Target Area 1 (Concrete Foundation of Former Building 363): Hazardous materials (including flammable and non-flammable liquids) stored in Conex boxes are the primary compounds of concern. Although Conex boxes were observed throughout the site during the visual inspection, hazardous materials were stored only on or adjacent to the concrete foundation. Therefore, only the concrete foundation and its boundaries are considered to be the target area. The four soil vapor samples that will be collected from this target area are listed in Table 6-172-1.

Parcel 173 Target Area

- Target Area 1 (Concrete Foundation of Former Building 362): Hazardous materials (including flammable and non-flammable liquids) stored in Conex boxes are the primary compounds of concern. Although Conex boxes were observed throughout the site during the visual inspection, hazardous materials were stored only on or adjacent to the concrete foundation. Therefore, only the concrete foundation and its boundaries are considered to be the target area. The four soil vapor samples that will be collected from this target area are listed in Table 6-173-1.

Parcel 174 Target Areas

Six parcel-specific target areas were identified for Parcel 174 as indicated below. Thirty soil vapor samples, ten surface soil samples, and one subsurface Geoprobe soil sample will be collected from this parcel. Sample locations are shown on Figure 6-174-1.

- Target Area 1 (Building 370 and southern perimeter): This target area addresses the possible release of compounds of concern associated with hydraulic fluid and lubricating oil storage in the middle unlabeled bay, and flammable liquids and poisons storage in the Conex boxes. The thirteen soil vapor samples that will be collected from this target area are listed in Table 6-174-1.

- Target Area 2 (Building 368): This target area addresses the possible release of compounds of concern associated with use and storage of PET, brake fluid, engine oil, and WD-40 associated with forklift activity throughout the building, and the forklift repair and maintenance shop in Bay M. The thirteen soil vapor samples that will be collected from this target area are listed in Table 6-174-1.

- Target Area 3 (Bay A in Building 371): This target area addresses the possible release of compounds of concern associated with storage of lubricating oil, spray paint, corrosives, halogenated organic compounds, and petroleum products within Bay A, along with storage of hazardous waste in the hazardous waste accumulation area. The seventeen soil vapor samples that will be collected from this target area are listed in Table 6-174-1.

- Target Area 4 (Building 371 excluding Bay A): This target area addresses the possible release of compounds of concern associated with storage of paint and medical equipment. The seven soil vapor samples that will be collected from this target area are listed in Table 6-174-1.

- Target Area 5 (Building 361): This target area addresses the possible release of compounds of concern associated with storage of paint, battery acid, engine coolant, TCE, pesticides, and hazardous waste. The eleven soil vapor samples and four surface soil samples that will be collected from this target area are listed in Table-6-174-1.

- Target Area 6 (diesel tank and drums within Open Space I): This target area addresses the possible release of compounds of concern associated with storage of diesel fuel and hazardous waste. The one soil vapor sample and one subsurface GeoProbe sample that will be collected from this target area are listed in Table 6-174-1.

Parcels 179 and 180 Target Area

Two parcel-specific target areas were identified for Parcel 179 and 180 as indicated below. Seven surface soil samples, ten soil vapor samples, and a minimum of four environmental air samples will be collected from this parcel. Sample locations are shown on Figure 6-179-1.

- Target Area 1 (Open Spaces I and II): This target area may have been impacted by activities at adjacent Parcels 178 and 181, nearby Parcels 176 and 177 (the Scrapyard IR Site), and the filled wetlands. The target area covers approximately 130,000 square feet. This target area has been classified as having a potential likelihood of impacts. Three surface soil samples and three soil vapor samples will be collected from three locations in the grassy or unpaved areas of Parcel 180. A total of four surface soil samples and four soil vapor samples will be collected from four locations in the grassy and paved areas of Parcel 179. One soil vapor sample will be collected at the boundary between Parcels 179 and 180 to the west of the George P. Miller Elementary School. Two additional soil vapor samples will be collected on the north and south sides of the George P.

Miller School's building foundation on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

- Target Area 2 (The School Crawl Space): This target area may have been impacted by the accumulation of VOCs that may have off-gassed from the filled wetlands. The target area covers approximately 22,500 square feet. This target area has been classified as having a potential likelihood of impacts. A minimum of four environmental air samples will be collected from the crawl space below the school on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

Parcel 181 Target Areas

Three parcel-specific target areas were identified for Parcel 181 as indicated below. Ten surface soil samples and eight soil vapor samples will be collected from this parcel. Sample locations are shown on Figure 6-181-1.

- Target Area 1 (Southwest Area): Based on soil sampling results in the northern portion of Parcel 178 (former warehouse area), which abuts the southwestern boundary of Parcel 181, elevated concentrations of metals may also be present in Target Area 1. This area has been classified as having a potential likelihood of impacts. Two surface soil samples will be analyzed for metals. Samples to be collected in Target Area 1 are listed in Table 6-181-1.

- Target Area 2 (Southeast Area): Based on stains that were observed in a 1966 aerial photograph, six locations in Target Area 2 will be sampled for VOCs, TPH, and metals. Although the staining was approximately 63,000 square feet in area, only six locations will be sampled because of subsequent housing development and accessibility issues. Samples to be collected in Target Area 2 are listed in Table 6-181-1.

- Target Area 3 (Southeast Corner): This corner of the parcel will be targeted as a potential area for VOCs, TPH, metals and PCBs due to its proximity to Parcel 176 and Parcel 177 (Scrapyard IR site). Only two locations will be sampled from this area. Samples to be collected in Target Area 4 are listed in Table 6-181-1.

Parcel 182 Target Area

- Target Area 1 (Eastern Parcel Boundary): The soil adjacent to the Naval Supply Center (NSC) east of Parcel 182 may have been

impacted by ongoing storage activities at the NSC. The two surface soil samples that will be collected from this target area are listed in Table 6-182-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), and environmental air sampling (SOP 22)

Table 6-Z16-1 summarizes screening-level sampling and analysis for the zone target areas. For the zone target areas, a total of 26 surface soil samples and 14 soil vapor samples will be collected from the locations shown on Figure 6-Z16-1. For the parcel-specific target areas, a total of 46 surface soil samples, 61 soil vapor samples, two GeoProbe subsurface soil sample, and a minimum of four environmental air samples will be collected from the designated target areas. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Follow-up air sampling of the school crawl space will be performed in the summer season to determine if seasonal temperature increases affect the potential volatilization and accumulation of VOCs in the crawl space. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

ZONE 16 ATTACHMENT A

PREVIOUS INVESTIGATION DATA

DOCUMENTS LIST (IN CHRONOLOGICAL ORDER)

ZONE 16 HOUSING ZONE

Correspondence. Dated 29 June 1981 from Commanding Officer, WESTDIV to Commanding Officer, Naval Supply Center-Oakland and Commanding Officer, Naval Air Station-Alameda. SUBJECT: *Transfer of Naval Air Station, Alameda Annex to Naval Supply Center, Oakland.* Correspondence includes plat map.

WESTDIVNAVFACENGCOM. April 28, 1987. *Soil Data and Related Construction Requirements for New Family Housing Project FY88, Alameda Naval Supply Annex, Alameda, California.*

ERM-West, Inc. September 1987. *Contaminated Site Investigation at the Screening Lot and Scrapyard Area, Naval Supply Center Alameda Annex.* Department of the Navy WESTDIVNAVFACENGCOM.

Naval Energy and Environmental Support Activity (NEESA). April 1988. *Preliminary Assessment Report, Naval Supply Center, Alameda Annex and Facility. EPA ID No. CA 1170090012.* NEESA 13-148PA.

Naval Energy and Environmental Support Activity (NEESA). May 1988. *Preliminary Assessment Report Amendment Naval Supply Center, Alameda Annex and Facility. EPA ID No. CA 1170090012.* NEESA 13-148PA/2.

ERM-West, Inc. May 1988. *Revised Final Report, Naval Supply Center Oakland, California, Tank Testing Study, Delivery Order #0032.* Department of the Navy WESTDIVNAVFACENGCOM.

ERM-West, Inc. May 1988. *Site Investigation at the Warehouse Area-Phase II. Naval Supply Center Alameda Annex.* Department of the Navy WESTDIVNAVFACENGCOM.

Brian Kangas Foulk. May 1988. *Site Engineering Investigation, New Family Housing Project (946 Units) FY89 Project H-056 and 2 Out-Year Projects, Naval Air Station Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

Woodward-Clyde Consultants. October 1988. *Final Submittal Environmental Site Compatibility Study for FY 89/90 Family Housing Program. Naval Supply Center, Oakland Alameda Annex.* Department of the Navy WESTDIVNAVFACENGCOM.

WESTDIVNAVFACENGCOM. February 21, 1989. *Solicitation, Offer, and Award for 300 Family Housing Units at the Alameda Annex, California.* Public Works Center.

PRC Environmental Management, Inc. November 29, 1989. *Final Report Shallow Soil Gas Investigation.* Naval Supply Center Oakland, Alameda Annex. Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. July 23, 1990. *Final Sampling and Analysis Report, Air Sampling and Analysis, Military Family Housing, Naval Air Station, Alameda North Housing Site, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. July 6, 1990. *Community Relations Plan, Naval Supply Center Oakland Alameda Annex and Facility, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

Correspondence. Dated November 7, 1990 from Dr. Allan Susten, Chief Technical Support Section, Emergency Response and Consultation Branch (ERCB), Division of Health Assessment and Consultation (DHAC), Agency for Toxic Substances and Disease Registry (ATSDR) to Gwendolyn Eng, Regional Representative, Department of Health and Human Services. SUBJECT: *Health Consultation, Naval Supply Center Oakland Alameda Annex, Alameda, California.* Letter summarizes the ATSDR comments on the Risk Assessment Report for The Alameda Annex. The ATSDR concurred with the Report's conclusions that migration of benzene and other soil gases into the homes from site-related contaminants in groundwater is not likely to represent a public health threat.

Correspondence. Dated November 20, 1990 from Gwendolyn Eng, Regional Representative, Department of Health and Human Services to Commander, WESTDIVNAVFACENGCOM. SUBJECT: *Health Consultation, Naval Supply Center Oakland Alameda Annex, Alameda, California.* Letter states that the health consultation prepared by Dr. Susten on November 7, 1990 concurs with the findings of the Risk Assessment Report dated October 2, 1990.

Correspondence. Dated December 1990 from Commander, WESTDIVNAVFACENGCOM to Naval Inspector General. SUBJECT: *NAS Alameda Family Housing Project.* Letter recommends that periodic sampling of indoor ambient air quality be conducted at the Family Housing Unit to assure that levels remain below level of health concern.

PRC Environmental Management, Inc. October 2, 1990. *Risk Assessment Report, Military Housing Site, Naval Supply Center Oakland, Alameda Annex, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. May 30, 1991. *RI/FS Final Field Sampling Plan. Screening Lot and Scrapyard Area, Naval Supply Center, Oakland, Alameda Annex and Facility, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. May 30, 1991. *Final RI/FS Work Plan. Screening Lot and Scrapyard Area, Naval Supply Center, Oakland, Alameda Annex and Facility, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. May 30, 1991. *RI/FS Final Health and Safety Plan, Screening Lot and Scrapyard Area, Naval Supply Center Oakland Alameda Annex and Facility, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. May 30, 1991. *RI/FS Final Quality Assurance Project Plan, Screening Lot and Scrapyard Area, Naval Supply Center Oakland Alameda Annex and Facility, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. March 26, 1993. *Final Report Air Sampling and Analysis, Naval Family Housing Area, Naval Supply Center Oakland Alameda Annex, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. and Versar, Inc. October 27, 1993. *Final RI/FS Phase II Work Plan Addendum. FISC, Oakland, Alameda Facility/Alameda Annex Site, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. and Versar, Inc. October 27, 1993. *RI/FS Phase II Field Sampling Plan Addendum. FISC, Oakland, Alameda Facility/Alameda Annex Site, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. and Versar, Inc. October 27, 1993. *Final RI/FS Phase II Quality Assurance Project Plan Addendum. FISC, Oakland, Alameda Facility/Alameda Annex Site, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

Correspondence. Dated 31 March 1994 from Henry C. Gee, Deputy Team Leader, Base Closure Team to Joseph Chou, Cal EPA DTSC,

Region 2. SUBJECT: *RI/FS for FISCO, Alameda Facility/Alameda Annex Site.* Letter details discovery of low level radioactive waste at the Screening Lot and Scrapyard Area Site.

Correspondence. Dated 12 April 1994 from Commander, WESTDIVNAVFACENGCOM to Cal EPA DTSC Region 2, California RWQCB, California Fish and Game, USEPA, US Fish and Wildlife, BAAQMD, Bay Conservation and Development Commission, and NOAA. SUBJECT: *RI/FS for FISCO, Alameda Facility/Alameda Annex Site.* Meeting minutes summarize the radiological survey of the Screening Lot and Scrapyard conducted on March 22-24, 1994.

PRC Environmental Management, Inc. and Versar, Inc. May 10, 1994. *Draft Radiological Sampling Health and Safety Plan Attachment. FISCO Alameda Facility/Alameda Annex Site, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

Correspondence. Dated 1 August 1994 from Joseph Chou, RPM Base Closure Unit Office of Military Facility, Cal EPA DTSC Region 2 to Ernie Galang, WESTDIVFACENGCOM. SUBJECT: *Draft Radiological Sampling Health and Safety Plan Attachment, FISCO, Alameda Facility and Annex.* Letter transmits DTSC comments on the referenced document.

PRC Environmental Management, Inc. and Versar, Inc. August 26, 1994. *RI/FS Removal Action EE/CA for PCB- and Lead-Contaminated Soils. FISC, Oakland, Alameda Facility/Alameda Annex Site Screening Lot and Scrapyard Area, Alameda, California.* Department of the Navy WESTDIVNAVFACENGCOM.

PRC Environmental Management, Inc. and Versar, Inc. August 31, 1994. *FISC, Oakland Alameda Facility/Alameda Annex Site RI/FS Technical Review Committee Presentation.* Department of the Navy WESTDIVNAVFACENGCOM.

DEPARTMENT OF THE NAVY
WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CONTRACT N62474-85-D-5627

CONTAMINATED SITE INVESTIGATION AT THE SCREENING LOT AND SCRAPYARD AREA

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NAVAL SUPPLY CENTER
ALAMEDA ANNEX/DRMO SCREENING LOT
AND SCRAPYARD AREA

Alameda, California

September 1987

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 2-1 – SITE PLAN

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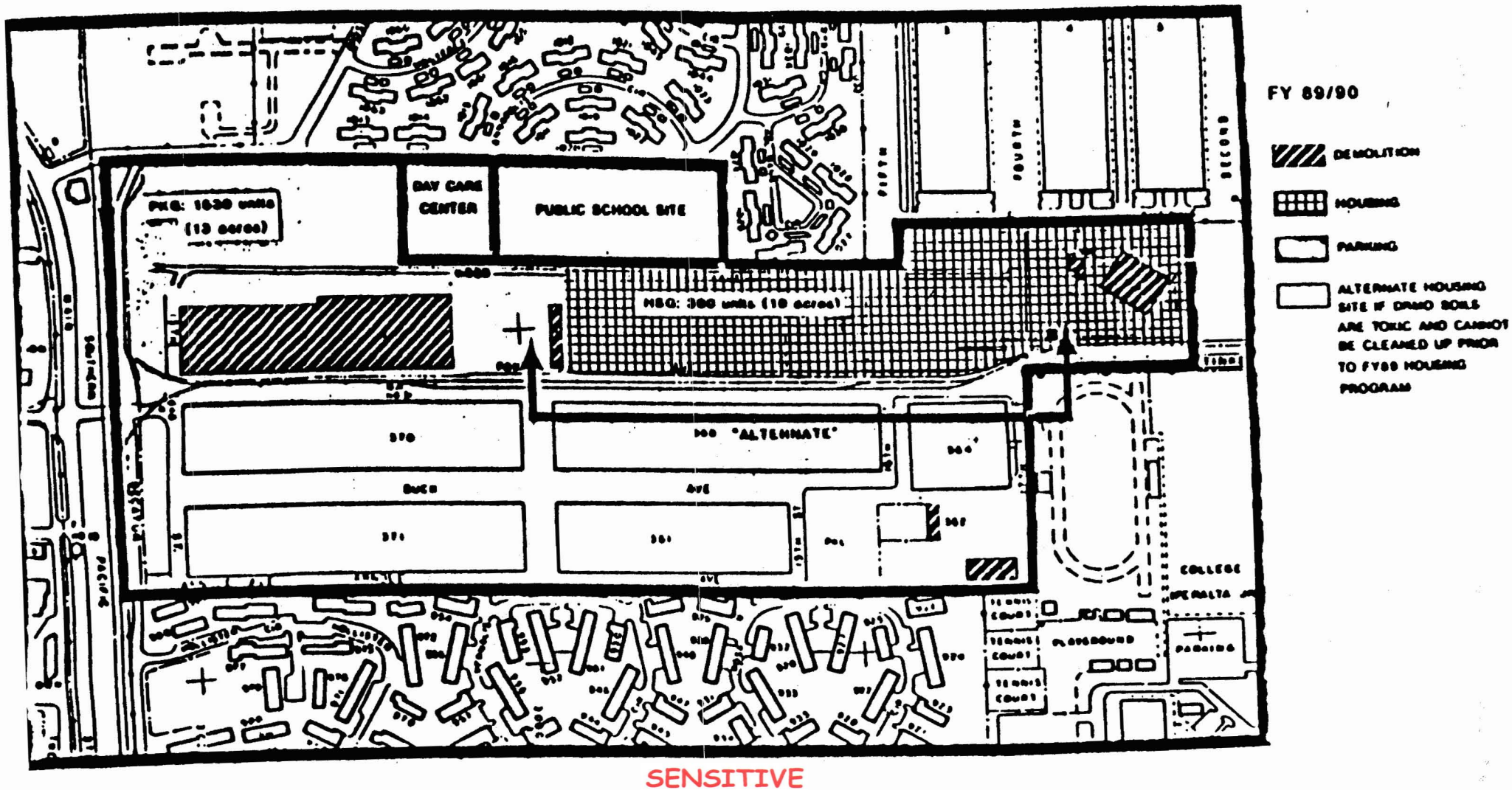
SENSITIVE

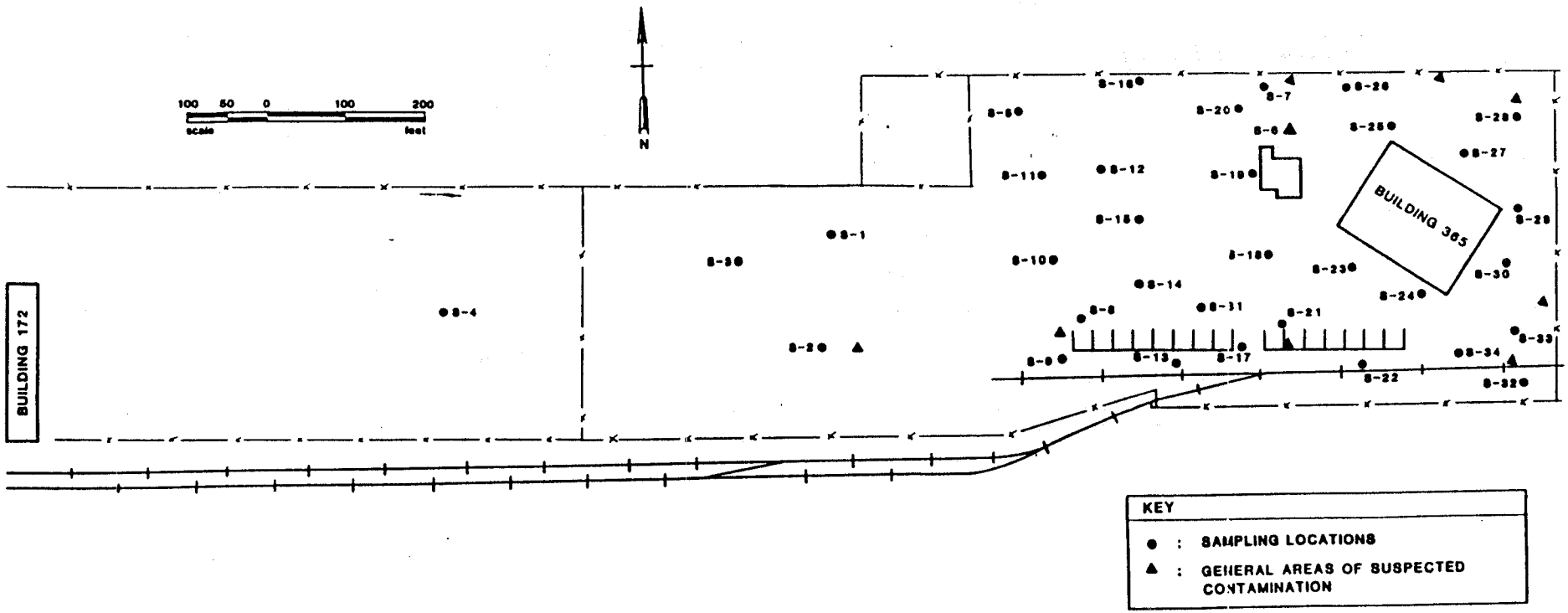


SENSITIVE

NAS ALAMEDA ANNEX

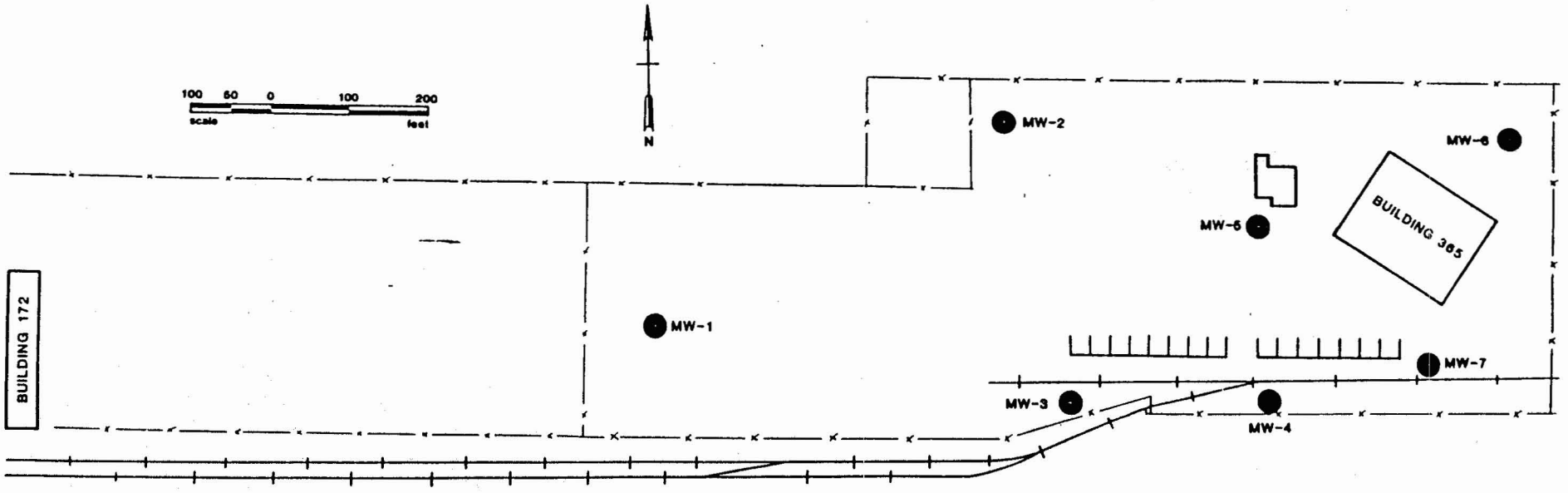
SITE PLAN

FIGURE 2-1



SOIL SAMPLING LOCATIONS

FIGURE 3-1



MONITORING WELL LOCATIONS

FIGURE 3-2

TABLE 4-2
SUMMARY OF HEAVY METALS FOUND IN SURFACE SOIL SAMPLES

SAMPLE IDENTIFICATION	METAL CONCENTRATION (MG/KG)												
	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
S-1	ND	1.3	0.3	0.12	26	24	6.3	0.068	30	ND	0.31	3.3	34
S-2	ND	0.54	0.2	0.11	14	27	85	0.075	16	ND	0.4	4.9	78
S-3	ND	2.2	0.2	0.058	27	11	20	0.060	27	ND	0.2	2.2	32
S-4	ND	0.077	0.5	ND	31	31	6.0	0.18	66	ND	0.3	3.2	50
S-5	ND	0.63	0.3	ND	17	36	6.6	0.005	62	ND	1.1	11	34
S-6	ND	2.1	0.3	0.15	36	16	22	0.11	24	ND	0.4	3.5	40
S-7	ND	2.3	0.2	ND	31	33	20	0.035	37	ND	0.4	4.1	56
S-8	ND	0.11	0.1	0.13	5.0	19	5.4	0.061	4.3	ND	0.2	2.2	68
S-9	ND	0.11	ND	ND	4.7	37	6.6	0.15	4.5	ND	0.2	2.1	72
S-10	ND	0.11	0.2	0.09	5.5	28	4.2	0.029	5.5	ND	0.4	4.2	53
S-11	ND	0.95	ND	ND	17	12	10	0.023	21	ND	0.1	1.6	24
S-12	ND	0.81	0.1	ND	25	7.4	11	0.020	25	ND	0.2	1.8	24
S-13	ND	0.19	ND	ND	5.0	55	4.9	0.10	8.5	ND	0.2	2.3	85

TABLE 4-2
SUMMARY OF HEAVY METALS FOUND IN SURFACE SOIL SAMPLES

SAMPLE IDENTIFICATION	METAL CONCENTRATION (MG/KG)												
	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
S-14	ND	0.83	0.2	ND	6.5	32	4.8	0.16	9.6	ND	0.4	3.5	96
S-15	ND	1.5	0.3	0.07	37	14	21	0.025	33	ND	0.5	4.4	41
S-16	ND	0.17	0.2	ND	11	14	4.1	0.12	10	ND	0.2	2.2	55
S-17	ND	0.10	ND	0.09	6.1	60	3.7	0.066	7.5	ND	0.3	3.0	70
S-18	ND	0.54	0.2	0.16	7.6	39	3.8	0.30	9.4	ND	0.4	3.6	94
S-19	ND	2.2	0.3	0.56	32	24	5.7	0.097	31	ND	0.5	4.2	99
S-20	ND	0.35	0.3	0.09	27	33	24	0.066	27	ND	0.6	5.5	54
S-21	ND	9.4	0.2	0.12	4.7	25	2.3	0.080	3.8	ND	0.4	3.2	74
S-22	ND	1.8	0.2	0.15	13	38	400	0.59	16	ND	1.2	14	48
S-23	ND	2.7	0.3	ND	13	34	4.3	0.013	15	ND	0.5	4.7	65
S-24	ND	7.1	0.3	0.16	36	29	8.5	0.26	32	0.05	0.4	3.6	72
S-25	ND	1.3	0.3	2.0	28	23	16	0.10	27	ND	0.6	4.8	130
S-26	ND	1.4	0.3	0.2	34	36	40	0.075	35	ND	0.7	6.4	58
S-27	ND	0.55	0.3	0.63	13	18	31	0.074	14	ND	0.6	6.2	64

TABLE 4-2
SUMMARY OF HEAVY METALS FOUND IN SURFACE SOIL SAMPLES

SAMPLE IDENTIFICATION	METAL CONCENTRATION (MG/KG)												
	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
S-28	ND	1.2	0.5	ND	60	12	7.7	0.59	180	ND	0.4	4.8	34
S-29	ND	0.37	0.6	0.16	53	21	11	10	69	ND	0.6	5.6	48
S-30	ND	3.5	0.3	0.09	41	26	5.0	0.10	41	ND	0.5	4.8	61
S-31	ND	0.26	0.2	ND	7.6	24	4.2	0.072	8.7	ND	0.3	2.8	70
S-32	ND	0.20	ND	ND	12	36	7.6	0.11	11	ND	0.6	5.8	50
S-33	ND	0.85	ND	ND	8.5	15	3.3	0.012	9.4	ND	0.2	1.8	32
S-34	ND	0.83	0.4	ND	31	15	20	0.027	41	ND	0.4	4.1	42

TABLE 4-3
SUMMARY OF HEAVY METALS FOUND IN GROUNDWATER SAMPLES

SAMPLE IDENTIFICATION	METAL CONCENTRATION (mg/l)												
	ANTIMONY	ARSENIC	BERYLLIUM	CADMIUM	CHROMIUM	COPPER	LEAD	MERCURY	NICKEL	SELENIUM	SILVER	THALLIUM	ZINC
MW-1	ND	0.006	ND	0.039	0.018	0.05	0.16	ND	0.07	ND	0.02	0.29	0.15
MW-2	ND	0.020	ND	0.018	0.075	0.07	0.08	0.0019	0.10	ND	0.01	0.19	0.17
MW-3	ND	ND	ND	0.091	0.046	0.09	0.08	ND	0.12	ND	0.07	0.78	0.12
MW-4	ND	0.006	ND	0.088	0.043	0.09	0.11	ND	0.12	ND	0.06	0.71	0.14
MW-5	ND	0.006	ND	0.069	0.048	0.09	0.068	ND	0.12	ND	0.05	0.53	0.32
MW-6	ND	ND	ND	0.014	0.005	ND	0.010	ND	ND	ND	ND	0.14	0.11
MW-7	ND	0.006	ND	0.077	0.045	0.092	0.085	ND	0.12	ND	0.05	0.58	0.55

TABLE 4-4

GROUNDWATER SAMPLES EQUALLING OR EXCEEDING
MAXIMUM CONTAMINANT LEVELS FOR METALS

Metal	Maximum Contaminant Level, mg/l	Wells Exceeding Maximum Contaminant Levels	Reported Concentration, mg/l
Cadmium	0.010	MW-1	0.038
		MW-2	0.018
		MW-3	0.091
		MW-4	0.088
		MW-5	0.069
		MW-6	0.014
		MW-7	0.077
Chromium	0.05	MW-2	0.075
Lead	0.05	MW-1	0.14
		MW-2	0.08
		MW-3	0.08
		MW-4	0.11
		MW-5	0.068
		MW-7	0.085
Mercury	0.002	MW-2	0.002
Silver	0.05	MW-1	0.08
		MW-3	0.07
		MW-4	0.06
		MW-5	0.05
		MW-7	0.05

TABLE 4-5
RESULTS OF SOIL ORGANIC AND ASBESTOS ANALYSES

Sample Identification	Sampling Date	Analyses For Volatile Organics, PCBs, and Asbestos	
		Compound	ug/kg
S-2	4-30-87	Toluene	2
		Xylenes	1
S-5	4-28-87	1,2-Dichloroethane (EDC)	5
S-8	4-30-87	1,2-Dichlorobenzene	5400
		1,3-Dichlorobenzene	940
		1,4-Dichlorobenzene	2800
		Ethylbenzene	10
		Xylenes	170
		PCBs	250
S-9	4-30-87	Benzene	2
		c-1,2-Dichloroethene	74
		t-1,2-Dichloroethene	3
		Toluene	12
		1,1,1-Trichloroethane (TCA)	6
		Trichloroethene (TCE)	21
		Xylenes	4
S-13	4-30-87	Toluene	2
S-14	4-28-87	1,2-Dichloroethane (EDC)	1
S-19	4-28-87	1,2-Dichloroethane (EDC)	2
		Toluene	2
S-21	4-28-87	1,2-Dichloroethane (EDC)	3
S-22	4-30-87	Toluene	4
S-23	4-28-87	Toluene	1
S-24	4-28-87	Toluene	2
		Xylenes	2
S-25	4-30-87	Toluene	2
		Xylenes	2
		PCBs	1800
S-27	4-30-87	PCBs	1100

TABLE 4-5
RESULTS OF SOIL ORGANIC AND ASBESTOS ANALYSES

Sample Identification	Sampling Date	Analyses For Volatile Organics, PCBs, and Asbestos	
		Compound	ug/kg
S-29	4-28-87	Toluene	2
S-31	4-30-87	1,2-Dichlorobenzene	3
		1,4-Dichlorobenzene	2
S-32	4-30-87	Toluene	2

Notes:

1. Only compounds detected are listed. Table 3-2 indicates volatile organic constituents analyzed for and the detection limits.

2. The detection limit for PCBs (Aroclor 1260) is 0.01 mg/kg

TABLE 4-6
SUMMARY OF VOLATILE AND EXTRACTABLE ORGANICS FOUND
IN GROUNDWATER SAMPLES (EPA METHODS 624 AND 625)

CONSTITUENT (ug/l)	SAMPLE IDENTIFICATION						
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Benzene	51	1.3	510	68	470	<0.1	12
Trichlorofluoromethane	<10	<10	<10	<10	<10	0.2	<10
Xylenes	36	10	340	33	310	0.2	5.1
Toluene	11	1.3	140	14	160	<0.2	17
Ethylbenzene	18	2.7	120	9	150	<0.1	7.6
cis-1,2-dichloroethylene	0.4	2.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	2.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthalene	130	150	190	80	210	<10	16
Acenaphthene	<10	30	180	140	64	<10	54
Anthracene	<50	<50	7	<50	<50	<10	<50
Benzidine	<20	50	<20	<20	<20	<10	<20
Chrysene	<20	50	<20	<20	<20	<10	<20
Fluoranthene	20	70	11	3	4	<10	4
Fluorene	30	30	26	15	15	<10	2
Naphthalene	590	470	1300	690	1200	<10	200
Phenanthrene	60	170	80	48	30	<10	27
Pyrene	<10	190	15	8	5	<10	12

DEPARTMENT OF THE NAVY
WESTERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CONTRACT N62474-85-D-5627

CONTAMINATED SITE INVESTIGATION AT THE WAREHOUSE AND SCRAPYARD AREAS

Prepared by:

ERM-West
1777 Botelho Drive, Suite 260
Walnut Creek, California 94596

NAVAL SUPPLY CENTER
ALAMEDA ANNEX

Alameda, California

March 1988

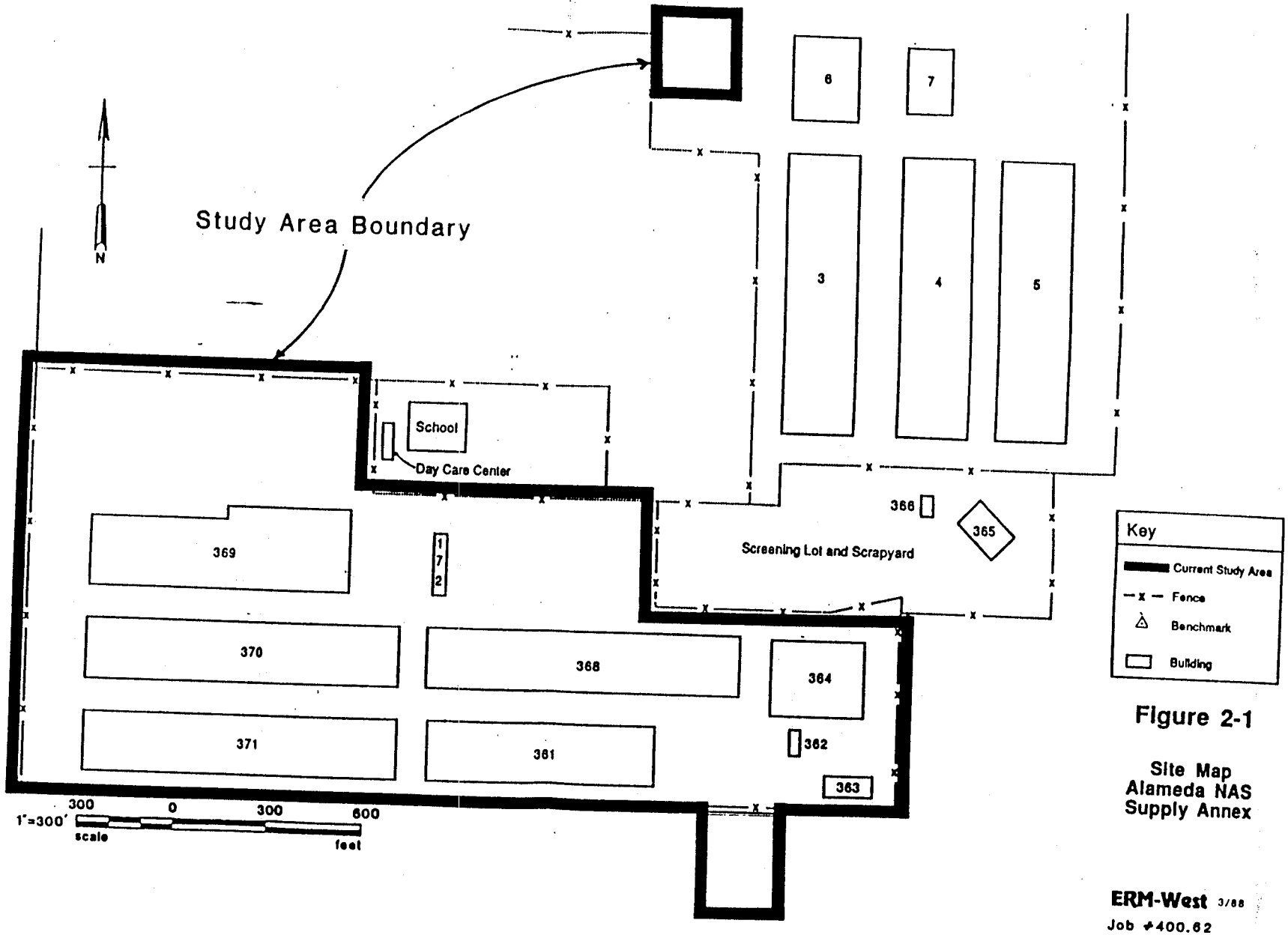


Figure 2-1

Site Map
Alameda NAS
Supply Annex

ERM-West 3/88
Job #400.62

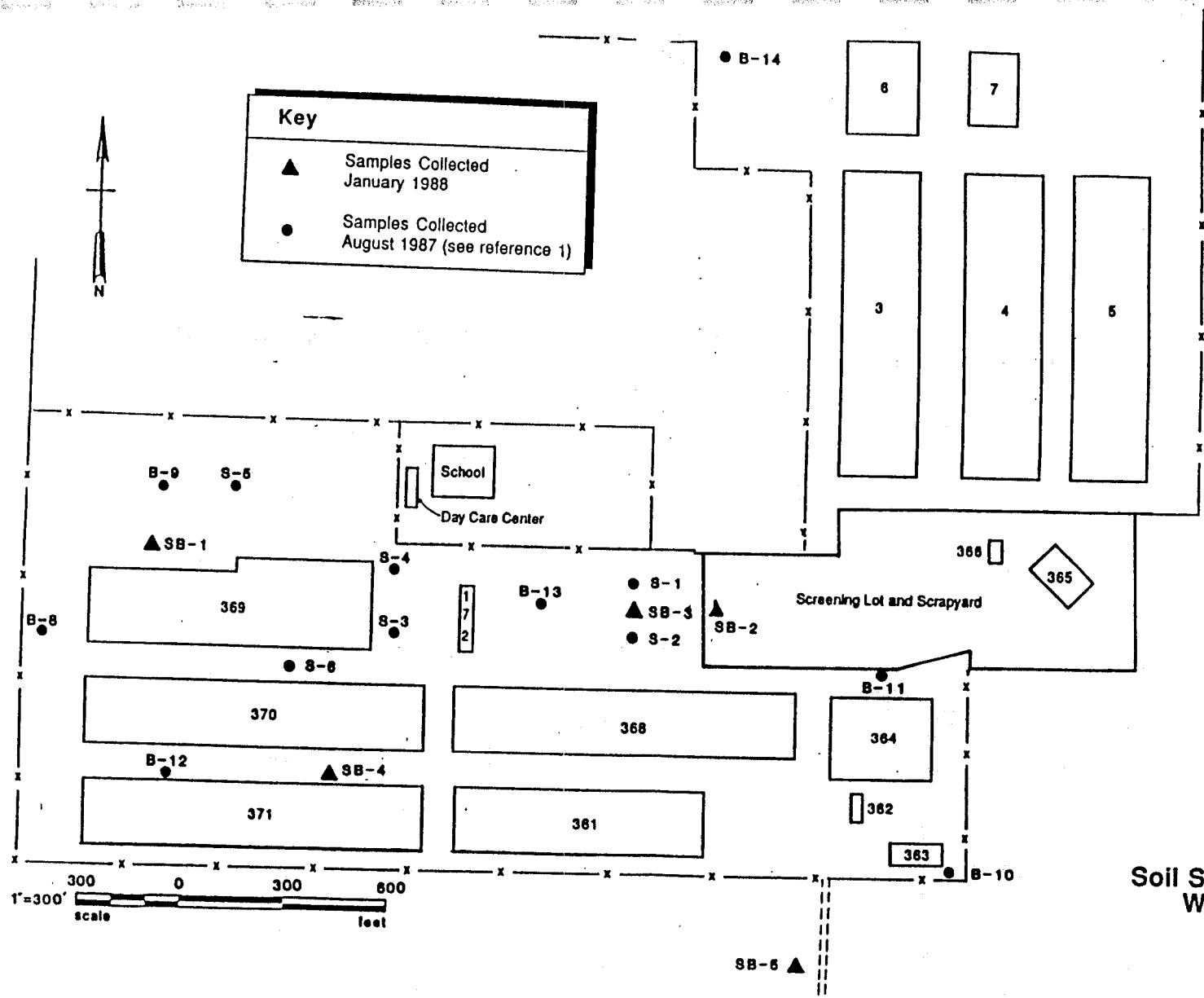


Figure 3-1

Soil Sampling Locations-Warehouse Area

ERM-West 3/88
Job #400.62

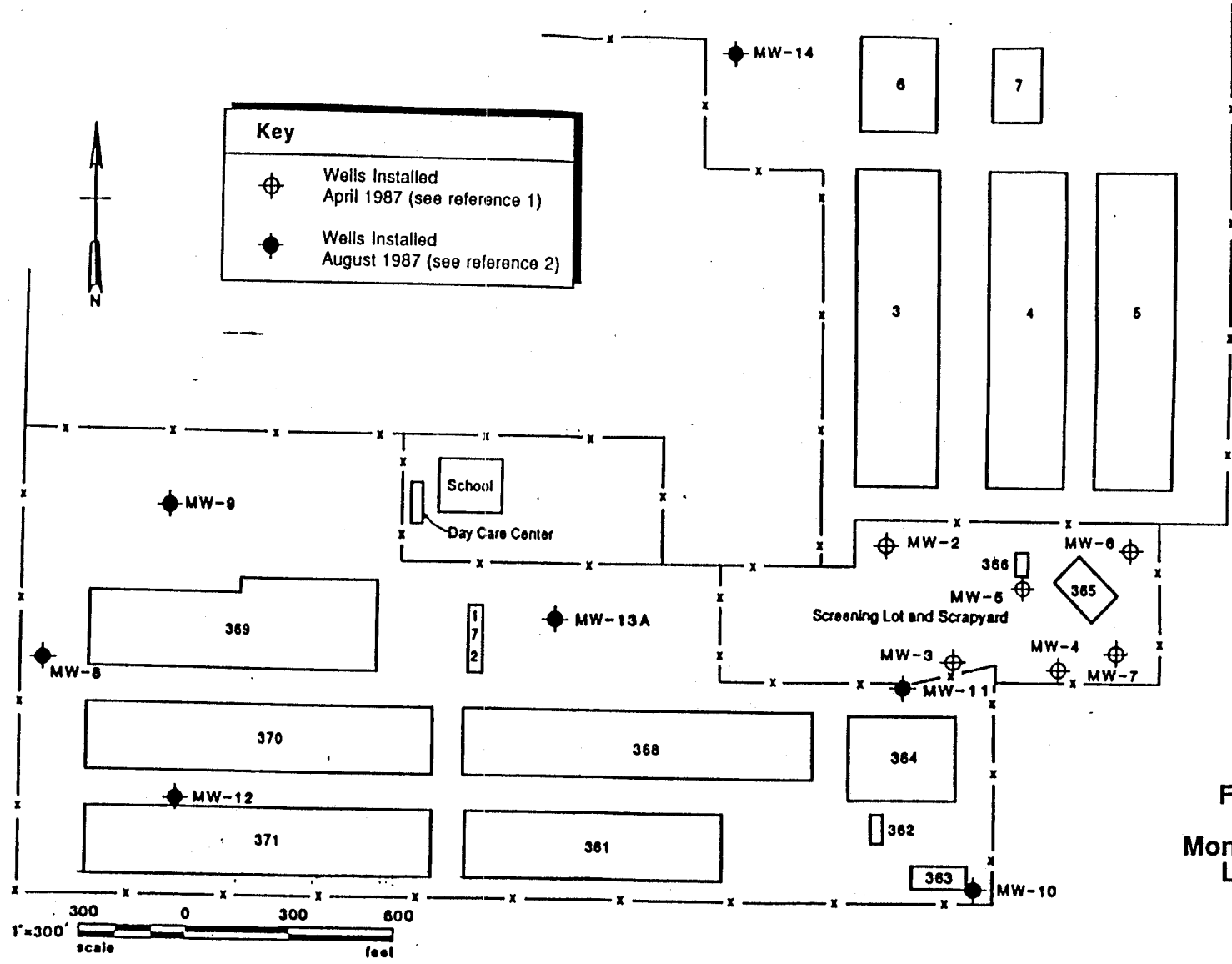


Figure 3-2

Monitoring Well Locations

ERM-West 3/88
Job #400.62

TABLE 4-2. RESULTS OF ANALYSES OF GROUNDWATER SAMPLES FOR TRACE METALS

SAMPLE IDENTIFICATION	DATE*	CONCENTRATION, milligrams per liter				
		ARSENIC	CADMIUM	CHROMIUM	LEAD	NICKEL
MW-1	May-87	0.006	0.039	0.018	0.16	0.07
	Jan-88	NS**	NS**	NS**	NS**	NS**
MW-2	May-87	0.020	0.018	0.075	0.08	0.10
	Jan-88	0.009	ND	ND	ND	ND
MW-3	May-87	ND	0.091	0.046	0.08	0.12
	Jan-88	ND	ND	ND	ND	ND
MW-4	May-87	0.006	0.088	0.043	0.11	0.12
	Jan-88	0.005	ND	ND	ND	ND
MW-5	May-87	0.006	0.069	0.048	0.068	0.12
	Jan-88	ND	ND	ND	ND	ND
MW-6	May-87	ND	0.014	0.005	0.010	ND
	Jan-88	0.004	ND	ND	ND	ND
MW-7	May-87	0.006	0.077	0.045	0.085	0.12
	Jan-88	0.008	ND	ND	ND	ND
MW-8	Aug-87	ND	0.06	0.03	0.62	0.28
	Jan-88	0.008	ND	ND	ND	0.030
MW-9	Aug-87	ND	0.04	0.03	0.32	0.14
	Jan-88	0.009	ND	ND	ND	ND
MW-10	Aug-87	0.038	0.08	0.07	0.82	0.35
	Jan-88	0.008	ND	ND	ND	ND
MW-11	Aug-87	ND	0.02	0.03	0.24	0.11
	Jan-88	ND	ND	ND	ND	ND
MW-12	Aug-87	ND	0.04	0.03	0.47	0.18
	Jan-88	0.008	ND	ND	ND	ND
MW-13	Aug-87	ND	0.06	0.07	0.78	0.31
	Jan-88	0.004	ND	ND	ND	ND
MW-14	Aug-87	0.048	0.06	0.05	0.76	0.32
	Jan-88	0.008	ND	ND	ND	ND

---

* May 1987 data from reference (1); analyses by Central Coast Analytical Services (San Luis Obispo, CA). August 1987 data from reference (2); analyses by Anlab Analytical Services (Sacramento, CA). January 1988 analyses by Anlab Analytical Services.

** NS means Not Sampled

TABLE 4-3. RESULTS OF ANALYSES OF GROUNDWATER FOR BENZENE AND NAPHTHALENE

SAMPLE IDENTIFICATION	DATE*	CONCENTRATION, micrograms per liter	
		BENZENE	NAPHTHALENE
MW-1	May-87	51	590
	Jan-88	NS**	NS**
MW-2	May-87	1.3	470
	Jan-88	ND	ND****
MW-3	May-87	510	1300
	Jan-88	280	660
MW-4	May-87	68	690
	Jan-88	150	ND***
MW-5	May-87	470	1200
	Jan-88	450	ND****
MW-6	May-87	ND	ND
	Jan-88	ND	40
MW-7	May-87	12	200
	Jan-88	9.1	ND***
MW-8	Aug-87	ND	3.9
	Jan-88	ND	ND***
MW-9	Aug-87	250	1100
	Jan-88	260	7800
MW-10	Aug-87	ND	66
	Jan-88	ND	ND***
MW-11	Aug-87	350	560
	Jan-88	ND	ND***
MW-12	Aug-87	ND	ND
	Jan-88	ND	ND***
MW-13	Aug-87	570	730
	Jan-88	740	1800
MW-14	Aug-87	ND	43
	Jan-88	0.6	40

---

* May 1987 data from reference (1); analyses by Central Coast Analytical Services (San Luis Obispo, CA). August 1987 data from reference (2); analyses by Anlab Analytical Services (Sacramento, CA). January 1988 analyses by Anlab Analytical Services.

** NS means "Not Sampled

*** None Detected (Detection limit = 40 micrograms per liter).

**** None Detected (Detection limit = 400 micrograms per liter).

TABLE 4-1. RESULTS OF ANALYSES OF SOIL SAMPLES FOR TRACE METALS

SAMPLE IDENTIFICATION			CONCENTRATION, MILLIGRAMS PER KILOGRAM				
STUDY AREA	LOCATION	DEPTH	ARSENIC	CADMIUM	CHROMIUM	LEAD	NICKEL
WAREHOUSE AREA*	B-8	2'-4'	8.1	1.0	91	28	280
	B-9	2'-4'	16	1.0	56	43	90
	B-10	2'-4'	13	1.0	60	48	92
	B-11	2'-4'	5.0	1.0	48	7	42
	B-11 duplicate	2'-4'	5.2	1.0	36	11	38
	B-12	2'-4'	9.0	1.0	48	34	74
	B-13	2'-4'	5.9	1.0	34	14	130
	B-14	2'-4'	6.2	1.0	30	25	50
	S-1	2'-4'	12	1.0	53	22	85
	S-2	2'-4'	6.0	<1.0	38	25	37
	S-3	2'-4'	8.0	1.0	86	31	270
	S-4	2'-4'	16	1.0	62	47	84
	S-5	2'-4'	16	1.0	59	37	79
	S-6	2'-4'	4.3	1.0	150	24	690
WAREHOUSE AREA - PHASE II	SB-1	0'-0.5'	3.0	3.0	360	9	580
	SB-1	1'-1.5'	21	3.5	120	23	80
	SB-1	4.5'-5'	8.0	2.5	90	18	66
	SB-2	0'-0.5'	3.8	4.5	140	36	290
	SB-2	1'-1.5'	8.2	1.5	40	12	48
	SB-2	4.5'-5'	3.7	1.0	47	6	36
	SB-3	0'-0.5'	6.0	2.5	190	5	430
	SB-3	1'-1.5'	6.2	3.0	250	18	450
	SB-3	4.5'-5'	5.2	1.0	54	11	48
	SB-4	0'-0.5'	5.0	2.0	41	26	33
	SB-4	1'-1.5'	10	5.5	40	22	34
	SB-4	4.5'-5'	5.2	2.5	68	14	55
	SB-5	0'-0.5'	10	3.0	62	23	50
	SB-5	1'-1.5'	7.5	3.0	68	22	58
	SB-5	4.5'-5'	18	3.5	150	38	120

* Data from reference (2). Analyses by Anlab Analytical Laboratory (Sacramento, CA).

CLEAN
Central Zone

Contract No. N62474-88-D-5086

Contract Task Order 0075

Navy Engineer-in-Charge: Ms. Bella Dizon

PRC Project Manager: Mr. Fred Stanley

NAVAL AIR STATION
ALAMEDA NORTH HOUSING SITE
ALAMEDA, CALIFORNIA

AIR SAMPLING AND ANALYSIS
MILITARY FAMILY HOUSING

FINAL
SAMPLING AND ANALYSIS REPORT

Prepared By

PRC ENVIRONMENTAL MANAGEMENT, INC.
120 Howard Street, Suite 700
San Francisco, CA 94105
415/543-4880

July 23, 1990

TABLE 1

AIR SAMPLING AND ANALYSIS DATA

Location	Sample	Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per Cubic Meter	Parts per Million	Parts per Trillion
	Test	Benzene	78	30	100	500	50.0	0.600	0.00019	188
2000F (H)	E02	Benzene	78	*30	110	494	54.3			
2000D (H)	E03	Benzene	78	54	99	493	48.8	1.107	0.00035	347
2000B (D)	E04	Benzene	78	121	108	513	55.4	2.184	0.00068	685
2000A (L)	E05	Benzene	78	58	88	508	44.7	1.298	0.00041	407
2002F (H)	E06	Benzene	78	*30	112	498	55.8			
2002E (L)	E07	Benzene	78	*30	87	504	43.8			
2002D (L)	E08	Benzene	78	*30	83	501	41.6			
2002C (D)	E09	Benzene	78	*30	102	498	50.8			
2002B (D)	E10	Benzene	78	*30	100	515	51.5			
2002A (L)	E11	Benzene	78	*30	98	506	49.6			
2004F (D)	E12	Benzene	78	45	99	500	49.5	0.909	0.00028	285
Field Blank	E14	Benzene	78	*30						
2004C (L)	E15	Benzene	78	*30	80	504	40.3			
2008F (H)	E16	Benzene	78	44	107	505	54.0	0.815	0.00026	255
2001C (B)	E17	Benzene	78	34	129	506	65.3	0.521	0.00016	163
2008D (H)	E18	Benzene	78	*30	88	502	44.2			
2006F (D)	E19	Benzene	78	*30	121	509	61.6			
2006C (D)	E21	Benzene	78	42	120	500	60.0	0.700	0.00022	219
2004A (L)	E23	Benzene	78	54	127	509	64.6	0.836	0.00026	262
2006A (D)	E25	Benzene	78	32	91	502	45.7	0.700	0.00022	219
2006E (L)	E26	Benzene	78	33	109	507	55.3	0.597	0.00019	187
2001C (L)	E27	Benzene	78	34	80	502	40.2	0.846	0.00027	265
2004D (L)	E29	Benzene	78	*30	84	463	38.9			
2008A (D)	E30	Benzene	78	42	100	454	45.4	0.925	0.00029	290
2006D (L)	E31	Benzene	78	*30	101	510	51.5			

* = Detection Limit

K = Kitchen
H = Hall
D = Dining Room
L = Living Room
B = Background
P = DRMO

TABLE 1 (Continued)

AIR SAMPLING AND ANALYSIS DATA

Location	Sample	Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per cubic meter	Parts per Million	Parts per Trillion
2006F (P)	E32	Benzene	78	*30	78	495	38.6			
2004B (L)	E33	Benzene	78	54	95	503	47.8	1.130	0.00035	354
Trip Blank	E34	Benzene	78	*30						
2000C (K)	E2A	Benzene	78	*30	118	513	60.5			
2006B (L)	E3A	Benzene	78	*30	93	498	46.3			
2001D (B)	E4A	Benzene	78	*30	84	504	42.3			
2004E (D)	E5A	Benzene	78	*30	112	223	25.0			
2001D (D)	E6A	Benzene	78	31	83	511	42.4	0.731	0.00023	229
2004B (P)	1A	Benzene	78	*30	79	473	37.4			
Field Blank	4A	Benzene	78	*30						
2008C (D)	4B	Benzene	78	*30	96	233	22.4			
2000C (K)	E2A	Vinyl Chloride	63	*50	118	513	60.5			
2006B (L)	E3A	Vinyl Chloride	63	*50	93	498	46.3			
2001D (B)	E4A	Vinyl Chloride	63	*50	84	504	42.3			
2004E (D)	E5A	Vinyl Chloride	63	*50	112	223	25.0			
2001D (D)	E6A	Vinyl Chloride	63	*50	83	511	42.4			
2004B (P)	1A	Vinyl Chloride	63	*50	79	473	37.4			
Field Blank	4A	Vinyl Chloride	63	*50						
2008C (D)	4B	Vinyl Chloride	63	*50	96	233	22.4			
2000C (K)	E2A	Methylene Chloride	85	963	118	513	60.5	15.917	0.00458	4579
2006B (L)	E3A	Methylene Chloride	85	1830	93	498	46.3	39.525	0.01137	11369
2001D (B)	E4A	Methylene Chloride	85	1340	84	504	42.3	31.678	0.00911	9112
2004E (D)	E5A	Methylene Chloride	85	281	112	223	25.0	11.240	0.00323	3233
2001D (D)	E6A	Methylene Chloride	85	3350	83	511	42.4	79.009	0.02273	22727

K = Kitchen
H = Hall
D = Dining Room
L = Living Room
F = Background
[illegible] = RMO

* = Detection Limit

TABLE 1 (Continued)

AIR SAMPLING AND ANALYSIS DATA

Location	Sample	Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per cubic meter	Parts per Million	Parts per Trillion
2004B (P)	1A	Methylene Chloride	85	685	79	473	37.4	18.316	0.00527	5268
Field Blank	4A	Methylene Chloride	85	*30						
2008C (D)	4B	Methylene Chloride	85	61	96	233	22.4	2.723	0.00078	78
2000C (K)	E2A	Chloroform	119	*30	118	513	60.5			
2006B (L)	E3A	Chloroform	119	*30	93	498	46.3			
2001D (B)	E4A	Chloroform	119	*30	84	504	42.3			
2004E (D)	E5A	Chloroform	119	*30	112	223	25.0			
2001D (D)	E6A	Chloroform	119	*30	83	511	42.4			
2004B (P)	1A	Chloroform	119	*30	79	473	37.4			
Field Blank	4A	Chloroform	119	*30						
2008C (D)	4B	Chloroform	119	*30	96	233	22.4			
2000C (K)	E2A	1,2-Dichloroethane	99	*30	118	513	60.5			
2006B (L)	E3A	1,2-Dichloroethane	99	*30	93	498	46.3			
2001D (B)	E4A	1,2-Dichloroethane	99	*30	84	504	42.3			
2004E (D)	E5A	1,2-Dichloroethane	99	*30	112	223	25.0			
2001D (D)	E6A	1,2-Dichloroethane	99	*30	83	511	42.4			
2004B (P)	1A	1,2-Dichloroethane	99	*30	79	473	37.4			
Field Blank	4A	1,2-Dichloroethane	99	*30						
2008C (D)	4B	1,2-Dichloroethane	99	*30	96	233	22.4			
2000C (K)	E2A	1,1,1-Trichloroethane	133	77	118	513	60.5	0.777	0.00014	143
2006B (L)	E3A	1,1,1-Trichloroethane	133	77	93	498	46.3	1.663	0.00031	306
2001D (B)	E4A	1,1,1-Trichloroethane	133	49	84	504	42.3	1.158	0.00021	213
2004E (D)	E5A	1,1,1-Trichloroethane	133	*30	112	223	25.0			

K = Kitchen
H = Hall
D = Dining Room
L = Living Room
B = Background
P = DRMO

* = Detection Limit

TABLE 1 (Continued)

AIR SAMPLING AND ANALYSIS DATA

Location	Sample	Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per cubic meter	Parts per Million	Parts per Trillion
2001D (D)	E6A	1,1,1 Trichloroethane	133	43	83	511	42.4	1.014	0.00019	186
2004B (P)	1A	1,1,1-Trichloroethane	133	*30	79	473	37.4			
Field Blank	4A	1,1,1-Trichloroethane	133	*30						
2008C (D)	4B	1,1,1-Trichloroethane	133	*30	96	233	22.4			
2000C (K)	E2A	Carbon Tetrachloride	154	*30	118	513	60.5			
2006B (L)	E3A	Carbon Tetrachloride	154	*30	93	498	46.3			
2001D (B)	E4A	Carbon Tetrachloride	154	*30	84	504	42.3			
2004E (D)	E5A	Carbon Tetrachloride	154	*30	112	223	25.0			
2001D (D)	E6A	Carbon Tetrachloride	154	*30	83	511	42.4			
2004B (P)	1A	Carbon Tetrachloride	154	*30	79	473	37.4			
Field Blank	4A	Carbon Tetrachloride	154	*30						
2008C (D)	4B	Carbon Tetrachloride	154	*30	96	233	22.4			
2000C (K)	E2A	Trichloroethene	132	*30	118	513	60.5			
2006B (L)	E3A	Trichloroethene	132	*30	93	498	46.3			
2001D (B)	E4A	Trichloroethene	132	*30	84	504	42.3			
2004E (D)	E5A	Trichloroethene	132	*30	112	223	25.0			
2001D (D)	E6A	Trichloroethene	132	*30	83	511	42.4			
2004B (P)	1A	Trichloroethene	132	*30	79	473	37.4			
Field Blank	4A	Trichloroethene	132	*30						
2008C (D)	4B	Trichloroethene	132	*30	96	233	22.4			
2000C (K)	E2A	Tetrachloroethene	166	*30	118	513	60.5			
2006B (L)	E3A	Tetrachloroethene	166	*30	93	498	46.3			
2001D (B)	E4A	Tetrachloroethene	166	*30	84	504	42.3			

K = Kitchen
H = Hall
D = Dining Room
L = Living Room
B = Aground
P = 40

* = Detection Limit

TABLE 1 (Continued)

AIR SAMPLING AND ANALYSIS DATA

Location	Sample	Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per cubic meter	Parts per Million	Parts per Trillion
2004E (D)	E5A	Tetrachloroethene	166	*30	112	223	25.0			
2001D (D)	E6A	Tetrachloroethene	166	*30	83	511	42.4			
2004B (P)	1A	Tetrachloroethene	166	31	79	473	37.4	0.829	0.00012	122
Field Blank	4A	Tetrachloroethene	166	*30						
2008C (D)	4B	Tetrachloroethene	166	*30	96	233	22.4			
2000C (K)	E2A	1,2-Dibromoethane	174	*30	118	513	60.5			
2006B (L)	E3A	1,2-Dibromoethane	174	*30	93	498	46.3			
2001D (B)	E4A	1,2-Dibromoethane	174	*30	84	504	42.3			
2004E (D)	E5A	1,2-Dibromoethane	174	*30	112	223	25.0			
2001D (D)	E6A	1,2-Dibromoethane	174	*30	83	511	42.4			
2004B (P)	1A	1,2-Dibromoethane	174	*30	79	473	37.4			
Field Blank	4A	1,2 Dibromoethane	174	*30						
2008C (D)	4B	1,2 Dibromoethane	174	*30	96	233	22.4			
2000C (K)	E2A	Toluene	92	172	118	513	60.5	2.842	0.00076	756
2006B (L)	E3A	Toluene	92	402	93	498	46.3	8.683	0.00231	2307
2001D (B)	E4A	Toluene	92	73	84	504	42.3	1.726	0.00046	459
2004E (D)	E5A	Toluene	92	76	112	223	25.0	3.040	0.00081	808
2001D (D)	E6A	Toluene	92	216	83	511	42.4	5.094	0.00135	1354
2004B (P)	1A	Toluene	92	104	79	473	37.4	2.781	0.00074	739
Field Blank	4A	Toluene	92	*30						
2008C (D)	4B	Toluene	92	*30	96	233	22.4			
2000C (K)	E2A	Ethylbenzene	121	323	118	513	60.5	5.339	0.00108	1079
2006B (L)	E3A	Ethylbenzene	121	85	93	498	46.3	1.836	0.00037	371

K = Kitchen
H = Hall
D = Dining Room
L = Living Room
B = Background
P = DRMO

* = Detection Limit

TABLE 1 (Continued)

AIR SAMPLING AND ANALYSIS DATA

Location	Sample	Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per cubic meter	Parts per Million	Parts per Trillion
2001D (B)	E4A	Ethylbenzene	121	*30	84	504	42.3			
2004E (D)	E5A	Ethylbenzene	121	*30	112	223	25.0			
2001D (D)	E6A	Ethylbenzene	121	51	83	511	42.4	1.203	0.00024	243
2004B (P)	1A	Ethylbenzene	121	*30	79	473	37.4			
Field Blank	4A	Ethylbenzene	121	*30						
2008C (D)	4B	Ethylbenzene	121	*30	96	233	22.4			
2000C (K)	E2A	Total Xylene	106	1514	118	513	60.5	25.025	0.00577	5772
2006B (L)	E3A	Total Xylene	106	476	93	498	46.3	10.281	0.00237	2371
2001D (B)	E4A	Total Xylene	106	116	84	504	42.3	2.742	0.00063	633
2004E (D)	E5A	Total Xylene	106	71	112	223	25.0	2.840	0.00066	655
2001D (D)	E6A	Total Xylene	106	345	83	511	42.4	8.137	0.00188	1877
2004B (P)	1A	Total Xylene	106	164	79	473	37.4	4.389	0.00101	1012
Field Blank	4A	Total Xylene	106	*30						
2008C (D)	4B	Total Xylene	106	*30	96	233	22.4			

K = Kitchen
H = Hall
D = Dining Room
L = Living Room
B = Background
P = DRMO

* = Detection Limit

TABLE 2

AIR SAMPLING DETECTION LIMITS FOR ORGANIC COMPOUNDS BASED ON MAXIMUM AIR VOLUMES SAMPLED

Compound	Molecular Weight	Lab Weight (nanograms)	Total Sample Time (minutes)	Average Flow Rate (cc/min)	Air Sample Volume (liters)	Micrograms per Cubic Meter	Parts per Million	Parts per Trillion
Benzene	78	30	120	500	60.0	0.500	0.00016	157
Vinyl Chloride	63	50	118	513	60.5	0.826	0.00032	321
Methylene Chloride	85	30	118	513	60.5	0.496	0.00014	143
Chloroform	119	30	118	513	60.5	0.496	0.00010	102
1,2-Dichloroethane	99	30	118	513	60.5	0.496	0.00012	122
1,1,1-Trichloroethane	133	30	118	513	60.5	0.496	0.00009	91
Carbon Tetrachloride	154	30	118	513	60.5	0.496	0.00008	79
Trichloroethene	132	30	118	513	60.5	0.496	0.00009	92
Tetrachloroethene	166	30	118	513	60.5	0.496	0.00007	73
1,2-Dibromoethane	174	30	118	513	60.5	0.496	0.00007	70
Toluene	92	30	118	513	60.5	0.496	0.00013	132
Ethylbenzene	121	30	118	513	60.5	0.496	0.00010	100
Total Xylene	106	30	118	513	60.5	0.496	0.00011	114

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 1 – LOCATION OF MONTEREY AND KOHLMAN CIRCLES

FOR ADDITIONAL INFORMATION, CONTACT:

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1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

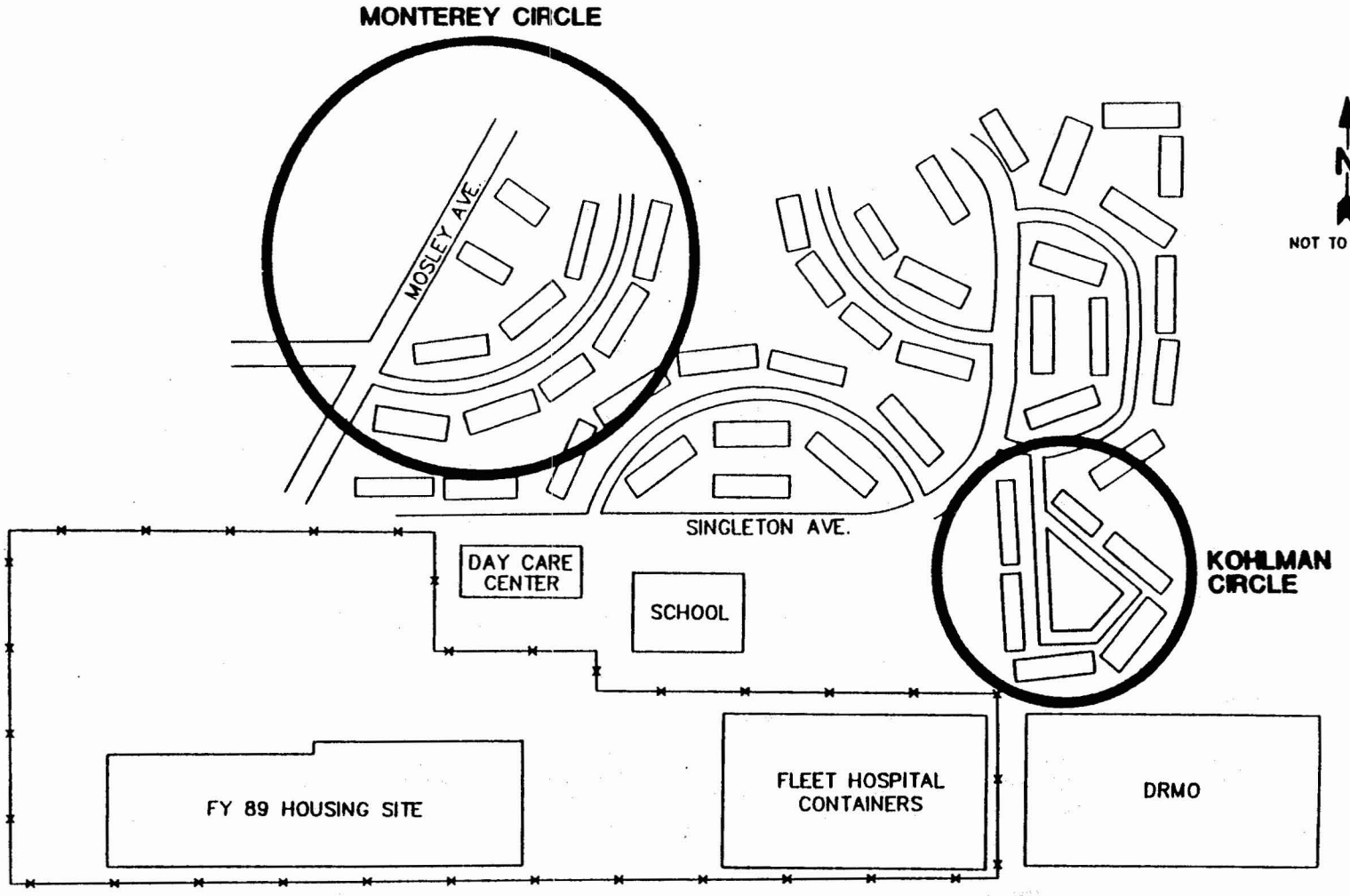

FIGURE 1

LOCATION OF MONTEREY AND KOHLMAN CIRCLES

CLEAN

Contract No. N62474-88-D-5086

Contract Task Order 0067

Navy Engineer-in-Charge: Ms. Bella Dizon

PRC Project Manager: Mr. Randy Fish

Military Housing Site
NAVAL SUPPLY CENTER OAKLAND
ALAMEDA ANNEX
ALAMEDA, CALIFORNIA

RISK ASSESSMENT
REPORT

Prepared By

PRC ENVIRONMENTAL MANAGEMENT, INC.
120 Howard Street, Suite 700
San Francisco, CA 94105
415/543-4880

October 2, 1990

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 3-1 – SITE MAP NSC OAKLAND ALAMEDA ANNEX AND ADJACENT AREAS

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SENSITIVE

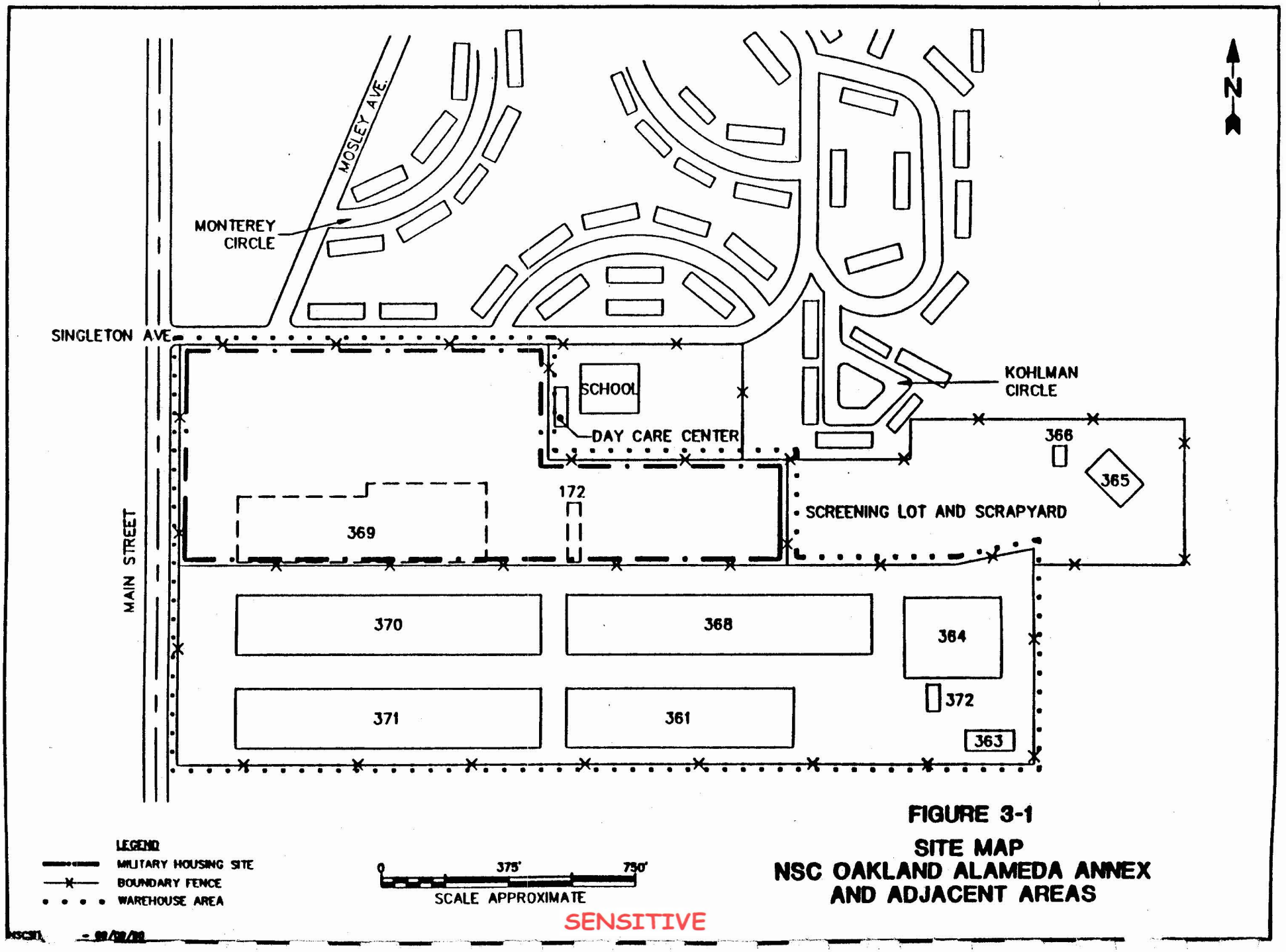

FIGURE 3-1

SITE MAP
NSC OAKLAND ALAMEDA ANNEX
AND ADJACENT AREAS

SENSITIVE

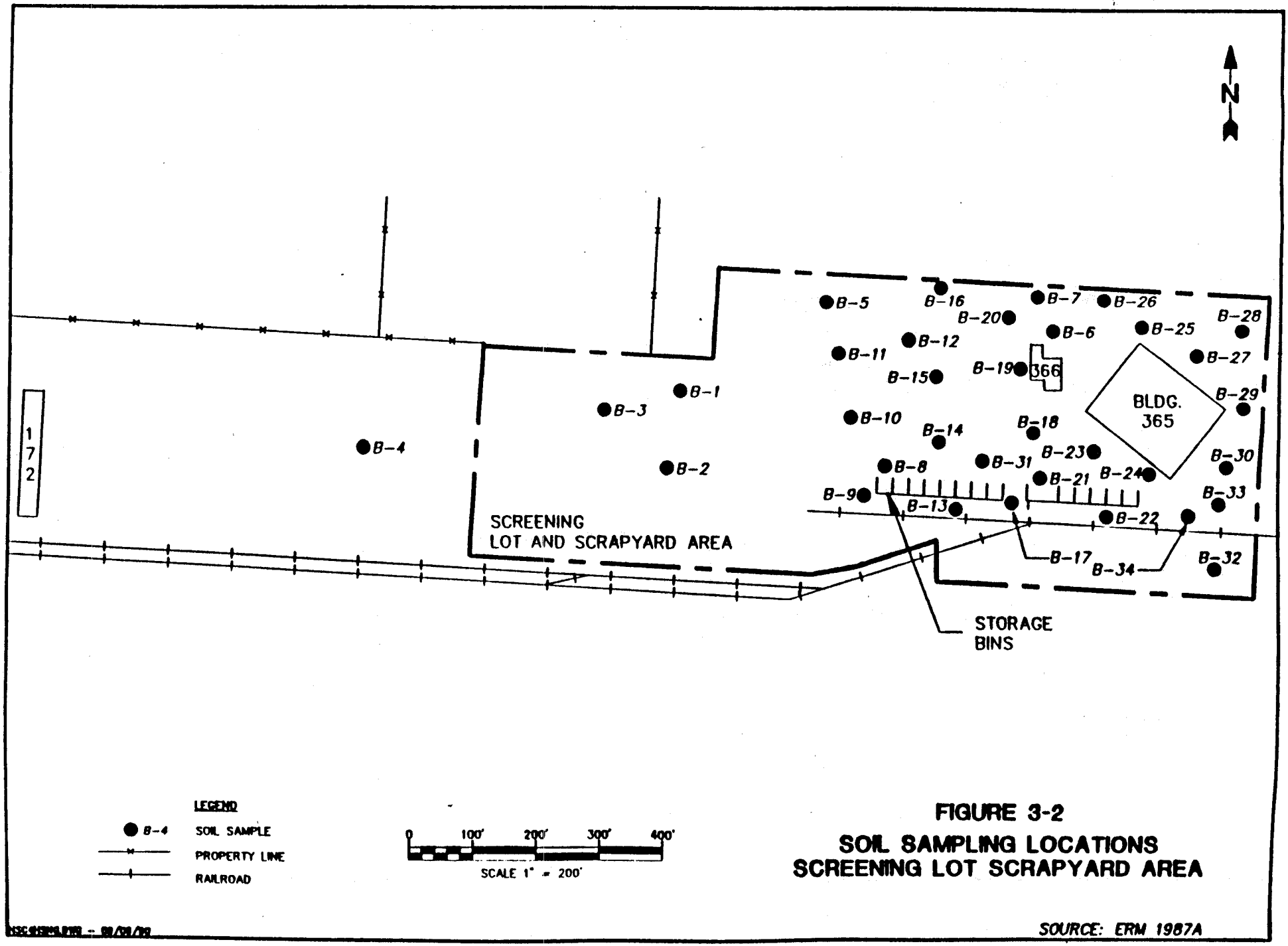

FIGURE 3-2
SOIL SAMPLING LOCATIONS
SCREENING LOT SCRAPYARD AREA

SOURCE: ERM 1987A

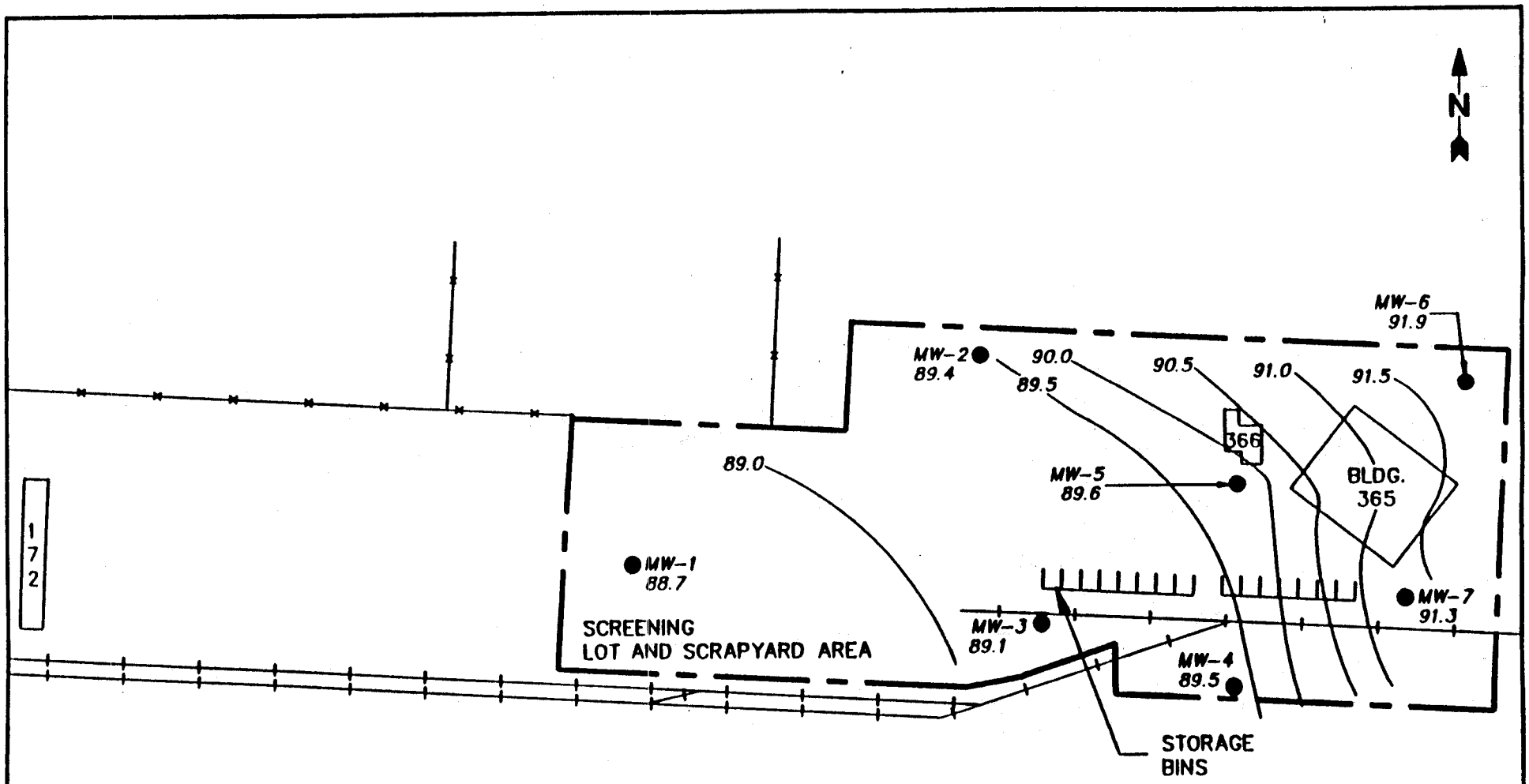

FIGURE 3-3

MONITORING WELL LOCATIONS
SCREENING LOT SCRAPYARD AREA

(ELEVATIONS IN FEET WITH RESPECT TO A FIXED DATUM, AS OF MAY 1987)

SOURCE: ERM '987A

TABLE 3-2
SUMMARY OF GROUND-WATER VOLATILE AND EXTRACTABLE ORGANICS ANALYSES
(EPA METHODS 624 AND 625)

Constituent	Concentrations (µg/l)						
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7
Benzene	51	1.3	510	68	470	<0.1	12
Trichlorofluoromethane	<10	<10	<10	<10	<10	0.2	<10
Xylenes	36	10	340	33	310	0.2	5.1
Toluene	11	1.3	140	14	160	<0.2	17
Ethylbenzene	18	2.7	120	9	150	<0.1	7.6
cis-1,2-dichloroethylene	0.4	2.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl Chloride	2.7	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthalene	130	150	190	80	210	<10	16
Acenaphthene	<10	30	180	140	64	<10	54
Anthracene	<50	<50	7	<50	<50	<10	<50
Benzidine	<20	50	<20	<20	<20	<10	<20
Chrysene	<20	50	<20	<20	<20	<10	<20
Fluoranthene	20	70	11	3	4	<10	4
Fluorene	30	30	26	15	15	<10	2
Naphthalene	590	470	1300	690	1200	<10	200
Phenanthrene	60	170	80	48	30	<10	27
Pyrene	<10	190	15	8	5	<10	12

Source: ERM, 1987

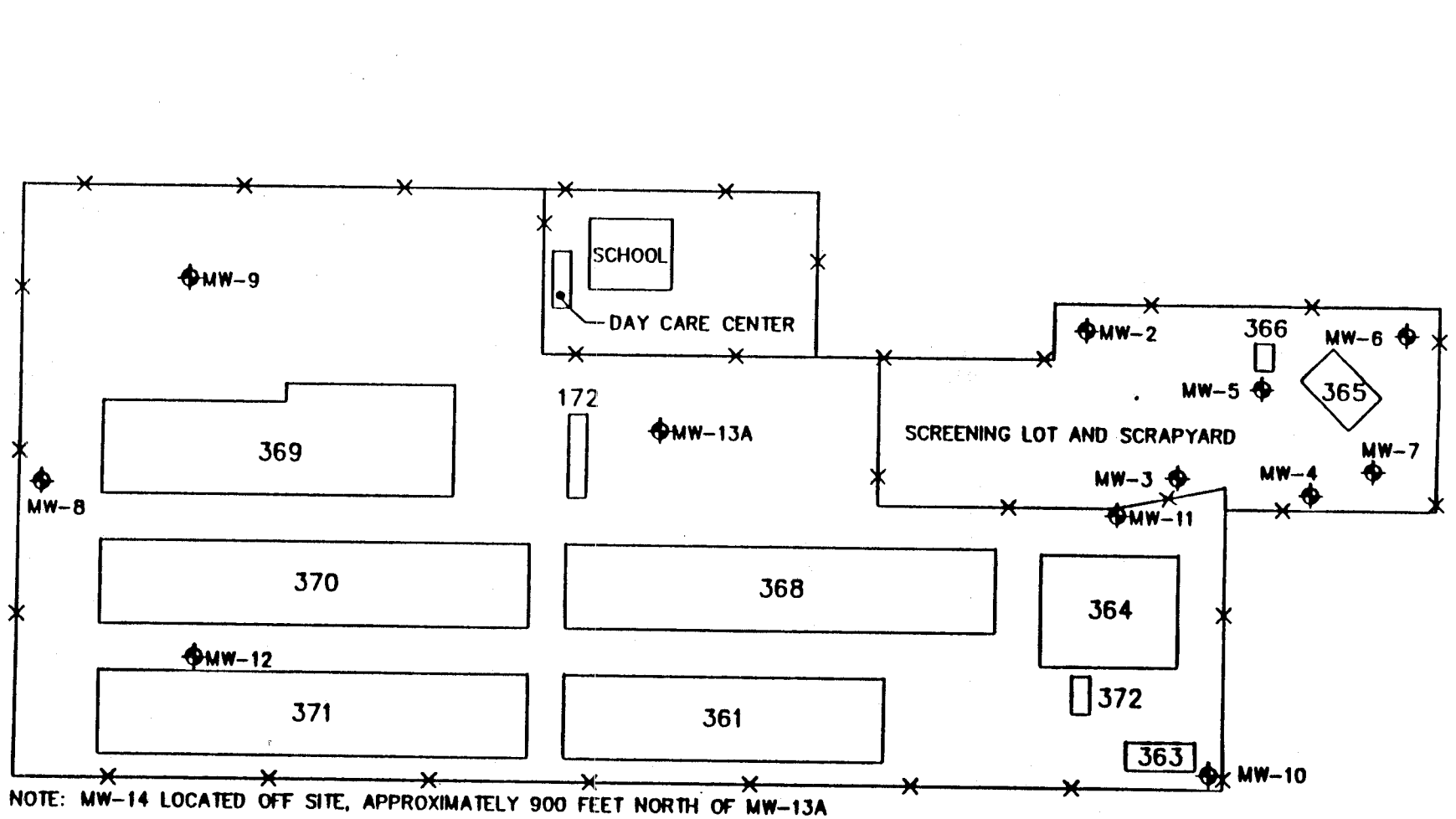

FIGURE 3-4
MONITORING WELL LOCATIONS
WAREHOUSE, SCREENING LOT AND SCRAPYARD AREA

SOUR TRM 1988

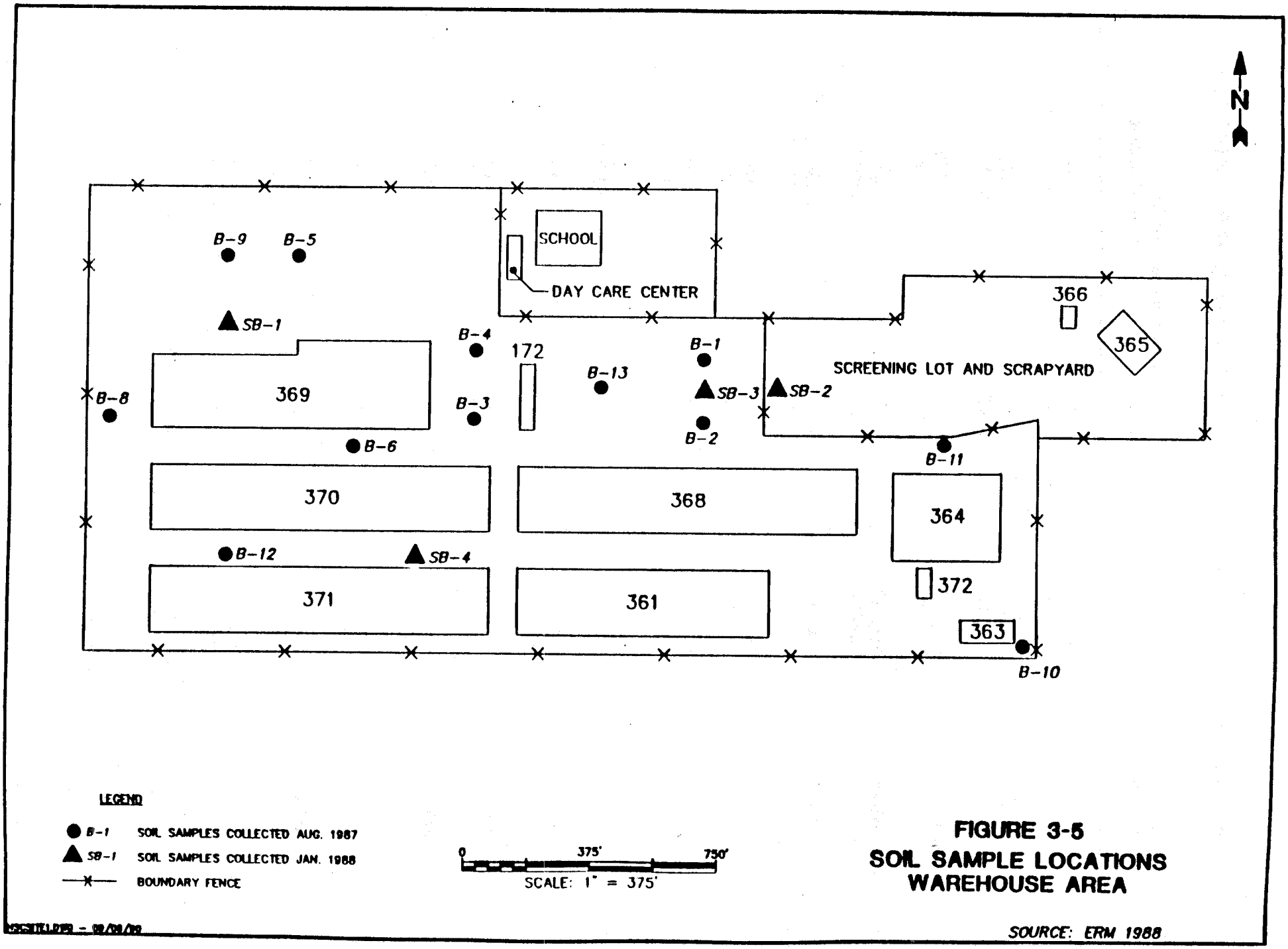

FIGURE 3-5
SOIL SAMPLE LOCATIONS
WAREHOUSE AREA

SOURCE: ERM 1988

TABLE 3-3
RESULTS OF ANALYSES OF GROUND WATER FOR BENZENE AND NAPHTHALENE

Sample Identification	Date	Concentration, (µg/l) Benzene	Naphthalene
MW-1	May-87	51	590
	Jan-88	NS**	NS**
MW-2	May-87	1.3	470
	Jan-88	ND	ND****
MW-3	May-87	510	1300
	Jan-88	280	660
MW-4	May-87	68	690
	Jan-88	150	ND***
MW-5	May-87	470	1200
	Jan-88	450	ND****
MW-6	May-87	ND	ND
	Jan-88	ND	40
MW-7	May-87	12	200
	Jan-88	9.1	ND***
MW-8	Aug-87	ND	3.9
	Jan-88	ND	ND***
MW-9	Aug-87	250	1100
	Jan-88	260	7800
MW-10	Aug-87	ND	66
	Jan-88	ND	ND***
MW-11	Aug-87	350	560
	Jan-88	ND	ND***
MW-12	Aug-87	ND	ND
	Jan-88	ND	ND***
MW-13	Aug-87	570	730
	Jan-88	740	1800
MW-14	Aug-87	ND	43
	Jan-88	0.6	40

* May 1987 analyses by Central Coast Analytical Services (San Luis Obispo, CA). August 1987 analyses by Anlab Analytical Services (Sacramento, CA). January 1988 analyses by Anlab Analytical Services.

** NS means "Not Sampled"

*** None Detected (Detection Limit = 40 µg/l).

**** None Detected (Detection Limit = 400 µg/l).

Source: ERM, 1988

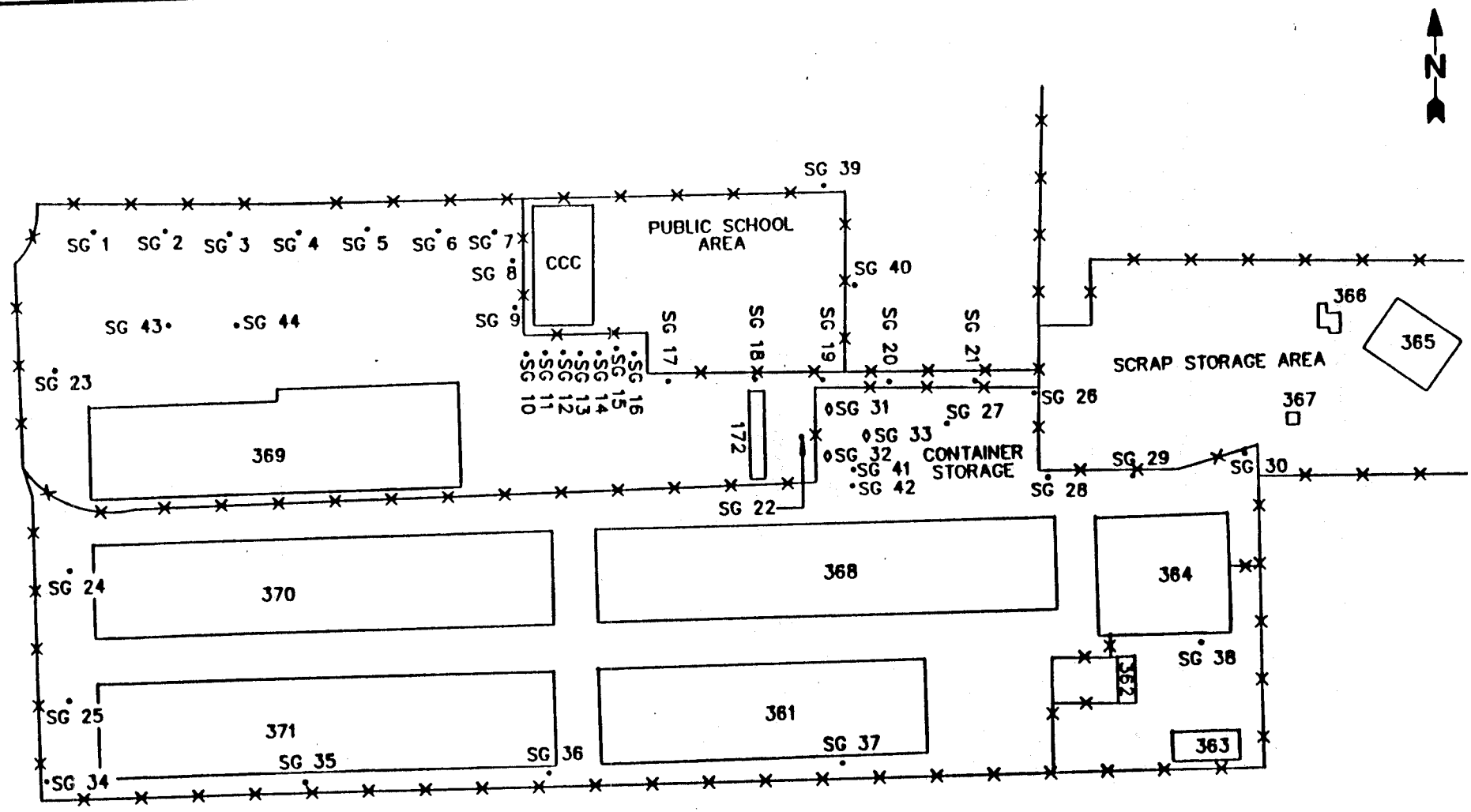

FIGURE 3-6
SOIL GAS SAMPLE LOCATIONS
WAREHOUSE AREA

SOURCE: PRC 1989

TABLE 3-4
SOIL GAS ANALYTICAL RESULTS FOR BENZENE[a]

SAMPLE[b]	BENZENE (µg/L)	BENZENE (ppb)[c]	THC[d] (µg/L)
SG - 2	0.04	12	0.08
SG - 23	0.04	12	0.2
SG - 34	0.08	25	0.2
SG - 41	0.09	28	0.3
SG - 43	0.3	94	0.3

a Samples collected and analyzed October 16 - 19, 1989

b Only positive results are presented. All results are presented in PRC, 1989. Most detection limits were 0.04 µg/L (12 ppb). Some were 0.08 µg/L (25 ppb).

c Calculated at 23.9 degrees celsius. Conversion is 1 µg/l = 312 ppb

d Total hydrocarbons presented for comparison

CLEAN
Central Zone

Contract No. N62474-88-D-5086

Contract Task Order 0011

Navy Engineer-in-Charge: Bella Dizon

PRC Project Manager: Kirk Switzer

NAVAL SUPPLY CENTER OAKLAND
ALAMEDA ANNEX AND FACILITY
ALAMEDA, CALIFORNIA

REMEDIAL INVESTIGATION/FEASIBILITY STUDY
FINAL FIELD SAMPLING PLAN

SCREENING LOT AND SCRAPYARD AREA

Prepared By

PRC ENVIRONMENTAL MANAGEMENT, INC.
11030 White Rock Road, Suite 190
Rancho Cordova, CA 95670
916/852-8300

May 30, 1991

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 1 – SITE LOCATION

FIGURE 3 – SURFACE SOIL GAS SAMPLING LOCATION SCREENING LOT/SCRAPYARD AREA

FOR ADDITIONAL INFORMATION, CONTACT:

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SENSITIVE

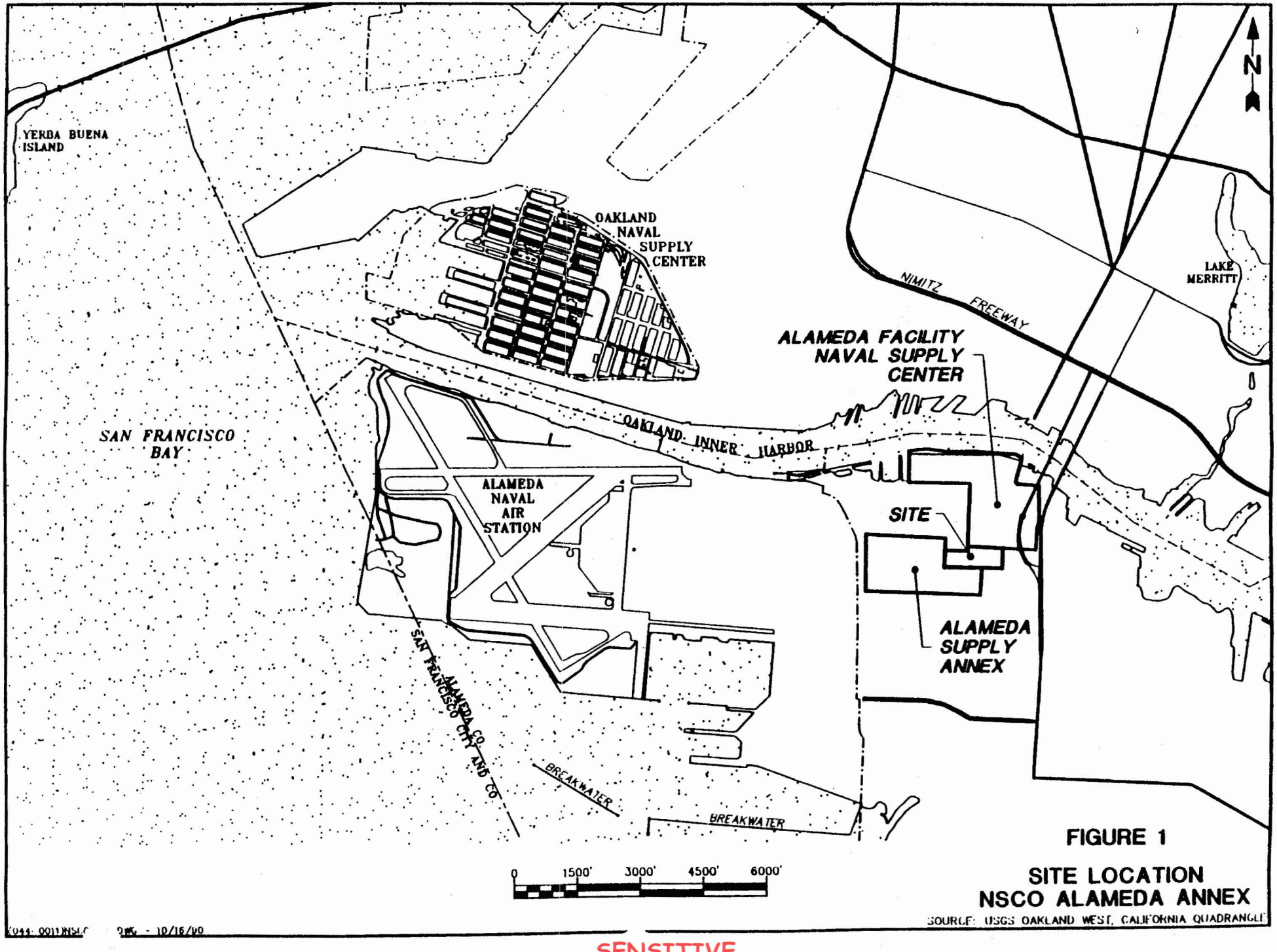


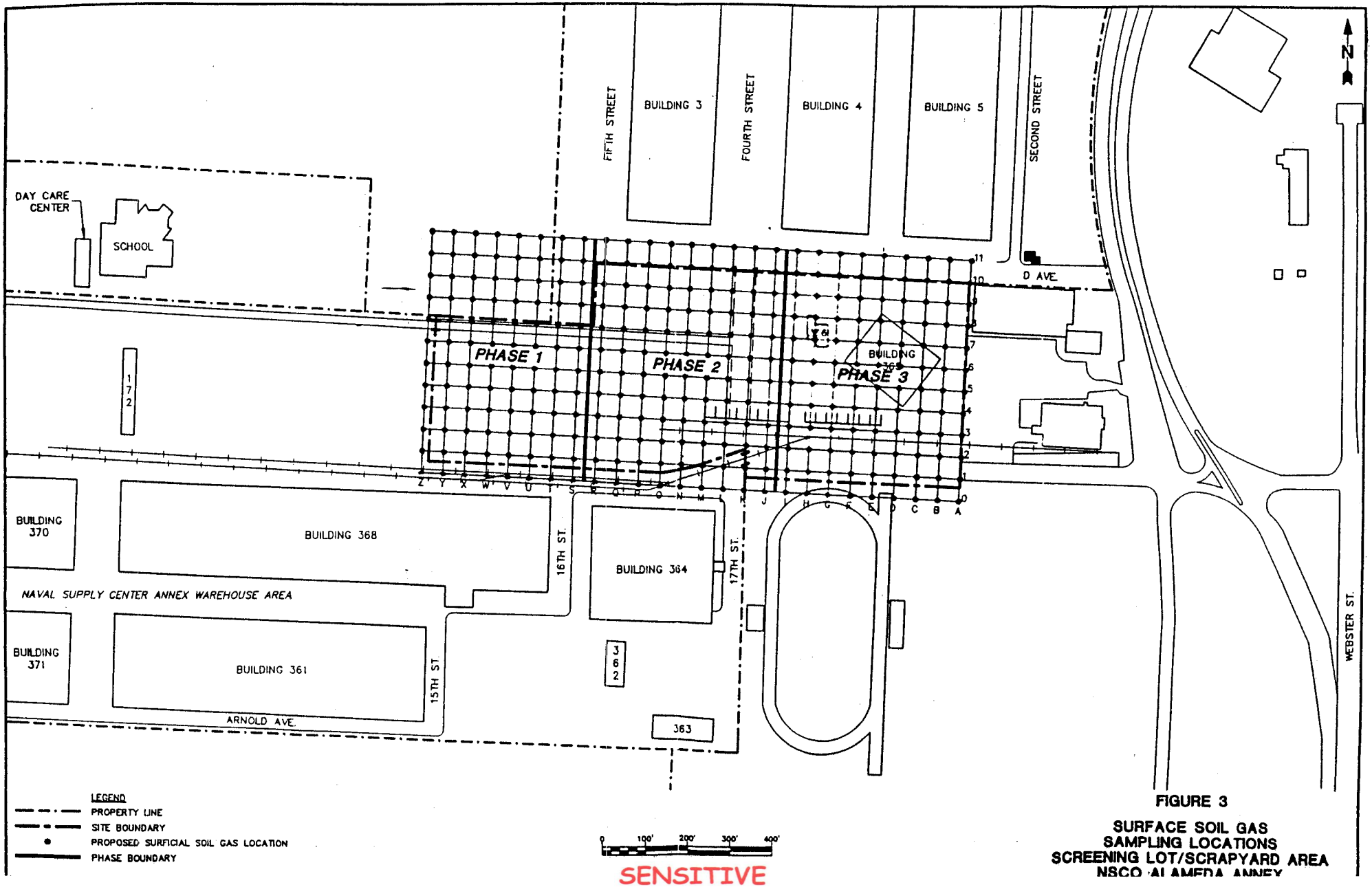
FIGURE 1

SITE LOCATION
NSCO ALAMEDA ANNEX

SOURCE: USGS OAKLAND WEST, CALIFORNIA QUADRANGLE

SENSITIVE

SENSITIVE



SENSITIVE

FIGURE 3

SURFACE SOIL GAS SAMPLING LOCATIONS
SCREENING LOT/SCRAPYARD AREA
NSCO ALAMEDA ANNEX

CLEAN

Contract No. N62474-88-D-5086

Contract Task Order 0067

Navy Engineer-in-Charge: Paul Kannapel

PRC Project Manager: Randy Fish

PRC Air Quality Project Manager: Randy Fox

NAVY SUPPLY CENTER OAKLAND
ALAMEDA ANNEX
ALAMEDA, CALIFORNIA

AIR SAMPLING AND ANALYSIS
NAVAL FAMILY HOUSING AREA

FINAL REPORT

Prepared By

PRC ENVIRONMENTAL MANAGEMENT, INC.
1099 18th Street, Suite 1960
Denver, CO 80202
303/295-1101

March 26, 1993

TABLE 4-1

RANGE OF LOWER DETECTION LIMITS (ppb)

Compound	Minimum	Maximum
Acetone	1.1	2.1
Trichlorofluoromethane	0.23	0.45
1,1-Dichloroethene	0.33	0.64
Methylene chloride	0.38	0.73
Carbon disulfide	0.42	0.80
Trichlorotrifluoroethane	0.17	0.33
trans-1,2-Dichloroethene	0.33	0.64
cis-1,2-Dichloroethene	0.33	0.64
1,1-Dichloroethane	0.32	0.62
Vinyl acetate	0.71	1.4
2-Butanone	0.85	1.7
Chloroform	0.27	0.52
1,2-Dichloroethane	0.32	0.62
1,1,1-Trichloroethane	0.24	0.46
Benzene	0.41	0.78
Carbon tetrachloride	0.21	0.40
1,2-Dichloropropane	0.28	0.55
Bromodichloromethane	0.20	0.38
Trichloroethene	0.24	0.47
cis-1,3-Dichloropropene	0.29	0.56
4-Methyl-2-pentanone	0.61	1.2
trans-1,3-Dichloropropene	0.29	0.56
1,1,2-Trichloroethane	0.24	0.46
Toluene	0.35	0.66
Dibromochloromethane	0.15	0.30
2-Hexanone	0.61	1.2
Tetrachloroethene	0.19	0.37
Chlorobenzene	0.28	0.55
Ethylbenzene	0.30	0.58
Bromoform	0.13	0.24
Styrene	0.31	0.59
m- and p-Xylenes	0.30	0.58
o-Xylene	0.30	0.58
1,1,2,2,-Tetrachloroethane	0.19	0.37
Naphthalene	0.48	0.96

TABLE 4-2
AIR SAMPLING RESULTS FOR BENZENE AT MARINA VILLAGE (ppb)

Sample ID	Building Number	Benzene
S-1-10	10	3.2
S-2-22	22	0.95
S-3-35	35	2.4
S-4-49	49	23
S-5-54	54	3.1
S-6-65	65	0.88
S-7-73	73	1.2
S-8-74	74	0.56TR
S-9-82*	82	4.3
S-35-82*	82	4.2
S-35-85*	85	0.79
S-10-85*	85	0.57
S-11-86	86	0.49
S-12-88	88	6.9
S-13-89	89	0.82
S-14-92	92	0.74TR
S-15-93	93	0.66TR
S-16-95	95	1.7
S-17-99	99	2.5
S-18-113	113	9.5
S-19-117	117	3.7
S-20-118	118	8.7
S-21-123	123	0.83
S-22-130	130	1.2
S-23-135*	135	1.5
S-23-135*	135	2.0
S-24-141	141	0.81
S-25-143*	143	0.47
S-32-143*	143	0.48TR
S-26-144	144	15
S-27-146	146	3.3
S-28-147	147	3.6
S-29-151	151	8.2
S-30-159	159	3.5

TR = Trace level - below detection limit
* = Duplicate Sample

TABLE 4-3

SUMMARY OF BENZENE RESULTS AT MARINA VILLAGE (ppb)

Building Type	Mean	Maximum	Minimum	Standard Deviation	Number of Samples
I	6.8	23	0.95	7.5	9
III	2.5	9.5	0.47	3.5	10
IV	2.1	3.6	0.81	1.4	3
V	3.4	4.3	2.5	0.76	4
VI	2.2	6.9	0.49	3.1	4
All Buildings	3.8	23	0.47	5.0	30

Note: Benzene was detected in all samples collected.

TABLE 4-4

AIR SAMPLING RESULTS FOR VOCs AT ALAMEDA ANNEX (ppb)

Compound	Sample ID							
	S-4-49	S-5-54	S-6-65	S-8-74	S-10-85^	S-11-86	S-14-92	S-15-93
Acetone	69	36	29	21	39	27	68	11
Trichlorofluoromethane	4.0	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	2.6	6.8	ND	2.1	ND	ND	ND	3.5
Carbon disulfide	ND	5.7	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	1.2	7.8	1.6	1.2	1.4	1.3	1.3	1.2
2-Butanone	27	38	ND	ND	11	ND	15	7.8
1,1,1-Trichloroethane	0.98	1.9	1.7	1.4	1.5	2.0	2.2	0.64
Benzene	23	3.1	0.88	0.56TR	0.79	0.49	0.74TR	0.66TR
Trichloroethene	ND	1.9	ND	0.17TR	ND	ND	ND	0.54
Toluene	65	190	27	8.9	56	2.4	4.0	150
Tetrachloroethene	0.25	3.3	ND	2.5	0.31TR	ND	ND	2.0
Ethylbenzene	10	33	11	1.2	10	ND	ND	21
Styrene	2.6	10	40	ND	3.3	ND	ND	6.0
m- & p-Xylenes	36	93	3.4	4.3	30	1.5	1.9	55
o-Xylene	13	35	2.2	1.3	14	ND	0.63	22
Naphthalene	22	280	11	ND	150	24	6.8	170

Notes:

The last 2 digits in the sample ID denote the building in which the sample was taken.
ND = Not detected
TR = Trace level - below detection limit
^ = Field duplicate sample

TABLE 4-4 (Continued)

AIR SAMPLING RESULTS FOR VOCs AT ALAMEDA ANNEX (ppb)

Compound	Sample ID						
	S-17-99	S-21-123	S-22-130	S-24-141	S-25-143^	S-29-151	S-30-159
Acetone	42	11	13	19	12	20	29
Trichlorofluoromethane	1.1	ND	ND	ND	ND	ND	1.2
Methylene chloride	4.3	3.2	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	ND	1.1	1.6	2.2	1.3	1.6	1.4
2-Butanone	16	ND	4.9	ND	2.8	ND	5.4
1,1,1-Trichloroethane	0.99	0.80	1.0	0.67	0.52	ND	0.39TR
Benzene	2.5	0.83	1.2	0.81	0.47	8.2	3.5
Trichloroethene	ND	ND	ND	ND	ND	ND	ND
Toluene	20	3.5	13	61	2.0	28	39
Tetrachloroethene	0.16TR	ND	ND	0.63	ND	ND	0.50
Ethylbenzene	3.6	ND	1.9	9.3	ND	4.9	6.0
Styrene	0.78	ND	0.40TR	2.7	0.30TR	11	1.3
m- and p-Xylenes	13	1.7	7.6	28	1.4	17	19
o-Xylene	4.4	0.67	3.9	12	0.47	6.7	8.0
Naphthalene	11	7.9	160	160	8.7	7.1	190

Notes: The last 2-3 digits in the Sample ID denote the building in which the sample was taken.
ND = Not Detected
TR = Trace Level - Below Detection Limit
^ = Field duplicate sample

TABLE 4- (Continued)

AIR SAMPLING RESULTS FOR VOCs AT ALAMEDA ANNEX (ppb)

Compound	Sample ID							
	S-32-143[A]	S-33-98[C]	S-34-85[A]	S-36-158[C]	S-37-321E[B]	S-38-498E[B]	S-39-159[D]	S-40-159[D]
Acetone	20	37	110	8.7	12	13	0.93TR	1.2
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	2.9	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	1.7	1.4	0.61	1.4	1.9	1.8	ND	ND
2-Butanone	3.4	21	63	3.4	9.5	2.4	ND	ND
1,1,1-Trichloroethane	0.44TR	0.62	0.73	0.50	0.99	0.26TR	ND	ND
Benzene	0.48TR	0.50TR	0.57	0.36TR	0.74TR	0.60TR	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	2.2	5.5	11	1.6	85	4.5	ND	ND
Tetrachloroethene	ND	ND	ND	ND	0.76	ND	ND	ND
Ethylbenzene	ND	1.2	1.0	1.3	11	1.5	ND	ND
Styrene	ND	20	0.59	ND	2.6	21	ND	ND
m- & p-Xylenes	1.4	3.2	4.5	1.3	31	4.0	ND	ND
o-Xylene	0.52TR	1.2	1.8	0.44	12	1.9	ND	ND
Naphthalene	5.5	26	12	6.2	270	12	ND	ND

Notes:

The last 2-3 digits in the sample ID denote the building in which the sample was taken. (This does not apply to samples noted with C or D, which were not indoor samples.)

ND = Not Detected

TR = Trace Level - Below Detection Limit

[A] = Field duplicate sample

[B] = Indoor off-site background sample

[C] = Outdoor on-site background sample

[D] = Field Blank sample

TABLE 4-5
SUMMARY OF VOC RESULTS AT MARINA VILLAGE (ppb)

Compound	Number of Detects	Mean (Of Detects Only)	Maximum	Minimum	Standard Deviation	Mean (Including NDs
Acetone	15	32.3	110	8.7	22	32.3
Trichlorofluoromethane	3	2.1	4.0	1.1*	1.6	0.56
Methylene Chloride	6	3.75	6.8	2.1*	1.7	1.6
Carbon Disulfide	1	5.7	5.7	5.7*	NA	0.67
Trichlorotrifluoromethane	14	1.9	7.8	1.0*	1.7	1.7
2-Butanone	9	17	63	2.8*	13	11
1,1,1-Trichloroethane	14	1.2	2.2	0.44*	0.59	1.1
Benzene	15	3.2	23	0.47	5.8	3.2
Trichloroethene	4	0.78	1.9	0.17*	0.77	0.34#
Toluene	15	43	190	2.0	56	43
Tetrachloroethene	8	1.2	3.3	0.16*	1.2	0.71
Ethylbenzene	11	9.8	33	1.0*	9.5	7.2
Styrene	11	7.0	40	0.30*	12	5.2
m- and p-xylenes	15	20	93	1.4	25	20
O-Xylene	14	8.4	35	0.47*	9.8	7.9
Naphthalene	14	81	280	6.8*	92	76

Notes:

NA Not applicable
ND Not detected
* Minimum value of detected results; there was at least one nondetect for this compound
\# Value is below the average of the maximum and minimum lower detection limits from all analyses of the compound

TABLE 4-6

BACKGROUND SAMPLE RESULTS AT ALAMEDA ANNEX (ppb)

Compound	Sample Identification			
	Outdoor On-site Background		Indoor Off-site Background	
	S-33-98	S-36-158	S-37-321E	S-38-498E
Acetone	37	8.7	12	13
Trichlorofluoromethane	ND	ND	ND	ND
Methylene chloride	ND	ND	ND	ND
Carbon disulfide	2.9	ND	ND	ND
Trichlorofluoroethane	1.4	1.4	1.9	1.8
2-Butanone	21	3.4	9.5	2.4
1,1,1-Trichloroethane	0.62	0.50	0.99	0.26TR
Benzene	0.50TR	0.36TR	0.74	0.60TR
Trichloroethene	ND	ND	ND	ND
Toluene	5.5	1.6	85	4.5
Tetrachloroethene	ND	ND	0.76	ND
Ethylbenzene	1.2	1.3	11	1.5
Styrene	20	ND	2.6	21
m- and p-Xylenes	3.2	1.3	31	4.0
o-Xylenes	1.2	0.44	12	2.9
Napthalene	26	6.2	270	12

ND = Not Detected
TR = Trace Level - Below Detection Limit

TABLE A-1 AIR SAMPLING RESULTS FOR VOCs AT ALAMEDA ANNEX (ppb)

Compound/Sample ID	S-4-49	S-5-54	S-6-65	S-8-74	S-10-85	S-11-86	S-14-92	S-15-93
Acetone	69	36	29	21	39	27	68	11
Trichlorofluoromethane	4.0	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	2.6	6.8	ND	2.1	ND	ND	ND	3.5
Carbon disulfide	ND	5.7	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	1.2	7.8	1.6	1.2	1.4	1.3	1.3	1.2
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	27	38	ND	ND	11	ND	15	7.8
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.98	1.9	1.7	1.4	1.5	2.0	2.2	0.64
Benzene	23	3.1	0.88	0.56TR	0.79	0.49	0.74TR	0.66TR
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	1.9	ND	0.17TR	ND	ND	ND	0.54
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	65	190	27	8.9	56	2.4	4.0	150
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.24	3.3	ND	2.5	0.31TR	ND	ND	2.0
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	10	33	11	1.2	10	ND	ND	21
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	2.6	10	40	ND	3.3	ND	ND	6.0
m- & p-Xylenes	36	93	3.4	4.3	30	1.5	1.9	55
o-Xylene	13	35	2.2	1.3	14	ND	0.63	22
1,1,2,2,-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	22	280	11	ND	150	24	6.8	170

ND = Not detected TR = Trace level - below detection limit

TABLE A-1 AIR SAMPLING RESULTS FOR VOCs AT ALAMEDA ANNEX (ppb) (Continued)

Compound/Sample ID	S-17-99	S-21-123	S-22-130	S-24-141	S-25-143	S-29-151	S-30-159
Acetone	42	11	13	19	12	20	29
Trichlorofluoromethane	1.1	ND	ND	ND	ND	ND	1.2
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	4.3	3.2	ND	ND	ND	ND	ND
Carbon disulfide	ND	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	ND	1.1	1.6	2.2	1.3	1.6	1.4
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND
2-Butanone	16	ND	4.9	ND	2.8	ND	5.4
Chloroform	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.99	0.80	1.0	0.67	0.52	ND	0.39TR
Benzene	2.5	0.83	1.2	0.81	0.47	8.2	3.5
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND
Toluene	20	3.5	13	61	2.0	28	39
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	0.16TR	ND	ND	0.63	ND	ND	0.50
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	3.6	ND	1.9	9.3	ND	4.9	6.0
Bromoform	ND	ND	ND	ND	ND	ND	ND
Styrene	0.78	ND	0.40TR	2.7	0.30TR	11	1.3
m- & p-Xylenes	13	1.7	7.6	28	1.4	17	19
o-Xylene	4.4	0.67	3.9	12	0.47	6.7	8.0
1,1,2,2,-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND
Naphthalene	11	7.9	160	160	8.7	7.1	190

ND = Not detected TR = Trace level - below detection limit

TABLE A-1 AIR SAMPLING RESULTS FOR VOCs AT ALAMEDA ANNEX (ppb) (Continued)

Compound/Sample ID	S-32-143	S-33-98	S-34-85	S-36-158	S-37-321E	S-38-498E	S-39-159	S-40-159
Acetone	20	37	110	8.7	12	13	0.93TR	1.2
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	1.2	ND	ND	ND
Methylene chloride	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	ND	2.9	ND	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	1.7	1.4	0.61	1.4	1.9	1.8	ND	ND
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl acetate	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	3.4	21	63	3.4	9.5	2.4	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.44TR	0.62	0.73	0.50	0.99	0.26TR	ND	ND
Benzene	0.48TR	0.50TR	0.57	0.36TR	0.74TR	0.60TR	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	2.2	5.5	11	1.6	85	4.5	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	0.76	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	1.2	1.0	1.3	11	1.5	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	ND	20	0.59	ND	2.6	21	ND	ND
m- & p-Xylenes	1.4	3.2	4.5	1.3	31	4.0	ND	ND
o-Xylene	0.52TR	1.2	1.8	0.44	12	1.9	ND	ND
1,1,2,2,-Tetrachloroethane	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5.5	26	12	6.2	270	12	ND	ND

ND = Not detected TR = Trace level - below detection limit

CLEAN
Central Zone

Contract No. N62474-88-D-5086

Contract Task Order No. 0200

Navy Engineer-in-Charge: Ernesto Galang

PRC Project Manager: Daniel Shafer

Versar Project Manager: Doug Bleakly

NAVAL SUPPLY CENTER, OAKLAND
ALAMEDA ANNEX AND FACILITY
SCREENING LOT AND SCRAPYARD AREA
ALAMEDA, CALIFORNIA

SAMPLING RESULTS
TECHNICAL MEMORANDUM
VOLUME I of VI

DRAFT

Prepared By

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February 1993

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 20 – SOIL GAS SURVEY CONCENTRATION CONTOUR MAP: TRICHLOROETHANE (TCA)

FIGURE 23 – SOIL GAS SURVEY CONCENTRATION CONTOUR MAP: TOTAL VOLATILE HYDROCARBON COMPOUNDS (TVHC)

FIGURE 21 – SOIL GAS SURVEY CONCENTRATION CONTOUR MAP: TETRACHLOROETHENE (PCE)

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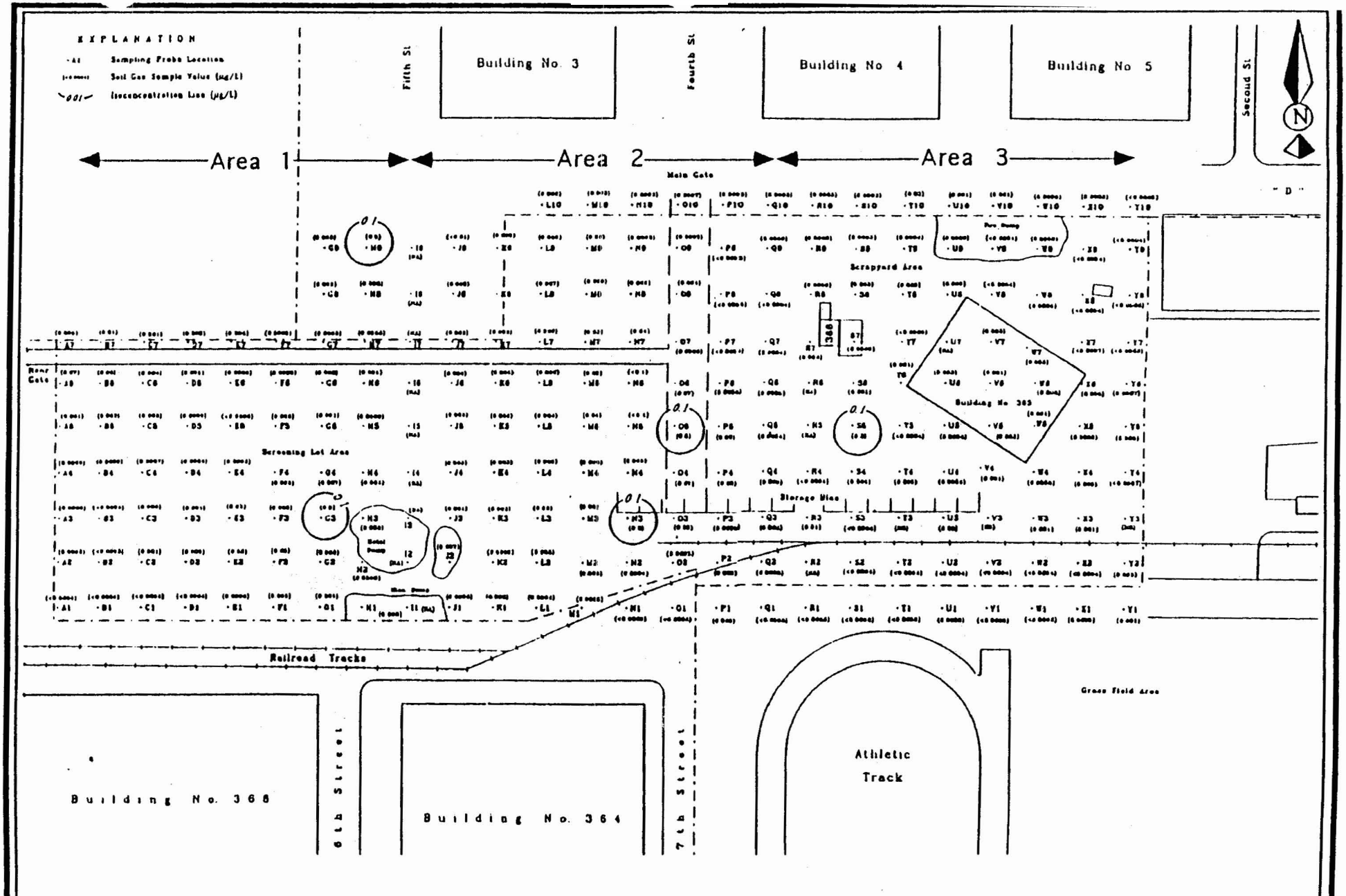

Approximate Scale (feet)
0 200

Soil Gas Survey Concentration Contour Map:
Trichloroethane (TCA)
Screening Lot / Scrapyard Area
NSCO Alameda Annex and Facility

Figure 20

CTO 0200

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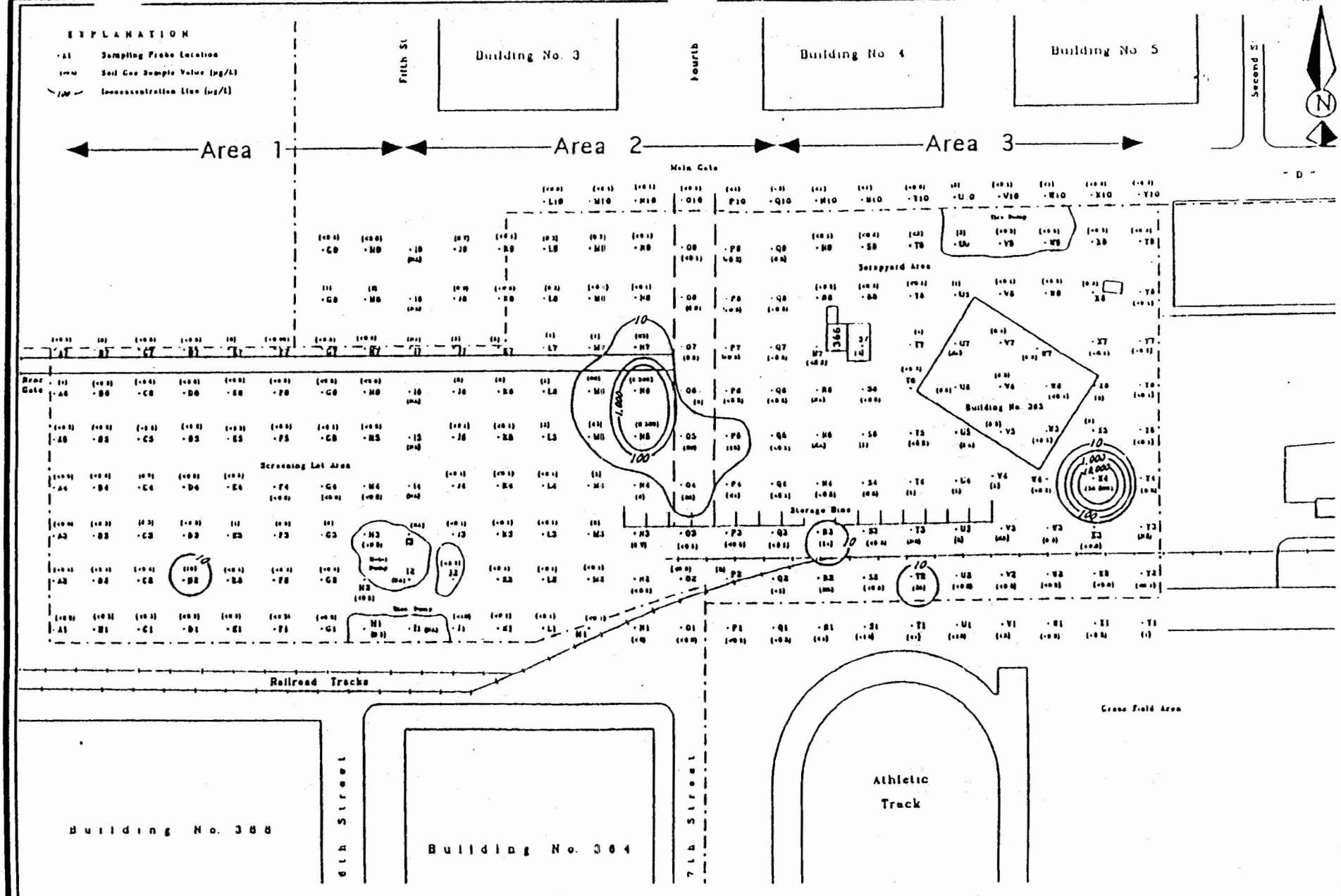
SENSITIVE



Approximate Scale (feet)
0 200

CTO 0200

Soil Gas Survey Concentration Contour Map:
Total Volatile Hydrocarbon Compounds (TVHC)
Screening Lot / Scrapyard Area
NSCO Alameda Annex and Facility

Figure 23

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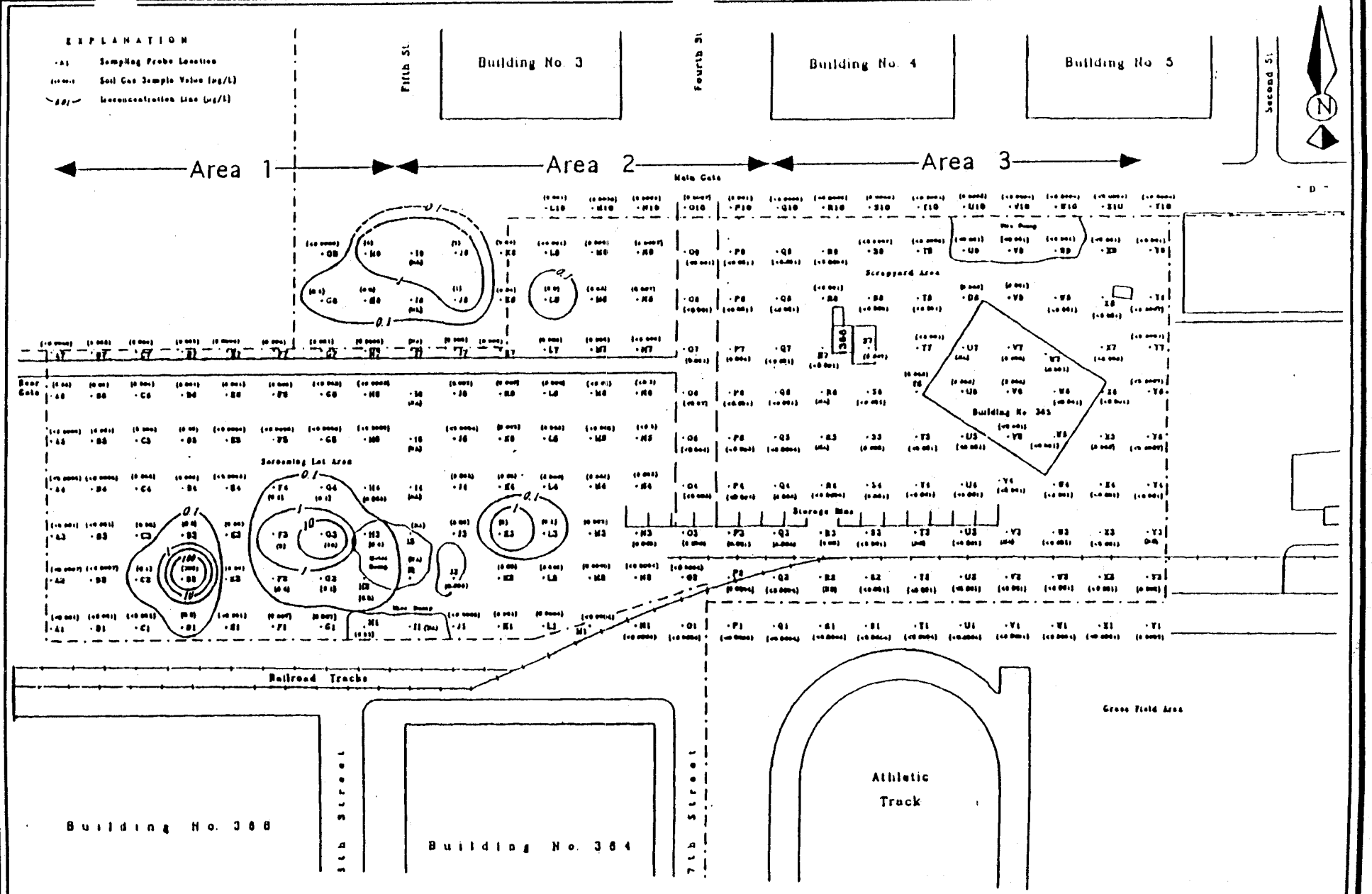
SENSITIVE



Approximate Scale (feet)
0 200

CTO 0200

Soil Gas Survey Concentration Contour Map:
Tetrachloroethene (PCE)
Screening Lot / Scrapyard Area
NSCO Alameda Annex and Facility

Figure 21

RI/FS

SENSITIVE

SECTION 6-98

PARCEL 98 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 98 at NAS Alameda (Figure 6-98-1). The parcel, which is located in the northeastern corner of the base, is approximately 45 acres in size and is roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two parcel-specific and two zone-wide target investigation areas (target areas) were identified on this parcel. Sampling procedures called for in the screening-level investigation in these target areas include surface soil sampling and soil vapor sampling. Table 6-98-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 98, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 98, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also describes any areas of concern identified.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the

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FIGURE 6-98-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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SENSITIVE

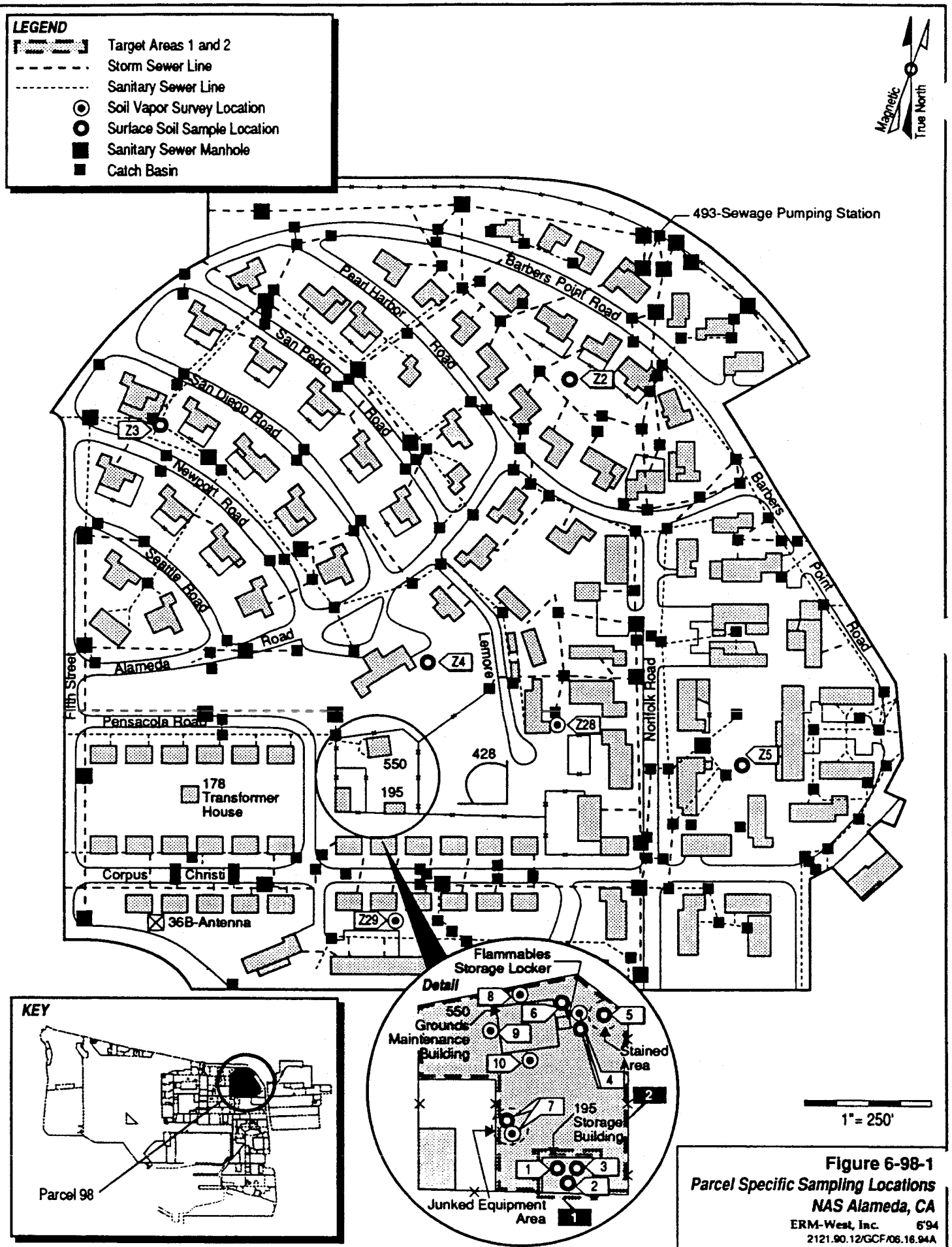


Figure 6-98-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.16.94A

SENSITIVE

TABLE 6-98-1

Summary of Recommended Samples
NAS Alameda Parcel 98

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
98-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	Modified EPA 8015
98-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	Modified EPA 8015
98-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-28-3-V-S-DDMMYY	0.0-0.5'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-29-3-V-S-DDMMYY	0.0-0.5'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was composed of approximately 40 percent salt marsh and tidal flats and 60 percent inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1931; the ground level may have been raised slightly between 1931 and 1940. The fill initially sloped to the south but was later made nearly flat.

Currently, approximately 115 buildings cover approximately 20 percent of the parcel (Figure 6-98-1). The remaining 80 percent of the parcel is open space. In general, the parcel area is currently used for family housing. Approximately 20 buildings, which were mostly temporary barracks and associated facilities, were formerly located on the parcel in the area between Norfolk Road and Barbers Point Road. These buildings have since been demolished and replaced with multi-family residences. Sewer lines are present on this parcel and are shown on Figure 6-98-1.

Parcel 98 is located approximately 350 feet south of an Installation Restoration (IR) site (IR Site 20, Oakland Estuary). No previous investigations have been conducted at Parcel 98, and specific data regarding chemical occurrence at this parcel are not available.

It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and are not considered in this PEP. Results of radon tests conducted in two of the parcel buildings were negative. Interiors of individual housing units were not inspected during the EBS.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

The family housing units on the parcel were constructed in two phases. The first phase of construction took place in the early 1940s which included construction of most of the units along Pensacola Road and Corpus Christi Road, and the units in the area bounded by Alameda Road and Pearl Harbor Road. The remaining housing units on Parcel 98 (located along Barbers Point Road and Norfolk Road) were added after 1961, after barracks in that area were demolished. Utilities located within and immediately surrounding these buildings include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Building 550

This building is a metal maintenance shed with concrete floors. It covers approximately 1,000 square feet. The construction date of Building 550 is unknown. The building is currently occupied by a maintenance contractor who is supervised by PWC. The building and surrounding area are enclosed by a fence. The area has reportedly been used by grounds maintenance personnel for approximately 20 to 30 years.

Building 195

Building 195 is a metal Quonset hut used for storage of fertilizers and pesticides. It is approximately 40 feet long and 20 feet wide. The building has an earthen floor. The construction date of Building 195 is unknown.

Building 278

Building 278 is a small stucco transformer house. When the building was inspected during the EBS, the transformer had been removed from the concrete pad inside the building and was located on the ground approximately four feet east of the building. No evidence of transformer leakage was noted and no evidence of chemical storage or use was observed. The construction date of Building 278 is unknown.

Facility 493

This facility is a sewage pumping station that is located below ground beneath a concrete pad which is surrounded by a chain link fence. Assorted vent pipes, access ports, and other equipment extend above

the pad. The facility is also referred to as "sewage station 3." A sign at the facility indicates its number is 492 rather than 493, as shown on facility maps. No chemicals were observed to be present at the facility. The construction date of Facility 493 is unknown.

Structure 36B

This structure is the base of a former radio communications antenna that has been demolished. The construction and demolition dates of Structure 36B are unknown.

Facility 428

This facility is a baseball field with a backstop and a small set of bleachers.

Open Space

The open space of Parcel 98 has been subdivided into two open spaces. The first open space is the fenced area of the maintenance yard associated with Building 550. Eighty percent of this area consists of bare soil and gravel and 20 percent is covered with grass and weeds. The second open space area consists of the landscaped and paved portions of the parcel between the housing units. Utilities located within the open space include underground electrical, storm sewer, sanitary sewer, water, and natural gas lines. Pad-mounted and pole-mounted transformers are also located in the open space.

Interviews indicate that banned pesticides and possibly PCBs may have been used in grounds maintenance at NAS Alameda. This may have impacted landscaped areas of both parcel open spaces. In addition, the open space associated with Building 550 may have been impacted by chemical use and storage activities associated with maintenance operations. Three stained areas were noted outside Building 550. These stains are believed to be the result of leaks and spills of petroleum products and/or pesticides. The stains are located in the gravel area east of Building 550, around the flammables storage locker located at the exterior east wall of Building 550, and along the northern half of the east side of the Building 550 foundation. An additional concern in this open space is the presence of discarded equipment between Building 550 and Building 195. An abandoned 55-gallon waste oil drum was also observed in this area.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 98 is bordered by Parcels 62, 79, 80, 87, 88, 96, 97, 99, 100, 102, 103, 104, 105, 188, 189, and 900. The only activities of concern are the shipyard-related operations that occurred at the former Todd Shipyard (located northeast of Parcel 98, off-base).

No parcels contiguous with Parcel 98 are IR sites; therefore, no sampling is called for in this PEP in response to any IR sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 98, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-98-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, radiological concerns, and asbestos. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 98 because no industrial buildings are present.

As noted earlier, Parcel 98 has open space areas that are unpaved and landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides.

TABLE 6-98-2

Summary of Data Gaps
NAS Alameda Parcel 98

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 98.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located approximately 350 feet north of Parcel 98. Additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 900 (The former Todd Shipyard).
Potential Zone-Wide Release Areas	• Landscaped/Unpaved Areas. • Filled wetlands.
Potential Parcel-Specific Release Areas	• Maintenance Yard. • Building 195.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.

TABLE 6-98-2

Summary of Data Gaps
NAS Alameda Parcel 98

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• Other data gaps identified include assorted vent pipes and access ports at Facility 493 (sewage pumping station).

Potential concerns related to pesticides have been identified as a parcel-specific data gap for Parcel 98. Pesticide sampling for this parcel has been limited to Building 195 and the maintenance yard associated with Building 550 (See detail on Figure 6-98-1), based on the potential intensive use and storage activities at these locations and the stains observed during the site inspection. Pesticide sampling outside the intensive-use area described above has been addressed as a zone-wide issue for the parcels located in Zone 16. Pesticide sampling for the landscaped areas of Parcel 98 are described in the Zone Analysis Plan for Zone 16.

As noted earlier, Parcel 98 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 98; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-98-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 98 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also affected by two zone-wide target areas. This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 195): The unpaved floor of Building 195 may have been impacted by the storage and use of potentially hazardous substances including pesticides, PCBs, and petroleum products (gasoline, diesel fuel, and motor oil). This target area

covers approximately 950 square feet. The likelihood that environmental impacts have occurred in this target area is classified as suspect. Samples to be collected in Target Area 2 are listed in Table 6-98-1.

- Target Area 2 (Maintenance Yard): The Maintenance Yard covers approximately 60,000 square feet. The soil in the area along the eastern side of Building 550 may have been impacted by the storage and use of potentially hazardous substances related to grounds maintenance activities. Staining around Building 550 (Grounds Maintenance) indicates that releases have occurred. In addition, staining observed in the junked equipment area (abandoned vehicles, etc.), which is located to the southwest of Building 550, indicates that releases have occurred. Potential compounds of concern in Target Area 1 include pesticides, herbicides, PCBs, solvents, and petroleum products (gasoline, diesel fuel, and motor oil). The likelihood that environmental impacts have occurred in this target area is classified as potential. Samples to be collected in Target Area 1 are listed in Table 6-98-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 98 are part of this zone-wide target area. Four of the 21 proposed zone-wide surface soil samples for pesticides are located on Parcel 98. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. The proposed zone-wide target area samples that are located on Parcel 98 are listed on Table 6-98-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 98. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-98-1.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and soil vapor sampling (SOP 6), will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-98-1 summarizes screening-level sampling and analyses for the parcel's target areas.

Seven soil vapor samples and eleven surface soil samples will be collected from the locations shown on Figure 6-98-1 (note detail area). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The seven soil vapor samples will be collected at the following locations: five in the maintenance yard and two through-out the parcel (as part of the zone-wide sampling). The eleven of the surface soil samples will be collected at the following locations: three samples from the stained areas inside Building 195, one sample from the junked equipment area, one sample from the stained area east of Building 550, one sample from the stained area in front of the door of the flammables storage locker, one sample from the soil adjacent to the staining at the northeast corner of the Building 550 foundation, and four samples from the landscaped areas located throughout this parcel. These sample locations are shown in Figure 6-98-1. These locations are based on the evaluation of historic activities inside the buildings and in open spaces described above. Minor adjustments in the sample locations may be made in the field based on visual observations and accessibility. Samples will be analyzed for TPH and/or pesticides/PCBs and/or VOCs as indicated on Table 6-98-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface GeoProbe soil sampling (SOP 14), Hydropunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-99

PARCEL 99 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 99 at NAS Alameda (Figure 6-99-1). The parcel, which is located in the northeastern portion of the base, is 3.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific target areas were identified at this parcel. However, two zone-wide target areas encompass this parcel. One sample for each of the zone-wide target areas is to be collected at this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-99-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 99, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 99, consistent with objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together.

TABLE 6-99-1

Summary of Recommended Samples
NAS Alameda Parcel 99

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was covered by tidal flats and/or wetlands. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, no buildings or structures are present on the parcel. The parcel is 100 percent open space. The parcel is presently in use as a playground and parking area. Three temporary barracks (Buildings 143, 145, and 147) were formerly located on the parcel and have since been demolished. Sewer lines are present on the parcel and are shown on Figure 6-99-1.

Parcel 99 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 99, and specific data regarding chemical occurrence at this parcel are not available; however, investigations have been conducted at Parcel 178 located to the east of Parcel 99 (east of Main Street). Specific data regarding chemical occurrence are available for Parcel 178.

It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential concern within the parcel open space are described in detail below.

Open Space

The open space covers 100 percent of the parcel. Ninety percent of the open space is landscaped with grass, bushes, and trees, and a park/playground area is present in the center of the parcel. The

remaining ten percent of the open space is paved with asphalt roadways and parking areas.

The parcel formerly contained part of several temporary barracks (Buildings 143, 145, and 147) that were built in the early 1940s and demolished in the late 1960s. The landscaped areas along the western side of the parcel appear to have been continuously maintained since the 1940s when they bordered the former barracks. The other landscaped areas of the parcel date to the late 1960s, after demolition of the barracks.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 99 is bounded by parcel 98 (housing area) to the north and west, and Parcel 100 (Navy Lodge) to the south. The northeastern and eastern borders of the parcel are bounded by the former Todd Shipyard and Main Street, respectively. To the east and south east of Main Street are Parcels 178 and 174 (former warehouse and scrap yard), respectively. While some compounds of concern have been detected at Parcel 178, the concentrations have been relatively low, and impacts to Parcel 99 from Parcel 178 are unlikely.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 99, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-99-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns. Sampling and imaging associated with sewer lines are also addressed

TABLE 6-99-2

Summary of Data Gaps
NAS Alameda Parcel 99

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 99
Installation Restoration (IR) Sites	• No IR sites are located on or within 500 feet of Parcel 99.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The former Todd Shipyard is located northeast of Parcel 99.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
Wetlands	• No wetlands identified as currently being located on-site.
Other	• No evidence of other data gaps identified.

separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 99 because no buildings are present.

As noted earlier, Parcel 99 had and currently has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) need to be sampled for pesticides. Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 99. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 99 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 99; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-99-2 are addressed and screening-level sampling results from the zone-wide target areas described below are compared to the appropriate screening levels, Parcel 99 may be reclassified from BRAC Category 7 to another BRAC.

Target Areas and Compounds of Concern

No parcel-specific and two of the three zone-wide target areas encompass this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual

observation and accessibility. The two zone-wide target areas identified at this parcel are listed in Table 6-99-2.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 99 are part of this zone-wide target area. One of the 21 proposed zone-wide surface soil samples for pesticides is located in Parcel 99. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-99-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. One of the 14 proposed zone-wide soil vapor samples for VOCs is located in Parcel 99. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-99-1.

Screening-Level Investigation

Several screening-level investigation techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase is necessary. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Table 6-99-1 summarizes screening-level sampling and analysis for the parcel's zone-wide target areas. One surface soil sample and one soil vapor sample will be collected from the approximate locations shown on Figure 6-99-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above on a higher sampling density as well as the following technologies not previously discussed: subsurface

GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

PARCELS 100 AND 212 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 100 and 212 at NAS Alameda (Figure 6-100-1). Parcel 212 is being considered concurrently with Parcel 100 because the histories and former uses of these parcels are very similar. Parcel 212 is completely contained within Parcel 100 (see Figure 6-100-1). The parcels, which are located in the northeastern portion of the base, are four acres in size and together are roughly rectangular in shape. These parcels have been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. One parcel-specific target investigation area (target area) and two zone-wide target areas encompass these parcels. No zone-wide target area samples are located on these parcels. Subsurface GeoProbe soil sampling will be used to accomplish the screening-level investigation. Table 6-100-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 100 and 212, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 100 and 212, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of these parcels was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, and 184.

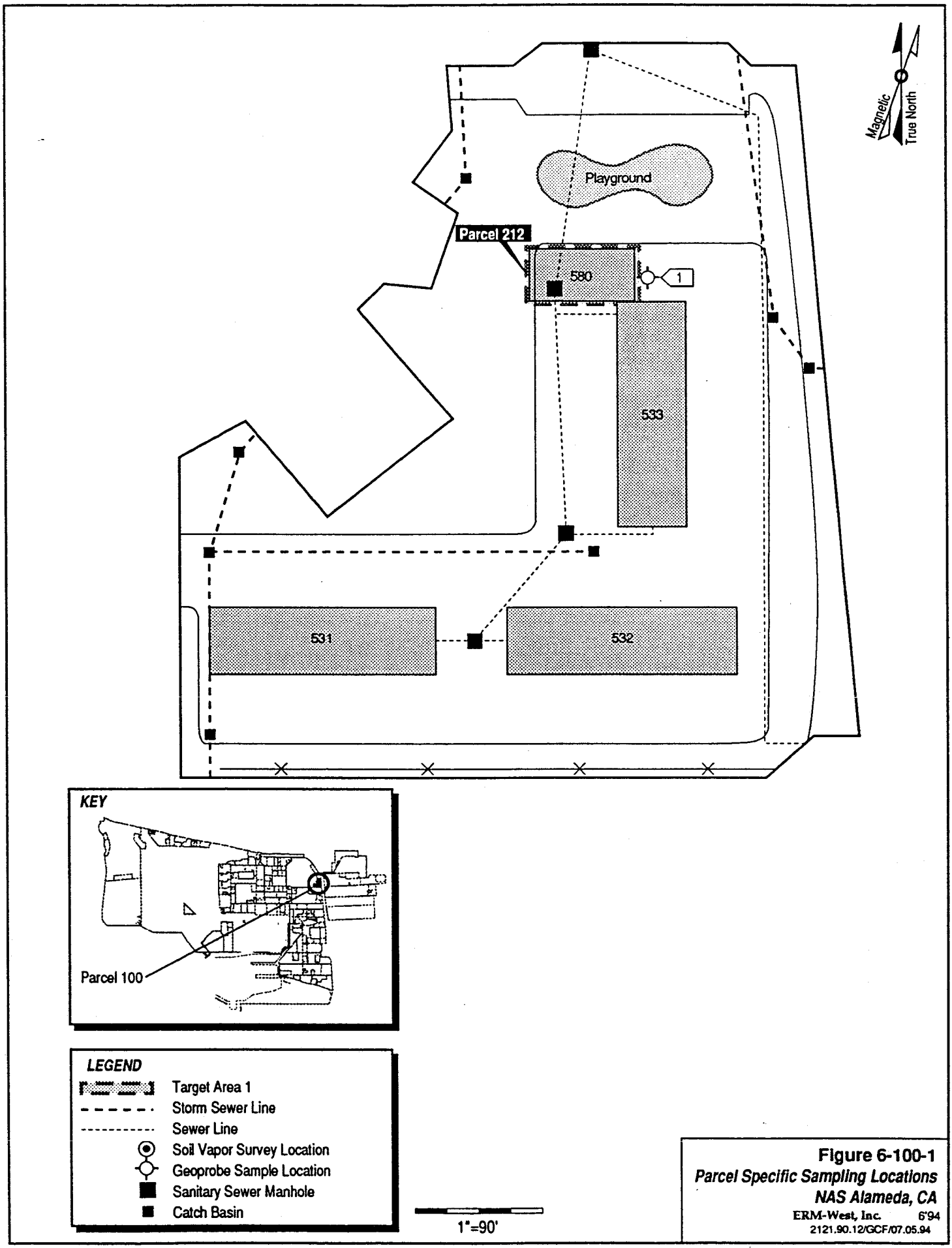


Figure 6-100-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-100 & 212 -1

Summary of Recommended Samples
NAS Alameda Parcels 100 & 212

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
100-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	VOCs, TPH	CLP RAS, Modified EPA 8015

This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in the early 1930s. Prior to this time, the parcel area was covered by tidal flats and/or wetlands. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, a Navy motel consisting of Buildings 531, 532, and 533 covers approximately 15 percent Parcel 100. The remainder (85 percent) of Parcel 100 is open space that is partially landscaped and partially paved. Parcel 100 formerly contained all or part of several temporary barracks (Buildings 139, 141, 148, and 149) built in the early 1940s and demolished in the late 1960s. Currently, two Conex boxes and a shed used by the adjacent Navy Lodge motel cover approximately five percent Parcel 212. The remainder (95 percent) of Parcel 212 is open space that is partially landscaped and partially paved. Parcel 212 formerly contained part of Building 141, a temporary barracks building built in the early 1940s and demolished in the late 1960s. Sewer lines on Parcels 100 and 212 are shown in Figure 6-100-1.

Parcels 100 and 212 are not located within 500 feet of any Installation Restoration (IR) Program sites. Previous investigations have not been conducted at Parcels 100 or 212; however, investigations have been conducted at Parcel 178 located to the east of Parcel 100 east of Main Street. Specific data regarding chemical occurrence are available for Parcel 178.

It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential

environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 531, 532, and 533

Buildings 531, 532, and 533 were constructed in approximately 1971. The buildings have always been used as the Navy Lodge, a 70-room motel operated by the Navy Exchange. These buildings are two-story buildings and are generally in good condition. The buildings are of wood frame construction with stucco exteriors. Each building covers approximately 10,000 square feet. As described above, barracks existed on the parcel from shortly after the area was filled until shortly before the motel buildings were built, therefore prior use of the parcel area is not of concern.

Utilities located within and immediately surrounding Buildings 531, 532, and 533 include underground sanitary sewer, storm sewer, water, natural gas, and electrical lines. Three pole-mounted transformers are located on the parcel northwest of Building 532. A total of less than 30 gallons (combined) of cleaning and maintenance supplies are stored in the laundry rooms and boiler rooms of the buildings.

Building 580 (Existing and Former)

The existing Building 580 is a Conex box with a roof vent used as a storage shed. The building is located on the west end of the parcel as shown on Figure 6-100-1. During the site inspection the building was observed to contain less than ten gallons of gasoline and two pounds of fertilizer. The age of this building is unknown. The building rests on a concrete pad that is the floor of a former dog kennel also known as Building 580. The concrete pad covers approximately 300 square feet. Underground sanitary sewer lines are located near the building. Drains observed in the concrete pad may lead to the sanitary sewer.

Building 2

Building 2 is a metal storage shed used for laundry supplies storage located on the north end of the former Building 580 pad. (Note that another Building 2 exists at the base. It is used as enlisted personnel barracks and is located on Parcel 45 in the central part of the base.) Approximately 50 gallons of corrosives and up to thirty gallons of cleaning supplies were observed to be stored in the building. The building covers approximately 100 square feet. The age of the building is unknown.

Building CHB-3

Building CHB-3 is a Conex box (no roof vent) located on the grass on the northwest corner of the parcel. Less than 10 gallons of paint were observed to be stored in the building. The age of the building is unknown.

Open Space

Parcel open space is 60 percent paved (with concrete sidewalks and asphalt parking areas). The remaining 40 percent of the open space is landscaped with grass, bushes, and trees. A playground area is present near the north end of Building 533. The landscaped areas along the western and southern sides of the parcel appear to have been continuously maintained since the early 1940s when they bordered the former barracks. The other landscaped areas of the parcel date to the early 1970s, after construction of the motel buildings.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcel 100 is bounded by Main Street, Avenue C, and Barber Point Road to the east, south, and northwest, respectively. Across the streets to the east is Parcels 178 (housing, former warehouse), and Parcels 98 (housing) and 102 (parking lot and commissary) are located to the west. Parcel 99 (playground/park) borders Parcel 100 to the north. While some constituents of concern have been detected at Parcel 178, the concentrations have been relatively low, and impacts to Parcels 100/212 from Parcel 178 are unlikely.

Parcel 212 is entirely contained within Parcel 100.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 100 and 212, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific

issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-100-2 must be addressed before these parcels can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at these parcels: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling appears to be required for Parcels 100 and 212 because no industrial buildings are present. However, the one-time compliance program will determine whether further sampling or cleanup measures are required within buildings before transfer or lease can occur.

As noted earlier, Parcels 100 and 212 previously had and currently has open space areas that were landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) need to be sampled for pesticides. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcels 100 and 212 were previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 100; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-100-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcels 100 and 212 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-100 & 212-2

Summary of Data Gaps
NAS Alameda Parcels 100 & 212

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 99
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcels 100 and 212.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The Todd Shipyard is located northeast of Parcel 100.
Potential Zone-Wide Release Areas	• Landscaped/Unpaved Areas. • Filled wetlands.
Potential Parcel-Specific Release Areas	• Buildings 2 and 580.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
Wetlands	• No wetlands identified as currently being located on-site.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Parcels 100 and 212 contain one parcel-specific target area and are affected by two zone-wide target areas. However, no zone-wide target area samples are located on these parcels. Sampling for the two zone-wide target areas is described in the Zone Analysis Plan for Zone 16. This subsection of the PEP discusses specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Buildings 2 and 580): Potential releases of TPH and VOCs from leaks or spills in or near these storage sheds is a concern in this area. This target area covers approximately 300 square feet and has been classified as having a potential likelihood of impacts. One subsurface GeoProbe soil sample will be collected from Target Area 1 as indicated in Table 6-100-1.

The following zone-wide target areas were identified on Parcel 100 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 1 (Landscaped/Unpaved Areas): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Subsurface GeoProbe soil sampling (SOP 14) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-100-1 summarizes the screening-level sampling and analysis recommended for the parcel-specific target area on Parcel 100. One subsurface GeoProbe soil sample will be collected from the parcel-specific target area on this parcel. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-103

PARCEL 103 EVALUATION PLAN

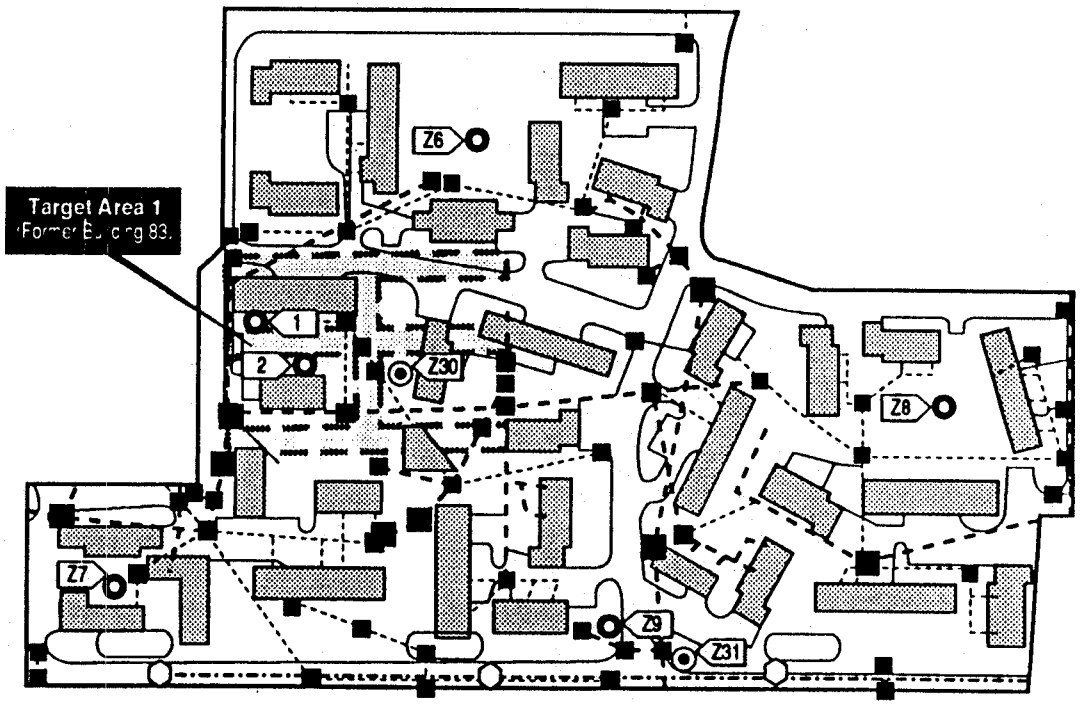
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 103 at NAS Alameda (Figure 6-103-1). The parcel, which is located in the central eastern portion of the base, is approximately 25 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one of the three zone-wide target investigation areas (target areas) have been identified on this parcel. Surface sampling will be used to accomplish the screening-level investigation. Table 6-103-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 103, historical activities are discussed below.

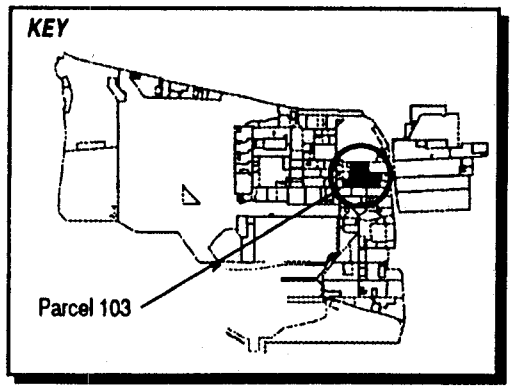
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 103, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the





LEGEND

- Target Area
- Storm Sewer Line
- Sewer Line
- Industrial Waste Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin

1" = 250'

Magnetic
True North

Figure 6-103-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-103-1

Summary of Recommended Samples
NAS Alameda Parcel 103

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
103-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
103-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-30-0-S-V-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-31-0-S-V-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 34 houses cover approximately 50 percent of the parcel. The remaining 50 percent is open space. The parcel area is presently a residential area. Thirteen buildings and one structure were formerly located on the parcel and have since been demolished. The demolished buildings were used as barracks, an insect vector control office, a combat training pool and a baseball field. Sewer lines are present on this parcel and are shown on Figure 6-103-1.

Parcel 103 is located directly west of an Installation Restoration (IR) Program site (IR Site 7A, Navy Exchange Service Station). Previous investigations have been conducted at Parcel 103; however specific data regarding potential chemical occurrence are not available.

In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 83 (Demolished)

Former Building 83 was constructed in 1945 and served both as a barracks and a public works storage area for insect vector control (Figure 6-103-1). This building was demolished in approximately 1960. Former Building 83 was a two story building, constructed of wood and covered approximately 26,000 square feet.

Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. Pesticide disposal methods for that period are unknown. There are no documented spills within former Building 83.

Open Space

The open space covers approximately 50 percent of the parcel. The open space is 50 percent paved and 50 percent unpaved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass and landscaping.

A baseball field, constructed in 1945, was formerly located within the open space. The field was removed in approximately 1960.

Buildings 79, 80, 81, 82, 125, 126, 127, 128, 150, 157, 159 were formerly located in this open space. These buildings housed barracks and related activities and were demolished in approximately 1960. These buildings were two story buildings constructed of wood and covered approximately 25,000 square feet each. Building 160 was formerly located in this open space. It housed a combat training swimming pool and was demolished in approximately 1960. Building 160 covered approximately 25,000 square feet. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, and industrial sewer lines.

EBS information indicates that activities conducted within this open space included normal residential activities. No chemicals are documented to have been stored in the open space. There are no other spills or incidents documented for this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 103 is bounded by Parcels 98, 104, 105, 203, 110, 111, 197, 113, 112, and 102. Parcel 113 is IR Site 7A (Navy Exchange Service Station). If

the continuing investigations at the IR site reveal a cause for concern at Parcel 103, then additional sampling on Parcel 103 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 103, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-103-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 103 because no industrial buildings are present.

As noted earlier, Parcel 103 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., unpaved agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-103-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 103 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained within two of the three zone-wide target areas.

TABLE 6-103-2

Summary of Data Gaps
NAS Alameda Parcel 103

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 103.
Installation Restoration (IR) Sites	• IR Site 7A (Service Station) is located adjacent to the east boundary of Parcel 103. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Potential groundwater contamination migration from IR Site 7A.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term landscaped areas of this parcel. • Release from the Pacific Coast Oil Refinery may have impacted the former wetlands area.
Potential Parcel-Specific Release Areas	• Pesticides may have impacted the long term intensive use areas (i.e., storage and distribution areas, etc.) at Bldg. 83 on Parcel 103
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-103-2

Summary of Data Gaps
NAS Alameda Parcel 103

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Area of Former Building 83): Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. This target area covers approximately 26,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-103-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. Two of the 21 proposed zone-wide surface soil samples for pesticides are located within Parcel 103. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs is located in Parcel 103. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 103 are listed on Table 6-103-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level investigation techniques that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-103-1 summarizes screening-level sampling and analysis for the parcel's target areas. Two parcel-specific surface soil samples, four zone-wide surface soil samples, and four zone-wide soil vapor samples will be collected from the locations shown on Figure 6-103-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and

the QA/QC guidelines in Section 4. Surface soil sampling locations shown on Figure 6-103-1 are approximate.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-170

PARCEL 170 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 170 at NAS Alameda (Figure 6-170-1). The parcel, which is located in the northeast portion of the base, is approximately 34 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel; however, two of the three zone-wide target areas affect this parcel. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-170-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 170, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 170, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

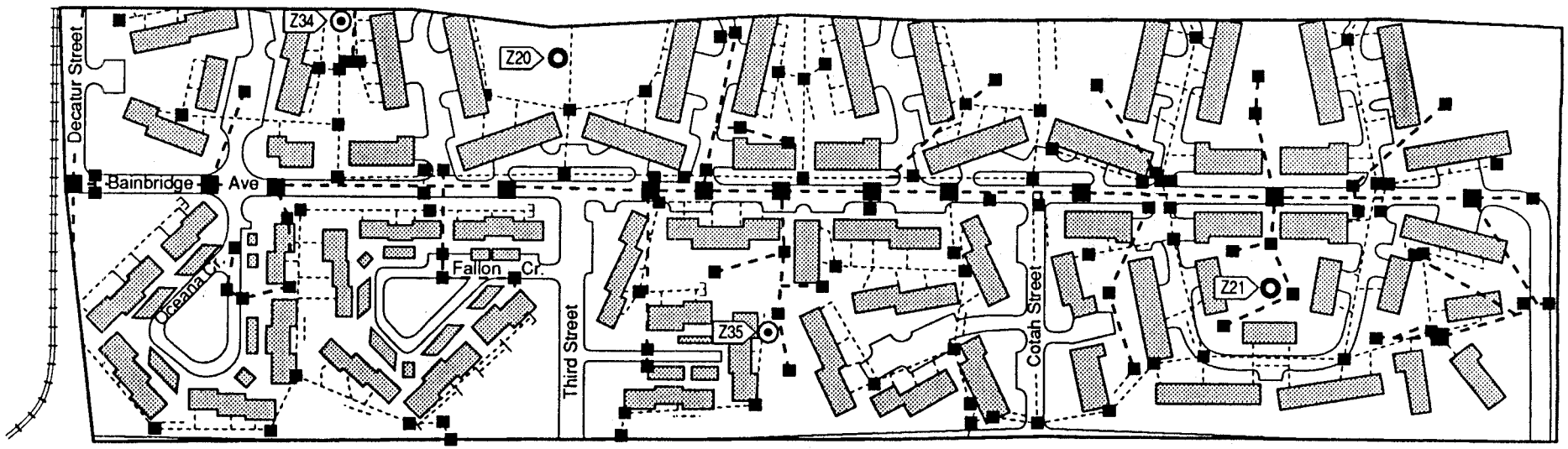
FIGURE 6-170-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

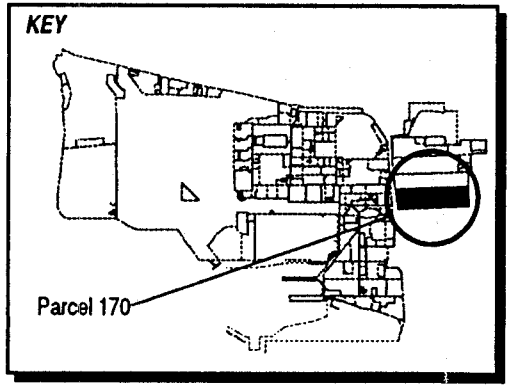
FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

Magnetic
True North

Figure 6-170-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.07.94

SENSITIVE

TABLE 6-170-1

Summary of Recommended Samples
NAS Alameda Parcel 170

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-34-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-35-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. This parcel is adjacent to Old Alameda Point, which was part of the original island. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, approximately 65 family housing units are located on the parcel (Figure 6-170-1). No industrial buildings are located on this parcel. These dwellings cover approximately 25 percent of the parcel. The remainder (75 percent) is open space. Based upon aerial photographs, temporary barracks were present on Parcel 170 prior to the early 1940s. These barracks were demolished and replaced with multifamily residences between the mid and late 1960s. Utilities located within and immediately surrounding the family housing and open space include underground natural gas, sanitary sewer, storm sewer, potable and fire protection water, and electrical lines.

Parcel 170 is not located within 500 feet any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 170, and specific data regarding potential chemical occurrence at this parcel are not available.

It is recommended that the zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Sewer lines present at this parcel are shown in Figure 6-170-1. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

Construction of the current family housing units on the parcel was completed by the fall of 1970. Based upon aerial photographs, the former barracks were constructed prior to late April 1942. The barracks on the eastern portion of the parcel were demolished prior to late July 1963. New family housing was constructed on the eastern side of the parcel by April 1966 and on the western side of the parcel by September 1970.

Open Space

Currently, the open space areas between family dwellings on Parcel 170, cover approximately 75 percent of the parcel. Open space areas are primarily covered by grass and weeds (70 percent), and secondarily covered by asphalt (20 percent) and concrete (10 percent) roadways. These open space areas are shown on Figure 6-170-1. The landscaped areas on this parcel have been landscaped since the early 1940s.

EBS information indicates that the activity conducted within this open space has consisted solely of residential housing. Minor stains in the open space and oil stains on roads and driveways are considered to be the result of normal vehicle traffic and parking. Transformers that may contain PCBs are also present. Railroad tracks associated with the Alameda Railroad are located on the western side of the parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 170 is bounded by Parcel 171 to the north. Activities of concern on this adjacent parcel are similar to those on Parcel 170. The Alameda Railroad runs along Main Street on the western border of this parcel. The railroad also runs on the southern side of Atlantic Avenue, which borders the southern boundary of Parcel 170. This segment of tracks most likely has not impacted Parcel 170. Private property is located to the east of Parcel 170.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 170. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-170-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: asbestos, transformers, radiological concerns, and lead-based paint. Sampling and imaging associated with underground sewer lines is also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 170 because no industrial buildings are present.

As noted earlier, Parcel 170 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate use areas (i.e. unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. No parcel-specific pesticide sampling has been proposed for Parcel 170; however, the ZAP for Zone 16 addresses potential pesticide concerns in landscaped areas on a zone-wide basis.

Once the data gaps in Table 6-170-2 are addressed and screening-level sampling results from the zone-wide target area described in the Zone Analysis Plan are compared to PRGs and background concentrations, Parcel 170 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas affect this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field

TABLE 6-170-2

Summary of Data Gaps
NAS Alameda Parcel 170

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 170.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 170.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 170 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 170. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 170 are listed on Table 6-170-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 170. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 170 are listed on Table 6-170-1.

In addition, data gaps pertaining to asbestos, lead-based paint, transformers, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Table 6-170-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcel 170. Two surface soil samples and two soil vapor samples will be collected from the locations shown on Figure 6-170-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6 -171

PARCEL 171 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 171 at NAS Alameda (Figure 6-171-1). The parcel, which is located in the northeast portion of the base, is approximately 24 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel, however two of the three zone-wide target areas have been identified that affect this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-171-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 171, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 171, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-171-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
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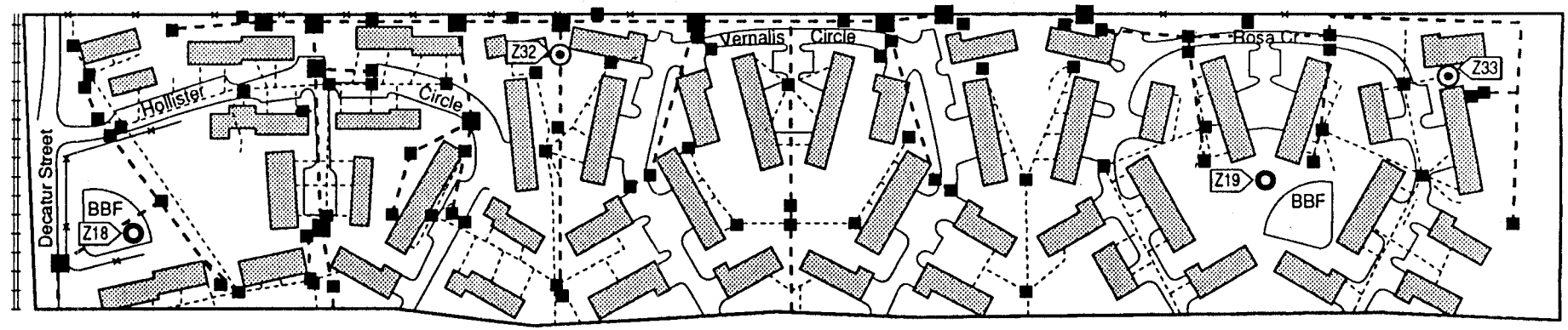
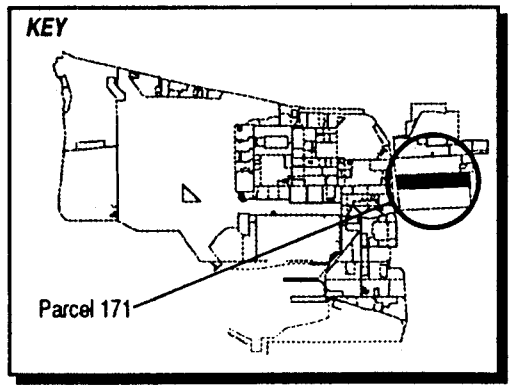
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

Figure 6- 171-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90 [illegible]OS/07.07.94

SENSITIVE

TABLE 6-171-1

Summary of Recommended Samples
NAS Alameda Parcel 171

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-18-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-19-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-32-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-33-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. This parcel is adjacent to Old Alameda Point. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, approximately 50 family units are located on the parcel (Figure 6-171-1). These dwellings cover approximately 20 percent of the parcel. The remainder (80 percent) is open space. Based upon aerial photographs, temporary barracks were present on Parcel 171 prior to the early 1940s. These barracks were demolished and replaced with multifamily residences between the early and mid-1960s. No industrial buildings are located on this parcel. Utilities located within and immediately surrounding the family housing and open space include underground natural gas, sanitary sewer, storm sewer, potable and fire protection water, and electrical lines. Sewer lines present at this parcel are shown in Figure 6-171-1.

Parcel 171 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 171 and specific data regarding potential chemical occurrence at this parcel are not available.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

Based upon aerial photographs, the former barracks were constructed prior to late April 1942. The structures on the eastern portion of the parcel were demolished prior to July 1963. By April 1966, all of the new family housing had been constructed on the parcel.

Open Space

Currently, approximately 80 percent of Parcel 171 consists of open space between family dwellings. This open space area is primarily covered by grass and weeds (70 percent), and secondarily covered by asphalt (20 percent) and concrete (10 percent) roadways. This parcel presently has open space areas that have been landscaped since the early 1940s. These open space areas are shown on Figure 6-171-1.

Transformers that may contain PCBs are also present. Railroad tracks associated with the Alameda Railroad are located on the western edge of the parcel. EBS information does not indicate any evidence of spills in the open spaces.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 171 is bounded by Parcel 170 to the south, and Parcels 172 and 174 to the north. Activities on Parcel 170 are similar to Parcel 171. Activities of concern on the other adjacent parcels include hazardous material storage on Parcel 172, and storage and/or use of petroleum products, spray paint, paint thinner, corrosives, halogenated organic compounds, metals, petroleum products, and pesticides within buildings on Parcel 174. The Alameda Railroad runs along Main Street on the western border of Parcel 171. Private property is located to the east of Parcel 171.

Monitoring wells were installed on Parcel 172 (MW-10) and Parcel 174 (MW-12) as indicated in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area.* The Warehouse and Scrapyard Area (Scrapyard) is an IR site located on Parcel 176, and the site investigation has been extended beyond the Scrapyard boundaries. Prior to monitoring well installation, earlier investigations on these parcels included soil sampling. The monitoring well on Parcel 172 (MW-12) is approximately 50 feet north of the boundary between Parcels 171 and 172. Results of soil and groundwater data are summarized in Tables 6-172-2 and 6-172-3 in the PEP for Parcel 172. Concentrations of cadmium, chromium, lead, and nickel in groundwater exceeded 1993 MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. The previous and proposed screening-level investigations are discussed in the PEPs for Parcels 172 and 174. The data from these investigations will provide the necessary boundary conditions for Parcel 171. Ongoing follow-up sampling and radiological sampling at the Scrapyard IR site are being performed by the IR contractor.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 171, consistent with the objectives in Section 1 of the Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-171-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: asbestos, radiological concerns, transformers and lead-based paint. Sampling and imaging associated with underground

TABLE 6-171-2

Summary of Data Gaps
NAS Alameda Parcel 171

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 171.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 171.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse) indicate the presence of benzene and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

sewer lines is also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 171 because no industrial buildings are present.

As noted earlier, Parcel 171 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate use areas (i.e. unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 171. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-171-2 are addressed and screening-level sampling results from the zone-wide target area described in the Zone Analysis Plan is compared to PRGs and background concentrations, Parcel 171 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas affect this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 171 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 171. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 171 are listed on Table 6-171-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 171. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 171 are listed on Table 6-171-1.

In addition, data gaps pertaining to asbestos, PCBs, lead-based paint, underground lines, potential groundwater contamination migration, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level techniques that will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-171-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcel 171. Two surface soil samples and two soil vapor samples will be collected from the locations shown on Figure 6-171-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-172

PARCEL 172 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 172 at NAS Alameda (Figure 6-172-1). The parcel, which is located in the northeastern portion of the base, is approximately 2.5 acres in size and is roughly J-shaped. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and one parcel-specific target investigation areas (target areas) have been identified on this parcel; however, no zone-wide samples are located on this parcel. Soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-172-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 172, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 172, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were

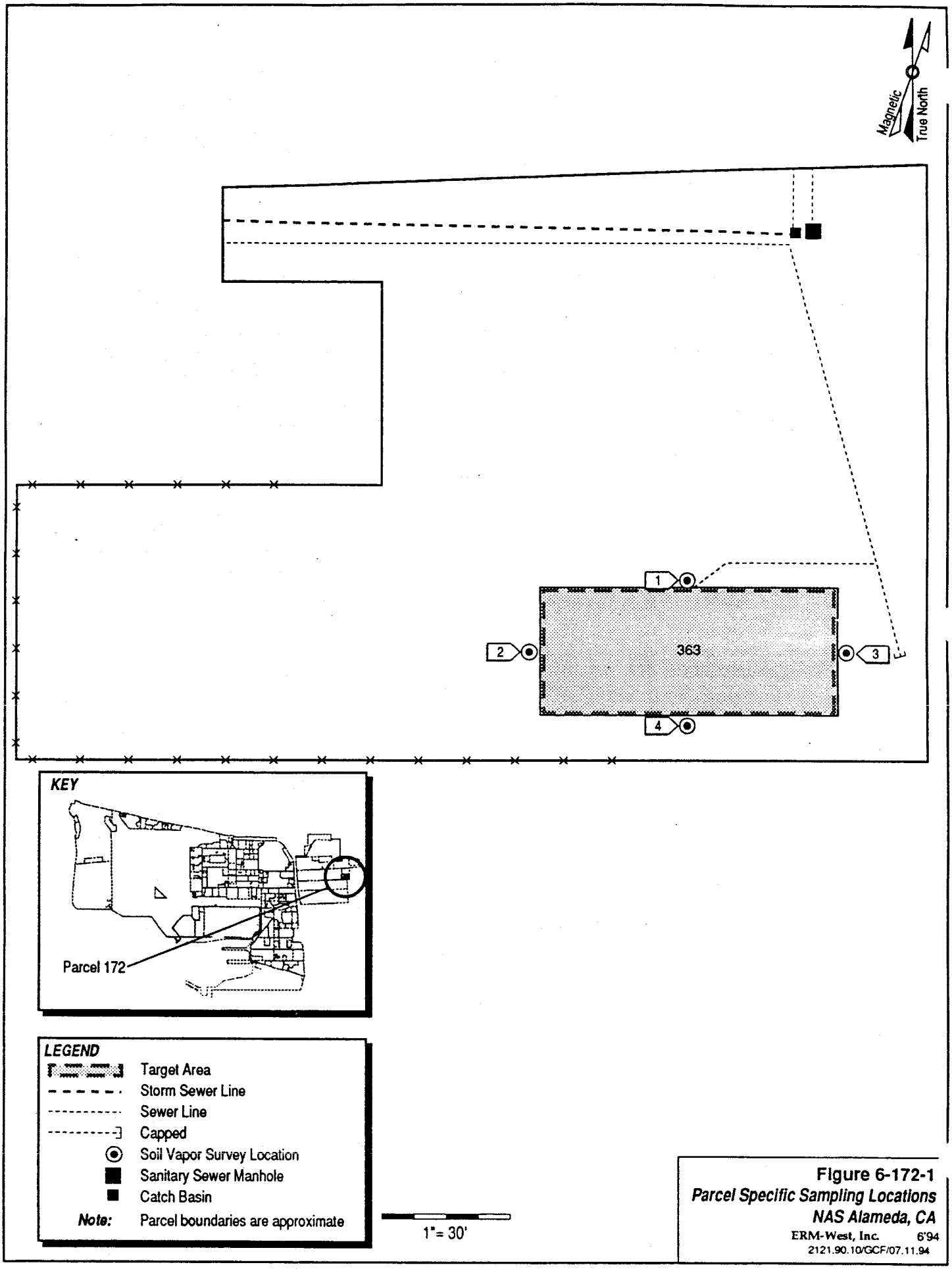


Figure 6-172-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-172-1

Summary of Recommended Samples
NAS Alameda Parcel 172

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
172-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
172-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
172-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
172-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC

evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one concrete foundation (formerly Building 363) covers approximately 10 percent of the parcel area (Figure 6-172-1). The remaining 90 percent is open space. The parcel area is presently used for storing Conex boxes. Building 363, formerly located on the parcel, was demolished in 1990. Sewer lines are present on this parcel and are shown on Figure 6-172-1.

Parcel 172 is located within 500 feet of the Scrapyard Installation Restoration (IR) Program site (Parcel 176). Previous investigations, including monitoring well (MW-10) installation and soil sampling, have occurred on Parcel 172, southeast of Building 363. Data and results are available in a report prepared by ERM-West, Inc. (contract N62474-85-D-5627) entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area.* This report discusses the impacts from this IR site on Parcels 172, 174, 175, 176, and 177. Additional data and results for Parcels 176 and 177 are included in a report prepared by PRC Environmental Management, Inc. (contract N62474-88-D-5086) entitled *Naval Supply Center, Oakland Alameda Annex and Facility Screening Lot and Scrapyard Area Alameda, California Sampling Results Technical Memorandum.*

Data from soil and groundwater samples taken at MW-10 between March 1987 and January 1988 are summarized in Tables 6-172-2 and 6-172-3. Data indicate that activities on adjacent parcels have impacted Parcel 172. Concentrations of cadmium, chromium, lead, and nickel in groundwater exceeded 1993 MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. Current monitoring well data from the Scrapyard IR site (Parcel 176) are not yet available to fully characterize the impacts to Parcel 172.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993

TABLE 6-172-2

Soil Sample Results in mg/kg from Boring 10
NAS Alameda Parcel 172

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	13	1	60	48	92
Detection Limit	0.05	0.05	0.05	0.2	0.5

Source: ERM-West, Inc., 1988

TABLE 6-172-3

Groundwater Sample Results in mg/L from Boring 10
NAS Alameda Parcel 172

	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Naphthalene
Aug-87	0.038	0.08	0.07	0.82	0.35	ND	66
Jan-88	0.008	ND	ND	ND	ND	ND	ND
Detection Limit	0.005	0.001	0.005	0.005	0.05	0.0005	40
May 1993 MCL	0.05	0.005	0.1	0.015	0.1	0.005	N/A

Source: ERM-West, Inc., 1988

addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental concern within parcel open space and buildings are described in detail below.

Concrete Foundation (Formerly Building 363)

Building 363 was constructed in 1944 and appears to have served as a warehouse or storage facility since that time. This building was demolished by May 1990. Building 363 covered approximately 9,200 square feet.

Information collected during the EBS indicates that recent activities conducted at this parcel have included storage of Conex boxes on and adjacent to the concrete foundation. No chemicals are documented to have been stored in Building 363 while it was in service. Based upon visual inspection, over 300 Conex boxes were present throughout the parcel. Approximately 10 Conex boxes had hazardous material labels for flammable liquid and gas, non-flammable gas, or poison. These 10 Conex boxes were stored on or adjacent to the concrete foundation.

Methods of disposing of chemicals currently stored on the concrete foundation are unknown.

Scattered staining, including paint overspray staining, was noticed on the concrete foundation during the visual inspection. Floor drains were also observed during the visual inspection.

Open Space

The open space occupies approximately 90 percent of the parcel. In general, the open space has been used for storage of Conex boxes.

There are no structures located within the open space other than the concrete foundation of former Building 363. Approximately 10 percent of the parcel is paved with asphalt, 10 percent is paved with concrete, and the remaining 80 percent of the open space is covered with gravel, often located over crumbly asphalt. The poor condition of the pavement and the presence of gravel made it difficult to identify the presence of stains.

EBS information indicates that activities conducted within this open space (other than those activities which occurred adjacent to the concrete foundation) included storage of non-hazardous materials in Conex boxes only. No chemicals are documented to have been stored in the open space.

One transformer was noted on the southeastern edge of the parcel; however, the location appears to be outside the property line. A groundwater monitoring well (MW-10) was installed southeast of Building 363 as part of a previous investigation at and around Parcel 176 (the Scrapyard IR site).

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 172 is bordered by Parcel 171 to the south, Parcels 173 and 174 to the west, and Parcel 175 to the north. Activities of concern include hazardous material storage of Conex boxes on Parcel 173, potential chemical storage of Conex boxes on Parcel 175, and petroleum products,

spray paint, paint thinner, corrosives, halogenated organics, metals, and pesticides within buildings on Parcel 174. Additionally, a diesel tank with observed stains is located on Parcel 174 at the border of Parcel 172.

Monitoring wells were installed on Parcels 174 and 175; both parcels border Parcel 176, which is part of the Scrapyard IR Site. Previous investigations on these parcels include groundwater and soil sampling data. The data obtained from previous and proposed screening-level investigations should provide sufficient characterization of boundary conditions for Parcel 172.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 172, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-172-4 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 172 because no industrial buildings are present.

As noted earlier, Parcel 172 was previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 172; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

TABLE 6-172-4

Summary of Data Gaps
NAS Alameda Parcel 172

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 172.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located approximately 500 feet south of Parcel 172. Additional subsurface investigation relative to the Scrapyard is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Filled wetlands.
Potential Parcel-Specific Release Areas	• Hazardous materials storage may have impacted the area bounded by the foundation of former Building 363.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-172-4

Summary of Data Gaps
NAS Alameda Parcel 172

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-172-4 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 172 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Former Building 363): This target area is defined as the concrete foundation of former Building 363. The target area is approximately 9,200 square feet in size. Hazardous materials (including flammable and non-flammable liquids) stored in Conex boxes are the primary compounds of concern. Although Conex boxes were observed throughout the site during the visual inspection, hazardous materials were stored only on or adjacent to the concrete foundation. Therefore, only the concrete foundation and its boundaries are considered to be the target area. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed on Table 6-172-1.

The following zone-wide target area was identified on Parcel 172 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Soil vapor sampling is the screening-level technique that will be employed used to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-172-1 summarizes screening-level sampling and analysis called for within the parcel's target area. Four soil vapor samples will be collected from the locations

shown on Figure 6-172-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The soil vapor samples will be located on the outer edge of the foundation. Effort should be made to ensure that samples are taken at locations of staining, and, when applicable, at cracks in the concrete foundation or asphalt underneath the gravel. Adjustments to the proposed sampling locations can be made if warranted by field conditions.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern that have been identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technology not previously discussed: surface soil sampling (SOP 3), subsurface GeoProbe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10) and follow-up groundwater sampling from the existing monitoring well (MW-10) located southeast of Building 363.

Follow-up sampling may be performed on Parcel 172 to characterize the impacted areas as part of ongoing investigations at adjacent parcels. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-173

PARCEL 173 EVALUATION PLAN

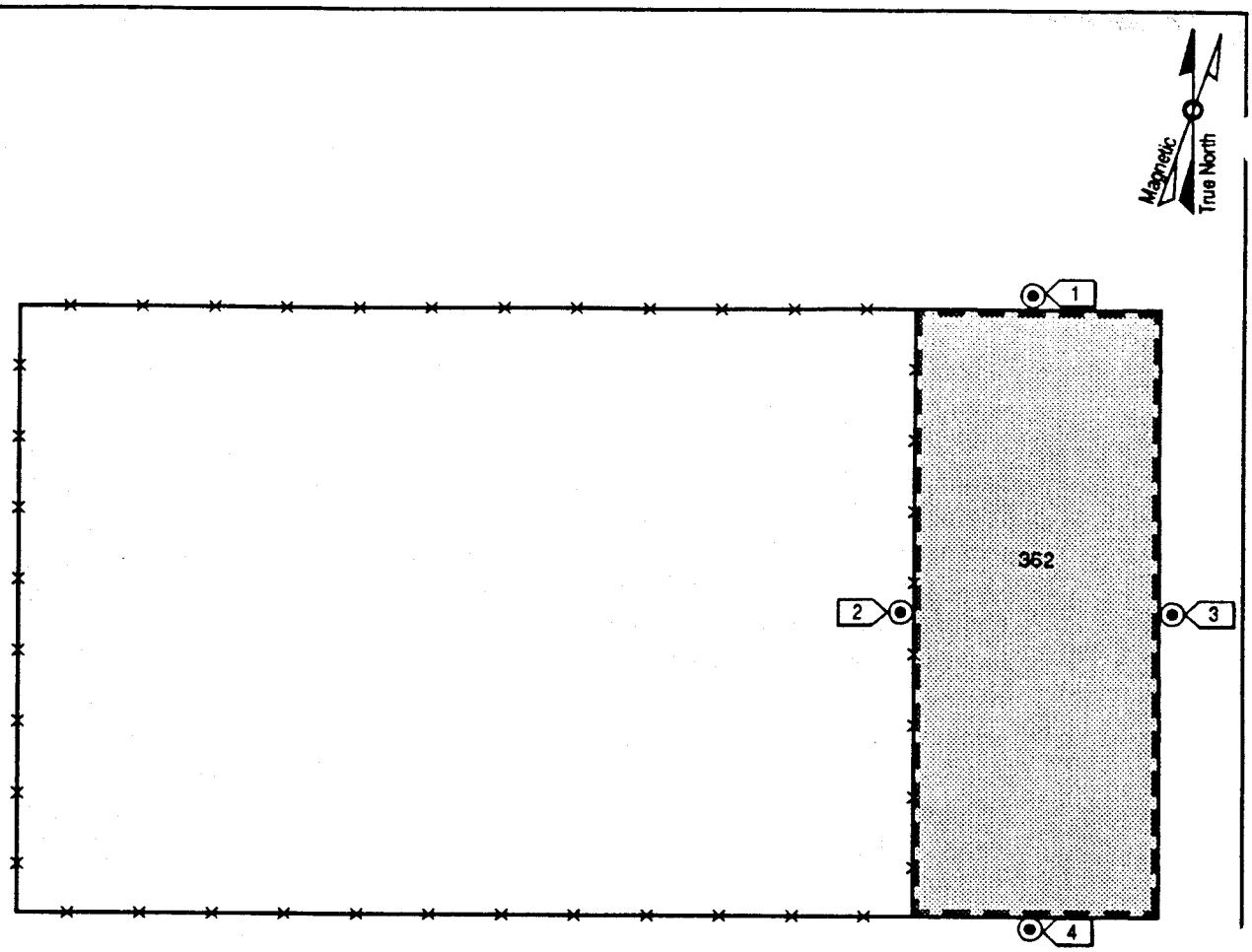
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 173 at NAS Alameda (Figure 6-173-1). The parcel, which is located in the northeast portion of the base, is approximately 0.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1. This parcel does not contain any RCRA sites. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. No zone-wide target area samples are located on this parcel. The sampling procedure called for in the screening-level investigation in this area is soil vapor sampling only. Table 6-173-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 173, historical activities are discussed below.

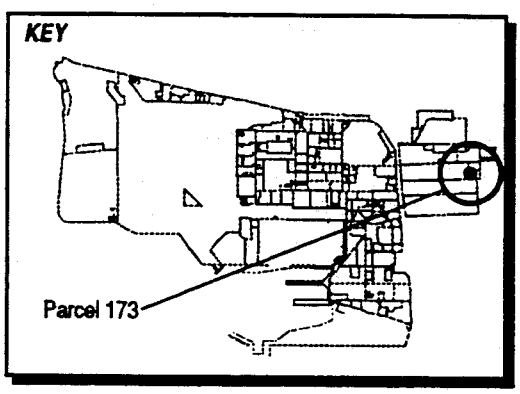
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 173, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel





LEGEND

- Target Area
- Soil Vapor Survey Location
- *Note:* Parcel boundaries are approximate

1"= 30'

Figure 6-173-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-173-1

Summary of Recommended Samples
NAS Alameda Parcel 173

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
173-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
173-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
173-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
173-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC

should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, there is one concrete foundation (formerly Building 362) located on the parcel (Figure 6-173-1). This foundation covers approximately 25 percent of the parcel area. The remaining 75 percent is open space. In general, the parcel area is presently in use as a storage area. Building 362, formerly located on the parcel, was demolished in 1990.

Parcel 173 is located approximately 300 feet south of an Installation Restoration (IR) Program site (The Scrapyard). No previous investigations have been conducted at Parcel 173 and specific data regarding potential chemical occurrence are not available. Investigations have been performed on adjacent Parcel 175. Parcel 175 is located north of Parcel 173. Data and results are available in a report prepared by ERM-West, Inc. (contract N62474-85-D-5627) entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area.* This report discusses the impact from this IR site on Parcels 172, 174, 175, 176, and 177. Additional data and results on Parcels 176 and 177 are included in a report prepared by PRC Environmental Management, Inc. (contract N62474-88-D-5086) entitled *Naval Supply Center, Oakland Alameda Annex and Facility Screening Lot and Scrapyard Area Alameda, California Sampling Results Technical Memorandum* and are discussed in the PEPs for Parcels 176 and 177.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan,* summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of

these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental concern within parcel open space and buildings are described in detail below.

Concrete Foundation (Formerly Building 362)

Based upon aerial photographs, Building 362 was constructed in the mid 1950s and appears to have served as a warehouse or storage facility since that time. This building was demolished by May 1990. Building 362 covered approximately 5,200 square feet.

Information collected during the EBS indicates that recent activities conducted at this parcel have included the storage of Conex boxes. No chemicals are documented to have been stored in the former Building 362. Based upon visual inspection, over 200 Conex boxes were present throughout the parcel. Of those 200 Conex boxes, approximately 20 had hazardous material labels for flammable liquid and gas, non-flammable gas, or poison. These 20 Conex boxes were stored on or around the concrete foundation. Methods of disposing used chemicals within the former Building 362 and currently stored on the concrete foundation are unknown.

Scattered staining on the concrete foundation was noticed during the visual inspection. Floor drains were also observed during visual inspection.

Open Space

The open space occupies approximately 75 percent of the parcel. In general, the open space has been used for the storage of Conex boxes.

There are no structures located within the open space other than the concrete foundation of former Building 362. Ten percent of the parcel is paved with concrete, and the remaining 90 percent of the open space is covered with gravel, often located above crumbly asphalt. The poor condition of the pavement and the presence of gravel made it difficult to identify stains during the site inspection.

EBS information indicates that activities conducted within this open space (other than adjacent to the concrete foundation) included storage of non-hazardous materials in Conex boxes only. No chemicals are documented to have been stored in the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 173 is bordered by Parcel 172 to the south and west, Parcel 174 to the west, and Parcel 175 to the north. Activities of concern include hazardous material (flammable liquid and gas) storage of Conex boxes on Parcel 172, potential chemical storage of Conex boxes on Parcel 175, and the presence of petroleum products, spray paint, paint thinner, corrosives, halogenated organic compounds, metals, petroleum products, and pesticides within buildings on Parcel 174.

Monitoring wells were installed on Parcels 172, 174, and 175 as part of a previous investigation at the Scrapyard IR site (Parcel 176). Previous investigations on these parcels include groundwater and soil sampling data. The data obtained from previous and proposed screening level investigations should provide sufficient characterization of boundary conditions for Parcel 173.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 173, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-173-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 173 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 173.

Once the data gaps in Table 6-173-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 173 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the parcel-specific target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

TABLE 6-173-2

Summary of Data Gaps
NAS Alameda Parcel 173

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 173.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located within 300 feet north of Parcel 173. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Former Wetlands.
Potential Parcel-Specific Release Areas	• Hazardous materials storage may have impacted the area bounded by concrete foundation of former Building 362.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-173-2

Summary of Data Gaps
NAS Alameda Parcel 173

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

- Target Area 1 (Concrete Foundation of Former Building 362): This target area is approximately 5,200 square feet in size. Hazardous materials (including flammable and non-flammable liquids) stored in Conex boxes are the primary compounds of concern. Although Conex boxes were observed throughout the site during the visual inspection, hazardous materials were stored only on or adjacent to the concrete foundation. Therefore, only the concrete foundation and its boundaries are considered to be the target area. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed on Table 6-173-1.

One of the three zone-wide target areas has been identified at this parcel.

- Zone 16 Target Area 2 (Filled Wetlands): No zone-wide target area samples are located on this parcel.

Screening-Level Investigation

Soil vapor sampling (SOP 6) is the screening-level technique that will be used to assess conditions in the parcel-specific target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-173-1 summarizes screening-level sampling and analysis called for within the parcel's target area. Four soil vapor samples will be collected from the locations shown on Figure 6-173-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Based upon the large size of the target area and the low potential for compound release, five subsurface soil samples were selected as a minimum. Adjustments to the proposed locations can be made if warranted by field conditions.

The four soil vapor samples will be located on the outer edge of the foundation. Effort should be made to ensure that samples are taken at locations of staining, and, when applicable, at cracks in the concrete foundation or asphalt underneath the gravel. Adjustments to the proposed sampling locations can be made if warranted by field conditions.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-174

PARCEL 174 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 174 at NAS Alameda (Figures 6-174-1, 6-174-2, and 6-174-3). The parcel, which is located in the northeast portion of the base, is 32.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA Sites are located at this parcel. Six parcel-specific target investigation areas (target areas), and two zone-wide target areas are encompassed in the parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface GeoProbe soil sampling, and soil vapor sampling. Table 6-174-1 provides the complete list of samples and analyses prescribed by this plan. Previous soil and groundwater sampling have been conducted at the parcel. Results are presented in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and scrap yard Area.*

This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 174, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 174, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, and other areas of concern. Past and present use of this parcel was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern. Although there are no records to suggest the area was used for purposes other than storage, gaps in the historical record exist.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 361, 368, 370, and 371), one sewage lift station, and one aboveground diesel storage tank are located on the parcel. These buildings and structures cover approximately 55 percent of the parcel area. The remainder (45 percent) is open space. The parcel area is presently used for storage. Sewer lines are present on this parcel and are shown on Figure 6-174-1.

Parcel 174 is located directly south of the Scrap Yard Installation Restoration (IR) Program site. Because of the proximity of Parcel 174 to the Scrap Yard IR site, previous investigations have been conducted at Parcel 174 and specific data regarding potential chemical occurrence are available. Data from previous investigations at Parcel 174 are discussed later in this PEP and in the 1988 ERM-West report.

Current investigations are being performed at the Fleet and Industrial Supply Center, Oakland Alameda Facility and Alameda Annex. This investigation affects numerous parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

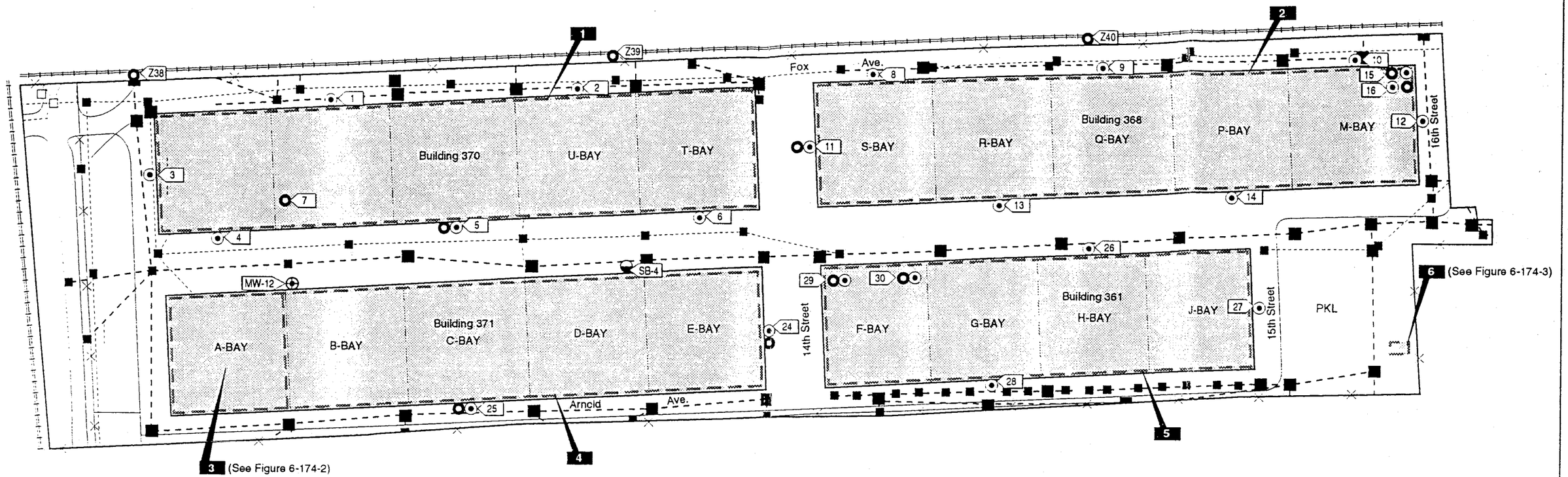
PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-174-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

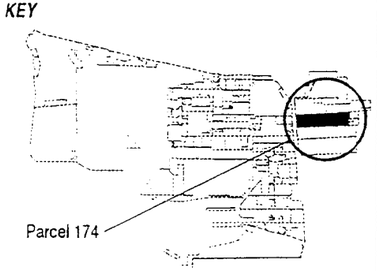


LEGEND

- Target Areas 1-7
- Approximate Location of Bay Wall
- Storm Sewer Line
- Sewer Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Boring Location (ERM-West, Inc.)
- Monitoring Well Location (ERM-West, Inc.)
- Manhole
- Catch Basin

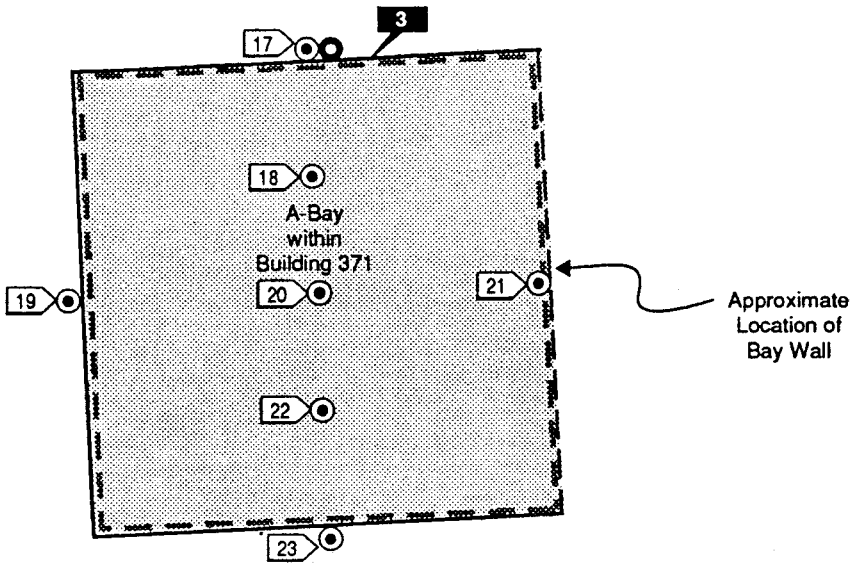
Note: Parcel boundaries are approximate

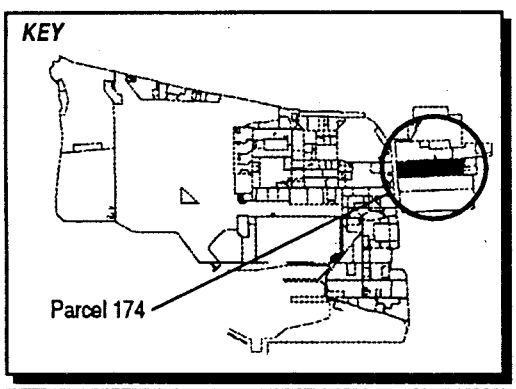
KEY

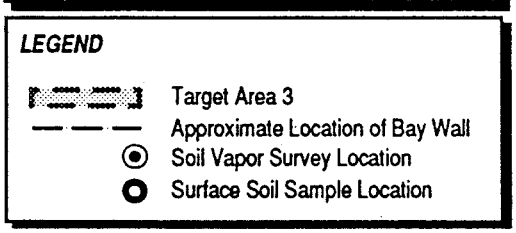


1"= 190'

Figure 6-174-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94







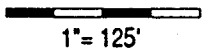
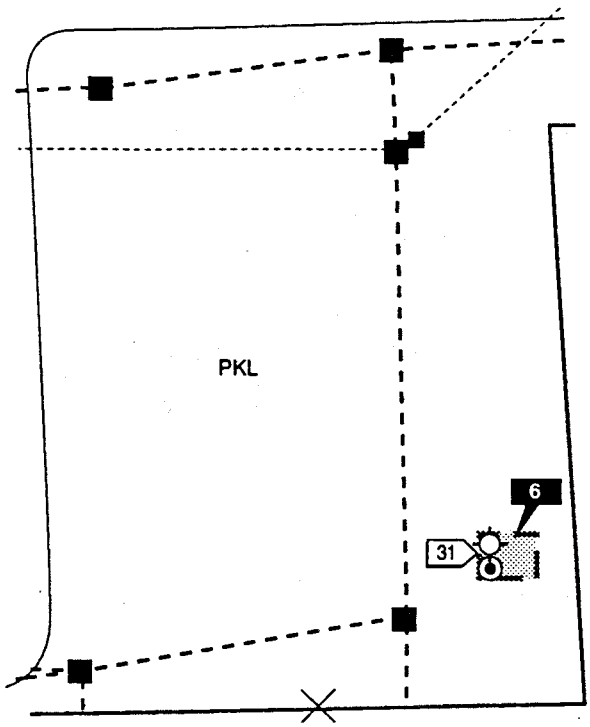
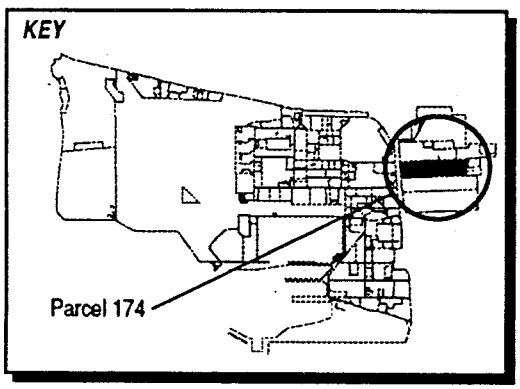
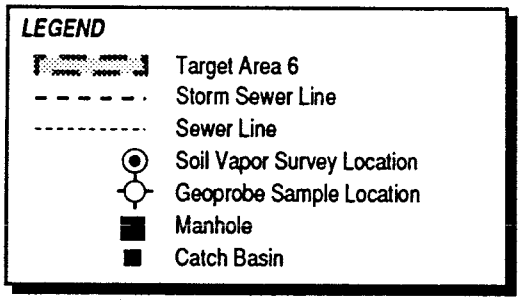


Figure 6-174-2
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94







1"= 125'

Figure 6-174-3
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

TABLE 6-174-1

Summary of Recommended Samples
NAS Alameda Parcel 174

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
174-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	VOCs, TPH	CLP RAS, Modified EPA 8015
174-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-7-3-V-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	VOCs, TPH	CLP RAS, Modified EPA 8015
174-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-11-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	VOCs, TPH	CLP RAS, Modified EPA 8015
174-12-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-13-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-14-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-15-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	VOCs, TPH	CLP RAS, Modified EPA 8015
174-16-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	VOCs, TPH	CLP RAS, Modified EPA 8015
174-17-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	VOCs, TPH	CLP RAS, Modified EPA 8015
174-18-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-19-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-20-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-21-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC

TABLE 6-174-1

Summary of Recommended Samples
NAS Alameda Parcel 174

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
174-22-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-23-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 4	VOCs	GC
174-24-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	VOCs, TPH	CLP RAS, Modified EPA 8015
174-25-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 4	VOCs	GC
174-25-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	VOCs, TPH	CLP RAS, Modified EPA 8015
174-26-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-28-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-29-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-29-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 5	VOCs, TPH	CLP RAS, Modified EPA 8015
174-30-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-30-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 5	VOCs, TPH	CLP RAS, Modified EPA 8015
174-31-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 6	VOCs	GC
174-31-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 6	TPH	Modified EPA 8015
Z16-38-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-38-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-38-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-39-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-39-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF

TABLE 6-174-1

Summary of Recommended Samples
NAS Alameda Parcel 174

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-40-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-40-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF

* This is the suggested location for the confirmatory sample. The actual location will depend on field analytical results.

83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Extensive peeling paint was observed on the exterior of all buildings. As these buildings were built before 1978, there may be a lead-paint issue to address on Parcel 174.

Utilities located within and immediately surrounding the parcel buildings and within the open spaces include underground gas, sanitary sewer, storm sewer, water, and electrical lines. Nineteen transformers, both pole- and pad-mounted, and three switches are located in the parcel.

Based upon building visual inspections, buildings located on Parcel 174 do not appear to be equipped with heating-ventilation-air conditioning (HVAC) systems. Activities of potential environmental or industrial hygiene concern within each open space and building on this parcel are described in detail below.

Building 361

Building 361 was constructed in 1944 as a warehouse. It is currently used for storage of items including medical supplies, hazardous materials, and hazardous waste. Building 361 is a one-story building and is constructed of wood with an asphalt floor, a concrete foundation, and a tar and gravel roof. This building covers approximately 140,000 square feet. Information collected during the EBS indicates that activities conducted within this building included equipment and waste storage only.

Hazardous materials and waste including motor oil, pesticides, battery acid, and TCE are documented to have been stored in Bays J, H, and G of Building 361. A total of approximately 30 gallons of Shell motor oil is stored in Building 361. Based upon a building visual inspection, hazardous materials and wastes are only documented to have been stored in Bay F of Building 361. Hazardous materials and waste storage in Bay F includes 500 gallons of pesticides, 500 gallons of Kodak developer, 20 gallons of ammonium nitrate, two 55-gallon drums of used aerosol cans, and paint. Disposal methods for used chemicals are unknown, although potentially impacted storm drains exist on Parcel 174 and staining is present around cracks in the floor possibly caused by earthquakes.

An unknown number of gallons of engine coolant was spilled onto asphalt during the site inspection. A stain approximately ten feet by ten feet in area within Bay F was documented in May 1994. Cleanup of the spill was not documented. Cracks and seams are present in the asphalt in the area of the stain.

Other issues of potential concern include several holes in the floor of Building 361, significant accumulation of dust on interior building surfaces, and possible lead-based paint peeling off the exterior of the building.

Building 368

Building 368 was constructed prior to August 1953 and serves as a storage warehouse. Bay R stores freezers, new and used 275-gallon fuel tanks, and compressors; Bay S stores paper products and wood; Bay P stores lead chest X-ray protectors and antibodies; and Bay M contains a Satellite Hazardous Waste Accumulation Point (SHWAP). Bay M is used for forklift repair and maintenance, and Bays P, R, and S are used for forklift activities. Building 368 is a one-story building. It is constructed of a steel frame with an asphalt floor, a concrete foundation, and metal roofing and siding. It covers approximately 220,000 square feet.

Information collected during the EBS indicates that activities conducted within this building included repair and maintenance of forklifts. PET, brake fluid, engine oil, and WD-40 have been stored and used in the repair shop area of Building 368. One 75-gallon drum and one 55-gallon drum were observed during visual inspection. Disposal of used chemicals was accomplished by discharging into a sink that drains to the sanitary sewer. Potentially impacted storm drains also exists on Parcel 174.

A review of site inspection data indicates that undocumented spills have occurred within Building 368 as indicated by the presence of extensive staining on the asphalt in the forklift area of Bay M. Another issue of potential concern is a four foot by four foot metal plate of unknown function in Bay R.

Building 370

Building 370 was constructed prior to August 1953 and serves as a warehouse for storage of such items as empty gas cylinders, generators, and fuel pump modules (in Bay T); food storage (in Bay U); and food, chemicals, and electronic equipment storage (in the three unlabeled bays). Empty paint and gas cans were found in the west-most unlabeled bay, and hydraulic fluid, coolant, polish, and batteries (wet-filled with alkali) were stored in the middle unlabeled bay. Building 370 is a one-story building. It is constructed of a steel frame with an asphalt floor, a concrete foundation, and metal roofing and siding. The building covers approximately 200,000 square feet.

Information collected during the EBS indicates that activities conducted within this building consisted of food, chemical, and equipment storage only. Hydraulic fluid, lubricating oil, and polish are documented to have been stored in quantities up to 500 gallons in the middle unlabeled bay within Building 370. Disposal methods for used chemicals are unknown, although potentially impacted storm drains exist on this parcel. A ten-foot by five-foot black, oily stain was observed during visual inspection in the middle bay. Other issues of possible concern include dust and possible lead-based paint peeling from the walls of the office space within Building 370.

Building 371

Building 371 was constructed prior to August 1953 as a warehouse for storage of items including medical supplies (in Bays D and E); food (in Bay C); supply vans, medical equipment, and fire extinguishers (in Bay B); paint (in Bay E); and chemicals and hazardous waste (in Bay A). Building 371 is a one-story building. It is constructed of a steel frame with an asphalt floor and a concrete foundation, and metal roofing and siding. The building covers approximately 200,000 square feet.

Information collected during the EBS indicates that activities conducted within this building included food, chemical, and medical supply storage only. Documented chemicals that have been stored in the building include: up to 50 gallons of paint, up to 10 gallons of paint in aerosol cans, less than 50 gallons of lubricating oil, spray paint, paint

thinner, and WD-40 in Bay E; and greater than 1,000 gallons of corrosives, halogenated organic compounds, metals, petroleum products, pesticides, and paints in Bay A. A hazardous waste accumulation area is located in the northeast corner of Bay A. Disposal methods for used chemicals are unknown, although potentially impacted storm drains exist on Parcel 174.

A review of site inspection data shows the presence of stains which indicates that undocumented spills have occurred within Building 371. A 10-foot by 30-foot stain was observed at the suspected former equipment battery recharge area.

Other issues of possible concern include dust and potentially lead-based paint peeling from the walls of the office space within Building 371.

Open Space I

Open Space I is defined as the parking area located southeast of Building 368 on Parcel 174. This space covers approximately ten percent of the parcel. Open Space I is regularly used for vehicle parking.

Structures located within Open Space I include a 500-gallon capacity aboveground diesel fuel storage tank, two hazardous waste drums, and approximately 150 900-gallons empty fuel tanks. The ground surface of Open Space I is entirely paved with asphalt, which is generally in fair condition.

A review of site inspection data indicates that the aboveground diesel fuel storage tank is leaking from the exit hose. A four-foot by four-foot stain extending onto the asphalt below the tank's concrete pad was noted. An odor was also present during the site inspection.

Open Space II

Open Space II is defined as the areas between Buildings 368 and 370 and between Buildings 371 and 361. This space covers approximately five percent of the parcel. In general, Open Space II has been used for the storage of Conex boxes. The ground surface of Open Space II is paved completely with concrete, which is generally in fair condition.

EBS information indicates that activities conducted within this open space have been confined to materials storage. Various chemicals have been stored in Open Space II. Approximately 60 to 80 Conex boxes labeled with flammable liquid, flammable gas, non-flammable gas, and

poison placards are presently stored in Open Space II. There are storm drains located throughout this storage area. There have been no documented spills in this area, and no stains were observed during visual inspection.

Open Space III

Open Space III, which comprises approximately five percent of the parcel, is defined as the area north of Buildings 370 and 368. The use of Open Space III was not documented and is not apparent from visual inspection. The entire ground surface of Open Space III is poorly maintained concrete; loose rocks and dirt are present on top of the pavement.

EBS information is inconclusive with respect to the past use of this area. There is no information regarding chemical use in this area, although various types of stains were observed during the visual inspection.

Scattered paint spills were found at a higher density in Open Space III than elsewhere on the parcel. These spills appear to have involved relatively minor quantities of released material. There are also a few stains in this area that may be associated with equipment waterproofing. Several of these spills were observed in close proximity to storm water drains.

Open Space IV

Open Space IV, which comprises approximately ten percent of the parcel, is defined as the area west of Buildings 370 and 368. No documentation was provided for the use in Open Space IV. From visual inspection, this area appears to be undergoing excavation and construction. The entire ground surface of Open Space IV is covered with loose rocks and dirt.

Open Space V

The remaining open space in parcel 174 is designated as Open Space V. This area covers approximately 15 percent of the parcel, defined primarily as the area between Buildings 370 and 371, and the area between Buildings 361 and 368. In general, the open space has been used for storage.

The majority of this open space is paved with asphalt, with the exception of several concrete walkways, gravel surrounding the sewage

lift station in the southwest corner of the parcel, and sparse vegetation located to the west of Building 370. The majority of the asphalt is in poor condition. The poor condition of the pavement and the presence of gravel made it difficult to identify stains.

EBS information is inconclusive regarding activities conducted within Open Space V. Four hundred Conex boxes were noted in this open space during visual inspection. Most were lacking placards identifying their contents. Numerous storm water drains were also observed during visual inspection in this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 174 is bounded by Parcel 171 to the south; Parcels 172, 173, and 175 to the east; and Parcels 178, 184, and 176 to the north. Activities of concern on adjacent parcels include hazardous material storage on Parcels 172 and 173, potential chemical storage on Parcel 175, and hazardous waste present on Parcel 176 (part of the Scrapyard IR site). The Alameda Railroad runs along Main Street on the western border and along Fox Street on the northern border of Parcel 174. The Alameda Railroad may have potentially impacted this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 174, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-174-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines

TABLE 6-174-2

Summary of Data Gaps
NAS Alameda Parcel 174

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 174.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the north side of Parcel 174. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Alameda Railroad Along The Northern and Western boundaries.
Potential Parcel-Specific Release Areas	• Hazardous materials storage in Buildings 361, 368, 370, 371 and Parcel-Specific Target Area 6.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-174-2

Summary of Data Gaps
NAS Alameda Parcel 174

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling appears to be required for Parcel 174 because no industrial buildings are present. However, a one-time compliance program will determine whether further sampling or cleanup measures are required within buildings before transfer or lease can occur.

As noted earlier, Parcel 174 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 174; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-174-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 174 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following six parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-174-2.

- Target Area 1 (Building 370 and Southern Perimeter): This target area addresses the possible release of compounds of concern associated with hydraulic fluid and lubricating oil storage in the middle unlabeled bay, and flammable liquids and poisons storage in the Conex boxes. The size of this area within Building 370 is approximately 200,000 square feet. The likelihood of

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environmental impacts having occurred within this target area is classified as suspect.

- Target Area 2 (Building 368): This target area addresses the possible release of compounds of concern associated with use and storage of PET, brake fluid, engine oil, and WD-40 associated with forklift activity throughout the building, and the forklift repair and maintenance shop in Bay M. The size of this area within Building 368 is approximately 220,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 3 (Bay A in Building 371): This target area addresses the possible release of compounds of concern associated with storage of lubricating oil, spray paint, corrosives, halogenated organic compounds, and petroleum products within Bay A, along with storage of hazardous waste in the hazardous waste accumulation area. The size of this area within Building 371 is approximately 40,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 4 (Building 371 excluding Bay A): This target area addresses the possible release of compounds of concern associated with storage of paint and medical equipment. The size of this area within Building 371 is approximately 160,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential.

- Target Area 5 (Building 361): This target area addresses the possible release of compounds of concern associated with storage of paint, battery acid, engine coolant, TCE, pesticides, and hazardous waste. The size of this area within Building 361 is approximately 140,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 6 (Diesel Tank and Drums within Open Space I): This target area addresses the possible release of compounds of concern associated with storage of diesel fuel and hazardous waste. The size of this area within Building 361 is approximately 200 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

The following zone-wide target areas were identified on Parcel 174 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 3 (Alameda Railroad Along The Western and Northern Parcel Boundaries): Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. The railroad borders the western boundary of Parcel 174. Three of the five samples proposed to be collected from this zone-wide target area are located on Parcel 174. The zone-wide target area samples that are located on Parcel 174 are listed on Table 6-174-1. This target area addresses the possible presence of TPH, SVOCs, PCBs, and lead. The likelihood of environmental impacts having occurred within this target area is classified as potential.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil gas sampling (SOP 6), and GeoProbe soil sampling (SOP 14). Table 6-174-1 summarizes screening-level sampling and analysis for the parcel's target areas. Ten surface soil samples, 30 soil gas samples, and one subsurface GeoProbe soil sample will be collected. Locations for these samples are shown on Figures 6-174-1, 6-174-2, and 6-174-3. Adjustments to the proposed locations may be made if warranted by field conditions. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

In Zone 16 Target Area 3, samples should be collected between the tracks underneath the coarse gravel (ballast). Sample locations are shown on Figure 6-174-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15),

TABLE 6-174-3

Soil Sample Results in mg/kg from Boring 12 between 2' and 4'
NAS Alameda Parcel 174

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	9	1	48	34	74
Detection Limit	0.05	0.05	0.05	0.2	0.5

Source: ERM-West, Inc., 1988

TABLE 6-174-4

Groundwater Sample Results in mg/L from MW-12
NAS Alameda Parcel 174

	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
Aug-87	ND	0.04	0.03	0.47	0.18	ND	ND
Jan-88	0.008	ND	ND	ND	ND	ND	ND
Detection Limit	0.005	0.001	0.005	0.005	0.05	0.0005	40
May 1993 MCL	0.05	0.005	0.1	0.015	0.1	0.005	

Source: ERM-West, Inc., 1988

SECTION 6-175

PARCEL 175 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 175 at NAS Alameda (Figure 6-175-1). The parcel, which is located in the northeast portion of the base, is approximately three acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. No parcel-specific target investigation areas (target areas) have been identified at this parcel. Two zone-wide target areas have been identified at this parcel; however, no zone-wide samples are located on this parcel. This parcel-specific plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed evaluation of Parcel 175, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 175, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identified Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and

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ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-175-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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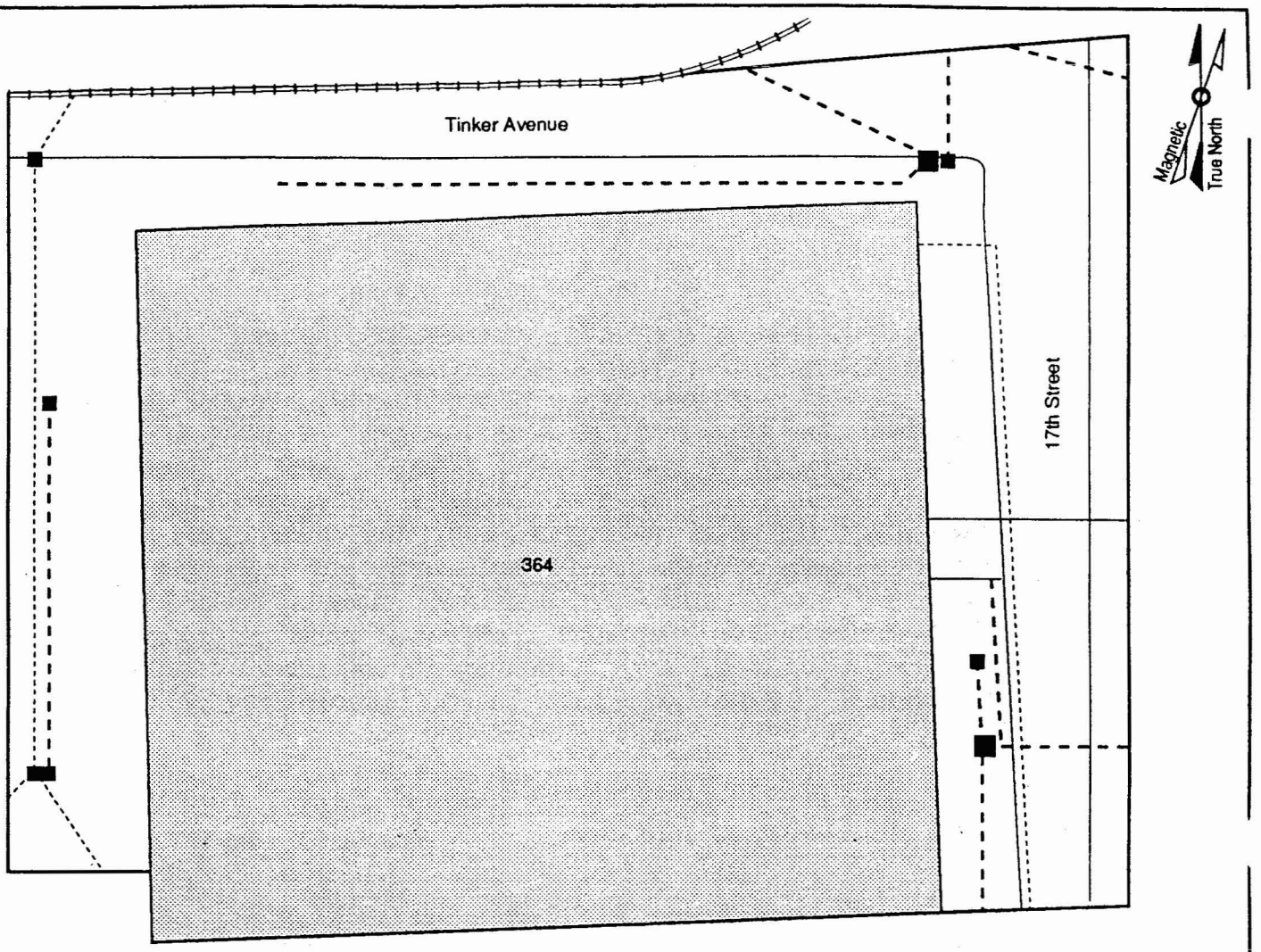
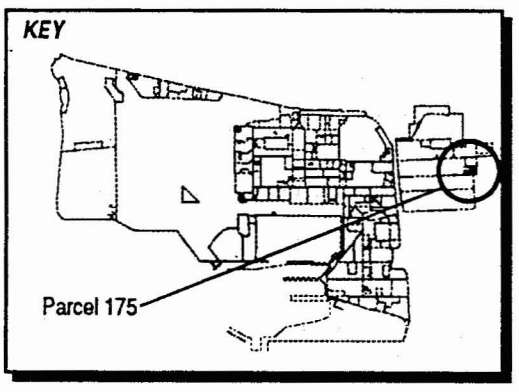
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: Parcel boundaries are approximate

1" = 60'

Figure 6-175-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

SENSITIVE

TABLE 6-174-5

Soil Sample Results in mg/kg from Boring 4
NAS Alameda Parcel 174

Sample Depth between 0' and 0.5'

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	5	2	41	26	33
Detection Limit	0.05	0.05	0.05	0.2	0.5

Sample Depth between 1' and 1.5'

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	10	5.5	40	22	34
Detection Limit	0.05	0.05	0.05	0.2	0.5

Sample Depth between 4.5' and 5'

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	5.2	2.5	68	14	55
Detection Limit	0.005	0.001	0.005	0.005	0.05

Source: ERM-West, Inc., 1988

environmental air monitoring (SOP 22), monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10), and the existing monitoring well (MW-12).

A monitoring well (MW-12) was installed on Parcel 174 north of Building 371 as part of the previous investigation of the scrap yard IR site. Soil samples were collected from this location prior to monitoring well installation. Soil sampling was also performed from zero to five feet below ground surface at another location north of Building 371 (SB-4). Activities performed at the scrap yard IR site appear to have impacted Parcel 174. Locations of MW-12 and SB-4 are shown on Figure 6-174-1.

Data from soil and groundwater samples taken at MW-12 between March 1987 and January 1988 are summarized in Tables 6-174-3 and 6-174-4 below. Soil samples from boring SB-4 are summarized in Table 6-174-5. Data indicate that activities on adjacent parcels have impacted Parcel 174. Current monitoring well data from the scrap yard IR site is not available to fully characterize the impacts to Parcel 174.

Follow-up sampling may be performed on Parcel 174 to characterize the impacted areas as part of ongoing investigations at adjacent parcels. Additionally, potentially impacted sewer lines and storm drains exist throughout Parcel 174, which require detailed evaluation.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 364) covers approximately 60 percent of the parcel. The remaining 40 percent is open space. Building 364 is presently used for storage. Sewer lines are present on this parcel and are shown in Figure 6-175-1.

Parcel 175 is bounded on the north by an Installation Restoration (IR) Program site (Scrapyard). Previous investigations, including monitoring well installation (MW-11) and soil sampling, have occurred on Parcel 175 located north of Building 364. Data and results are available in a report prepared by ERM-West, Inc. (contract N62474-85-D-5627) entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area.* This report discusses the impacts from this IR site on Parcels 172, 174, 175, 176, and 177. Additional data and results on Parcels 176 and 177 are included in a report prepared by PRC Environmental Management, Inc. (contract N62474-88-D-5086) entitled *Naval Supply Center, Oakland Alameda Annex and Facility Screening Lot and Scrapyard Area Alameda, California Sampling Results Technical Memorandum.*

Data from soil and groundwater samples taken at monitoring well MW-11 between March 1987 and January 1988 are summarized in Tables 6-175-2 and 6-175-3 below. The 1987 groundwater monitoring data showed that concentrations of cadmium, lead, nickel, and benzene in groundwater exceeded 1993 MCLs. However, 1988 groundwater data showed all constituents to be below MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. Current monitoring well data from the neighboring Scrapyard IR site (Parcel 176) are not yet available to fully characterize the impacts to Parcel 175.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial*

TABLE 6-175-2

Soil Sample Results in mg/kg from Boring 11
NAS Alameda Parcel 175

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	5	1	48	7	42
March 1987 (duplicate)	5.2	1	36	11	38
Detection Limit	0.05	0.01	0.05	0.05	0.5

Source: ERM-West, Inc., 1988

TABLE 6-175-3

Groundwater Sample Results in mg/L from Boring 11
NAS Alameda Parcel 175

	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
Aug-87	ND	0.02	0.03	0.24	0.11	350	560
Jan-88	ND	ND	ND	ND	ND	ND	ND
Detection Limit	0.005	0.001	0.005	0.005	0.05	0.0005	40
May 1993 MCL	0.05	0.005	0.1	0.015	0.1	0.005	

Source: ERM-West, Inc., 1988

Investigation/Feasibility Study Phase II Field Sampling Plan, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential concern within parcel open space is described in detail below.

Building 364

Based upon aerial photographs, Building 364 was constructed prior to August 1963. This building is in fair condition. Building 364 is one-story tall, has a steel frame with a concrete floor, and covers approximately 72,000 square feet. The space occupied by Building 364 was formerly open space used as a storage area.

Information collected during the EBS indicates that activities conducted within Building 364 included storage only. No chemicals are documented to have been stored in this building. Based upon visual inspection, Building 364 is primarily used as a warehouse for X-ray and other medical equipment. One flammable materials locker was observed. This locker contained less than 55 gallons of paint, paint thinner, and degreasers. Methods of disposing used of chemicals stored within Building 364 are unknown.

Scattered, light staining was noticed during visual inspection of the concrete floor. Additionally, the floor appeared to have been resurfaced several times.

Open Space

The open space occupies approximately 40 percent of the parcel. In general, the open space has been used for storage. The entire open space is paved with asphalt (90 percent) and concrete (10 percent).

EBS information indicates that activities conducted within this open space included storage only. No chemicals are documented to have been stored in the open space. Based upon visual inspection, a few Conex boxes were stored on the western side of Building 364.

A few, minor paint overspray stains were noticed during the visual inspection of the open space. Documentation shows that one transformer and one switch gear are present on the western side of Building 364. One groundwater monitoring well (MW-11) was installed north of Building 364 as part of a previous investigation at and around Parcel 176 (the Scrapyard IR site).

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 175 is bounded by Parcel 172 to the south, Parcel 174 to the west, Parcel 176 to the north, and the Fleet Industrial Supply Center - Oakland Alameda Facility to the east. Activities of concern include hazardous material storage on Parcel 172. The presence of petroleum products, spray paint, paint thinner, corrosives, halogenated organics, metals, and pesticides are documented within buildings on Parcel 174. Hazardous waste is present on Parcel 176, which is the Scrapyard IR site. The Alameda Railroad runs along Fox Street and through Parcel 176, which is located along the northern border of Parcel 175.

The presence of a monitoring well (MW-11) on Parcel 175 is probably a result of previous investigations on and around Parcel 176. Soil sampling has been performed on Parcels 174 and 176 as part of previous investigations on and around Parcel 176. The data obtained from previous and proposed screening level investigations should provide sufficient characterization of necessary boundary conditions for Parcel 175.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 175, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-175-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 175 because no industrial buildings are present.

As noted earlier, Parcel 175 was previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 175; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-175-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 175 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. However, two zone-wide target areas were identified. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16.

TABLE 6-175-1

Summary of Data Gaps
NAS Alameda Parcel 175

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 175.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the north side of Parcel 175. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified. The railroad tracks in this parcel are being addressed as part of the Scrapyard IR Site.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-175-1

Summary of Data Gaps
NAS Alameda Parcel 175

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As discussed previously, monitoring well MW-11 is located on Parcel 175 west of Building 364; this well is part of the previous investigation for Parcel 176, the Scrapyard IR site. Current monitoring well data from the Scrapyard IR site (Parcel 176) are not available to fully characterize the impacts to Parcel 175. Follow-up sampling may be performed on Parcel 175 to characterize the impacted areas as part of ongoing investigations at adjacent parcels.

The following zone-wide target areas were identified on Parcel 175 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.
- Zone Target Area 3 (Railroad Tracks): This parcel does not contain any samples from this zone.

SECTION 6-176

PARCEL 176 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 176 at NAS Alameda (Figure 6-176-1). The parcel, which is located in the northeast portion of the base, is approximately nine acres in size and is roughly rectangular in shape. No RCRA sites are located at this parcel. Parcel 176 is part of an Installation Restoration (IR) Program site and is currently undergoing investigation by the IR contractor. Two zone-wide target investigation areas (target areas) were identified for Parcel 177. A high level of effort is needed to complete the assessment at this parcel.

Releases of radioactive materials, petroleum products, corrosives, flammable liquids, mercury, and metals have historically impacted the open space of this parcel. Soil and groundwater sampling results have been addressed in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area*, and a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, entitled *Naval Supply Center, Oakland; Alameda Annex and Facility Screening Lot and Scrapyard Area; Alameda, California; Sampling Results Technical Memorandum*. Ongoing follow-up sampling and radiological sampling are being performed by the IR contractor.

This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities on Parcel 176 are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for open spaces and boundaries of Parcel 176, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-176-1 – PARCEL 76
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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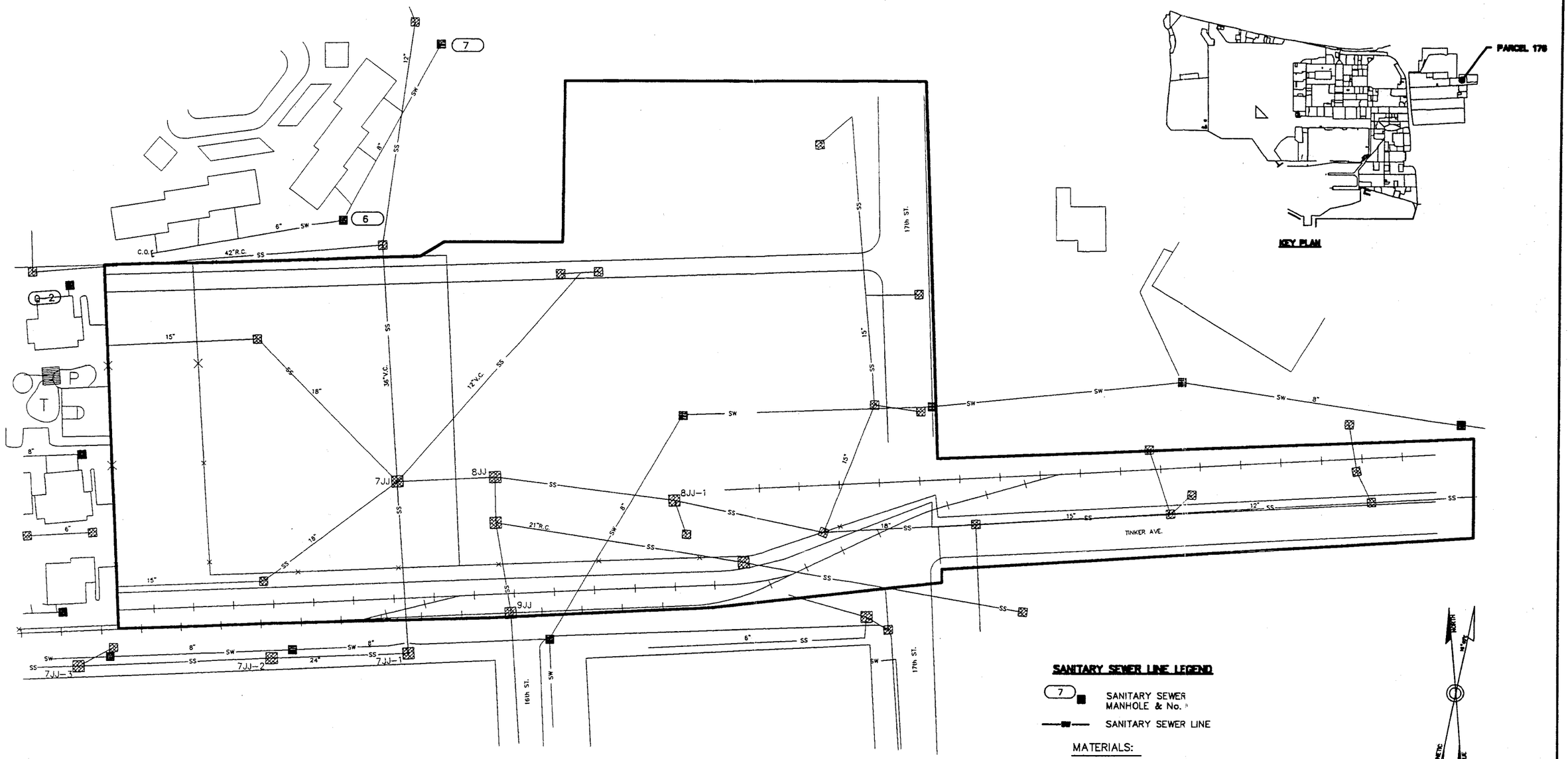
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

KEY PLAN



GENERAL LEGEND

PARCEL OUTLINE

NOTES:

1. NO P.E.P. SPECIFIC SAMPLING IS CALLED FOR AT THIS PARCEL.
2. PLEASE REFER TO THE REPORTS REFERENCED IN THE PARCEL 176 EVALUATION PLAN (SECTION 6-176) FOR PREVIOUS SAMPLING LOCATIONS AND SAMPLING RESULTS AT THIS PARCEL.

SCALE IN FEET

100 0 100 200 300

1" = 100'

SANITARY SEWER LINE LEGEND

7 SANITARY SEWER MANHOLE & No.

SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

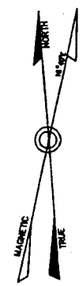
7JJ-3 MANHOLE

CATCH BASIN

SS STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



NAVAL AIR STATION, ALAMEDA

FIGURE 6-176-1

PARCEL 176

PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19569176.DWG	PWC 17,631 (STORM DRAINS) PWC 106,730 (SANITARY SEWER)
SCALE AS NOTED	DATE: 10/14/94 — SHEET 1 OF 1

parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Although no buildings are known to have existed on Parcel 176, one structure (Structure 367) covers less than five percent of the parcel. The parcel is presently in use as a salvage yard. Sewer lines are present at this parcel and are shown in Figure 6-176-1. Storm drains present on this parcel collect runoff from the parcel and may potentially be impacted from the release of liquids from storage containers on the parcel. Historical aerial photographs show that persistent surface staining was present on Parcel 176 from approximately 1953 to 1985.

Parcel 176 is contained within the Scrapyard IR site. Previous investigations have been conducted at Parcel 176 and specific data regarding potential chemical occurrence are available. Data from previous and current investigations at Parcel 176 are discussed in the previous and current investigations subsections in this PEP and in both the 1988 ERM-West and the 1993 PRC reports.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing sampling data to PRGs, it is recommended that the sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and

are not considered in this PEP. Lead-based paint, PCBs, and asbestos are not anticipated to be concerns on this parcel.

Seismic disturbances have impacted areas at NAS Alameda; however, there is no documentation of earthquake damage in Parcel 176. Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below.

Previous Investigations

Previous investigations have collected soil, groundwater, air, and soil vapor samples from Parcels 176 and 177. Follow-up detailed evaluations are being conducted by the IR contractor.

As part of a former screening-level sampling effort summarized in the 1988 ERM-West report, a total of 34 soil samples were collected throughout Parcels 176 and 177 (primarily on Parcel 177). These samples were analyzed for priority pollutants including metals, pesticides/PCBs, VOCs, and asbestos. Another screening-level sampling effort documented in the 1993 report by PRC indicated that a total of 132 soil samples had been collected throughout Parcels 176 and 177, including the railroad track area. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides/PCBs, VOCs, and SVOCs.

The 1988 ERM-West report indicated that thallium and lead were detected at maximum concentrations of 14 mg/kg and 400 mg/kg, respectively, in a soil sample collected near the railroad tracks in the eastern portion of Parcel 176. The concentration of lead in this soil sample exceeds residential PRGs. The following compounds were detected in soil samples near the west end of Structure 367 at concentrations below residential PRGs: TCE, TCA, benzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, toluene, xylenes, ethylbenzene, t-1,2 dichloroethene, and c-1,2 dichloroethene. According to the 1993 PRC report, soil samples from Parcel 176 contained arsenic, lead, and mercury at maximum concentrations of 212 mg/kg, 26,600 mg/kg, and 4 mg/kg, respectively. The concentrations of both lead and arsenic exceeded residential PRGs for soil.

Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. The 1993 PRC report stated that TCA, PCE, TCE, and TPH were detected in Parcel 176 soil vapor at maximum concentrations of 0.1 µg/L, 100 µg/L, 1 µg/L, and 1,000 µg/L, respectively. Additionally, 17 monitoring wells are located throughout Parcels 176 and 177. Groundwater sampling results from these monitoring wells indicate that most metals and chlorinated organic compounds detected in the groundwater exceeded August 1994 USEPA MCLs. In addition, air

samples were collected and analyzed for lead, arsenic, and asbestos at Parcels 176 and 177. Lead, arsenic, and asbestos were detected at maximum concentrations of 84 ng/SCM, 0.81 ng/SCM, and 0.0039 f/cc, respectively.

The IR contractor has reportedly completed a radiological survey on a 50-foot interval grid as part of follow-up sampling for Parcels 176 and 177. The results were not available at the time of writing.

Current Investigations

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Structure 367

Structure 367 was constructed in the early 1950s and is located in the southeastern portion of the parcel. With a paved floor, multiple wooden walls, and no roof, this compartmental structure is currently used for segregating scrap materials. This structure covers approximately 10,000 square feet on both Parcel 176 and Parcel 177. Site inspection data indicate that the structure is in poor condition. According to EBS data, Structure 367 was formerly used as a warehouse. The space occupied by this structure was initially part of the San Francisco Airdrome.

Open Space

Open space covers the entire area referred to as Parcel 176 (nine acres). This parcel has served as a scrapyard for NAS Alameda since the early 1950s. The ground surface of the parcel is primarily dirt with patches of

asphalt and concrete scattered throughout. Asphalt roads run east to west and north to south through this parcel. The scattered pavement is generally in poor condition, while the roads are more carefully maintained. The unpaved areas of the open space are covered with mud, sparse vegetation, and gravel. Utilities located within the open space include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space have consisted of the storage of salvage materials and the accumulation of waste solutions removed from these salvage materials.

Spills of motor oil and fuel, in amounts typically associated with vehicle parking, were documented in the southeast parking area of the parcel. Near the south edge of the parcel, several stains ranging in size from one square foot to 100 square feet were located on bare soil just north of Gate S-2. No cleanup appeared to have taken place. EBS data indicate that there was an ongoing PCB oil leak from a transformer in the southern portion of Parcel 176.

One aboveground diesel storage tank, which is used to refuel scrapyard equipment, is located in the north-central portion of the parcel. This raised tank is located within a concrete secondary containment structure. According to site inspection data, several stains were present on the bare soil around this tank. These stains appear to be the result of the equipment refueling process.

Approximately 62 locked Conex boxes and several containers labeled "corrosives" and "flammable liquids" were stored at the west end of the parcel during the site inspection.

Potential radiological hazards appear to be of concern in the open space. A small area in the northeast portion of the open space, demarcated with "Caution: Do Not Enter" yellow tape, reportedly contained radioactive materials. There are several spilled and broken drums within this containment area. The ground surface is primarily bare soil, with a lot of standing water in the vicinity. Removal of radioactive waste above one quarter of the permissible radiological dose set by OSHA was performed within this area. In the western portion of Parcel 176, site inspectors noted instruments labeled "radioactive devices" and a wooden crate labeled "mercury metallic" and "radioactive device."

Numerous storm drains are located throughout the open space. They serve as receptacles for the runoff from the scrapyard and the adjacent parking lot in Parcel 174.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 176 is bounded by Parcels 175, 177, 178, 174, 181, and the College of Alameda. The Alameda Railroad runs along the southern portion of Parcel 176. A stain three feet in diameter was located fifteen feet to the south of the tracks. The IR contractor has collected samples for lead, pesticides/PCBs, and SVOCs along this section of tracks.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 176, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred. The data gaps shown in Table 6-176-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and the Scrapyard Installation Restoration site. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 176 because no industrial buildings are present.

As noted earlier, Parcel 176 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-

use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Because pesticide sampling has already been conducted for previous investigations, no pesticide sampling is recommended for this parcel.

Once the data gaps in Table 6-176-1 are addressed and the sampling results from the previous investigations described below are compared to the appropriate screening levels, Parcel 176 may be leased or transferred.

Target Areas and Compounds of Concern

Because subsurface contamination issues are being addressed by the IR Program, no parcel-specific target areas were identified for this parcel. Two zone-wide target areas were identified at this parcel; however, no zone-wide target area samples are located on this parcel because extensive soil vapor sampling has already been conducted at this parcel.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.
- Zone 16 Target Area 3 (Railroad Tracks): This parcel does not contain any samples from this zone.

The remaining data gaps (concerns pertaining to PCBs, underground lines, radiological concerns, and the Scrapyard IR site) must be resolved before this parcel can be leased or transferred.

TABLE 6-176-1

Summary of Data Gaps
NAS Alameda Parcel 176

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 176.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located on Parcel 176. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 177, Scrapyard IR Site.
Potential Zone-Wide Release Areas	• Former Wetlands. • Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-177

PARCEL 177 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 177 at NAS Alameda (Figure 6-177-1). The parcel, which is located in the northeast portion of the base, is approximately five acres in size and is rectangular in shape. No RCRA sites are located at this parcel. Parcel 177 is part of an Installation Restoration (IR) Program site and is currently undergoing investigation by the IR contractor. One zone-wide target investigation area (target area) was identified for Parcel 177. A high level of effort is needed to complete the assessment at this parcel.

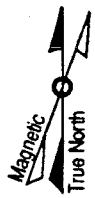
Storage and release of radioactive materials, petroleum products, PCB-containing oil, lead-acid batteries, scrap metal, and halogenated solvents have historically impacted the open space on Parcel 177; storage and release of petroleum hydrocarbons, PCBs, and mercury have historically impacted the interiors of buildings. Soil and groundwater sampling have been addressed in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area*, and a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, entitled *Naval Supply Center, Oakland; Alameda Annex and Facility Screening Lot and Scrapyard Area; Alameda, California; Sampling Results Technical Memorandum*.

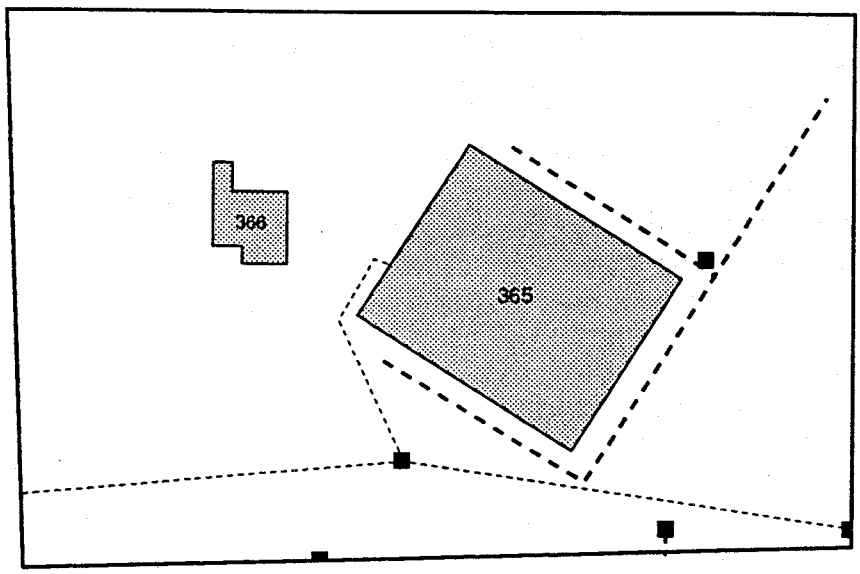
This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities are discussed below.

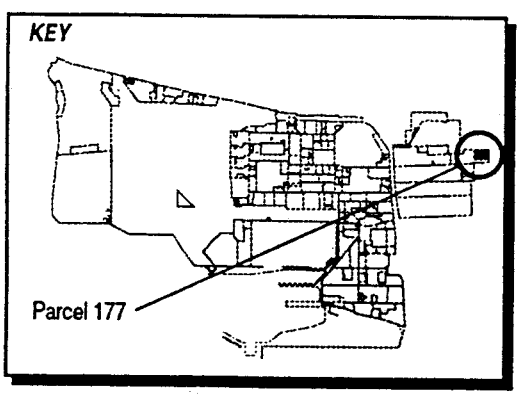
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 177, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling







LEGEND

- Storm Sewer Line
- Sewer Line
- Catch Basin or Manhole

Note: No screening - level sampling is recommended for Parcel 177.

1"= 125'

Figure 6-177-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 365 and 366) and one structure (Structure 367) cover approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel is presently in use as a storage area. Sewer lines present at this parcel are shown in Figure 6-174-1. Staining observed around the storm drains during the site inspection indicates that the storm sewer may have been impacted.

Parcel 177 is contained within the Scrapyard IR site. Previous investigations have been conducted at Parcel 177 and specific data regarding potential chemical occurrence are available. Data from previous and current investigations at the Scrapyard IR site (Parcels 176 and 177) are discussed in the previous and current investigations subsections in this PEP and in both the 1988 ERM-West and the 1993 PRC reports.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Historical aerial photographs show that persistent surface staining was present on Parcel 177 from approximately 1953 to 1985. Aerial photographs also indicate that aboveground storage tanks and railroad tracks were formerly located on this parcel.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. During the site inspection, potentially lead-based paint was observed peeling from the exteriors of Buildings 365 and 366. Transformer oil is suspected to have been used for dust control in the open space. The transite wallboard on the underside of the welding area in Building 366 is documented to contain asbestos. Asbestos disposal is suspected in the open space.

Based upon building visual inspections, the buildings located on Parcel 177 do not appear to be equipped with heating-ventilation-air conditioning (HVAC) systems. EBS data indicates that such systems are unlikely in these buildings. Activities of potential environmental or industrial hygiene (IH) concern within the parcel's buildings and open spaces are described in detail below.

Previous Investigations

Previous investigations have collected soil, groundwater, air, and soil vapor samples from Parcels 176 and 177. Follow-up detailed evaluations are being conducted by the IR contractor.

As part of a former screening-level sampling effort summarized in the 1988 ERM-West report, a total of 34 soil samples were collected throughout Parcels 176 and 177 (primarily in Parcel 177). These samples were analyzed for priority pollutants including metals, pesticides/PCBs, VOCs, and asbestos. Another screening-level sampling effort documented in the 1993 PRC report indicated that a total of 132 soil samples were collected from locations throughout Parcels 176 and 177. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides/PCBs, VOCs, and SVOCs.

The 1988 ERM-West report indicates that arsenic was detected at a maximum concentration of 9.4 mg/kg in a soil sample taken near Structure 367, while PCBs and beryllium were detected at maximum concentrations of 1.8 mg/kg and 0.6 mg/kg, respectively, in soil samples collected near Building 365. These concentrations of arsenic, PCBs and beryllium exceeded August 1994 residential preliminary remediation goals (PRGs). In general, soil samples collected near Building 365 had the highest concentrations of metals.

Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. PRC reported detections of TCA, TCE, and TPH in Parcel 177 at maximum concentrations of 0.1, 0.1, and 10,000 µg/L, respectively. Additionally, 17 monitoring wells are located throughout Parcels 176 and 177. Groundwater sampling results from these monitoring wells indicate

that most metals and chlorinated organic compounds detected in groundwater exceed August 1994 U.S. EPA MCLs. Groundwater samples adjacent to or downgradient from Building 365 had the highest concentrations of metals. In addition, air samples were collected and analyzed for lead, arsenic, and asbestos at Parcels 176 and 177. Lead, arsenic, and asbestos were detected at maximum concentrations of 84 ng/SCM, 0.81 ng/SCM, and 0.0039 f/cc, respectively.

As part of the follow-up sampling for Parcels 176 and 177, a radiological survey on a 50-foot interval grid was completed. No areas were identified within Parcel 177 that exceeded one quarter of the permissible radiological dose set by OSHA.

Current Investigations

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Building 365

Building 365 was constructed in the early 1930s and covers approximately 19,500 square feet (Figure 6-177-1). This one-story warehouse is constructed of a metal frame, a metal ceiling, and metal walls. The floor is paved with concrete and asphalt. This building initially served as the principal passenger terminal for the San Francisco Airdrome, housing aircraft operated by several commercial carriers until the Airdrome closed in 1941. Building 365 has served as a scrap sorting area since approximately 1941.

Utilities located within and immediately surrounding Building 365 include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Information collected during the EBS indicates that aircraft maintenance activities occurred in this building. These activities involved the use of solvents, cleaning solutions, and paint. Frequent oil leaks and spills also resulted from aircraft maintenance. The building was used for aircraft maintenance between approximately 1930 and 1941. In the ensuing years, the building became an area for scrap operations.

During visual inspection, suspected oil stains were noted throughout the building. Measuring approximately four square feet, the dark-colored stains may be a result of the documented PCB and mercury spills that occurred in this area prior to 1988. Historical data indicate that the Defense Reutilization and Marketing Office (DRMO) responded to the spills in a timely manner. The cleanup methods, however, were not specified.

Site inspections identified several industrial hygiene issues within Building 365. Severe structural damage was noted at the foundation of the building; some of the load-bearing wall supports were also affected. Additionally, potentially lead-based paint was observed peeling from the interior walls.

Three disconnected wall-mounted transformers are present in the building. They appeared to be old and corroded; water damage was probable.

Building 366

Constructed in the early 1950s, Building 366 has primarily served as a storage area for DRMO (Figure 6-177-1). This one-story building is two-thirds vacant and is in poor condition. The walls and ceiling are constructed of wood and the floor is constructed of concrete. The 1,500-square-foot area occupied by Building 366 was formerly part of the San Francisco Airdrome's open space. Currently, a cutting and welding pad and storage pad are present in Building 366.

Utilities located within and immediately surrounding Building 366 include underground natural gas and water lines. During the site inspection, a light-colored stain was noted on the concrete around a floor drain in the southwest corner of Building 366. It is not known whether this floor drain is connected to the storm sewer or the sanitary sewer.

Approximately 50 gallons of gasoline and adhesives are documented to be stored in a steel container in the northern interior of the building. Additionally, there are 150 gallons of oil stored in either steel containers or drums within the building. According to site inspection data, the drums are set on drip catchers and wood pallets. The containers are reported to have staining in and around them. A Conex box containing diesel fuel and hydraulic fluid is present on the storage pads.

Staining, possibly from oil, is present within Building 366. A five-foot-by-four-foot stain was observed on the concrete storage pad. Site inspectors also noted that approximately 60 percent of the plywood and wood pallets beneath a hazardous materials Conex box were stained.

The transite wallboard on the underside of the welding area is documented to contain asbestos. Visual inspections revealed that the wallboard was water-damaged and cracked.

Structure 367

Structure 367 was constructed in the early 1950s and is located in the southwestern portion of the parcel. This structure has a paved floor, multiple wooden walls, and no roof, this compartmental structure is currently used for segregating scrap materials. This structure covers approximately 10,000 square feet on both Parcel 177 and Parcel 176. Site inspection data indicate that the structure is in poor condition. The space occupied by this structure was initially part of the San Francisco Airdrome. According to EBS data, Structure 367 was formerly used as a warehouse.

According to data obtained from visual inspections, leaking materials are present on the foundation of Structure 367. Oily residue from several spools of wire stored at this structure has created a five-foot-by-five-foot stain on the concrete floor. A similar oily stain, approximately 35 square feet in size, is located on the nearby concrete and dirt.

Open Space I

Open Space I is defined as the area immediately surrounding Building 365, Building 366, and Structure 367. This space occupies approximately 10 percent of the parcel. The ground surface of Open Space I is composed of bare soil, asphalt, and concrete. Both the paved and unpaved areas are in poor condition.

EBS information indicates that storage activities associated with Building 365, Building 366, and Structure 367 were conducted in Open Space I. Storage activities involved the processing of transformers, capacitors, lead-acid batteries, and metal scrap (possibly cadmium- and nickel-plated). Historical data indicate that transformer oil was spread on the ground for dust control and that asbestos may have been disposed of in the area. The areas around Buildings 366 and 367 were formerly part of a runway used by the San Francisco Airdrome. Typical chemical handling and use associated with aircraft care in the 1930s may be of potential concern.

Photographs taken by site reviewers show the storage of drums against the exterior of Building 365. The types of chemicals, if any, stored in these drums were not noted.

Ongoing spills of oil and hydraulic fluid are documented in EBS information files. Site inspection data indicate that scattered stains are located throughout Open Space I. These stains, which range in size from one foot to two feet in diameter, appear to originate from the forklifts and cranes used at the Scrapyard. There are no reports of cleanup; however, during visual inspection of this parcel, a worker was seen sweeping soil over a spill that was caused by forklift maintenance activities.

One pad-mounted transformer was noted in Open Space I. The side of this transformer was labeled "sampled 3/23/94 S.O./D.C." An oil/vacuum switch is located northeast of Building 365.

Open Space II

Open Space II, which is located in the northern portion of Parcel 177, covers approximately 15 percent of the parcel.

The ground surface of Open Space II is primarily bare soil and deteriorated asphalt. The poor condition of Open Space II and materials strewn about the parcel make it difficult to identify both the ground type and potential staining in the area.

EBS information indicates that storage activities associated with Building 365, Building 366, and Structure 367 were conducted in Open Space II. Storage activities involved the processing of transformers, capacitors, lead-acid batteries, and metal scrap (possibly cadmium- and nickel-plated). Historical data indicate that transformer oil was spread on the ground for dust control and that asbestos may have been disposed of in the area. The area around Building 366 was formerly part of a runway used by the San Francisco Airdrome. Typical chemical handling and use associated with aircraft care in the 1930s may be of potential concern.

Staining was observed on and beneath a portable generator that was stored in Open Space II. The staining appears to be due to spillage or leakage from the generator's fuel tank. One transformer was documented in the northeast corner of the parcel. EBS files also noted the presence of a storm drain in the northwest corner of the parcel.

Although site inspection data indicate that equipment with "radioactive" stickers were stored in Open Space II, the "radioactive" equipment appeared to be safely contained within cases. A recent radiological survey of the parcel

did not indicate the presence of any ionizing radiation exceeding action levels.

Open Space III

Open Space III is defined by the remaining open area in Parcel 177. This space covers approximately 60 percent of the parcel. The ground surface of Open Space III consists of bare soil, concrete, and asphalt. There are monitoring wells throughout the area.

Utilities located within and immediately surrounding Open Space III include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. Two storm drains in the southeast area of the open space collect runoff from the scrapyard.

EBS information indicates that storage activities associated with Building 365, Building 366, and Structure 367 were conducted in Open Space III. Storage activities involved the processing of transformers, capacitors, lead-acid batteries, and metal scrap (possibly cadmium- and nickel-plated). Historical data indicate that transformer oil was spread on the ground for dust control and that asbestos may have been disposed of in the area. The areas around Buildings 366 and 367 were formerly part of a runway used by the San Francisco Airdrome. Typical chemical handling and use associated with aircraft care in the 1930's may be potential concerns.

PCB-containing oil is documented to have been spilled in this area in 1987. Although the amount of the release is not documented, it is noted that cleanup was accomplished by a private contractor. Another spill involving PCBs and mercury occurred sometime before 1988. Although the method of cleanup is not disclosed, the documents note that DRMO responded quickly to the releases.

One pad-mounted transformer is located near the eastern edge of Open Space III. No leakage from this transformer was noted during the site inspection. According to a label on its side, the transformer was last sampled on 3/23/94.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 177 is bounded by Parcel 176 to the west and south, and the Fleet Industrial Supply Center (FISC) to the east and north. Parcel 176 is part of the Scrapyard IR site. Radiological hazards are of concern on Parcel 176. The 1993 PRC report on the Scrapyard IR site does not indicate that Parcel 177 has been impacted by Parcel 176.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 177, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred. The data gaps shown in Table 6-177-1 must be addressed before this parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and the Scrapyard IR site. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are of concern in Buildings 365 and 366. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur. Because of the age, poor structural integrity, former activities, and extensive staining associated with Buildings 365 and 366, it is suggested that these buildings be demolished.

As noted earlier, Parcel 177 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Because pesticide sampling has been conducted for previous investigations, no pesticide sampling is recommended for this parcel.

Once the data gaps in Table 6-177-1 are addressed and the sampling results from previous subsurface investigations are compared to the appropriate screening levels, Parcel 177 may be leased or transferred.

Target Areas and Compounds of Concern

Because subsurface contamination issues are being addressed by the IR Program, no parcel-specific target areas were identified for this parcel. One zone-wide target area was identified at this parcel; however, no zone-wide target area samples are located on this parcel because extensive soil vapor sampling has already been conducted at this parcel.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

The remaining data gaps (concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and the Scrapyard IR site must be resolved before this parcel can be leased or transferred.

TABLE 6-177-1

Summary of Data Gaps
NAS Alameda Parcel 177

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located on Parcels 177 and 176. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 176, Scrapyard IR Site.
Potential Zone-Wide Release Areas	• Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

PARCEL 178 & 184 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 178 and 184 at NAS Alameda (Figure 6-178-1). Parcel 184 is being considered concurrently with Parcel 178 because the histories and former uses of these parcels are very similar. Parcel 184 is completely contained within Parcel 178 (see Figure 6-178-1). The parcels, which are located in the northeastern portion of the base, are approximately 22.5 acres in size and together are roughly L-shaped. These parcels have been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. No parcel-specific target investigation areas (target areas) have been identified on these parcels; however three zone-wide target areas encompass these parcels. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-178-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 178 and 184, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 178 and 184, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern. Past and present uses of these parcels were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 182, 183, and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-178-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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SAN DIEGO, CA 92132

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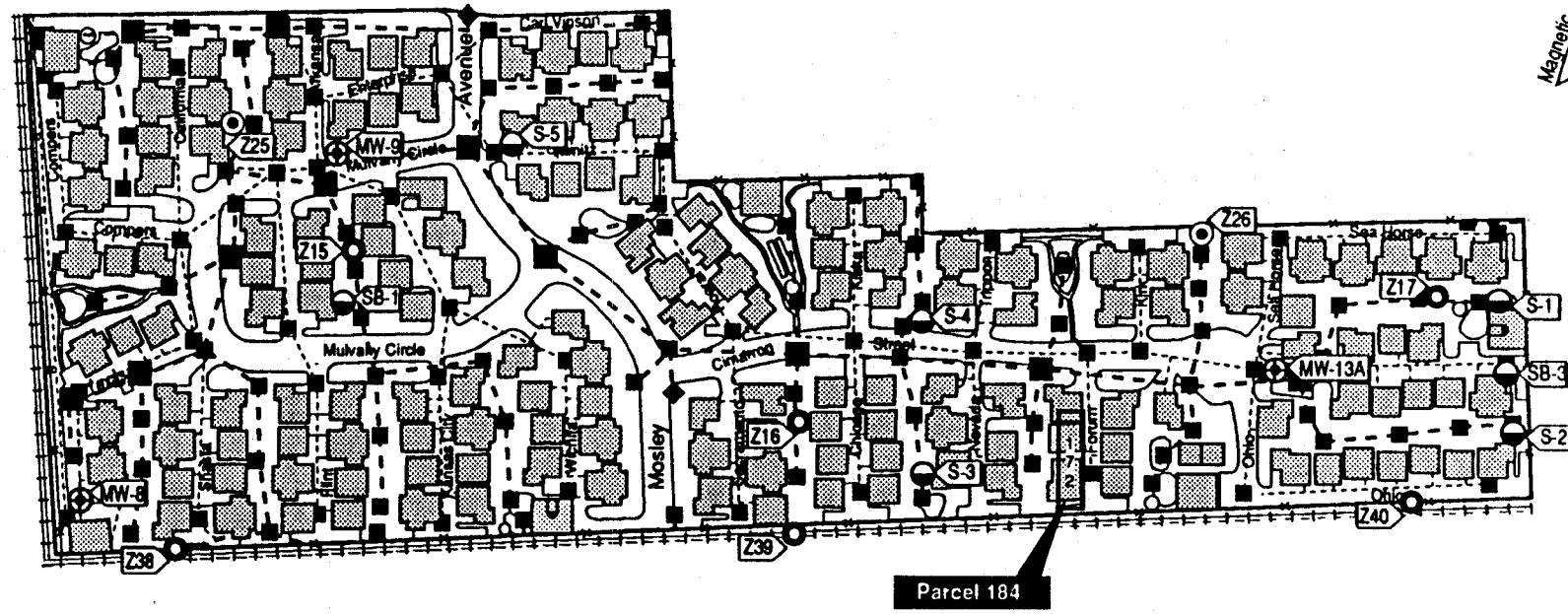
SENSITIVE



LEGEND

- Storm Sewer Line
- Sewer Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Boring Location
- Monitoring Well Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

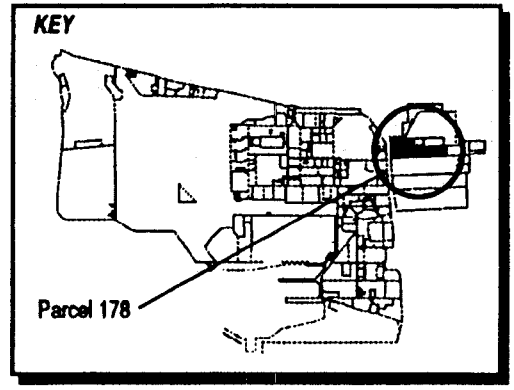


Figure 6-178-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.11/AMR/06.28.94

SENSITIVE

TABLE 6-178-1

Summary of Recommended Samples
NAS Alameda Parcel 178

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-25-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-26-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-38-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-38-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-38-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-39-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-39-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-40-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-40-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF

* This is the suggested location for the confirmatory sample. The actual location will depend on field analytical results.

and commercial (e.g., Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the Parcel 178 and 184 boundaries were completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Approximately 160 family dwellings currently cover approximately 50 percent of these parcels. The remaining 50 percent of the parcels consists of open space. The parcel areas are presently in use as a residential subdivision. One building (Building 369) was formerly located in the southwestern portion of Parcel 178, and Building 172 was formerly located on Parcel 184. Sewer lines are present at these parcels and are shown in Figure 6-178-1.

Parcels 178 and 184 are located to the west of Parcel 176, the Scrapyard Installation Restoration (IR) Program site. Previous investigations have been conducted at Parcel 178, and specific data regarding potential chemical occurrence are available. Parcels 178 and 184 were formerly used as a warehouse area adjacent to the Scrapyard. Parcels 178 and 184 were investigated in a March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area.* Two monitoring wells (MW-9 and MW-13) and 10 soil borings were installed on Parcel 178 as part of this previous investigation. A total of 14 soil samples were collected from depths of zero to five feet below ground surface from the 10 soil borings.

Data from soil and groundwater samples collected from the borings and monitoring wells on Parcel 178 between March 1987 and January 1988 are summarized in Tables 6-178-2 and 6-178-3. Only Arsenic was detected in soil samples above August 1994 residential PRG. Groundwater samples collected in August 1987 were above May 1993 USEPA or Cal-EPA MCLs for cadmium, chromium, lead, nickel, and benzene. Only benzene was detected above USEPA and Cal-EPA MCLs in groundwater samples collected in January 1988. Data indicate that activities on Parcel 178 and adjacent parcels have impacted Parcel 178. Current monitoring well data is not yet available to fully characterize the impacts to Parcel 178.

TABLE 6-178-2

March 1987 Soil Sample Results in mg/kg
NAS Alameda Parcel 178

Sample Number	Depth	Arsenic	Cadmium	Chromium	Lead	Nickel
B-9	2'-4'	16	1	56	43	90
B-13	2'-4'	5.9	1	34	14	130
S-1	2'-4'	12	1	53	22	85
S-2	2'-4'	6	1	38	25	37
S-3	2'-4'	8	1	86	31	270
S-4	2'-4'	16	1	62	47	84
S-5	2'-4'	16	1	59	37	79
S-6	2'-4'	4.3	1	150	24	690
SB-1	0.0'-0.5'	3	3	360	9	580
SB-1	1'-1.5'	21	3.5	120	23	80
SB-1	4.5'-5'	8	2.5	90	18	66
SB-3	0.0'-0.5'	6	2.5	190	5	430
SB-3	1'-1.5'	6.2	3	250	18	450
SB-3	4.5'-5'	5.2	1	54	11	48
Detection Limit		0.005	0.001	0.005	0.005	0.05
August 1994 Residential PRGs		1.9	38	380	400	1500

Source: ERM-West, March 1988

TABLE 6-178-3

Groundwater Sample Results in mg/L
NAS Alameda Parcel 178

Sample Number	Date	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
MW-9	Aug-87	ND	0.04	0.03	0.32	0.14	0.25	1.1
MW-9	Jan-88	0.009	ND	ND	ND	ND	0.26	7.8
MW-13	Aug-87	ND	0.06	0.07	0.78	0.31	0.57	0.73
MW-13	Jan-88	0.004	ND	ND	ND	ND	0.74	1.8
Detection Limit		0.005	0.001	0.005	0.005	0.05	0.0005	40
USEPA MCL		0.05	0.005	0.1	0.015	0.1	0.005	---
May 1993 CA MCL		0.05	0.01	0.05	0.05	---	0.001	---

Source: ERM-West, March 1988

Construction requirements for the new family housing project for fiscal year 1988 considered the results of the ERM-West, March 1988 report. Based upon the investigation by ERM-West, the top six inches of soil at Parcels 178 and 184 was removed and replaced with a minimum of two feet of clean imported fill. To be able to place residences in this area, the Navy installed an impermeable barrier below building foundations to reduce potential exposure to impacted soil and groundwater. Building foundations for family housing units were underlain by a minimum of 2 inches of sand over a 40 mil impermeable barrier.

Current investigations are being performed at the Fleet and Industrial Supply Center, Oakland Alameda Facility and Alameda Annex. This investigation affects numerous parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the zone-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Residential Housing

The residential housing currently located on these parcels was built between 1990 and 1992. The space now occupied by the houses was an open space storage area between the mid 1960s and 1990. Prior to this, the northern section housed a barracks area built in the 1940s. The southwestern portion of Parcel 178 had a large warehouse that was built between 1947 and 1953. The warehouse was demolished between 1985 and 1990. Detailed information about the buildings presently located on the parcel is not available; visual building visual inspections were not conducted within residences.

Utilities located within and immediately surrounding the parcels include underground sanitary sewer, water, natural gas, storm sewer, and electrical lines. Twenty-four small, pad-mounted transformers were noted throughout the parcel. Because of the recent development of the parcel, PCB-containing transformers are not likely to be present. A small oil stain was noted on the concrete pad of a transformer at the north part of Mosley Avenue.

No chemical storage is documented to have occurred in the current or former buildings on the parcels. No other incidents such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Parcels 178 and 184.

Building 369 (Demolished)

Building 369 (Parcel 178) was constructed in the early 1950s and was used as a warehouse (Figure 6-178-1). This 172,000 square foot building was demolished between 1985 and 1990. A portion of this warehouse was sealed off prior to its demolition due to the deterioration of asbestos fire-proof material.

Building 172 (Demolished)

Building 172 (Parcel 184) was constructed in 1946 and was used as an equipment storage shed. This 5,000 square foot building was demolished between 1990 and 1992. No chemical storage, spills or staining are documented to have occurred in or near Building 172.

Open Space

Open space covers approximately 50 percent of the parcels. The open space of Parcel 178 had been used for vehicle and equipment parking, warehousing of unknown materials, and is currently used for residential and recreational purposes. The open space of Parcel 184 was covered by an equipment storage shed, as described above.

No structures are currently located in the open space on Parcels 178 and 184. The ground surface of the open space consists of 75 percent asphalt and concrete pavement and 25 percent unpaved areas. The pavement is in good condition. The unpaved areas of the open space have been landscaped since 1990. This parcel previously had open space areas that were storage areas from 1960 to 1990.

Utilities located on the parcels include underground sanitary sewers, water, natural gas, electrical, and storm sewer lines. No chemical storage is documented to have occurred on Parcels 178 and 184. No documented spills or staining were noted on the parcel, except for a paint stain on a storm drain that was observed during the site inspection. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcels 178 and 184.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcel 178 is bounded by Parcels 180 and 181 to the north, Parcel 176 to the east, Parcel 174 to the south, and Main Street to the west. Parcel 184 is bounded by Parcel 178 to the north, west, and east, and Parcel 174 to the south. Parcel 176 (along the eastern border of Parcel 178) is an IR Site (the Scrap Yard). Activities of concern on these adjacent parcels include hazardous materials storage and use. Previous investigations by ERM-West, Inc. and PRC Environmental Management, Inc. have been conducted at Parcels 176, 177, and 178. Data indicate that activities on these parcels have impacted Parcels 178 and 184. Ongoing follow-up sampling and radiological sampling at the Scrap Yard IR site are being performed by the IR contractor.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 178 and 184, consistent with the objectives in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-178-4 must be addressed before the parcels can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, asbestos, radiological considerations, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated sewers is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 178 or Parcel 184 because no industrial buildings are present.

As noted earlier, Parcel 178 previously had open space areas that were unpaved, and currently has open space areas that are landscaped. Parcel 184 was previously covered by Building 172, and currently has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 178 was previously occupied by wetlands, and may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-178-4 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcels 178 and Parcel 184 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-178-4

Summary of Data Gaps
NAS Alameda Parcel 178 & 184

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 178 or Parcel 184.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the east of Parcel 178. Additional subsurface investigation relative to the Scrapyard IR Site is ongoing by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse) and Parcel 178 indicate the presence of benzene and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Landscaped or long-term unpaved areas. • Filled wetlands. • Railroad tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-178-4

Summary of Data Gaps
NAS Alameda Parcel 178 & 184

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

The following zone-wide target areas were identified on Parcel 178 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcels 178 and 184 are part of this zone-wide target area. Three of the 21 proposed zone-wide surface soil samples for pesticides are located within Parcels 178 and 184. The samples were located on these parcels to ensure an appropriate distribution of samples throughout the zone-wide target area. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 2 includes all land area north of Atlantic Avenue within the Housing Zone, which overlie former wetlands. Parcels 178 and 184, which are part of this zone-wide target area, overlie former wetlands. Three of the 14 samples proposed to be collected from this zone-wide target area are located on Parcels 178 and 184. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. The railroad borders the western and southern boundaries of Parcels 178 and 184. Three of the five samples proposed to be collected from this zone-wide target area are located on Parcels 178 and 184. The zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. Railroad tracks currently located along the western boundary of Parcel 178 and the southern boundaries of Parcels 178 and 184 are part of this zone-wide target area. Seven of the 14 samples proposed to be collected from this zone-wide target area are located on Parcel 170. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

In addition, data gaps pertaining to transformers, asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and soil vapor sampling (SOP 6), will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-178-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcels 178 and 184. Six surface soil samples and two soil vapor samples will be collected from the locations shown on Figure 6-178-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

PARCELS 179 AND 180 EVALUATION PLAN

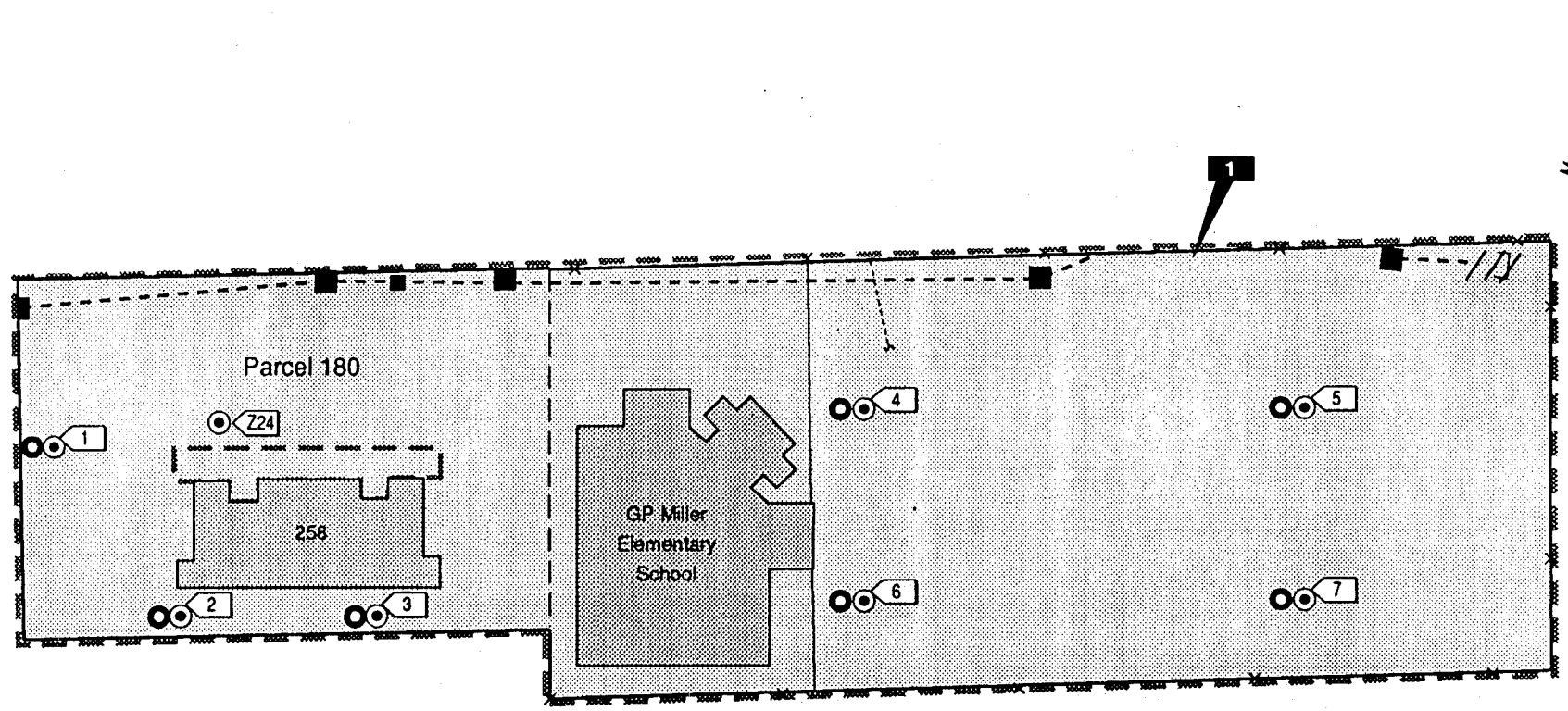
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 179 and 180 at NAS Alameda (Figure 6-179-1). Parcel 180 is being considered concurrently with Parcel 179 because the histories, former uses, and current users of these parcels are very similar. Parcel 180 is located to the west of Parcel 179 (see Figure 6-179-1). The parcels, which are located in the northeastern portion of the base, are approximately five acres in size and are roughly rectangular in shape. The parcels have been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. One zone-wide and one parcel-specific target investigation areas (target areas) have been identified on these parcels. Surface soil and soil vapor will be used to accomplish the screening-level investigation for the target areas. Table 6-179-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 179 and 180, historical activities are discussed below.

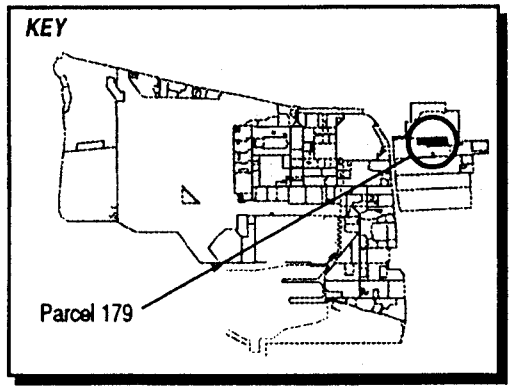
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 179 and 180, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of these parcels was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcels where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 181, 182, 183, 184, and 212.





LEGEND

- Target Area 1
- Storm Sewer Line
- Sewer Line
- Capped
- Sewer Line Abandoned In Place
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"=

Figure 6-179-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
212' 'AMR/06.28.94

TABLE 6-179-1

Summary of Recommended Samples
NAS Alameda Parcels 179 and 180

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
180-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
180-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
180-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-11-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
179-12-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
179-13-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
179-14-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
Z16-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the Parcel 179 and 180 boundaries was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, the George P. Miller Elementary School and Building 258 (the child care center) cover approximately 30 percent of the Parcels 179 and 180. The remaining 70 percent is open space. The parcel areas are presently in use as a public elementary school. Sewer lines are present at these parcels and are shown in Figure 6-179-1.

Parcels 179 and 180 are located approximately 100 feet west of an Installation Restoration (IR) Program site (The Scrapyard). No previous investigations have been conducted at the parcel and specific data regarding potential chemical occurrence are not available; however, previous investigations have been performed and current investigations are being performed at adjacent parcels. Previous and current investigations affecting adjacent parcels are discussed in the following sections, which are summarized in the Zone Analysis Plan for Zone 16.

In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific and zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Previous Investigations

Previous and current investigations have been performed at neighboring Parcels 172, 173, 174, 175, 176, 177, and 178. Previous investigations on Parcel 178 and the western portion of Parcel 176 are within 500 feet of the boundaries for Parcels 179 and 180, and will be summarized in this section.

Parcel 178 (along with Parcels 172, 173, 174, 175, 176, and 177) was investigated during 1987 and 1988 by ERM-West, Inc. A March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area* summarizes the results of these investigations. As part of these previous investigations, two of 14 monitoring wells (MW-9 and MW-13) and 10 of 52 soil borings were installed on Parcel 178. A total of 14 soil samples were collected from these 10 borings at a depth of zero to five feet below ground surface. Data from soil and groundwater samples collected from the borings and monitoring wells on Parcel 178 are summarized in the PEP for Parcel 178 in Tables 6-178-2 and 6-178-3. Only Arsenic was detected in soil samples above August 1994 Residential Use PRGs. Groundwater samples collected in August 1987 contained concentrations of cadmium, chromium, lead, nickel, and benzene above May 1993 USEPA and Cal-EPA MCLs. However, only benzene was detected above USEPA and Cal-EPA MCLs in groundwater samples collected in January 1988. Current monitoring well data are not available to fully characterize the impacts to Parcel 178.

Construction requirements for the new family housing project for fiscal year 1988 considered the soil data results of the ERM-West, Inc. March 1988 report. Based upon the investigation by ERM-West, the top six inches of soil from Parcels 178 and 184 was removed and replaced with a minimum of two feet of clean imported fill. Prior to construction of residences in this area, the Navy installed an impermeable barrier below building foundations to reduce potential exposure from impacted soil and groundwater. Building foundations for family housing units were underlain by a minimum of 2 inches of sand placed over a 40-mil thick impermeable synthetic barrier.

Four soil borings were installed on the western portion of Parcel 176 by ERM-West in 1987. Six soil samples were collected from these borings at depths of zero to five feet below ground surface. Only arsenic was detected above August 1994 Residential Use PRGs.

A screening-level sampling effort documented in a 1993 report by PRC indicated that a comprehensive soil vapor survey was performed for Parcels 176 and 177. In addition, soil, groundwater, and air samples

were collected throughout Parcels 176 and 177, including the railroad track area.

Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. The 1993 PRC report stated that TCA, PCE, TCE, and TPH were detected in Parcel 176 soil vapor at maximum concentrations of 0.1 µg/L, 100 µg/L, 1 µg/L, and 1,000 µg/L, respectively.

Subsequent, soil boring locations were chosen based on a 150-foot by 150-foot grid, locations of suspected chemicals of concern, potential exposure pathways, and soil vapor survey results. One hundred thirty two soil samples were collected from the soil boring locations. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides, PCBs, VOCs, and SVOCs. Samples from five of the soil borings were located on the western portion of Parcel 176. The 1993 PRC report indicated the presence of chromium, nickel, and mercury in these soil samples. The concentrations of these metals were all below USEPA's August 1994 industrial PRGs for soil.

One of the four air monitoring sample locations was located on the western portion of Parcel 176. According to the 1993 PRC report, arsenic and lead were detected in the air at concentrations of 0.54 and 51 ng/SCM, respectively.

Four monitoring wells are located on the western portion of Parcel 176. The 1993 PRC report for groundwater sampling results from these four monitoring wells indicated the presence of vinyl chloride, fluorene, naphthalene, and barium. The concentrations were slightly above USEPA and Cal-EPA December 1993 MCLs for most compounds. Any further groundwater investigation requirements will be defined after the screening-level investigation has been completed. The screening-level data collected under this program and the groundwater data to be gathered from new wells at adjacent parcels will be evaluated together to assess the need for any further groundwater investigation.

Current Investigations

Current investigations are being performed at the Fleet Industrial Supply Center, Oakland - Alameda Facility/Alameda Annex. Figure 6-Figure Z-16-2 shows the general site layout of this study area. The sample locations for these investigations are often within 500 feet of Parcels 179 and 180. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative

plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are completed, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area. Soil samples are proposed to be collected at depths of 0.0 feet, 0.5 feet, 2.0 to 2.5 feet, 5.0 to 5.5 feet, and one directly above the soil/groundwater table interface.

Current and proposed boring and monitoring well locations are illustrated in Figure 6-Z16-3 of the Zone Analysis Plan for Zone 16. A total of seven monitoring wells and nine borings are currently being installed throughout the study area. Three of the seven monitoring wells (S45, S46, and S47) are located within Zone 16. The three monitoring wells are within 500 feet of Parcel 179 and 180. None of the Phase II-C soil borings are located in Zone 16.

Current results of unvalidated data from soil samples taken in the vicinity of Parcels 179 and 180 are summarized below. The three new wells are located northeast of Parcels 179 and 180 in Parcel 181 as illustrated on Figure 6-181-1. Several compounds were detected in soil samples from these three monitoring well locations including VOCs, SVOCs (including PAHs), TPH, and metals.

VERSAR, Inc. indicated that preliminary soil sampling results at monitoring wells S45, S46, and S47 detected high benzene concentrations at the former wetlands crust (10,000 µg/kg benzene detected at boring S46 at a depth of 16 feet bgs); however analytical results were not available to confirm this assertion. The concentration of benzene in the soil sample at S45 at a depth of 16 feet bgs and S47 at a depth of 17.5 feet bgs were 4 µg/kg and 1,100 µg/kg respectively.

Most SVOCs were detected above both industrial and residential PRGs in soil samples from monitoring wells S45, S46, and S47 between 13.0 and 16.0 feet bgs. Most inorganic compounds were detected below residential August 1994 PRGs; however, arsenic was commonly detected above both industrial and residential August 1994 PRGs and chromium was commonly detected above residential August 1994 California modified PRGs. Most soil samples indicated the presence of aluminum above residential August 1994 PRGs.

TPH-gasoline, TPH-motor oil, and TPH-diesel were detected in soil samples from this study area. TPH-gasoline concentrations ranged from 0.750 mg/kg in monitoring well S45 at 13 feet bgs to 250 mg/kg in monitoring well S47 at 14.5 feet bgs. TPH-motor oil concentrations ranged from 7,100 µg/kg in monitoring well S47 at 5.5 feet bgs to 9,700 mg/kg in monitoring well S47 at 14.5 feet bgs. TPH-diesel

concentrations ranged from 20 mg/kg in monitoring well S47 at 16 feet bgs to 2,500 mg/kg in monitoring well S47 at 14.5 feet bgs.

An abandoned 12,000-gallon underground storage tank (Tank AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the NSC Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 0.50 mg/kg to 11,000 mg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

George P. Miller Elementary School

The George P. Miller Elementary School Building (the school) was constructed between 1975 and 1981 and has served as a public elementary school (Figure 6-179-1) since that time. The school is a one-story building constructed with a concrete floor/foundation and a composite roof. The school covers approximately 22,500 square feet and is in good condition. The space occupied by the building was formerly an open space used for storage, parking, and residential housing.

Utilities located within and immediately surrounding the school include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. No environmental permits appear to have been issued for this building.

Cleaning agents and solvents are documented to have been used in the building and stored in the janitor's room in quantities totaling approximately 110 gallons. Other chemicals including toner, duplicating fluid, glue, and paints are also stored in small quantities throughout the school. The disposition of the used chemicals is not known. No staining was noted in the school during the site inspections or the EBS review.

The building is equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near the school.

Building 258

Building 258 was constructed in 1985 and has served as a child care center (Figure 6-180-1) since that time. This building is in good condition. Building 258 has ten classrooms; there is no other available information about the center's construction. There is a wood, modular structure located east of the main building that is used as an office and lending library. The space occupied by Building 258 was formerly open space used for storage and parking between 1963 and 1981. It is not immediately clear from aerial photographs whether the parking/storage area was paved, or consisted of bare ground. Prior to this time the parcel area was part of a residential housing development. The housing was demolished sometime between 1958 and 1963.

Utilities located within and immediately surrounding Building 258 include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for this area.

Less than four gallons of pesticides (drione, ficam W, diazinon 4E, bait blocks), cleaning solvents, and bleach were stored in the building at the time of visual inspections. These chemicals were found in the janitor's closet. Approximately twelve gallons of degreaser, floor polish, and concentrated cleaner were documented during the site inspection. Copier toner is located in the modular office located east of the main building. The process employed at this building for disposing of chemical waste is unknown.

Review of site inspection data and historical records indicates that no documented spills have occurred on this parcel, and no staining was noted during the site inspection.

There is no available information pertaining to an HVAC system in Building 258. The building's water supply was found to contain high levels of lead between 1987 and 1988. Filters are currently used and changed every six months to reduce lead levels in water. Floor tile in the building was sampled and tested for asbestos; none was detected. No incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 258.

Open Space I

Open Space I covers approximately 40 percent of the parcel, and consists of the open space in Parcel 179. In general, Open Space I is used as a

playground. Historically, Open Space I was used for vehicle parking, storage, and residential housing.

The ground surface of Open Space I is almost completely paved. However, two "play pits" containing bark chips are located immediately east of the school building. Most of the paved area is surfaced with asphalt. The pavement is in good condition. Utilities located within and immediately surrounding the open space on Parcel 179 include underground gas, sanitary sewer, storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space include recreational activities and vehicle parking. No chemicals are documented to have been stored in Open Space I. Two oil-filled transformers on poles are located near the northeast corner of the school building.

No documented spills have occurred in the open space. The only staining noted during the site inspection is a stain located along the base of the brick wall near the southeastern corner of the school. This stain is approximately four feet long. Minor staining related to vehicle parking was also noted in the asphalt parking lot north of the school. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near the school.

Open Space II

Open Space II covers approximately 30 percent of the parcel, and consists of the open space in Parcel 180. In general, Open Space II is used for parking. A playground and a small landscaped area are also located in this open space.

One pole-mounted transformer is located on Open Space II. It was observed along the western edge of the parcel. The ground surface of Open Space II is 80 percent paved and 20 percent unpaved. Approximately 50 percent of Open Space II is surfaced with asphalt and 40 percent is concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with landscaping. A storage shed located in front of the center is used to store earthquake supplies.

Numerous buildings were formerly located on Open Space II. Parcel 180 was formerly used for residential housing (prior to 1963), with approximately 60 percent of Parcel 180 existing as grassy and landscaped open space at that time. Utilities located within and immediately surrounding this open space include underground

natural gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for processes occurring within this open space.

No incidents such as fires, mishaps, or flooding are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcels 179 and 180 are bounded by Parcels 178 to the south, west, and east, and Parcel 181 to the north. Parcels 178 and 181 are currently residential areas. Parcel 176 is part of the Scrapyard IR Site and is located approximately 150 feet southwest of Parcel 179. Activities of concern on Parcels 176 include storage and disposal of hazardous substances. Previous investigations on Parcels 176 and 178 indicated the presence of heavy metals in the soil and groundwater, and benzene in the groundwater. Current investigations on Parcel 181 indicate the presence of benzene in the soil at the wetlands crust.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 179 and 180, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-179-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps at this parcel: asbestos, lead-based paint, transformers, radiological considerations, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial

TABLE 6-179-2

Summary of Data Gaps
NAS Alameda Parcel 179 & 180

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 179 or Parcel 180.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located 150 feet to the east of Parcel 179. Additional subsurface investigation relative to the Scrapyard IR Site is ongoing.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse), Parcel 181 (Residential) and Parcel 178 (Residential) indicate the presence of benzene, vinyl chloride, fluorene, barium, and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Filled wetlands.
Potential Parcel-Specific Release Areas	• Open Spaces I and II may have been impacted by activities on Parcels 176 and 177 (the Scrapyard IR Site), and the filled wetlands. • The School Crawl Space may have been impacted by accumulation of VOCs from the filled wetlands.

TABLE 6-179-2

Summary of Data Gaps
NAS Alameda Parcel 179 & 180

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

hygiene (IH) sampling is required for Parcels 179 and 180 because no industrial buildings are present.

As noted earlier, Parcels 179 and 180 have, and previously had open space areas that are or were unpaved or landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 179 and 180 were previously occupied by wetlands, and may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-179-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcels 179 and 180 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Spaces I and II): This target area may have been impacted by activities at adjacent Parcels 178 and 181, nearby Parcels 176 and 177 (the Scrapyard IR Site), and the filled wetlands. The target area covers approximately 130,000 square feet. This target area has been classified as having a potential likelihood of impacts.

Three surface soil samples and three soil vapor samples will be collected from three locations in the grassy or unpaved areas of Parcel 180. A total of four surface soil samples and four soil vapor samples will be collected from four locations in the grassy and paved areas of Parcel 179. One soil vapor sample will be collected at the boundary between Parcels 179 and 180 to the west of the George P. Miller Elementary School. Two additional soil vapor samples will be collected on the north and south sides of the George P. Miller School's building foundation on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

- Target Area 2 (The School Crawl Space): This target area may have been impacted by the accumulation of VOCs that may have off-gassed from the filled wetlands. The target area covers approximately 22,500 square feet. This target area has been classified as having a potential likelihood of impacts. A minimum of four environmental air samples will be collected from the crawl space below the school on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

The following zone-wide target area was identified on Parcel 172 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. VOC sampling has been addressed as a zone-wide issue for these parcels. As an extra level of caution, VOC sampling is also being addressed as a parcel-specific isssue for these parcels.

Screening-Level Investigation

Three screening-level techniques will be employed to assess conditions in the target area and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), and air sampling (SOP 22). Table 6-179-1 summarizes screening-level sampling and analysis for the parcel-specific target area. Seven surface soil, ten soil vapor, and a minimum of four environmental air samples will be collected from the locations shown on Figure 6-179-1.

All soil vapor samples will be analyzed in the field for VOCs. All surface soil samples will be analyzed at a contract laboratory for TPH,

PCBs, SVOCs, pesticides, and metals (including Chromium VI). All air samples will be analyzed at a contract laboratory for the same suite of VOCs that are analyzed for soil vapor samples. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Follow-up air sampling of the school crawl space will be performed in the summer season to determine if seasonal temperature increases affect the potential volatilization and accumulation of VOCs in the crawl space. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-181

PARCEL 181 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 181 at NAS Alameda (Figure 6-181-1). The parcel, which is located in the northeastern portion of the base, is approximately 29 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Three parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil vapor sampling. Table 6-181-1 provides the complete list of samples and analyses prescribed by this plan. This PEP has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 181, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 181, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-181-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

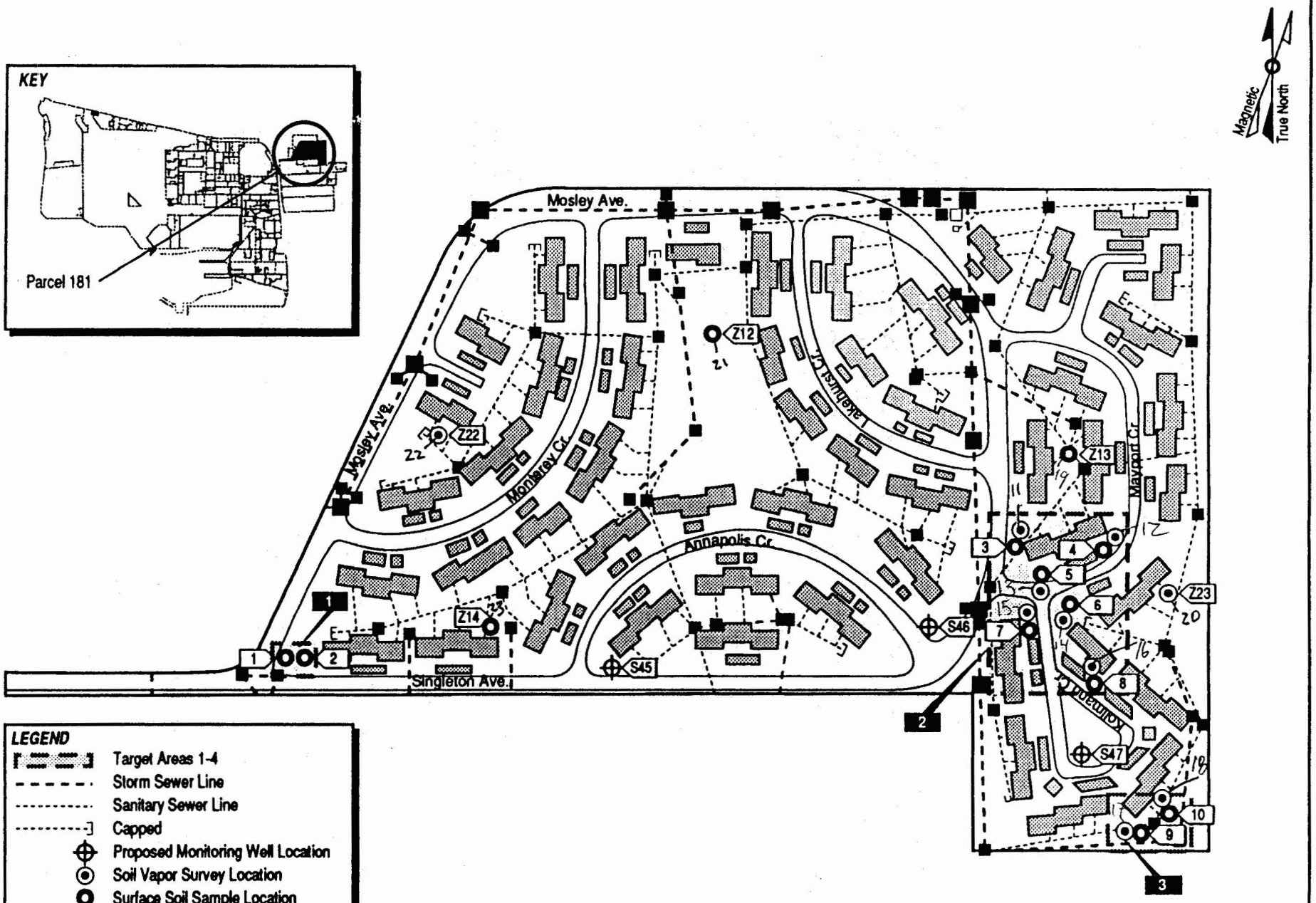


Figure 6-181-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/08.16.94B

SENSITIVE

TABLE 6-181-1

Summary of Recommended Samples
NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
181-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals	XRF
181-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals	XRF
181-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Metals	CLP RAS
181-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Modified EPA 8015, CLP RAS
181-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-8-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Modified EPA 8015, CLP RAS
181-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, Metals	Test Kits, XRF
181-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
181-10-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, Metals	Test Kits, XRF
181-10-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, Metals	Modified EPA 8015, CLP RAS
181-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
Z16-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS

TABLE 6-181-1

Summary of Recommended Samples

NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-22-0-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-23-0-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 51 buildings and one structure (a sanitary sewage pump station) cover approximately 30 percent of the parcel (Figure 6-181-1). The remaining 70 percent is open space. Aerial photographs from 1947 and 1958 show an area covered with large structures and a configuration of housing units that is different than the current configuration of housing units. These former housing units were reportedly City of Alameda housing projects. The use of the large structures is unknown. Between 1958 and 1963, the housing units at the east end of Parcel 181 were razed, yielding a large open space. In 1969, the remainder of the older housing units were demolished and the present configuration of housing complexes and surface streets was constructed. Sewer lines are present on this parcel and are shown on Figure 6-181-1.

Parcel 181 is located immediately northwest of Parcel 176, which together with Parcel 177, comprises an Installation Restoration (IR) Program site (the Scrapyard). The IR site is part of the Fleet Industrial Supply Center (FISC) Oakland, Alameda Annex, and not part of NAS Alameda. Current investigations are being performed at this facility. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Three monitoring wells (S45, S46, and S47) are currently being installed on Parcel 181 by the Navy IR contractor as part of the Phase IIC investigation at the Scrapyard IR Site (Figure 6-181-1). Preliminary soil sampling results at these monitoring wells indicate elevated benzene concentrations at the depth of the former wetlands crust (10,000 µg/kg benzene detected at 16 ft below ground surface in boring S46).

An abandoned 12,000-gallon underground storage tank (Tank AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the FISC Alameda Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 0.5 mg/kg to 11,000 mg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Multiple-Unit Housing

The multiple-unit housing presently on-site was constructed in 1969 and have served Navy personnel and their dependents (Figure 6-181-1). These buildings are generally in good condition. The buildings are two stories tall, constructed of stucco walls, and feature composition tar and gravel roofs. Each complex covers approximately 5,400 to 7,200 square feet.

Utilities located within and immediately surrounding these buildings include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Site inspections, interviews, and a review of historical records, and permits do not suggest that these buildings were used for any significant type of industrial purpose; however, a 1966 aerial photograph shows a stained area on the large open space in the eastern portion of the parcel. This area is currently occupied by housing. The source and composition

of this stain cannot be determined from the aerial photograph. The aerial photographs from 1947 through 1963 also show a collection of larger buildings that do not appear to be housing. These building occupy the eastern half of the parcel. Because detailed information regarding the construction and usage of these buildings is unknown, the former occurrence of industrial processes within the buildings cannot be excluded.

Site inspections of this parcel did not include the interior of housing complexes per instructions provided by the Navy. In addition, because this parcel is exclusively residential, industrial hygiene issues (other than potential ACM or lead-based paint) are not a concern. It is important to note that documents show that two samples collected from Singleton Avenue 103(A) and 2002 Monterey Circle contained lead at concentrations of 9,440 parts per million (ppm) and 47,100 ppm, respectively.

Open Space

The open space covers approximately 70 percent of the parcel. Approximately 20 percent of the open space is paved with asphalt and concrete in good condition. The remaining 80 percent is unpaved and covered with grass.

One structures is located within the open space: Facility 591, a sanitary sewage pump station. Facility 591 is located along the northern edge of the parcel near the southeast corner of Estuary Park. This pump station has a capacity of 1,000 gallons per minute. No chemical storage has been documented for this structure.

Utilities located within and immediately surrounding this open space include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. Pole-mounted transformers are also located within the open space.

No chemicals are documented to have been stored in the open space. Also, no spills reports were found during document review. No staining other than typical staining related to vehicle parking was noted during the site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified

any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 181 is bounded by Parcels 178, 180, 179, and 176 to the south, Parcels 182 and 183 to the west and north, and by the FISC Oakland, Alameda Facility to the east.

Several areas adjacent to Parcel 181 may be sources of potential chemical migration. To the southeast of Parcel 181, Parcels 176 and 177 (the Scrapyard) have been identified collectively as an IR site. This site was used as an airport facility in the 1930s and was converted to its present use in the 1950s. Currently, processes at the Scrapyard include the handling and storage of old electrical equipment, office furniture, aircraft parts, and junked automobiles. Previous site investigations have identified the presence of metals, VOCs, PCBs, and PAHs in the soil, and benzene, naphthalene, barium, and cadmium in the groundwater (see the PEPs for Parcels 176 and 177).

Parcel 178 comprises the former warehouse area, which was included in the above-mentioned site investigations. Soil samples in the northern part of Parcel 178 contained elevated concentrations of nickel and chromium. Benzene and naphthalene were also detected in the groundwater samples collected in this area.

The FISC Oakland (previously the Naval Supply Center (NSC) Oakland) Alameda Facility is situated directly east of Parcel 181. Site inspection data revealed that aircraft engine containers, 55-gallon drums, JP-5 fuel storage tanks, diesel generators, and air compressors were stored at this facility. These items are located immediately adjacent to the northeastern and eastern boundaries of Parcel 181.

If the continuing investigations at any of these nearby sites show a cause for concern at Parcel 181, than additional sampling on Parcel 181 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 181, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown

in Table 6-181-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 181 because no industrial buildings are present.

As noted earlier, Parcel 181 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. Three parcel-specific and two of the three zone-wide target areas were identified at this parcel based on the potential release areas described above and listed in Table 6-181-2.

- Target Area 1 (Southwest Area): Based on soil sampling results in the northern portion of Parcel 178 (former warehouse area), which abuts the southwestern boundary of Parcel 181, elevated concentrations of metals may also be present in Target Area 1. This area has been classified as having a potential likelihood of impacts. Two surface soil samples will be analyzed for metals. Samples to be collected in Target Area 1 are listed in Table 6-181-1.

- Target Area 2 (Southeast Area): Based on stains that were observed in a 1966 aerial photograph, six locations in Target Area 2 will be sampled for VOCs, TPH, and metals. Although the staining was approximately

TABLE 6-181-2

Summary of Data Gaps
NAS Alameda Parcel 181

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 181.
Installation Restoration (IR) Sites	• Scrapyard IR Site adjacent to Parcel 181.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 178, former warehouse area
Potential Zone-Wide Release Areas	• Landscaped Areas. • Former Wetlands.
Potential Parcel-Specific Release Areas	• Southwest Area (potential release of heavy metals contamination from Parcel 178-former warehouse area) • Southeast Area (Target Area 3, stains observed in 1966 aerial photograph) • Northeast and Eastern Border (adjacent to FISC Oakland storage area) • Southeast Corner (proximity to Parcel 176-Scrapyard IR site)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-181-2

Summary of Data Gaps
NAS Alameda Parcel 181

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

63,000 square feet in area, only six locations will be sampled because of subsequent housing development and accessibility issues. Samples to be collected in Target Area 2 are listed in Table 6-181-1.

- Target Area 3 (Southeast Corner): This corner of the parcel will be targeted as a potential area for VOCs, TPH, metals and PCBs due to its proximity to Parcel 176 and Parcel 177 (Scrapyard IR site). Only two locations will be sampled from this area. Samples to be collected in Target Area 3 are listed in Table 6-181-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 181 are part of this zone-wide target area. Three of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 181. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-181-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 181. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-181-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone-wide and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques are surface soil sampling (SOP 3) and soil vapor sampling (SOP 6).

Table 6-181-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 181. Eight soil vapor samples and ten surface soil samples will be collected from the parcel-specific target areas shown on Figure 6-181-1. Two soil vapor samples and three surface soil samples will be collected from the zone-wide target areas on this parcel as shown on Figure 6-181-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-182

PARCEL 182 EVALUATION PLAN

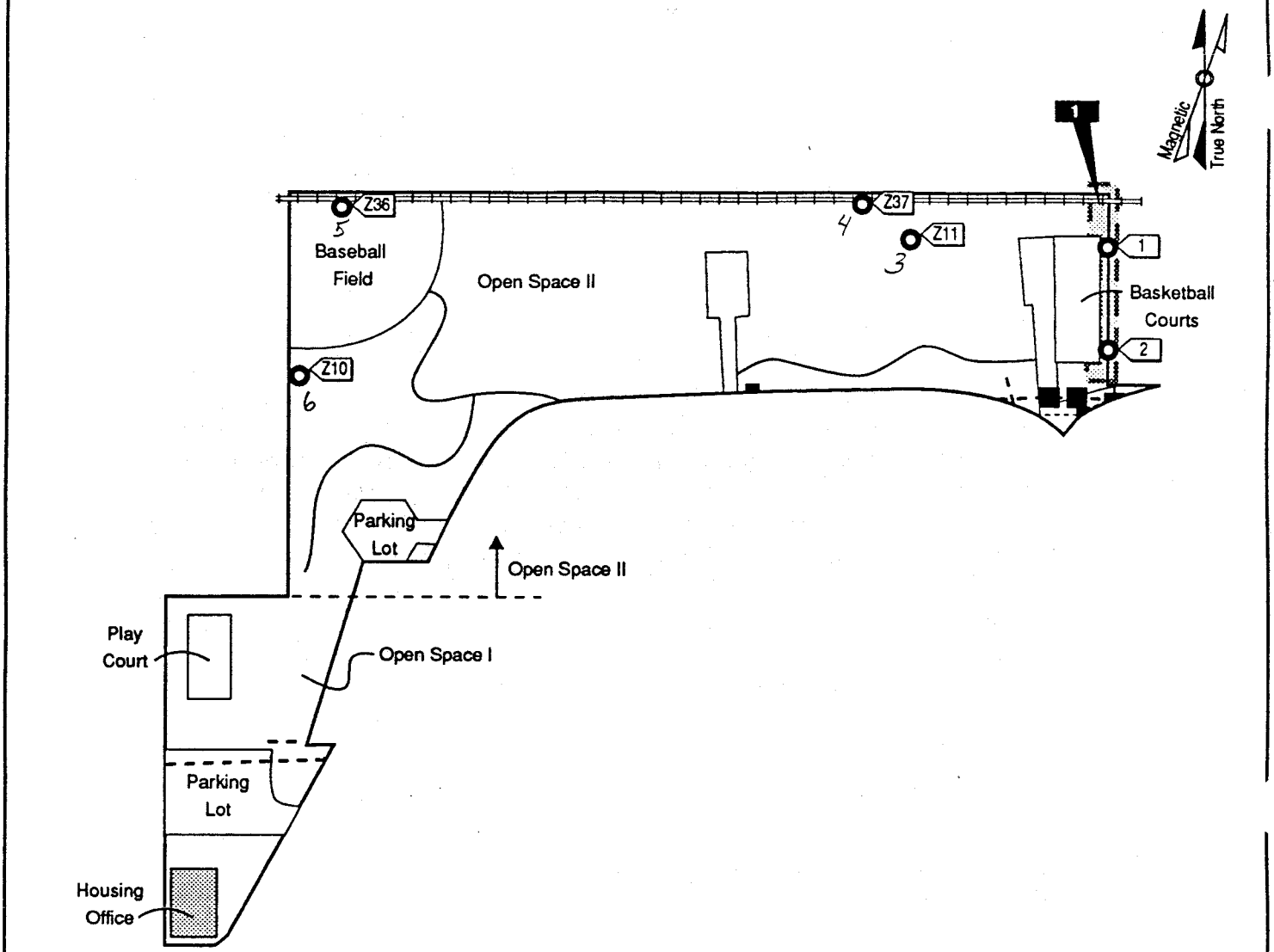
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 182 at NAS Alameda (Figure 6-182-1). The parcel, which is located in the northeastern corner of the base, is approximately 13 acres in size and is roughly shaped like an irregular triangle. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and three zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening level investigation. Table 6-182-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 182, historical activities are discussed below.

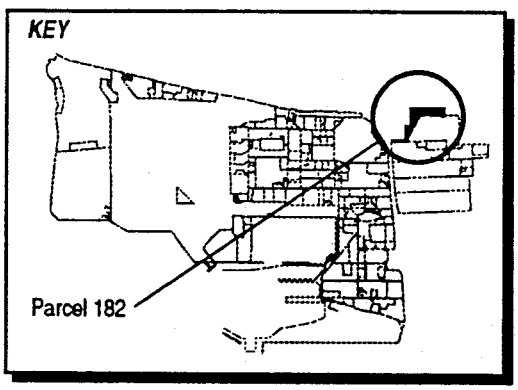
Background and Historical Activities

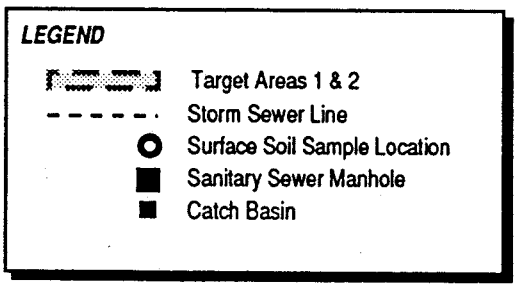
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 182, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together.







1"= 250'

Figure 6-182-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-182-1

Summary of Recommended Samples
NAS Alameda Parcel 182

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
182-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	Test Kit, XRF
182-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	Modified EPA 8015, CLP RAS
182-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	Test Kit, XRF
Z16-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-36-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-36-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-37-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-37-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS

* The suggested location for the Zone 16 Target Area 3 confirmation sample is found in Parcel 174 and 184. The actual location will depend on field analytical results for this zone-wide target area.

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 534) covers less than five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as the housing office building and related support facilities. This was a residential area with barracks from at least 1947 to 1966. Numerous buildings and structures were formerly located on the parcel and were demolished and cleared sometime between 1966 and 1970. Sewer lines are present on this parcel and are shown on Figure 6-182-1.

Parcel 182 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 182 and specific data regarding potential chemical occurrence are not available.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations

may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 534

Building 534 (PWCSFB Housing Office) was constructed between 1990 and 1992 and has served as office space since that time (Figure 6-182-1). This building is in good condition. There is no available information regarding the construction of the Housing Office.

Utilities located within and immediately surrounding Building 534 include underground gas, sanitary sewer, storm sewer, telephone, water, and electrical lines. A transformer associated with Building 534 is present on the parcel. This transformer appeared to site reviewers to have been recently placed (i.e., within the past five years). It is pad-mounted and contained within a metal case. No leakage was noted.

Information collected during the EBS indicates that activities conducted within this building included office type work. Approximately six gallons of cleaners, disinfectants, and vandal remover compounds are documented to have been stored in the janitor's closet. It is unknown how the disposal of used chemicals is accomplished in Building 534. There is no documentation of spills in this building. No staining was noted in the building during the site inspection.

No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Building 534. Potential radiological hazards do not appear to be of concern in this building.

Open Space I

The open space covers over ninety-five percent of the parcel. Open Space I is defined as the recreation area north of Mosley Avenue (Estuary Park). This space takes up approximately 75 percent of the parcel. Open Space I is used for grassy areas, a baseball field, picnic areas, a sport court, and basketball courts. Five percent of the ground

surface of Open Space I is paved with asphalt. Ninety-five percent of the area is unpaved. The paved area consists of basketball and sports courts. The unpaved areas of Open Space I are covered with grass and minor amounts of bare soil. The vegetation is healthy and no stains were observed in the area.

Structures located within Open Space I include Sewage Lift Station 7, along the eastern edge of the parcel, and an abandoned sewage lift station in the northeast corner of the parcel. Painted bleachers were noted on the baseball field, in addition to two control boxes associated with the irrigation system.

Several buildings were formerly located on this open space when it was part of the barracks area. The barracks existed on the parcel from at least 1947 (earliest aerial photograph) to 1966, and were demolished between 1966 and 1970. Utilities located within and immediately surrounding Open Space I include natural gas, sanitary sewer, storm sewer, water, and electrical lines.

An aboveground storage tank (250-gallon capacity) is present off-site to the north of Parcel 182. The tank has a flammable materials label on it. There was a floating object in the estuary on the day of the site inspection; it appeared to be a 10,000-gallon underground storage tank.

No chemical storage, stains or spills are documented to have occurred within Open Space I. No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within or near Open Space I.

Open Space II

Open Space II covers approximately 20 percent of the parcel. Open Space II is defined by the area surrounding and immediately north of Building 534. Open Space II is a support facility for Building 534. The ground surface of Open Space II is 90 percent paved and 10 percent unpaved. Approximately 60 percent of this open space is surfaced with asphalt (parking lot) and 30 percent is covered with concrete (sidewalks). The pavement is in good condition. The unpaved area in Open Space II is covered with landscaping. Structures located within this open space include a small storage locker labeled "Self Help Store."

Several buildings were formerly located on this open space when it was part of the barracks area. The barracks existed on the parcel from at least 1947 (earliest aerial photograph) to 1966, and was demolished between 1966 and 1970. Utilities located within and immediately

surrounding Open Space II include natural gas, sanitary sewer, storm sewer, water, and electrical lines.

No chemical storage, stains or spills are documented to have occurred in Open Space II. No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 182 is bounded by Parcels 183 and 181. Railroad tracks and the Todd Shipyard border Parcel 182 to the north, and the Fleet Industrial Supply Center (FISC) Oakland Alameda Facility borders Parcel 182 to the east. Parcels 181 and 183 are predominantly residential.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 182, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-182-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, a separate investigation is currently underway to address the asbestos, transformer, and lead based paint data gaps at this parcel. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 182 because no industrial buildings are present.

As noted earlier, Parcel 182 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e.,

TABLE 6-182-2

Summary of Data Gaps
NAS Alameda Parcel 182

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 182.
Installation Restoration (IR) Sites	• No IR sites are located on or within 500 feet of Parcel 182.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The soil and groundwater at the FISC Oakland Alameda Facility east of Parcel 182 may have been impacted by ongoing storage activities at the facility.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands. • Railroad Tracks.
Potential Parcel-Specific Release Areas	• Potential impacts from Alameda Facility along the eastern boundary.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-182-2

Summary of Data Gaps
NAS Alameda Parcel 182

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-182-2 are addressed Parcel 182 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in all three zone-wide target areas. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The two zone-wide target areas identified at this parcel are listed in Table 6-182-2.

- Target Area 1 (Eastern Parcel Boundary): The soil adjacent to the FISC Oakland Alameda Facility east of Parcel 182 may have been impacted by ongoing storage activities at the facility. This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-182-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 182 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 182. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 182 are listed on Table 6-182-1.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 3 (Railroad Tracks): Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. Railroad tracks currently located along the northern boundary of Parcel 182 are part of this zone-wide target area. Two of the five samples proposed to be collected from this zone-wide target area are located on Parcel 182. The proposed zone-wide target area samples that are located on Parcel 182 are listed on Table 6-182-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-182-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 182. Seven surface soil samples will be collected from the locations shown on Figure 6-182-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-183

PARCEL 183 EVALUATION PLAN

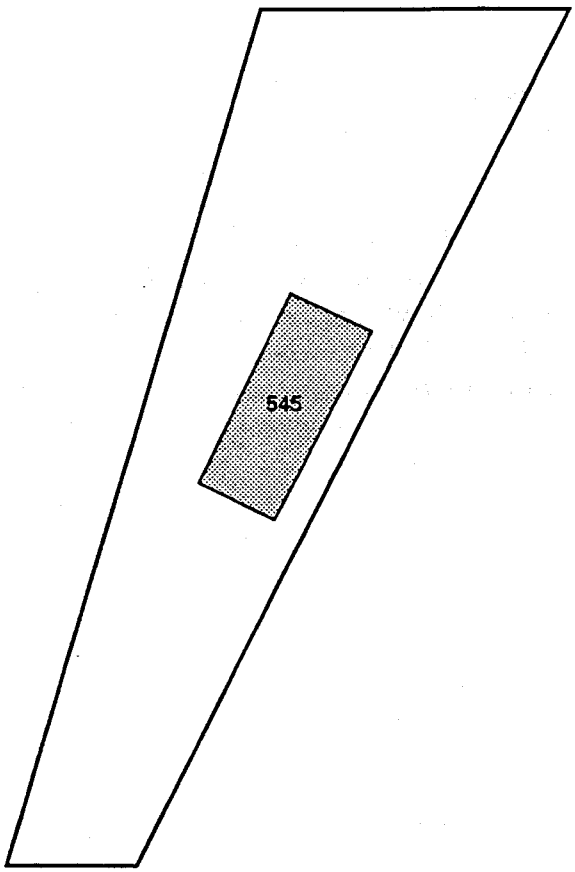
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 183 at NAS Alameda (Figure 6-183-1). The parcel, which is located in the northeast portion of the base, is less than one acre in size and is roughly triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two zone-wide target investigation area (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil gas sampling. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 183, historical activities are discussed below.

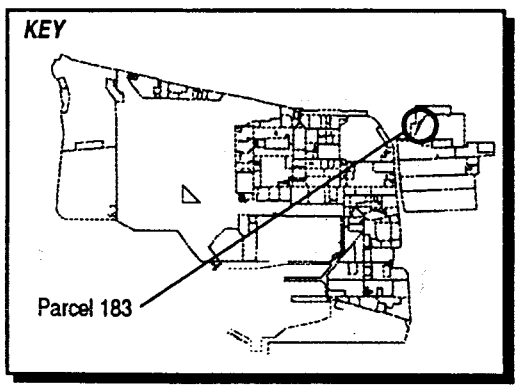
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 183, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies any Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the





1"= 60'

Figure 6-183-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 545) covers approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently in use as community center and temporary child care center. Aerial maps show that historically the site was part of a barracks area. The barracks were demolished between 1966 and 1970. Sewer lines are present on this parcel.

Parcel 183 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 183 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 545

Building 545 was constructed between 1970 and 1975. It is used as a community and child care center, and appears to have been used for these purposes since its construction. This building is in moderately good condition. Building 545 has wood-faced construction, a concrete foundation, and a composite roof. Building 545 covers approximately 1,800 square feet.

Utilities located within and immediately surrounding Building 545 include underground gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for this building.

Household cleaning agents and paint are documented to have been stored and used in Building 545. Less than 10 gallons of the cleaning agents and paint were stored in Building 545. One transformer is

present outside Building 545, on the south side. No documented spills have occurred in this parcel, and no staining was noted in or adjacent to Building 545 during the site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 545.

Open Space

The open space covers approximately 90 percent of the parcel. The open space is 20 percent paved and 80 percent unpaved. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass, landscaping and bare soil.

EBS information indicates that activities conducted within this open space are recreational and educational. Historically, the open space was used as a barracks area. It later became a vacant field.

Less that 15 gallons of paint and turpentine are documented to have been stored at the north side of the parcel, in a Conex box that rests on the grass. No spills are documented to have occurred in the open space. No staining was noted during the site inspection, except for vehicle staining in the parking area. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 183.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 183 is bounded by Parcels 181 and 182. The former Todd Shipyard is located to the northwest of Parcel 183. Environmental concerns associated with these areas include potential impacts associated with former shipyard activities.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 183, consistent with the objectives described in Section 1 of the

Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-183-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos, transformers, and lead-based paint. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 183 because no industrial buildings are present.

As noted earlier, Parcel 183 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-183-1 are addressed, Parcel 183 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas have been identified for this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped/Unpaved Areas): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

TABLE 6-183-1

Summary of Data Gaps
NAS Alameda Parcel 183

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 183.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 183.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.

TABLE 6-183-1

Summary of Data Gaps
NAS Alameda Parcel 183

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

In addition, data gaps pertaining to asbestos, lead-based paint, PCBs, and underground lines must be resolved before this parcel can be reclassified from BRAC Category 7.

SECTION 6-184

PARCEL 184 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 184 at NAS Alameda has been incorporated into the PEP for Parcel 178. Parcel 184 is a small parcel located entirely within Parcel 178. Parcels 178 and 184 have very similar histories and uses. Parcel 184 is located in the northeastern portion of the base and is less than one acre in size.

SECTION 6-212

PARCEL 212 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 212 at NAS Alameda has been incorporated into the PEP for Parcel 100. Parcel 212 is a small parcel located entirely within Parcel 100. Parcels 100 and 212 have very similar histories and uses. Parcel 212 is located in the northeastern portion of the base and is less than one acre in size.

SECTION 6-98

PARCEL 98 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 98 at NAS Alameda (Figure 6-98-1). The parcel, which is located in the northeastern corner of the base, is approximately 45 acres in size and is roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two parcel-specific and two zone-wide target investigation areas (target areas) were identified on this parcel. Sampling procedures called for in the screening-level investigation in these target areas include surface soil sampling and soil vapor sampling. Table 6-98-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 98, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 98, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also describes any areas of concern identified.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-98-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

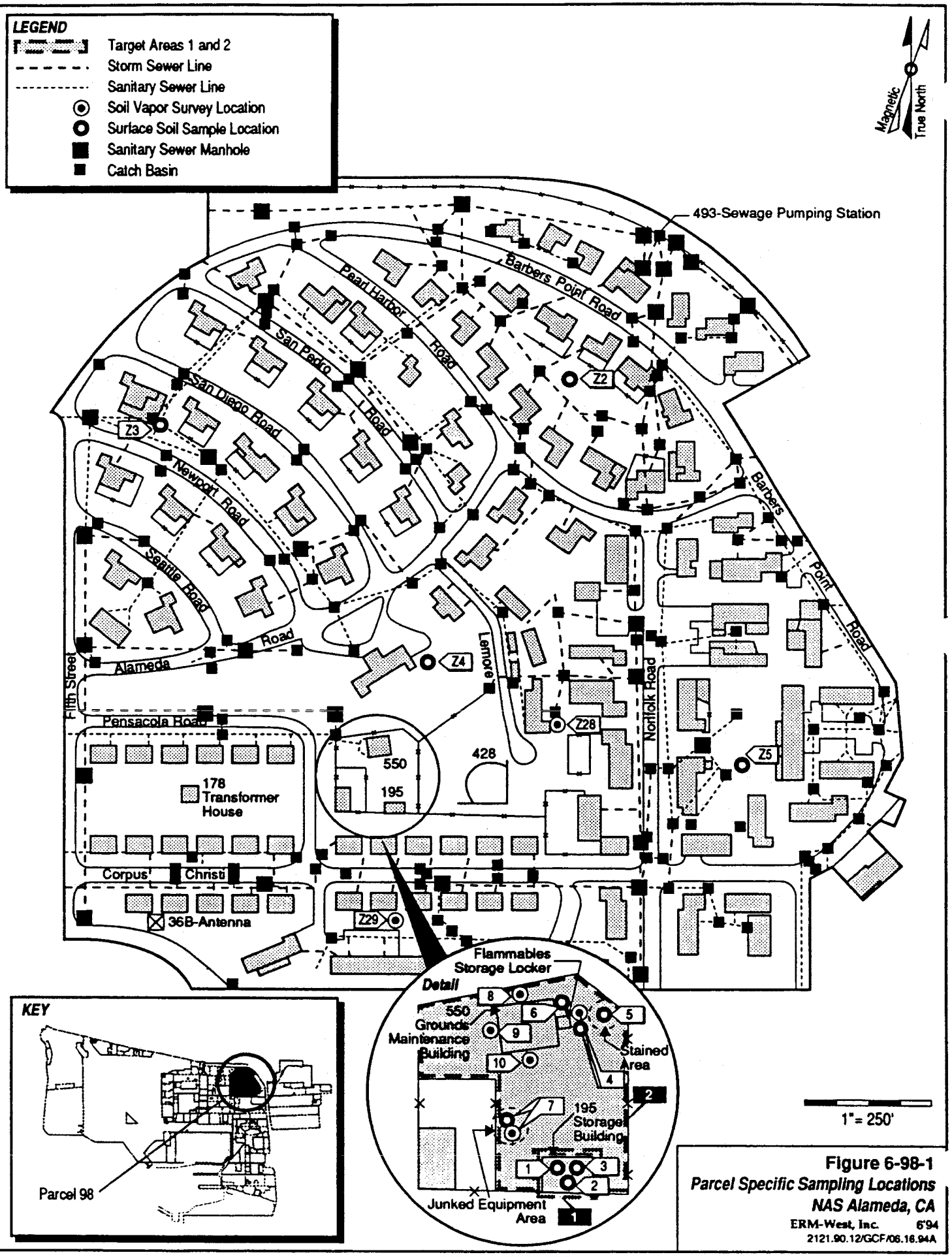


Figure 6-98-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.16.94A

SENSITIVE

TABLE 6-98-1

Summary of Recommended Samples
NAS Alameda Parcel 98

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
98-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	Modified EPA 8015
98-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	Modified EPA 8015
98-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Pesticides/PCBs, TPH	CLP RAS, Modified EPA 8015
98-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
98-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
Z16-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-28-3-V-S-DDMMYY	0.0-0.5'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-29-3-V-S-DDMMYY	0.0-0.5'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was composed of approximately 40 percent salt marsh and tidal flats and 60 percent inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1931; the ground level may have been raised slightly between 1931 and 1940. The fill initially sloped to the south but was later made nearly flat.

Currently, approximately 115 buildings cover approximately 20 percent of the parcel (Figure 6-98-1). The remaining 80 percent of the parcel is open space. In general, the parcel area is currently used for family housing. Approximately 20 buildings, which were mostly temporary barracks and associated facilities, were formerly located on the parcel in the area between Norfolk Road and Barbers Point Road. These buildings have since been demolished and replaced with multi-family residences. Sewer lines are present on this parcel and are shown on Figure 6-98-1.

Parcel 98 is located approximately 350 feet south of an Installation Restoration (IR) site (IR Site 20, Oakland Estuary). No previous investigations have been conducted at Parcel 98, and specific data regarding chemical occurrence at this parcel are not available.

It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and are not considered in this PEP. Results of radon tests conducted in two of the parcel buildings were negative. Interiors of individual housing units were not inspected during the EBS.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

The family housing units on the parcel were constructed in two phases. The first phase of construction took place in the early 1940s which included construction of most of the units along Pensacola Road and Corpus Christi Road, and the units in the area bounded by Alameda Road and Pearl Harbor Road. The remaining housing units on Parcel 98 (located along Barbers Point Road and Norfolk Road) were added after 1961, after barracks in that area were demolished. Utilities located within and immediately surrounding these buildings include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Building 550

This building is a metal maintenance shed with concrete floors. It covers approximately 1,000 square feet. The construction date of Building 550 is unknown. The building is currently occupied by a maintenance contractor who is supervised by PWC. The building and surrounding area are enclosed by a fence. The area has reportedly been used by grounds maintenance personnel for approximately 20 to 30 years.

Building 195

Building 195 is a metal Quonset hut used for storage of fertilizers and pesticides. It is approximately 40 feet long and 20 feet wide. The building has an earthen floor. The construction date of Building 195 is unknown.

Building 278

Building 278 is a small stucco transformer house. When the building was inspected during the EBS, the transformer had been removed from the concrete pad inside the building and was located on the ground approximately four feet east of the building. No evidence of transformer leakage was noted and no evidence of chemical storage or use was observed. The construction date of Building 278 is unknown.

Facility 493

This facility is a sewage pumping station that is located below ground beneath a concrete pad which is surrounded by a chain link fence. Assorted vent pipes, access ports, and other equipment extend above

the pad. The facility is also referred to as "sewage station 3." A sign at the facility indicates its number is 492 rather than 493, as shown on facility maps. No chemicals were observed to be present at the facility. The construction date of Facility 493 is unknown.

Structure 36B

This structure is the base of a former radio communications antenna that has been demolished. The construction and demolition dates of Structure 36B are unknown.

Facility 428

This facility is a baseball field with a backstop and a small set of bleachers.

Open Space

The open space of Parcel 98 has been subdivided into two open spaces. The first open space is the fenced area of the maintenance yard associated with Building 550. Eighty percent of this area consists of bare soil and gravel and 20 percent is covered with grass and weeds. The second open space area consists of the landscaped and paved portions of the parcel between the housing units. Utilities located within the open space include underground electrical, storm sewer, sanitary sewer, water, and natural gas lines. Pad-mounted and pole-mounted transformers are also located in the open space.

Interviews indicate that banned pesticides and possibly PCBs may have been used in grounds maintenance at NAS Alameda. This may have impacted landscaped areas of both parcel open spaces. In addition, the open space associated with Building 550 may have been impacted by chemical use and storage activities associated with maintenance operations. Three stained areas were noted outside Building 550. These stains are believed to be the result of leaks and spills of petroleum products and/or pesticides. The stains are located in the gravel area east of Building 550, around the flammables storage locker located at the exterior east wall of Building 550, and along the northern half of the east side of the Building 550 foundation. An additional concern in this open space is the presence of discarded equipment between Building 550 and Building 195. An abandoned 55-gallon waste oil drum was also observed in this area.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 98 is bordered by Parcels 62, 79, 80, 87, 88, 96, 97, 99, 100, 102, 103, 104, 105, 188, 189, and 900. The only activities of concern are the shipyard-related operations that occurred at the former Todd Shipyard (located northeast of Parcel 98, off-base).

No parcels contiguous with Parcel 98 are IR sites; therefore, no sampling is called for in this PEP in response to any IR sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 98, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-98-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, radiological concerns, and asbestos. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 98 because no industrial buildings are present.

As noted earlier, Parcel 98 has open space areas that are unpaved and landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides.

TABLE 6-98-2

Summary of Data Gaps
NAS Alameda Parcel 98

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 98.
Installation Restoration (IR) Sites	• IR Site 20 (Oakland Estuary) is located approximately 350 feet north of Parcel 98. Additional subsurface investigation relative to IR Site 20 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 900 (The former Todd Shipyard).
Potential Zone-Wide Release Areas	• Landscaped/Unpaved Areas. • Filled wetlands.
Potential Parcel-Specific Release Areas	• Maintenance Yard. • Building 195.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.

TABLE 6-98-2

Summary of Data Gaps
NAS Alameda Parcel 98

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• Other data gaps identified include assorted vent pipes and access ports at Facility 493 (sewage pumping station).

Potential concerns related to pesticides have been identified as a parcel-specific data gap for Parcel 98. Pesticide sampling for this parcel has been limited to Building 195 and the maintenance yard associated with Building 550 (See detail on Figure 6-98-1), based on the potential intensive use and storage activities at these locations and the stains observed during the site inspection. Pesticide sampling outside the intensive-use area described above has been addressed as a zone-wide issue for the parcels located in Zone 16. Pesticide sampling for the landscaped areas of Parcel 98 are described in the Zone Analysis Plan for Zone 16.

As noted earlier, Parcel 98 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 98; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-98-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 98 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also affected by two zone-wide target areas. This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 195): The unpaved floor of Building 195 may have been impacted by the storage and use of potentially hazardous substances including pesticides, PCBs, and petroleum products (gasoline, diesel fuel, and motor oil). This target area

covers approximately 950 square feet. The likelihood that environmental impacts have occurred in this target area is classified as suspect. Samples to be collected in Target Area 2 are listed in Table 6-98-1.

- Target Area 2 (Maintenance Yard): The Maintenance Yard covers approximately 60,000 square feet. The soil in the area along the eastern side of Building 550 may have been impacted by the storage and use of potentially hazardous substances related to grounds maintenance activities. Staining around Building 550 (Grounds Maintenance) indicates that releases have occurred. In addition, staining observed in the junked equipment area (abandoned vehicles, etc.), which is located to the southwest of Building 550, indicates that releases have occurred. Potential compounds of concern in Target Area 1 include pesticides, herbicides, PCBs, solvents, and petroleum products (gasoline, diesel fuel, and motor oil). The likelihood that environmental impacts have occurred in this target area is classified as potential. Samples to be collected in Target Area 1 are listed in Table 6-98-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 98 are part of this zone-wide target area. Four of the 21 proposed zone-wide surface soil samples for pesticides are located on Parcel 98. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. The proposed zone-wide target area samples that are located on Parcel 98 are listed on Table 6-98-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 98. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-98-1.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and soil vapor sampling (SOP 6), will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-98-1 summarizes screening-level sampling and analyses for the parcel's target areas.

Seven soil vapor samples and eleven surface soil samples will be collected from the locations shown on Figure 6-98-1 (note detail area). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The seven soil vapor samples will be collected at the following locations: five in the maintenance yard and two through-out the parcel (as part of the zone-wide sampling). The eleven of the surface soil samples will be collected at the following locations: three samples from the stained areas inside Building 195, one sample from the junked equipment area, one sample from the stained area east of Building 550, one sample from the stained area in front of the door of the flammables storage locker, one sample from the soil adjacent to the staining at the northeast corner of the Building 550 foundation, and four samples from the landscaped areas located throughout this parcel. These sample locations are shown in Figure 6-98-1. These locations are based on the evaluation of historic activities inside the buildings and in open spaces described above. Minor adjustments in the sample locations may be made in the field based on visual observations and accessibility. Samples will be analyzed for TPH and/or pesticides/PCBs and/or VOCs as indicated on Table 6-98-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface GeoProbe soil sampling (SOP 14), Hydropunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-99

PARCEL 99 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 99 at NAS Alameda (Figure 6-99-1). The parcel, which is located in the northeastern portion of the base, is 3.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific target areas were identified at this parcel. However, two zone-wide target areas encompass this parcel. One sample for each of the zone-wide target areas is to be collected at this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-99-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 99, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the open space and boundaries of Parcel 99, consistent with objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together.

TABLE 6-99-1

Summary of Recommended Samples
NAS Alameda Parcel 99

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was covered by tidal flats and/or wetlands. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, no buildings or structures are present on the parcel. The parcel is 100 percent open space. The parcel is presently in use as a playground and parking area. Three temporary barracks (Buildings 143, 145, and 147) were formerly located on the parcel and have since been demolished. Sewer lines are present on the parcel and are shown on Figure 6-99-1.

Parcel 99 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 99, and specific data regarding chemical occurrence at this parcel are not available; however, investigations have been conducted at Parcel 178 located to the east of Parcel 99 (east of Main Street). Specific data regarding chemical occurrence are available for Parcel 178.

It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential concern within the parcel open space are described in detail below.

Open Space

The open space covers 100 percent of the parcel. Ninety percent of the open space is landscaped with grass, bushes, and trees, and a park/playground area is present in the center of the parcel. The

remaining ten percent of the open space is paved with asphalt roadways and parking areas.

The parcel formerly contained part of several temporary barracks (Buildings 143, 145, and 147) that were built in the early 1940s and demolished in the late 1960s. The landscaped areas along the western side of the parcel appear to have been continuously maintained since the 1940s when they bordered the former barracks. The other landscaped areas of the parcel date to the late 1960s, after demolition of the barracks.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 99 is bounded by parcel 98 (housing area) to the north and west, and Parcel 100 (Navy Lodge) to the south. The northeastern and eastern borders of the parcel are bounded by the former Todd Shipyard and Main Street, respectively. To the east and south east of Main Street are Parcels 178 and 174 (former warehouse and scrap yard), respectively. While some compounds of concern have been detected at Parcel 178, the concentrations have been relatively low, and impacts to Parcel 99 from Parcel 178 are unlikely.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 99, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-99-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns. Sampling and imaging associated with sewer lines are also addressed

TABLE 6-99-2

Summary of Data Gaps
NAS Alameda Parcel 99

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 99
Installation Restoration (IR) Sites	• No IR sites are located on or within 500 feet of Parcel 99.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The former Todd Shipyard is located northeast of Parcel 99.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
Wetlands	• No wetlands identified as currently being located on-site.
Other	• No evidence of other data gaps identified.

separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 99 because no buildings are present.

As noted earlier, Parcel 99 had and currently has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) need to be sampled for pesticides. Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 99. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 99 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 99; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-99-2 are addressed and screening-level sampling results from the zone-wide target areas described below are compared to the appropriate screening levels, Parcel 99 may be reclassified from BRAC Category 7 to another BRAC.

Target Areas and Compounds of Concern

No parcel-specific and two of the three zone-wide target areas encompass this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual

observation and accessibility. The two zone-wide target areas identified at this parcel are listed in Table 6-99-2.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 99 are part of this zone-wide target area. One of the 21 proposed zone-wide surface soil samples for pesticides is located in Parcel 99. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-99-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. One of the 14 proposed zone-wide soil vapor samples for VOCs is located in Parcel 99. The sample was located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 99 are listed on Table 6-99-1.

Screening-Level Investigation

Several screening-level investigation techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase is necessary. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Table 6-99-1 summarizes screening-level sampling and analysis for the parcel's zone-wide target areas. One surface soil sample and one soil vapor sample will be collected from the approximate locations shown on Figure 6-99-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above on a higher sampling density as well as the following technologies not previously discussed: subsurface

GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

PARCELS 100 AND 212 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 100 and 212 at NAS Alameda (Figure 6-100-1). Parcel 212 is being considered concurrently with Parcel 100 because the histories and former uses of these parcels are very similar. Parcel 212 is completely contained within Parcel 100 (see Figure 6-100-1). The parcels, which are located in the northeastern portion of the base, are four acres in size and together are roughly rectangular in shape. These parcels have been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. One parcel-specific target investigation area (target area) and two zone-wide target areas encompass these parcels. No zone-wide target area samples are located on these parcels. Subsurface GeoProbe soil sampling will be used to accomplish the screening-level investigation. Table 6-100-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 100 and 212, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 100 and 212, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of these parcels was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, and 184.

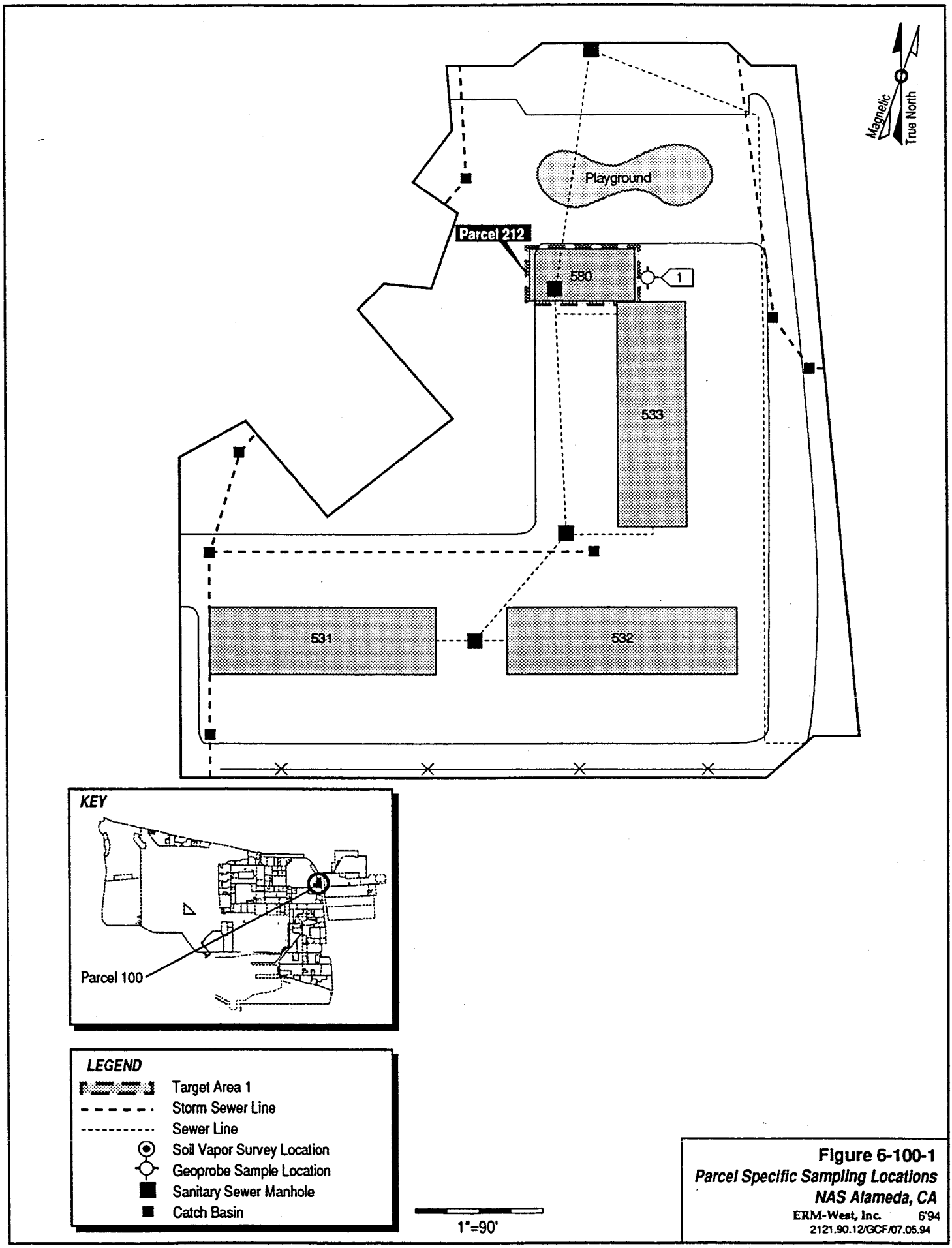


Figure 6-100-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-100 & 212 -1

Summary of Recommended Samples
NAS Alameda Parcels 100 & 212

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
100-1-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	VOCs, TPH	CLP RAS, Modified EPA 8015

This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in the early 1930s. Prior to this time, the parcel area was covered by tidal flats and/or wetlands. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, a Navy motel consisting of Buildings 531, 532, and 533 covers approximately 15 percent Parcel 100. The remainder (85 percent) of Parcel 100 is open space that is partially landscaped and partially paved. Parcel 100 formerly contained all or part of several temporary barracks (Buildings 139, 141, 148, and 149) built in the early 1940s and demolished in the late 1960s. Currently, two Conex boxes and a shed used by the adjacent Navy Lodge motel cover approximately five percent Parcel 212. The remainder (95 percent) of Parcel 212 is open space that is partially landscaped and partially paved. Parcel 212 formerly contained part of Building 141, a temporary barracks building built in the early 1940s and demolished in the late 1960s. Sewer lines on Parcels 100 and 212 are shown in Figure 6-100-1.

Parcels 100 and 212 are not located within 500 feet of any Installation Restoration (IR) Program sites. Previous investigations have not been conducted at Parcels 100 or 212; however, investigations have been conducted at Parcel 178 located to the east of Parcel 100 east of Main Street. Specific data regarding chemical occurrence are available for Parcel 178.

It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential

environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 531, 532, and 533

Buildings 531, 532, and 533 were constructed in approximately 1971. The buildings have always been used as the Navy Lodge, a 70-room motel operated by the Navy Exchange. These buildings are two-story buildings and are generally in good condition. The buildings are of wood frame construction with stucco exteriors. Each building covers approximately 10,000 square feet. As described above, barracks existed on the parcel from shortly after the area was filled until shortly before the motel buildings were built, therefore prior use of the parcel area is not of concern.

Utilities located within and immediately surrounding Buildings 531, 532, and 533 include underground sanitary sewer, storm sewer, water, natural gas, and electrical lines. Three pole-mounted transformers are located on the parcel northwest of Building 532. A total of less than 30 gallons (combined) of cleaning and maintenance supplies are stored in the laundry rooms and boiler rooms of the buildings.

Building 580 (Existing and Former)

The existing Building 580 is a Conex box with a roof vent used as a storage shed. The building is located on the west end of the parcel as shown on Figure 6-100-1. During the site inspection the building was observed to contain less than ten gallons of gasoline and two pounds of fertilizer. The age of this building is unknown. The building rests on a concrete pad that is the floor of a former dog kennel also known as Building 580. The concrete pad covers approximately 300 square feet. Underground sanitary sewer lines are located near the building. Drains observed in the concrete pad may lead to the sanitary sewer.

Building 2

Building 2 is a metal storage shed used for laundry supplies storage located on the north end of the former Building 580 pad. (Note that another Building 2 exists at the base. It is used as enlisted personnel barracks and is located on Parcel 45 in the central part of the base.) Approximately 50 gallons of corrosives and up to thirty gallons of cleaning supplies were observed to be stored in the building. The building covers approximately 100 square feet. The age of the building is unknown.

Building CHB-3

Building CHB-3 is a Conex box (no roof vent) located on the grass on the northwest corner of the parcel. Less than 10 gallons of paint were observed to be stored in the building. The age of the building is unknown.

Open Space

Parcel open space is 60 percent paved (with concrete sidewalks and asphalt parking areas). The remaining 40 percent of the open space is landscaped with grass, bushes, and trees. A playground area is present near the north end of Building 533. The landscaped areas along the western and southern sides of the parcel appear to have been continuously maintained since the early 1940s when they bordered the former barracks. The other landscaped areas of the parcel date to the early 1970s, after construction of the motel buildings.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcel 100 is bounded by Main Street, Avenue C, and Barber Point Road to the east, south, and northwest, respectively. Across the streets to the east is Parcels 178 (housing, former warehouse), and Parcels 98 (housing) and 102 (parking lot and commissary) are located to the west. Parcel 99 (playground/park) borders Parcel 100 to the north. While some constituents of concern have been detected at Parcel 178, the concentrations have been relatively low, and impacts to Parcels 100/212 from Parcel 178 are unlikely.

Parcel 212 is entirely contained within Parcel 100.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 100 and 212, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific

issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-100-2 must be addressed before these parcels can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at these parcels: transformers, lead-based paint, asbestos, and radiological concerns. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling appears to be required for Parcels 100 and 212 because no industrial buildings are present. However, the one-time compliance program will determine whether further sampling or cleanup measures are required within buildings before transfer or lease can occur.

As noted earlier, Parcels 100 and 212 previously had and currently has open space areas that were landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) need to be sampled for pesticides. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcels 100 and 212 were previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 100; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-100-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcels 100 and 212 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-100 & 212-2

Summary of Data Gaps
NAS Alameda Parcels 100 & 212

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 99
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcels 100 and 212.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The Todd Shipyard is located northeast of Parcel 100.
Potential Zone-Wide Release Areas	• Landscaped/Unpaved Areas. • Filled wetlands.
Potential Parcel-Specific Release Areas	• Buildings 2 and 580.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
Wetlands	• No wetlands identified as currently being located on-site.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Parcels 100 and 212 contain one parcel-specific target area and are affected by two zone-wide target areas. However, no zone-wide target area samples are located on these parcels. Sampling for the two zone-wide target areas is described in the Zone Analysis Plan for Zone 16. This subsection of the PEP discusses specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Buildings 2 and 580): Potential releases of TPH and VOCs from leaks or spills in or near these storage sheds is a concern in this area. This target area covers approximately 300 square feet and has been classified as having a potential likelihood of impacts. One subsurface GeoProbe soil sample will be collected from Target Area 1 as indicated in Table 6-100-1.

The following zone-wide target areas were identified on Parcel 100 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 1 (Landscaped/Unpaved Areas): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Subsurface GeoProbe soil sampling (SOP 14) is the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-100-1 summarizes the screening-level sampling and analysis recommended for the parcel-specific target area on Parcel 100. One subsurface GeoProbe soil sample will be collected from the parcel-specific target area on this parcel. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-103

PARCEL 103 EVALUATION PLAN

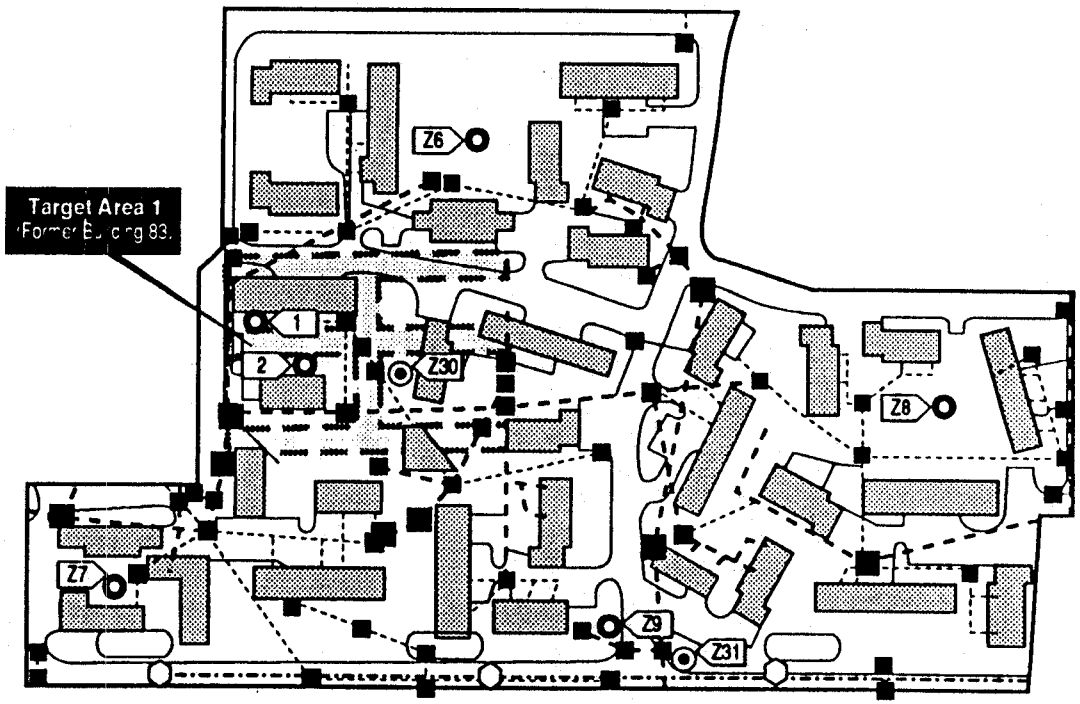
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 103 at NAS Alameda (Figure 6-103-1). The parcel, which is located in the central eastern portion of the base, is approximately 25 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one of the three zone-wide target investigation areas (target areas) have been identified on this parcel. Surface sampling will be used to accomplish the screening-level investigation. Table 6-103-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 103, historical activities are discussed below.

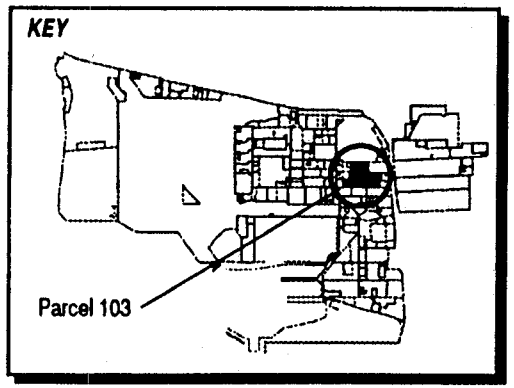
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 103, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the





LEGEND

- Target Area
- Storm Sewer Line
- Sewer Line
- Industrial Waste Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin

1" = 250'

Magnetic
True North

Figure 6-103-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-103-1

Summary of Recommended Samples
NAS Alameda Parcel 103

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
103-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
103-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	CLP RAS
Z16-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-30-0-S-V-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-31-0-S-V-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 34 houses cover approximately 50 percent of the parcel. The remaining 50 percent is open space. The parcel area is presently a residential area. Thirteen buildings and one structure were formerly located on the parcel and have since been demolished. The demolished buildings were used as barracks, an insect vector control office, a combat training pool and a baseball field. Sewer lines are present on this parcel and are shown on Figure 6-103-1.

Parcel 103 is located directly west of an Installation Restoration (IR) Program site (IR Site 7A, Navy Exchange Service Station). Previous investigations have been conducted at Parcel 103; however specific data regarding potential chemical occurrence are not available.

In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 83 (Demolished)

Former Building 83 was constructed in 1945 and served both as a barracks and a public works storage area for insect vector control (Figure 6-103-1). This building was demolished in approximately 1960. Former Building 83 was a two story building, constructed of wood and covered approximately 26,000 square feet.

Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. Pesticide disposal methods for that period are unknown. There are no documented spills within former Building 83.

Open Space

The open space covers approximately 50 percent of the parcel. The open space is 50 percent paved and 50 percent unpaved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass and landscaping.

A baseball field, constructed in 1945, was formerly located within the open space. The field was removed in approximately 1960.

Buildings 79, 80, 81, 82, 125, 126, 127, 128, 150, 157, 159 were formerly located in this open space. These buildings housed barracks and related activities and were demolished in approximately 1960. These buildings were two story buildings constructed of wood and covered approximately 25,000 square feet each. Building 160 was formerly located in this open space. It housed a combat training swimming pool and was demolished in approximately 1960. Building 160 covered approximately 25,000 square feet. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, and industrial sewer lines.

EBS information indicates that activities conducted within this open space included normal residential activities. No chemicals are documented to have been stored in the open space. There are no other spills or incidents documented for this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 103 is bounded by Parcels 98, 104, 105, 203, 110, 111, 197, 113, 112, and 102. Parcel 113 is IR Site 7A (Navy Exchange Service Station). If

the continuing investigations at the IR site reveal a cause for concern at Parcel 103, then additional sampling on Parcel 103 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 103, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-103-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 103 because no industrial buildings are present.

As noted earlier, Parcel 103 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., unpaved agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-103-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 103 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained within two of the three zone-wide target areas.

TABLE 6-103-2

Summary of Data Gaps
NAS Alameda Parcel 103

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 103.
Installation Restoration (IR) Sites	• IR Site 7A (Service Station) is located adjacent to the east boundary of Parcel 103. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Potential groundwater contamination migration from IR Site 7A.
Potential Zone-Wide Release Areas	• Pesticides may have impacted the long-term landscaped areas of this parcel. • Release from the Pacific Coast Oil Refinery may have impacted the former wetlands area.
Potential Parcel-Specific Release Areas	• Pesticides may have impacted the long term intensive use areas (i.e., storage and distribution areas, etc.) at Bldg. 83 on Parcel 103
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-103-2

Summary of Data Gaps
NAS Alameda Parcel 103

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Area of Former Building 83): Pesticides are documented to have been stored in a portion of former Building 83 from 1945 to approximately 1960. This target area covers approximately 26,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-103-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. Two of the 21 proposed zone-wide surface soil samples for pesticides are located within Parcel 103. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs is located in Parcel 103. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 103 are listed on Table 6-103-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level investigation techniques that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-103-1 summarizes screening-level sampling and analysis for the parcel's target areas. Two parcel-specific surface soil samples, four zone-wide surface soil samples, and four zone-wide soil vapor samples will be collected from the locations shown on Figure 6-103-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and

the QA/QC guidelines in Section 4. Surface soil sampling locations shown on Figure 6-103-1 are approximate.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-170

PARCEL 170 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 170 at NAS Alameda (Figure 6-170-1). The parcel, which is located in the northeast portion of the base, is approximately 34 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel; however, two of the three zone-wide target areas affect this parcel. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-170-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 170, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 170, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-170-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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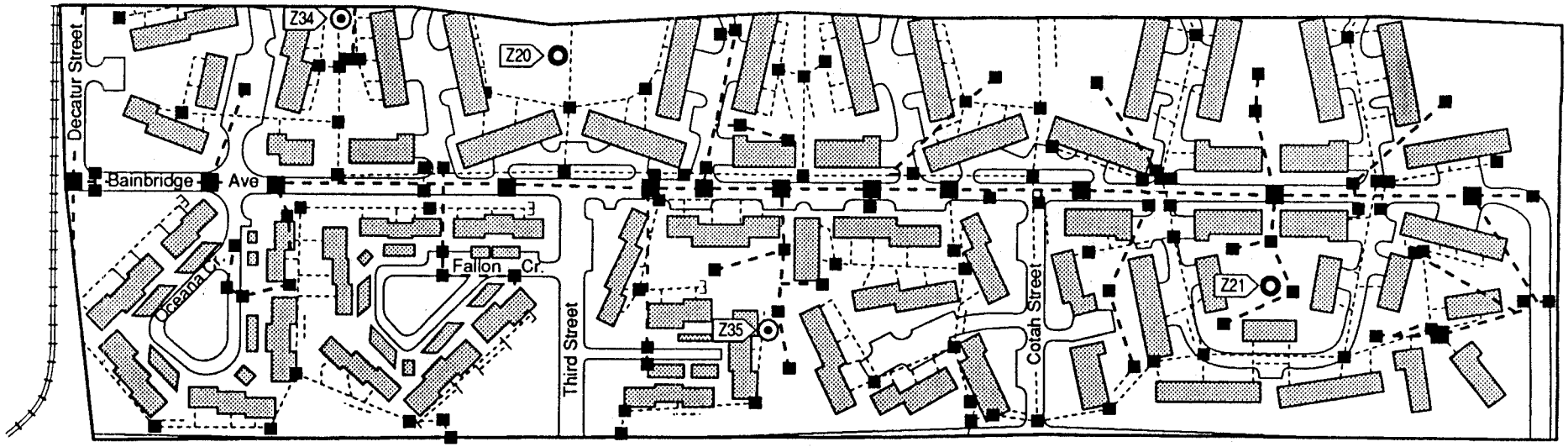
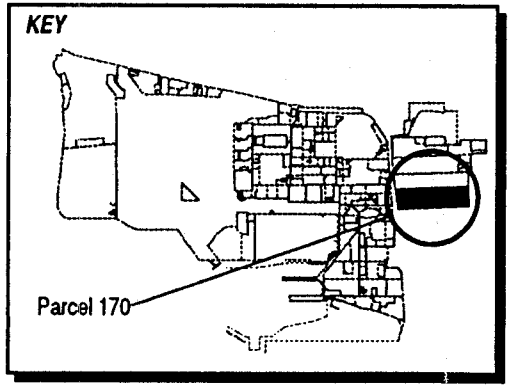
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

Figure 6-170-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.07.94

SENSITIVE

TABLE 6-170-1

Summary of Recommended Samples
NAS Alameda Parcel 170

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-20-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-21-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-34-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-35-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. This parcel is adjacent to Old Alameda Point, which was part of the original island. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, approximately 65 family housing units are located on the parcel (Figure 6-170-1). No industrial buildings are located on this parcel. These dwellings cover approximately 25 percent of the parcel. The remainder (75 percent) is open space. Based upon aerial photographs, temporary barracks were present on Parcel 170 prior to the early 1940s. These barracks were demolished and replaced with multifamily residences between the mid and late 1960s. Utilities located within and immediately surrounding the family housing and open space include underground natural gas, sanitary sewer, storm sewer, potable and fire protection water, and electrical lines.

Parcel 170 is not located within 500 feet any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 170, and specific data regarding potential chemical occurrence at this parcel are not available.

It is recommended that the zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Sewer lines present at this parcel are shown in Figure 6-170-1. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

Construction of the current family housing units on the parcel was completed by the fall of 1970. Based upon aerial photographs, the former barracks were constructed prior to late April 1942. The barracks on the eastern portion of the parcel were demolished prior to late July 1963. New family housing was constructed on the eastern side of the parcel by April 1966 and on the western side of the parcel by September 1970.

Open Space

Currently, the open space areas between family dwellings on Parcel 170, cover approximately 75 percent of the parcel. Open space areas are primarily covered by grass and weeds (70 percent), and secondarily covered by asphalt (20 percent) and concrete (10 percent) roadways. These open space areas are shown on Figure 6-170-1. The landscaped areas on this parcel have been landscaped since the early 1940s.

EBS information indicates that the activity conducted within this open space has consisted solely of residential housing. Minor stains in the open space and oil stains on roads and driveways are considered to be the result of normal vehicle traffic and parking. Transformers that may contain PCBs are also present. Railroad tracks associated with the Alameda Railroad are located on the western side of the parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 170 is bounded by Parcel 171 to the north. Activities of concern on this adjacent parcel are similar to those on Parcel 170. The Alameda Railroad runs along Main Street on the western border of this parcel. The railroad also runs on the southern side of Atlantic Avenue, which borders the southern boundary of Parcel 170. This segment of tracks most likely has not impacted Parcel 170. Private property is located to the east of Parcel 170.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 170. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-170-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: asbestos, transformers, radiological concerns, and lead-based paint. Sampling and imaging associated with underground sewer lines is also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 170 because no industrial buildings are present.

As noted earlier, Parcel 170 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate use areas (i.e. unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. No parcel-specific pesticide sampling has been proposed for Parcel 170; however, the ZAP for Zone 16 addresses potential pesticide concerns in landscaped areas on a zone-wide basis.

Once the data gaps in Table 6-170-2 are addressed and screening-level sampling results from the zone-wide target area described in the Zone Analysis Plan are compared to PRGs and background concentrations, Parcel 170 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas affect this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field

TABLE 6-170-2

Summary of Data Gaps
NAS Alameda Parcel 170

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 170.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 170.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 170 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 170. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 170 are listed on Table 6-170-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 170. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 170 are listed on Table 6-170-1.

In addition, data gaps pertaining to asbestos, lead-based paint, transformers, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and soil vapor sampling (SOP 6). Table 6-170-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcel 170. Two surface soil samples and two soil vapor samples will be collected from the locations shown on Figure 6-170-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6 -171

PARCEL 171 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 171 at NAS Alameda (Figure 6-171-1). The parcel, which is located in the northeast portion of the base, is approximately 24 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel, however two of the three zone-wide target areas have been identified that affect this parcel. Surface soil sampling and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-171-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 171, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 171, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-171-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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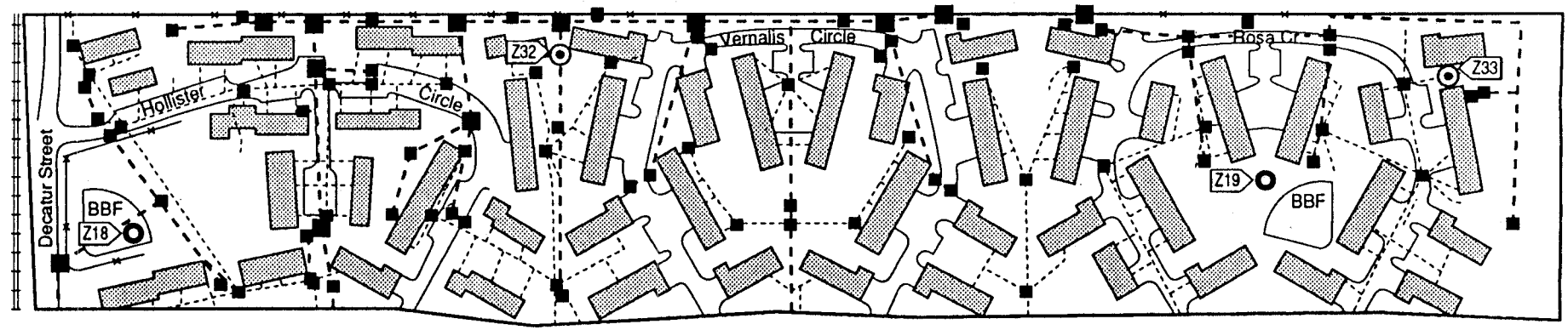
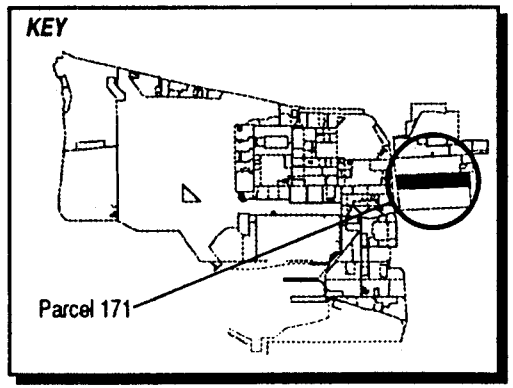
SENSITIVE





LEGEND

- Storm Sewer Line
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

Figure 6- 171-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90 ··· OS/07.07.94

SENSITIVE

TABLE 6-171-1

Summary of Recommended Samples
NAS Alameda Parcel 171

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-18-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-19-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-32-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-33-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was wetlands. This parcel is adjacent to Old Alameda Point. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, approximately 50 family units are located on the parcel (Figure 6-171-1). These dwellings cover approximately 20 percent of the parcel. The remainder (80 percent) is open space. Based upon aerial photographs, temporary barracks were present on Parcel 171 prior to the early 1940s. These barracks were demolished and replaced with multifamily residences between the early and mid-1960s. No industrial buildings are located on this parcel. Utilities located within and immediately surrounding the family housing and open space include underground natural gas, sanitary sewer, storm sewer, potable and fire protection water, and electrical lines. Sewer lines present at this parcel are shown in Figure 6-171-1.

Parcel 171 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 171 and specific data regarding potential chemical occurrence at this parcel are not available.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Family Housing

Based upon aerial photographs, the former barracks were constructed prior to late April 1942. The structures on the eastern portion of the parcel were demolished prior to July 1963. By April 1966, all of the new family housing had been constructed on the parcel.

Open Space

Currently, approximately 80 percent of Parcel 171 consists of open space between family dwellings. This open space area is primarily covered by grass and weeds (70 percent), and secondarily covered by asphalt (20 percent) and concrete (10 percent) roadways. This parcel presently has open space areas that have been landscaped since the early 1940s. These open space areas are shown on Figure 6-171-1.

Transformers that may contain PCBs are also present. Railroad tracks associated with the Alameda Railroad are located on the western edge of the parcel. EBS information does not indicate any evidence of spills in the open spaces.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 171 is bounded by Parcel 170 to the south, and Parcels 172 and 174 to the north. Activities on Parcel 170 are similar to Parcel 171. Activities of concern on the other adjacent parcels include hazardous material storage on Parcel 172, and storage and/or use of petroleum products, spray paint, paint thinner, corrosives, halogenated organic compounds, metals, petroleum products, and pesticides within buildings on Parcel 174. The Alameda Railroad runs along Main Street on the western border of Parcel 171. Private property is located to the east of Parcel 171.

Monitoring wells were installed on Parcel 172 (MW-10) and Parcel 174 (MW-12) as indicated in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area.* The Warehouse and Scrapyard Area (Scrapyard) is an IR site located on Parcel 176, and the site investigation has been extended beyond the Scrapyard boundaries. Prior to monitoring well installation, earlier investigations on these parcels included soil sampling. The monitoring well on Parcel 172 (MW-12) is approximately 50 feet north of the boundary between Parcels 171 and 172. Results of soil and groundwater data are summarized in Tables 6-172-2 and 6-172-3 in the PEP for Parcel 172. Concentrations of cadmium, chromium, lead, and nickel in groundwater exceeded 1993 MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. The previous and proposed screening-level investigations are discussed in the PEPs for Parcels 172 and 174. The data from these investigations will provide the necessary boundary conditions for Parcel 171. Ongoing follow-up sampling and radiological sampling at the Scrapyard IR site are being performed by the IR contractor.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 171, consistent with the objectives in Section 1 of the Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-171-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: asbestos, radiological concerns, transformers and lead-based paint. Sampling and imaging associated with underground

TABLE 6-171-2

Summary of Data Gaps
NAS Alameda Parcel 171

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 171.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 171.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse) indicate the presence of benzene and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current of former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

sewer lines is also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 171 because no industrial buildings are present.

As noted earlier, Parcel 171 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate use areas (i.e. unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no parcel-specific pesticide sampling has been proposed for Parcel 171. Pesticide sampling for landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-171-2 are addressed and screening-level sampling results from the zone-wide target area described in the Zone Analysis Plan is compared to PRGs and background concentrations, Parcel 171 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas affect this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 171 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 171. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 171 are listed on Table 6-171-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 171. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 171 are listed on Table 6-171-1.

In addition, data gaps pertaining to asbestos, PCBs, lead-based paint, underground lines, potential groundwater contamination migration, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) and soil vapor sampling (SOP 6) are the screening-level techniques that will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-171-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcel 171. Two surface soil samples and two soil vapor samples will be collected from the locations shown on Figure 6-171-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-172

PARCEL 172 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 172 at NAS Alameda (Figure 6-172-1). The parcel, which is located in the northeastern portion of the base, is approximately 2.5 acres in size and is roughly J-shaped. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and one parcel-specific target investigation areas (target areas) have been identified on this parcel; however, no zone-wide samples are located on this parcel. Soil vapor sampling will be used to accomplish the screening-level investigation. Table 6-172-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 172, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 172, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were

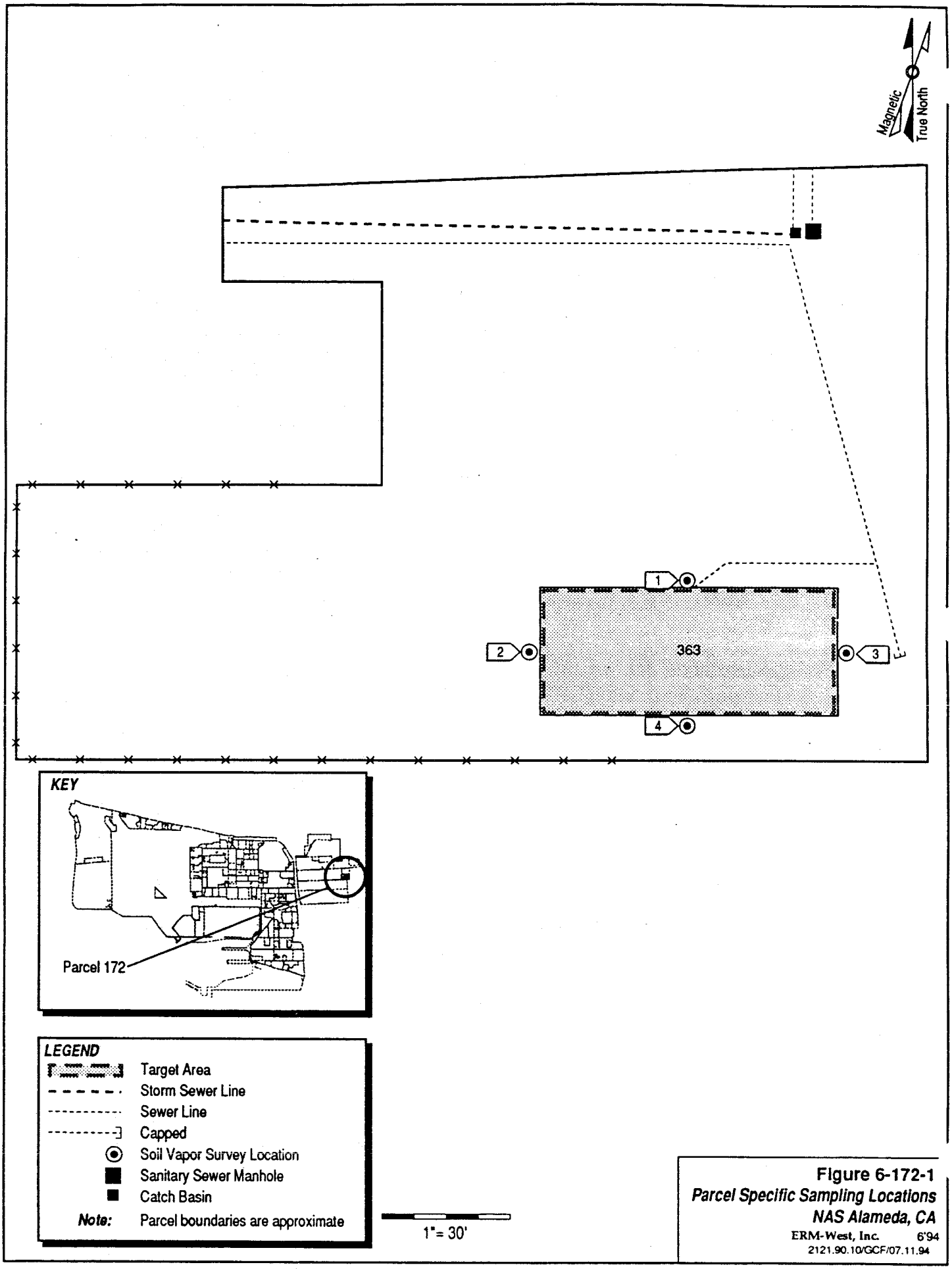


Figure 6-172-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-172-1

Summary of Recommended Samples
NAS Alameda Parcel 172

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
172-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
172-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
172-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
172-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC

evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one concrete foundation (formerly Building 363) covers approximately 10 percent of the parcel area (Figure 6-172-1). The remaining 90 percent is open space. The parcel area is presently used for storing Conex boxes. Building 363, formerly located on the parcel, was demolished in 1990. Sewer lines are present on this parcel and are shown on Figure 6-172-1.

Parcel 172 is located within 500 feet of the Scrapyard Installation Restoration (IR) Program site (Parcel 176). Previous investigations, including monitoring well (MW-10) installation and soil sampling, have occurred on Parcel 172, southeast of Building 363. Data and results are available in a report prepared by ERM-West, Inc. (contract N62474-85-D-5627) entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area.* This report discusses the impacts from this IR site on Parcels 172, 174, 175, 176, and 177. Additional data and results for Parcels 176 and 177 are included in a report prepared by PRC Environmental Management, Inc. (contract N62474-88-D-5086) entitled *Naval Supply Center, Oakland Alameda Annex and Facility Screening Lot and Scrapyard Area Alameda, California Sampling Results Technical Memorandum.*

Data from soil and groundwater samples taken at MW-10 between March 1987 and January 1988 are summarized in Tables 6-172-2 and 6-172-3. Data indicate that activities on adjacent parcels have impacted Parcel 172. Concentrations of cadmium, chromium, lead, and nickel in groundwater exceeded 1993 MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. Current monitoring well data from the Scrapyard IR site (Parcel 176) are not yet available to fully characterize the impacts to Parcel 172.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993

TABLE 6-172-2

Soil Sample Results in mg/kg from Boring 10
NAS Alameda Parcel 172

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	13	1	60	48	92
Detection Limit	0.05	0.05	0.05	0.2	0.5

Source: ERM-West, Inc., 1988

TABLE 6-172-3

Groundwater Sample Results in mg/L from Boring 10
NAS Alameda Parcel 172

	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Naphthalene
Aug-87	0.038	0.08	0.07	0.82	0.35	ND	66
Jan-88	0.008	ND	ND	ND	ND	ND	ND
Detection Limit	0.005	0.001	0.005	0.005	0.05	0.0005	40
May 1993 MCL	0.05	0.005	0.1	0.015	0.1	0.005	N/A

Source: ERM-West, Inc., 1988

addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental concern within parcel open space and buildings are described in detail below.

Concrete Foundation (Formerly Building 363)

Building 363 was constructed in 1944 and appears to have served as a warehouse or storage facility since that time. This building was demolished by May 1990. Building 363 covered approximately 9,200 square feet.

Information collected during the EBS indicates that recent activities conducted at this parcel have included storage of Conex boxes on and adjacent to the concrete foundation. No chemicals are documented to have been stored in Building 363 while it was in service. Based upon visual inspection, over 300 Conex boxes were present throughout the parcel. Approximately 10 Conex boxes had hazardous material labels for flammable liquid and gas, non-flammable gas, or poison. These 10 Conex boxes were stored on or adjacent to the concrete foundation.

Methods of disposing of chemicals currently stored on the concrete foundation are unknown.

Scattered staining, including paint overspray staining, was noticed on the concrete foundation during the visual inspection. Floor drains were also observed during the visual inspection.

Open Space

The open space occupies approximately 90 percent of the parcel. In general, the open space has been used for storage of Conex boxes.

There are no structures located within the open space other than the concrete foundation of former Building 363. Approximately 10 percent of the parcel is paved with asphalt, 10 percent is paved with concrete, and the remaining 80 percent of the open space is covered with gravel, often located over crumbly asphalt. The poor condition of the pavement and the presence of gravel made it difficult to identify the presence of stains.

EBS information indicates that activities conducted within this open space (other than those activities which occurred adjacent to the concrete foundation) included storage of non-hazardous materials in Conex boxes only. No chemicals are documented to have been stored in the open space.

One transformer was noted on the southeastern edge of the parcel; however, the location appears to be outside the property line. A groundwater monitoring well (MW-10) was installed southeast of Building 363 as part of a previous investigation at and around Parcel 176 (the Scrapyard IR site).

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 172 is bordered by Parcel 171 to the south, Parcels 173 and 174 to the west, and Parcel 175 to the north. Activities of concern include hazardous material storage of Conex boxes on Parcel 173, potential chemical storage of Conex boxes on Parcel 175, and petroleum products,

spray paint, paint thinner, corrosives, halogenated organics, metals, and pesticides within buildings on Parcel 174. Additionally, a diesel tank with observed stains is located on Parcel 174 at the border of Parcel 172.

Monitoring wells were installed on Parcels 174 and 175; both parcels border Parcel 176, which is part of the Scrapyard IR Site. Previous investigations on these parcels include groundwater and soil sampling data. The data obtained from previous and proposed screening-level investigations should provide sufficient characterization of boundary conditions for Parcel 172.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 172, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-172-4 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 172 because no industrial buildings are present.

As noted earlier, Parcel 172 was previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 172; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

TABLE 6-172-4

Summary of Data Gaps
NAS Alameda Parcel 172

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 172.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located approximately 500 feet south of Parcel 172. Additional subsurface investigation relative to the Scrapyard is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Filled wetlands.
Potential Parcel-Specific Release Areas	• Hazardous materials storage may have impacted the area bounded by the foundation of former Building 363.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-172-4

Summary of Data Gaps
NAS Alameda Parcel 172

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-172-4 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 172 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Former Building 363): This target area is defined as the concrete foundation of former Building 363. The target area is approximately 9,200 square feet in size. Hazardous materials (including flammable and non-flammable liquids) stored in Conex boxes are the primary compounds of concern. Although Conex boxes were observed throughout the site during the visual inspection, hazardous materials were stored only on or adjacent to the concrete foundation. Therefore, only the concrete foundation and its boundaries are considered to be the target area. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed on Table 6-172-1.

The following zone-wide target area was identified on Parcel 172 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Soil vapor sampling is the screening-level technique that will be employed used to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-172-1 summarizes screening-level sampling and analysis called for within the parcel's target area. Four soil vapor samples will be collected from the locations

shown on Figure 6-172-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The soil vapor samples will be located on the outer edge of the foundation. Effort should be made to ensure that samples are taken at locations of staining, and, when applicable, at cracks in the concrete foundation or asphalt underneath the gravel. Adjustments to the proposed sampling locations can be made if warranted by field conditions.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern that have been identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technology not previously discussed: surface soil sampling (SOP 3), subsurface GeoProbe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10) and follow-up groundwater sampling from the existing monitoring well (MW-10) located southeast of Building 363.

Follow-up sampling may be performed on Parcel 172 to characterize the impacted areas as part of ongoing investigations at adjacent parcels. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-173

PARCEL 173 EVALUATION PLAN

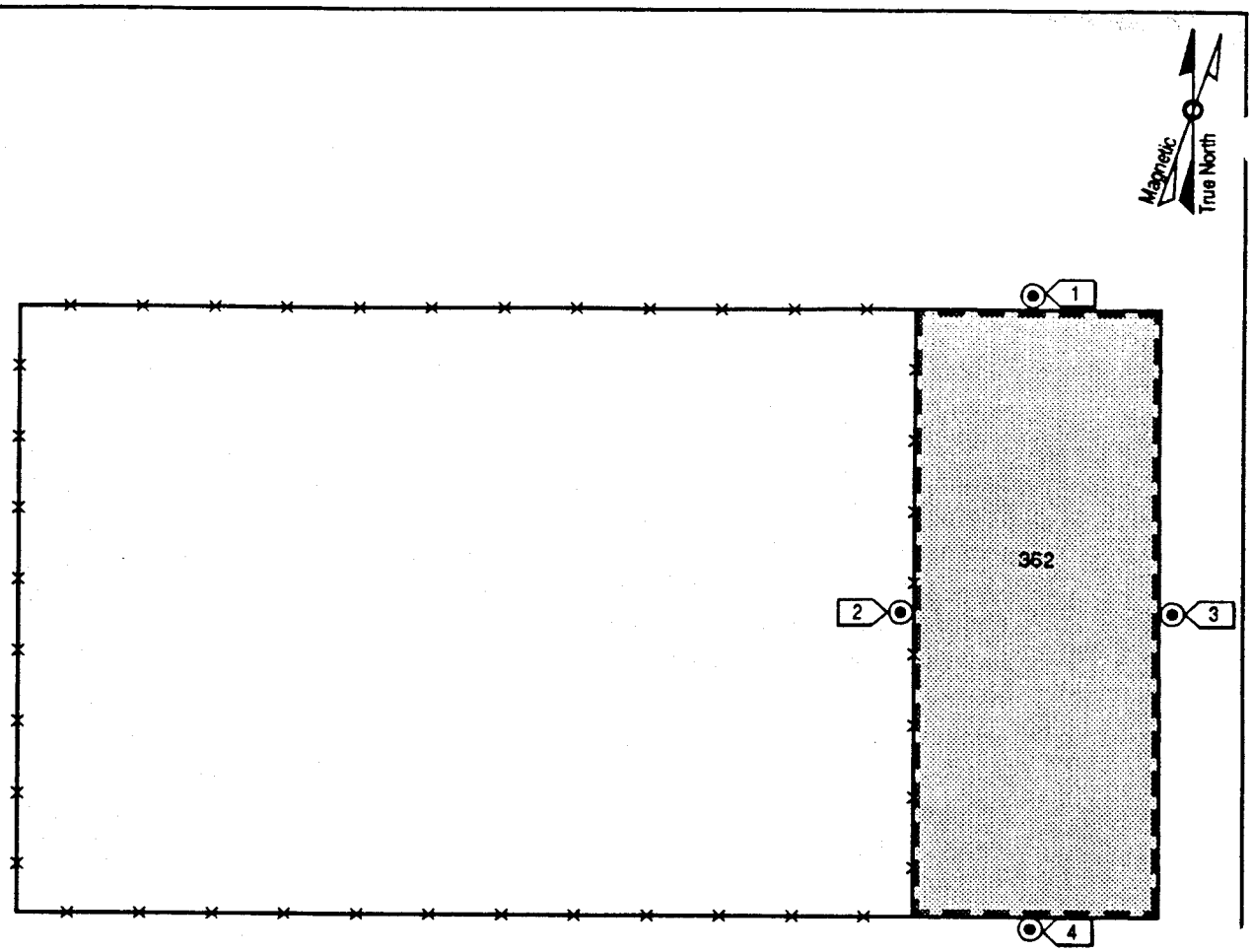
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 173 at NAS Alameda (Figure 6-173-1). The parcel, which is located in the northeast portion of the base, is approximately 0.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1. This parcel does not contain any RCRA sites. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. No zone-wide target area samples are located on this parcel. The sampling procedure called for in the screening-level investigation in this area is soil vapor sampling only. Table 6-173-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 173, historical activities are discussed below.

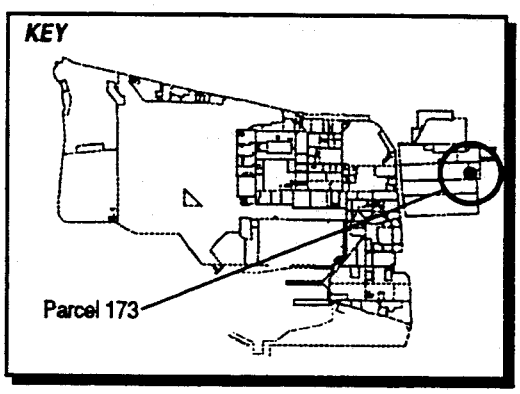
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 173, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel





LEGEND

- Target Area
- Soil Vapor Survey Location
- *Note:* Parcel boundaries are approximate

1"= 30'

Figure 6-173-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-173-1

Summary of Recommended Samples
NAS Alameda Parcel 173

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
173-1-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
173-2-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
173-3-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC
173-4-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 1	VOCs	GC

should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, there is one concrete foundation (formerly Building 362) located on the parcel (Figure 6-173-1). This foundation covers approximately 25 percent of the parcel area. The remaining 75 percent is open space. In general, the parcel area is presently in use as a storage area. Building 362, formerly located on the parcel, was demolished in 1990.

Parcel 173 is located approximately 300 feet south of an Installation Restoration (IR) Program site (The Scrapyard). No previous investigations have been conducted at Parcel 173 and specific data regarding potential chemical occurrence are not available. Investigations have been performed on adjacent Parcel 175. Parcel 175 is located north of Parcel 173. Data and results are available in a report prepared by ERM-West, Inc. (contract N62474-85-D-5627) entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area.* This report discusses the impact from this IR site on Parcels 172, 174, 175, 176, and 177. Additional data and results on Parcels 176 and 177 are included in a report prepared by PRC Environmental Management, Inc. (contract N62474-88-D-5086) entitled *Naval Supply Center, Oakland Alameda Annex and Facility Screening Lot and Scrapyard Area Alameda, California Sampling Results Technical Memorandum* and are discussed in the PEPs for Parcels 176 and 177.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan,* summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of

these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental concern within parcel open space and buildings are described in detail below.

Concrete Foundation (Formerly Building 362)

Based upon aerial photographs, Building 362 was constructed in the mid 1950s and appears to have served as a warehouse or storage facility since that time. This building was demolished by May 1990. Building 362 covered approximately 5,200 square feet.

Information collected during the EBS indicates that recent activities conducted at this parcel have included the storage of Conex boxes. No chemicals are documented to have been stored in the former Building 362. Based upon visual inspection, over 200 Conex boxes were present throughout the parcel. Of those 200 Conex boxes, approximately 20 had hazardous material labels for flammable liquid and gas, non-flammable gas, or poison. These 20 Conex boxes were stored on or around the concrete foundation. Methods of disposing used chemicals within the former Building 362 and currently stored on the concrete foundation are unknown.

Scattered staining on the concrete foundation was noticed during the visual inspection. Floor drains were also observed during visual inspection.

Open Space

The open space occupies approximately 75 percent of the parcel. In general, the open space has been used for the storage of Conex boxes.

There are no structures located within the open space other than the concrete foundation of former Building 362. Ten percent of the parcel is paved with concrete, and the remaining 90 percent of the open space is covered with gravel, often located above crumbly asphalt. The poor condition of the pavement and the presence of gravel made it difficult to identify stains during the site inspection.

EBS information indicates that activities conducted within this open space (other than adjacent to the concrete foundation) included storage of non-hazardous materials in Conex boxes only. No chemicals are documented to have been stored in the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 173 is bordered by Parcel 172 to the south and west, Parcel 174 to the west, and Parcel 175 to the north. Activities of concern include hazardous material (flammable liquid and gas) storage of Conex boxes on Parcel 172, potential chemical storage of Conex boxes on Parcel 175, and the presence of petroleum products, spray paint, paint thinner, corrosives, halogenated organic compounds, metals, petroleum products, and pesticides within buildings on Parcel 174.

Monitoring wells were installed on Parcels 172, 174, and 175 as part of a previous investigation at the Scrapyard IR site (Parcel 176). Previous investigations on these parcels include groundwater and soil sampling data. The data obtained from previous and proposed screening level investigations should provide sufficient characterization of boundary conditions for Parcel 173.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 173, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-173-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 173 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 173.

Once the data gaps in Table 6-173-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 173 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the parcel-specific target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

TABLE 6-173-2

Summary of Data Gaps
NAS Alameda Parcel 173

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 173.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located within 300 feet north of Parcel 173. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Former Wetlands.
Potential Parcel-Specific Release Areas	• Hazardous materials storage may have impacted the area bounded by concrete foundation of former Building 362.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-173-2

Summary of Data Gaps
NAS Alameda Parcel 173

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

- Target Area 1 (Concrete Foundation of Former Building 362): This target area is approximately 5,200 square feet in size. Hazardous materials (including flammable and non-flammable liquids) stored in Conex boxes are the primary compounds of concern. Although Conex boxes were observed throughout the site during the visual inspection, hazardous materials were stored only on or adjacent to the concrete foundation. Therefore, only the concrete foundation and its boundaries are considered to be the target area. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed on Table 6-173-1.

One of the three zone-wide target areas has been identified at this parcel.

- Zone 16 Target Area 2 (Filled Wetlands): No zone-wide target area samples are located on this parcel.

Screening-Level Investigation

Soil vapor sampling (SOP 6) is the screening-level technique that will be used to assess conditions in the parcel-specific target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-173-1 summarizes screening-level sampling and analysis called for within the parcel's target area. Four soil vapor samples will be collected from the locations shown on Figure 6-173-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Based upon the large size of the target area and the low potential for compound release, five subsurface soil samples were selected as a minimum. Adjustments to the proposed locations can be made if warranted by field conditions.

The four soil vapor samples will be located on the outer edge of the foundation. Effort should be made to ensure that samples are taken at locations of staining, and, when applicable, at cracks in the concrete foundation or asphalt underneath the gravel. Adjustments to the proposed sampling locations can be made if warranted by field conditions.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-174

PARCEL 174 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 174 at NAS Alameda (Figures 6-174-1, 6-174-2, and 6-174-3). The parcel, which is located in the northeast portion of the base, is 32.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA Sites are located at this parcel. Six parcel-specific target investigation areas (target areas), and two zone-wide target areas are encompassed in the parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface GeoProbe soil sampling, and soil vapor sampling. Table 6-174-1 provides the complete list of samples and analyses prescribed by this plan. Previous soil and groundwater sampling have been conducted at the parcel. Results are presented in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and scrap yard Area.*

This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 174, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 174, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, and other areas of concern. Past and present use of this parcel was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern. Although there are no records to suggest the area was used for purposes other than storage, gaps in the historical record exist.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-174-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
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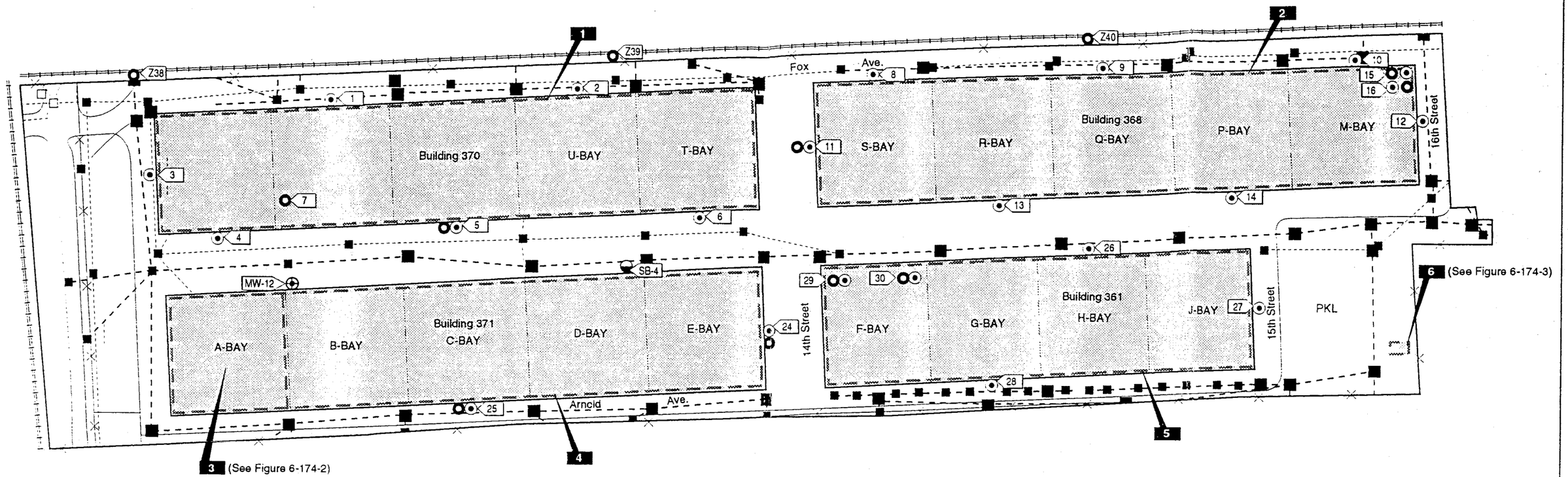
SENSITIVE

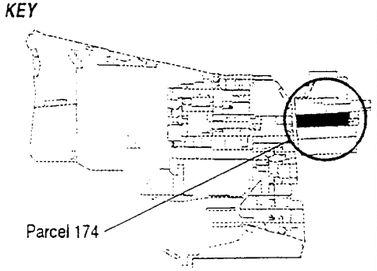


LEGEND

- Target Areas 1-7
- Approximate Location of Bay Wall
- Storm Sewer Line
- Sewer Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Boring Location (ERM-West, Inc.)
- Monitoring Well Location (ERM-West, Inc.)
- Manhole
- Catch Basin

Note: Parcel boundaries are approximate

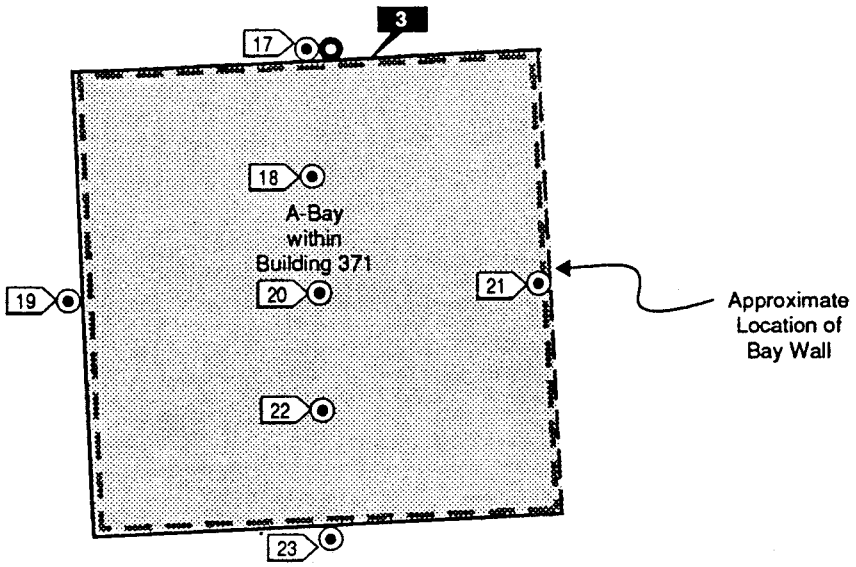
KEY

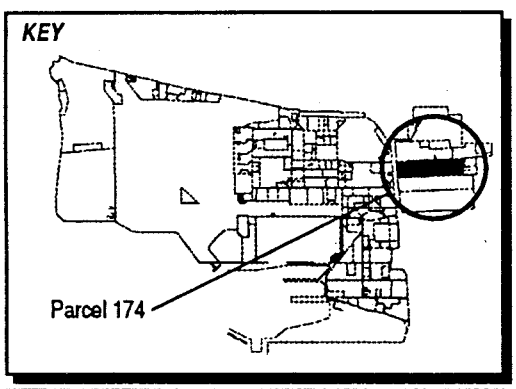


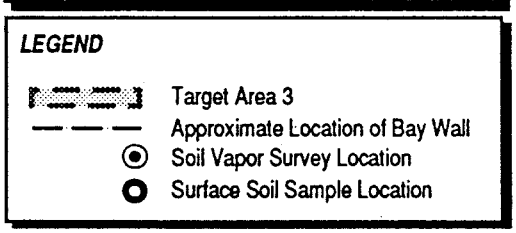
1"= 190'

Figure 6-174-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

SENSITIVE







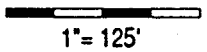
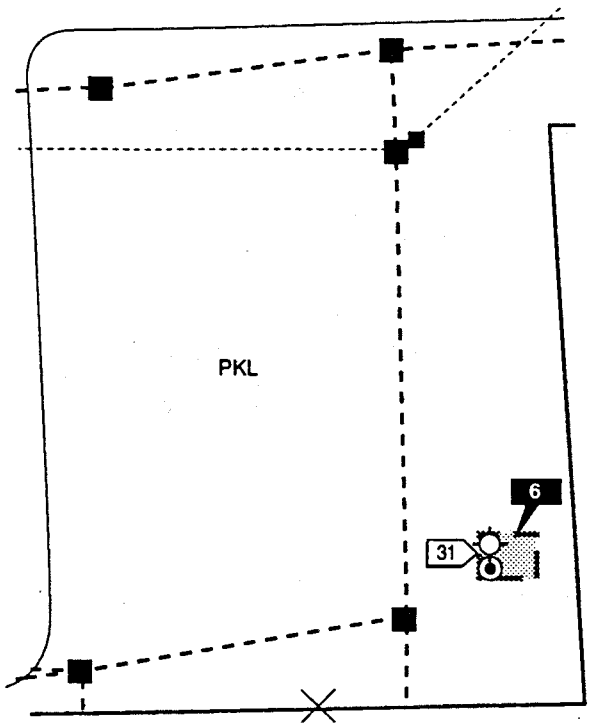
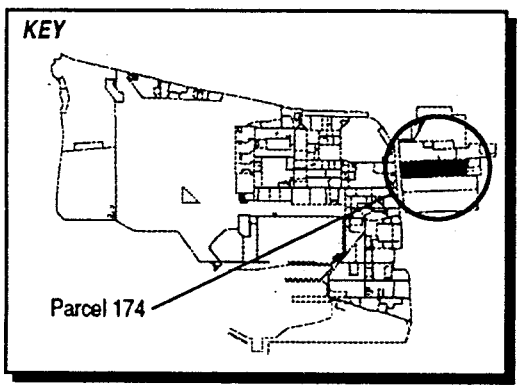
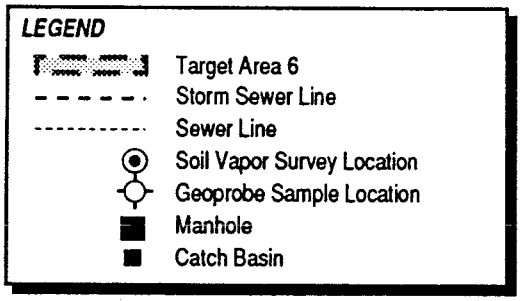


Figure 6-174-2
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94







1"= 125'

Figure 6-174-3
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

TABLE 6-174-1

Summary of Recommended Samples
NAS Alameda Parcel 174

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
174-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	VOCs, TPH	CLP RAS, Modified EPA 8015
174-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
174-7-3-V-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	VOCs, TPH	CLP RAS, Modified EPA 8015
174-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-11-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	VOCs, TPH	CLP RAS, Modified EPA 8015
174-12-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-13-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-14-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-15-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	VOCs, TPH	CLP RAS, Modified EPA 8015
174-16-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
174-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	VOCs, TPH	CLP RAS, Modified EPA 8015
174-17-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	VOCs, TPH	CLP RAS, Modified EPA 8015
174-18-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-19-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-20-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-21-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC

TABLE 6-174-1

Summary of Recommended Samples
NAS Alameda Parcel 174

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
174-22-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-23-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
174-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 4	VOCs	GC
174-24-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	VOCs, TPH	CLP RAS, Modified EPA 8015
174-25-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 4	VOCs	GC
174-25-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	VOCs, TPH	CLP RAS, Modified EPA 8015
174-26-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-27-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-28-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-29-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-29-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 5	VOCs, TPH	CLP RAS, Modified EPA 8015
174-30-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 5	VOCs	GC
174-30-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 5	VOCs, TPH	CLP RAS, Modified EPA 8015
174-31-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 6	VOCs	GC
174-31-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 6	TPH	Modified EPA 8015
Z16-38-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-38-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-38-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-39-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-39-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF

TABLE 6-174-1

Summary of Recommended Samples
NAS Alameda Parcel 174

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-40-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-40-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF

* This is the suggested location for the confirmatory sample. The actual location will depend on field analytical results.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 361, 368, 370, and 371), one sewage lift station, and one aboveground diesel storage tank are located on the parcel. These buildings and structures cover approximately 55 percent of the parcel area. The remainder (45 percent) is open space. The parcel area is presently used for storage. Sewer lines are present on this parcel and are shown on Figure 6-174-1.

Parcel 174 is located directly south of the Scrap Yard Installation Restoration (IR) Program site. Because of the proximity of Parcel 174 to the Scrap Yard IR site, previous investigations have been conducted at Parcel 174 and specific data regarding potential chemical occurrence are available. Data from previous investigations at Parcel 174 are discussed later in this PEP and in the 1988 ERM-West report.

Current investigations are being performed at the Fleet and Industrial Supply Center, Oakland Alameda Facility and Alameda Annex. This investigation affects numerous parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately

83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Extensive peeling paint was observed on the exterior of all buildings. As these buildings were built before 1978, there may be a lead-paint issue to address on Parcel 174.

Utilities located within and immediately surrounding the parcel buildings and within the open spaces include underground gas, sanitary sewer, storm sewer, water, and electrical lines. Nineteen transformers, both pole- and pad-mounted, and three switches are located in the parcel.

Based upon building visual inspections, buildings located on Parcel 174 do not appear to be equipped with heating-ventilation-air conditioning (HVAC) systems. Activities of potential environmental or industrial hygiene concern within each open space and building on this parcel are described in detail below.

Building 361

Building 361 was constructed in 1944 as a warehouse. It is currently used for storage of items including medical supplies, hazardous materials, and hazardous waste. Building 361 is a one-story building and is constructed of wood with an asphalt floor, a concrete foundation, and a tar and gravel roof. This building covers approximately 140,000 square feet. Information collected during the EBS indicates that activities conducted within this building included equipment and waste storage only.

Hazardous materials and waste including motor oil, pesticides, battery acid, and TCE are documented to have been stored in Bays J, H, and G of Building 361. A total of approximately 30 gallons of Shell motor oil is stored in Building 361. Based upon a building visual inspection, hazardous materials and wastes are only documented to have been stored in Bay F of Building 361. Hazardous materials and waste storage in Bay F includes 500 gallons of pesticides, 500 gallons of Kodak developer, 20 gallons of ammonium nitrate, two 55-gallon drums of used aerosol cans, and paint. Disposal methods for used chemicals are unknown, although potentially impacted storm drains exist on Parcel 174 and staining is present around cracks in the floor possibly caused by earthquakes.

An unknown number of gallons of engine coolant was spilled onto asphalt during the site inspection. A stain approximately ten feet by ten feet in area within Bay F was documented in May 1994. Cleanup of the spill was not documented. Cracks and seams are present in the asphalt in the area of the stain.

Other issues of potential concern include several holes in the floor of Building 361, significant accumulation of dust on interior building surfaces, and possible lead-based paint peeling off the exterior of the building.

Building 368

Building 368 was constructed prior to August 1953 and serves as a storage warehouse. Bay R stores freezers, new and used 275-gallon fuel tanks, and compressors; Bay S stores paper products and wood; Bay P stores lead chest X-ray protectors and antibodies; and Bay M contains a Satellite Hazardous Waste Accumulation Point (SHWAP). Bay M is used for forklift repair and maintenance, and Bays P, R, and S are used for forklift activities. Building 368 is a one-story building. It is constructed of a steel frame with an asphalt floor, a concrete foundation, and metal roofing and siding. It covers approximately 220,000 square feet.

Information collected during the EBS indicates that activities conducted within this building included repair and maintenance of forklifts. PET, brake fluid, engine oil, and WD-40 have been stored and used in the repair shop area of Building 368. One 75-gallon drum and one 55-gallon drum were observed during visual inspection. Disposal of used chemicals was accomplished by discharging into a sink that drains to the sanitary sewer. Potentially impacted storm drains also exists on Parcel 174.

A review of site inspection data indicates that undocumented spills have occurred within Building 368 as indicated by the presence of extensive staining on the asphalt in the forklift area of Bay M. Another issue of potential concern is a four foot by four foot metal plate of unknown function in Bay R.

Building 370

Building 370 was constructed prior to August 1953 and serves as a warehouse for storage of such items as empty gas cylinders, generators, and fuel pump modules (in Bay T); food storage (in Bay U); and food, chemicals, and electronic equipment storage (in the three unlabeled bays). Empty paint and gas cans were found in the west-most unlabeled bay, and hydraulic fluid, coolant, polish, and batteries (wet-filled with alkali) were stored in the middle unlabeled bay. Building 370 is a one-story building. It is constructed of a steel frame with an asphalt floor, a concrete foundation, and metal roofing and siding. The building covers approximately 200,000 square feet.

Information collected during the EBS indicates that activities conducted within this building consisted of food, chemical, and equipment storage only. Hydraulic fluid, lubricating oil, and polish are documented to have been stored in quantities up to 500 gallons in the middle unlabeled bay within Building 370. Disposal methods for used chemicals are unknown, although potentially impacted storm drains exist on this parcel. A ten-foot by five-foot black, oily stain was observed during visual inspection in the middle bay. Other issues of possible concern include dust and possible lead-based paint peeling from the walls of the office space within Building 370.

Building 371

Building 371 was constructed prior to August 1953 as a warehouse for storage of items including medical supplies (in Bays D and E); food (in Bay C); supply vans, medical equipment, and fire extinguishers (in Bay B); paint (in Bay E); and chemicals and hazardous waste (in Bay A). Building 371 is a one-story building. It is constructed of a steel frame with an asphalt floor and a concrete foundation, and metal roofing and siding. The building covers approximately 200,000 square feet.

Information collected during the EBS indicates that activities conducted within this building included food, chemical, and medical supply storage only. Documented chemicals that have been stored in the building include: up to 50 gallons of paint, up to 10 gallons of paint in aerosol cans, less than 50 gallons of lubricating oil, spray paint, paint

thinner, and WD-40 in Bay E; and greater than 1,000 gallons of corrosives, halogenated organic compounds, metals, petroleum products, pesticides, and paints in Bay A. A hazardous waste accumulation area is located in the northeast corner of Bay A. Disposal methods for used chemicals are unknown, although potentially impacted storm drains exist on Parcel 174.

A review of site inspection data shows the presence of stains which indicates that undocumented spills have occurred within Building 371. A 10-foot by 30-foot stain was observed at the suspected former equipment battery recharge area.

Other issues of possible concern include dust and potentially lead-based paint peeling from the walls of the office space within Building 371.

Open Space I

Open Space I is defined as the parking area located southeast of Building 368 on Parcel 174. This space covers approximately ten percent of the parcel. Open Space I is regularly used for vehicle parking.

Structures located within Open Space I include a 500-gallon capacity aboveground diesel fuel storage tank, two hazardous waste drums, and approximately 150 900-gallons empty fuel tanks. The ground surface of Open Space I is entirely paved with asphalt, which is generally in fair condition.

A review of site inspection data indicates that the aboveground diesel fuel storage tank is leaking from the exit hose. A four-foot by four-foot stain extending onto the asphalt below the tank's concrete pad was noted. An odor was also present during the site inspection.

Open Space II

Open Space II is defined as the areas between Buildings 368 and 370 and between Buildings 371 and 361. This space covers approximately five percent of the parcel. In general, Open Space II has been used for the storage of Conex boxes. The ground surface of Open Space II is paved completely with concrete, which is generally in fair condition.

EBS information indicates that activities conducted within this open space have been confined to materials storage. Various chemicals have been stored in Open Space II. Approximately 60 to 80 Conex boxes labeled with flammable liquid, flammable gas, non-flammable gas, and

poison placards are presently stored in Open Space II. There are storm drains located throughout this storage area. There have been no documented spills in this area, and no stains were observed during visual inspection.

Open Space III

Open Space III, which comprises approximately five percent of the parcel, is defined as the area north of Buildings 370 and 368. The use of Open Space III was not documented and is not apparent from visual inspection. The entire ground surface of Open Space III is poorly maintained concrete; loose rocks and dirt are present on top of the pavement.

EBS information is inconclusive with respect to the past use of this area. There is no information regarding chemical use in this area, although various types of stains were observed during the visual inspection.

Scattered paint spills were found at a higher density in Open Space III than elsewhere on the parcel. These spills appear to have involved relatively minor quantities of released material. There are also a few stains in this area that may be associated with equipment waterproofing. Several of these spills were observed in close proximity to storm water drains.

Open Space IV

Open Space IV, which comprises approximately ten percent of the parcel, is defined as the area west of Buildings 370 and 368. No documentation was provided for the use in Open Space IV. From visual inspection, this area appears to be undergoing excavation and construction. The entire ground surface of Open Space IV is covered with loose rocks and dirt.

Open Space V

The remaining open space in parcel 174 is designated as Open Space V. This area covers approximately 15 percent of the parcel, defined primarily as the area between Buildings 370 and 371, and the area between Buildings 361 and 368. In general, the open space has been used for storage.

The majority of this open space is paved with asphalt, with the exception of several concrete walkways, gravel surrounding the sewage

lift station in the southwest corner of the parcel, and sparse vegetation located to the west of Building 370. The majority of the asphalt is in poor condition. The poor condition of the pavement and the presence of gravel made it difficult to identify stains.

EBS information is inconclusive regarding activities conducted within Open Space V. Four hundred Conex boxes were noted in this open space during visual inspection. Most were lacking placards identifying their contents. Numerous storm water drains were also observed during visual inspection in this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 174 is bounded by Parcel 171 to the south; Parcels 172, 173, and 175 to the east; and Parcels 178, 184, and 176 to the north. Activities of concern on adjacent parcels include hazardous material storage on Parcels 172 and 173, potential chemical storage on Parcel 175, and hazardous waste present on Parcel 176 (part of the Scrapyard IR site). The Alameda Railroad runs along Main Street on the western border and along Fox Street on the northern border of Parcel 174. The Alameda Railroad may have potentially impacted this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 174, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-174-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines

TABLE 6-174-2

Summary of Data Gaps
NAS Alameda Parcel 174

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 174.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the north side of Parcel 174. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Alameda Railroad Along The Northern and Western boundaries.
Potential Parcel-Specific Release Areas	• Hazardous materials storage in Buildings 361, 368, 370, 371 and Parcel-Specific Target Area 6.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-174-2

Summary of Data Gaps
NAS Alameda Parcel 174

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling appears to be required for Parcel 174 because no industrial buildings are present. However, a one-time compliance program will determine whether further sampling or cleanup measures are required within buildings before transfer or lease can occur.

As noted earlier, Parcel 174 was previously occupied by wetlands. The parcel may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 174; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-174-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 174 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following six parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-174-2.

- Target Area 1 (Building 370 and Southern Perimeter): This target area addresses the possible release of compounds of concern associated with hydraulic fluid and lubricating oil storage in the middle unlabeled bay, and flammable liquids and poisons storage in the Conex boxes. The size of this area within Building 370 is approximately 200,000 square feet. The likelihood of

environmental impacts having occurred within this target area is classified as suspect.

- Target Area 2 (Building 368): This target area addresses the possible release of compounds of concern associated with use and storage of PET, brake fluid, engine oil, and WD-40 associated with forklift activity throughout the building, and the forklift repair and maintenance shop in Bay M. The size of this area within Building 368 is approximately 220,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 3 (Bay A in Building 371): This target area addresses the possible release of compounds of concern associated with storage of lubricating oil, spray paint, corrosives, halogenated organic compounds, and petroleum products within Bay A, along with storage of hazardous waste in the hazardous waste accumulation area. The size of this area within Building 371 is approximately 40,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 4 (Building 371 excluding Bay A): This target area addresses the possible release of compounds of concern associated with storage of paint and medical equipment. The size of this area within Building 371 is approximately 160,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential.

- Target Area 5 (Building 361): This target area addresses the possible release of compounds of concern associated with storage of paint, battery acid, engine coolant, TCE, pesticides, and hazardous waste. The size of this area within Building 361 is approximately 140,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 6 (Diesel Tank and Drums within Open Space I): This target area addresses the possible release of compounds of concern associated with storage of diesel fuel and hazardous waste. The size of this area within Building 361 is approximately 200 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

The following zone-wide target areas were identified on Parcel 174 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 3 (Alameda Railroad Along The Western and Northern Parcel Boundaries): Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. The railroad borders the western boundary of Parcel 174. Three of the five samples proposed to be collected from this zone-wide target area are located on Parcel 174. The zone-wide target area samples that are located on Parcel 174 are listed on Table 6-174-1. This target area addresses the possible presence of TPH, SVOCs, PCBs, and lead. The likelihood of environmental impacts having occurred within this target area is classified as potential.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil gas sampling (SOP 6), and GeoProbe soil sampling (SOP 14). Table 6-174-1 summarizes screening-level sampling and analysis for the parcel's target areas. Ten surface soil samples, 30 soil gas samples, and one subsurface GeoProbe soil sample will be collected. Locations for these samples are shown on Figures 6-174-1, 6-174-2, and 6-174-3. Adjustments to the proposed locations may be made if warranted by field conditions. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

In Zone 16 Target Area 3, samples should be collected between the tracks underneath the coarse gravel (ballast). Sample locations are shown on Figure 6-174-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), and HydroPunch groundwater sampling (SOPs 1 and 15),

TABLE 6-174-3

Soil Sample Results in mg/kg from Boring 12 between 2' and 4'
NAS Alameda Parcel 174

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	9	1	48	34	74
Detection Limit	0.05	0.05	0.05	0.2	0.5

Source: ERM-West, Inc., 1988

TABLE 6-174-4

Groundwater Sample Results in mg/L from MW-12
NAS Alameda Parcel 174

	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
Aug-87	ND	0.04	0.03	0.47	0.18	ND	ND
Jan-88	0.008	ND	ND	ND	ND	ND	ND
Detection Limit	0.005	0.001	0.005	0.005	0.05	0.0005	40
May 1993 MCL	0.05	0.005	0.1	0.015	0.1	0.005	

Source: ERM-West, Inc., 1988

TABLE 6-174-5

Soil Sample Results in mg/kg from Boring 4
NAS Alameda Parcel 174

Sample Depth between 0' and 0.5'

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	5	2	41	26	33
Detection Limit	0.05	0.05	0.05	0.2	0.5

Sample Depth between 1' and 1.5'

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	10	5.5	40	22	34
Detection Limit	0.05	0.05	0.05	0.2	0.5

Sample Depth between 4.5' and 5'

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	5.2	2.5	68	14	55
Detection Limit	0.005	0.001	0.005	0.005	0.05

Source: ERM-West, Inc., 1988

environmental air monitoring (SOP 22), monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10), and the existing monitoring well (MW-12).

A monitoring well (MW-12) was installed on Parcel 174 north of Building 371 as part of the previous investigation of the scrap yard IR site. Soil samples were collected from this location prior to monitoring well installation. Soil sampling was also performed from zero to five feet below ground surface at another location north of Building 371 (SB-4). Activities performed at the scrap yard IR site appear to have impacted Parcel 174. Locations of MW-12 and SB-4 are shown on Figure 6-174-1.

Data from soil and groundwater samples taken at MW-12 between March 1987 and January 1988 are summarized in Tables 6-174-3 and 6-174-4 below. Soil samples from boring SB-4 are summarized in Table 6-174-5. Data indicate that activities on adjacent parcels have impacted Parcel 174. Current monitoring well data from the scrap yard IR site is not available to fully characterize the impacts to Parcel 174.

Follow-up sampling may be performed on Parcel 174 to characterize the impacted areas as part of ongoing investigations at adjacent parcels. Additionally, potentially impacted sewer lines and storm drains exist throughout Parcel 174, which require detailed evaluation.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-175

PARCEL 175 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 175 at NAS Alameda (Figure 6-175-1). The parcel, which is located in the northeast portion of the base, is approximately three acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. No parcel-specific target investigation areas (target areas) have been identified at this parcel. Two zone-wide target areas have been identified at this parcel; however, no zone-wide samples are located on this parcel. This parcel-specific plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed evaluation of Parcel 175, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 175, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identified Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 176, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and

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FIGURE 6-175-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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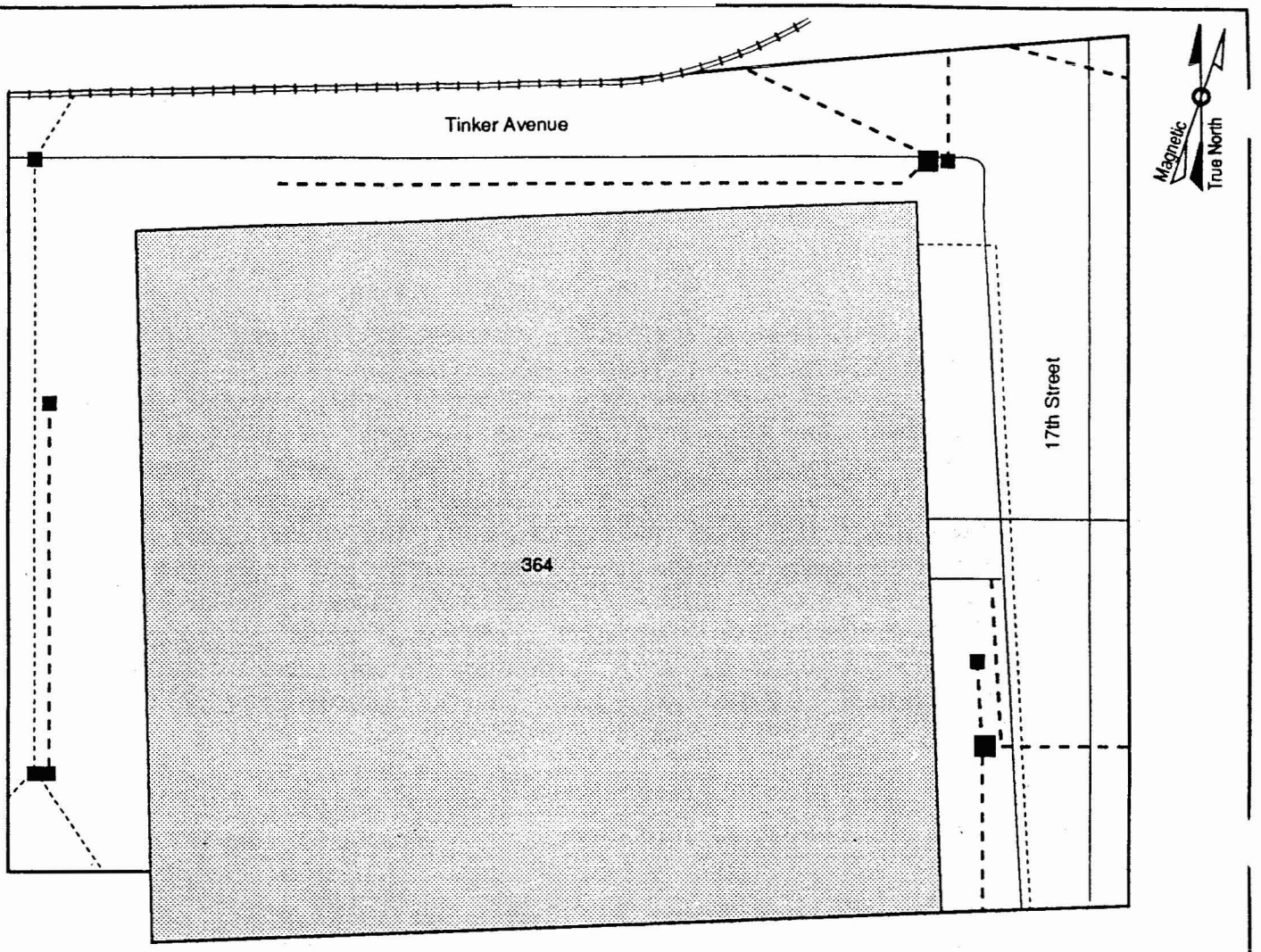

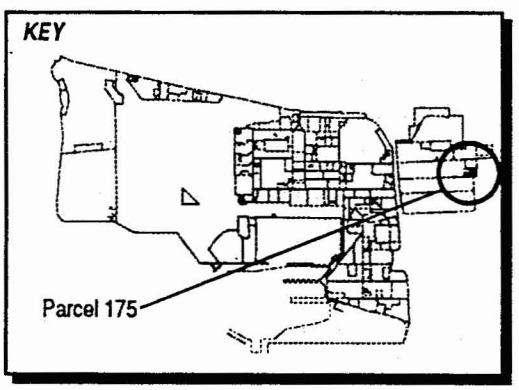

LEGEND

- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: Parcel boundaries are approximate

1" = 60'

Figure 6-175-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

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potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 364) covers approximately 60 percent of the parcel. The remaining 40 percent is open space. Building 364 is presently used for storage. Sewer lines are present on this parcel and are shown in Figure 6-175-1.

Parcel 175 is bounded on the north by an Installation Restoration (IR) Program site (Scrapyard). Previous investigations, including monitoring well installation (MW-11) and soil sampling, have occurred on Parcel 175 located north of Building 364. Data and results are available in a report prepared by ERM-West, Inc. (contract N62474-85-D-5627) entitled *Contaminated Site Investigation at the Warehouse and Scrap Yard Area.* This report discusses the impacts from this IR site on Parcels 172, 174, 175, 176, and 177. Additional data and results on Parcels 176 and 177 are included in a report prepared by PRC Environmental Management, Inc. (contract N62474-88-D-5086) entitled *Naval Supply Center, Oakland Alameda Annex and Facility Screening Lot and Scrapyard Area Alameda, California Sampling Results Technical Memorandum.*

Data from soil and groundwater samples taken at monitoring well MW-11 between March 1987 and January 1988 are summarized in Tables 6-175-2 and 6-175-3 below. The 1987 groundwater monitoring data showed that concentrations of cadmium, lead, nickel, and benzene in groundwater exceeded 1993 MCLs. However, 1988 groundwater data showed all constituents to be below MCLs. The concentration of arsenic in soil exceeded August 1994 industrial and residential PRGs. Current monitoring well data from the neighboring Scrapyard IR site (Parcel 176) are not yet available to fully characterize the impacts to Parcel 175.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial*

TABLE 6-175-2

Soil Sample Results in mg/kg from Boring 11
NAS Alameda Parcel 175

	Arsenic	Cadmium	Chromium	Lead	Nickel
March 1987	5	1	48	7	42
March 1987 (duplicate)	5.2	1	36	11	38
Detection Limit	0.05	0.01	0.05	0.05	0.5

Source: ERM-West, Inc., 1988

TABLE 6-175-3

Groundwater Sample Results in mg/L from Boring 11
NAS Alameda Parcel 175

	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
Aug-87	ND	0.02	0.03	0.24	0.11	350	560
Jan-88	ND	ND	ND	ND	ND	ND	ND
Detection Limit	0.005	0.001	0.005	0.005	0.05	0.0005	40
May 1993 MCL	0.05	0.005	0.1	0.015	0.1	0.005	

Source: ERM-West, Inc., 1988

Investigation/Feasibility Study Phase II Field Sampling Plan, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential concern within parcel open space is described in detail below.

Building 364

Based upon aerial photographs, Building 364 was constructed prior to August 1963. This building is in fair condition. Building 364 is one-story tall, has a steel frame with a concrete floor, and covers approximately 72,000 square feet. The space occupied by Building 364 was formerly open space used as a storage area.

Information collected during the EBS indicates that activities conducted within Building 364 included storage only. No chemicals are documented to have been stored in this building. Based upon visual inspection, Building 364 is primarily used as a warehouse for X-ray and other medical equipment. One flammable materials locker was observed. This locker contained less than 55 gallons of paint, paint thinner, and degreasers. Methods of disposing used of chemicals stored within Building 364 are unknown.

Scattered, light staining was noticed during visual inspection of the concrete floor. Additionally, the floor appeared to have been resurfaced several times.

Open Space

The open space occupies approximately 40 percent of the parcel. In general, the open space has been used for storage. The entire open space is paved with asphalt (90 percent) and concrete (10 percent).

EBS information indicates that activities conducted within this open space included storage only. No chemicals are documented to have been stored in the open space. Based upon visual inspection, a few Conex boxes were stored on the western side of Building 364.

A few, minor paint overspray stains were noticed during the visual inspection of the open space. Documentation shows that one transformer and one switch gear are present on the western side of Building 364. One groundwater monitoring well (MW-11) was installed north of Building 364 as part of a previous investigation at and around Parcel 176 (the Scrapyard IR site).

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 175 is bounded by Parcel 172 to the south, Parcel 174 to the west, Parcel 176 to the north, and the Fleet Industrial Supply Center - Oakland Alameda Facility to the east. Activities of concern include hazardous material storage on Parcel 172. The presence of petroleum products, spray paint, paint thinner, corrosives, halogenated organics, metals, and pesticides are documented within buildings on Parcel 174. Hazardous waste is present on Parcel 176, which is the Scrapyard IR site. The Alameda Railroad runs along Fox Street and through Parcel 176, which is located along the northern border of Parcel 175.

The presence of a monitoring well (MW-11) on Parcel 175 is probably a result of previous investigations on and around Parcel 176. Soil sampling has been performed on Parcels 174 and 176 as part of previous investigations on and around Parcel 176. The data obtained from previous and proposed screening level investigations should provide sufficient characterization of necessary boundary conditions for Parcel 175.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 175, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-175-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 175 because no industrial buildings are present.

As noted earlier, Parcel 175 was previously occupied by wetlands. These parcels may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). No parcel-specific VOC sampling has been proposed for Parcel 175; however, VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-175-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 175 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. However, two zone-wide target areas were identified. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16.

TABLE 6-175-1

Summary of Data Gaps
NAS Alameda Parcel 175

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 175.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the north side of Parcel 175. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified. The railroad tracks in this parcel are being addressed as part of the Scrapyard IR Site.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-175-1

Summary of Data Gaps
NAS Alameda Parcel 175

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As discussed previously, monitoring well MW-11 is located on Parcel 175 west of Building 364; this well is part of the previous investigation for Parcel 176, the Scrapyard IR site. Current monitoring well data from the Scrapyard IR site (Parcel 176) are not available to fully characterize the impacts to Parcel 175. Follow-up sampling may be performed on Parcel 175 to characterize the impacted areas as part of ongoing investigations at adjacent parcels.

The following zone-wide target areas were identified on Parcel 175 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.
- Zone Target Area 3 (Railroad Tracks): This parcel does not contain any samples from this zone.

SECTION 6-176

PARCEL 176 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 176 at NAS Alameda (Figure 6-176-1). The parcel, which is located in the northeast portion of the base, is approximately nine acres in size and is roughly rectangular in shape. No RCRA sites are located at this parcel. Parcel 176 is part of an Installation Restoration (IR) Program site and is currently undergoing investigation by the IR contractor. Two zone-wide target investigation areas (target areas) were identified for Parcel 177. A high level of effort is needed to complete the assessment at this parcel.

Releases of radioactive materials, petroleum products, corrosives, flammable liquids, mercury, and metals have historically impacted the open space of this parcel. Soil and groundwater sampling results have been addressed in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area*, and a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, entitled *Naval Supply Center, Oakland; Alameda Annex and Facility Screening Lot and Scrapyard Area; Alameda, California; Sampling Results Technical Memorandum*. Ongoing follow-up sampling and radiological sampling are being performed by the IR contractor.

This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities on Parcel 176 are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for open spaces and boundaries of Parcel 176, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the

parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 177, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Although no buildings are known to have existed on Parcel 176, one structure (Structure 367) covers less than five percent of the parcel. The parcel is presently in use as a salvage yard. Sewer lines are present at this parcel and are shown in Figure 6-176-1. Storm drains present on this parcel collect runoff from the parcel and may potentially be impacted from the release of liquids from storage containers on the parcel. Historical aerial photographs show that persistent surface staining was present on Parcel 176 from approximately 1953 to 1985.

Parcel 176 is contained within the Scrapyard IR site. Previous investigations have been conducted at Parcel 176 and specific data regarding potential chemical occurrence are available. Data from previous and current investigations at Parcel 176 are discussed in the previous and current investigations subsections in this PEP and in both the 1988 ERM-West and the 1993 PRC reports.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing sampling data to PRGs, it is recommended that the sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and

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PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-176-1 – PARCEL 176
PROPOSED SAMPLE LOCATION MAP

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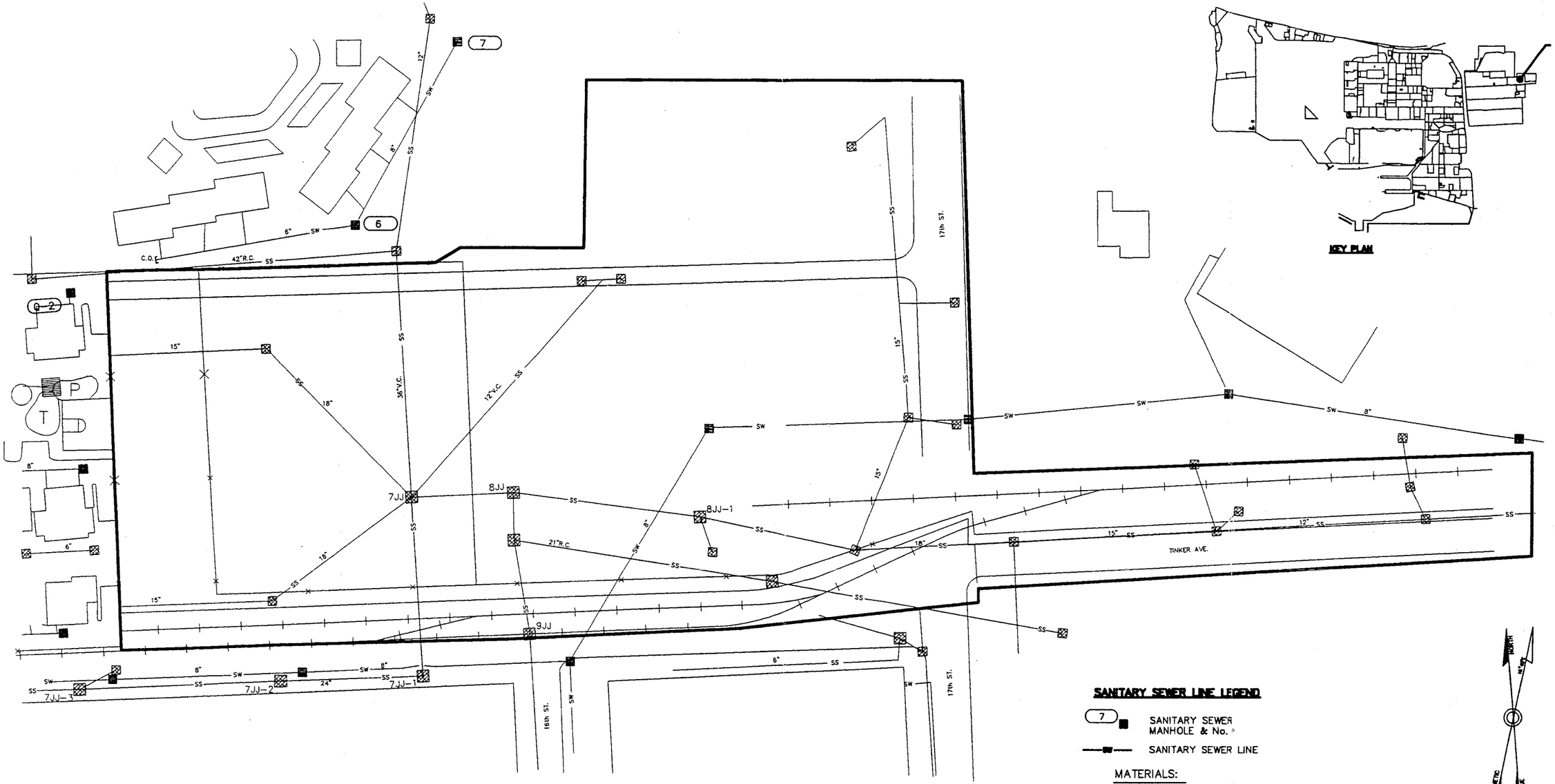
E-MAIL: diane.silva@navy.mil

SENSITIVE



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

NOTES:

1. NO P.E.P. SPECIFIC SAMPLING IS CALLED FOR AT THIS PARCEL.
2. PLEASE REFER TO THE REPORTS REFERENCED IN THE PARCEL 176 EVALUATION PLAN (SECTION 6-176) FOR PREVIOUS SAMPLING LOCATIONS AND SAMPLING RESULTS AT THIS PARCEL.

SCALE IN FEET

100 0 100 200 300

1" = 100'

SANITARY SEWER LINE LEGEND

7 ■ SANITARY SEWER MANHOLE & No.

SW SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

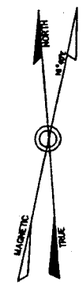
7JJ-3 ▨ MANHOLE

▨ CATCH BASIN

SS STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE



NAVAL AIR STATION, ALAMEDA

FIGURE 6-176-1

PARCEL 176

PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19569176.DWG	PWC 17.631 (STORM DRAINS) PWC 106,730 (SANITARY SEWER)
SCALE AS NOTED	DATE: 10/14/94 SHEET 1 OF 1

SENSITIVE

are not considered in this PEP. Lead-based paint, PCBs, and asbestos are not anticipated to be concerns on this parcel.

Seismic disturbances have impacted areas at NAS Alameda; however, there is no documentation of earthquake damage in Parcel 176. Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below.

Previous Investigations

Previous investigations have collected soil, groundwater, air, and soil vapor samples from Parcels 176 and 177. Follow-up detailed evaluations are being conducted by the IR contractor.

As part of a former screening-level sampling effort summarized in the 1988 ERM-West report, a total of 34 soil samples were collected throughout Parcels 176 and 177 (primarily on Parcel 177). These samples were analyzed for priority pollutants including metals, pesticides/PCBs, VOCs, and asbestos. Another screening-level sampling effort documented in the 1993 report by PRC indicated that a total of 132 soil samples had been collected throughout Parcels 176 and 177, including the railroad track area. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides/PCBs, VOCs, and SVOCs.

The 1988 ERM-West report indicated that thallium and lead were detected at maximum concentrations of 14 mg/kg and 400 mg/kg, respectively, in a soil sample collected near the railroad tracks in the eastern portion of Parcel 176. The concentration of lead in this soil sample exceeds residential PRGs. The following compounds were detected in soil samples near the west end of Structure 367 at concentrations below residential PRGs: TCE, TCA, benzene, 1,2-dichlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene, toluene, xylenes, ethylbenzene, t-1,2 dichloroethene, and c-1,2 dichloroethene. According to the 1993 PRC report, soil samples from Parcel 176 contained arsenic, lead, and mercury at maximum concentrations of 212 mg/kg, 26,600 mg/kg, and 4 mg/kg, respectively. The concentrations of both lead and arsenic exceeded residential PRGs for soil.

Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. The 1993 PRC report stated that TCA, PCE, TCE, and TPH were detected in Parcel 176 soil vapor at maximum concentrations of 0.1 µg/L, 100 µg/L, 1 µg/L, and 1,000 µg/L, respectively. Additionally, 17 monitoring wells are located throughout Parcels 176 and 177. Groundwater sampling results from these monitoring wells indicate that most metals and chlorinated organic compounds detected in the groundwater exceeded August 1994 USEPA MCLs. In addition, air

samples were collected and analyzed for lead, arsenic, and asbestos at Parcels 176 and 177. Lead, arsenic, and asbestos were detected at maximum concentrations of 84 ng/SCM, 0.81 ng/SCM, and 0.0039 f/cc, respectively.

The IR contractor has reportedly completed a radiological survey on a 50-foot interval grid as part of follow-up sampling for Parcels 176 and 177. The results were not available at the time of writing.

Current Investigations

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Structure 367

Structure 367 was constructed in the early 1950s and is located in the southeastern portion of the parcel. With a paved floor, multiple wooden walls, and no roof, this compartmental structure is currently used for segregating scrap materials. This structure covers approximately 10,000 square feet on both Parcel 176 and Parcel 177. Site inspection data indicate that the structure is in poor condition. According to EBS data, Structure 367 was formerly used as a warehouse. The space occupied by this structure was initially part of the San Francisco Airdrome.

Open Space

Open space covers the entire area referred to as Parcel 176 (nine acres). This parcel has served as a scrapyard for NAS Alameda since the early 1950s. The ground surface of the parcel is primarily dirt with patches of

asphalt and concrete scattered throughout. Asphalt roads run east to west and north to south through this parcel. The scattered pavement is generally in poor condition, while the roads are more carefully maintained. The unpaved areas of the open space are covered with mud, sparse vegetation, and gravel. Utilities located within the open space include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space have consisted of the storage of salvage materials and the accumulation of waste solutions removed from these salvage materials.

Spills of motor oil and fuel, in amounts typically associated with vehicle parking, were documented in the southeast parking area of the parcel. Near the south edge of the parcel, several stains ranging in size from one square foot to 100 square feet were located on bare soil just north of Gate S-2. No cleanup appeared to have taken place. EBS data indicate that there was an ongoing PCB oil leak from a transformer in the southern portion of Parcel 176.

One aboveground diesel storage tank, which is used to refuel scrapyard equipment, is located in the north-central portion of the parcel. This raised tank is located within a concrete secondary containment structure. According to site inspection data, several stains were present on the bare soil around this tank. These stains appear to be the result of the equipment refueling process.

Approximately 62 locked Conex boxes and several containers labeled "corrosives" and "flammable liquids" were stored at the west end of the parcel during the site inspection.

Potential radiological hazards appear to be of concern in the open space. A small area in the northeast portion of the open space, demarcated with "Caution: Do Not Enter" yellow tape, reportedly contained radioactive materials. There are several spilled and broken drums within this containment area. The ground surface is primarily bare soil, with a lot of standing water in the vicinity. Removal of radioactive waste above one quarter of the permissible radiological dose set by OSHA was performed within this area. In the western portion of Parcel 176, site inspectors noted instruments labeled "radioactive devices" and a wooden crate labeled "mercury metallic" and "radioactive device."

Numerous storm drains are located throughout the open space. They serve as receptacles for the runoff from the scrapyard and the adjacent parking lot in Parcel 174.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 176 is bounded by Parcels 175, 177, 178, 174, 181, and the College of Alameda. The Alameda Railroad runs along the southern portion of Parcel 176. A stain three feet in diameter was located fifteen feet to the south of the tracks. The IR contractor has collected samples for lead, pesticides/PCBs, and SVOCs along this section of tracks.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 176, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred. The data gaps shown in Table 6-176-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and the Scrapyard Installation Restoration site. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 176 because no industrial buildings are present.

As noted earlier, Parcel 176 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-

use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Because pesticide sampling has already been conducted for previous investigations, no pesticide sampling is recommended for this parcel.

Once the data gaps in Table 6-176-1 are addressed and the sampling results from the previous investigations described below are compared to the appropriate screening levels, Parcel 176 may be leased or transferred.

Target Areas and Compounds of Concern

Because subsurface contamination issues are being addressed by the IR Program, no parcel-specific target areas were identified for this parcel. Two zone-wide target areas were identified at this parcel; however, no zone-wide target area samples are located on this parcel because extensive soil vapor sampling has already been conducted at this parcel.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.
- Zone 16 Target Area 3 (Railroad Tracks): This parcel does not contain any samples from this zone.

The remaining data gaps (concerns pertaining to PCBs, underground lines, radiological concerns, and the Scrapyard IR site) must be resolved before this parcel can be leased or transferred.

TABLE 6-176-1

Summary of Data Gaps
NAS Alameda Parcel 176

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 176.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located on Parcel 176. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 177, Scrapyard IR Site.
Potential Zone-Wide Release Areas	• Former Wetlands. • Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-177

PARCEL 177 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 177 at NAS Alameda (Figure 6-177-1). The parcel, which is located in the northeast portion of the base, is approximately five acres in size and is rectangular in shape. No RCRA sites are located at this parcel. Parcel 177 is part of an Installation Restoration (IR) Program site and is currently undergoing investigation by the IR contractor. One zone-wide target investigation area (target area) was identified for Parcel 177. A high level of effort is needed to complete the assessment at this parcel.

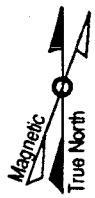
Storage and release of radioactive materials, petroleum products, PCB-containing oil, lead-acid batteries, scrap metal, and halogenated solvents have historically impacted the open space on Parcel 177; storage and release of petroleum hydrocarbons, PCBs, and mercury have historically impacted the interiors of buildings. Soil and groundwater sampling have been addressed in a 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area*, and a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, entitled *Naval Supply Center, Oakland; Alameda Annex and Facility Screening Lot and Scrapyard Area; Alameda, California; Sampling Results Technical Memorandum*.

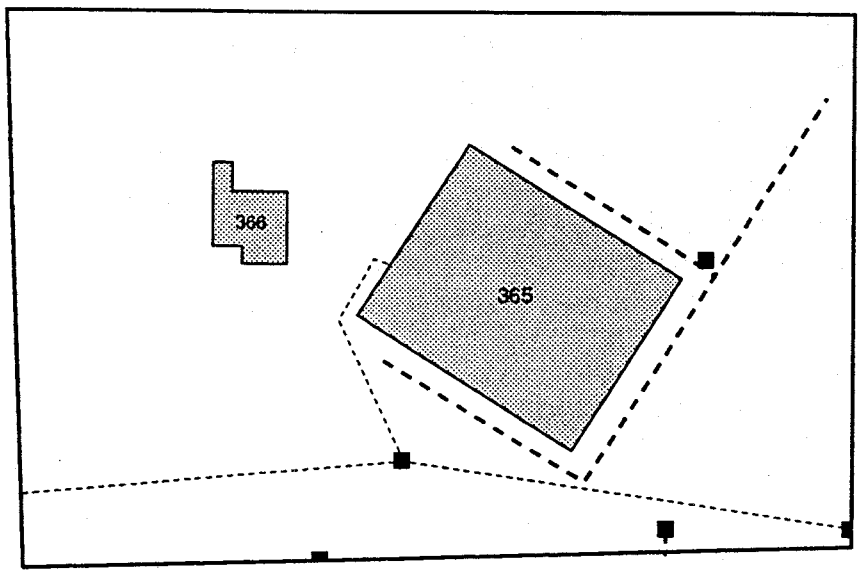
This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities are discussed below.

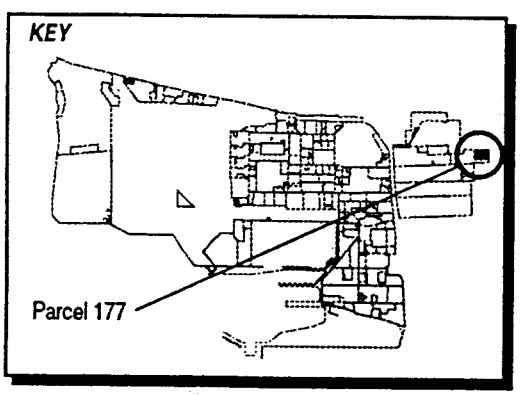
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 177, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling







LEGEND

- Storm Sewer Line
- Sewer Line
- Catch Basin or Manhole

Note: No screening - level sampling is recommended for Parcel 177.

1"= 125'

Figure 6-177-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 178, 179, 180, 181, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 365 and 366) and one structure (Structure 367) cover approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel is presently in use as a storage area. Sewer lines present at this parcel are shown in Figure 6-174-1. Staining observed around the storm drains during the site inspection indicates that the storm sewer may have been impacted.

Parcel 177 is contained within the Scrapyard IR site. Previous investigations have been conducted at Parcel 177 and specific data regarding potential chemical occurrence are available. Data from previous and current investigations at the Scrapyard IR site (Parcels 176 and 177) are discussed in the previous and current investigations subsections in this PEP and in both the 1988 ERM-West and the 1993 PRC reports.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Historical aerial photographs show that persistent surface staining was present on Parcel 177 from approximately 1953 to 1985. Aerial photographs also indicate that aboveground storage tanks and railroad tracks were formerly located on this parcel.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. During the site inspection, potentially lead-based paint was observed peeling from the exteriors of Buildings 365 and 366. Transformer oil is suspected to have been used for dust control in the open space. The transite wallboard on the underside of the welding area in Building 366 is documented to contain asbestos. Asbestos disposal is suspected in the open space.

Based upon building visual inspections, the buildings located on Parcel 177 do not appear to be equipped with heating-ventilation-air conditioning (HVAC) systems. EBS data indicates that such systems are unlikely in these buildings. Activities of potential environmental or industrial hygiene (IH) concern within the parcel's buildings and open spaces are described in detail below.

Previous Investigations

Previous investigations have collected soil, groundwater, air, and soil vapor samples from Parcels 176 and 177. Follow-up detailed evaluations are being conducted by the IR contractor.

As part of a former screening-level sampling effort summarized in the 1988 ERM-West report, a total of 34 soil samples were collected throughout Parcels 176 and 177 (primarily in Parcel 177). These samples were analyzed for priority pollutants including metals, pesticides/PCBs, VOCs, and asbestos. Another screening-level sampling effort documented in the 1993 PRC report indicated that a total of 132 soil samples were collected from locations throughout Parcels 176 and 177. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides/PCBs, VOCs, and SVOCs.

The 1988 ERM-West report indicates that arsenic was detected at a maximum concentration of 9.4 mg/kg in a soil sample taken near Structure 367, while PCBs and beryllium were detected at maximum concentrations of 1.8 mg/kg and 0.6 mg/kg, respectively, in soil samples collected near Building 365. These concentrations of arsenic, PCBs and beryllium exceeded August 1994 residential preliminary remediation goals (PRGs). In general, soil samples collected near Building 365 had the highest concentrations of metals.

Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. PRC reported detections of TCA, TCE, and TPH in Parcel 177 at maximum concentrations of 0.1, 0.1, and 10,000 µg/L, respectively. Additionally, 17 monitoring wells are located throughout Parcels 176 and 177. Groundwater sampling results from these monitoring wells indicate

that most metals and chlorinated organic compounds detected in groundwater exceed August 1994 U.S. EPA MCLs. Groundwater samples adjacent to or downgradient from Building 365 had the highest concentrations of metals. In addition, air samples were collected and analyzed for lead, arsenic, and asbestos at Parcels 176 and 177. Lead, arsenic, and asbestos were detected at maximum concentrations of 84 ng/SCM, 0.81 ng/SCM, and 0.0039 f/cc, respectively.

As part of the follow-up sampling for Parcels 176 and 177, a radiological survey on a 50-foot interval grid was completed. No areas were identified within Parcel 177 that exceeded one quarter of the permissible radiological dose set by OSHA.

Current Investigations

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Building 365

Building 365 was constructed in the early 1930s and covers approximately 19,500 square feet (Figure 6-177-1). This one-story warehouse is constructed of a metal frame, a metal ceiling, and metal walls. The floor is paved with concrete and asphalt. This building initially served as the principal passenger terminal for the San Francisco Airdrome, housing aircraft operated by several commercial carriers until the Airdrome closed in 1941. Building 365 has served as a scrap sorting area since approximately 1941.

Utilities located within and immediately surrounding Building 365 include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Information collected during the EBS indicates that aircraft maintenance activities occurred in this building. These activities involved the use of solvents, cleaning solutions, and paint. Frequent oil leaks and spills also resulted from aircraft maintenance. The building was used for aircraft maintenance between approximately 1930 and 1941. In the ensuing years, the building became an area for scrap operations.

During visual inspection, suspected oil stains were noted throughout the building. Measuring approximately four square feet, the dark-colored stains may be a result of the documented PCB and mercury spills that occurred in this area prior to 1988. Historical data indicate that the Defense Reutilization and Marketing Office (DRMO) responded to the spills in a timely manner. The cleanup methods, however, were not specified.

Site inspections identified several industrial hygiene issues within Building 365. Severe structural damage was noted at the foundation of the building; some of the load-bearing wall supports were also affected. Additionally, potentially lead-based paint was observed peeling from the interior walls.

Three disconnected wall-mounted transformers are present in the building. They appeared to be old and corroded; water damage was probable.

Building 366

Constructed in the early 1950s, Building 366 has primarily served as a storage area for DRMO (Figure 6-177-1). This one-story building is two-thirds vacant and is in poor condition. The walls and ceiling are constructed of wood and the floor is constructed of concrete. The 1,500-square-foot area occupied by Building 366 was formerly part of the San Francisco Airdrome's open space. Currently, a cutting and welding pad and storage pad are present in Building 366.

Utilities located within and immediately surrounding Building 366 include underground natural gas and water lines. During the site inspection, a light-colored stain was noted on the concrete around a floor drain in the southwest corner of Building 366. It is not known whether this floor drain is connected to the storm sewer or the sanitary sewer.

Approximately 50 gallons of gasoline and adhesives are documented to be stored in a steel container in the northern interior of the building. Additionally, there are 150 gallons of oil stored in either steel containers or drums within the building. According to site inspection data, the drums are set on drip catchers and wood pallets. The containers are reported to have staining in and around them. A Conex box containing diesel fuel and hydraulic fluid is present on the storage pads.

Staining, possibly from oil, is present within Building 366. A five-foot-by-four-foot stain was observed on the concrete storage pad. Site inspectors also noted that approximately 60 percent of the plywood and wood pallets beneath a hazardous materials Conex box were stained.

The transite wallboard on the underside of the welding area is documented to contain asbestos. Visual inspections revealed that the wallboard was water-damaged and cracked.

Structure 367

Structure 367 was constructed in the early 1950s and is located in the southwestern portion of the parcel. This structure has a paved floor, multiple wooden walls, and no roof, this compartmental structure is currently used for segregating scrap materials. This structure covers approximately 10,000 square feet on both Parcel 177 and Parcel 176. Site inspection data indicate that the structure is in poor condition. The space occupied by this structure was initially part of the San Francisco Airdrome. According to EBS data, Structure 367 was formerly used as a warehouse.

According to data obtained from visual inspections, leaking materials are present on the foundation of Structure 367. Oily residue from several spools of wire stored at this structure has created a five-foot-by-five-foot stain on the concrete floor. A similar oily stain, approximately 35 square feet in size, is located on the nearby concrete and dirt.

Open Space I

Open Space I is defined as the area immediately surrounding Building 365, Building 366, and Structure 367. This space occupies approximately 10 percent of the parcel. The ground surface of Open Space I is composed of bare soil, asphalt, and concrete. Both the paved and unpaved areas are in poor condition.

EBS information indicates that storage activities associated with Building 365, Building 366, and Structure 367 were conducted in Open Space I. Storage activities involved the processing of transformers, capacitors, lead-acid batteries, and metal scrap (possibly cadmium- and nickel-plated). Historical data indicate that transformer oil was spread on the ground for dust control and that asbestos may have been disposed of in the area. The areas around Buildings 366 and 367 were formerly part of a runway used by the San Francisco Airdrome. Typical chemical handling and use associated with aircraft care in the 1930s may be of potential concern.

Photographs taken by site reviewers show the storage of drums against the exterior of Building 365. The types of chemicals, if any, stored in these drums were not noted.

Ongoing spills of oil and hydraulic fluid are documented in EBS information files. Site inspection data indicate that scattered stains are located throughout Open Space I. These stains, which range in size from one foot to two feet in diameter, appear to originate from the forklifts and cranes used at the Scrapyard. There are no reports of cleanup; however, during visual inspection of this parcel, a worker was seen sweeping soil over a spill that was caused by forklift maintenance activities.

One pad-mounted transformer was noted in Open Space I. The side of this transformer was labeled "sampled 3/23/94 S.O./D.C." An oil/vacuum switch is located northeast of Building 365.

Open Space II

Open Space II, which is located in the northern portion of Parcel 177, covers approximately 15 percent of the parcel.

The ground surface of Open Space II is primarily bare soil and deteriorated asphalt. The poor condition of Open Space II and materials strewn about the parcel make it difficult to identify both the ground type and potential staining in the area.

EBS information indicates that storage activities associated with Building 365, Building 366, and Structure 367 were conducted in Open Space II. Storage activities involved the processing of transformers, capacitors, lead-acid batteries, and metal scrap (possibly cadmium- and nickel-plated). Historical data indicate that transformer oil was spread on the ground for dust control and that asbestos may have been disposed of in the area. The area around Building 366 was formerly part of a runway used by the San Francisco Airdrome. Typical chemical handling and use associated with aircraft care in the 1930s may be of potential concern.

Staining was observed on and beneath a portable generator that was stored in Open Space II. The staining appears to be due to spillage or leakage from the generator's fuel tank. One transformer was documented in the northeast corner of the parcel. EBS files also noted the presence of a storm drain in the northwest corner of the parcel.

Although site inspection data indicate that equipment with "radioactive" stickers were stored in Open Space II, the "radioactive" equipment appeared to be safely contained within cases. A recent radiological survey of the parcel

did not indicate the presence of any ionizing radiation exceeding action levels.

Open Space III

Open Space III is defined by the remaining open area in Parcel 177. This space covers approximately 60 percent of the parcel. The ground surface of Open Space III consists of bare soil, concrete, and asphalt. There are monitoring wells throughout the area.

Utilities located within and immediately surrounding Open Space III include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. Two storm drains in the southeast area of the open space collect runoff from the scrapyard.

EBS information indicates that storage activities associated with Building 365, Building 366, and Structure 367 were conducted in Open Space III. Storage activities involved the processing of transformers, capacitors, lead-acid batteries, and metal scrap (possibly cadmium- and nickel-plated). Historical data indicate that transformer oil was spread on the ground for dust control and that asbestos may have been disposed of in the area. The areas around Buildings 366 and 367 were formerly part of a runway used by the San Francisco Airdrome. Typical chemical handling and use associated with aircraft care in the 1930's may be potential concerns.

PCB-containing oil is documented to have been spilled in this area in 1987. Although the amount of the release is not documented, it is noted that cleanup was accomplished by a private contractor. Another spill involving PCBs and mercury occurred sometime before 1988. Although the method of cleanup is not disclosed, the documents note that DRMO responded quickly to the releases.

One pad-mounted transformer is located near the eastern edge of Open Space III. No leakage from this transformer was noted during the site inspection. According to a label on its side, the transformer was last sampled on 3/23/94.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 177 is bounded by Parcel 176 to the west and south, and the Fleet Industrial Supply Center (FISC) to the east and north. Parcel 176 is part of the Scrapyard IR site. Radiological hazards are of concern on Parcel 176. The 1993 PRC report on the Scrapyard IR site does not indicate that Parcel 177 has been impacted by Parcel 176.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 177, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred. The data gaps shown in Table 6-177-1 must be addressed before this parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and the Scrapyard IR site. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are of concern in Buildings 365 and 366. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur. Because of the age, poor structural integrity, former activities, and extensive staining associated with Buildings 365 and 366, it is suggested that these buildings be demolished.

As noted earlier, Parcel 177 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Because pesticide sampling has been conducted for previous investigations, no pesticide sampling is recommended for this parcel.

Once the data gaps in Table 6-177-1 are addressed and the sampling results from previous subsurface investigations are compared to the appropriate screening levels, Parcel 177 may be leased or transferred.

Target Areas and Compounds of Concern

Because subsurface contamination issues are being addressed by the IR Program, no parcel-specific target areas were identified for this parcel. One zone-wide target area was identified at this parcel; however, no zone-wide target area samples are located on this parcel because extensive soil vapor sampling has already been conducted at this parcel.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

The remaining data gaps (concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and the Scrapyard IR site must be resolved before this parcel can be leased or transferred.

TABLE 6-177-1

Summary of Data Gaps
NAS Alameda Parcel 177

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located on Parcels 177 and 176. Additional subsurface investigation relative to the Scrapyard IR Site is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 176, Scrapyard IR Site.
Potential Zone-Wide Release Areas	• Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

PARCEL 178 & 184 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 178 and 184 at NAS Alameda (Figure 6-178-1). Parcel 184 is being considered concurrently with Parcel 178 because the histories and former uses of these parcels are very similar. Parcel 184 is completely contained within Parcel 178 (see Figure 6-178-1). The parcels, which are located in the northeastern portion of the base, are approximately 22.5 acres in size and together are roughly L-shaped. These parcels have been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. No parcel-specific target investigation areas (target areas) have been identified on these parcels; however three zone-wide target areas encompass these parcels. Surface soil and soil vapor sampling will be used to accomplish the screening-level investigation for the zone-wide target areas. Table 6-178-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 178 and 184, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 178 and 184, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern. Past and present uses of these parcels were determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 179, 180, 181, 182, 183, and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-178-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

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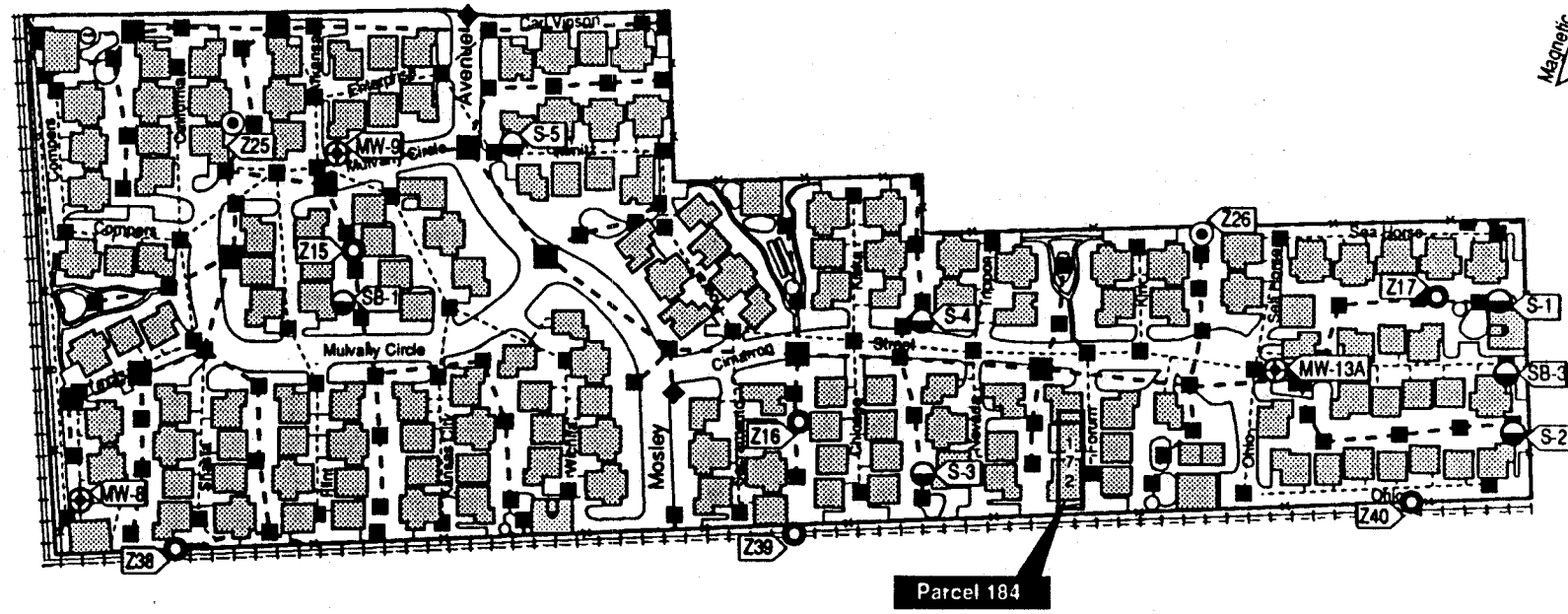
SENSITIVE



LEGEND

- Storm Sewer Line
- Sewer Line
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Boring Location
- Monitoring Well Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 250'

KEY

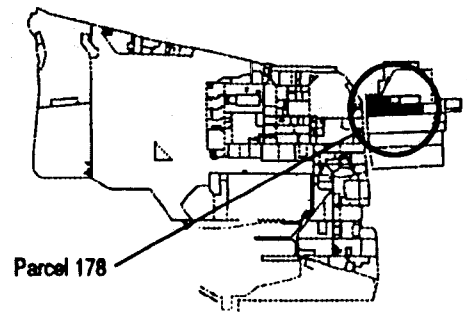


Figure 6-178-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6/94
2121.90.11/AMR/06.28.94

SENSITIVE

TABLE 6-178-1

Summary of Recommended Samples
NAS Alameda Parcel 178

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-15-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-16-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-17-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-25-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-26-3-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-38-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-38-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-38-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-39-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-39-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-40-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-40-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF

* This is the suggested location for the confirmatory sample. The actual location will depend on field analytical results.

and commercial (e.g., Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the Parcel 178 and 184 boundaries were completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Approximately 160 family dwellings currently cover approximately 50 percent of these parcels. The remaining 50 percent of the parcels consists of open space. The parcel areas are presently in use as a residential subdivision. One building (Building 369) was formerly located in the southwestern portion of Parcel 178, and Building 172 was formerly located on Parcel 184. Sewer lines are present at these parcels and are shown in Figure 6-178-1.

Parcels 178 and 184 are located to the west of Parcel 176, the Scrapyard Installation Restoration (IR) Program site. Previous investigations have been conducted at Parcel 178, and specific data regarding potential chemical occurrence are available. Parcels 178 and 184 were formerly used as a warehouse area adjacent to the Scrapyard. Parcels 178 and 184 were investigated in a March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area.* Two monitoring wells (MW-9 and MW-13) and 10 soil borings were installed on Parcel 178 as part of this previous investigation. A total of 14 soil samples were collected from depths of zero to five feet below ground surface from the 10 soil borings.

Data from soil and groundwater samples collected from the borings and monitoring wells on Parcel 178 between March 1987 and January 1988 are summarized in Tables 6-178-2 and 6-178-3. Only Arsenic was detected in soil samples above August 1994 residential PRG. Groundwater samples collected in August 1987 were above May 1993 USEPA or Cal-EPA MCLs for cadmium, chromium, lead, nickel, and benzene. Only benzene was detected above USEPA and Cal-EPA MCLs in groundwater samples collected in January 1988. Data indicate that activities on Parcel 178 and adjacent parcels have impacted Parcel 178. Current monitoring well data is not yet available to fully characterize the impacts to Parcel 178.

TABLE 6-178-2

March 1987 Soil Sample Results in mg/kg
NAS Alameda Parcel 178

Sample Number	Depth	Arsenic	Cadmium	Chromium	Lead	Nickel
B-9	2'-4'	16	1	56	43	90
B-13	2'-4'	5.9	1	34	14	130
S-1	2'-4'	12	1	53	22	85
S-2	2'-4'	6	1	38	25	37
S-3	2'-4'	8	1	86	31	270
S-4	2'-4'	16	1	62	47	84
S-5	2'-4'	16	1	59	37	79
S-6	2'-4'	4.3	1	150	24	690
SB-1	0.0'-0.5'	3	3	360	9	580
SB-1	1'-1.5'	21	3.5	120	23	80
SB-1	4.5'-5'	8	2.5	90	18	66
SB-3	0.0'-0.5'	6	2.5	190	5	430
SB-3	1'-1.5'	6.2	3	250	18	450
SB-3	4.5'-5'	5.2	1	54	11	48
Detection Limit		0.005	0.001	0.005	0.005	0.05
August 1994 Residential PRGs		1.9	38	380	400	1500

Source: ERM-West, March 1988

TABLE 6-178-3

Groundwater Sample Results in mg/L
NAS Alameda Parcel 178

Sample Number	Date	Arsenic	Cadmium	Chromium	Lead	Nickel	Benzene	Napthalene
MW-9	Aug-87	ND	0.04	0.03	0.32	0.14	0.25	1.1
MW-9	Jan-88	0.009	ND	ND	ND	ND	0.26	7.8
MW-13	Aug-87	ND	0.06	0.07	0.78	0.31	0.57	0.73
MW-13	Jan-88	0.004	ND	ND	ND	ND	0.74	1.8
Detection Limit		0.005	0.001	0.005	0.005	0.05	0.0005	40
USEPA MCL		0.05	0.005	0.1	0.015	0.1	0.005	---
May 1993 CA MCL		0.05	0.01	0.05	0.05	---	0.001	---

Source: ERM-West, March 1988

Construction requirements for the new family housing project for fiscal year 1988 considered the results of the ERM-West, March 1988 report. Based upon the investigation by ERM-West, the top six inches of soil at Parcels 178 and 184 was removed and replaced with a minimum of two feet of clean imported fill. To be able to place residences in this area, the Navy installed an impermeable barrier below building foundations to reduce potential exposure to impacted soil and groundwater. Building foundations for family housing units were underlain by a minimum of 2 inches of sand over a 40 mil impermeable barrier.

Current investigations are being performed at the Fleet and Industrial Supply Center, Oakland Alameda Facility and Alameda Annex. This investigation affects numerous parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. In addition to comparing the existing data to PRGs, it is recommended that the zone-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Residential Housing

The residential housing currently located on these parcels was built between 1990 and 1992. The space now occupied by the houses was an open space storage area between the mid 1960s and 1990. Prior to this, the northern section housed a barracks area built in the 1940s. The southwestern portion of Parcel 178 had a large warehouse that was built between 1947 and 1953. The warehouse was demolished between 1985 and 1990. Detailed information about the buildings presently located on the parcel is not available; visual building visual inspections were not conducted within residences.

Utilities located within and immediately surrounding the parcels include underground sanitary sewer, water, natural gas, storm sewer, and electrical lines. Twenty-four small, pad-mounted transformers were noted throughout the parcel. Because of the recent development of the parcel, PCB-containing transformers are not likely to be present. A small oil stain was noted on the concrete pad of a transformer at the north part of Mosley Avenue.

No chemical storage is documented to have occurred in the current or former buildings on the parcels. No other incidents such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Parcels 178 and 184.

Building 369 (Demolished)

Building 369 (Parcel 178) was constructed in the early 1950s and was used as a warehouse (Figure 6-178-1). This 172,000 square foot building was demolished between 1985 and 1990. A portion of this warehouse was sealed off prior to its demolition due to the deterioration of asbestos fire-proof material.

Building 172 (Demolished)

Building 172 (Parcel 184) was constructed in 1946 and was used as an equipment storage shed. This 5,000 square foot building was demolished between 1990 and 1992. No chemical storage, spills or staining are documented to have occurred in or near Building 172.

Open Space

Open space covers approximately 50 percent of the parcels. The open space of Parcel 178 had been used for vehicle and equipment parking, warehousing of unknown materials, and is currently used for residential and recreational purposes. The open space of Parcel 184 was covered by an equipment storage shed, as described above.

No structures are currently located in the open space on Parcels 178 and 184. The ground surface of the open space consists of 75 percent asphalt and concrete pavement and 25 percent unpaved areas. The pavement is in good condition. The unpaved areas of the open space have been landscaped since 1990. This parcel previously had open space areas that were storage areas from 1960 to 1990.

Utilities located on the parcels include underground sanitary sewers, water, natural gas, electrical, and storm sewer lines. No chemical storage is documented to have occurred on Parcels 178 and 184. No documented spills or staining were noted on the parcel, except for a paint stain on a storm drain that was observed during the site inspection. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcels 178 and 184.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcel 178 is bounded by Parcels 180 and 181 to the north, Parcel 176 to the east, Parcel 174 to the south, and Main Street to the west. Parcel 184 is bounded by Parcel 178 to the north, west, and east, and Parcel 174 to the south. Parcel 176 (along the eastern border of Parcel 178) is an IR Site (the Scrap Yard). Activities of concern on these adjacent parcels include hazardous materials storage and use. Previous investigations by ERM-West, Inc. and PRC Environmental Management, Inc. have been conducted at Parcels 176, 177, and 178. Data indicate that activities on these parcels have impacted Parcels 178 and 184. Ongoing follow-up sampling and radiological sampling at the Scrap Yard IR site are being performed by the IR contractor.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 178 and 184, consistent with the objectives in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-178-4 must be addressed before the parcels can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps: transformers, lead-based paint, asbestos, radiological considerations, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated sewers is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 178 or Parcel 184 because no industrial buildings are present.

As noted earlier, Parcel 178 previously had open space areas that were unpaved, and currently has open space areas that are landscaped. Parcel 184 was previously covered by Building 172, and currently has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 178 was previously occupied by wetlands, and may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-178-4 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcels 178 and Parcel 184 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-178-4

Summary of Data Gaps
NAS Alameda Parcel 178 & 184

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 178 or Parcel 184.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located adjacent to the east of Parcel 178. Additional subsurface investigation relative to the Scrapyard IR Site is ongoing by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse) and Parcel 178 indicate the presence of benzene and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Landscaped or long-term unpaved areas. • Filled wetlands. • Railroad tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-178-4

Summary of Data Gaps
NAS Alameda Parcel 178 & 184

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

The following zone-wide target areas were identified on Parcel 178 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcels 178 and 184 are part of this zone-wide target area. Three of the 21 proposed zone-wide surface soil samples for pesticides are located within Parcels 178 and 184. The samples were located on these parcels to ensure an appropriate distribution of samples throughout the zone-wide target area. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 2 includes all land area north of Atlantic Avenue within the Housing Zone, which overlie former wetlands. Parcels 178 and 184, which are part of this zone-wide target area, overlie former wetlands. Three of the 14 samples proposed to be collected from this zone-wide target area are located on Parcels 178 and 184. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. The railroad borders the western and southern boundaries of Parcels 178 and 184. Three of the five samples proposed to be collected from this zone-wide target area are located on Parcels 178 and 184. The zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

- Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. Railroad tracks currently located along the western boundary of Parcel 178 and the southern boundaries of Parcels 178 and 184 are part of this zone-wide target area. Seven of the 14 samples proposed to be collected from this zone-wide target area are located on Parcel 170. The proposed zone-wide target area samples that are located on Parcels 178 and 184 are listed on Table 6-178-1.

In addition, data gaps pertaining to transformers, asbestos, lead-based paint, underground lines, and radiological concerns must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and soil vapor sampling (SOP 6), will be employed to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-178-1 summarizes the screening-level sampling and analysis recommended for the zone-wide target areas that impact Parcels 178 and 184. Six surface soil samples and two soil vapor samples will be collected from the locations shown on Figure 6-178-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), wipe sampling (SOP 20), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

PARCELS 179 AND 180 EVALUATION PLAN

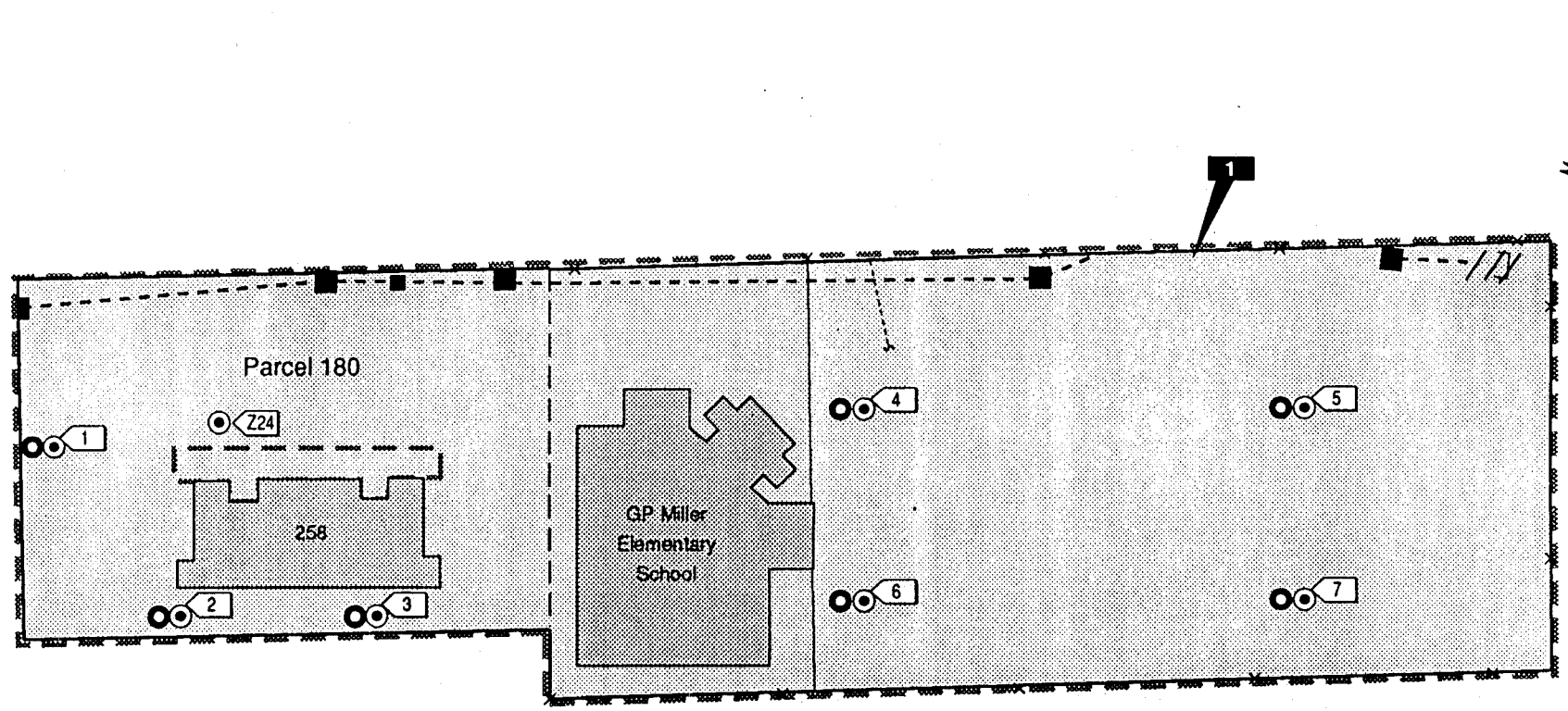
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcels 179 and 180 at NAS Alameda (Figure 6-179-1). Parcel 180 is being considered concurrently with Parcel 179 because the histories, former uses, and current users of these parcels are very similar. Parcel 180 is located to the west of Parcel 179 (see Figure 6-179-1). The parcels, which are located in the northeastern portion of the base, are approximately five acres in size and are roughly rectangular in shape. The parcels have been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on these parcels. One zone-wide and one parcel-specific target investigation areas (target areas) have been identified on these parcels. Surface soil and soil vapor will be used to accomplish the screening-level investigation for the target areas. Table 6-179-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcels 179 and 180, historical activities are discussed below.

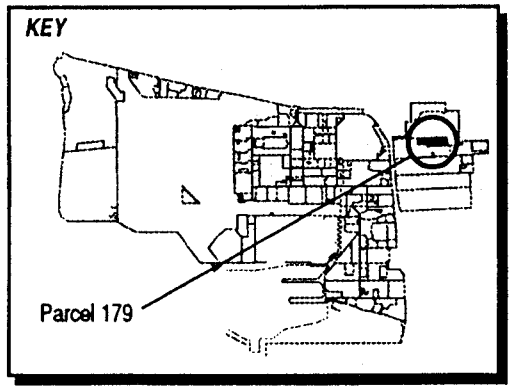
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcels 179 and 180, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of these parcels was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcels where sampling was deemed necessary to delineate potential impacts of compounds of concern.

These parcels have been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 181, 182, 183, 184, and 212.





LEGEND

- Target Area 1
- Storm Sewer Line
- Sewer Line
- Capped
- Sewer Line Abandoned In Place
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"=

Figure 6-179-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
212' 'AMR/06.28.94

TABLE 6-179-1

Summary of Recommended Samples
NAS Alameda Parcels 179 and 180

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
180-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
180-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
180-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
180-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, SVOCs, Pesticides, Metals	Modified EPA 8015, CLP RAS
179-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	VOCs	GC
179-11-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
179-12-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
179-13-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
179-14-0-A-V-DDMMYY	0.0'	Air	Air	Target Area 2	VOCs	CLP RAS
Z16-24-3-V-S-DDMMYY	3.0'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by these parcels in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the Parcel 179 and 180 boundaries was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, the George P. Miller Elementary School and Building 258 (the child care center) cover approximately 30 percent of the Parcels 179 and 180. The remaining 70 percent is open space. The parcel areas are presently in use as a public elementary school. Sewer lines are present at these parcels and are shown in Figure 6-179-1.

Parcels 179 and 180 are located approximately 100 feet west of an Installation Restoration (IR) Program site (The Scrapyard). No previous investigations have been conducted at the parcel and specific data regarding potential chemical occurrence are not available; however, previous investigations have been performed and current investigations are being performed at adjacent parcels. Previous and current investigations affecting adjacent parcels are discussed in the following sections, which are summarized in the Zone Analysis Plan for Zone 16.

In addition to comparing the existing data to PRGs, it is recommended that the parcel-specific and zone-wide sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Previous Investigations

Previous and current investigations have been performed at neighboring Parcels 172, 173, 174, 175, 176, 177, and 178. Previous investigations on Parcel 178 and the western portion of Parcel 176 are within 500 feet of the boundaries for Parcels 179 and 180, and will be summarized in this section.

Parcel 178 (along with Parcels 172, 173, 174, 175, 176, and 177) was investigated during 1987 and 1988 by ERM-West, Inc. A March 1988 report prepared by ERM-West, Inc., under contract N62474-85-D-5627, entitled *Contaminated Site Investigation at the Warehouse and Scrapyard Area* summarizes the results of these investigations. As part of these previous investigations, two of 14 monitoring wells (MW-9 and MW-13) and 10 of 52 soil borings were installed on Parcel 178. A total of 14 soil samples were collected from these 10 borings at a depth of zero to five feet below ground surface. Data from soil and groundwater samples collected from the borings and monitoring wells on Parcel 178 are summarized in the PEP for Parcel 178 in Tables 6-178-2 and 6-178-3. Only Arsenic was detected in soil samples above August 1994 Residential Use PRGs. Groundwater samples collected in August 1987 contained concentrations of cadmium, chromium, lead, nickel, and benzene above May 1993 USEPA and Cal-EPA MCLs. However, only benzene was detected above USEPA and Cal-EPA MCLs in groundwater samples collected in January 1988. Current monitoring well data are not available to fully characterize the impacts to Parcel 178.

Construction requirements for the new family housing project for fiscal year 1988 considered the soil data results of the ERM-West, Inc. March 1988 report. Based upon the investigation by ERM-West, the top six inches of soil from Parcels 178 and 184 was removed and replaced with a minimum of two feet of clean imported fill. Prior to construction of residences in this area, the Navy installed an impermeable barrier below building foundations to reduce potential exposure from impacted soil and groundwater. Building foundations for family housing units were underlain by a minimum of 2 inches of sand placed over a 40-mil thick impermeable synthetic barrier.

Four soil borings were installed on the western portion of Parcel 176 by ERM-West in 1987. Six soil samples were collected from these borings at depths of zero to five feet below ground surface. Only arsenic was detected above August 1994 Residential Use PRGs.

A screening-level sampling effort documented in a 1993 report by PRC indicated that a comprehensive soil vapor survey was performed for Parcels 176 and 177. In addition, soil, groundwater, and air samples

were collected throughout Parcels 176 and 177, including the railroad track area.

Soil vapor sampling on Parcels 176 and 177 was performed on a 50-foot interval grid. The 1993 PRC report stated that TCA, PCE, TCE, and TPH were detected in Parcel 176 soil vapor at maximum concentrations of 0.1 µg/L, 100 µg/L, 1 µg/L, and 1,000 µg/L, respectively.

Subsequent, soil boring locations were chosen based on a 150-foot by 150-foot grid, locations of suspected chemicals of concern, potential exposure pathways, and soil vapor survey results. One hundred thirty two soil samples were collected from the soil boring locations. These samples were analyzed for priority pollutants including metals, cyanide, phenolics, pesticides, PCBs, VOCs, and SVOCs. Samples from five of the soil borings were located on the western portion of Parcel 176. The 1993 PRC report indicated the presence of chromium, nickel, and mercury in these soil samples. The concentrations of these metals were all below USEPA's August 1994 industrial PRGs for soil.

One of the four air monitoring sample locations was located on the western portion of Parcel 176. According to the 1993 PRC report, arsenic and lead were detected in the air at concentrations of 0.54 and 51 ng/SCM, respectively.

Four monitoring wells are located on the western portion of Parcel 176. The 1993 PRC report for groundwater sampling results from these four monitoring wells indicated the presence of vinyl chloride, fluorene, naphthalene, and barium. The concentrations were slightly above USEPA and Cal-EPA December 1993 MCLs for most compounds. Any further groundwater investigation requirements will be defined after the screening-level investigation has been completed. The screening-level data collected under this program and the groundwater data to be gathered from new wells at adjacent parcels will be evaluated together to assess the need for any further groundwater investigation.

Current Investigations

Current investigations are being performed at the Fleet Industrial Supply Center, Oakland - Alameda Facility/Alameda Annex. Figure 6-Figure Z-16-2 shows the general site layout of this study area. The sample locations for these investigations are often within 500 feet of Parcels 179 and 180. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative

plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are completed, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area. Soil samples are proposed to be collected at depths of 0.0 feet, 0.5 feet, 2.0 to 2.5 feet, 5.0 to 5.5 feet, and one directly above the soil/groundwater table interface.

Current and proposed boring and monitoring well locations are illustrated in Figure 6-Z16-3 of the Zone Analysis Plan for Zone 16. A total of seven monitoring wells and nine borings are currently being installed throughout the study area. Three of the seven monitoring wells (S45, S46, and S47) are located within Zone 16. The three monitoring wells are within 500 feet of Parcel 179 and 180. None of the Phase II-C soil borings are located in Zone 16.

Current results of unvalidated data from soil samples taken in the vicinity of Parcels 179 and 180 are summarized below. The three new wells are located northeast of Parcels 179 and 180 in Parcel 181 as illustrated on Figure 6-181-1. Several compounds were detected in soil samples from these three monitoring well locations including VOCs, SVOCs (including PAHs), TPH, and metals.

VERSAR, Inc. indicated that preliminary soil sampling results at monitoring wells S45, S46, and S47 detected high benzene concentrations at the former wetlands crust (10,000 µg/kg benzene detected at boring S46 at a depth of 16 feet bgs); however analytical results were not available to confirm this assertion. The concentration of benzene in the soil sample at S45 at a depth of 16 feet bgs and S47 at a depth of 17.5 feet bgs were 4 µg/kg and 1,100 µg/kg respectively.

Most SVOCs were detected above both industrial and residential PRGs in soil samples from monitoring wells S45, S46, and S47 between 13.0 and 16.0 feet bgs. Most inorganic compounds were detected below residential August 1994 PRGs; however, arsenic was commonly detected above both industrial and residential August 1994 PRGs and chromium was commonly detected above residential August 1994 California modified PRGs. Most soil samples indicated the presence of aluminum above residential August 1994 PRGs.

TPH-gasoline, TPH-motor oil, and TPH-diesel were detected in soil samples from this study area. TPH-gasoline concentrations ranged from 0.750 mg/kg in monitoring well S45 at 13 feet bgs to 250 mg/kg in monitoring well S47 at 14.5 feet bgs. TPH-motor oil concentrations ranged from 7,100 µg/kg in monitoring well S47 at 5.5 feet bgs to 9,700 mg/kg in monitoring well S47 at 14.5 feet bgs. TPH-diesel

concentrations ranged from 20 mg/kg in monitoring well S47 at 16 feet bgs to 2,500 mg/kg in monitoring well S47 at 14.5 feet bgs.

An abandoned 12,000-gallon underground storage tank (Tank AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the NSC Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 0.50 mg/kg to 11,000 mg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

George P. Miller Elementary School

The George P. Miller Elementary School Building (the school) was constructed between 1975 and 1981 and has served as a public elementary school (Figure 6-179-1) since that time. The school is a one-story building constructed with a concrete floor/foundation and a composite roof. The school covers approximately 22,500 square feet and is in good condition. The space occupied by the building was formerly an open space used for storage, parking, and residential housing.

Utilities located within and immediately surrounding the school include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. No environmental permits appear to have been issued for this building.

Cleaning agents and solvents are documented to have been used in the building and stored in the janitor's room in quantities totaling approximately 110 gallons. Other chemicals including toner, duplicating fluid, glue, and paints are also stored in small quantities throughout the school. The disposition of the used chemicals is not known. No staining was noted in the school during the site inspections or the EBS review.

The building is equipped with an HVAC system. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near the school.

Building 258

Building 258 was constructed in 1985 and has served as a child care center (Figure 6-180-1) since that time. This building is in good condition. Building 258 has ten classrooms; there is no other available information about the center's construction. There is a wood, modular structure located east of the main building that is used as an office and lending library. The space occupied by Building 258 was formerly open space used for storage and parking between 1963 and 1981. It is not immediately clear from aerial photographs whether the parking/storage area was paved, or consisted of bare ground. Prior to this time the parcel area was part of a residential housing development. The housing was demolished sometime between 1958 and 1963.

Utilities located within and immediately surrounding Building 258 include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for this area.

Less than four gallons of pesticides (drione, ficam W, diazinon 4E, bait blocks), cleaning solvents, and bleach were stored in the building at the time of visual inspections. These chemicals were found in the janitor's closet. Approximately twelve gallons of degreaser, floor polish, and concentrated cleaner were documented during the site inspection. Copier toner is located in the modular office located east of the main building. The process employed at this building for disposing of chemical waste is unknown.

Review of site inspection data and historical records indicates that no documented spills have occurred on this parcel, and no staining was noted during the site inspection.

There is no available information pertaining to an HVAC system in Building 258. The building's water supply was found to contain high levels of lead between 1987 and 1988. Filters are currently used and changed every six months to reduce lead levels in water. Floor tile in the building was sampled and tested for asbestos; none was detected. No incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 258.

Open Space I

Open Space I covers approximately 40 percent of the parcel, and consists of the open space in Parcel 179. In general, Open Space I is used as a

playground. Historically, Open Space I was used for vehicle parking, storage, and residential housing.

The ground surface of Open Space I is almost completely paved. However, two "play pits" containing bark chips are located immediately east of the school building. Most of the paved area is surfaced with asphalt. The pavement is in good condition. Utilities located within and immediately surrounding the open space on Parcel 179 include underground gas, sanitary sewer, storm sewer, water, and electrical lines.

EBS information indicates that activities conducted within this open space include recreational activities and vehicle parking. No chemicals are documented to have been stored in Open Space I. Two oil-filled transformers on poles are located near the northeast corner of the school building.

No documented spills have occurred in the open space. The only staining noted during the site inspection is a stain located along the base of the brick wall near the southeastern corner of the school. This stain is approximately four feet long. Minor staining related to vehicle parking was also noted in the asphalt parking lot north of the school. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near the school.

Open Space II

Open Space II covers approximately 30 percent of the parcel, and consists of the open space in Parcel 180. In general, Open Space II is used for parking. A playground and a small landscaped area are also located in this open space.

One pole-mounted transformer is located on Open Space II. It was observed along the western edge of the parcel. The ground surface of Open Space II is 80 percent paved and 20 percent unpaved. Approximately 50 percent of Open Space II is surfaced with asphalt and 40 percent is concrete. The pavement is generally in good condition. The unpaved areas of the open space are covered with landscaping. A storage shed located in front of the center is used to store earthquake supplies.

Numerous buildings were formerly located on Open Space II. Parcel 180 was formerly used for residential housing (prior to 1963), with approximately 60 percent of Parcel 180 existing as grassy and landscaped open space at that time. Utilities located within and immediately surrounding this open space include underground

natural gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for processes occurring within this open space.

No incidents such as fires, mishaps, or flooding are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at these parcels. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at these parcels.

Parcel Boundary Conditions

Parcels 179 and 180 are bounded by Parcels 178 to the south, west, and east, and Parcel 181 to the north. Parcels 178 and 181 are currently residential areas. Parcel 176 is part of the Scrapyard IR Site and is located approximately 150 feet southwest of Parcel 179. Activities of concern on Parcels 176 include storage and disposal of hazardous substances. Previous investigations on Parcels 176 and 178 indicated the presence of heavy metals in the soil and groundwater, and benzene in the groundwater. Current investigations on Parcel 181 indicate the presence of benzene in the soil at the wetlands crust.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcels 179 and 180, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-179-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps at this parcel: asbestos, lead-based paint, transformers, radiological considerations, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial

TABLE 6-179-2

Summary of Data Gaps
NAS Alameda Parcel 179 & 180

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 179 or Parcel 180.
Installation Restoration (IR) Sites	• The Scrapyard IR Site is located 150 feet to the east of Parcel 179. Additional subsurface investigation relative to the Scrapyard IR Site is ongoing.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Monitoring wells on Parcel 174 (Hazardous Materials Storage Warehouse), Parcel 181 (Residential) and Parcel 178 (Residential) indicate the presence of benzene, vinyl chloride, fluorene, barium, and napthalene in the groundwater.
Potential Zone-Wide Release Areas	• Filled wetlands.
Potential Parcel-Specific Release Areas	• Open Spaces I and II may have been impacted by activities on Parcels 176 and 177 (the Scrapyard IR Site), and the filled wetlands. • The School Crawl Space may have been impacted by accumulation of VOCs from the filled wetlands.

TABLE 6-179-2

Summary of Data Gaps
NAS Alameda Parcel 179 & 180

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

hygiene (IH) sampling is required for Parcels 179 and 180 because no industrial buildings are present.

As noted earlier, Parcels 179 and 180 have, and previously had open space areas that are or were unpaved or landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

As noted earlier, Parcel 179 and 180 were previously occupied by wetlands, and may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. Subsurface soil samples collected on Parcel 181 as part of the investigation of the Naval Supply Center contained elevated levels of benzene and naphthalene. The soil samples contained a tar-like material. The affected horizon was between 16 and 20 feet below the ground surface (bgs). VOC sampling has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-179-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcels 179 and 180 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Spaces I and II): This target area may have been impacted by activities at adjacent Parcels 178 and 181, nearby Parcels 176 and 177 (the Scrapyard IR Site), and the filled wetlands. The target area covers approximately 130,000 square feet. This target area has been classified as having a potential likelihood of impacts.

Three surface soil samples and three soil vapor samples will be collected from three locations in the grassy or unpaved areas of Parcel 180. A total of four surface soil samples and four soil vapor samples will be collected from four locations in the grassy and paved areas of Parcel 179. One soil vapor sample will be collected at the boundary between Parcels 179 and 180 to the west of the George P. Miller Elementary School. Two additional soil vapor samples will be collected on the north and south sides of the George P. Miller School's building foundation on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

- Target Area 2 (The School Crawl Space): This target area may have been impacted by the accumulation of VOCs that may have off-gassed from the filled wetlands. The target area covers approximately 22,500 square feet. This target area has been classified as having a potential likelihood of impacts. A minimum of four environmental air samples will be collected from the crawl space below the school on Parcel 179. Samples to be collected in this target area are listed in Table 6-179-1.

The following zone-wide target area was identified on Parcel 172 based on possible impacts from activities described above involving potentially hazardous substances.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery and two gas manufacturing plants. VOC sampling has been addressed as a zone-wide issue for these parcels. As an extra level of caution, VOC sampling is also being addressed as a parcel-specific isssue for these parcels.

Screening-Level Investigation

Three screening-level techniques will be employed to assess conditions in the target area and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), and air sampling (SOP 22). Table 6-179-1 summarizes screening-level sampling and analysis for the parcel-specific target area. Seven surface soil, ten soil vapor, and a minimum of four environmental air samples will be collected from the locations shown on Figure 6-179-1.

All soil vapor samples will be analyzed in the field for VOCs. All surface soil samples will be analyzed at a contract laboratory for TPH,

PCBs, SVOCs, pesticides, and metals (including Chromium VI). All air samples will be analyzed at a contract laboratory for the same suite of VOCs that are analyzed for soil vapor samples. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Follow-up air sampling of the school crawl space will be performed in the summer season to determine if seasonal temperature increases affect the potential volatilization and accumulation of VOCs in the crawl space. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-181

PARCEL 181 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 181 at NAS Alameda (Figure 6-181-1). The parcel, which is located in the northeastern portion of the base, is approximately 29 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Three parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil vapor sampling. Table 6-181-1 provides the complete list of samples and analyses prescribed by this plan. This PEP has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 181, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 181, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 182, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-181-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

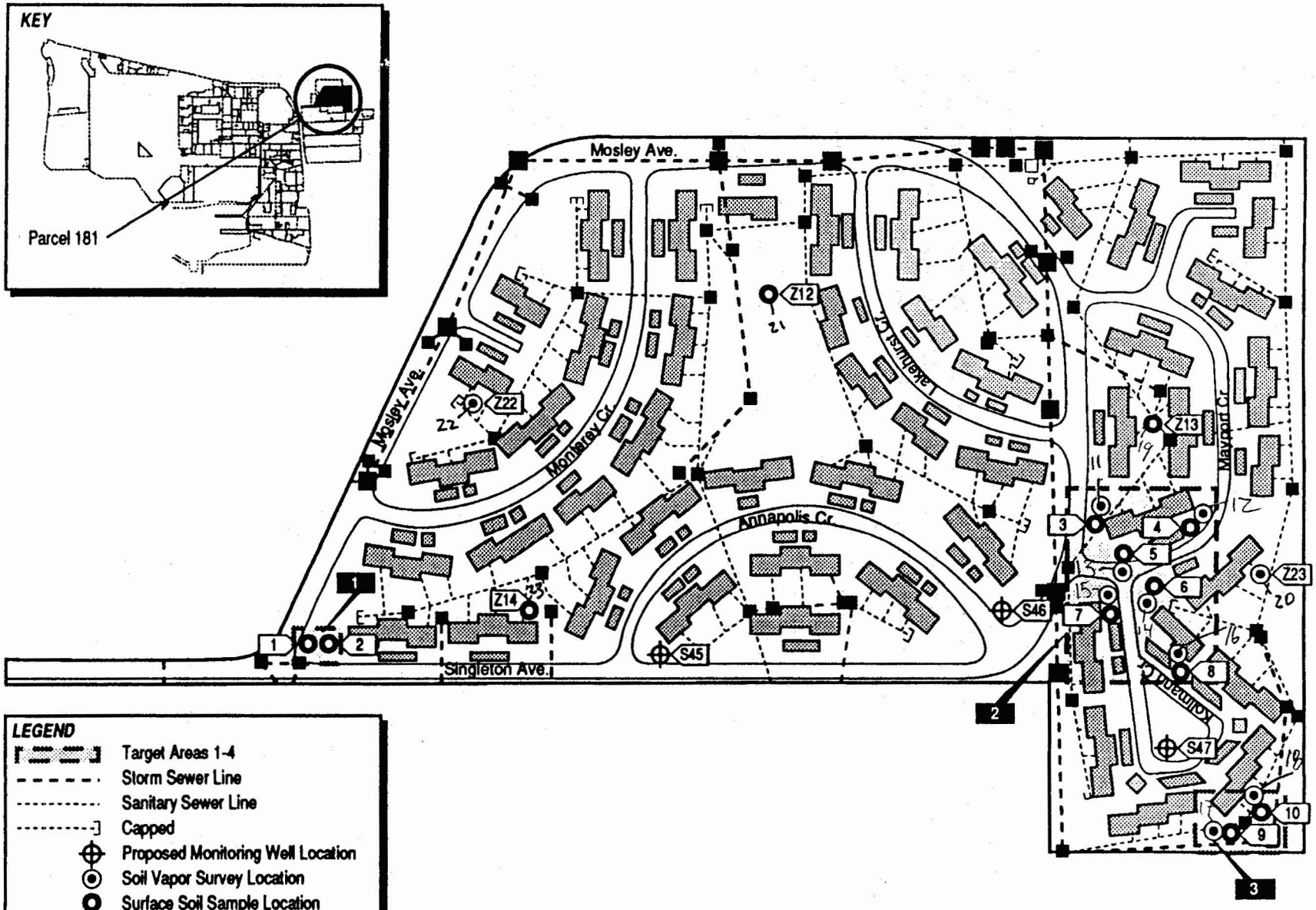


Figure 6-181-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/08.16.94B

SENSITIVE

TABLE 6-181-1

Summary of Recommended Samples
NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
181-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals	XRF
181-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Metals	XRF
181-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Metals	CLP RAS
181-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Modified EPA 8015, CLP RAS
181-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-6-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-7-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Test Kit, XRF
181-8-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, Metals	Modified EPA 8015, CLP RAS
181-8-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 2	VOCs	GC
181-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, Metals	Test Kits, XRF
181-9-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
181-10-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, Metals	Test Kits, XRF
181-10-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	TPH, PCBs, Metals	Modified EPA 8015, CLP RAS
181-10-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 3	VOCs	GC
Z16-12-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-13-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS

TABLE 6-181-1

Summary of Recommended Samples

NAS Alameda Parcel 181

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
Z16-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-22-0-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC
Z16-23-0-V-S-DDMMYY	3'	SVS	Vapor	Zone 16 Target Area 2	VOCs	GC

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, 51 buildings and one structure (a sanitary sewage pump station) cover approximately 30 percent of the parcel (Figure 6-181-1). The remaining 70 percent is open space. Aerial photographs from 1947 and 1958 show an area covered with large structures and a configuration of housing units that is different than the current configuration of housing units. These former housing units were reportedly City of Alameda housing projects. The use of the large structures is unknown. Between 1958 and 1963, the housing units at the east end of Parcel 181 were razed, yielding a large open space. In 1969, the remainder of the older housing units were demolished and the present configuration of housing complexes and surface streets was constructed. Sewer lines are present on this parcel and are shown on Figure 6-181-1.

Parcel 181 is located immediately northwest of Parcel 176, which together with Parcel 177, comprises an Installation Restoration (IR) Program site (the Scrapyard). The IR site is part of the Fleet Industrial Supply Center (FISC) Oakland, Alameda Annex, and not part of NAS Alameda. Current investigations are being performed at this facility. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Three monitoring wells (S45, S46, and S47) are currently being installed on Parcel 181 by the Navy IR contractor as part of the Phase IIC investigation at the Scrapyard IR Site (Figure 6-181-1). Preliminary soil sampling results at these monitoring wells indicate elevated benzene concentrations at the depth of the former wetlands crust (10,000 µg/kg benzene detected at 16 ft below ground surface in boring S46).

An abandoned 12,000-gallon underground storage tank (Tank AOC-1), located approximately 800 feet northeast of Parcel 181, was removed in October 1994 as part of an investigation by the FISC Alameda Annex IR contractor. Preliminary results of soil and groundwater samples collected during a remedial investigation/feasibility study of the site in the second quarter of 1994 indicate the presence of TPH-gasoline and benzene in the subsurface. TPH-gasoline was detected in soil samples at concentrations ranging from 0.5 mg/kg to 11,000 mg/kg. TPH-gasoline and benzene were detected in water samples at concentrations ranging from 37 µg/L to 430 µg/L and 2 µg/L to 16 µg/L, respectively.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Multiple-Unit Housing

The multiple-unit housing presently on-site was constructed in 1969 and have served Navy personnel and their dependents (Figure 6-181-1). These buildings are generally in good condition. The buildings are two stories tall, constructed of stucco walls, and feature composition tar and gravel roofs. Each complex covers approximately 5,400 to 7,200 square feet.

Utilities located within and immediately surrounding these buildings include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines.

Site inspections, interviews, and a review of historical records, and permits do not suggest that these buildings were used for any significant type of industrial purpose; however, a 1966 aerial photograph shows a stained area on the large open space in the eastern portion of the parcel. This area is currently occupied by housing. The source and composition

of this stain cannot be determined from the aerial photograph. The aerial photographs from 1947 through 1963 also show a collection of larger buildings that do not appear to be housing. These building occupy the eastern half of the parcel. Because detailed information regarding the construction and usage of these buildings is unknown, the former occurrence of industrial processes within the buildings cannot be excluded.

Site inspections of this parcel did not include the interior of housing complexes per instructions provided by the Navy. In addition, because this parcel is exclusively residential, industrial hygiene issues (other than potential ACM or lead-based paint) are not a concern. It is important to note that documents show that two samples collected from Singleton Avenue 103(A) and 2002 Monterey Circle contained lead at concentrations of 9,440 parts per million (ppm) and 47,100 ppm, respectively.

Open Space

The open space covers approximately 70 percent of the parcel. Approximately 20 percent of the open space is paved with asphalt and concrete in good condition. The remaining 80 percent is unpaved and covered with grass.

One structures is located within the open space: Facility 591, a sanitary sewage pump station. Facility 591 is located along the northern edge of the parcel near the southeast corner of Estuary Park. This pump station has a capacity of 1,000 gallons per minute. No chemical storage has been documented for this structure.

Utilities located within and immediately surrounding this open space include underground natural gas, sanitary sewer, storm sewer, water, and electrical lines. Pole-mounted transformers are also located within the open space.

No chemicals are documented to have been stored in the open space. Also, no spills reports were found during document review. No staining other than typical staining related to vehicle parking was noted during the site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified

any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 181 is bounded by Parcels 178, 180, 179, and 176 to the south, Parcels 182 and 183 to the west and north, and by the FISC Oakland, Alameda Facility to the east.

Several areas adjacent to Parcel 181 may be sources of potential chemical migration. To the southeast of Parcel 181, Parcels 176 and 177 (the Scrapyard) have been identified collectively as an IR site. This site was used as an airport facility in the 1930s and was converted to its present use in the 1950s. Currently, processes at the Scrapyard include the handling and storage of old electrical equipment, office furniture, aircraft parts, and junked automobiles. Previous site investigations have identified the presence of metals, VOCs, PCBs, and PAHs in the soil, and benzene, naphthalene, barium, and cadmium in the groundwater (see the PEPs for Parcels 176 and 177).

Parcel 178 comprises the former warehouse area, which was included in the above-mentioned site investigations. Soil samples in the northern part of Parcel 178 contained elevated concentrations of nickel and chromium. Benzene and naphthalene were also detected in the groundwater samples collected in this area.

The FISC Oakland (previously the Naval Supply Center (NSC) Oakland) Alameda Facility is situated directly east of Parcel 181. Site inspection data revealed that aircraft engine containers, 55-gallon drums, JP-5 fuel storage tanks, diesel generators, and air compressors were stored at this facility. These items are located immediately adjacent to the northeastern and eastern boundaries of Parcel 181.

If the continuing investigations at any of these nearby sites show a cause for concern at Parcel 181, than additional sampling on Parcel 181 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 181, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown

in Table 6-181-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No industrial hygiene (IH) sampling is required for Parcel 181 because no industrial buildings are present.

As noted earlier, Parcel 181 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. Three parcel-specific and two of the three zone-wide target areas were identified at this parcel based on the potential release areas described above and listed in Table 6-181-2.

- Target Area 1 (Southwest Area): Based on soil sampling results in the northern portion of Parcel 178 (former warehouse area), which abuts the southwestern boundary of Parcel 181, elevated concentrations of metals may also be present in Target Area 1. This area has been classified as having a potential likelihood of impacts. Two surface soil samples will be analyzed for metals. Samples to be collected in Target Area 1 are listed in Table 6-181-1.

- Target Area 2 (Southeast Area): Based on stains that were observed in a 1966 aerial photograph, six locations in Target Area 2 will be sampled for VOCs, TPH, and metals. Although the staining was approximately

TABLE 6-181-2

Summary of Data Gaps
NAS Alameda Parcel 181

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 181.
Installation Restoration (IR) Sites	• Scrapyard IR Site adjacent to Parcel 181.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 178, former warehouse area
Potential Zone-Wide Release Areas	• Landscaped Areas. • Former Wetlands.
Potential Parcel-Specific Release Areas	• Southwest Area (potential release of heavy metals contamination from Parcel 178-former warehouse area) • Southeast Area (Target Area 3, stains observed in 1966 aerial photograph) • Northeast and Eastern Border (adjacent to FISC Oakland storage area) • Southeast Corner (proximity to Parcel 176-Scrapyard IR site)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-181-2

Summary of Data Gaps
NAS Alameda Parcel 181

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

63,000 square feet in area, only six locations will be sampled because of subsequent housing development and accessibility issues. Samples to be collected in Target Area 2 are listed in Table 6-181-1.

- Target Area 3 (Southeast Corner): This corner of the parcel will be targeted as a potential area for VOCs, TPH, metals and PCBs due to its proximity to Parcel 176 and Parcel 177 (Scrapyard IR site). Only two locations will be sampled from this area. Samples to be collected in Target Area 3 are listed in Table 6-181-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 181 are part of this zone-wide target area. Three of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 181. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-181-1.

- Zone 16 Target Area 2 (Filled Wetlands): Zone 16 Target Area 2 includes all former wetlands within the Housing Zone. Two of the 14 proposed zone-wide soil vapor samples for VOCs are located in Parcel 181. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 181 are listed on Table 6-181-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone-wide and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques are surface soil sampling (SOP 3) and soil vapor sampling (SOP 6).

Table 6-181-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 181. Eight soil vapor samples and ten surface soil samples will be collected from the parcel-specific target areas shown on Figure 6-181-1. Two soil vapor samples and three surface soil samples will be collected from the zone-wide target areas on this parcel as shown on Figure 6-181-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-182

PARCEL 182 EVALUATION PLAN

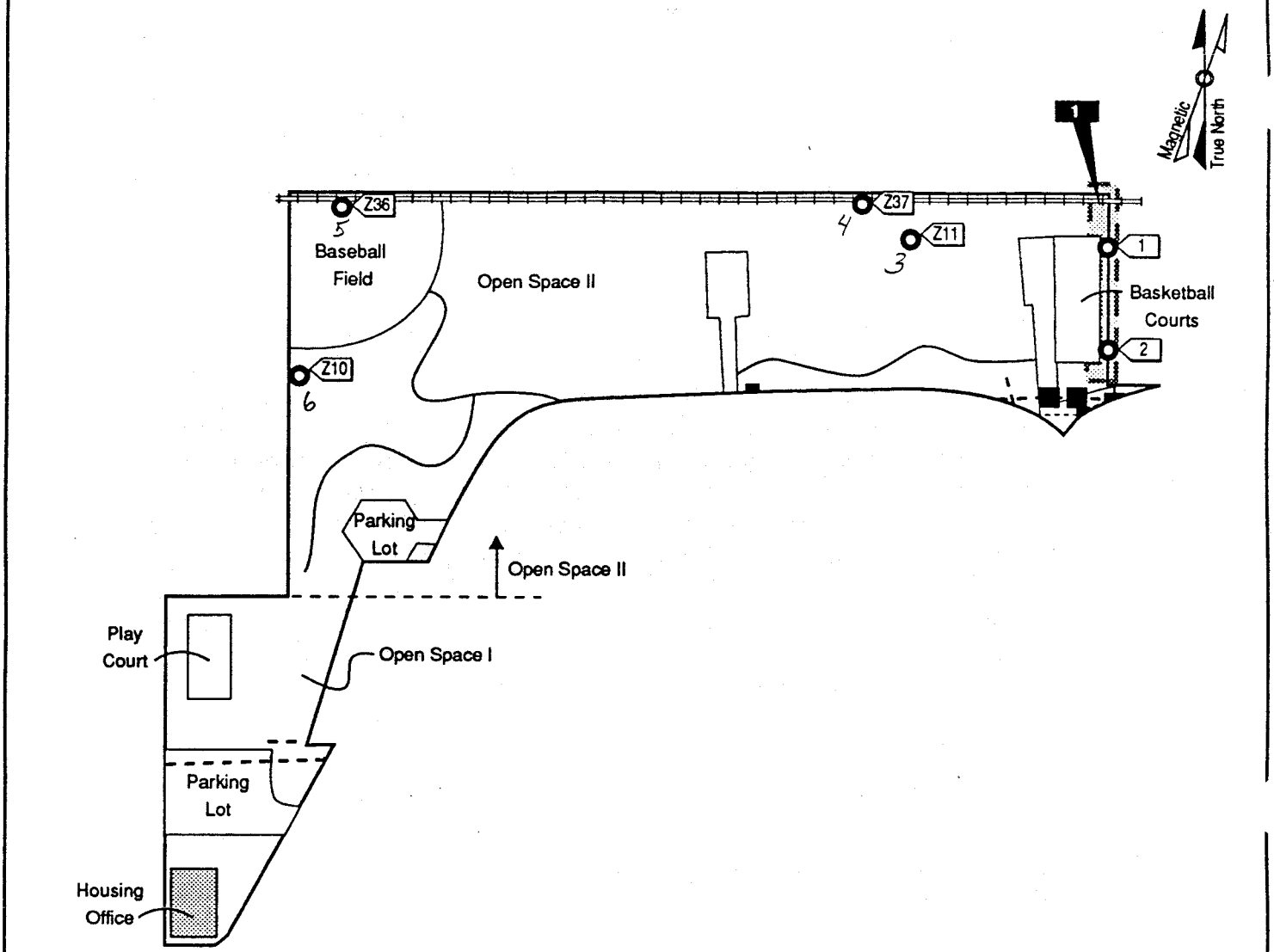
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 182 at NAS Alameda (Figure 6-182-1). The parcel, which is located in the northeastern corner of the base, is approximately 13 acres in size and is roughly shaped like an irregular triangle. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and three zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening level investigation. Table 6-182-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 182, historical activities are discussed below.

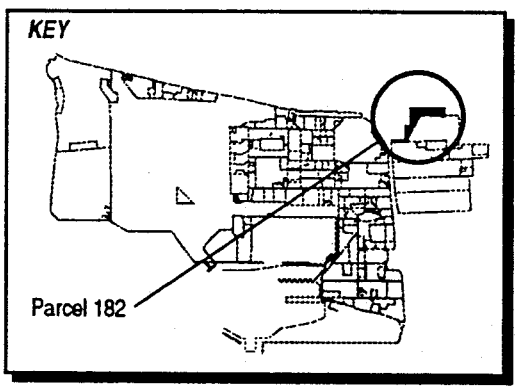
Background and Historical Activities

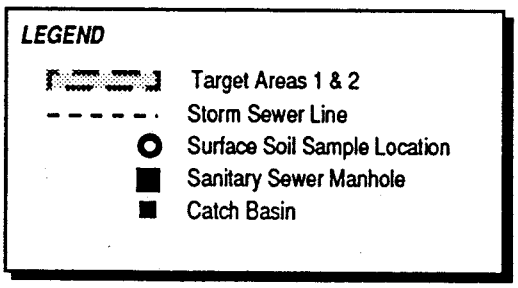
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 182, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 183, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together.







1"= 250'

Figure 6-182-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-182-1

Summary of Recommended Samples
NAS Alameda Parcel 182

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Target Analytes	Analytical Method
182-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	Test Kit, XRF
182-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	Modified EPA 8015, CLP RAS
182-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals	Test Kit, XRF
Z16-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-11-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 1	Pesticides	CLP RAS
Z16-36-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS
Z16-36-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Test Kit, XRF
Z16-37-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z16-37-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 16 Target Area 3	SVOCs	CLP RAS

* The suggested location for the Zone 16 Target Area 3 confirmation sample is found in Parcel 174 and 184. The actual location will depend on field analytical results for this zone-wide target area.

Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 534) covers less than five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as the housing office building and related support facilities. This was a residential area with barracks from at least 1947 to 1966. Numerous buildings and structures were formerly located on the parcel and were demolished and cleared sometime between 1966 and 1970. Sewer lines are present on this parcel and are shown on Figure 6-182-1.

Parcel 182 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 182 and specific data regarding potential chemical occurrence are not available.

Current investigations are being performed at the Fleet and Industrial Supply Center Oakland; Alameda Facility and Alameda Annex. This investigation affects parcels in the Housing Zone. The parcels located within 500 feet of the study area include Parcels 171, 172, 173, 174, 175, 176, 177, 178 and 184, 179 and 180, 181, and 182. These parcels were investigated during the 1990s by PRC Environmental Management, Inc. and VERSAR, Inc. A May 1991 report and an October 1993 addendum were prepared by PRC Environmental Management, Inc. and VERSAR, Inc., under contract N62474-88-D-5086, entitled *Remedial Investigation/Feasibility Study Phase II Field Sampling Plan*, summarizes the results of current Phase IIA and IIB investigative plans. A Phase IIC workplan has also been prepared and is currently being implemented. The final RI/FS document is scheduled for delivery to the Navy on March 27, 1995. When all three phases of these current investigations are implemented, approximately 83 soil borings and 40 monitoring wells will be installed throughout the study area.

Previous and current investigations that affect parcels within the Housing Zone are also summarized in the Zone Analysis Plan for Zone 16. It is recommended that the parcel-specific sampling data be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations

may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 534

Building 534 (PWCSFB Housing Office) was constructed between 1990 and 1992 and has served as office space since that time (Figure 6-182-1). This building is in good condition. There is no available information regarding the construction of the Housing Office.

Utilities located within and immediately surrounding Building 534 include underground gas, sanitary sewer, storm sewer, telephone, water, and electrical lines. A transformer associated with Building 534 is present on the parcel. This transformer appeared to site reviewers to have been recently placed (i.e., within the past five years). It is pad-mounted and contained within a metal case. No leakage was noted.

Information collected during the EBS indicates that activities conducted within this building included office type work. Approximately six gallons of cleaners, disinfectants, and vandal remover compounds are documented to have been stored in the janitor's closet. It is unknown how the disposal of used chemicals is accomplished in Building 534. There is no documentation of spills in this building. No staining was noted in the building during the site inspection.

No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Building 534. Potential radiological hazards do not appear to be of concern in this building.

Open Space I

The open space covers over ninety-five percent of the parcel. Open Space I is defined as the recreation area north of Mosley Avenue (Estuary Park). This space takes up approximately 75 percent of the parcel. Open Space I is used for grassy areas, a baseball field, picnic areas, a sport court, and basketball courts. Five percent of the ground

surface of Open Space I is paved with asphalt. Ninety-five percent of the area is unpaved. The paved area consists of basketball and sports courts. The unpaved areas of Open Space I are covered with grass and minor amounts of bare soil. The vegetation is healthy and no stains were observed in the area.

Structures located within Open Space I include Sewage Lift Station 7, along the eastern edge of the parcel, and an abandoned sewage lift station in the northeast corner of the parcel. Painted bleachers were noted on the baseball field, in addition to two control boxes associated with the irrigation system.

Several buildings were formerly located on this open space when it was part of the barracks area. The barracks existed on the parcel from at least 1947 (earliest aerial photograph) to 1966, and were demolished between 1966 and 1970. Utilities located within and immediately surrounding Open Space I include natural gas, sanitary sewer, storm sewer, water, and electrical lines.

An aboveground storage tank (250-gallon capacity) is present off-site to the north of Parcel 182. The tank has a flammable materials label on it. There was a floating object in the estuary on the day of the site inspection; it appeared to be a 10,000-gallon underground storage tank.

No chemical storage, stains or spills are documented to have occurred within Open Space I. No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within or near Open Space I.

Open Space II

Open Space II covers approximately 20 percent of the parcel. Open Space II is defined by the area surrounding and immediately north of Building 534. Open Space II is a support facility for Building 534. The ground surface of Open Space II is 90 percent paved and 10 percent unpaved. Approximately 60 percent of this open space is surfaced with asphalt (parking lot) and 30 percent is covered with concrete (sidewalks). The pavement is in good condition. The unpaved area in Open Space II is covered with landscaping. Structures located within this open space include a small storage locker labeled "Self Help Store."

Several buildings were formerly located on this open space when it was part of the barracks area. The barracks existed on the parcel from at least 1947 (earliest aerial photograph) to 1966, and was demolished between 1966 and 1970. Utilities located within and immediately

surrounding Open Space II include natural gas, sanitary sewer, storm sewer, water, and electrical lines.

No chemical storage, stains or spills are documented to have occurred in Open Space II. No incidents, such as fires, mishaps, flooding, crashes, etc., are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 182 is bounded by Parcels 183 and 181. Railroad tracks and the Todd Shipyard border Parcel 182 to the north, and the Fleet Industrial Supply Center (FISC) Oakland Alameda Facility borders Parcel 182 to the east. Parcels 181 and 183 are predominantly residential.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 182, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-182-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, a separate investigation is currently underway to address the asbestos, transformer, and lead based paint data gaps at this parcel. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 182 because no industrial buildings are present.

As noted earlier, Parcel 182 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e.,

TABLE 6-182-2

Summary of Data Gaps
NAS Alameda Parcel 182

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 182.
Installation Restoration (IR) Sites	• No IR sites are located on or within 500 feet of Parcel 182.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The soil and groundwater at the FISC Oakland Alameda Facility east of Parcel 182 may have been impacted by ongoing storage activities at the facility.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands. • Railroad Tracks.
Potential Parcel-Specific Release Areas	• Potential impacts from Alameda Facility along the eastern boundary.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-182-2

Summary of Data Gaps
NAS Alameda Parcel 182

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-182-2 are addressed Parcel 182 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in all three zone-wide target areas. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The two zone-wide target areas identified at this parcel are listed in Table 6-182-2.

- Target Area 1 (Eastern Parcel Boundary): The soil adjacent to the FISC Oakland Alameda Facility east of Parcel 182 may have been impacted by ongoing storage activities at the facility. This target area covers approximately 1,000 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this Target Area are listed in Table 6-182-1.

- Zone 16 Target Area 1 (Landscaped Areas): Zone 16 Target Area 1 includes all landscaped and currently or formerly unpaved areas within the Housing Zone. The landscaped areas located throughout Parcel 182 are part of this zone-wide target area. Two of the 21 proposed zone-wide surface soil samples for pesticides are located in Parcel 182. The samples were located on this parcel to ensure an appropriate distribution of samples throughout the zone-wide target area. Samples that are located on Parcel 182 are listed on Table 6-182-1.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 3 (Railroad Tracks): Zone 16 Target Area 3 includes all current or former railroad tracks within the Housing Zone. Railroad tracks currently located along the northern boundary of Parcel 182 are part of this zone-wide target area. Two of the five samples proposed to be collected from this zone-wide target area are located on Parcel 182. The proposed zone-wide target area samples that are located on Parcel 182 are listed on Table 6-182-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-182-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 182. Seven surface soil samples will be collected from the locations shown on Figure 6-182-1. Sampling will be conducted in accordance with the referenced SOPs Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-183

PARCEL 183 EVALUATION PLAN

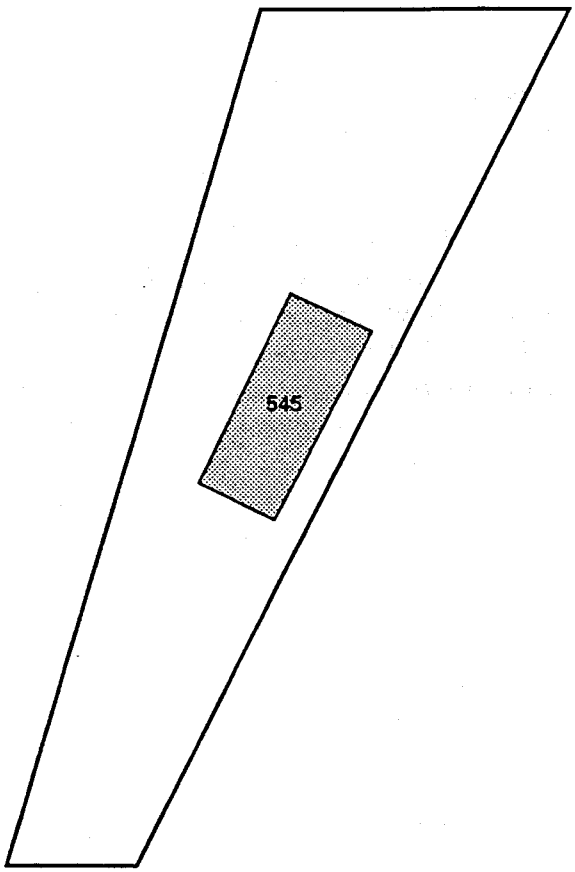
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 183 at NAS Alameda (Figure 6-183-1). The parcel, which is located in the northeast portion of the base, is less than one acre in size and is roughly triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two zone-wide target investigation area (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and soil gas sampling. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 183, historical activities are discussed below.

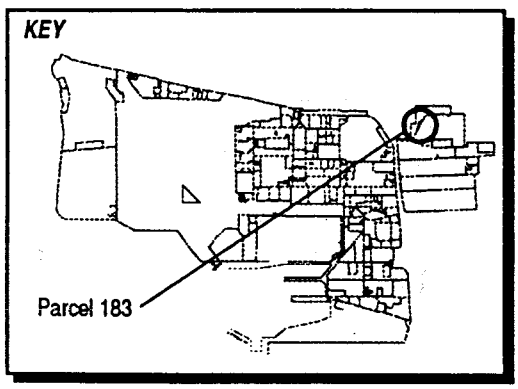
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 183, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies any Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 98, 99, 100, 103, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 184 and 212. This parcel zone has been designated the Housing Zone (Zone 16). The Housing Zone encompasses the parcels that are primarily residential and commercial (e.g., the Navy Lodge). During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the





1"= 60'

Figure 6-183-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 16.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 545) covers approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently in use as community center and temporary child care center. Aerial maps show that historically the site was part of a barracks area. The barracks were demolished between 1966 and 1970. Sewer lines are present on this parcel.

Parcel 183 is not located near any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 183 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 545

Building 545 was constructed between 1970 and 1975. It is used as a community and child care center, and appears to have been used for these purposes since its construction. This building is in moderately good condition. Building 545 has wood-faced construction, a concrete foundation, and a composite roof. Building 545 covers approximately 1,800 square feet.

Utilities located within and immediately surrounding Building 545 include underground gas, sanitary sewer, storm sewer, water, and electrical lines. No permits appear to have been issued for this building.

Household cleaning agents and paint are documented to have been stored and used in Building 545. Less than 10 gallons of the cleaning agents and paint were stored in Building 545. One transformer is

present outside Building 545, on the south side. No documented spills have occurred in this parcel, and no staining was noted in or adjacent to Building 545 during the site inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within or near Building 545.

Open Space

The open space covers approximately 90 percent of the parcel. The open space is 20 percent paved and 80 percent unpaved. The pavement is generally in good condition. The unpaved areas of the open space are covered with grass, landscaping and bare soil.

EBS information indicates that activities conducted within this open space are recreational and educational. Historically, the open space was used as a barracks area. It later became a vacant field.

Less that 15 gallons of paint and turpentine are documented to have been stored at the north side of the parcel, in a Conex box that rests on the grass. No spills are documented to have occurred in the open space. No staining was noted during the site inspection, except for vehicle staining in the parking area. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space on Parcel 183.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 183 is bounded by Parcels 181 and 182. The former Todd Shipyard is located to the northwest of Parcel 183. Environmental concerns associated with these areas include potential impacts associated with former shipyard activities.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 183, consistent with the objectives described in Section 1 of the

Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-183-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos, transformers, and lead-based paint. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No industrial hygiene (IH) sampling is required for Parcel 183 because no industrial buildings are present.

As noted earlier, Parcel 183 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Pesticide sampling in landscaped areas has been addressed as a zone-wide issue for the parcels located in Zone 16.

Once the data gaps in Table 6-183-1 are addressed, Parcel 183 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two of the three zone-wide target areas have been identified for this parcel. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 16. The nature and locations of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 16 Target Area 1 (Landscaped/Unpaved Areas): This parcel does not contain any samples from this zone.

- Zone 16 Target Area 2 (Filled Wetlands): This parcel does not contain any samples from this zone.

TABLE 6-183-1

Summary of Data Gaps
NAS Alameda Parcel 183

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 183.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 183.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Landscaped Areas. • Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified.

TABLE 6-183-1

Summary of Data Gaps
NAS Alameda Parcel 183

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

In addition, data gaps pertaining to asbestos, lead-based paint, PCBs, and underground lines must be resolved before this parcel can be reclassified from BRAC Category 7.

SECTION 6-184

PARCEL 184 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 184 at NAS Alameda has been incorporated into the PEP for Parcel 178. Parcel 184 is a small parcel located entirely within Parcel 178. Parcels 178 and 184 have very similar histories and uses. Parcel 184 is located in the northeastern portion of the base and is less than one acre in size.

SECTION 6-212

PARCEL 212 EVALUATION PLAN

The Parcel Evaluation Plan (PEP) describing the proposed evaluation strategy for Parcel 212 at NAS Alameda has been incorporated into the PEP for Parcel 100. Parcel 212 is a small parcel located entirely within Parcel 100. Parcels 100 and 212 have very similar histories and uses. Parcel 212 is located in the northeastern portion of the base and is less than one acre in size.

SECTION 6-Z17

ZONE 17 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 17 at NAS Alameda (Figure 6-Z17-1). Zone 17 has been designated the Engine Testing and Hazardous Materials Storage Zone and encompasses the parcels that have been or are currently used for engine testing or hazardous materials storage, or related support facilities. Zone 17 is comprised of Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 131, 135, 136, 137, 138, and 200. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and 22 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-Z17-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z17-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. Four of the parcels in this zone have been tentatively reclassified from BRAC Category 7. Parcels 128, 131, 135, and 137 have been tentatively reclassified to BRAC Category 6. These reclassifications have been proposed pending RASO concurrence.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 17, historical activities are discussed below.

Zone 17 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 17 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

TABLE 6-Z17-1

Summary of Recommended Samples
NAS Alameda Zone 17

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z17-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Fuels, Oils, PCBs, Creosote, Tie Tar	TPH, lead, SVOCs, PCBs	Modified EPA 8015, CLP RAS
Z17-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan

TABLE 6-Z17-1

Summary of Recommended Samples
NAS Alameda Zone 17

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z17-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Fuels, Oils, PCBs	TPH, PCBs, Lead, SVOCS	Modified 8015, CLP RAS
Z17-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-13-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Fuels, Oils, PCBs	TPH, PCBs, Lead, SVOCs	Modified 8015, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 17, the Engine Testing and Hazardous Material Storage Zone encompasses 15 parcels that have been or are currently used for engine testing and for storage of fuel and other hazardous materials. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, 21 buildings and five structures cover approximately 30 percent of the zone. The remaining 70 percent is open space. Eleven buildings and one structure were formerly located on the parcel and have since been demolished.

Zone 17 contains three Installation Restoration (IR) Program sites (IR Site 3 (Aviation Gasoline Tanks), IR Site 7B (Building 162, Service Stations), and IR Site 11 (Building 14)). Previous investigations have been conducted at Zone 17, and specific data regarding chemical occurrence at this zone are available. These data are discussed within the appropriate PEP.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 17 will be addressed in other sampling programs and are not considered in this ZAP.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Underground Storage Tanks

Two underground storage tanks were formerly present at Parcel 110 (Tanks AV Lube 1 and AV Lube 2). These tanks were installed at an unknown date and were associated with Building 271. Tank AV Lube 1 and Tank AV Lube 2 held automotive lubricant. These tanks had capacities of 22,000 and 2,200 gallons, respectively. The two tanks are listed as RCRA tanks (they were designated an AOC).

One underground storage tank was formerly present at Parcel 111 (Tank 117-1). Tank 117-1 was installed on an unknown date, and was located south of Building 117. This tank was used to store diesel waste and had a capacity of 1,000 gallons. The former presence of this tank was identified from the EBS. Based on the available information, evidence of leakage was found when the tank was removed. This tank has been identified as a RCRA tank based on its former contents and its inclusion in the RFI.

Two inactive underground storage tanks are present at Parcel 123 (Tanks 393-1 and 411-1). The tanks were installed in on an unknown date and are located between Avenue G and Building 393, and west of Building 411, respectively. Tank 393-1 was used to store waste paint and oil, and Tank 411-1 was used to store various solvent products and diesel. Tanks 393-1 and 411-1 have capacities of 500 and 10,000 gallons, respectively. These tanks are scheduled to be removed. Investigation of these former tanks is has not been scheduled. These tanks have been identified as RCRA tanks based on their former contents and their inclusion in the RFI.

Three abandoned underground storage tanks are present at Parcel 124 (Tanks 13-1, 13-2, and 13-3). The tanks were installed at an unknown date and are located immediately west of Building 13 (Figure 6-124-1). The tanks were used to store unknown materials, and have capacities of 2,400 gallons each. An underground tank investigation (ERM-West, 1988) detected oil and grease residual product in all three tanks. According to site personnel, these tanks have not been used for many years. These tanks are scheduled to be removed. These tanks have been identified as RCRA tanks based on their inclusion in the RFI.

Two additional tanks were discovered during the tank removal project at Parcel 124. They were numbered 13-4 and 13-5, and have capacities of 5,000 and 10,000 gallons, respectively. These tanks are reported to have stored lubricating oil. No other information is available regarding these tanks.

Two inactive underground storage tanks are present at Parcel 127 (Tanks 398-1 and 398-2). These tanks were installed in 1969-1970 and

are located between Buildings 398 and 470. The tanks both contain JP-5 product, and have capacities of 10,000 gallons, each. These tanks were precision tested in October 1991 and January 1994, and passed. A remediation plan has been issued for both tanks due to leaking piping and documented soil contamination. Because of the way in which the two tanks are manifolded together, tightness tests could not be performed during the 1987 tank investigation. These tanks are not scheduled for closure until the NADEP closure, and are included in the RCRA Corrective Action Program and RFI.

Two additional USTs, part of a former service station, may potentially exist, or may have been removed from, the south side of Building 398 on Parcel 127. No other information is available regarding these suspect tanks.

Five underground storage tanks were formerly present at Parcel 131 (Tanks 97A, 97B, 97C, 97D, and 97E). These tanks were installed in 1945, were located at the present site of the airplane monument in the center of Parcel 131. These tanks were used to store aviation gasoline, and had a capacity of 100,000 gallons each. Based on the available information, significant releases from these tanks occurred.

Two abandoned underground storage tanks are present at Parcel 135 (Tanks 162-1 and 162-2). The tanks were installed in 1945 and are located north of Building 162. The tanks were used to store gasoline and waste oil, and have capacities of 100 and 150 gallons, respectively. Tank 162-2 was also used to store JP-5. One of these tanks was filled with concrete (the records are unclear about which tank was filled). These tanks are scheduled to be removed. These tanks have been identified as RCRA tanks based on their former contents. One additional tank is listed in the EBS as being located on this parcel. No other information is available regarding this potential tank.

Six inactive underground storage tanks are present at Parcel 137 (Tanks 14-1, 14-2, 14-3, 14-4, 14-5, and 14-6). The tanks were installed in 1940 and are located on the south and southwest sides of Building 14. Tanks 14-1, 14-2, 14-3, and 14-5 were used to store waste oil and have capacities of 10,000 gallons, each, except for Tank 14-5, which has a capacity of 600 gallons. Tank 14-4, a 1,000 gallon tank, stored oil. Tank 14-6, a 600 gallon steel tank, stored gasoline. These tanks are scheduled to be removed. Investigation of these former tanks has not been scheduled. These tanks have been identified as RCRA tanks based on their former use or contents (four of the six tanks were used to store waste oil).

Twenty-two underground storage tanks (USTs) are located at this parcel. All of these tanks are located in the fuel storage region of Area 37, except Tanks 37-13, 37-14, 37-15, and 37-16, which are located in

Open Space II (in the southwestern portion of the open space). All of these tanks at the parcel were installed in 1941. The approximate location of these tanks are shown in Figure 6-138-1. The locations shown in Figure 6-138-1 have been determined from the site inspection and are more accurate than the locations illustrated on the NAS Alameda Impediment Map with Tanks and IR Sites. Twenty of the 22 tanks have capacities of 25,000 gallons each. Seven of these tanks are abandoned (Tanks 37-1, 37-3, 37-4, 37-13, 37-14, 37-15, and 37-16). Eight of these tanks are active (37-5, 37-6, 37-7, 37-8, 37-21, 37-22, 37-23, and 37-24). The other five of these 20 tanks are empty, but are not considered abandoned, and scheduled for closure (Tanks 37-2, 37-9, 37-10, 37-11, and 37-12). Two of the 22 tanks (Tanks 374-1 and 374-2) are located in Area 374 in this parcel and have capacities of 550,000 gallons each. All of the tanks are currently scheduled for removal or closure (the tank removals are being performed by PWC). The tanks at this parcel have been used to store JP-5, aviation gasoline, fuels, solvents, diesel, heavy oils, and combustible liquid wastes. These tanks are identified in combination as RCRA Site SWMU/UST-7. Six other tanks may be located at this parcel. No other information is available regarding these six potential tanks.

RCRA Sites

This zone includes 22 RCRA sites on Parcels 110, 111, 122, 123, 124, 125, 127, 135, 136, 137, and 138. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, of the 22 RCRA sites at this zone, five require further investigation as part of the sampling program. In addition, RCRA tanks are being addressed as part of the UST program. Any necessary investigation associated with these tanks will be implemented as part of the UST program. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 17 is bounded by Zones 4, 11, 13, 16, 18, 19, 21, and 22. Activities of concern on these adjacent zones include aircraft maintenance and rework on Zone 11, light industrial activities in Zone 13, and former petroleum refining and current heavy industrial activities in Zone 22.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and 22 parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 17 Target Areas

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. However, only unpaved tracks or tracks in potential loading and unloading areas will be sampled. Railroad tracks are located throughout the zone. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas for a total of thirteen surface soil samples for this zone target area. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-Z17-1. The approximate sampling locations are shown on Figure 6-Z17-1.

  It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of the compounds of concern are negligible, then the railroad track zone target area may be eliminated in this zone and other zones. Alternately, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then sampling may be modified to analyze for the more limited suite of the compounds of concern, only.

Parcel 110 Target Areas

- No parcel-specific target areas were identified at this parcel.

Parcel 111 Target Areas

- No parcel-specific target areas were identified for this parcel.

Parcel 122 Target Areas

- Target Area 1 (Building 112): This target area is the staining area that is associated with the carpentry shop. This target area is less than 1,000 square feet. Compounds of concern within this target area include SVOCs, metals, and TPH. The likelihood of environmental impact is classified as potential. Two surface soil samples will be obtained beneath the two most significant stains.

- Target Area 2 (Open Space): This target area encompasses the painting area located to the north of Building 112. This target area is estimated to cover 1,000 square feet. Compounds of concern within this target area include metals from paints and paint removal by sanding. The likelihood of an environmental concern having occurred in this area is classified as potential. Two surface soil samples will be obtained from this target area.

Parcel 123 Target Areas

- Target Area 1 (Building 98): Building 98 serves as the centralized hazardous waste accumulation point for NAS Alameda. Staining was noted during the site inspection on the deteriorated asphalt floor. The likelihood of environmental impacts are classified as potential in this target area. The target area is defined as the outline of the building, but the potentially affected (stained) area is anticipated to be significantly smaller. Compounds of concern include TPH, VOCs, SVOCs, and metals. Three subsurface soil samples and three surface soil sample will be located in the most heavily stained areas on the ground floor.

- Target Area 2 (Building 263): Heavy staining on the building floor and fuel odors were noted during the site inspection. This target area has been classified as having a potential likelihood of impacts, and covers less than 1,000 square feet. Two surface soil samples will be located beneath the most deteriorated and stained portions of the floor. Soil samples will be analyzed for TPH.

- Target Area 3 (Building 67): Building 67 appears to have always been used for maintenance activities. Staining observed during the site inspection indicate that repair activities are potential sources of releases. Compounds of concern include TPH, SVOCs, PCBs, and metals. Two surface soil samples will be collected from beneath the darkest stains in the shop areas, and one surface soil sample will be collected from beneath the stained areas near the railroad trench that runs through the building.

- Target Area 4 (Southeastern Portion of Open Space II, West Side of Building 112): Staining in historical aerial photographs indicates that spills may have occurred in Target Area 4, which is adjacent to the west side of Building 112. Aircraft support and shop activities have occurred within Building 112 and are potential sources of release. Compounds of concern include TPH, VOCs, SVOCs, and metals. Two surface soil samples and two subsurface soil samples will be located in the open space immediately west of Building 112.

- Target Area 5 (West Side of Building 393): Staining in historical aerial photographs and observed by site inspectors indicates that spills may have occurred in Target Area 5, which is adjacent to the west side of Building 393. A hazardous material storage area is a potential source of releases. Compounds of concern include TPH and metals. Two surface soil samples will be located in the open space immediately west of Building 393.

Parcel 124 Target Areas

- Target Area 1 (Building 13): Extensive floor staining was noted in the southern portion of this building during the site inspection. The central portion of the south wing of the building has been designated a target area to screen for the "worst case" scenario. The exact location of the target area will be determined in the field, and will be defined as the most severely stained area in the southern half of the building. This target area has been classified as having a potential likelihood of impacts, and covers approximately 2,000 square feet. Three surface soil and three subsurface soil samples will be collected from this target area. Compounds of concern include VOCs, SVOCs, PCBs, Metals, and TPH.

Parcel 125 Target Areas

- Parcel 125 Target Area 1 (Stained Area of Building 66): This target area addresses the possible presence of compounds of concern associated with spillage observed during the site inspections. This

target area is not intended to test the area beneath the whole building, but a representative "worst case" area. The target area is defined as the most severely stained area of the building, and is anticipated to cover less than 1,000 square feet. Compounds possible within this target area include VOCs, SVOCs, and TPH. Two surface soil and two subsurface soil samples will be collected from this target area. The likelihood that environmental impacts have occurred in this target area is classified as suspect.

Parcel 126 Target Areas

- Target Area 1 (Building 399): This target area, which consists of a 500-square-foot stain in the northwest portion of Building 399, has been classified as having a potential likelihood of impacts. TPH is the primary compound of concern. Two surface soil samples will be collected in this target area.

- Target Area 2 (Open Space): This target area primarily addresses the possible presence of metals associated with smelting operations and heavy staining observed in 1947 and 1953 aerial photographs. Compounds possible within this target area include metals and TPH. The likelihood of environmental impacts having occurred in this target area is classified as potential. Three surface soil samples will be collected in this target area.

Parcel 127 Target Areas

- Target Area 1 (Building 398, Test Cells): This target area includes the central test cell area of Building 398. The central test cells are intended to be representative of the "worst case" scenario for staining and deteriorated foundation. If field conditions indicate that the staining or condition of the foundation is worse in other areas of the building at the time of sampling, then the sample locations may be adjusted accordingly. The samples in this target area will be analyzed for TPH. This target area has been classified as having a potential likelihood of impacts, and covers approximately 4,000 square feet. Four surface and four subsurface soil samples will be collected from this target area.

- Target Area 2 (GAP Sites 44 and 45): Staining was observed around GAP Sites 44 and 45. This target area that covers less than 1,000 square feet. Because waste chemicals stored in this area include lubricating oil and solvents, samples will be analyzed for TPH, metals, SVOCs, and VOCs. The likelihood of environmental impacts having occurred in this target area is classified as potential.

Two surface soil and two subsurface soil samples will be collected from this target area.

- Target Area 3 (Open Space): This target area addresses the possible presence of compounds of concern associated with smelting operations and heavy staining observed in a 1953 aerial photograph. Although the staining in the aerial photograph covered the entire parcel, this target area has been chosen as a representative area. The representative target area covers approximately 2,500 square feet. Compounds possible within this target area include metals and TPH. The likelihood of environmental impacts having occurred in this target area is classified as potential. Three surface soil samples will be collected in this target area.

Parcel 128 Target Areas

- Target Area 1 (Fuel Dispensing Area): Based on the staining in historical aerial photographs and the uses of former buildings and structures on the parcel, the area surrounding the former buildings was identified as a potential release area. Target Area 1 covers approximately 25,000 square feet. The sampling in this Target Area supplements the sampling proposed by the IR contractor in this area of the parcel. This target area has been classified as having a potential likelihood of impacts. Five surface soil samples will be collected from this target area. Because the sources of release is likely to be fuel products dispensed at these locations, the compounds of concern are TPH and VOCs.

Parcel 131 Target Areas

- No parcel-specific target areas were identified for this parcel.

Parcel 135 Target Areas

- Target Area 1 (Building 162, Central Area): This target area is located in the central portion of Building 162, and encompasses the large stained areas noted during the site inspection. The chemicals of concern in this target area include fuel, lubrication oils, metals from plating solutions, and solvents for parts cleaning. This target area is estimated to occupy the areas of most severe staining and is less than 3,000 square feet. This target area has been classified as having a potential likelihood of impact. Three surface soil and three subsurface soil samples will be collected from this target area.

- Target Area 2 (GAP Site 11): This target area is reportedly a sump for the collection of waste oils. The chemicals of concern in this target area include fuel, lubrication oils, metals from plating solutions, and solvents for parts cleaning. This target area has been classified as having a suspect likelihood of impact. Two subsurface GeoProbe soil samples will be collected from this target area.

Parcel 136 Target Areas

- Parcel 136 Target Area 1 (Building 113, Shop Area): The target area is the shop area of Building 113, which is located on the west side of the building. This target area is intended to be representative of the remainder of the stained area of the building floor, excluding the paint booth. The compounds of concern are metals, VOCs, and SVOCs. The likelihood of impact is potential, and one surface soil sample and one subsurface soil sample will be collected from this target area. The target area is approximately 1,200 square feet in area.

- Parcel 136 Target Area 2 (Building 113, Paint Booth): The target area is the paint booth of Building 113, which is located on the southern portion of the building. The floor is completely and severely stained in this area. The compounds of concern are SVOCs, VOCs, and metals. This target area covers approximately 1,200 square feet and has been classified as having a potential likelihood of impacts. One surface soil sample and one subsurface soil sample will be collected from this target area.

Parcel 137 Target Areas

- Target Area 1 (Building 14): This target area is defined as the areas of significant staining observed in the dyno buildup shop in the southwest corner (300 square foot stain), the main east/west hallway in front of test cells 2 and 3 (240 square foot stain), and test cells 6 (500 square foot stain), 11 (300 square foot stain), and 12 (600 square foot stain). These areas together will serve as a representative "worst case" scenario for the remainder of the building. The chemicals of concern in this target area include fuel, lubricating oils, and solvents. This target area is estimated to occupy approximately 2,500 square feet total and has been classified as having a potential likelihood of impact. Three subsurface soil and five surface soil samples will be collected from this target area.

Parcel 138 Target Areas

- Target Area 1 (Structure 598/GAP 37): This target area encompasses Structure 598 and the associated surrounding area. This target area is established to addresses the possible presence of compounds of concern associated with fuel and hazardous waste storage and releases. The size of this target area is approximately 2,500 square feet. Compounds of concern within this target area include TPH, VOCs, and metals. The likelihood environmental impacts having occurred in this target area is classified as potential. Two surface and two subsurface soil samples will be collected from this target area.

- Target Area 2 (Open Space II): This target area encompasses the donut decommissioning area. This target area is established to addresses the possible presence of compounds of concern associated with potential releases of fuel and waste oil during cleaning of the donuts. The size of this target area is approximately 2,000 square feet. Compounds of concern within this target area include SVOCs, TPH and metals. The likelihood environmental impacts having occurred in this target area is classified as potential.

Parcel 200 Target Areas

- No parcel-specific target areas were identified for this parcel.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14).

Table 6-Z17-1 summarizes screening-level sampling and analysis for the zone target area. A total of 27 subsurface GeoProbe soil samples and 68 surface soil samples will be collected from the locations shown on Figure 6-Z17-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-110

PARCEL 110 EVALUATION PLAN

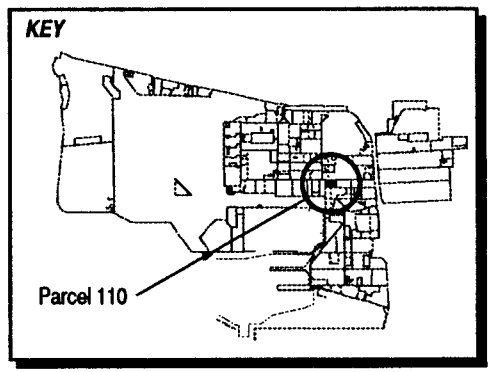
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 110 at NAS Alameda (Figure 6-110-1). The parcel, which is located in the central portion of the base, is 2.6 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. Two former tanks were located at this parcel and are listed as site of the RCRA RFI. One zone-wide and no parcel-specific target investigation areas (target areas) were identified on this parcel. Surface soil sampling is the sampling procedure called for in the screening-level investigation in this area. Table 6-110-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 110, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 110, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 111, 122, 123, 124, 125, 126, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the

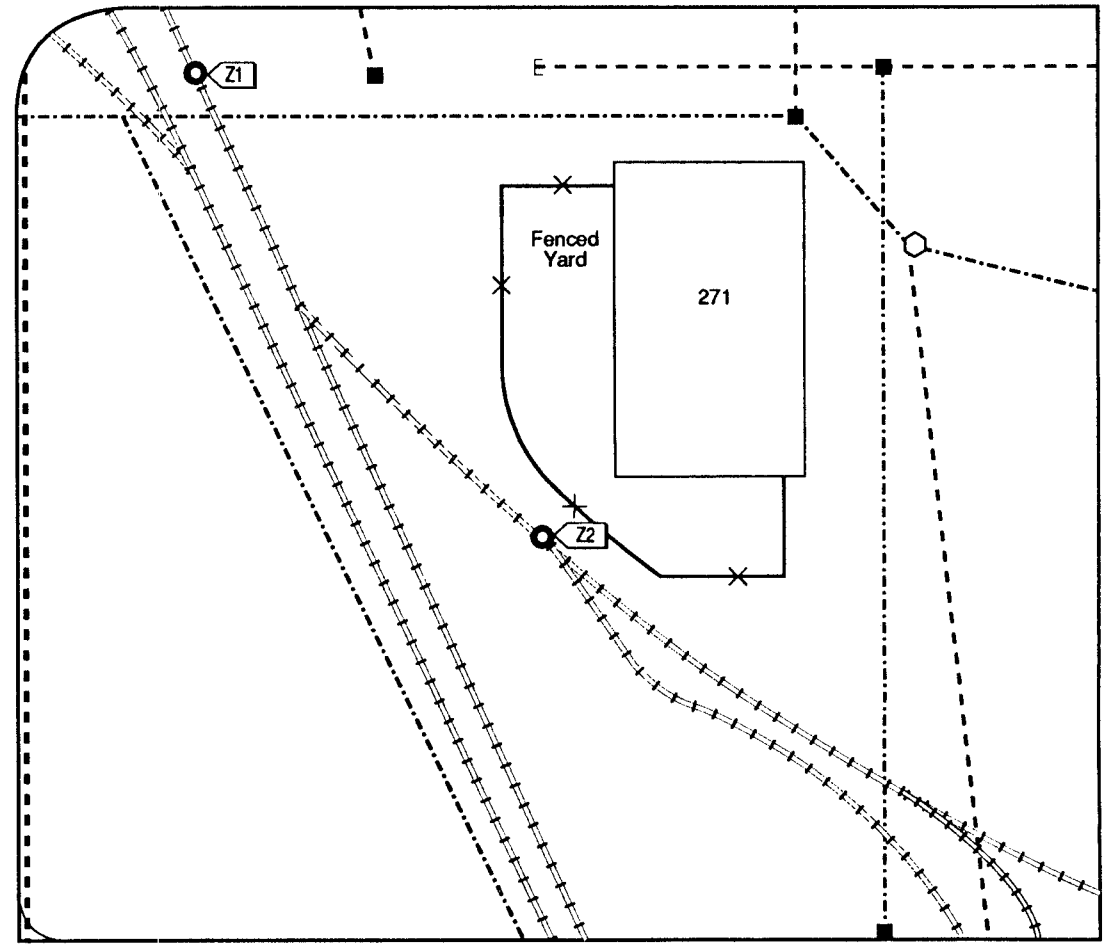


LEGEND

- Steam Line
- Storm Sewer Line
- Sewer Line
- Industrial Waste Line
- Capped
- Surface Soil Sample Location
- Catch Basin
- Catch Basin

Note: No parcel specific sampling is required

1"= 60'



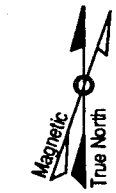


Figure 6-110-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

TABLE 6-110-1

Summary of Recommended Samples
NAS Alameda Parcel 110

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z17-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs, Fuels	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, EPA 8015 Modified
Z17-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs, Fuels	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, EPA 8015 Modified

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 271, the Hazardous/Flammable Storehouse) and one structure (Structure 590, Industrial Waste Pump Station #5) cover approximately 20 percent of the parcel. The remaining 80 percent is open space. The parcel area is presently in use for material storage, vehicle parking, disposal, and recycling. Railroad tracks are present in the western and southern portions of Parcel 110. Sewer lines are present on this parcel and are shown on Figure 6-110-1.

Parcel 110 is located approximately 500 feet east of an Installation Restoration (IR) Program site (IR Site 6, Hanger 41 AIMD). Subsurface contamination migration from Parcel 131, IR Site 3, onto parcels located northwest of Parcel 131 is being investigated under the IR program. No previous investigations have been conducted at Parcel 110 and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 271

Building 271 was constructed in 1945 and served as a Hazardous/Flammable Storehouse (Figure 6-110-1). This building is in fair condition. Building 271 is a one story building constructed of a wood frame with chain link walls, an asphalt floor, and wood roof. Building 271 covers approximately 6,100 square feet. No other buildings or structures are documented to have existed in the space covered by Building 271.

Utilities located within and immediately surrounding Building 271 include storm, sanitary, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building have included material storage, vehicle parking, disposal, and recycling. Storage of chemicals, empty drums, gas cylinders, sandblasting grit, secondary containment tubs, and other materials occurred within the building and in the adjacent fenced yard. Storage occurred within Building 271 from 1945 to the present.

Acetylene, sulfur hexafluoride, propane, freon, transmission fluid, paint thinner, chromic acid, sodium fluorosilicate, TCE, floor polish, and monoethanolamine are documented to have been stored in Building 271 during the site inspection.

Review of aerial photographs and site inspection data indicates that undocumented spills may have occurred around Building 271. Dark stains observed on the west side of the building interior appear to be dark oil or grease. The dark staining covers an area measuring approximately six by four feet. White stains observed in the battery charging area appear to be the result of releases of battery acid. The white staining covers an area measuring approximately four by ten feet. Dark oil like stains are located around the AV-lube station, and small scattered stains are located throughout the recycle center yard. These stains area relatively minor, located on concrete, and will not be sampled at this time.

Building 271 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as floods, fires, or crashes are documented to have occurred within Building 271.

Structure 590

Structure 590 houses Industrial Wastewater Pump Station #5 and pumps 210 gallons of industrial wastewater per minute. Structure 590 is composed of a concrete vault with a metal grate on top. No stains were noted in the vicinity of this structure.

Open Space

Open space covers approximately 80 percent of the parcel. The open space is used for recyclable material accumulation and railroad tracks.

Structures located within the open space include railroad tracks, constructed prior to 1947, and Structure 590. The ground surface of the

open space is 90 percent paved and 10 percent unpaved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are either bare soil or covered with gravel.

Utilities located within and immediately surrounding the open space include storm sewer, steam, fuel and industrial sewer lines.

EBS information indicates that activities conducted within this open space included material storage, vehicle parking, and activities related to the presence of railroad tracks. No spills or staining were noted in this open space.

No incidents such as floods, fires, or crashes are documented to have occurred within the open space.

Underground Storage Tanks

Two underground storage tanks were formerly present at this parcel (Tanks AV Lube 1 and AV Lube 2). These tanks were installed at an unknown date and were associated with Building 271. Tank AV Lube 1 held automotive lubricant. The former contents of Tank AV Lube 2 are unknown, but based on the name of the tank it likely contained aviation lubricants. These tanks had capacities of 22,000 and 2,200 gallons, respectively. The former presence of these tanks was identified from the EBS. No information is available regarding the integrity of the tanks that were removed.

The two tanks are listed as RCRA tanks (they were designated an AOC). Tanks AV Lube 1 and AV Lube 2 were identified as RCRA tanks based on their inclusion in the RFI.

Parcel Boundary Conditions

Parcel 110 is bounded by Parcels 71, 103, 109, 111, 123, and 124. Parcel 110 is located approximately 500 feet east of IR Site 6 (Hanger 41 AIMD), located on Parcel 196. Activities of concern on other adjacent parcels include materials storage on Parcel 124, recycling and vehicle maintenance on Parcel 123, and aircraft maintenance and historical fueling operations on Parcel 71.

Subsurface contamination migration from Parcel 131, IR Site 3, onto parcels located northwest of Parcel 131 is being investigated under the IR program.

No parcels contiguous with Parcel 110 are IR sites, therefore, no sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for continuing concern at Parcel 110, then additional sampling on Parcel 110 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel contained two RCRA tanks (Tanks AV Lube 1 and AV Lube 2) that comprise one RCRA site. Tanks AV Lube 1 and AV Lube 2 were identified as RCRA tanks based on their inclusion in the RCRA Facility Investigation (RFI) for NAS Alameda. The requirements for the RFI are described in detail in Section 8. At NAS Alameda, tanks that would normally require an RFI will be investigated and remediated, if necessary, as part of the UST program. These tanks have been removed. A description of the tanks is provided in the Underground Storage Tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 110, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-110-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 110 because no industrial buildings are present.

TABLE 6-110-2

Summary of Data Gaps
NAS Alameda Parcel 110

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 110.
Installation Restoration (IR) Sites	• IR Site 6 (Hanger 41 AIMD) is located approximately 500 feet west of Parcel 110. Subsurface contamination migration from IR Site 3, onto parcels located northwest of IR Site 3 is being investigated under the IR program.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-110-2

Summary of Data Gaps
NAS Alameda Parcel 110

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Two underground storage tanks were formerly present at this parcel (Tanks AV Lube 1 and AV Lube 2). Tank AV Lube 1 held automotive lubricant. The former contents of Tank AV Lube 2 is unknown. These tanks had capacities of 22,000 and 2,200 gallons, respectively.
Underground Utilities	• Industrial sewer, storm sewer, and sanitary sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

As noted earlier, Parcel 110 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 110.

Once the data gaps in Table 6-110-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 110 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 110. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and location zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. Two of the fifteen surface soil samples for this zone target area are located on this parcel. The three proposed confirmation samples are located on other parcels. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-110-1. The approximate sampling locations are shown on Figure 6-110-1.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, nearby IR sites, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-110-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 110. Two surface soil samples will be collected from the locations shown on Figure 6-110-1. The samples should be located in the areas with the most significant staining. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-111

PARCEL 111 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 111 at NAS Alameda (Figure 6-111-1). The parcel, which is located in the central portion of the base, is approximately 4 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site has been identified at this parcel that requires an RFI. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. No sampling is called for in the zone-wide target area on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 111, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 111, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 122, 123, 124, 125, 126, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel

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PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-111-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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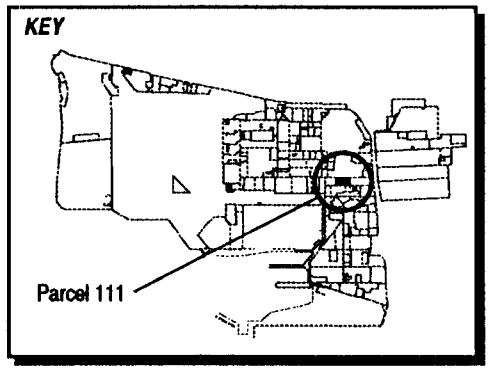

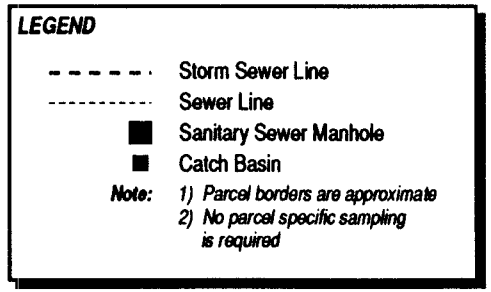

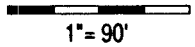

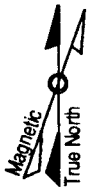

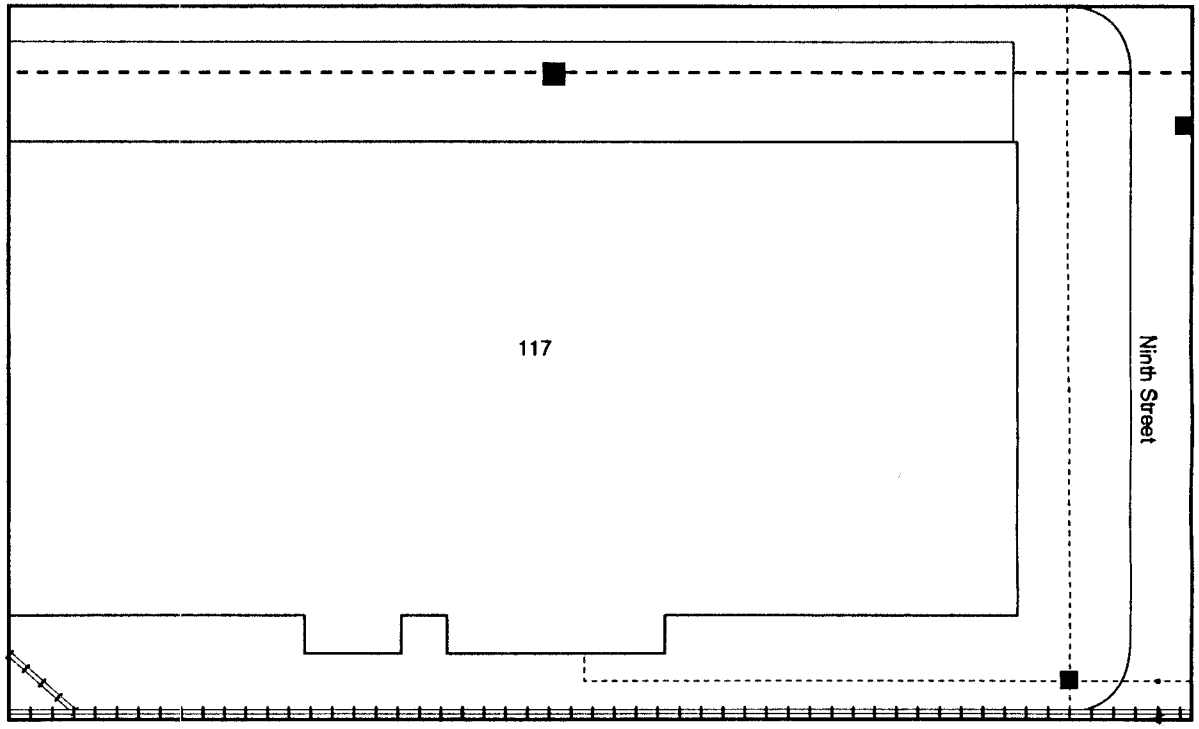

Figure 6-111-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

SENSITIVE

should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 117, a warehouse) and railroad tracks cover approximately 60 percent of the parcel. The remaining 40 percent is open space. In general, the parcel area is presently in use for indoor (warehouse) storage, vehicle parking, outdoor storage, sidewalks, and roadways. Sewer lines are present at this parcel and are shown in Figure 6-111–1.

Parcel 111 is located approximately 500 feet west of Installation Restoration (IR) Program site 7A (Service Station). Potential subsurface contaminate migration from Parcel 131, IR Site 3, onto parcels located northwest of Parcel 131 is being investigated under the IR program. No previous investigations have been conducted at Parcel 111 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 117

Building 117 was constructed in 1943 and has served as a general warehouse since that time (Figure 6-111–1). This building is in fair condition. Building 117 is a one-story building and is constructed of a wood frame with metal siding. The building has an asphalt-covered concrete slab floor and wood frame roof with composite roll roofing material. The building is approximately 106,000 square feet in area. No previous use is documented for this area prior to the construction of Building 117. Utilities located within and immediately surrounding Building 117 include sanitary and storm sewer lines.

Information collected during the EBS indicates that activities conducted within this building included general warehouse storage. Warehouse activities involve forklift operation, refueling, and

maintenance. These activities were conducted in the equipment room of Building 117, and typically involve the use or generation of chemicals and wastes including hydraulic fluids, battery acids, and PCB oil.

Motor oil, auto polish, brake fluid, hydraulic fluid, and battery fluid are documented to have been stored and used in the equipment room of Building 117. Approximately 12 gallons of petroleum products and one gallon of corrosives were stored in Building 117 at the time of the site inspection. A chemical inventory dated April 1993 listed a total of 500 gallons of non-halogenated and halogenated organics, paint, petroleum products, and corrosives. Disposal of used chemicals is accomplished by sending them to an off-site collection point.

There are no documented releases in this building. However, site inspection data indicate that small, undocumented releases may have occurred at the east side of the office trailers, in the old file storage area, and in the forklift battery recharging area. These releases are dark, scattered stains and appear to be due to petroleum products. The staining covers approximately 16 square feet in the file storage areas, and 400 square feet in the battery recharging area. Because this staining is relatively minor and has occurred on a concrete surface, no sampling is proposed at this time.

Open Space

Open space covers approximately 40 percent of the parcel. In general, this open space is used for material storage, vehicle parking, and railroad tracks. There are no structures located within the open space. Utilities located within and immediately surrounding this open space include storm and sanitary sewer lines.

EBS information indicates that activities conducted within this open space included material storage and vehicle parking. Railroad tracks are located along the southern boundary of the parcel. Use of the railroad tracks occurred from prior to 1947 to the present.

Grease is documented to have been stored and used in the courtyard section of the open space. Approximately five gallons of grease are currently being stored in the open space. Disposal of used chemicals is accomplished by sending them to an off-site central collection point.

There are no documented releases and review of aerial photographs and site inspection data shows no apparent stains in the open space of Parcel 111.

Underground Storage Tanks

One underground storage tank was formerly present at this parcel (Tank 117-1). Tank 117-1 was installed on an unknown date, and was located south of Building 117. This tank was used to store diesel waste and had a capacity of 1,000 gallons. The former presence of this tank was identified from the EBS. Based on the available information, evidence of leakage was found when the tank was removed. This tank has been identified as a RCRA tank based on its former contents and its inclusion in the RFI.

Parcel Boundary Conditions

Parcel 111 is bounded by Parcels 103, 110, 123, 121, 119, and 197. Parcel 113 is IR Site 7A (the Former Service Station). Activities of concern on adjacent parcels include vehicle maintenance on Parcel 123 and material storage on Parcel 110. Potential subsurface contaminant migration from Parcel 131, IR Site 3, onto parcels located northwest of Parcel 131 is being investigated under the IR program.

No parcels contiguous with Parcel 111 are IR sites, therefore, no sampling is called for in this PEP in response to the nearby IR site. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 111, then additional sampling on Parcel 111 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (site number UST-8). This tank was identified as a RCRA tank based on its former contents and its inclusion in the RCRA Facility Investigation (RFI) for NAS Alameda. This tank has been removed. A description of the tank is provided in the Underground Storage Tank subsection above. The requirements for the RFI are described in detail in Section 8. At NAS Alameda, RCRA tank sites that would normally require an RFI will be investigated and remediated, if necessary, as part of the UST program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 111, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-111-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 111 because no industrial buildings are present.

Once the data gaps in Table 6-111-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 111 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 111. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and location zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the

TABLE 6-111-1

Summary of Data Gaps
NAS Alameda Parcel 111

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 111.
Installation Restoration (IR) Sites	• Parcel 111 is located approximately 500 feet west of Installation Restoration (IR) Program site 7A (Service Station). Additional investigation at IR site 7A is proposed by the IR contractor. Subsurface contamination migration from IR Site 3, onto parcels located northwest of IR Site 3 is being investigated under the IR program.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-111-1

Summary of Data Gaps
NAS Alameda Parcel 111

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One underground storage tank was formerly present at this parcel (Tank 117-1). Tank 117-1. This tank was used to store diesel waste and had a capacity of 1,000 gallons. Evidence of leakage was found when the tank was removed. This tank has been identified as a RCRA tank.
Underground Utilities	• Storm and sanitary sewer lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. No surface soil samples for this zone target area are located on this parcel. Soil samples on other parcels will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, nearby IR sites, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-122

PARCEL 122 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 122 at NAS Alameda (Figure 6-122-1). The parcel, which is located in the central portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel contains one RCRA site (SWMU/GAP 10). This site is not listed in the Part B permit requiring an RFI. Two parcel-specific target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in this investigation consist of surface soil sampling. Table 6-122-1 provides the complete list of samples and analysis prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 122, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 122, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 123, 124, 125, 126, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the

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SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-122-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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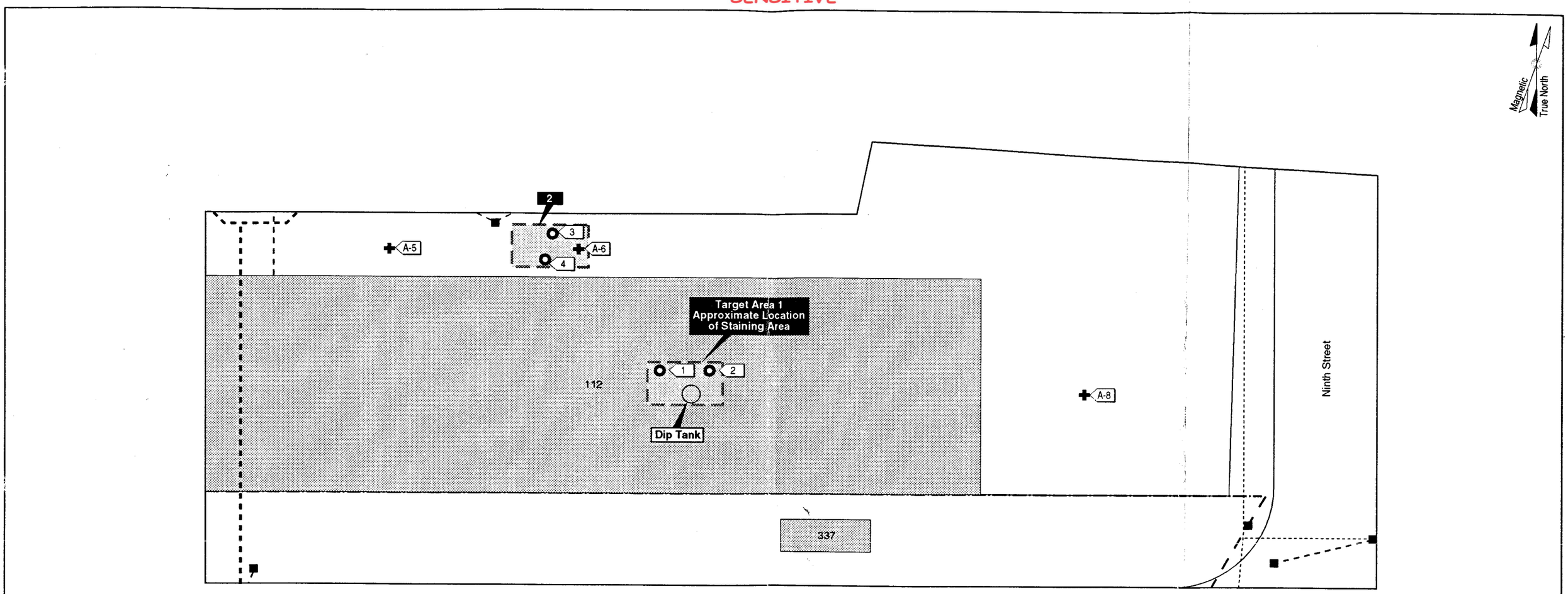

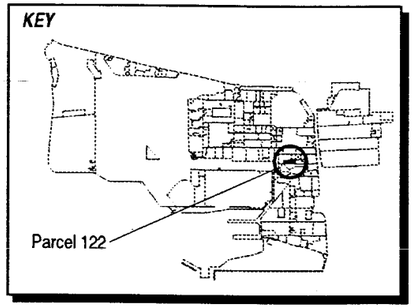

LEGEND

- Target Areas 1-2
- Steam Line
- Fuel Lines in Use
- Fuel Lines (Abandoned)
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location
- Soil Vapor Sample Location (Canonie Environmental, Inc.)
- Catch Basin

1"= 45'

Figure 6-122-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.1G/DS/07.13.94

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TABLE 6-122-1

Summary of Recommended Samples
NAS Alameda Parcel 122

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
122-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Oils, Metal shavings, Paint	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
122-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Oils, Metal shavings, Paint	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
122-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Oils, Metal shavings, Paint	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
122-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paint, sandblast grit	Metals	ICAP Scan
122-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paint, sandblast grit	Metals	ICAP Scan
122-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Paint, sandblast grit	Metals	CLP RAS

*These are the suggested locations for the confirmation sample. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1900. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1915; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 112 and 337) cover approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is in use by SIMA as a painting and ship repair facility and supporting grounds. Fuel and sewer lines are present at this parcel and are shown in Figure 6-122-1.

No Installation Restoration (IR) Program sites border Parcel 122; however, IR Site 3 (Aviation Gasoline Tanks) and IR Site 7B (the former service station) are located within 500 feet of Parcel 122.

Previous investigations have been conducted at Parcel 122. Four soil vapor samples were obtained at the northern parcel border as part of the investigation of IR Site 3. Locations of these soil vapor samples are shown on Figure 6-122-1. Soil vapor was only analyzed for hydrocarbon-related compounds. Contour maps for soil vapor suggest that Benzene, Toluene, Ethylbenzene, and Xylene in soil vapor underlying the site ranges from 1 to 10 parts per billion in the southeast parcel border.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 112

Building 112 is in moderately good condition. It is constructed of concrete and painted asphalt floors, wood frame, and a tar and wood roof. The building is approximately 34,000 square feet in size.

Utilities located within and immediately surrounding this building include underground sanitary sewer, storm sewers, electrical, potable and fire protection water lines, and steam and condensate lines.

EBS information indicates that this building was present prior to 1947, and that past use of this facility was as an aircraft support facility. Building 112 is currently in use as a supply storeroom, a weight test area, a zinc smelter, a carpentry shop, an upholstery shop, a tool issue shop, and a non-destructive testing lab.

During the site inspection, the following chemical storage issues were noted. Zinc was stored in 55-gallon drums in the zinc smelting area. One hundred gallons of wood glues, sealant, adhesives, bedding compound, wood stains and varnishes, gear oil and paint were stored in a flammable materials locker located in the carpentry shop. Less than 100 gallons of resins, adhesives, roof tar, lubricating oil, car wax, and floor wax were stored in a flammable materials cabinet in the center of the building. Over one hundred gallons of corrosives and lab chemicals (i.e., acetone, alcohol) were noted in hazardous materials lockers in the non-destructive testing laboratory. Petroleum products (such as hydraulic oil, cutting oils, etc.) are stored throughout the building.

No spills have been documented in this building. However, scattered stains were present on the painted asphalt throughout the interior of Building 112. Numerous oil and hydraulic fluid stains were located in building work areas (carpentry shop, wood staining shop, and hydraulic equipment). Building 112 is washed out occasionally. The waste water generated by the washdown of the building is pushed out the front door to parking areas. The staining in the carpentry shops is addressed as Target Area 1.

Many of the steam lines at this building are covered with potential asbestos-containing-material (ACM), including the steam lines that were noted along the roof of the building.

A ventilation system is in use in the non-destructive testing shop and hooked up to the laboratory vent hoods. A former vent system was located over the dip tank in the staining area, and black material was noted inside the vent.

Building 337

Building 337 is a Quonset hut, constructed of corrugated metal ceilings and walls over painted asphalt. The building is approximately 840 square feet in size.

Utilities located within and immediately surrounding this building include underground sanitary sewer, storm sewer, electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

EBS information indicates that this building has been present since the 1950s. Building 337 is currently in use as a chemical supply storehouse. Chemicals are stored on shelves. Approximately 400 gallons of material are stored in this building, and include: adhesives, battery fluids, enamel paints, latex paints, gasoline, diesel, oils. The following wastes were noted inside this building: one 55-gallon drum of waste oil, one 55-gallon drum of aerosol cans, and various empty paint cans. Rust stains were evident underneath the drums. Absorbent was scattered about the drum of waste oil. Pad-mounted transformers, whose PCB content is not known, are located to the east and west of Building 337.

No spills have been reported in this building. However, the floor of this area exhibits general discoloration throughout. The floor appeared dark and mottled beneath the paint. Building 337 is washed out occasionally. No sampling is proposed in this area because only general discoloration, not staining, was noted by site observers. The resulting wastewater is pushed out the front door to the exterior parking areas.

Open Space

The open space is defined by the parcel boundaries and contains approximately one acre. The open space is paved in part with asphalt, which is in poor condition. Utilities located within and immediately surrounding this open space include fuel lines, sanitary and storm sewers, electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

Most of the open space surrounding this parcel is used for vehicle and forklift parking. Painting of ship hulls/parts and sanding operations occur in the area north of Building 112. Chemicals stored in this area include lubricating oil, acetone, urethane reducer, reducer, and primer catalyst. Less than 10 gallons of chemicals were noted, but paint containers were stored adjacent to an unpaved area. A fenced storage area is located east of Building 112, containing metal parts, wooden crates and patching of various electronic components, cylinders of compressed gases. Drums of bilge water and absorbent were stored at the northeast building corner. Twenty gallons of paint, 15 gallons of detergent, and packages of grout were also stored here.

No spills have been documented for this parcel. However, stains were noted throughout the open space. Most of these appeared to be associated with vehicle and forklift parking, or with paint overspray. Stains at the north painting area were noted to be particularly heavy over damaged asphalt, and adjacent to unpaved areas. This area is addressed by Target Area 2.

Storm drains surround this open space on all sides, and it appears that runoff from the painting and sanding areas would enter the storm sewer. As noted under Buildings 337 and 112, wastewater generated in these buildings, either as a result of leaks during storm events or from washing down floors, is pushed out onto the streets which border this open space and into the storm sewer system.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 122 is surrounded by Parcels 123, 121, 119, 120, 129, 128, and 127. Activities of concern on adjacent and nearby parcels include fuel testing and storage, various light industry, and the presence of railroad tracks.

No parcels contiguous with Parcel 122 are IR sites, therefore, no sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 122, then additional sampling on Parcel 122 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/GAP 10). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under this criteria, SWMU/GAP 10 does not require sampling because the location of the

site could not be determined based on available records and EBS information, and because the floor of Building 112 is paved.

SWMU/GAP 10 is listed as having contained the following hazardous wastes: solvents, waste oils, and asbestos, and is located in Building 112. The current status of this site is unknown.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 122, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-122-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 112. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-122-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 122 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-122-2

Summary of Data Gaps
NAS Alameda Parcel 122

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 3 (Aviation Gasoline Tanks) is located approximately 300 feet southeast of Parcel 122. • IR Site 7B (former service station) is located approximately 400 feet south of Parcel 122.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from nearby Parcel 131 identified, and is being addressed as part of the IR site program.
Potential Zone-Wide Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-122-2

Summary of Data Gaps
NAS Alameda Parcel 122

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• (Building 112): This target area is the staining area that is associated with the carpentry shops, and is less than 1,000 square feet. Compounds of concern within this target area include SVOCs, metals and TPH. . • (Open Space): This target area encompasses the painting area located to the north of Building 112. This target area is estimated to cover 1,000 square feet. Compounds of concern within this target area include metals.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Abandoned and active sanitary sewer, storm sewer, electrical distribution lines, and potable and fire protection water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Underground abandoned and active fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and location of these areas were evaluated to determine field investigation and sampling strategies. Three target areas of concern were identified at Parcel 122.

- Target Area 1 (Building 112): This target area is the staining area that is associated with the carpentry shops. This target area is less than 1,000 square feet. Compounds of concern within this target area include SVOCs, metals, and TPH. The likelihood of environmental impact is classified as potential. Two surface soil samples will be obtained beneath the most significant stained areas.

- Target Area 2 (Open Space): This target area encompasses the stained painting area located to the north of Building 112. This target area is estimated to cover 1,000 square feet. Compounds of concern within this target area include metals from paints and paint removal by sanding. The likelihood of an environmental concern having occurred in this area is classified as potential. Samples to be obtained are listed on Table 6-122-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-122-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 122. Four surface soil samples will be collected from the locations shown on Figure 6-122-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The location of Target Areas 1 and 2 are approximated on the map, the actual locations will be determined in the field.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level

investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-123

PARCEL 123 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 123 at NAS Alameda (Figure 6-123-1). The parcel, which is located in the east-central portion of the base, is approximately three acres in size. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains four RCRA sites, two of which have been identified in the Part B Permit as requiring RCRA Facility Investigations (RFI). One zone-wide and four parcel-specific target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-123-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 123, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 123, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present uses of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 124, 125, 126, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing,

hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930 and included the use of dredged material from the Todd Shipyard. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently five buildings (67, 98, 263, 393, and 411) cover approximately 15 percent of the parcel. The remainder (85 percent) is open space. In general, the parcel area is presently in use as a storage area for refuse, recyclable materials, boats, diesel generators, hazardous materials/wastes, mobile facility CONEX containers, and other miscellaneous equipment. Two buildings were formerly located on the parcel and have since been demolished. Sewer and abandoned fuel lines are present at this parcel and are shown in Figure 6-123-1.

Parcel 123 is located approximately 450 feet northwest of Installation Restoration (IR) Site 3 (Aviation Gasoline Storage Tanks), and 400 feet north of IR Site 7B (Building 162). Previous investigations have been conducted at Parcel 123, and specific data regarding chemical occurrence are available.

Sampling of the contents of Tank 393, located beneath a concrete pad north of Building 393, during a previous investigation (ERM-West, 1988) revealed the following constituents: methylene chloride, toluene, trichlorofluoromethane, 2,4-dimethylphenol, phenol, cadmium, chromium, lead, mercury, and zinc. PCBs were not detected. Two soil samples, taken at depths between 5.5 feet and 8.0 feet near the western and southern sides of the concrete tank pad, contained the following constituents (maximum concentrations): total petroleum hydrocarbons (120 ppm), ethylbenzene (0.03 ppm), toluene (0.28 ppm), and xylenes (0.19 ppm). No halogenated VOCs or SVOCs were detected in the soil samples. Tank 393 is no longer in use.

Two soil samples collected near the western edge of the concrete pad for Tank 411 contained toluene, ethylbenzene, and xylenes in maximum concentrations of 0.03 ppm, 0.22 ppm, and 0.23 ppm, respectively. TPH and oil/grease concentrations were below 10 ppm and 0.2%, respectively. SVOCs and halogenated VOCs were not detected. In another investigation, two soil vapor samples (Canonie, 1990) were collected in Open Space II to define the extent of AVGAS contamination from IR Site

3 (Parcel 131). Concentrations of benzene, toluene, ethylbenzene, xylenes, and hydrocarbons were below detection limits in both soil vapor samples.

Informal assessments indicate that asbestos containing materials may be present in Buildings 67, 263, and 393. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel open space and buildings are described in detail below.

Building 67

Building 67 was constructed in 1942 and has served as a welding, mechanical, and maintenance shop, aircraft ground support shop, and switching substation (Figure 6-123-1). This 12,700-square-foot building was originally used as a locomotive shed and rail car repair shop. Building 67 is constructed of wood and concrete with a concrete floor and built-up roof. FMO, MWR, and HM-15 currently occupy this building.

Utilities located within and immediately surrounding Building 67 include underground sanitary sewer, storm sewer, steam, industrial sewer, and electrical lines. It appears that no permits have been issued for processes occurring within this building. Site inspection data indicate that four pad-mounted transformers and four oil-filled switches are located in the northwestern corner of Building 67. One PCB-containing transformer (#3165452, PCBs > 50 ppm) was removed in November 1991. According to EBS information, another PCB-containing transformer (#2977050) is still located in this building.

It appears that repair activities have been conducted in Building 67 since its construction. Repair and maintenance processes typically use or generate chemicals and wastes including solvents, lubricating fluids, metals, and petroleum products. When Building 67 was used as a rail car repair shop and locomotive shed, maintenance activities likely involved heavy metals, solvents, and petroleum products. Floor drains in the shop areas appear to be connected to an oil/water separator that is located near the south side of Building 67. It is not known if the unit is currently in operation. The railroad tracks that run through Building 67 are no longer in use.

Site inspection data indicate that cylinders of argon, acetylene, and oxygen, and approximately 50 pounds of fertilizer, are stored in Building

67. Lawn maintenance equipment (tractors, lawnmowers, etc.) are also stored in this building. According to EBS information, 500 gallons of waste petroleum products, corrosives, and nonhalogenated organic compounds were generated by painting and maintenance activities performed by the Shore Intermediate Maintenance Activity (SIMA). SIMA has been inactive since 1991.

Although there have not been any documented spills in Building 67, staining observed during the site inspection indicates that spills have occurred in the shop areas. An oily residue covers the railroad track trench that runs through Building 67. These stained areas are addressed by Target Area 3.

No HVAC system, air inlets, or exhaust vents were noted during the building inspection. No incidents are documented to have occurred within Building 67.

Building 79 (Demolished)

Building 79 was constructed in 1942 and served as barracks. This semi-permanent building was demolished. No chemicals are documented to have been stored or used in Building 79.

Building 98

Building 98 was constructed in 1942 and serves as a storehouse for hazardous materials and wastes (Figure 6-123-1). This two-story building currently serves as the centralized hazardous waste accumulation point for NAS Alameda. Building 98 is constructed of concrete with a deteriorated asphalt floor, and covers approximately 11,600 square feet. Although the second story is vacant, its floor is heavily stained. The ceiling appears to be insulated with a friable, spray-type insulation. Utilities located within Building 98 include underground sanitary sewer, storm sewer, steam, fuel, industrial sewer, and electrical lines. It appears that Building 98 has always been used for hazardous materials storage.

Approximately 3,000 gallons of waste petroleum products, corrosives, metals, asbestos, and nonhalogenated organic compounds are stored within Building 98. Site inspection data indicate that solvents, lube oil, and corrosion inhibitors (unknown quantities) are stored in this building. Hazardous waste drums currently located inside the building and in a fenced enclosure on the east side of Building 98 contain unknown quantities of flammable materials, corrosives, used rags, batteries, used spill kits, used aerosol cans, and waste paint.

According to site inspection data, multiple releases have occurred in Building 98; black and white stains cover most of the second-story floor, and the asphalt floor on the ground level is heavily stained and deteriorated. Stains range in size from approximately one square foot to 25 square feet. These areas are addressed by Target Area 1.

No HVAC system, air inlets, or exhaust vents were noted during the building inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 98.

Building 263

Building 263 was constructed in 1946 and served as an aircraft ground support equipment shop (Figure 6-123-1). This building is currently occupied by the Facilities Maintenance Office, and is used to store lawn maintenance equipment, gasoline, and oil. Building 263 is a metal Quonset hut with an asphalt and concrete floor, and covers approximately 850 square feet. Utilities located within Building 263 include underground storm sewer, industrial sewer, and electrical lines.

Site inspection data indicate that less than 100 gallons of lube oil, gasoline, diesel, and acetylene are stored in Building 263. Acetylene cylinders are stored in a steel cage and fuels are stored in a flammable materials cabinet. Although there have not been any documented spills in Building 263, floor stains exist near the southern end of the building.

No HVAC system, air inlets, or exhaust vents were noted during the building inspection. Intense fuel and oil odors present during the site inspection indicate that the building is poorly ventilated and suggest that releases may have recently occurred. This area of intense odor and staining in the southern portion of the building are addressed by Target Area 2. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 263.

Building 393

Building 393 was constructed in 1953 and served as a painting and sandblasting facility (Figure 6-123-1). This 1,800-square-foot building was also used as a maintenance shop and supply storage facility. Site inspection data indicate that Building 393 is currently used to store repair parts for boats and trailers. Building 393 is constructed of wood with a concrete floor and a corrugated metal exterior. Utilities located within and immediately surrounding Building 393 include underground storm sewer and steam lines, and overhead electrical lines.

Painting processes typically generate waste paint, metals (from surface preparation), solvents, and wastewater. Waste chemicals appear to have been disposed of in an underground waste storage tank north of Building 393. Site inspection data indicate that less than 10 gallons of brake fluid, aluminum paint, and spray enamels are currently stored in this building.

Although there have not been any documented spills in Building 393, paint floor stains were observed during the site inspection. Paint overspray stains were also noted on the walls and floor of the building. A dark oil-like stain near vehicle repair equipment indicates that minor maintenance activities may still be taking place inside Building 393. These stains are relatively minor, and have occurred on a concrete surface. Thus, no sampling is called for in this building.

No HVAC system, air inlets, or exhaust vents were noted during the building inspection. No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 393.

Building 411

Building 411 serves as Electrical Substation 2 (Figure 6-123-1). This 550-square-foot building is constructed of concrete with a concrete floor and ceiling. Two transformers (one non-PCB, the other unknown-PCB), vacuum-type circuit breakers, and underground electrical lines are located within this building. It is not known if the floor drain noted during the site inspection is connected to the sanitary sewer, storm sewer, or the oil/water separator near the south side of Building 67.

EBS information indicates that transformers have leaked at Electrical Substation 2. According to site inspection data, scattered stains exist on the concrete floor of Building 411. This staining is relatively minor and no migration pathway is evident to the underlying soils. Thus, the staining of the concrete should be addressed as part of the electrical equipment program, which is separate from this PEP.

No HVAC system, air inlets, or exhaust vents were noted during the building inspection. No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 411.

Open Space I

The open space of Parcel 123 has been subdivided into Open Space I and Open Space II. Open Space I, the area east of the eastern side of Building 67, occupies approximately 50 percent of the parcel (Figure 6-123-1). In general, Open Space I is used to store boats,

hazardous materials, diesel generators, forklifts, trucks, and modular CONEX facilities. A salvage and refuse area (scrap metal, etc.) is located in the easternmost portion of Open Space I. The ground surface of Open Space I is completely paved with asphalt and concrete. The pavement is in fair condition. Utilities located within Open Space I include underground storm sewer, steam, water, industrial sewer, and electrical lines.

One underground storage tank (Tank 393) is located beneath a concrete pad north of Building 393. This steel tank, which has an estimated capacity between 500 and 1,000 gallons, was used to store waste oil, paint, and solvent from Building 393. Tank 393 is no longer in use and is scheduled to be removed in 1994.

Site inspection data indicate that steam cleaning and vehicle washing occur near a storm drain north of Building 393. Portable diesel generators are also stored in this area. Boats and trucks are stored near the southern and northern edges of Open Space I, respectively. Boat and truck repair also occurs in this open space. A leaking lube oil drum west of Building 393 appears to impact a nearby storm drain. Approximately 500 gallons of petroleum products, halogenated and nonhalogenated organic compounds, and corrosives are stored near the western side of Building 393. The floor of this hazardous materials storage area is stained. This stained area is addressed by Target Area 5.

Although there have not been any documented spills in Open Space I, heavy staining is evident in aerial photographs between Building 67 and Building 393, near the north and east sides of Building 393, and in an isolated area northeast of Building 393. The dark staining between Building 393 and Building 67 was present in 1953 and 1966 aerial photographs and covered approximately 6,000 square feet. The staining observed during the site inspection and noted in aerial photographs west of Building 393 is addressed by Target Area 5.

Open Space II

Open Space II, the area west of the eastern side of Building 67, covers approximately 35 percent of Parcel 123 (Figure 6-123-1). The ground surface, which is completely paved with asphalt and concrete, is in fair condition. In general, Open Space II is used to store refuse and recyclable materials (i.e., glass, aluminum cans, etc.). Forklifts and trucks are parked in this area.

Four buildings (67, 98, 263, and 411) are located within the boundaries of Open Space II (Figure 6-123-1). Utilities located within Open Space II include underground sanitary sewer, storm sewer, steam, water,

abandoned fuel, industrial sewer, and electrical lines. Railroad tracks are also present in Open Space II and are shown on Figure 6-123-1. Two transformers and switchgear are located northeast of Building 67. An oil/water separator is located near the south side of Building 67 (Figure 6-123-1). It is not known if the unit is currently in operation. A fenced area immediately east of Building 98 is used for drummed hazardous waste storage.

An underground storage tank (Tank 411) is located beneath a concrete pad immediately west of Building 411. This 10,000-gallon steel tank, which reportedly stored diesel and solvents, was used by the self-help division.

Although no documented spills have occurred in Open Space II, staining is evident in historical aerial photographs in the area north of Building 67 and in the southeastern portion of Open Space II. The staining north of Building 67 is apparent in 1953, 1963, and 1966 aerial photographs and appears to cover approximately 3,600 square feet. Because sampling has already been done in this area, and one of the railroad track samples is located in the area north of Building 67, no additional sampling is proposed. The staining in the southeastern portion of Open Space II appears to be related to activities within Building 112, which is located in Parcel 122. Building 112 has been used as an aircraft support facility (aircraft parts cleaning, repair, etc.), carpentry shop, upholstery shop, and nondestructive testing lab. This staining is addressed by Target Area 4.

Underground Storage Tanks

Two inactive underground storage tanks are present at this parcel (Tanks 393-1 and 411-1). The tanks were installed in on an unknown date and are located between Avenue G and Building 393, and west of Building 411, respectively. Tank 393-1 was used to store waste paint and oil, and Tank 411-1 was used to store various solvent products and diesel. Tanks 393-1 and 411-1 have capacities of 500 and 10,000 gallons, respectively. The presence of these tanks were identified from the EBS. These tanks are scheduled to be removed. Investigation of these former tanks is has not been scheduled. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. These tanks have been identified as RCRA tanks based on their inclusion in the RFI.

Parcel Boundary Conditions

Parcel 123 is bounded by Parcels 110, 111, 121, 122, 124, 125, 126, and 127. Activities of concern include shop activities and spray painting in Parcel 122 and hazardous waste storage/handling in Building 13 (Parcel 124). Building 13 appears to have always been used for hazardous materials storage.

No sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 123, then additional sampling on Parcel 123 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. Parcel 123 contains four RCRA sites (GAP Site 15 and GAP Site 29, known collectively as SWMU GII-11, and the two RCRA tanks). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. The RCRA tanks require further investigation that will be conducted under the UST program. SWMU GII-11 is listed in the RCRA Part B Permit and must be investigated as part of the RCRA Facility Investigation (RFI) for NAS Alameda. The requirements for the RFI are described in detail in Section 8. GAP Site 15 was incorporated into the RFI because of potential for releases to a "sump" located near the site. No other concern were identified for this site. Because the sewer lines are being investigated under a different program, this Gap site does require investigation in this PEP. This area was stained and is being sampled as part of this PEP (Target Area 5). A brief description of the RCRA sites is provided below.

GAP Site 15 is a concrete area, approximately 10 feet by 10 feet in size, near the north side of Building 67. The chemicals of concern associated with this site include waste paint material, solvents, thinner, and waste oil. No known releases have occurred at GAP Site 15. This site is currently inactive and closed.

GAP Site 29 reportedly was located near the fence by Building 67. Stained concrete was noted in this area. This area may correspond to a hazardous material west of Building 393 noted during site inspection.

This tanks were identified as RCRA tanks based on their inclusion in the RFI. Descriptions of the tanks are provided in the Underground Storage Tank subsection above.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 123, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-123-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 67, 393, and 411. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-123-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 123 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains several parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies.

TABLE 6-123-2

Summary of Data Gaps
NAS Alameda Parcel 1234

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 123 is located approximately 450 feet northwest of Installation Restoration (IR) Site 3 (Aviation Gasoline Storage Tanks), and 400 feet north of IR Site 7B (Building 162). Additional subsurface investigations relative to IR Sites 3 and 7B are proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from nearby Parcel 131 identified, and is being addressed as part of the IR site program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-123-1

Summary of Recommended Samples
NAS Alameda Parcel 123

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
123-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Waste Oils, Paints, PCBs	TPH, SVOCs, PCB, Metals	Mod. EPA 8015, EPA 8270, EPA 8080, ICAP Scan
123-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Waste Oil, Metals, Paints	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
123-9-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	Solvents, Paints, Waste Oil, Fuels	VOCs, SVOCs, Metals, TPH	EPA 8240, EPA 8270, ICAP Scan, Mod. EPA 8015
123-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Waste Oil, Metals, Paints	SVOCs, Metals, TPH	EPA 8270, ICAP Scan, Modified EPA 8015
123-10-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 4	Waste Oil, Metals, Paints	SVOCs, Metals, TPH	CLP RAS, Modified EPA 8015
123-10-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	Fuels, Solvents, Paints, Waste Oil	TPH, VOCs, SVOCs, Metals	Mod. EPA 8015, EPA 8240, EPA 8270, ICAP Scan
123-10-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 4	Fuels, Solvents, Paints, Waste Oil	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
123-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Oils, Metals, Paints	SVOCs, Metals, TPH	EPA 8270, ICAP Scan, Modified EPA 8015
123-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	Fuels, Oils, Metals, Paints	SVOCs, Metals, TPH	EPA 8270, ICAP Scan, Modified EPA 8015
Z17-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs, Fuels	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, EPA 8015 Modified
Z17-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Fuels, Oils, PCBs, Creosote, Tie Tar	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, EPA 8015 Modified
Z17-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs, Fuels	SVOCs, PCBs, Lead, TPH	CLP RAS, EPA 8015 Modified

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

TABLE 6-123-1

Summary of Recommended Samples
NAS Alameda Parcel 123

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
123-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Waste Oil, Paints	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
123-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Paints, Waste Oil	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
123-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Waste Oil, Paints, Solvents	TPH, SVOCs, Metals, VOCs	Mod. EPA 8015, EPA 8270, ICAP Scan, EPA 8240
123-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Waste Oil, Paints, Solvents	TPH, SVOCs, Metals, VOCs	Modified EPA 8015, CLP RAS
123-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Waste Oil, Paints	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
123-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Waste Oil, Paints, Solvents	SVOCs, Metals, TPH, VOCs	EPA 8270, ICAP Scan, Mod. EPA 8015, EPA 8240
123-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Waste Oil, Paints	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
123-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Waste Oil, Paints, Solvents	SVOCs, Metals, TPH, VOCs	EPA 8270, ICAP Scan, Mod. EPA 8015, EPA 8240
123-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
123-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
123-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
123-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Waste Oils, Paints, PCBs	TPH, SVOCs, PCB, Metals	Mod. EPA 8015, EPA 8270, EPA 8080, ICAP Scan
123-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Waste Oils, Paints, PCBs	TPH, SVOCs, PCB, Metals	Mod. EPA 8015, EPA 8270, EPA 8080, ICAP Scan
123-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 3	Fuels, Oils, PCBs, Metals, Paints	TPH, PCBs, Metals, SVOCs	EPA Modified 8015, CLP RAS

TABLE 6-123-2

Summary of Data Gaps
NAS Alameda Parcel 1234

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead. Two surface soil samples for this target area is located on this parcel.
Potential Parcel-Specific Release Areas	• Building 98. • Building 263. • Building 67. • Open Space II, West Side of Building 112. • Open Space I, West Side of Building 393.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Two inactive underground storage tanks are present at this parcel (Tanks 393-1 and 411-1). These tanks are scheduled to be removed. Investigation of these former tanks is has not been scheduled.
Underground Utilities	• Sanitary sewer, storm sewer, water, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Abandoned fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Final sample locations will be determined in the field based on visual observation and accessibility. The following five parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-123-2.

- Target Area 1 (Building 98): Building 98 serves as the centralized hazardous waste accumulation point for NAS Alameda. Staining was noted during the site inspection on the deteriorated asphalt floor. The likelihood of environmental impacts are classified as potential in this target area. The target area is defined as the outline of the building, but the potential affected (stained) area is anticipated to be significantly smaller. Compounds of concern include TPH, VOCs, SVOCs, and metals. Three subsurface soil samples and three surface soil sample will be located in the most heavily stained areas on the ground floor.

- Target Area 2 (Building 263): Heavy floor staining and fuel odors were noted during the site inspection. This target area has been classified as having a potential likelihood of impacts, and covers less than 1,000 square feet. Two surface soil samples will be located in the most deteriorated and stained portions of the floor. Soil samples will be analyzed for TPH.

- Target Area 3 (Building 67): Building 67 appears to have always been used for maintenance activities. Staining observed during the site inspection indicate that repair activities are potential sources of releases. Compounds of concern include TPH, SVOCs, PCBs, and metals. Two surface soil samples will be collected from the darkest stains in the shop areas, and one surface soil sample will be taken in the stained areas near the railroad trench that runs through the building.

- Target Area 4 (Southeastern Portion of Open Space II, West Side of Building 112): Staining in historical aerial photographs indicates that spills may have occurred in Target Area 4, which is adjacent to the west side of Building 112. Aircraft support and shop activities have occurred within Building 112 and are potential sources of release. Compounds of concern include TPH, VOCs, SVOCs, and metals. Two surface soil samples and two subsurface soil samples will be located in the open space immediately west of Building 112.

- Target Area 5 (West Side of Building 393): Staining in historical aerial photographs and observed by site inspectors indicate that spills may have occurred in Target Area 5, which is adjacent to the west side of Building 393. A hazardous material storage area is a potential source of release. Compounds of concern include TPH and metals.

Two surface soil samples will be located in the open space immediately west of Building 393.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. Two of the fifteen surface soil samples for this zone target area is located on this parcel. One of the three proposed confirmation samples are located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-123-1. The approximate sampling locations are shown on Figure 6-123-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14).

Table 6-123-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 123. Five parcel-specific subsurface soil samples and 14 parcel-specific subsurface surface soil samples and two zone-wide surface soil samples will be collected from the locations shown on Figure 6-123-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level

investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-124

PARCEL 124 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 124 at NAS Alameda (Figure 6-124-1). The parcel, which is located in the central portion of the base, is 1.2 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains two RCRA sites. One zone-wide and one parcel-specific target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-124-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 124, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 124, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 125, 126, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the

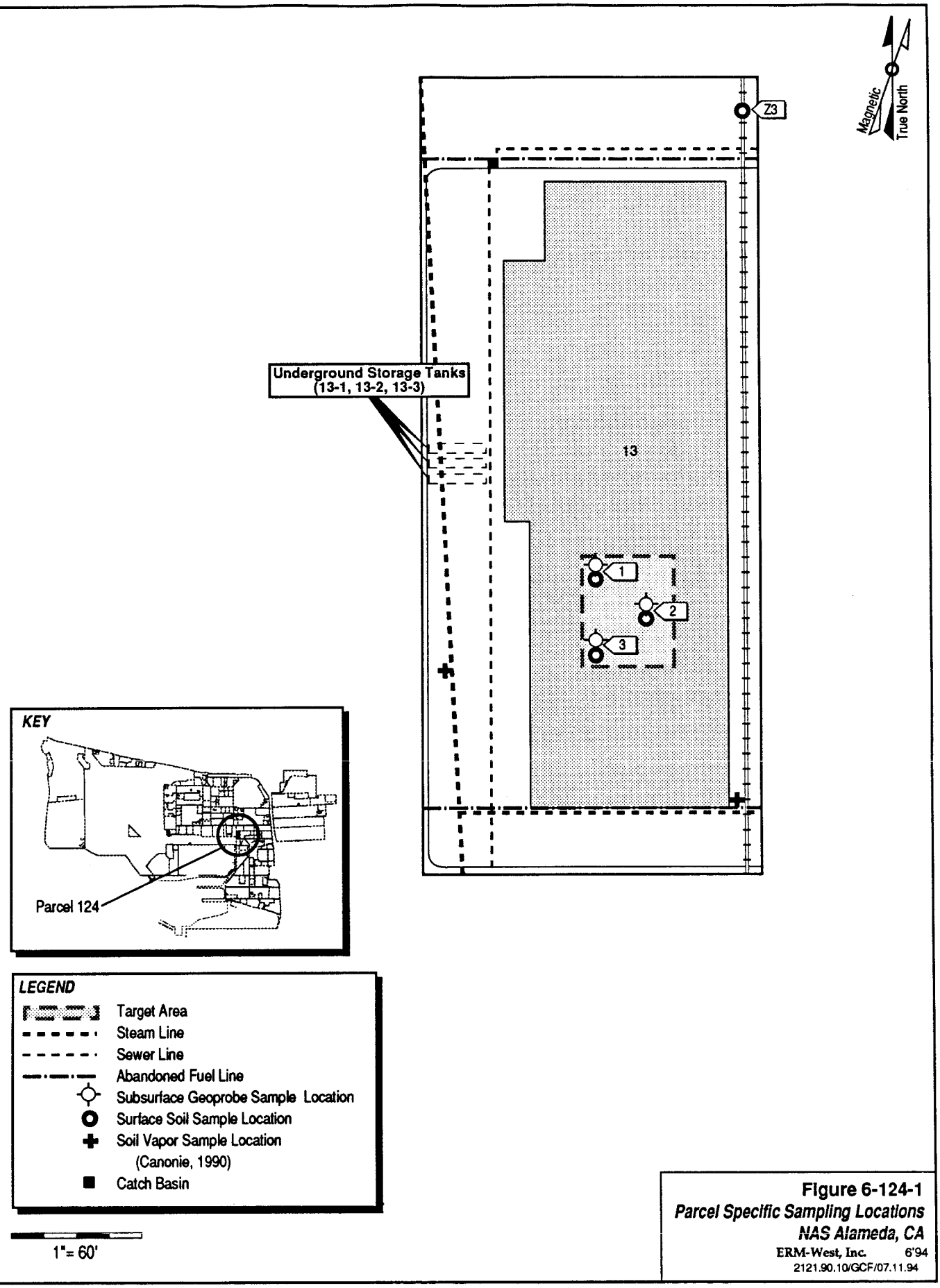


Figure 6-124-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-124-1

Summary of Recommended Samples

NAS Alameda Parcel 124

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
124-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Oils, PCBs, Paints	TPH, PCBs, SVOCs, Metals	Mod. EPA 8015, EPA 8080, EPA 8270, ICAP Scan
124-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Oils, PCBs, Paints	TPH, PCBs, SVOCs, Metals	Modified EPA 8015, CLP RAS
124-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Oils, PCBs, Paints	TPH, VOCs, PCBs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8080, EPA 8270, ICAP Scan
124-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Oils, PCBs, Paints	TPH, VOCs, PCBs, SVOCs, Metals	Modified EPA 8015, CLP RAS
124-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, Oils, PCBs	PCBs, Metals, TPH, SVOCs	EPA 8080, ICAP Scan, Modified EPA 8015, EPA 8270
124-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Paints, Oils, PCBs	VOCs, SVOCs, PCBs, Metals, TPH	EPA 8240, EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
124-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, Oils, PCBs	PCBs, Metals, TPH, SVOCs	EPA 8080, ICAP Scan, Mod. EPA 8015, EPA 8270
124-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Paints, Oils, PCBs	VOCs, SVOCs, PCBs, Metals, TPH	EPA 8240, EPA 8270, EPA 8080, ICAP Scan, Modified EPA 8015
Z17-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs, Fuels	SVOCs, PCBs, Lead, TPH	EPA 8270, EPA 8080, ICAP Scan, EPA 8015 Modified

*These are the suggested locations for the confirmation sample. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 13) covers approximately 65 percent of the parcel. The remaining 35 percent is open space. The parcel area is presently used for vehicle parking and the storage and transfer of hazardous materials. Three buildings (Buildings 59, 262, and 44) were formerly located on the parcel and have since been demolished. Underground fuel and sewer lines are present on the parcel and are shown on Figure 6-124-1.

Parcel 124 is located approximately 400 feet east of IR Site 6 (Aircraft Intermediate Maintenance Building, Building 41), and 400 feet north of IR Site 7B (Former Service Stations, Building 162). Previous investigations have been conducted at Parcel 124 and limited data regarding chemical occurrence are available. Two soil vapor samples (Canonie, 1990) were collected in Parcel 124 to define the extent of AVGAS impacts from IR Site 3 (Parcel 131). Concentrations of benzene, toluene, ethylbenzene, xylenes, and hydrocarbons were below detection limits in both samples.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 13

Building 13 was constructed in 1942 and serves as a hazardous materials and hazardous waste storehouse and Public Works maintenance storage facility (Figure 6-124-1). The southern half of this one-story, 35,500-square-foot building is constructed of wood and has a concrete floor, while the northern half is constructed entirely of concrete. The concrete floor is coated with a protective epoxy resin. Although it was not inspected, the roof reportedly leaks. Building 13

was originally used as a paint warehouse. It appears that Building 13 was always used for storing hazardous materials.

Utilities located within Building 13 include underground steam and electrical lines. One transformer is also located in the north portion of the building. Steam pipes are present inside Building 13, and may be insulated with asbestos containing materials.

In general, hazardous wastes are stored in the southern half of Building 13, while hazardous materials are stored in the northern half of the building. According to EBS information, nonhalogenated organic compounds, corrosives, PCBs, oxidizers, and petroleum products have been stored in Building 13. Site inspection data indicate that approximately 4,000 gallons of corrosives, flammable materials, nonhalogenated and halogenated solvents, and PCBs are currently stored within the building.

Site inspection data indicate that staining exists throughout Building 13. Approximately 40 percent of the southern half of Building 13 is stained. The floor in the northern half of the building is 30 percent covered with stains of oil, halogenated solvents, and nonhalogenated solvents. The stains range in size from several inches in diameter to two feet in diameter. Large stains are present near the north wall and in the southeast and southwest corners. The stains in the southeast and southwest corners appear to measure approximately 12 square feet. Absorbent is reportedly used regularly on spills. Staining in the southern half of the building is addressed as Target Area 1. Target Area 1 has been designated a target area to represent the "worst case" scenario for the staining observed in the building.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within Building 13.

Open Space

The open space covers approximately 35 percent of Parcel 124 and is completely paved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is covered with concrete. The pavement is in fair condition. Utilities located within the open space include underground sanitary sewer, steam, electrical, fuel, and industrial sewer lines. Railroad tracks east of Building 13 parallel the eastern parcel boundary, and are considered part of Parcel 124. Abandoned underground fuel lines are located in the north and south portions of the parcel.

Three buildings were formerly located in Parcel 124. Building 262 was constructed in 1943 and was used to store lumber. This semi-permanent, 1,340-square-foot building burned down. Former Building 444, which was part of Building 262, was constructed in 1943 and was also used to store lumber. This 525-square-foot, semi-permanent building also burned down. Building 59 was demolished in 1953. The use, construction type, and construction date of this building are unknown. A vacant, 60-square-foot shed is currently located on the south side of Building 13. No chemicals are stored in this shed. Three abandoned underground storage tanks (Tanks 13-1, 13-2, and 13-3) are located immediately west of Building 13 (Figure 6-124-1).

Although no chemicals are documented to have been stored or used in the open space, hazardous materials are transferred at the loading docks on the east and west sides of Building 13. Scattered stains are present on the concrete loading dock and stairs on the east side of Building 13. The largest stain covers approximately eight square feet. Stains typical of vehicle engine leakage are scattered throughout the asphalt pavement around Building 13. The staining in these areas is relatively minor and has occurred on a concrete surface. These areas do not warrant sampling at this time.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

Three abandoned underground storage tanks are present at this parcel (Tanks 13-1, 13-2, and 13-3). The tanks were installed at an unknown time and are located immediately west of Building 13 (Figure 6-124-1). The tanks were used to store unknown materials, and have capacities of 2,400 gallons, each. An underground tank investigation (ERM-West, 1988) detected oil and grease residual product in all three tanks. According to site personnel, these tanks have not been used for many years. The presence of these tanks were identified from the EBS. These tanks are scheduled to be removed. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking.

These tanks have been identified as RCRA tanks based on their inclusion in the RFI. One soil boring taken west of the tanks contained the following concentrations of constituents: toluene (0.48 ppm), xylenes (0.07 ppm), TPH (<10 ppm), and oil/grease (<0.02 percent). No halogenated or aromatic VOCs were detected. The concentrations of toluene and xylenes are below unrestricted and industrial use PRGs.

Two additional tanks were discovered during the tank removal project, and have been numbered 13-4 and 13-5, and have capacities of 5,000 and 10,000 gallons, respectively. These tanks are reported to have stored Lubricating oil. No other information is available regarding these tanks.

Parcel Boundary Conditions

Parcel 124 is bounded by Parcels 23, 71, 110, 123, and 125. Activities of concern include hazardous material and hazardous waste storage in Building 98 (Parcel 123) and engine accessories testing in Building 66 (Parcel 125).

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 124, then additional sampling on Parcel 124 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (site numbers UST-5 and SWMU/Unknown). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, both RCRA sites at this zone require further investigation. A brief description of each of the RCRA sites is provided below.

The tanks were identified as RCRA tanks based on their inclusion in the RCRA Facility Investigation (RFI) for NAS Alameda. These tanks are scheduled to be removed, and a description of the tanks is provided in the Underground Storage Tank subsection above. The requirements for the RFI are described in detail in Section 10. At NAS Alameda, tanks that would normally require an RFI will be investigated and remediated, if necessary, as part of the UST program.

Site SWMU/Unknown is listed as the hazardous materials delivery area of Building 13 and has not had any known releases. This site has an area storage capacity of approximately 7,600 square feet. Although a full description of the location of SWMU/Unknown was not provided in the EBS, it is though to correspond to the hazardous waste storage area in the southern portion of Building 13. The chemicals of concern associated with this site are not known. The status of this site is

currently unknown. Sampling is proposed at this site as part of Target Area 1.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 124, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-124-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 124 because no industrial buildings are present.

Once the data gaps in Table 6-124-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 124 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and location of the parcel-specific and zone-wide target areas

TABLE 6-124-2

Summary of Data Gaps
NAS Alameda Parcel 124

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 124.
Installation Restoration (IR) Sites	• Parcel 124 is located approximately 400 feet east of IR Site 6 (Aircraft Intermediate Maintenance Building, Building 41), and 400 feet north of IR Site 7B (Former Service Stations, Building 162). Additional subsurface investigation relative to IR Site 7B is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Evidence of potential groundwater contamination migration from nearby Parcel 131 identified, and is being addressed as part of the IR site program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-124-2

Summary of Data Gaps
NAS Alameda Parcel 124

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead. One surface soil sample is located on this parcel.
Potential Parcel-Specific Release Areas	• (Building 13): The central portion of the south wing of the building, has been designated a target area to screen for the "worst case" scenario. The exact location of the target area will be defined as the most severely stained area in the southern half of the building. This target area covers approximately 2,000 square feet. Compounds of concern include SVOCs, PCBs, Metals, Pesticides, and TPH.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Three abandoned underground storage tanks are present at this parcel (Tanks 13-1, 13-2, and 13-3). The tanks were installed at an unknown time and are located immediately west of Building 13 (Figure 6-124-1). The tanks were used to store unknown materials, and have capacities of 2,400 gallons, each. These tanks are scheduled to be removed.

TABLE 6-124-2

Summary of Data Gaps
NAS Alameda Parcel 124

Data Gap	Status/Description
Underground Storage Tanks (USTs) (Continued)	These tanks have been identified as RCRA tanks based on their inclusion in the RFI. Two additional tanks were discovered during the tank removal project, and have capacities of 5,000 and 10,000 gallons, respectively. No other information is available regarding these tanks.
Underground Utilities	• Sanitary sewer, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 13): Due to the extensive floor staining noted during the site inspection, the central portion of the south wing of the building, has been designated a target area to screen for the "worst case" scenario. The exact location of the target area will be determined in the field, and will be defined as the most severely stained area in the southern half of the building. This target area has been classified as having a potential likelihood of impacts, and covers approximately 2,000 square feet. Compounds of concern include VOCs, SVOCs, PCBs, Metals, and TPH. Samples to be collected in this target area are listed in Table 6-124-1.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One surface soil sample for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). Table 6-124-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 124. Three subsurface soil samples and four surface soil samples will be collected from the locations shown on Figure 6-124-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The samples should be collected from areas that have cracks and significant staining. If no cracking in the concrete foundation is evident, then the samples should be taken in areas of heaviest staining.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-125

PARCEL 125 EVALUATION PLAN

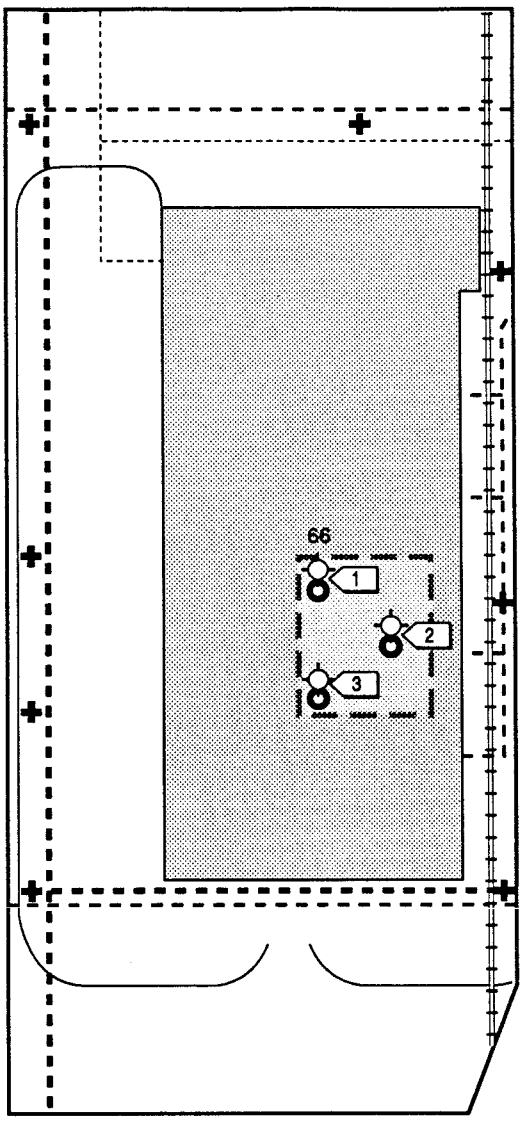
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 125 at NAS Alameda (Figure 6-125-1). The parcel, which is located in the south central portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. SWMU/GAP 43 has not been identified in the Part B Permit as requiring an RFI. One zone-wide and one parcel-specific target investigation area (target area) have been identified on this parcel. However, no samples for the zone target area are located on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-125-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 125, historical activities are discussed below.

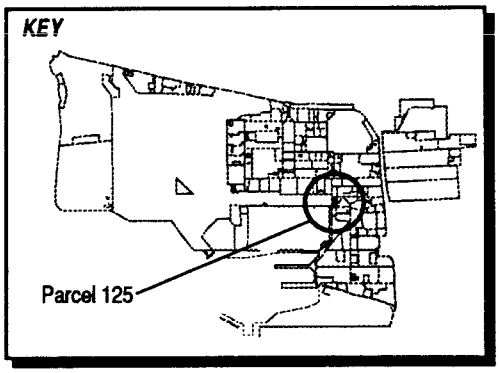
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 125, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 126, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage





LEGEND

- Target Areas 1 and 2
- Steam Line
- Storm Sewer Line
- Sewer Line
- Soil Vapor Sample Location (Canonie, 1990)
- Surface Soil Sample Location
- Subsurface Geoprobe Sample Location

1"= 60'

Figure 6-125-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.10/GCF/07.11.94

TABLE 6-125-1

Summary of Recommended Samples
NAS Alameda Parcel 125

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
125-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	SVOCs, TPH	EPA 8270, Modified EPA 8015
125-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	SVOCs, TPH	CLP RAS, Modified EPA 8015
125-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents	VOCs, SVOCs, TPH	EPA 8240, EPA 8270, Modified EPA 8015
125-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Solvents	VOCs, SVOCs, TPH	CLP RAS, Modified EPA 8015
125-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	SVOCs, TPH	EPA 8270, Modified EPA 8015
125-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Oils	VOCs, SVOCs, TPH	EPA 8240, EPA 8270, Modified EPA 8015

*These are the suggested locations for the confirmation sample. The actual locations will depend on field analytical results.

Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 66, the Engine Accessory Test Shop) covers approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as the Engine Accessory Test Shop and associated parking. No other buildings or structures were formerly located on this parcel. Sewer lines are present on this parcel and are shown on Figure 6-125-1.

Parcel 125 is located within 500 feet of five Installation Restoration (IR) Program sites. IR Site 3 (Area 97) is located approximately 500 feet east of Parcel 125. IR Site 6 (Building 41, AIMD) is located approximately 400 feet northwest of Parcel 125. IR Sites 7B and 11 (Building 162, Service Station and Building 14, Engine Test Cell) are located approximately 100 and 300 feet southeast of Parcel 125, respectively. IR Site 17, (the Seaplane Lagoon) is located approximately 100 feet southwest of Parcel 125. Previous investigations have not been conducted at Parcel 125 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 66

Building 66 was constructed in 1942 and served as an engine accessory test shop (Figure 6-125-1). This building is in fair condition. Building 66 is a one-story building constructed of concrete with a concrete floor and gravel roof, and covers approximately 31,000 square feet. Utilities

located within and immediately surrounding Building 66 include sanitary and storm sewer lines.

Information collected during the EBS indicates that activities conducted within this building included engine testing. This involves repair and testing of aircraft pneumatic hydraulic and fuel metering systems. This type of process typically involves the use or generation of chemicals and wastes including solvents, corrosives, JP-5, refrigerant oil, and calibration and dry cleaning fluids. This process occurred within Building 66 from 1942 to the present.

Halogenated and non-halogenated organics, corrosives, and solvents, are documented to have been stored in or used at the fuel pumping/ignition room, fuel control room, parts storage room, and in the test cells of Building 66 during the site inspection. Approximately 500 gallons of the above-mentioned chemicals were stored in Building 66. Disposal of used chemicals is accomplished by the base environmental group.

Spills of oils and hydraulic fluids were documented during the site inspection. Approximately 90 percent of the floor area is stained. Spills observed during the site inspection were treated with absorbent pads. The site inspectors also noted that releases had occurred due overflow of storage equipment. A clear liquid was noted to be dripping into a tank. The top tank had a broken outlet pipe and the outlet hole was not plugged. These spills appeared to have occurred over a long period of time. Target Area 1 has been identified as a representative "worst case" area . The target area is defined as the most severely stained area of the building

Building 66 is equipped with a heating-ventilation-air conditioning (HVAC) system. Corrosion spots were noted on the roof at the air exhaust unit on the northwest corner of Building 66. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 66.

Open Space

The open space covers approximately 60 percent of the parcel. The open space completely paved with asphalt which is generally in fair condition. Utilities located within and immediately surrounding the open space include steam, sanitary and storm sewer, and fuel lines just south of the southern boundary of the parcel. Railroad tracks are located on the eastern portion of the parcel.

Halogenated and non-halogenated organics, calibration fluid, and dry cleaning solvents were documented during the site inspection to have been stored on the exterior north side of the building, and in the outdoor sheds. Approximately 400 gallons of the above-mentioned chemicals were being stored in the open space. No staining other than that related to vehicle parking was noted.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 125 is bounded by Parcels 23, 123, 124, 126, 135, and 136. Activities of concern on these adjacent parcels include the former service station on Parcel 135 (IR Site 7B), fuel storage and use on nearby Parcels 138, 131, and 137, and light industrial activities on the remaining surrounding parcels. The Seaplane Lagoon is located less than one hundred feet southwest of Parcel 125.

No sampling is called for in this PEP in response to the five nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 125, then additional sampling on Parcel 125 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel contains one RCRA site (site number SWMU/GAP 43). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel, and requires sampling. Sampling is required, and will be addressed by Target Area 1. Because Target Area 1 addresses the widespread staining throughout Building 66 by testing a worst case scenario, it will, in effect, investigate SWMU/GAP 43.

Site SWMU/GAP 43 is located in Building 66, Shop 96321. No releases are documented to have occurred at this site. SWMU/GAP 43 consists of 55-gallon drums, five gallon containers, and aerosol cans. The chemicals of concern associated with this site include aerosol paint, solvent, lacquer, JP-5, type II fuel, oil and trichlorotrifluorethane. This site is reportedly active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 125, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-125-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with fuel and sewer lines are also addressed separately. Sampling associated with fuel and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 66. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-125-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 125 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-125-2

Summary of Data Gaps
NAS Alameda Parcel 125

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 3, (Area 97) is located approximately 500 feet east of Parcel 125. Significant groundwater impacts have been identified at and northwest of this site. • IR Site 6, (Building 41, AIMD) is located approximately 400 feet northwest of Parcel 125. • IR Sites 7B (Building 162, Service Station) is located approximately 100 feet southeast of Parcel 125. • IR Sites 11, (Building 14, Engine Test Cell) is located approximately 300 feet southeast of Parcel 125. • IR Site 17, (the Seaplane Lagoon) is located approximately 100 feet southwest of Parcel 125.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-125-2

Summary of Data Gaps
NAS Alameda Parcel 125

Data Gap	Status/Description
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• Target Area 1 (Stained Area of Building 66)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, and sanitary sewer lines identified on or directly adjacent to Parcel 125.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified directly adjacent to Parcel 125.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Parcel 66 Target Area 1 (Stained Area of Building 66): This target area addresses the possible presence of compounds of concern associated with spillage observed during the site inspections. This target area is not intended to test the area beneath the whole building, but only a representative "worst case" area. The target area is defined as the most severely stained area of the building, and is anticipated to cover less than 1,000 square feet. Compounds possible within this target area include VOCs, SVOCs, and TPH. The likelihood that environmental impacts have occurred in this target area is classified as suspect. Samples to be collected in this Target Area are listed in Table 6-125-1.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. No surface soil samples for this zone target area are located on this parcel. Soil samples on other parcels will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the parcel-specific target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-125-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 125. Two surface soil and two subsurface soil samples will be collected from the locations shown on Figure 6-125-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Subsurface soil and surface soil sampling locations shown on Figure 6 125-1 are approximate, as the location of the target area is approximate. This is because the target area is intended to serve as a "worst case" test area, and is defined as the area of the building with the most severe staining. If no staining is evident at the time of the investigation, then the samples should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-126

PARCEL 126 EVALUATION PLAN

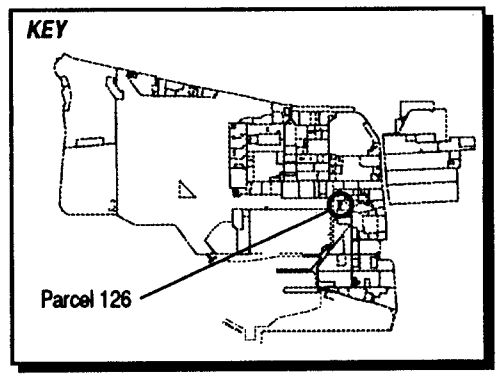
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 126 at NAS Alameda (Figure 6-126-1). The parcel, which is located in the south-central portion of the base, is 0.8 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1. No RCRA sites are located at this parcel. Two parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. The sampling procedure called for in the screening-level investigation in these target areas is surface soil sampling. Table 6-126-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 126, historical activities are discussed below.

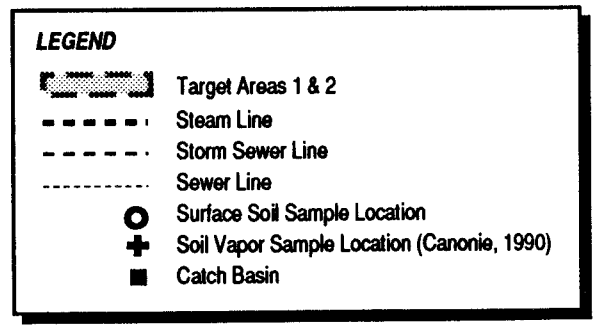
Background and Historical Activities

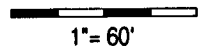
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 126, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

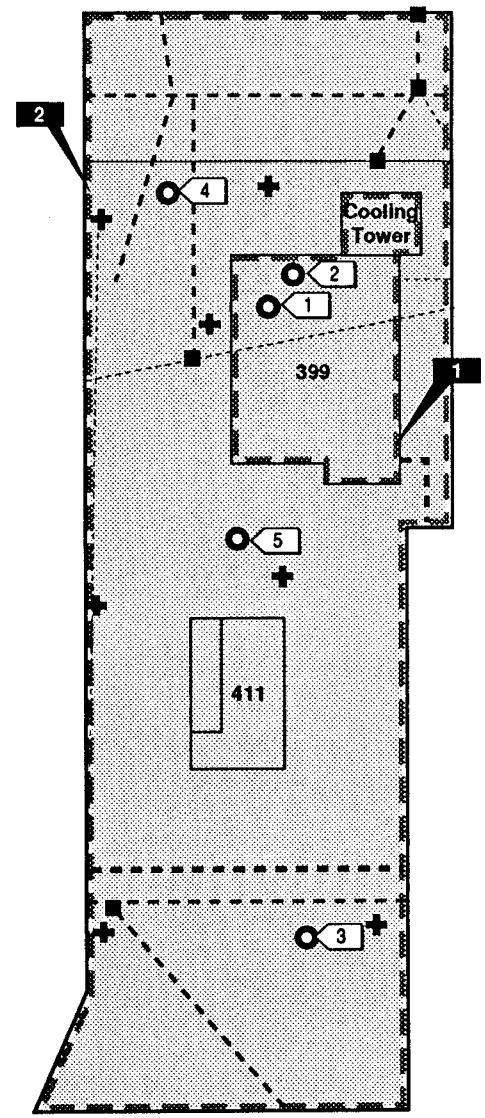
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 127, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were









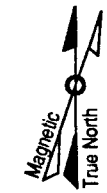


Figure 6-126-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/DS/06.29.94

TABLE 6-126-1

Summary of Recommended Samples
NAS Alameda Parcel 126

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
126-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
126-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	VOCs, TPH	EPA 8240, Modified EPA 8015
126-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
126-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
126-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
126-2-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, CLP RAS
126-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, TPH	Metals, TPH	ICAP Scan, Modified EPA 8015
126-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, TPH	Metals, TPH	ICAP Scan, Modified EPA 8015
126-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metals, TPH	Metals, TPH	ICAP Scan, Modified EPA 8015
126-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Metals, TPH	Metals, TPH	CLP RAS, Modified EPA 8015

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to that time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 399) and one structure (Structure 411) cover approximately 15 percent of the parcel. The remaining 85 percent is open space. One building (Building 99) was formerly located on the parcel and has since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-126-1.

Parcel 126 is located near three Installation Restoration (IR) Program sites (IR Site 7B (Former Service Station), IR Site 11 (Aircraft Engine Test Cells), and IR Site 17 (Seaplane Lagoon)). Previous investigations have been conducted at Parcel 126 and specific data regarding chemical occurrence are available.

A soil vapor survey (Canonie, 1990) was conducted in Parcel 126 to more fully define the extent of petroleum hydrocarbon contamination from IR Site 3. The maximum concentrations of benzene, toluene, and hydrocarbons detected at the seven soil vapor locations shown in Figure 6-126-1 were 0.2 µg/l, 0.1 µg/l, and 0.8 µg/l, respectively. Ethylbenzene and xylene concentrations were below detection limits.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will also be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 399

Building 399 was constructed in 1957 and serves as the NADEP compressor support facility (Figure 6-126-1). It appears that Building 399 was always used for this purpose. This one-story building is constructed of metal with a concrete floor, and covers approximately 4,200 square feet. Utilities located within and immediately surrounding Building 399 include underground sanitary sewer, storm sewer, and steam lines. An informal assessment noted that asbestos

containing materials may be present in this building. The space occupied by Building 399 was formerly open space.

Compressors in Building 399 supply air to aircraft engine test cells in nearby buildings. The present compressors were installed in approximately 1989. The compressors that were replaced reportedly leaked oil. An oil stain that covers approximately 500 square feet is located in the northwest portion of the building. This stained area is identified as Target Area 1. Approximately 100 gallons of corrosives and nonhalogenated organic compounds, used as microbiocides, are stored in Building 399. No other incidents such as fires, mishaps, or flooding are documented to have occurred in this building.

Open Space

The open space covers approximately 85 percent of the parcel and is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The open space is used primarily for vehicle parking. Various equipment (cooling towers, pumps, etc.) related to operations within Building 399 is located in the open space immediately surrounding Building 399. Prior to 1957, smelting operations reportedly took place in Parcels 126 and 127 to recover aluminum from scrap material. Target Area 2 addresses the possible presence of metals associated with smelting operations and heavy staining observed in 1947 and 1953 aerial photographs. A historical aerial photograph indicates that the open space was used for storage of unknown materials in 1947.

Utilities located within the open space include underground sanitary sewer, storm sewer, steam, water, and electrical lines. Building 99 was formerly located in the open space. This building was demolished in approximately 1953. The use, size, and construction date of Building 99 are unknown.

Cooling towers are located on the north and east sides of Building 399. Green liquid is present in the secondary containment of the water cooler on the east side of the building. Air heating equipment is located on the south side of Building 399. Other miscellaneous equipment, including pumps and unknown equipment, is located east of Building 399.

Structure 411 is located in the southern half of the parcel, and serves as Electrical Substation 4 (Figure 6-126-1). This structure consists of a 1,000-square-foot concrete pad and a chain-link fence. Three transformers and two 55-gallon drums are located on the concrete pad. Oil stains are present on the concrete pad beneath the transformers and

55-gallon drums. According to site inspection data, the drums contain non-PCB transformer fluid. A sticker observed during the site inspection indicates that the transformers were sampled in 1993.

Although no documented spills have occurred in the open space, extensive staining in 1947 and 1953 historical aerial photographs indicates that spills may have occurred throughout Parcel 126 (Target Area 2). Stains typical of vehicle engine leakage are also present in the parking area.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 126 is bounded by Parcels 123, 125, 127 and 135. Parcel 135 is IR Site 7B (Former Service Station). Activities of concern on these adjacent parcels include aircraft engine testing in Building 398 (Parcel 127), hazardous materials storage in Building 98 (Parcel 123), and engine accessories testing in Building 66 (Parcel 125).

No sampling is called for in this PEP in response to the three nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 126, then additional sampling on Parcel 126 may be appropriate.

RCRA Sites

No RCRA sites are located on Parcel 126.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 126, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for

TABLE 6-126-2

Summary of Data Gaps
NAS Alameda Parcel 126

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 7B (Former Service Station) is located south and adjacent to Parcel 126. • IR Site 11 (Aircraft Engine Test Cells) is located approximately 300 feet south of Parcel 126. • IR Site 17 (Seaplane Lagoon) is located approximately 300 feet southwest of Parcel 126.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 399) • Target Area 2 (Open Space)

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-126-2

Summary of Data Gaps
NAS Alameda Parcel 126

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-126-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 399. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-126-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 126 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two target areas were identified based on possible impacts from activities described above involving potentially hazardous substances.

- Target Area 1 (Building 399): This target area, which consists of a 500-square-foot stain in the northwest portion of Building 399, has been classified as having a potential likelihood of impacts. TPH and VOCs are the primary compounds of concern. Samples to be collected in this target area are summarized in Table 6-126-1.

- Target Area 2 (Open Space): This target area primarily addresses the possible presence of metals associated with smelting operations and

heavy staining observed in 1947 and 1953 aerial photographs. Compounds possible within this target area include metals and TPH. The likelihood of environmental impacts having occurred in this target area is classified as potential. Samples to be collected in this target area are listed in Table 6-126-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be employed to assess conditions in the parcel target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-126-1 summarizes screening-level sampling and analysis for the target areas at this parcel. Five surface soil samples will be collected from the locations shown on Figure 6-126-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The surface soil sampling locations shown on Figure 6-126-1 are approximate. The surface soil samples in Target Area 1 will be collected from beneath the most heavily stained areas in Building 399. Because no staining is currently evident in Target Area 2, the surface soil samples should be located as closely as possible to the designated locations shown in Figure 6-126-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-127

PARCEL 127 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 127 at NAS Alameda (Figure 6-127-1). The parcel, which is located in the east-central portion of the base, is 2.3 acres in size and is roughly triangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1. This parcel contains three RCRA sites. One zone-wide and three parcel-specific target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-127-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 127, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 127, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 128, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling

TABLE 6-127-1

Summary of Recommended Samples

NAS Alameda Parcel 127

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
127-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
127-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
127-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
127-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
127-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
127-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
127-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
127-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
127-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
127-4-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents	TPH, VOCs	Modified EPA 8015, CLP RAS
127-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paint, Waste Oil	SVOCs, Metals, TPH	EPA 8270, ICAP Scan, Modified EPA 8015
127-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Paint, Waste Oil	SVOCs, Metals, TPH	CLP RAS, Modified EPA 8015
127-5-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 2	Paints, Waste Oil, Solvents	VOCs, SVOCs, Metals, TPH	CLP RAS, Modified EPA 8015
127-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	Paints, Waste Oil, Solvents	VOCs, SVOCs, TPH, Metals	EPA 8240, EPA 8270, Mod. EPA 8015, ICAP Scan
127-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paint, Waste Oil	SVOCs, Metals, TPH	EPA 8270, ICAP Scan, Modified EPA 8015
127-6-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	Paints, Waste Oil, Solvents	VOCs, SVOCs, Metals, TPH	EPA 8240, EPA 8270, ICAP Scan, Modified EPA 8015
127-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	ICAP Scan, Modified EPA 8015

TABLE 6-127-1

Summary of Recommended Samples

NAS Alameda Parcel 127

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
127-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	ICAP Scan, Modified EPA 8015
127-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	ICAP Scan, Modified EPA 8015
127-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 3	Metals, TPH	Metals, TPH	CLP RAS, Modified EPA 8015

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 398 and 470) cover approximately 25 percent of the parcel. The remaining 75 percent is paved open space. Two buildings were formerly located on this parcel and have since been demolished. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-127-1.

Parcel 127 is located near four Installation Restoration (IR) Program sites (IR Site 3 - Area 97 Abandoned Fuel Storage Area, IR Site 7B - Former Service Station, IR Site 11 - Aircraft Engine Test Cell, and IR Site 17 - Seaplane Lagoon). Previous investigations have been conducted at Parcel 127 and specific data regarding chemical occurrence are available.

Previous investigations have been conducted in Parcel 127 to define the extent of AVGAS contamination from IR Site 3. Monitoring well (Kennedy, 1980) and soil vapor survey locations (Canonie, 1990) from these investigations are shown in Figure 6-127-1. According to the soil vapor survey data, the AVGAS contamination has primarily impacted the eastern edge of Parcel 127. Analytical results from the monitoring well are unknown.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 398

Building 398 was constructed in 1957 and has served as an aircraft engine testing and overhaul facility (Figure 6-127-1). This 31,900-square-foot, two-story building is in moderately good condition. Building 398 is constructed of metal and concrete, with a concrete floor and a gravel roof. The southeast portion of the building has been used as the

Auxiliary Power Units (APUs) and Cooling Air Turbines Shop since 1989. Permits have been issued for turbine engine testing, solvent cleaning, degreasing, miscellaneous chemicals, the use of a spray booth, an underground JP-5 storage tank, and abrasive blasting. Utilities located within Building 398 include underground steam and sanitary sewer lines. Asbestos removal operations have been conducted in this building.

Aircraft engines are evaluated in the Test Cells located in the northern half of Building 398. Aircraft engine testing typically involves connecting and disconnecting engines, which can result in spillage of fuel, lubricating oil, and solvents. The Test Cells, which range in size from 170 square feet to 240 square feet, are heavily stained. Approximately 70 percent of the floor area is heavily stained in each of the following Test Cells: 109A, 104, 114, 115, 116, and 117. A 48-square-foot floor stain was also noted near the north wall of Test Cell 112. Staining between the walls and foundation of Building 398 indicates that fluids have leached out of the Test Cell and Compressor Shop areas. The stained areas of Building 398 are addressed by Target Area 1.

According to EBS information, 5,000 gallons of petroleum products, halogenated organic compounds, and nonhalogenated compounds are stored in Building 398. The starter and valve shop, located on the second floor, contains approximately 30 gallons of oil, grease, solvent, and aerosol paint. These chemicals are accessed on an as-needed basis by facility personnel. The second floor of Building 398 covers approximately 1,750 square feet and is 50 percent stained. The APU, which is located in the southeastern portion of the building, stores approximately 25 gallons of acrylic lacquer and paint, grease, hydraulic fluid, aerosols, and dyes. Approximately 75 gallons of halogenated hydrocarbons, paint, grease, and solvent (PD680) are stored in the Cleaning Room. The Cleaning Room also contains a 1,1,1-trichloroethane recovery system. A small stain is located in the northeast corner of the Cleaning Room. Stains cover approximately 70 percent of the floor in the Control Center, which is used as a shop for Test Cells 114, 115, 116, and 117.

Approximately 31,000 gallons of hazardous waste were generated in Building 398 in 1993. Hazardous wastes including waste oil, filters, aerosol cans, towels contaminated with JP-5, hydraulic and lubricating fluids, solvents, and other cleaning compounds are currently disposed of daily at two hazardous waste accumulation areas (GAP Sites 44 and 45).

No incidents such as fires, mishaps, or flooding are documented to have occurred. An informal assessment indicates that asbestos may be present in Building 398.

Building 470

Building 470 was constructed in 1961 and served as an aircraft engine overhaul and general purpose facility (Figure 6-127-1). This one-story building is in moderately good condition. Building 470 is constructed of metal with a concrete floor and a metal roof, and covers approximately 380 square feet. A small engine testing area and a vacuum pump, which is used for operations in Building 398, are currently located in Building 470. This building is also used to store nonhazardous materials. An informal assessment indicated that ACM may be present in Building 470.

Although no documented spills have occurred, a 50-square-foot floor stain near the base of the vacuum pump was noted during the site inspection. This is a relatively minor stain on concrete, and will no be sampled at this time. No other incidents such as fires, mishaps, or flooding are documented to have occurred in this building.

Open Space

The open space covers approximately 75 percent of Parcel 127 and is completely paved. Approximately 70 percent of the paved area is surfaced with asphalt and 30 percent is covered with concrete. The paved concrete areas appear to be new and in good condition, while the asphalt areas are deteriorated and in fair condition. Utilities located within the open space include underground sanitary sewer, storm sewer, steam, water, and industrial sewer lines. The open space east of Building 398 has been primarily used for vehicle parking and miscellaneous material storage.

Two underground storage tanks (Tanks 398-1 and 398-2), located near the northeast corner of Building 398, are used to store JP-5 fuel for aircraft engines that are tested within Building 398.

Approximately 900 gallons of petroleum products and halogenated organic compounds are stored in the open space east of Building 398. Three 55-gallon drums of unknown materials are stored on pallets near a storm drain on the north side of Building 470. Miscellaneous parts and equipment are stored in a fenced yard east of Building 398. This storage yard contains two 55-gallon drums of dry cleaning solvent. Generators and other miscellaneous equipment are stored on the west side of the building. Blowdown from Building 398 occurs in the open space immediately west of the building.

According to a 1942 document, a service station was formerly located in the southern half of Parcel 127. The service station consisted of one building, one pump island, and two underground storage tanks.

Abandoned fuel lines may also be present in the area. Another building, approximately 60 feet by 200 feet in size, was formerly located in the south half of Parcel 127. Aerial photographs indicate that this building was constructed before 1947 and demolished between 1947 and 1953. Prior to 1957, smelting operations reportedly took place in Parcels 126 and 127 to recover aluminum from scrap material.

Although no documented spills have occurred in the open space, a 16-square-foot stain near the east side of Building 470 was noted during the site inspection. Staining is also present in the vicinity of GAP Sites 44 and 45. This staining is addressed by Target Area 2. Stains typical of vehicle engine leakage are located in the parking areas on the south and east sides of Building 398. Extensive staining is evident in 1947 and 1953 aerial photographs throughout the entire parcel. This staining is addressed by Target Area 3.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

Two inactive underground storage tanks are present at this parcel (Tanks 398-1 and 398-2). The presence of these tanks were identified from the EBS. These tanks were installed in 1969-1970 and are located between Buildings 398 and 470. The tanks both contain JP-5 product, and have capacities of 10,000 gallons, each. These tanks were precision tested in October 1991 and January 1994, and passed. A remediation plan has been issued for both tanks due to leaking piping and documented soil contamination. Because of the way in which the two tanks are manifolded together, tightness tests could not be performed during the 1987 tank investigation. These tanks are not scheduled for closure until the NADEP closure is completed. Investigation and necessary remediation of these tanks will be performed under the UST program. These tanks have been identified as RCRA tanks based on their inclusion in the RFI.

Three additional USTs may potentially exist, or may have been removed from, the south side of Building 398. No other information is available regarding these suspect tanks.

Parcel Boundary Conditions

Parcel 127 is bounded by Parcels 123, 126, 135, 128, and 131. Parcel 131 is IR Site 3 (Area 97 Abandoned Fuel Storage Tanks), while Parcel 135 is IR

Site 7B (Former Service Station). Migrating AVGAS from IR Site 3 has impacted the eastern edge of Parcel 127.

If the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 127, then additional sampling on Parcel 127 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes three RCRA sites (GAP Site 44, GAP Site 45, and Tanks 398-1 and 398-2). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, all three of the RCRA sites at this parcel require further investigation. A brief description of each of the RCRA sites is provided below. The sampling proposed for the sites that require sampling is described in the Target Areas and Compounds of Concern subsection.

GAP Site 44, located northwest of Building 470 near the east side of Building 398, stores waste lubricating oil and M-114 solvent. Staining was observed near this hazardous waste accumulation area (Target Area 2). Waste chemicals at GAP Site 44 are stored in three aboveground metal storage containers, each with a capacity of approximately 100 gallons. Waste chemicals from GAP Site 44 are disposed of off-site. This site is currently active.

GAP Site 45, located approximately 40 feet south of GAP Site 44, consists of six 55-gallon drums and one 15-gallon drum which are used to store waste solvents, lubricating oil, cleaner, filters, and aerosol cans. Secondary containment is present for five of the six 55-gallon drums. Waste chemicals from GAP Site 45 are taken off-site by GAP personnel. Site inspection data indicate that staining was present in the area around the drums (Target Area 2). This site is currently active.

The tanks were identified as RCRA tanks based on their inclusion in the RCRA Facility Investigation (RFI) for NAS Alameda. The tanks have been removed (a description of the tanks is provided in the Underground Storage Tank subsection, above). The requirements for the RFI are described in detail in Section 8. At NAS Alameda, RCRA tank sites that would normally require an RFI will be investigated and remediated, if necessary, as part of the UST program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 127, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-127-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 398. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-127-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 127 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains three parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies.

TABLE 6-127-2

Summary of Data Gaps
NAS Alameda Parcel 127

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 127 is located near four Installation Restoration (IR) Program sites (IR Site 3 - Area 97 Abandoned Fuel Storage Area, IR Site 7B - Former Service Station, IR Site 11 - Aircraft Engine Test Cell, and IR Site 17 - Seaplane Lagoon). Additional subsurface investigation relative to IR Sites 3, 7B, and 11 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 398, Test Cells) • Target Area 2 (GAP Sites 44 and 45) • Target Area 3 (Open Space)

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-127-2

Summary of Data Gaps
NAS Alameda Parcel 127

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Two inactive USTs are present at this parcel (Tanks 398-1 and 398-2). Two additional USTs, part of a former service station, may potentially exist, or may have been removed from, the south side of Building 398. No other information is available regarding these suspect tanks.
Underground Utilities	• Sanitary sewer, storm sewer, water, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 398, Test Cells): This target area includes the central test cell area of Building 398. The test cells are intended to be representative of the "worst case" scenario for staining and deteriorated foundation. If field conditions indicate that the staining or condition of the foundation is worse in other areas of the building at the time of sampling, then the sample locations may be adjusted accordingly. The samples in this target area will be analyzed for TPH and VOCs. This target area has been classified as having a potential likelihood of impacts, and covers approximately 4,000 square feet. Samples to be collected in this target area are listed in Table 6-127-1.

- Target Area 2 (GAP Sites 44 and 45): Staining was observed around GAP Sites 44 and 45. Waste chemicals stored in this area include lubricating oil and solvents, samples will be analyzed for TPH, metals, SVOCs, and VOCs. The likelihood of environmental impacts having occurred in this target area that covers less than 1,000 square feet is classified as potential. Samples to be collected in this target area are listed in Table 6-127-1.

- Target Area 3 (Open Space): This target area addresses the possible presence of compounds of concern associated with smelting operations and heavy staining observed in a 1953 aerial photograph. Although the staining in the aerial photograph covered the entire parcel, this target area has been chosen as a representative area. The representative target area covers approximately 2,500 square feet. Compounds possible within this target area include metals and TPH. The likelihood of environmental impacts having occurred in this target area is classified as potential. Samples to be collected in this target area are listed in Table 6-127-1.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. None of the fifteen surface soil samples for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations,

metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-127-1. The approximate sampling locations are shown on Figure 6-127-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14).

Table 6-127-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 127. Six subsurface soil samples and nine surface soil samples will be collected from the locations shown on Figure 6-127-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Sampling locations shown on Figure 6-127-1 are approximate. All surface soil samples will be collected from the centers of the darkest stains, in areas of deteriorated flooring material, where possible. The samples collected from GAP Sites 44 and 45 will be located near cracks in the most heavily stained areas. The sampling densities in Target Areas 1 and 3 are less than the protocol standards in Table 3-1 because of the large sizes of the target areas.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-127-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

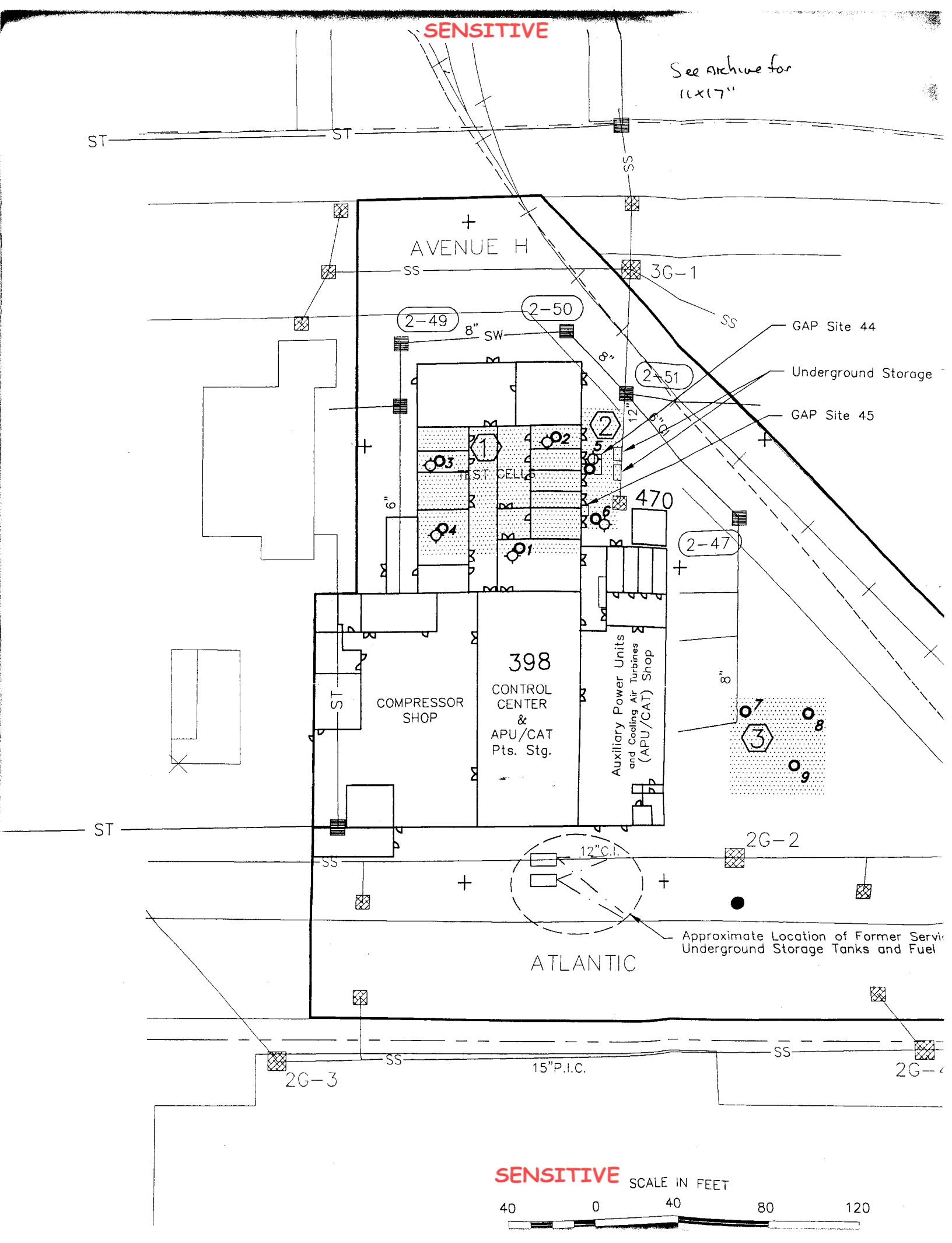
FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE

See archive for 11x17"



SENSITIVE

SCALE IN FEET

40 0 40 80 120

SECTION 6-128

PARCEL 128 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 128 at NAS Alameda (Figure 6-128-1). The parcel, which is located in the south-central portion of the base, is approximately two acres in size and is roughly triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific target investigation area and no zone-wide target areas (target areas) have been identified on this parcel. Surface soil sampling and subsurface soil sampling will be used to accomplish the screening-level investigation. Table 6-128-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 128, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 128, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifes Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 131, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazarous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the

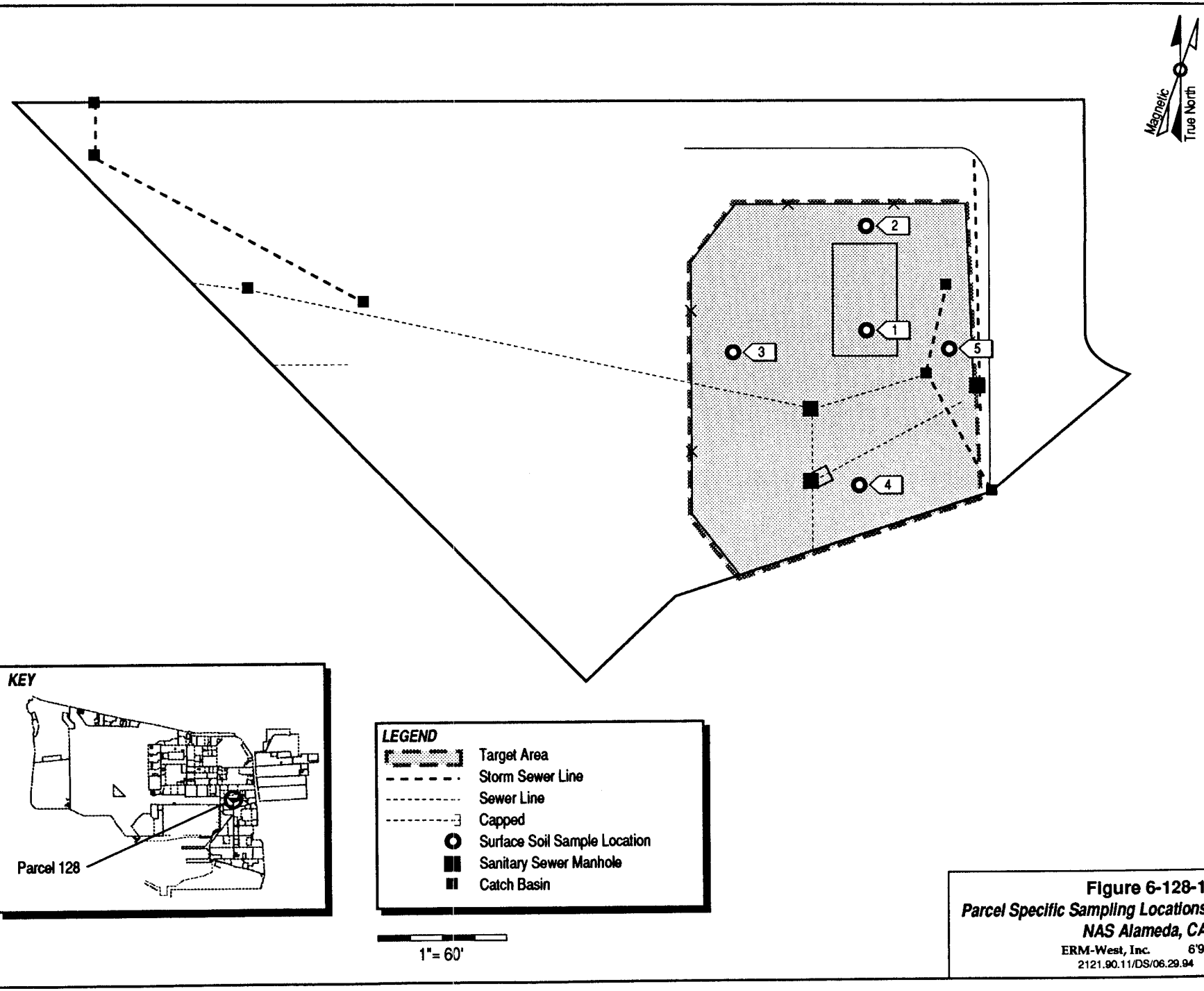


Figure 6-128-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/DS/06.29.94

TABLE 6-128-1

Summary of Recommended Samples
NAS Alameda Parcel 128

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
128-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
128-5-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015

*These are the suggested locations for the confirmation sample. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, no buildings or structures are present on Parcel 128. One building and one structure were formerly located on the parcel and have since been demolished. The parcel area is presently in use as a vehicle parking area. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-128-1.

Parcel 128 is located approximately 125 feet northeast of Installation Restoration (IR) Program Site 7B (Former Service Station), 425 feet northeast of IR Site 11 (Aircraft Engine Test Cell), and immediately northwest of IR Site 3 (Area 97, Aviation Gasoline Tanks). Previous investigations have been conducted at Parcel 128 and specific data regarding chemical occurrence are available.

Sampling locations associated with previous and proposed investigations on Parcel 128 are shown on Figure 6-128-1. Past subsurface investigations have been conducted to define the extent of the petroleum hydrocarbon contamination from fuel releases at Parcel 131 (IR Site 3). Over 300,000 gallons of AVGAS reportedly leaked from fuel tanks located on Parcel 131 in the 1960s and early 1970s, impacting the surrounding sanitary and storm sewers. Soil vapor samples (Canonie, 1990) from twelve locations in Parcel 128 were analyzed for benzene, toluene, ethylbenzene, xylenes, and petroleum hydrocarbons. Maximum concentrations of benzene, toluene, ethylbenzene, xylenes, and hydrocarbons in soil vapor samples were 73,000 µg/l, 51,000 µg/l, 1,000 µg/l, 440 µg/l, and 960,000 µg/l, respectively. AVGAS leached into an exploratory trench constructed in the eastern portion of Parcel 128. Soil analytical results from two monitoring wells (Kennedy, 1980) are unknown. Additional monitoring well, CPT/Hydropunch, and boring locations have been proposed as part of the on-going investigation to define the extent of contamination from IR Site 3 (Figure 6-128-1).

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

All of Parcel 128 is paved open space that is used for vehicle parking. Approximately 95 percent of the paved area is surfaced with asphalt and five percent is covered with concrete. The pavement is generally in good condition.

Building 109 was formerly located in the southeastern portion of this open space. This 310-square-foot building was constructed before 1947 and served as a gasoline truck loading stand. Building 109 was demolished between 1985 and 1990.

Structure 430 was constructed in 1957 and served as an aircraft truck fueling facility. According to site inspection data, the area formerly occupied by Structure 430 currently consists of a concrete pad, measuring approximately 30 feet by 40 feet, and an eight foot by twenty foot patch of bare soil. The demolition date for Structure 430 is unknown.

Utilities located within the open space include underground sanitary sewer, storm sewer, water, and electrical lines. An active fuel line passes through the eastern portion of Parcel 128. Railroad tracks border the west edge of Parcel 128, but are located on Parcel 127. A ventilation/scrubber unit located in the southeastern portion of Parcel 128 may be in place to mitigate fuel vapor build-up in the sewer system. No permits appear to have been issued for processes occurring within this open space.

The open space has been used for vehicle parking since approximately 1970. Aerial photographs indicate that the western half of the parcel was used to store unknown materials in 1958, while unknown materials appear to be stored throughout the entire parcel in a 1947 aerial photograph. No chemicals are documented to have been stored in Parcel 128.

Although no documented spills have occurred in Parcel 128, extensive staining in a 1947 aerial photograph indicates that spills may have occurred throughout the entire parcel. Scattered staining north and west of former Structure 430 is present in 1963, 1966, and 1970 aerial photographs. Site inspection data indicate that only scattered oil stains, typical of vehicle engine leakage, are currently visible in Parcel 128.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 128 is bounded by Parcels 122, 127, 129, and 131. Activities of concern on these parcels include hazardous material/waste storage in Parcel 122, and hazardous material storage near the south edge of Parcel 127. Parcel 131 is IR Site 3 (Area 97, Aviation Gasoline Tanks Area). Subsurface investigations related to IR Site 3 indicate that AVGAS contamination is migrating in a northwesterly direction across Parcel 128. Although elevated concentrations of benzene and hydrocarbons exist in soil vapor throughout most of the parcel, the extent of contamination has not yet been fully defined. Further investigation is planned for this parcel.

RCRA Sites

No RCRA sites are located at this parcel.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified because it has been impacted by an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-128-2

Summary of Data Gaps
NAS Alameda Parcel 128

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• No ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 128.
Installation Restoration (IR) Sites	• Parcel 128 is located approximately 125 feet northeast of Installation Restoration (IR) Program Site 7B (Former Service Station), 425 feet northeast of IR Site 11 (Aircraft Engine Test Cell), and immediately northwest of IR Site 3 (Area 97, Aviation Gasoline Tanks). Additional subsurface investigation relative to IR Sites 7B, 11, and 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• No LBP issues identified.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Fuel Dispensing Area)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-128-2

Summary of Data Gaps
NAS Alameda Parcel 128

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, storm sewer, water, and electrical lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-128-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 128 because no buildings are present.

Once the data gaps in Table 6-128-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 128 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Fuel Dispensing Area): Based on the staining in historical aerial photographs and the uses of former buildings and structures on the parcel, the area surrounding the former buildings was identified as a potential release area. Target Area 1 covers approximately 25,000 square feet. The sampling in this Target Area supplements the sampling proposed by the IR contractor in this area of the parcel. This target area has been classified as having a potential likelihood of impacts. Five surface soil samples will be collected from this target area. Because the sources of release is likely to be fuel products dispensed at these locations, the compound of concern is TPH.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14), are the screening-level investigation technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-128-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 128. Five surface soil samples will be collected from the locations shown on Figure 6-128-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Sampling locations shown on Figure 6-128-1 are approximate; however, one sample should be collected from the center of the concrete pad (former Structure 430) and one sample should be collected from the area immediately north of the concrete pad. Because no staining will be evident when locating the samples, field sample locations should mirror the locations shown in Figure 6-128-1 as closely as possible.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-131

PARCEL 131 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 131 at NAS Alameda (Figure 6-131-1). The parcel, which is located in the central portion of the base, is 3.7 acres in size and is roughly oval in shape. This parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 131, historical activities are discussed below.

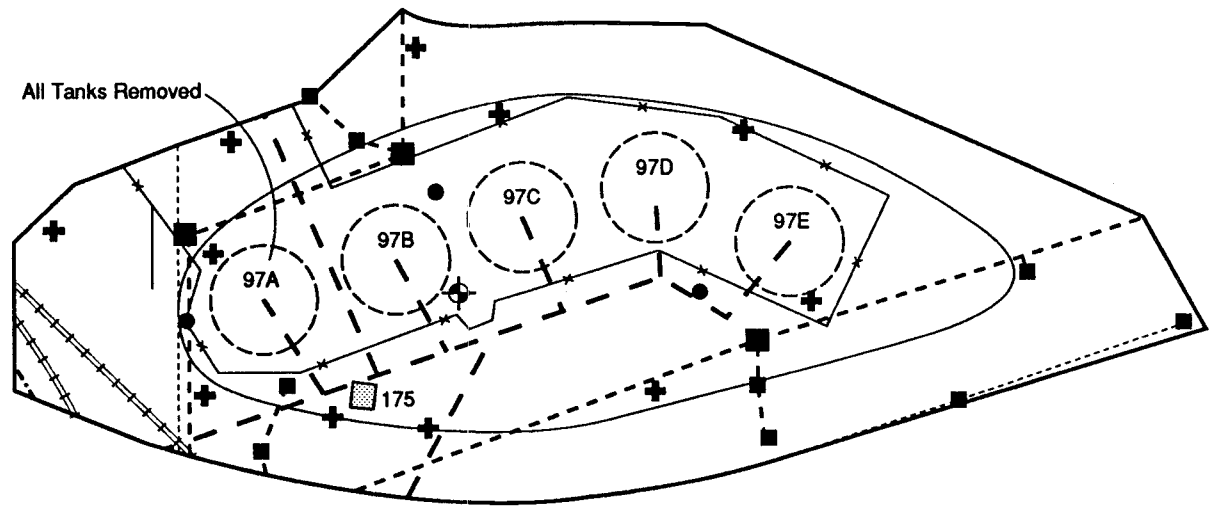
Background and Historical Activities

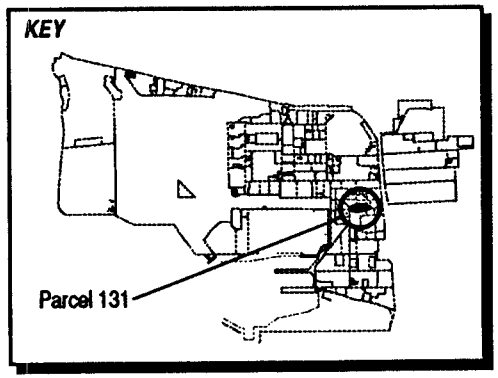
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 131, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 135, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and

Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the





LEGEND

- Fuel Lines in Use
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Existing Soil Vapor Survey Location (*Canonie, 1990*)
- Existing Monitoring Well (*Canonie, 1990*)
- Existing Monitoring Well (*Kennnedy, 1980*)
- Sanitary Sewer Manhole
- Catch Basin

Note: *No sampling required for this parcel.*

1"= 125'

Figure 6- 131-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.18.94

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 175, a transformer house) and one structure (Structure 71, the airplane monument) cover less than one percent of the parcel. The remainder is open space. The parcel area is presently in use as a lawn area. Five storage tanks that were partially buried and partially aboveground were formerly located at this parcel (Figure 6-131-1) and have since been demolished. Limited investigations pertaining to these tanks have been conducted. Fuel and sewer lines are present at this parcel and are shown in Figure 6-131-1.

Parcel 131 is IR Site 3 (Area 97). Previous investigations have been conducted at Parcel 131 and specific data regarding potential chemical occurrence are available. Soil vapor, soil, and groundwater have been extensively investigated. Investigation results show that a plume from the spill is traveling in a northwesterly direction and may affect parcels 110, 111, 121, 122, 123, 124, 125, 126, 127, 128, and 71. The detection limits for soil samples from this parcel exceeded the residential PRG for arsenic. Results from the soil vapor survey showed maximum concentrations of benzene, ethylbenzene, toluene, total xylenes, and hydrocarbons of 73 ppm, 58 ppm, 1 ppm, 0.51 ppm, and 810 ppm, respectively.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel are described in detail below.

Building 175

Building 175 was constructed in approximately 1945 and serves as a transformer house (Figure 6-131-1). This building is in poor condition. Building 175 a is one story building, is constructed of concrete with a concrete floor and concrete roof, and covers approximately 100 square feet. The space occupied by Building 175 was formerly open space. Utilities located within and immediately surrounding Building 175

include underground sanitary sewer, storm sewer, and active fuel lines. No chemicals are documented to have been stored in or used at Building 175 from 1945 to present.

Site inspection information indicates that undocumented spills may have occurred from the transformers, switches, and gaskets on the equipment. These spills appear to be oil-like in origin, and to have involved a minor quantity of released material. The staining covers an area measuring approximately two by two feet, and does not warrant sampling. Building 175 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 175.

Open Space

The parcel consists almost entirely of open space. An airplane monument and railroad tracks are located in the open space. The open space formerly contained five storage tanks.

The railroad tracks on the parcel were constructed immediately after the parcel was filled (Figure 6-131-1). The ground surface of the open space is 40 percent paved and 60 percent unpaved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is surfaced with concrete. The pavement is generally in fair condition. The unpaved areas of the open space are covered with grass and landscaping.

Five storage tanks were formerly located in this open space. These tanks have been demolished. EBS information indicates that these tanks stored aviation gasoline. Aviation gasoline storage occurred on this parcel from 1945 to approximately 1985. Utilities located within and immediately surrounding open space include underground industrial sewer, sanitary sewer, storm sewer, and fuel lines (shown on EBS maps as active lines).

Spills of aviation gas are documented to have occurred from the 1960's until 1978. Approximately 365,000 gallons of aviation gasoline were released into the shallow groundwater, the sewers and the utility ducts. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within the parcel open space.

Underground Storage Tanks

Five underground storage tanks were formerly present at this parcel (Tanks 97A, 97B, 97C, 97D, and 97E). These tanks were installed in 1945, were located at the present site of the airplane monument in the center of Parcel 131. These tanks were used to store aviation gasoline, and had a capacity of 100,000 gallons each. The former presence of these tanks were identified from the EBS. Based on the available information, extensive releases from these tanks occurred.

Parcel Boundary Conditions

Parcel 131 is bounded by Parcels 129, 128, 127, 135, 134, 133, 130, and 209. Parcels 135, 137, and 143, are IR Sites 7B (Building 162), 11 (Building 14), and 4 (Building 360), respectively. Former and current activities of concern on these adjacent parcels include the service station at IR Site 7B, plating and metal work at IR Site 4, and the engine test cells at IR Site 11.

No sampling is called for in this PEP in response to the three nearby IR sites, and the IR site on the parcel. However, investigations are continuing as part of the IR program. If the continuing investigations at these IR sites reveal additional cause for concern at Parcel 131, then additional sampling on Parcel 131 may be appropriate.

RCRA Sites

No RCRA sites were identified on this parcel.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6, based on its status as an IR site.

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-131-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently

TABLE 6-131-1

Summary of Data Gaps
NAS Alameda Parcel 131

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 131.
Installation Restoration (IR) Sites	• Parcel 131 is IR Site 3 (Area 97). Significant releases to soil and groundwater have been documented at this parcel. • IR Site 7B (Building 162) is located less than 200 feet southwest of Parcel 131. • IR Site 11 (Building 14) is located less than 500 feet southwest of Parcel 131. • IR Site 4 (Building 360) is located less than 300 feet southeast of Parcel 131. Additional subsurface investigation relative to IR Sites 7B, 3, and 11 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Releases to groundwater are documented to have occurred at this parcel.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-131-1

Summary of Data Gaps
NAS Alameda Parcel 131

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Five USTs were formerly present at this parcel (Tanks 97A, 97B, 97C, 97D, and 97E). These tanks were installed in 1945, used to store aviation gasoline, and had capacities of 100,000 gallons each. Based on the available information, releases from these tanks occurred.
Underground Utilities	• Industrial sewer, sanitary sewer, storm sewer, and electrical lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

underway to address the following data gaps at this parcel: transformers, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 131 because no industrial buildings are present.

As noted earlier, Parcel 131 has open space areas that are landscaped/unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 131.

Once the data gaps in Table 6-131-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 131 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 131. No parcel-specific target areas were identified for this parcel. This subsection of the PEP provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and location zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad

tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. No surface soil samples for this zone target area are located on this parcel. Soil samples on other parcels will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, the IR site, and USTs must be resolved before this parcel can be reclassified from BRAC Category 6, leased, or transferred.

SECTION 6-135

PARCEL 135 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 135 at NAS Alameda (Figure 6-135-1). The parcel, which is located in the south-central portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel reportedly to contains four RCRA sites (GAP Site 11, GAP Site 46, two former waste oil tanks, and an unnumbered site). Two parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil and subsurface soil sampling will be used to accomplish the screening-level investigation. Table 6-135-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 135, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 135, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which inluded site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 131, 136, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing,

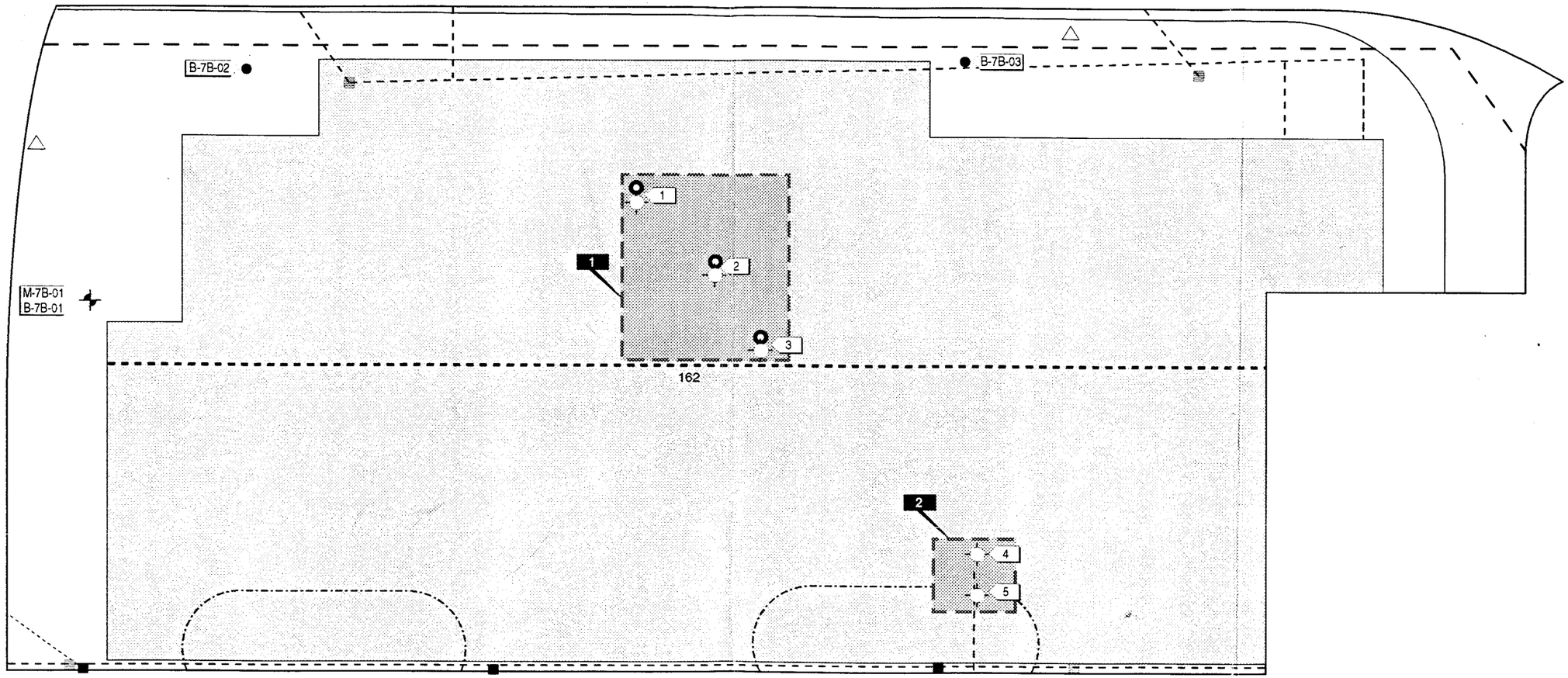
hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

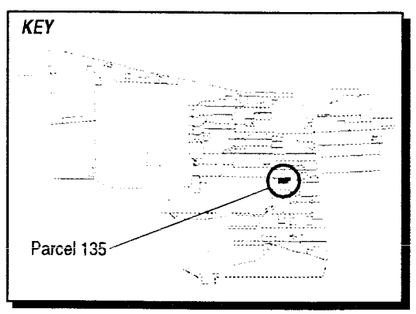
Filling began in the area covered by this parcel in 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 162) covers approximately 80 percent of the parcel. The remaining 20 percent is open space. The parcel area is presently in use as a maintenance facility for ship components. There is no evidence that any buildings formerly existed at this parcel. Underground fuel, steam, and sewer lines are present on this parcel and are shown on Figure 6-135-1.

Parcel 135 is Installation Restoration (IR) Program Site 7B. A previous investigation was conducted at this parcel in 1992 as part of Remedial Investigation Phases 2B and 3. The results of this previous investigation are presented in *Data Summary Report, RI/FS, Phases 2B and 3*, prepared by PRC Environmental Management and J.M. Montgomery Consulting Engineers, dated October 27, 1992. This investigation was directed at the open space around Building 162. No investigation or sampling was conducted in or beneath the building. As part of this investigation, three soil borings were drilled at this site; one was subsequently completed as a groundwater monitoring well. Twelve soil samples and one duplicate sample were collected from the borings. The monitoring well was also sampled. The locations of these borings and monitoring well are shown on Figure 6-135-1. The soil samples were analyzed for VOCs, SVOCs, TRPH, pesticides/PCBs, and metals. The ground water samples were analyzed for VOCs, SVOCs, metals, and general minerals.

The results of this investigation indicated that TRPH was detected in five soil samples (ranging from 55.3 mg/kg to 508 mg/kg), VOCs were detected in nine soil samples (ranging from 11 µg/kg to 120 µg/kg), and SVOCs were detected in six soil samples (ranging from 88 µg/kg to 3,300 µg/kg). Three samples collected from this parcel contained concentrations of several polynuclear aromatic hydrocarbons that exceeded the unrestricted use (residential) Preliminary Remedial Goals (PRGs). One sample also contained Benzo(a)pyrene above the industrial PRG. Two metals (arsenic and beryllium) were detected at levels exceeding the unrestricted use PRGs in the majority of soil





LEGEND

- Target Areas 1 and 2
- Steam Line
- Fuel Lines in Use
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location
- Geoprobe Subsurface Sioil Sampling Location
- Existing Monitoring Well Location
- Existing Soil Boring Location
- Proposed CPT/Hydropunch Location *(PRC)*
- Sanitary Sewer Manhole
- Catch Basin

1"= 45'

Figure 6-135-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.18.94

TABLE 6-135-1

Summary of Recommended Samples
NAS Alameda Parcel 135

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
135-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Oils, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
135-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils, Metals	TPH, Metals	Modified EPA 8015, ICAP Scan
135-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Oils, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
135-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils, Metals	TPH, Metals	Modified EPA 8015, ICAP Scan
135-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Oils, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
135-3-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Metals, Solvents	TPH, VOCs, Metals	Modified EPA 8015, CLP RAS
135-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils, Metals	TPH, Metals	Modified EPA 8015, ICAP Scan
135-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuel, Oils, Metals	TPH, Metals	Modified EPA 8015, CLP RAS
135-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	Oils, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
135-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	Oils, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
135-5-4-S-V-DDMMYY*	4.0'**	GeoProbe	Soil	Target Area 2	Fuel, Solvents, Oils, Metals	TPH, Metals, VOCs	Modified EPA 8015, CLP RAS

*These are the proposed locations for the confirmation samples. Actual locations will depend on field analytical results.
**Samples will be collected from either side of the sump at a depth equal to the bottom of the sump

samples collected. The industrial PRG was exceeded for arsenic in five of the samples collected. The industrial PRG was exceeded for beryllium in six of the samples collected. All other metals were detected at levels below PRGs.

The results of the groundwater investigation indicated that elevated levels of VOCs were detected in the monitoring well. SVOCs, pesticides/PCBs, and TPH were not detected in the ground water. Because no background data are available for metals in this area, no conclusions were made about the detected levels of metals in ground water.

As part of the IR program, additional site investigation work has been proposed for the open space associated with Building 162. Two CPT/HydroPunch sampling locations have been proposed to investigate potential contamination associated with several underground storage tanks that reportedly exist on the north and west side of Building 162. The locations of the proposed borings and monitoring wells are shown on Figure 6-135-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 162

Building 162, located in the central portion of the parcel, was reportedly constructed in 1945. This two-story warehouse-style building has been used as a maintenance shop for ship components (Figure 6-135-1). The mezzanine upstairs is a mechanical shop. This building is constructed with wooden walls, a concrete floor, and a tar and gravel roof. The building is in fair condition and occupies approximately 110,000 square feet. The space occupied by Building 162 was formerly vacant open space.

Utilities located within and immediately surrounding Building 162 include underground sanitary sewer, storm sewer, water, electrical, fuel, and industrial sewer lines, and overhead electrical lines.

Information collected during the EBS indicates that Building 162 was also used as an aircraft maintenance shop. The activities on the main shop floor include sand blasting, welding, photo-engraving, and metal

plating. The metal plating area is located in the southwest corner of the building. A metal lathe and drill area occupies the majority of the ground floor. Testing of numerous small engines and pumps occurs in the building. The tests are conducted in water filled vats. These types of industrial processes typically involve the use or generation of chemicals and wastes including fuel, lubrication oil, metals, and solvents for parts cleaning.

A variety of chemicals are documented to have been stored in and used in Building 162. These include sulfuric acid, paints, lubricants, solvents, varnish, and metal plating solutions. The disposal practices for used chemicals are not known. Several areas in Building 162 are used to store hazardous waste. These materials include lead-containing sand from sand blasting operations, spent oil absorbent, caustic soda with metals, and plating solutions.

No spills are documented to have occurred in Building 162. However, staining occurs at various locations within the building. The majority of stains are dark in appearance and appear to have been caused by leakage of fuels, solvents, and oils. Two areas in the central area of the building are significantly stained. These include stains that cover approximately 1,600 square feet and 700 square feet, and were both caused by unknown chemicals. These stained areas are addressed by Target Area 1.

Building 162 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents, such as including fires, explosions, flooding, or crashes have been documented to have occurred within Building 162.

Open Space

The open space covers approximately 20 percent of the parcel. The ground surface of the open space is covered with asphalt roadways and concrete. It appears that the open space has always been vacant open space.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, electrical, fuel, and industrial sewer lines, and overhead electrical lines. EBS information indicates that the open space associated with this site has been used for parking for Building 162. Several of the alleyways on this parcel are also used for repair and testing of ship components.

No chemicals are documented to have been stored or used in the open space; however, it is likely that products such as fuels, lubrication oils

and solvents were used in these areas. Sampling has either already been conducted in the open spaces or is proposed for the next phase of work by the IR contractor. No other incidents, such as including fires, explosions, flooding, or crashes have been documented to have occurred within the open space.

Underground Storage Tanks

Two abandoned underground storage tanks are present at this parcel (Tanks 162-1 and 162-2). The tanks were installed in 1945 and are located north of Building 162. The tanks were used to store gasoline and waste oil, and have capacities of 100 and 150 gallons, respectively. Tank 162-2 was also used to store JP-5. The presence of these tanks was identified from the EBS. One of these tanks was filled with concrete (it is unclear from the records which one was filled). These tanks are scheduled to be removed. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. These tanks have been identified as RCRA tanks based on their former contents.

The EBS lists one other tank as being located on this parcel. No other information is available regarding this potential tank.

Parcel Boundary Conditions

Parcel 135 is bounded by Parcels 125, 126, 127, 134, 136, 137, and 200. Parcel 137 is IR Site 11 (Building 14). Activities of concern on the adjacent parcels include fuel and solvent usage on Parcel 137. Parcel 135 is located approximately 50 feet to the southwest of Parcel 131. Parcel 131, IR Site 3 (Area 97), previously contained several large above-ground storage tanks which are known to have leaked.

No sampling is called for in this PEP in response to the three nearby IR sites. If the continuing investigations at the IR sites reveal additional cause for concern at Parcel 135, then additional sampling on Parcel 135 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes four RCRA sites

(GAP Site 11, GAP Site 46, the waste oil USTs, and an unidentified site). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the four RCRA sites at this parcel, two require further investigation (GAP 11 and the USTs). The two remaining sites do not require sampling because no staining was noted at GAP Site 46, and the location of the unnumbered site eliminates potential concerns associated with this site. The sampling proposed for GAP site 11 is described in the Target Areas and Compounds of Concern subsection. A brief description of each of the RCRA sites is provided below.

The tanks were identified as RCRA tanks based on their former contents and their inclusion in the RCRA Facility Investigation (RFI) for NAS Alameda. The tanks are scheduled to be removed. A description of the tanks is provided in the Underground Storage Tank subsection, above. The requirements for the RFI are described in detail in Section 8. At NAS Alameda, RCRA tank sites that would normally require an RFI will be investigated and remediated, if necessary, as part of the UST program.

GAP Site 11 is reported to be a sump containing waste oils. The startup date, history of releases, and the current status of this site are unknown. The exact location of this site is not known, but is surmised to be the catch basin in the southeastern portion of the building. This GAP site is addressed by Target Area 2.

GAP Site 46 is a storage area for aerosol cans, 55-gallon drums and 5-gallon pails containing paint, 1,1,1 TCA, lubrication oil, solvents, and acetone. It is unknown whether any chemicals have been released from this site. This site is currently active and no staining or other evidence of spillage was observed to be associated with this GAP site.

The un-numbered GAP site is reported to be located in the laboratory of Building 162 (the mezzanine). The dimensions or type of storage facility is unknown, but it reportedly stores oil and 1,1,1 TCA. It is not known if this site is currently active. Because this site is located on an upper floor of the building, no sampling is currently required at this GAP site.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this

TABLE 6-135-2

Summary of Data Gaps
NAS Alameda Parcel 135

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 7B is located on Parcel 135. • IR Site 11 is located less than 100 feet south of Parcel 135. • IR Site 3 is located approximately 200 feet northeast of Parcel 135. Evidence of potential groundwater contamination migration from this IR site has been identified, and is being addressed as part of the IR site program. • IR Site 17 is located less than 300 feet west of Parcel 135. • Additional subsurface investigation relative to IR Sites 3, 11, and 7B is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-135-2

Summary of Data Gaps
NAS Alameda Parcel 135

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 162, Central Stained Area) • Target Area 2 (GAP Site 11)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Two abandoned USTs are present at this parcel (Tanks 162-1 and 162-2). The tanks were installed in 1945 and are located north of Building 162. One of these tanks was filled with concrete. These tanks are scheduled to be removed. One additional tank is listed in The EBS list one other tank as being located on this parcel. No other information is available regarding this potential tank.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-135-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 162. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-135-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 135 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target areas. The nature and location of this area was evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

- Target Area 1 (Building 162, Central Area): This target area is located in the central portion of Building 162, and encompasses the large stained areas noted during the site inspection. The chemicals of concern in this target area include fuel, lubrication oils, metals from plating solutions, and solvents for parts cleaning. This target area contains the areas with the most severe staining and is estimated to occupy approximately 3,000 square feet. This target area has been classified as having a potential likelihood of impact. Samples to be collected in this target area are listed in Table 6-135-1, and will be analyzed for TPH, Metals, and VOCs.

- Target Area 2 (GAP Site 11): This target area is reportedly a sump for the collection of waste oils. The chemicals of concern in this target area include fuel, lubrication oils, metals from plating solutions, and solvents for parts cleaning. This target area has been classified as having a suspect likelihood of impact. Samples to be collected in this target area are listed in Table 6-135-1, and will be analyzed for TPH, Metals, and VOCs.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-135-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 135. Five subsurface soil samples and three surface soil samples will be collected from the locations shown on Figure 6-135-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The sampling locations presented on Figure 6-135-1 are approximate and the actual sampling points will be based on field observations. The recommended sampling at Target Area 1 results in a sampling density less than the protocol standard as stated in Table 3-1. In areas of the most significant staining, a surface soil sample and a subsurface soil sample will be collected from beneath the building floor. The surface soil samples will be analyzed for metals, TPH, and SVOCs. The subsurface soil sample will be analyzed for VOCs.

The sampling locations for Target Area 2 are shown in the southeastern portion of the building at the catch basin. The exact location of the sump will be verified by the personnel performing the sampling activities. Subsurface GeoProbe soil samples will be collected from two sides of the sump. Samples will be collected from a depth equal to the depth of the sump bottom.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-136

PARCEL 136 EVALUATION PLAN

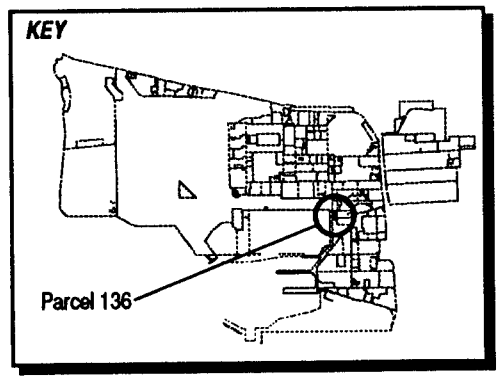
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 136 at NAS Alameda (Figure 6-136-1). The parcel, which is located in the southeastern central portion of the base, is approximately one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains two RCRA sites. Neither site has been identified in the Part B Permit as requiring an RFI. Two parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-136-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 136, historical activities are discussed below.

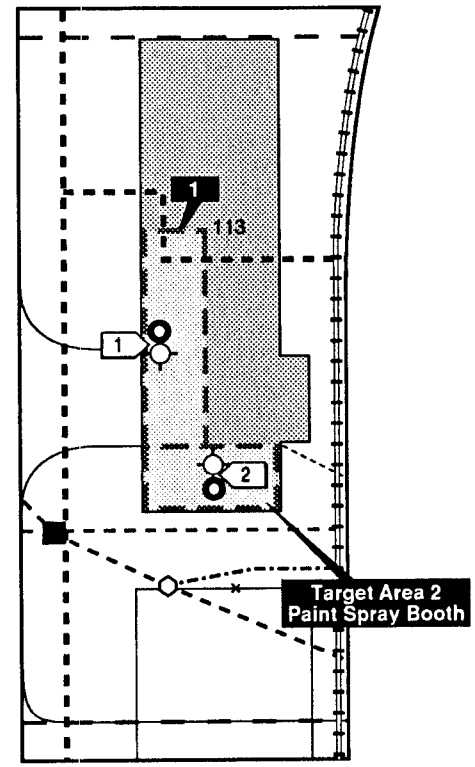
Background and Historical Activities

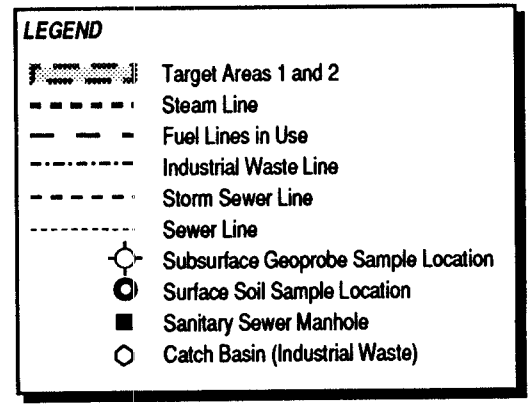
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 136, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 131, 135, 137, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage







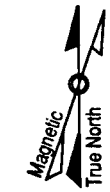


Figure 6- 136-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.07.94

TABLE 6-136-1

Summary of Recommended Samples
NAS Alameda Parcel 136

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
136-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents, Paints	VOCs, TPH, SVOCs, Metals	EPA 8240, Modified EPA 8015, EPA 8270, ICAP Scan
136-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils, Solvents, Paints	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
136-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils, Paints	Metals, SVOCs, TPH	Modified EPA 8015, EPA 8270, ICAP Scan
136-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils, Paints	Metals, SVOCs, TPH	CLP RAS, Modified EPA 8015
136-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	Solvents, Paints	VOCs, Metals, SVOCs	EPA 8240, ICAP Scan, EPA 8270
136-2-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 2	Solvents, Paints	VOCs, Metals, SVOCs	CLP RAS
136-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Paints	Metals, SVOCs	ICAP Scan, EPA 8270
136-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Paints	Metals, SVOCs	CLP RAS

*These are the suggested locations of the confirmation sample. The actual locations will depend of screening-level analytical results.

Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Buildings 113, Aircraft Parts Shipping and Overhaul) covers approximately 25 percent of the parcel. The remaining 75 percent is open space. The parcel area is presently in use as the Aircraft Parts Shipping and Overhaul Facility and for associated vehicle parking. No other buildings or structures were formerly located on this parcel. Underground fuel, steam, and sewer lines are present on this parcel and are shown on Figure 6-136-1.

Parcel 136 is located immediately west of two Installation Restoration (IR) Program sites (IR Site 7B - Building 162, Service Station and IR Site 11 - Building 14, Engine Test Facility). Parcel 136 is also within 100 feet of the Seaplane Lagoon. No previous investigations have been conducted at Parcel 136, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 113

Building 113 was constructed in 1943 and served as an Aircraft Parts Shipping and Overhaul Facility (Figure 6-136-1). This building is in fair condition. Building 113 is a one-story building constructed of metal with a concrete floor and metal roof, and covers approximately 13,000 square feet. The space occupied by Building 113 was formerly open space used for vehicle parking. Utilities located within and immediately surrounding Building 113 include sanitary sewer, storm sewer, fuel, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included aircraft overhaul and repair. These industrial processes involve the use of oils, lubricants, solvents, paints, and corrosives, and generation of wastes, including metals, and sandblast grit. Aircraft overhaul and repair occurred within Building 113 from 1943 to the present.

Oils, resins, silicones, paint, cleaning agents, solvents, corrosives, phenols, and ethylamines are documented to have been stored in the storage cabinets on the south side of the paint room portion of Building 113 during the site inspection. Approximately 150 gallons of the above-mentioned chemicals were stored in Building 113. Disposal of used chemicals is accomplished by sending all hazardous waste to the hazardous waste collection department.

Stains from paint, resins, and sodium hydroxide were noted on concrete surfaces during the site inspection. These spills appear to have involved a relatively large quantity of material. The staining covers 75 percent of the entire floor of the building. The shop areas area addressed by Target Area 1. The staining in the paint booth completely covers the floor. The paint booth is addressed by Target Area 2.

Building 113 is not equipped with a heating-ventilation-air conditioning (HVAC) system. Large amounts of dust, apparently generated from sandblasting activities, were noted during the site inspection. This dust is apparently generated from sandblasting lead paint off containers. No other incidents are documented to have occurred within Building 113.

Open Space

The open space covers approximately 75 percent of the parcel. The open space is completely paved with asphalt. No structures are located within the open space. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, steam, fuel, and industrial sewer lines. No chemicals are documented to have been stored in or used at the open space. No spills or staining area documented to have occurred in the open space.

No other incidents are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 136 is bounded by Parcels 125, 23, 155, 138, 137, 135, and 126. Parcel 136 is located next to two Installation Restoration (IR) Program sites (IR Sites 7B and 11: Building 162, Service Station and Building 14, engine test facility). Parcel 136 is also in close proximity to the Seaplane Lagoon. Activities of concern on these adjacent parcels include engine test cell activities on Parcel 137 and engine repair and overhaul on Parcel 135. The former Seaplane Lagoon is located just west of Parcel 136.

No sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 136, then additional sampling on Parcel 136 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (site numbers SMWU/GAP 76, and SMWU/GAP 77). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, neither RCRA site requires sampling. The floor of Building 113 is paved, and the materials stored are not likely to have resulted in an impact to the environment. The locations of the sites could not be determined during the EBS information. A brief description of the two RCRA sites is provided below. The sampling proposed is described in the Target Areas and Compounds of Concern subsection, below.

Site 76 is Building 113, Shop 96212. It is unknown whether any chemicals were released from this site. Site 76 consists of 55-gallon drums for the collection of aerosol cans. The chemicals of concern associated with this site include aerosol paint and rust remover, dope and lacquer thinner, oil, enamel paint and 1,1,1-TCA. This site is reportedly active.

Site 77 is Building 113, Shop 96215. It is unknown whether any chemicals were released from this site. Site 77 consists of bags of used blasting grit. The chemicals of concern associated with this site include metals. This site is reportedly active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 136, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-136-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 113. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-136-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 136 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview

TABLE 6-136-2

Summary of Data Gaps
NAS Alameda Parcel 136

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 136 is located immediately west of two Installation Restoration (IR) Program sites (IR Sites 7B and 11: Building 162, Service Station and Building 14, engine test facility). Parcel 136 is also within 100 feet of the Seaplane Lagoon. Additional subsurface investigations relative to IR Sites 7B and 11 are proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 113, Shop Area) • Target Area 2 (Building 113, Paint Booth)

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-136-2

Summary of Data Gaps
NAS Alameda Parcel 136

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Sanitary sewer, storm sewer, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-136-2.

- Parcel 136 Target Area 1 (Building 113, Shop Area): The target area is the shop area of Building 113, which is located on the west side of the building. This target area is intended to be representative of the remainder of the stained area of the building floor, excluding the paint booth. The compounds of concern are metals, VOCs, TPH, and SVOCs. This target area has been classified as having a potential likelihood of impacts. The target area is approximately 1,200 square feet in area. Samples to be collected in this Target Area are listed in Table 6-136-1.

- Parcel 136 Target Area 2 (Building 113, Paint Booth): The target area is the paint booth of Building 113, which is located on the southern portion of the building. The floor is completely and severely stained in this area. The compounds of concern are SVOCs, VOCs, and metals. This target area covers approximately 1,200 square feet and has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-136-1.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. However, only unpaved tracks, or tracks in potential loading and unloading areas will be sampled. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. No surface soil samples for this zone target area is located on this parcel. Soil samples on other parcels will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means.

SECTION 6-137

PARCEL 137 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 137 at NAS Alameda (Figure 6-137-1). The parcel, which is located in the east central portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel is reportedly contains three RCRA sites (GAP sites 47 and 48, and the tanks). One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil and subsurface soil sampling will be used to accomplish the screening-level investigation. Table 6-137-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 137, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 137, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 131, 135, 136, 138, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the

TABLE 6-137-1

Summary of Recommended Samples
NAS Alameda Parcel 137

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
137-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
137-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
137-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
137-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
137-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
137-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Fuels	TPH, VOCs	Modified EPA 8015, EPA 8240
137-3-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Fuels	TPH, VOCs	Modified EPA 8015, CLP RAS
137-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
137-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Fuels	VOCs, TPH	EPA 8240, Modified EPA 8015
137-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings occupy approximately 45 percent of the parcel. The remaining 55 percent is open space. The parcel area is presently in use as an aircraft engine test and repair facility. Fuel, steam, and sewer lines exist at this parcel and are shown on Figure 6-137-1.

Parcel 137 is an Installation Restoration (IR) Program site (IR Site 11, Building 14). A previous investigation was conducted at this parcel in 1992 as part of the Remedial Investigation Phases 2B and 3. The results of this previous investigation are presented in *Data Summary Report, RI/FS, Phases 2B and 3*, prepared by PRC Environmental Management and J.M. Montgomery Consulting Engineers, dated October 27, 1992. This investigation was directed at the open space around Building 14, and did not involve any investigation or sampling in or beneath the building. As part of this investigation, seven soil borings were installed at this site, and four were subsequently completed as ground water monitoring wells. Twenty-eight soil samples and two duplicate samples were collected from the borings. The four monitoring wells were also sampled. The locations of these borings and monitoring wells are shown on Figure 6-137-1. The soil samples were analyzed for VOCs, SVOCs, TRPH, and metals. The groundwater samples were analyzed for VOCs, SVOCs, metals, and general chemicals.

The results of this investigation indicate that TRPH were detected in 13 soil samples (ranging from 34.5 mg/kg to 28,700 mg/kg), VOCs were detected in 22 soil samples (ranging from 8.2 µg/kg to 490 µg/kg), and SVOCs were detected in 12 soil samples (ranging from 150 µg/kg to 1,400 µg/kg). Three samples collected from this parcel contained levels of several polynuclear aromatic hydrocarbons that exceeded the residential Preliminary Remedial Goals (PRGs). The levels of Benzo(a)pyrene and Ideno(1,2,3-cd)pyrene in these samples also exceeded industrial PRGs. Two metals (arsenic and beryllium) were detected at levels exceeding the residential PRGs in the majority of soil samples collected. The industrial PRG for arsenic was also exceeded in 13 of the samples collected. The industrial PRG was exceeded for

beryllium in 9 of the samples collected. All other metals were detected at levels below PRGs.

The results of the ground water investigation indicate that elevated levels of VOCs were detected in three of the four monitoring wells SVOCs, Pesticides/PCBs, and TPH were not detected in any of the monitoring wells. Because no background data are available for metals in this area, no conclusions were made about the detected levels of metals in groundwater.

As part of the IR program, additional site investigation work has been proposed for the open space associated with Building 14. Seven soil borings, two monitoring wells, and two CPT/HydroPunch sampling locations have been proposed to investigate potential contamination associated with several underground storage tanks that reportedly exist on the south and west side of Building 14. The locations of the proposed borings and monitoring wells are shown on Figure 6-137-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 14

Building 14, located in the central portion of the parcel, was reportedly constructed in 1940. This building has been used for aircraft engine testing and repair (Figure 6-137-1). Most of the test cells in this building are currently used for storage purposes, however two cells (Test Cells 11 and 12) are still used to test aircraft engines. This two story building is constructed with a combination of concrete and wooden walls and a concrete floor. The building is in fair condition and occupies approximately 62,000 square feet. The space occupied by Building 14 was formerly vacant open space. The building is divided into a series of test cells. Each of the test cells contains floor drains that lead to an industrial waste gravity sewer system. In Cells 1 through 10, the drains reportedly lead to underground storage tanks. The drains in cells 11 and 12 lead to an oil/water separator and then to the storm sewer. The second floor of building is occupied by a laboratory associated with the engine testing.

Utilities located within and immediately surrounding Building 14 include sanitary sewer, storm sewer, telephone, water, electrical, fuel, and industrial sewer lines, and overhead/underground electrical lines.

Information collected during the EBS indicates that this building has always been used for testing and repair of aircraft engines. After engine testing, spilled fuel and other fluids are reportedly cleaned with solvent and then washed with water into the industrial waste gravity sewer.

A variety of chemicals are documented to have been stored in and used in Building 14. These include Aviation fuels (JP-5, JP-7 and AVGAS), aircraft turbine lubricant, halogenated and non-halogenated solvents, mercury, spray paint, hydraulic fluids, motor oils, powdered metals, and ferrocene (a substance used for smoke abatement). The disposal practices for used chemicals is not known.

No spills have been documented in Building 14. However, widespread staining observed during the site inspection indicates that undocumented spills have occurred at various locations within the building. The majority of stains are dark in appearance and appear to have been caused by leakage of fuels and oils. Several areas are significantly stained. These include the dyno buildup shop in the southwest corner (300 square foot stain), the main east/west hallway in front of Test Cells 2 and 3 (240 square foot stain), and Test Cells 6 (500 square foot stain), 8 (20% of floor stained), 11 (300 square foot stain), and 12 (600 square foot stain). The staining in these areas appears to have been caused by releases of relatively large quantities of material. This staining is addressed by Target Area 1.

Building 14 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents such as fires, explosions, flooding, or crashes have been documented to have occurred within Building 14.

Building 265

Building 265 was constructed in 1945 and serves as a plant services building for aircraft overhaul (Figure 6-137-1). Historic aerial photographs indicate that the original building was either demolished and rebuilt, or remodeled. The current building is 1,500 square feet in area. Building 265 is a one story, concrete block building. The space occupied by Building 265 was formerly vacant open space.

No utilities are located within or immediately surrounding Building 265. Information collected during the EBS indicates that this building is used for storage of equipment for Building 14. This building was previously used as a plant services facility for aircraft overhaul. There

is no evidence that hazardous materials were used or stored at Building 265. Building 265 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents such as fires, explosions, flooding, or crashes have been documented to have occurred within or immediately surrounding this building.

Un-Numbered Building

An un-numbered building exists on the site. It is reported to be a 2,500 square foot corrugated metal shed, with a concrete floor. This building is in good condition and is used to shelter a fire truck. The location of this building was not reported as part of the EBS. No other information concerning this building was available.

Open Space

The open space covers approximately 55 percent of the parcel. The ground surface of the open space is covered with asphalt roadways and concrete. It appears that the open space has always been vacant open space. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, electrical, fuel, industrial sewer lines, and overhead electrical lines.

EBS information indicates that the open space associated with this site has been used for parking for Building 14. No chemicals are documented to have been stored or used in the open space. No other incidents such as fires, explosions, flooding, or crashes have been documented to have occurred within the open space.

Underground Storage Tanks

Six inactive underground storage tanks are present at Parcel 137 (Tanks 14-1, 14-2, 14-3, 14-4, 14-5, and 14-6). The tanks were installed in 1940 and are located on the south and southwest sides of Building 14. Tanks 14-1, 14-2, 14-3, and 14-5 were used to store waste oil and have capacities of 10,000 gallons, each, except for Tank 14-5, which has a capacity of 600 gallons. Tank 14-4, a 1,000 gallon tank, stored oil. Tank 14-6, a 600 gallon steel tank, stored gasoline. These tanks are scheduled to be removed. Investigation of these former tanks has not been scheduled. These tanks have been identified as RCRA tanks based on their former use or contents (four of the six tanks were used to store waste oil). The presence of these tanks was identified from the EBS. These tanks are scheduled to be removed. Investigation of these former tanks has not been scheduled. The available information did not identify why the

tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because it they were leaking.

Parcel Boundary Conditions

Parcel 137 is bounded by Parcels 134, 135, 136 and 138. Parcel 135 is IR Site 7B (Building 162). Activities of concern on these adjacent parcels include the underground storage tanks on Parcel 138, and the potential USTs on Parcel 135. Parcel 137 is located approximately 250 feet to the southwest of Parcel 131 (IR Site 3 (Area 97)). However, the groundwater impacts appear to be migrating northwest from Parcel 131; therefore, this IR site appears to be of limited concern.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes three RCRA sites (GAP Sites 47 and 48, and Tanks 14-1 through 14-6). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Based on the criteria applied in this evaluation, only the tanks require further investigation. The GAP sites do not require sampling because they have either been removed, or no staining was noted at the GAP location. A brief description of each of the RCRA sites is provided below.

The tanks were identified as RCRA tanks based on their former contents and their inclusion in the RCRA Facility Investigation (RFI) for NAS Alameda. The tanks are scheduled to be removed. A description of the tanks is provided in the Underground Storage Tank subsection, above. The requirements for the RFI are described in detail in Section 8. At NAS Alameda, RCRA tank sites that would normally require an RFI will be investigated and remediated, if necessary, as part of the UST program.

GAP Site 47 is reported to have been a sump that stored lubrication and motor oil. It is unknown whether any chemicals were released from this site. GAP Site 47 has been removed.

GAP Site 48 is a drum storage area for lubrication and engine oil, solvents, and aerosol paints. It is unknown whether any chemicals were released from this site. GAP Site 48 is located at the easternmost end of the main hallway in Building 14. This site is currently active.

No staining or other evidence of spillage was observed to be associated with this GAP Site, therefore, no investigation is required.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-137-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 14. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-137-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 137 may be leased or transferred, as appropriate.

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-137-2

Summary of Data Gaps
NAS Alameda Parcel 137

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 11 (Engine Test Cells) is located on Parcel 137. Additional subsurface investigation relative to IR Site 11 is proposed by the IR contractor. • IR Site 3 (Area 97) is located approximately 250 feet northeast of Parcel 137. Evidence of groundwater migration from this parcel has been identified. Additional investigation relative to this area is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 14)

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-137-2

Summary of Data Gaps
NAS Alameda Parcel 137

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Six inactive USTs are present at this parcel (Tanks 14-1, 14-2, 14-3, 14-4, 14-5, and 14-6). The tanks were installed in 1940 and are located on the south and southwest sides of Building 14. These tanks are scheduled to be removed. Investigation of these former tanks has not been scheduled. These tanks have been identified as RCRA tanks based on their former contents. They have been included in the RFI.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of the parcel-specific target area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 14): This target area is defined as the areas of significant staining observed in the dyno buildup shop in the southwest corner (300 square foot stain), the main east/west hallway in front of Test Cells 2 and 3 (240 square foot stain), and Test Cells 6 (500 square foot stain), 11 (300 square foot stain), and 12 (600 square foot stain). These areas together will serve as a representative "worst case" scenario for the remainder of the building. The chemicals of concern in this target area include fuel, lubrication oils, and solvents. This target area is estimated to occupy approximately 2,500 square feet total and has been classified as having a potential likelihood of impact. Samples to be collected in this Target Area are listed in Table 6-137-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). Table 6-137-1 summarizes the screening-level sampling and analysis recommended for the target area on Parcel 137. Five surface soil samples and three subsurface soil samples will be collected from the locations shown on Figure 6-137-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Due to the scattered nature of the target area, the recommended sampling at Target Area 1 results in a sampling density which slightly greater than the protocol standard as stated in Table 3-1. The surface sample locations coincide with areas of significant staining as observed during the site inspection. In Test Cells 6 and 11, a subsurface soil sample will also be collected beneath the building floor.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). The samples should be located in the areas with the most significant staining.

Table 6-136-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 136. Two subsurface soil samples and two surface soil samples will be collected from the locations shown on Figure 6-136-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-138

PARCEL 138 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 138 at NAS Alameda (Figure 6-138-1). The parcel, which is located in the southeastern portion of the base, is approximately five acres in size and is roughly triangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. This RCRA site has been identified in the Part B Permit as requiring an RFI. One zone-wide and two parcel-specific target investigation areas (target areas) have been identified on this parcel. The sampling procedures called for in the screening-level investigation in these areas are surface soil sampling and subsurface soil sampling . Table 6-138-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 138, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 138, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 131, 135, 136, 137, and 200. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing,

hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 180) covers approximately one percent of the parcel. The remaining 99 percent is open space. A portion of the open space in this parcel is part of a larger open space designated as Area 37 which is shared between Parcels 138, 139, and 140. The fuel storage region of Area 37 is located within this parcel. The open space area of Parcel 138 is presently in use for fuel and material storage. Structures present within this open space include a guard shack, a storage shed, and an aviation fuel storage structure (Structure 598). Three buildings (Buildings 105, 106, and 296) were formerly located on the parcel and have since been demolished. Railroad tracks are present at this parcel. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-138-1.

Parcel 138 is located less than 100 feet east of Installation Restoration (IR) Program Site 17 (Seaplane Lagoon) and immediately south of IR Site 11 (Building 14). No previous investigations have been conducted at Parcel 138, and specific data regarding chemical occurrence at this parcel are not available.

Lead based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 180

Based on aerial photographs, Building 180 was constructed prior to March 1958. This building has always served as a pumping station and office space. The building is in moderately good condition. Building 180 is constructed of wood framing with corrugated steel siding and roofing. It has a concrete floor and covers approximately 200 square

feet. The space occupied by Building 180 was formerly open space used as a staging area. Utilities located within and immediately surrounding Building 180 include sanitary sewer, storm sewer, steam, water, electrical, and fuel lines.

Information collected during the EBS indicates that activities conducted within this building included diesel fuel and motor fuel (MOGAS) storage. These chemicals were stored in Building 180 for at least the past 20 years. A flammable cabinet is located within this structure with a maximum capacity of 14 quarts of fuel samples.

Available documents do not indicate that Building 180 is equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents, such as fires, mishaps, flooding, or crashes are documented to have occurred within Building 180.

Open Space I (Area 37 Fuel Storage Area)

Open Space I is the fenced fuel storage area associated with Area 37. This area was constructed in 1941 and has been used as a fuel and chemical storage area since that time. This area covers approximately 110,000 square feet. This area is paved with asphalt and is in fair condition. Utilities located within and immediately surrounding Open Space I include underground sanitary sewer, storm sewer, steam, water, electrical, and fuel lines.

An air quality permit was issued for this open space. The permit encompassed the following structures and associated activities: aboveground tanks, underground tanks, a gasoline loading rack, a fixed roof tank, and a truck loading stand.

Information collected during the EBS indicates that activities conducted within this area included significant fuel and chemical storage, particularly along the western fence line of Area 37. Storage of hazardous materials (primarily paints, solvents, and oils) has occurred in this area primarily along the western fence line. These materials were stored in lockers and drums. Between October 1992 and October 1993, pesticides (20 gallons of Round-up, 60 pounds of Krovar 1, and 30 pounds of Amizole) were documented to have been stored and possibly used in this open space area. Storage tanks for JP-5, diesel fuel, and oily wastewater were observed during the site inspection in this part of Area 37.

Aviation fuel, miscellaneous liquids, contaminated fuel, lubricants, aircraft ready fuel, and vehicle ready fuel are documented to have been stored throughout this open space, primarily in underground storage

tanks. The estimated capacity of the underground tanks in this area for petroleum products is up to 1,500,000 gallons. Two 55-gallon drums of motor oil and several containers of lubricating oil were noted on wooden pallets during site inspection.

Hazardous waste materials have also been stored in this open space. Non-halogenated organics, halogenated organics, beryllium, and mercury were stored in quantities up to 22,000 gallons. Non-halogenated organics are reported to have been held in a 10,000 gallon storage tank. Past and present methods of chemical disposal in this area are unknown.

An aircraft fuel storage area (Structure 598) is located in this open area. Structure 598 is secondary containment that houses three aboveground storage tanks each with a capacity of 25,000 gallons. These aboveground tanks are currently empty and are to be converted for storage of diesel fuel and oily wastes. A permit application to make this a hazardous waste storage facility is currently being reviewed. This structure is addressed by Target Area 1.

A documented spill of JP-5 fuel occurred in 1983 in the northwest portion of Area 37. A significant amount was spilled onto asphalt creating a ten foot by ten foot stain. Cleanup measures involved the excavation of contaminated soil. Another documented spill in this area resulted in a minor three foot by three foot black stain. The releases were associated with the dispensing of petroleum products. No drip pans were apparent in the vicinity of the dispensing area. Review of aerial photographs and site inspection data indicates that undocumented spills may also have occurred.

Open Space II

This open space covers all parcel areas other than Open Space I. This area is mostly paved (approximately 60 percent paved with asphalt, 30 percent paved with concrete) but contains some areas of bare soil and grass (approximately 10 percent). The paved areas are in fair condition. Utilities located within and immediately surrounding this open space include sanitary sewer, storm sewer, telephone, steam, water, electrical, fuel, industrial sewer lines, and overhead electrical lines. Both AVGAS and regular fuel lines were located in this open space. Both types of fuel lines are now abandoned and reportedly water filled. The lines have not been integrity tested. The aviation gas lines run underneath the railroad tracks which are located along the southeastern side of the parcel.

Former Building 105 was located on the western edge of Open Space II. It was constructed in 1939 and had concrete floors and pilings. The building was approximately 35,000 square feet in size. This building served as a warehouse until it was demolished in 1975. The area formerly occupied by Building 105 is currently open space. This building functioned as an air cargo terminal and included activities associated with loading docks and materials handling and storage. Available documents do not contain information regarding the specific activities conducted or chemicals stored in former Building 105.

Former Building 106 was located on the western side of Open Space II. It was constructed in 1939 and served as a temporary air terminal and a fleet air intelligence support center. It was a temporary structure that covered approximately 21,000 square feet. Based on aerial photographs, this building was demolished prior to 1963. The space occupied by Building 106 is currently open space. It is unknown whether any chemicals were stored in former Building 106.

Former Buildings 296 was constructed in 1945 and served as a bus station. It was a temporary structure that covered approximately 1,000 square feet. It is unclear, based on aerial photographs and documentation, when this building was demolished. The space occupied by Building 296 is currently open space.

A storage area in use for holding decommissioned floating oil/water separators ("donuts") prior to their final disposal is located in this open space. These separators were used to treat bilge water off-loaded from navy ships. When in use, these separators float along the pier next to the ship they are serving. Two separators were stored in this area at the time of the site inspection. The donut decommissioning area will be investigated by Target Area 2.

Activities conducted within Open Space II included storage of fuel and various hazardous materials (solvents and oils). Minor staining from vehicle parking is present throughout the area.

Underground Storage Tanks

Twenty-two underground storage tanks (USTs) are located at this parcel. All of these tanks are located in the fuel storage region of Area 37, except Tanks 37-13, 37-14, 37-15, and 37-16, which are located in Open Space II (in the southwestern portion of the open space). All of these tanks at the parcel were installed in 1941. The approximate location of these tanks are shown in Figure 6-138-1. The locations shown in Figure 6-138-1 have been determined from the site inspection and are more accurate than the locations illustrated on the NAS

Alameda Impediment Map with Tanks and IR Sites. Twenty of the 22 tanks have capacities of 25,000 gallons each. Seven of these tanks are abandoned (Tanks 37-1, 37-3, 37-4, 37-13, 37-14, 37-15, and 37-16). Eight of these tanks are active (37-5, 37-6, 37-7, 37-8, 37-21, 37-22, 37-23, and 37-24). The other five of these 20 tanks are empty, but are not considered abandoned, and scheduled for closure (Tanks 37-2, 37-9, 37-10, 37-11, and 37-12). Two of the 22 tanks (Tanks 374-1 and 374-2) are located in Area 374 in this parcel and have capacities of 550,000 gallons each.

All of the tanks on this parcel are currently scheduled for removal or closure (tank removals are being performed by PWC). The tanks have been used to store JP-5, aviation gasoline, fuels, solvents, diesel, heavy oils, and combustible liquid wastes. The available information did not identify why the abandoned tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. These tanks are identified in combination as RCRA Site SWMU/UST-7. Investigation and necessary remediation will be accomplished under the UST program.

Six other tanks may be located at this parcel. No other information is available regarding these six tanks.

Parcel Boundary Conditions

Parcel 138 is bounded by Parcels 136 and 137 to the north, 140 and 139 to the southeast, and 155 to the west. Activities of concern on these adjacent parcels include storage of hazardous materials and wastes. An incinerator was located on Parcel 139 and may pose a concern to Parcel 138.

Parcel 138 is contiguous with Parcel 134 with contains IR Site 11 (Building 14). Four borings, three monitoring wells, and two CPT/HydroPunch locations are proposed along the northern boarder of Parcel 138. These activities are part of the continuing investigations at IR Site 11. Parcel 138 is located within 100 feet of IR Site 17, which is the seaplane lagoon. If the continuing investigations at either of these two IR sites reveal a cause for concern at Parcel 138, then additional sampling on this parcel may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on this parcel, consistent with objectives described in

Section 1 of the Shell Workplan. This parcel includes two RCRA sites (site numbers SWMU/Unknown and SWMU/UST-7). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, both sites require further investigation. The tanks are being addressed as part of the UST program. They are scheduled to be removed or closed, and any necessary investigation will be implemented as part of the UST program. SWMU/GAP 37 is part of the RFI that includes the tanks in and encompasses Area 37. This site is also addressed by Target Area 1. A brief description of the two RCRA sites is provided below.

SWMU/Unknown is a GAP site located in Area 37. One source identifies this site as GAP 37. SWMU/GAP 37 is a covered 22 by 15 foot container storage area that is surrounded by an 8-inch concrete berM. The storage capacity of this site is 22,000 gallons. The chemicals of concern associated with this site include waste flammable liquids, beryllium, mercury, and spent solvents including toluene, MEK, TCA, and methylene chloride. This site has not been used for storage of hazardous waste for a number of years.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 138, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-138-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 138 because no industrial buildings are present.

As noted earlier, Parcel 138 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 138.

Once the data gaps in Table 6-138-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 138 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 17. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Structure 598/GAP 37): This target area encompasses Structure 598 and the associated surrounding area. This target area is established to addresses the possible presence of compounds of concern associated with fuel and hazardous waste storage and release. The size of this target area is approximately 2,500 square feet. Compounds of concern within this target area include VOCs, TPH and metals. The likelihood environmental impacts having occurred in this target area is classified as potential.

- Target Area 2 (Open Space II): This target area encompasses the donut decommissioning area. This target area is established to addresses the possible presence of compounds of concern associated with potential releases of fuel and waste oil during cleaning of the donuts. The size of this target area is approximately 2,000 square feet. Compounds of concern within this target area include SVOCs, TPH and metals. The likelihood environmental impacts having occurred in this target area is classified as potential.

- Zone 17 Target Area 1 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Engine Testing and Hazardous Materials Storage Zone. Railroad tracks are located in the western portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. Eight of the fifteen surface soil samples for this zone target area are located on this parcel. Two of the three proposed confirmation samples are also located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-138-1. The approximate sampling locations are shown on Figure 6-138-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14) are the screening-level investigation techniques that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-138-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 138. Fourteen surface soil samples and two subsurface GeoProbe samples will be collected from the locations shown on Figure 6-138-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The site-specific conditions at Target Area 1 result in a density of field surface soil samples less than the protocol standard stated in Table 3-1. The sample density is below the standard because of the large size of the target area. Efforts should be made to ensure that samples are taken at locations of staining beside storage containers, tanks, drums, or lockers.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

TABLE 6-138-1

Summary of Recommended Samples
NAS Alameda Parcel 138

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
138-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals, Solvents	TPH, Metals	Modified EPA 8015, ICAP Scan
138-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals, Solvents	TPH, Metals	Modified 8015, CLP RAS
138-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Waste Oil, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
138-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Waste Oil, Metals, Solvents	VOCs, Metals, TPH	CLP RAS, Modified EPA 8015
138-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Waste Oil, Metals	Metals, TPH	ICAP Scan, Modified EPA 8015
138-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Waste Oil, Metals, Solvents	VOCs, Metals, TPH	EPA 8240, ICAP Scan, Modified EPA 8015
138-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	Metals, SVOCs, TPH	ICAP Scan, EPA 8270, Modified EPA 8015
138-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	Metals, SVOCs, TPH	ICAP Scan, EPA 8270, Modified EPA 8015
138-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	Metals, SVOCs, TPH	ICAP Scan, EPA 8270, Modified EPA 8015
138-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	TPH, Metals, SVOCs	Modified EPA 8015, CLP RAS
138-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Waste Oil	Metals, SVOCs, TPH	ICAP Scan, EPA 8270, Modified EPA 8015
Z17-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan

TABLE 6-138-1

Summary of Recommended Samples
NAS Alameda Parcel 138

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z17-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-10-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Fuels, Oils, PCBs	TPH, PCBs, Lead, SVOCS	Modified 8015, CLP RAS
Z17-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Creosote, Tie Tar, Oils, PCBs	SVOCs, PCBs, TPH, Lead	EPA 8270, EPA 8080, Mod. EPA 8015, ICAP Scan
Z17-13-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 17 Target Area 1	Fuels, Oils, PCBs	TPH, PCBs, Lead, SVOCs	Modified 8015, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

TABLE 6-138-2

Summary of Data Gaps
NAS Alameda Parcel 138

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 138.
Installation Restoration (IR) Sites	• Parcel 138 is located less than 100 feet east of Installation Restoration (IR) Program Site 17 (Seaplane Lagoon) and immediately south of IR Site 11 (Building 14).
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• Target Area 1 (Structure 598/GAP 37)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.
[1] Note: These data gaps are disclosure issues, only.
[1] Note: These data gaps are disclosure issues, only.

TABLE 6-138-2

Summary of Data Gaps
NAS Alameda Parcel 138

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Twenty-two underground storage tanks (USTs) are located at this parcel. All of these tanks were installed in 1941. Twenty of these tanks have capacities of 25,000 gallons each. Seven of these tanks are abandoned, eight of these tanks are active, and five are empty, but not considered abandoned. All of these tanks are scheduled for removal and closure. Two tanks (Tanks 374-1 and 374-2) are located within this parcel in Area 374 and have capacities of 512,000 gallons each. These tanks are identified in combination as RCRA Site SWMU/UST-7. Six other tanks may be located at this parcel, but no further information is available regarding these tanks.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuels Lines	• Underground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-200

PARCEL 200 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 200 at NAS Alameda (Figure 6-200-1). The parcel, which is located in the southeast portion of the base, is 0.3 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 200, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 200, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 110, 111, 122, 123, 124, 125, 126, 127, 128, 131, 135, 136, 137, and 138. This parcel zone has been designated the Engine Testing and Hazardous Materials Storage Zone (Zone 17). The Engine Testing and Hazardous Materials Storage Zone encompasses the parcels that have been used as engine testing, hazardous materials storage, and support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide

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FIGURE 6-200-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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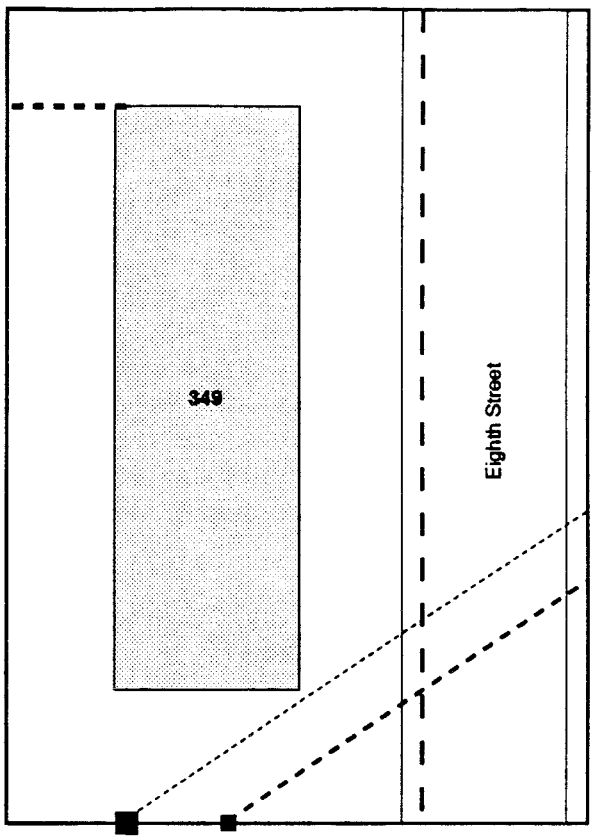

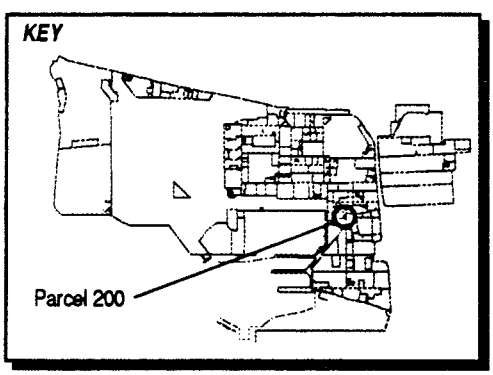

LEGEND

- Steam Line
- Fuel Lines In Use
- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: *No parcel specific sampling is required.*

1"= 30'

Figure 6-200-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 17.

Filling began in the area covered by this parcel in approximately 1930. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 349) covers approximately 30 percent of the parcel. The remaining 70 percent is open space. No buildings were formerly located on this parcel. This parcel contains a support facility for the nearby engine testing area. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-200-1.

Parcel 200 is located adjacent to two Installation Restoration (IR) Program sites (IR Sites 11 (Building 14) and 7B (Building 162)), and is less than 200 feet southwest of IR Site 3. No previous investigations have been conducted at Parcel 200, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 349

Building 349 was constructed in 1948 and served as an aircraft overhaul and repair and fuel system accessory building (Figure 6-200-1). This building is in moderately good condition. Building 349 is constructed of metal with a concrete floor and covers approximately 4,000 square feet. Information collected during the EBS indicates that Building 349 has always been used as an engine accessory building. No known industrial processes have occurred in this building.

Utilities located within and immediately surrounding Building 349 include steam, sanitary sewer, storm sewer, fuel, and industrial sewer lines. Air quality permits for this building were issued for solvent use.

Non-halogenated organics and lubricants are documented to have been stored in drums and cabinets throughout the building. Approximately 500 gallons of non-halogenated organics were stored in Building 349.

The disposal method for used chemicals and wastes is unknown. No documented incidents of spills or staining have occurred in this area.

Building 349 is equipped with a heating-ventilation-air conditioning (HVAC) system. ACM may be present at this building, as insulation on piping was wrapped and transite was encapsulated. No incidents including fires, mishaps, flooding, or crashes are documented to have occurred within Building 349.

Open Space

The open space covers approximately 70 percent of the parcel. This open space is not used for any particular purpose. The ground surface of open space is completely paved with concrete. The pavement is generally in fair condition.

Structures located within the open space include an oil-filled transformer. Utilities located within and immediately surrounding the open space include steam, sanitary sewer, storm sewer, fuel, and industrial sewer lines.

EBS information indicates that this open space has remained the same since its construction. No known industrial processes have occurred in the open space. No documented chemical storage or use has occurred on this open space. However, small stains have been identified between a transformer platform and a storm drain.

No other incidents, including fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 200 is bounded by Parcels 134, 135, and 137. Parcels 135 and 137 are IR Sites 162 and 137. Activities of concern on these adjacent parcels include former storage of large quantities of aviation gasoline on Parcel 131 (IR Site 3), use of Building 14 (IR Site 11) for engine testing, and the former service station at Parcel 135 (IR Site 7B). Other light industrial activities may also be a concern.

No sampling is called for in this PEP in response to the three nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 200, then additional sampling on Parcel 200 may be appropriate.

RCRA Sites

No RCRA sites are located at this parcel

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 200, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-200-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category.

As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 200 because no industrial buildings are present. Once the data gaps in Table 6-200-2 are addressed, Parcel 200 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified that affect this parcel. However,

TABLE 6-200-1

Summary of Data Gaps
NAS Alameda Parcel 200

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 200.
Installation Restoration (IR) Sites	• Parcel 200 is located adjacent to two Installation Restoration (IR) Program sites (IR Sites 11 (Building 14) and 7B (Building 162)), and is less than 200 feet southwest of IR Site 3.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-200-1

Summary of Data Gaps
NAS Alameda Parcel 200

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer, storm sewer, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and potential impacts of the nearby and adjacent IR sites must be resolved before this parcel can be reclassified to another BRAC category, leased, or transferred.

SECTION 6-Z18

ZONE 18 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 18 at NAS Alameda (Figure 6-Z181-1). Zone 18 has been designated the Dock Zone and encompasses the parcels that are associated with boat docks and slips. Zone 18 is comprised of Parcels 155, 156, 157, and 158. During the sampling program development, the parcels located in this zone were evaluated together. No zone-wide target investigation areas (target areas) and two parcel-specific target areas have been identified in this zone; however no sampling has been proposed in Zone 18. Three of the parcels in this zone have been reclassified from BRAC Category 7. Parcels 156 and 158 have been reclassified to BRAC Category 2, and Parcel 157 has been reclassified to BRAC Category 3. These reclassifications have been proposed pending RASO concurrence.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 18, historical activities are discussed below.

Zone 18 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 18 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

was deemed necessary to delineate potential impacts of compounds of concern.

Zone 18, the Dock Zone encompasses four parcels that are associated with the pier and wharf area to the east of the former Seaplane Lagoon. During the evaluation program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of parcel-specific concerns is provided in the PEPs for individual parcels.

Prior to 1930, the zone was completely inundated by the San Francisco Bay. The northern portion of Zone 18 including Parcels 156, 157, 158, and the northern portion of Parcel 155 came into existence during the construction of Pier 1, which occurred between 1930 and 1939. The southern portion of the zone came into existence during the construction of Piers 2 and 3, which occurred between 1942 and 1946. The northern section of the zone is the shoreline, which has rip rap as its western border. The southern portion of the zone is composed entirely of a concrete pier area, which is underlain by the San Francisco Bay.

Currently, six buildings cover approximately five percent of the zone. The remaining 95 percent is open space. The zone area is presently in use for waterfront operations. One building was formerly located on the parcel and has since been demolished.

Zone 18 is located east of and adjacent to an Installation Restoration (IR) Program site (IR Site 17, Former Seaplane Lagoon). Zone 18 is also located approximately 300 feet west of two IR sites (IR Sites 11 - Engine Test Facility and 7B - Service Station). No previous investigations have been conducted at Zone 18 and specific data regarding potential chemical occurrence are not available.

Fuel and sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 18 will be addressed in other sampling programs and are not considered in this ZAP. Potential radiological hazards may to be of concern at Parcel 155, based on a report from RASO indicating that a Strontium-90 spill occurred near Pier 3. Potentially asbestos-containing floor tiles and peeling paint were observed throughout Building 15 on Parcel 157.

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ALAMEDA POINT

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PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-Z18-1 – NAVAL AIR STATION, ALAMEDA
ZONE 18

FOR ADDITIONAL INFORMATION, CONTACT:

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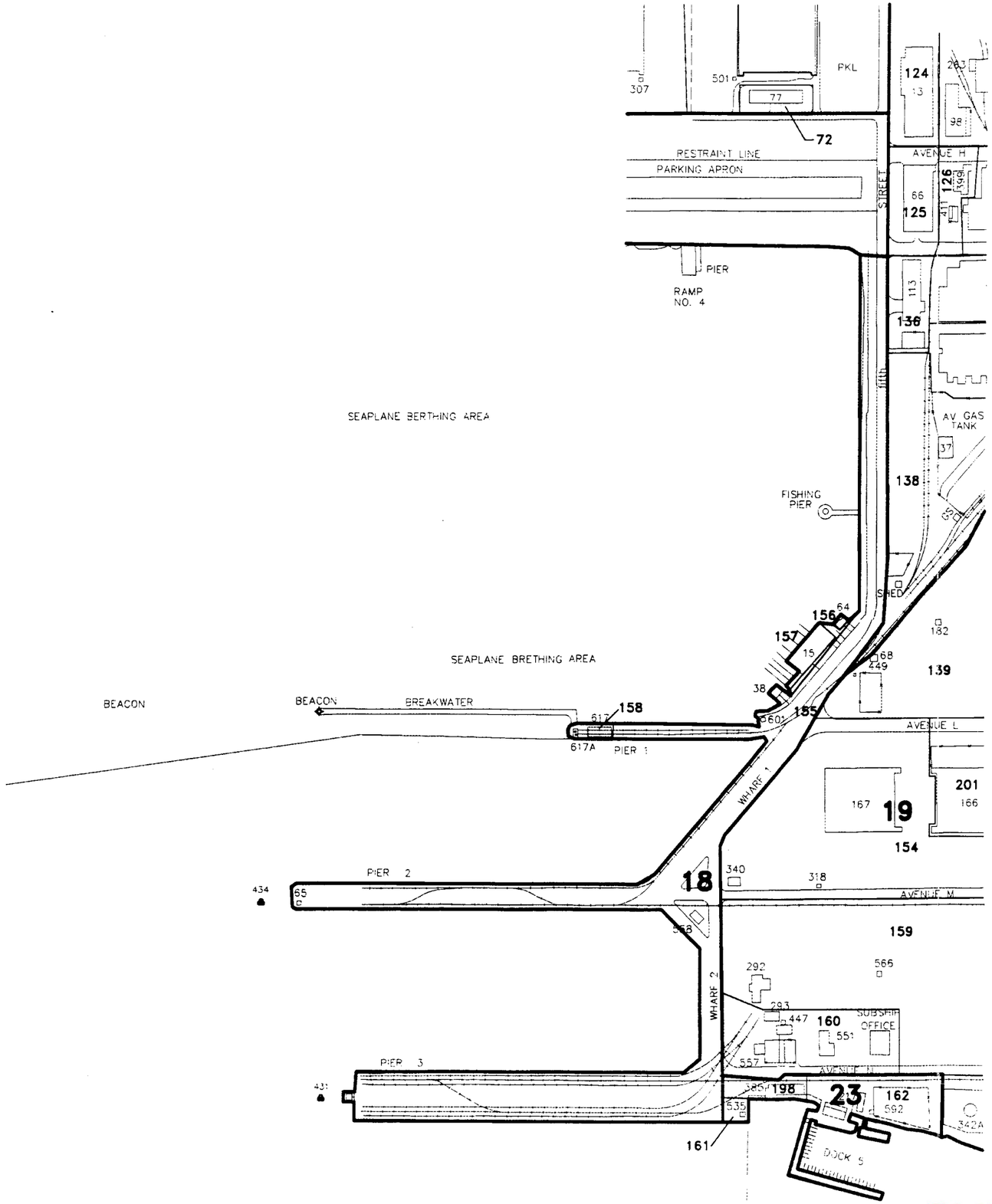
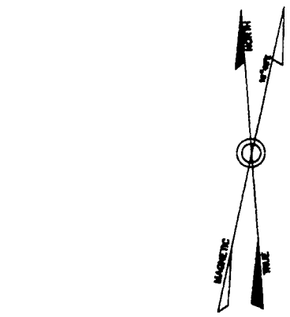
SENSITIVE





SCALE IN FEET

400 0 400 800

1" = 400'

LEGEND

ZONE BOUNDARY

NO SAMPLING IS PROPOSED FOR THIS ZONE

NOTE: FACILITIES AND/OR STRUCTURES SHOWN REFLECT THOSE ORIGINALLY PROVIDED TO ERM-WEST IN COMPUTER AIDED DESIGN (CAD) FORMAT AND MAY NOT BE CURRENT.

DRAFT
12-20-94

FIGURE 6-Z18-1

NAVAL FACILITIES ENGINEERING COMMAND
NAVAL AIR STATION, ALAMEDA
ZONE 18

SIZE	ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
F	2121618.DWG	PWC 17,627; 17,628; 17,630; 17,631; 17,627A; 17,629

SCALE: AS NOTED DATE: 12-20-94 SHEET 1 OF 1

SENSITIVE

Underground Storage Tanks

Three abandoned tanks (Tanks 15-1, 15-2, and 15-3) are present in this zone on Parcel 155. Investigation of these tanks has not been scheduled. The available information did not identify why the tanks were abandoned; however, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking. These tanks have been identified as RCRA tanks based on their inclusion in the RFI.

RCRA Sites

This zone includes three RCRA sites (Tanks 15-1, 15-2, and 15-3) on Parcel 155. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. These tanks are being addressed as part of the UST program. They are scheduled to be removed, and any necessary investigation will be implemented as part of the UST program. A brief description of each RCRA site is provided in the PEP for Parcel 155.

Zone Boundary Conditions

Zone 18 is bounded by Zone 4 to the north and Zones 17, 19, and 23 to the east. San Francisco Bay borders Zone 18 to the south and the Former Seaplane Lagoon IR Site borders Zone 18 to the west. Activities of concern on these adjacent zone include IR Sites 7B and 11 in Zone 17, a former incinerator in Zone 19 on Parcel 139, and aircraft activity and maintenance in Zones 4 and 23.

Zone Target Areas and Compounds of Concern

This zone contains no zone-wide target areas and two parcel-specific target areas. This subsection of the ZAP provides an overview of the parcel-specific target areas. No sampling has been proposed for this zone. Detailed information regarding the parcel-specific target areas is provided in the PEPs for individual parcels.

Parcels 156, 157, and 158 Target Areas

No parcel-specific target areas were identified on these parcels.

Parcel 155 Target Areas

Two parcel-specific target areas were identified for Parcel 155 as indicated below. No sampling has been proposed for Parcel 155; however; surface soil samples will be collected from adjacent Parcel 138. Table 6-138-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 155.

- Target Area 1 (Fifth Street, Border of Parcel 138): Surface soil samples will be collected from Parcel 138 at the border of Parcel 155. Samples to be collected in Parcel 138 at the border with Parcel 155 are listed in Table 6-138-1. The soil beneath Fifth Avenue on Parcel 155 may have been impacted by spills or leakage of petroleum products stored in Tanks 37-13, 37-14, 37-15, and 37-16, and from two oil/water separators on Parcel 138. This target area covers approximately 125,000 square feet and has been classified as having a potential likelihood of impacts.

- Target Area 2 (Railroad Tracks): This target area includes all current railroad tracks within Parcel 155. Railroad track are located along Wharf 1, Pier 2, and Pier 3. These areas below the tracks may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines; however, the wharves and piers are built on pilings. Sediments affected by the presence of the railroad tracks will be investigated as part of the Seaplane Lagoon IR Site.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, impacts of the nearby and adjacent IR sites, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) on adjacent Zone 17 is the screening-level investigation technique that will be used to assess conditions in the target areas on Zone 18 and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-155

PARCEL 155 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 155 at NAS Alameda (Figure 6-155-1). The parcel is located in the southern portion of the base, is less than one-fifth of an acre in size, and is fork-shaped. The parcel requires a low level sampling effort to meet the objectives outlined in Section 1 of the Shell Workplan. Three RCRA sites are located at the parcel. These RCRA sites have been identified in the RCRA Facility Investigation (RFI). No zone-wide and two parcel-specific target investigation areas (target areas) have been identified on this parcel; however, no sampling has been proposed for this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 155, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 155, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with several other parcels (Parcels 156, 157, and 158). This parcel zone has been designated the Dock Zone. The Dock Zone encompasses the parcels that have boat docks and slips. During the sampling program development, the parcels located in this zone were considered together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

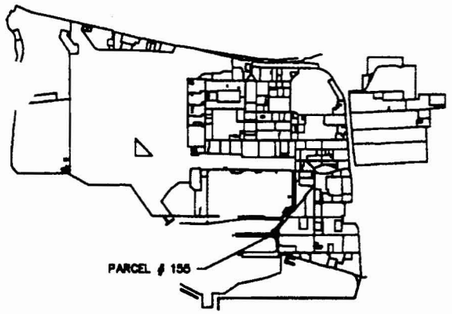
FIGURE 6-155-1 – PARCEL 155
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



KEY PLAN

GENERAL LEGEND

PARCEL OUTLINE

TARGET AREA AND NUMBER

FUEL LINE LEGEND

FUEL LINES IN USE

FUEL LINES ABANDONED

ABANDONED FUEL STORAGE TANK

SANITARY SEWER LINE LEGEND

SANITARY SEWER MANHOLE & No.

CATCH BASIN

SANITARY SEWER LINE

LIFT STATION & No.

HOSE CONNECTION STATION & No.

MATERIALS:

C.I. – CAST IRON
D.I. – DUCTILE IRON
PVC – POLYVINYL CHLORIDE

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STORM DRAIN LEGEND

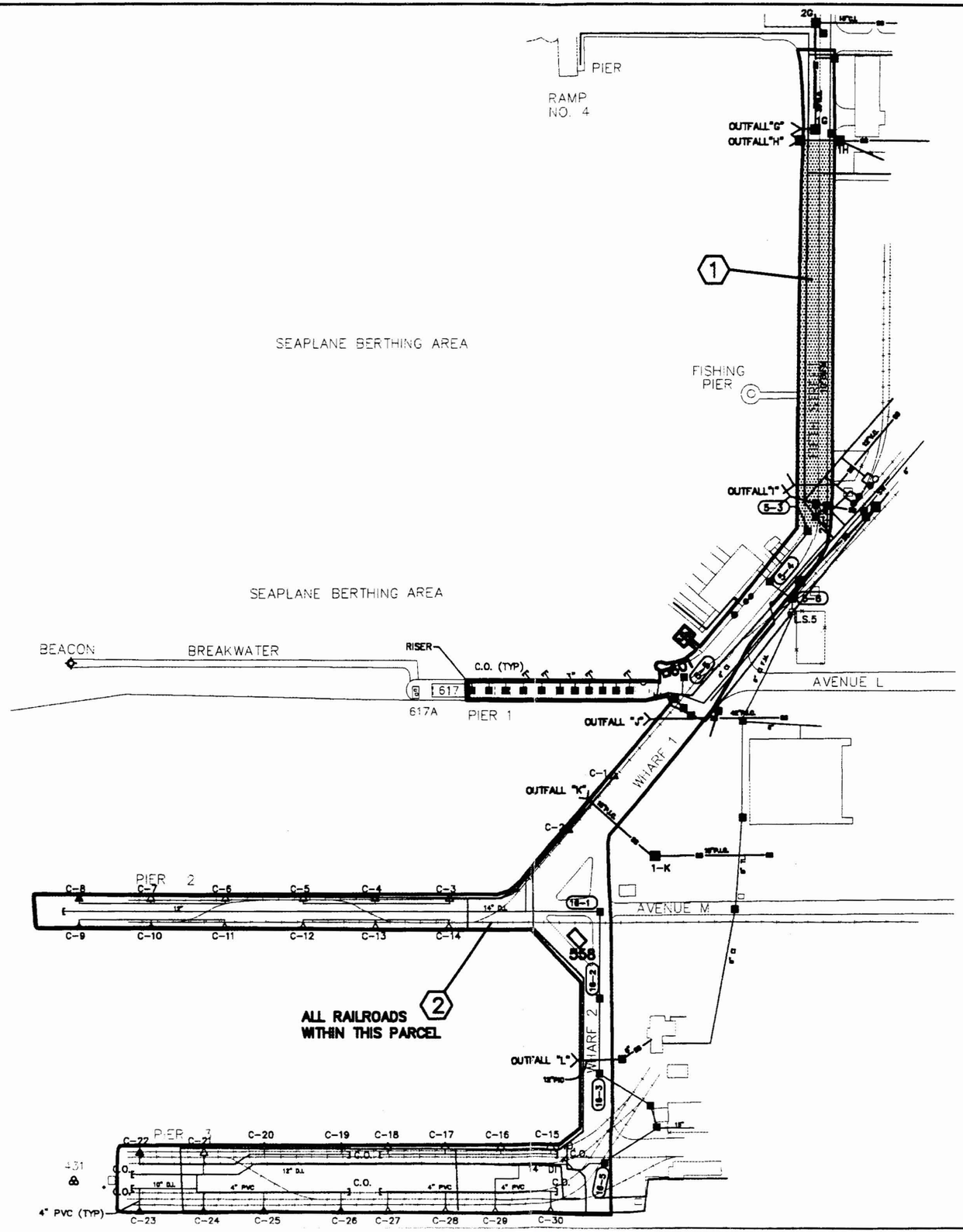
MANHOLE & No.

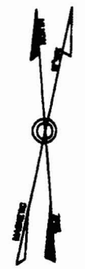
CATCH BASIN

STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE
V.C. – VITRIFIED CLAY
P.I.C. – PAVED INVERT CORREGATED METAL





SCALE IN FEET

300 0 300 600 900

1" = 300'

NOTE:

NO SAMPLING IS PROPOSED FOR THIS PARCEL

NAVAL AIR STATION, ALAMEDA

FIGURE 6-155-1
PARCEL 155
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590155.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 12.13.94/2121.96.45 SHEET 1 OF 1

SENSITIVE

Prior to 1930, the parcel area was completely inundated by the San Francisco Bay. The northern section of the parcel came into existence during the construction of Pier 1, which occurred between 1930 and 1939. The southern section of the parcel came into existence during the construction of Piers 2 and 3, which occurred between 1942 and 1946. The northern section of the parcel is part of the NAS Alameda shoreline and has rip rap as its western border. The southern portion of the parcel is composed entirely of a concrete pier area, which is underlain by the San Francisco Bay.

Currently, three buildings (Building 601, Storage Building and Former Oil Spill Cleanup Facility; Building 558, Substation #14; and Building 38, Port Services Chemical Storage) cover approximately one percent of the parcel. The remaining 99 percent is open space. The parcel area is presently in use as a wharf and pier area. Building 65 was formerly located on the parcel and has since been demolished. The use of this former building is unknown. Fuel and sewer lines are present at this parcel and are shown in Figure 6-155-1.

Parcel 155 is located east of and adjacent to an Installation Restoration (IR) Program site (IR Site 17, Former Seaplane Lagoon). Parcel 155 is also located approximately 300 feet west of two IR sites (IR Sites 11 - Engine Test Facility and 7B - Service Station). No previous investigations have been conducted at Parcel 155 and specific data regarding potential chemical occurrence are not available.

It is recommended that any parcel-specific sampling data collected be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 38

Building 38 was constructed prior to 1947 and serves as a fuel storage shack (Figure 6-155-1). This building is in fair condition. Building 38 is a one story building. It is constructed of corrugated metal with a

concrete floor on pier pilings and has a corrugated metal roof. Building 38 covers approximately 1,000 square feet. The space occupied by Building 38 was formerly open water. Utilities located within and immediately surrounding Building 38 include underground sanitary sewer and storm sewer lines.

Information collected during the EBS indicates that activities conducted within this building consisted of fuel storage. Approximately 440 gallons (combined total) of hydraulic fluid, lubricating oil, and gasoline are stored in Building 38. The fuel and petroleum products are used in the boats docked next to this building. The excess is normally stored in a Building 38 or sent to a central collection point.

Site inspection data indicates that undocumented spills have occurred at inside Building 38. These spills appear to be fuel-like in origin, and to have involved a relatively minor quantity of released material. The staining covers the building floor.

Building 38 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 38.

Building 558

Building 558 was constructed in the early 1970s and served as electrical substation 14 (Figure 6-155-1). This building is in good condition. Building 558 is a one-story building, is constructed of concrete walls and floor, and a corrugated metal roof. This building covers approximately 1,000 square feet. The space occupied by Building 558 was formerly open water. Utilities located within and immediately surrounding Building 558 include underground electrical lines.

Information collected during the EBS indicates that activities conducted within this building were consistent with typical electrical substation operations. No oil-filled devices, only dry-type circuit breakers are present at this substation. A transformer compound is associated with this substation; it is located across Fifth Street, east of Building 558 at the eastern boundary of Parcel 155. The condition of the transformer compound is unknown.

No chemicals are documented to have been stored or used in Building 558. No spills have been documented in Building 558. During a visual inspection, non-PCB fluid was observed leaking from capacitors in the transformer compound.

Building 601

Building 601 is a small (1,000 square foot) corrugated metal shed with a concrete floor. It was constructed around 1980 as a SOREX oil-water separator. It was shut down due to improper operation and it is currently a storage facility for Port Services. Waste oil stains still exist on the concrete floor. No chemical are stored at this facility.

Building 65 (Demolished)

Building 65 was formerly located in this parcel. It housed a substation and was demolished around 1975. Building 65 covered approximately 2,100 square feet.

Open Space

The parcel consists of Piers 1, 2, and 3, Wharves 1 and 2, and Fifth Street. The parcel is 95 percent open space. All piers and wharves are underlain by San Francisco Bay. Structures located within the open space include railroad tracks, and utility hook-ups for ported ships (Figure 6-155-1). These structures were constructed in 1946. The ground surface is 100 percent paved. Approximately 15 percent of the paved area is surfaced with asphalt and 85 percent is concrete. The pavement is generally in good condition.

Utilities located within and immediately surrounding the parcel include underground electrical, water, steam, storm sewer, sanitary sewer, and fuel lines. The open space is presently in use as a dock area and vehicle parking area. Railroad tracks run east to west through Piers 2 and 3. Pier 1 was replaced between 1989 and 1993 and the railroad tracks were removed during reconstruction. Oils and solvents (halogenated and non-halogenated organic compounds) are documented to have been used on the piers.

Several fuel spills have been documented at Piers 1, 2, and 3 on Parcel 155. The largest spill was 2,000 gallons of oil from Pier 3; this spill occurred in August of 1990. In addition, Area 37 on Parcel 138 is located to the east of Parcel 155. Mr. Duane Balch of PRC reported that his interview with a former fuel farm employee discussed standard operating procedures for Area 37. The employee reportedly stated that excess fuel was released from Area 37, and flowed westward to the Seaplane Lagoon across Parcel 155.

Potential radiological hazards may to be of concern at Parcel 155, based on a report from RASO indicating a Strontium-90 spill occurred near

Pier 3. No other incidents are documented to have occurred within Parcel 155.

Underground Storage Tanks

Three abandoned underground storage tanks are present at this parcel (Tanks 15-1, 15-2, and 15-3). These tanks are located to the west of Building 15. It is unknown when these tanks were installed. Tank 15-1 stored diesel fuel; however it is unknown what materials were stored in Tanks 15-2 and 15-3. Tank 15-1 is currently empty and Tanks 15-2 and 15-3 are currently filled with sand. Tank 15-1 reportedly failed a tank test on October 21, 1991; however it passed the line test. These three tanks have a capacity of 2,000 gallons each. The presence of these tanks were identified in the RCRA Facility Investigation (RFI). They are scheduled to be removed. The available information did not identify why the tanks were abandoned; however, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking.

Parcel Boundary Conditions

Parcel 155 is bounded by Parcels 23, 156, 257, 158, 161, 198, 160, 159, 154, 139, 138, 136, and 125. As Parcel 155 is primarily a concrete pier, with the exception of the northern most section, it is unlikely that releases to the pier on the parcel will have had a lasting impact on the parcel. The sediments underneath the piers will be addressed as part of the former Seaplane Lagoon IR Site. In the northern portion of the parcel, potential impacts exist due to the presence of four 25,000 gallon USTs (Tanks 37-13, 37-14, 37-15, and 37-16) located in Parcel 138 at the eastern boundary of Parcel 155.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with these sites on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes three RCRA sites (Tank 15-1, 15-2, and 15-3). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. These tanks are being addressed as part of the UST program. They are scheduled to be removed, and any necessary investigation will be implemented as part of the UST program. A brief description of the three RCRA sites is provided below.

These tanks were identified as RCRA tanks based on their inclusion in the RFI. A description of the tank is provided in the Underground Storage Tank subsection above. Tank 15-1 failed a tank test on October 21, 1991; however, it passed the line test.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 155, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-155-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Buildings 38 and 601. The one-time compliance program will determine whether further sampling or cleanup measures are required within these buildings before transfer or lease can occur.

Once the data gaps in Table 6-155-1 are addressed Parcel 155 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and no zone-wide target areas. This subsection of the PEP discusses specific parcel target areas. However, no sampling has been proposed for this parcel. The following parcel-specific target areas were identified based on the potential release areas described above

- Target Area 1 (Fifth Street, Border of Parcel 138): Surface soil samples will be collected from Parcel 138 at the border of Parcel 155. Samples to be collected in Parcel 138 at the border with Parcel 155 are listed in Table 6-138-1. The soil beneath Fifth Avenue on Parcel 155

TABLE 6-155-1

Summary of Data Gaps
NAS Alameda Parcel 155

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located adjacent to Parcel 155. No investigation at Parcel 155 relative to IR Site 17 is proposed by the IR contractor. • IR Site 11 (Engine Test Facility) and IR Site 7B - Service Station are located approximately 300 feet east of Parcel 155. No subsurface investigation at Parcel 155 relative to IR Site 11 or 7B is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Area 37 on Parcel 138 contains four 25,000 gallons USTs at the eastern border of Parcel 155. Employee interviews indicate that excess fuel was released westward toward the Seaplane Lagoon.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Fifth Street, Border of Parcel 138. • Railroad Tracks.

TABLE 6-155-1

Summary of Data Gaps
NAS Alameda Parcel 155

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Three USTs currently exist at Parcel 155. Tank 15-1 is empty and Tanks 15-2 and 15-3 are inactive. All three tanks are scheduled to be removed.
Underground Utilities	• Fuel, storm sewer, sanitary sewer, steam, electrical, and water lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

may have been impacted by spills or leakage of petroleum products stored in Tanks 37-13, 37-14, 37-15, and 37-16, and from two oil/water separators on Parcel 138. This target area covers approximately 125,000 square feet and has been classified as having a potential likelihood of impacts.

- Target Area 2 (Railroad Tracks): This target area includes all current railroad tracks within Parcel 155. Railroad track are located along Wharf 1, Pier 2, and Pier 3. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines; however, the wharves and piers are built on pilings. Sediments affected by the presence of the railroad tracks will be investigated as part of the Seaplane Lagoon IR Site.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, impacts of the nearby and adjacent IR sites, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) on adjacent Parcel 138 is the screening-level investigation technique that will be used to assess conditions in Target Area 1 on Parcel 155 and to identify areas on Parcel 155 itself that may require further sampling in the follow-up detailed evaluation phase. Table 6-138-1 summarizes the screening-level sampling and analysis recommended for Target Area 1 on Parcel 155. Sediment sampling will be required to address potential impacts to the Seaplane Lagoon. The sediment sampling and any sampling requirements are provided in the RI workplans for IR Site 17. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), environmental

air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-156

PARCEL 156 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 156 at NAS Alameda (Figure 6-156-1). The parcel, which is located in the southeastern portion of the base, is 2,000 square feet in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide or parcel-specific target investigation areas (target areas) have been identified on this parcel. To provide a basis for the proposed investigation of Parcel 156, historical activities are discussed below.

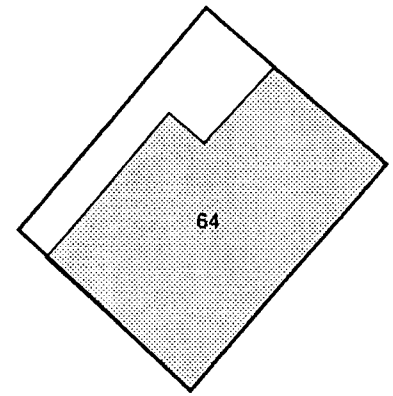
Background and Historical Activities

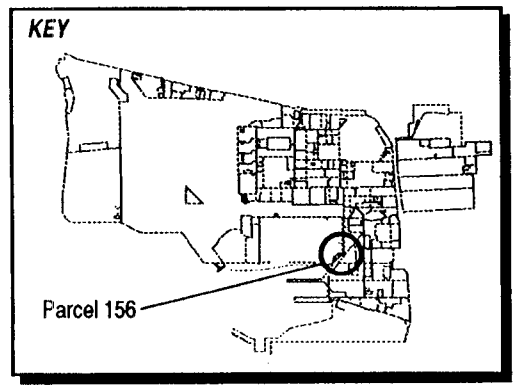
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 156, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with several other parcels (Parcels 155, 157, and 158). This parcel zone has been designated the Dock Zone. The Dock Zone encompasses the parcels that have boat docks and slips. During the sampling program development, the parcels located in this zone were considered together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone.

Prior to 1930, the parcel area was completely inundated by the San Francisco Bay. The parcel came into existence during the construction





1"= 30'

Figure 6- 156-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.12/DS/07.06.94

of Pier 1, which occurred between 1930 and 1939. The parcel is built on pier pilings and is underlain by the San Francisco Bay.

Currently, one building (Building 64) completely covers the parcel. The parcel area has always been used for waterfront operations.

Parcel 156 is located on the east side of an Installation Restoration (IR) Program site (IR Site 17, Former Seaplane Lagoon). No previous investigations have been conducted at Parcel 156, and specific data regarding chemical occurrence at this parcel are not available.

It is recommended that any parcel-specific sampling data collected be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, the background concentration may represent a more appropriate screening level than the concentration suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Building 64

Building 64 serves as the waterfront operations headquarters for the SIMA Divers (Figure 6-156-1). This building occupies a pier over the Seaplane Lagoon and is in fair condition. Building 64 is a two-story building, is constructed of concrete with a concrete floor and roof, and covers approximately 2,000 square feet. The space occupied by Building 64 was formerly open water. No utilities are located within or immediately surrounding Building 64.

Information collected during the EBS indicates that activities conducted within this building were restricted to waterfront operations. These waterfront operations conducted in the dock area on the west side of the building involve storage of scuba diving equipment, and powerboat docking and refueling. These processes typically involve the use or generation wastes, including petroleum products, and fuels. Waterfront operations have occurred within Building 64 from 1947 to the present.

Petroleum products, fuels, and scuba cleaning compounds are documented to have been used on the dock area of Building 64 during site inspection in May 1994. A total of approximately 73 gallons of

petroleum products, fuels, scuba cleaning compounds are stored in Building 64. Disposal of used chemicals is accomplished by sending the waste to a central collection area. Former disposal methods are unknown. No spills are documented on this parcel.

Building 64 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents such as mishaps or flooding are documented to have occurred within Building 64.

Open Space

This parcel is occupied completely by Building 64. Therefore, there is no open space in this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated any information that suggested that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 156 is bounded by Parcel 155 to the east, and the former Seaplane Lagoon (IR Site 17) to the north, south, and west. Activities of concern on this adjacent parcel include the presence of three USTs. Because Parcel 156 is built on pier pilings, it is unlikely that releases to the wharf on Parcel 155 will have an impact on the parcel.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 2. The only data gaps remaining pertain to disclosure issues (asbestos and lead-based paint) and radiological issues as indicated in Table 6-165-1. Based on its classification, if RASO concurrence is obtained, the parcel is considered suitable for lease or transfer. Although IR Site 17 is adjacent to this parcel, it does not impact the parcel (i.e. the sediments

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-156-1

Summary of Data Gaps
NAS Alameda Parcel 156

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 156.
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located adjacent to Parcel 156. No investigation at Parcel 156 relative to IR Site 17 is proposed by the IR contractor. IR Site 17 is not expected to impact Parcel 156.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No potentially PCB-containing electrical equipment identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• No evidence of underground utilities identified.

[1] Note: These items are disclosure issues only.

TABLE 6-156-1

Summary of Data Gaps
NAS Alameda Parcel 156

Data Gap	Status/Description
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

underlying this parcel are considered to be part of IR Site 17 and not part of the parcel area).

As indicated in Section 6, separate investigations are currently underway to address the remaining issues at this parcel: lead-based paint, asbestos, and radiological concerns.

SECTION 6-157

PARCEL 157 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 157 at NAS Alameda (Figure 6-157-1). The parcel, which is located in the southeastern portion of the base, is one third of an acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. To provide a basis for the proposed investigation of Parcel 157, historical activities are discussed below.

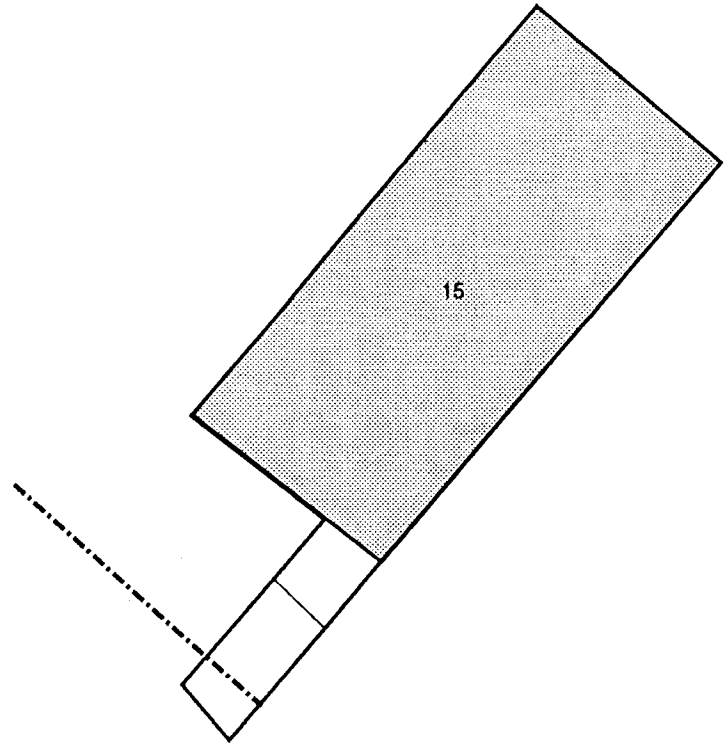
Background and Historical Activities

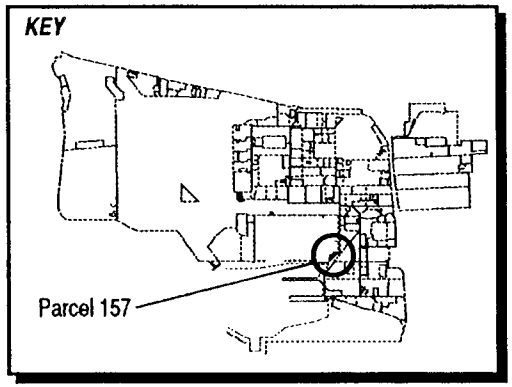
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 157, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

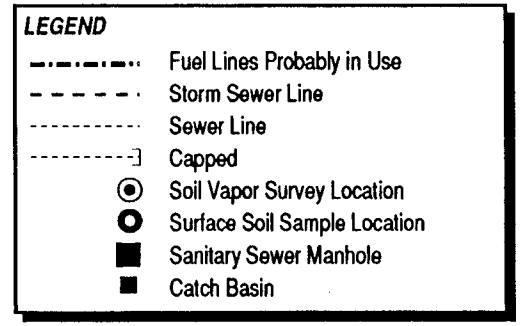
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with several other parcels (Parcels 155, 156, and 158). This parcel zone has been designated the Dock Zone. The Dock Zone encompasses the parcels that have boat docks and slips. During the sampling program development, the parcels located in this zone were considered together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone.

Prior to 1930, the parcel area was completely inundated by the San Francisco Bay. The parcel came into existence during the construction







1"= 60'

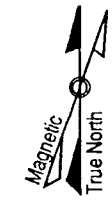


Figure 6- 157-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.11/DS/07.06.94

of Pier 1, which occurred between 1930 and 1939. The parcel is built on pier pilings and is underlain by the San Francisco Bay.

Currently, one building (Building 15) completely covers the parcel. The parcel area has always been used for waterfront operations. Underground fuel lines are present on this parcel and are shown on Figure 6-157-1.

Parcel 157 is located to the east side of an Installation Restoration (IR) Program site (IR Site 17, Former Seaplane Lagoon). No previous investigations have been conducted at Parcel 157, and specific data regarding chemical occurrence at this parcel are not available.

It is recommended that any parcel-specific sampling data collected be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potentially asbestos-containing floor tiles and peeling paint were observed throughout Building 15.

Building 15

Building 15 serves as waterfront operations headquarters. It contains offices, a quarter deck, break rooms, a lounge, an exercise room, a tool room, two supply rooms, an engine room, a battery closet, and a boiler room. This building occupies a pier over the Seaplane Lagoon and is in fair condition. Building 15 is a two story building, is constructed of concrete with a concrete floor and roof, and covers approximately 16,500 square feet. The space occupied by Building 15 was formerly open water. Fuel, steam, and sanitary sewer lines are located within and immediately surrounding Building 15.

Information collected during the EBS indicates that activities conducted within this building were restricted to waterfront operations. Waterfront operations processes involve powerboat docking, maintenance, and refueling and were conducted in the dock area on the west side of the building. EBS information indicated the presence of an oil/water separator on Parcel 157; however, no oil/water

separator was observed on this parcel during a visual inspection. The types of processes occurring at Parcel 157 typically involve the use or generation of chemicals and wastes, including petroleum products, fuels, dry cleaning compounds, and corrosives. Waterfront operations have occurred within Building 15 from 1947 to the present.

During a visual inspection of Building 15, numerous compounds of concern were observed. These compounds include approximately 25 gallons of oxalic acid, grease, and oils in the engine room, 20 gallons of corrosives in the battery locker, 75 gallons of dry cleaning solvent, gasoline, lubricating oil, and general purpose grease in the slip area flammable lockers, and 500 gallons of petroleum products, metals, paint, non-halogenated organic compounds, and corrosives throughout the building. The dry cleaning solvent was used to clean parts and equipment. Disposal of used chemicals is accomplished by sending excess chemicals to a central collection area. Holes were identified in the engine room during a visual inspection. These holes apparently served as a disposal method, with wastes being discharged to the Former Seaplane Lagoon. Former disposal methods are unknown. No spills are documented on this parcel. Two transformers are located outside of Building 15.

Building 15 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 15.

Open Space

This parcel is completely occupied by Building 15. There is no open space in this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 157 is bounded by Parcel 155 to the east, and the former Seaplane Lagoon (IR Site 17) to the north, south, and west. Activities of potential concern on this adjacent parcel include the presence of three USTs located to the east of Building 15. Because Parcel 157 is built on

pier pilings, it is unlikely that releases to the pier on the parcel will have an impact on the parcel. The sediments underneath the wharf will be addressed as part of the former Seaplane Lagoon IR Site.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 3.

The only data gaps remaining pertain to disclosure issues (asbestos, lead-based paint, and the potential presence of PCB-containing transformers) and radiological issues as indicated in Table 6-157-1. Based on its classification, if RASO concurrence is obtained, the parcel is considered suitable for lease or transfer. Although IR Site 17 is adjacent to this parcel, it does not impact the parcel (i.e. the sediments underlying this parcel are considered to be part of IR Site 17 and not part of the parcel area). In addition, the presence of fuel and sewer lines underneath the pier is also not of concern (releases from these lines would result in an impact to IR Site 17, not to the parcel itself).

As indicated in Section 6, separate investigations are currently underway to address the remaining issues at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, and radiological concerns.

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-157-1

Summary of Data Gaps
NAS Alameda Parcel 157

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located adjacent to Parcel 157. No investigation at Parcel 157 relative to IR Site 17 is proposed by the IR contractor. IR Site 17 is not expected to impact Parcel 157.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Parcel 155 contains three 2,000 gallon USTs (Tanks 15-1, 15-2, and 15-3) at the eastern border of Parcel 157. Tank 15-1 formerly contained diesel fuel. The materials stored in Tanks 15-2 and 15-3 are unknown. Because Parcel 157 is located entirely over water, releases from these tanks are not expected to impact Parcel 157.
Potential Zone-Wide Release Areas	• No potential release areas identified.

[1] Note: These items are disclosure issues only.

TABLE 6-157-1

Summary of Data Gaps
NAS Alameda Parcel 157

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• The water/cleaning compounds used to wash the floor in Building 15 were drained to San Francisco Bay via a hole in the floor. Releases from Building 15 may have impacted the Seaplane Lagoon, but are not expected to have impacted Parcel 157.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Fuel, sanitary sewer, and steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-158

PARCEL 158 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 158 at NAS Alameda (Figure 6-158-1). The parcel, which is located in the southeastern portion of the base, is one third of an acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. To provide a basis for the proposed investigation of Parcel 158, historical activities are discussed below.

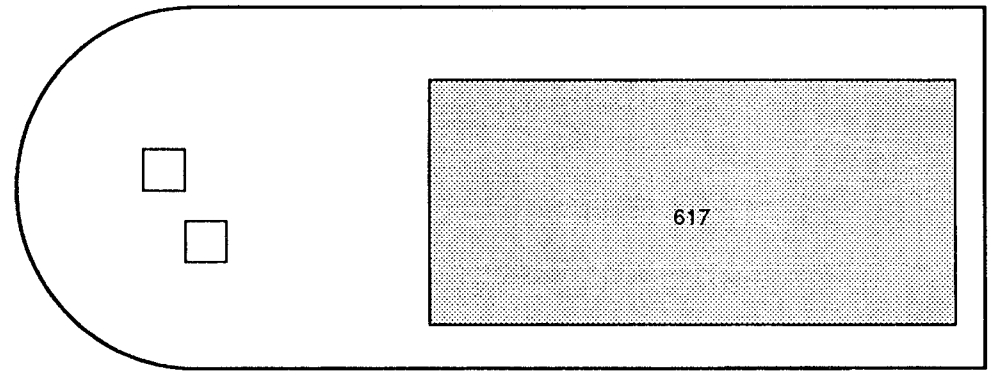
Background and Historical Activities

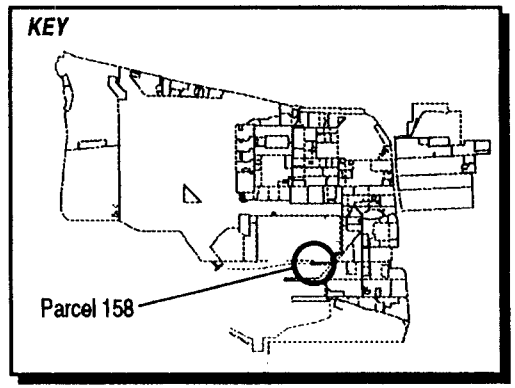
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 158, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with several other parcels (Parcels 155, 156, and 157). This parcel zone has been designated the Dock Zone. The Dock Zone encompasses the parcels that have boat docks and slips. During the sampling program development, the parcels located in this zone were considered together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone.

Prior to 1930, the parcel area was completely inundated by the San Francisco Bay. The parcel came into existence during the construction





1"= 30'

Magnetic
True North

Figure 6-158-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94C

of Pier 1, which occurred between 1930 and 1939. The parcel is built on pier pilings and is underlain by the San Francisco Bay.

Currently, one building (Building 617) completely covers approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in use as a pier. The pier was originally built around 1945. Due to earthquake damage it was completely reconstructed in 1991.

Parcel 158 is located on the east side of an Installation Restoration (IR) Program site (IR Site 17, Former Seaplane Lagoon). No previous investigations have been conducted at Parcel 158, and specific data regarding chemical occurrence at this parcel are not available.

It is recommended that any parcel-specific sampling data collected be compared to the background concentrations for naturally-occurring or site-related compounds. Certain background chemical concentrations may be higher than the concentrations suggested by the PRGs. Thus, for certain compounds, background concentrations may represent a more appropriate screening level than the concentrations suggested by the PRGs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Building 617

Due to earthquake damage, Building 617 was reconstructed in 1991. It currently serves as a storage and exercise facility (Figure 6-158-1). This building is in good condition. Building 617 is a two story building, is constructed of concrete with a concrete floor and roof, and covers approximately 1,600 square feet. The space occupied by Building 617 was formerly open water.

Information collected during the EBS indicates that storage and exercise activities are conducted within this building. Paint and general purpose cleaning agents are documented to have been stored in Building 617 during site inspection in May 1994. Approximately 100 gallons of the chemicals listed above were stored in Building 617. Disposal of used chemicals is accomplished by sending excess chemicals to a central collection area. Former disposal methods are unknown. No spills are documented on this parcel.

Building 617 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 617.

Open Space

The open space covers approximately 60 percent of the parcel. The open space is completely paved with concrete. The pavement is generally in good condition. There are no utilities located on or near this parcel. EBS information indicates that activities conducted within this open space include boat docking and boat equipment laydown. No chemicals are documented to have been stored in or used at the open space. No spills are documented to have occurred on this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 158 is bounded by Parcel 155 to the east, and the former Seaplane Lagoon (IR Site 17) to the north, south, and west. Activities of concern on this adjacent parcel include documented oil spills on Pier 1. Because Parcel 158 is built on pier pilings, it is unlikely that releases to the pier on Parcel 155 will have an impact on the parcel. The sediments underneath the pier will be addressed as part of the former Seaplane Lagoon IR Site.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 2. The only data gaps remaining pertain to disclosure issues (asbestos and lead-based paint) and radiological issues as indicated in Table 6-158-1. Based on its classification, if RASO concurrence is obtained, the parcel

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-158-1

Summary of Data Gaps
NAS Alameda Parcel 158

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 17 (Seaplane Lagoon) is located adjacent to Parcel 158. No investigation at Parcel 158 relative to IR Site 17 is proposed by the IR contractor. IR Site 17 is not expected to impact this parcel.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No potentially PCB-containing electrical identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These items are disclosure issues only.

TABLE 6-158-1

Summary of Data Gaps
NAS Alameda Parcel 158

Data Gap	Status/Description
Underground Utilities	• No evidence of underground utilities identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

is considered suitable for lease or transfer. Although IR Site 17 is adjacent to this parcel, it does not impact the parcel (i.e. the sediments underlying this parcel are considered to be part of IR Site 17 and not part of the parcel area).

As indicated in Section 6, separate investigations are currently underway to address the remaining issues at this parcel: lead-based paint, asbestos, and radiological concerns.

SECTION 6-Z19

ZONE 19 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 19 at NAS Alameda (Figure 6-Z19-1). Zone 19, which is located in the southeast portion of the base, has been designated the Dock Support Services Zone and encompasses the parcels where activities and services associated with the shipping docks are performed, including welding and machining operations. Zone 19 is comprised of Parcels 139, 140, 150, 151, 154, 159, 160, 163, 199, 201, and 202. During the sampling program development, the parcels located in this zone were evaluated together. Two zone-wide target investigation areas (target areas) and twenty-seven parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, soil vapor sampling, and subsurface GeoProbe soil sampling. Table 6-Z19-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z19-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 19, historical activities are discussed below.

Zone 19 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 19 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the parcel-specific evaluation plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-Z19-1

Summary of Recommended Samples
NAS Alameda Zone 19

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
Z19-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, CLP RAS
Z19-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-6-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, CLP RAS
Z19-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Dioxins and Furans	Dioxins and Furans	EPA 8280/SAS B
Z19-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Dioxins and Furans	Dioxins and Furans	EPA 8280/SAS B
Z19-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Dioxins and Furans	Dioxins and Furans	EPA 8280/SAS B
Z19-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Dioxins and Furans	Dioxins and Furans	8280/SAS B

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 19, the Dock Support Services Zone, encompasses 11 parcels that are located near the dock area and where historical activities indicated dock support services. During sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the Parcel Evaluation Plans (PEPs) for individual parcels.

Filling began in the area covered by this zone in approximately 1942. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land area east of Pier 2. This fill material may have been impacted by hazardous compounds. The parcels occupied by this land area in this zone include Parcels 154, 159, 160, and 201. No zone-wide fill sampling has been proposed for these parcels as fill quality is a basewide issue that will be addressed with background sampling.

Currently, 20 buildings, five structures, and numerous mobile trailers (all located on Parcel 160) cover approximately 25 percent of the zone. The remaining 75 percent is open space. The zone area is presently in use as industrial facilities for dock support services. Two buildings were formerly located on Parcel 139 in Zone 19 and have since been demolished.

Zone 19 contains no Installation Restoration (IR) Program sites; however, Zone 19 is within 500 feet of six IR sites (IR sites 9, 10B, 11, 13, 16, and 19). No previous investigations have been conducted at Zone 19 and specific data regarding potential chemical occurrence are not available. Current investigations under the IR program are being conducted at Parcel 150. Details regarding current investigation activities are described in the corresponding PEP.

Underground fuel lines and sewer lines present in this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

(see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on Zone 19 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

One tank was formerly present at this zone (on Parcel 163). Investigation of this former tank has not been scheduled. No information was available regarding the condition of the tank at the time of its removal.

Three active tanks are present at this zone on Parcel 154 (Tank 340-1) and Parcel 202 (Tanks 584-1 and 584-2). Based on the available information, these tanks are used to store diesel fuel. The installation dates for these tanks are unknown. Investigations of these tanks have not been scheduled, and no data pertaining to tightness or tank integrity has been identified. These tanks are all scheduled to be removed.

RCRA Sites

This zone includes a total of 11 RCRA sites on Parcel 139 (unknown identification numbers), Parcel 154 (SWMU/GAP 67, SWMU/GAP 68, SWMU/GAP 69, SWMU/GAP 71, and SWMU/GAP 72), Parcel 201 (SWMU/GII-6, SWMU/GAP 65, and SWMU/GAP 66), and Parcel 202 (SWMU/GAP 4 and SWMU/unknown). These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, of the 11 RCRA sites at this zone, eight require further investigation. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 19 is bounded by Zones 17, 18, 22, and 23. Activities of concern on these adjacent zones include IR Sites 4, 7C, 10B, 16, and 19 in Zone 22, and IR sites 3, 7B, and 11 in Zone 17. There are environmental concerns associated with these areas including potential releases of petroleum products and hazardous materials that were stored and/or used on adjacent zones.

Zone Target Areas and Compounds of Concern

This zone contains two zone-wide target areas and 27 parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target areas and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. In addition, parcel-specific data gaps pertaining to asbestos, lead-based paint, and radiological concerns must be resolved before the parcels in this zone can be leased or transferred.

Zone 19 Target Areas

- Target Area Z1 (Railroad Tracks): This target area includes all current railroad tracks within or adjacent to the Dock Support Services Zone. Railroad tracks are located on the boundary between Parcel 139 and Parcel 140, the northern areas of Parcel 159 and Parcel 163, and in Parcel 150. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. Surface soil samples will be collected approximately every 800 linear feet along the three track areas for a total of six zone sampling locations. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. Samples to be collected in this target area are listed in Table 6-Z19-1. Approximate sampling locations are shown on Figure 6-Z19-1.

  It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of compounds of concern are negligible then the railroad track zone target area may be eliminated in this zone and other zones. Alternatively, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then sampling may be modified to analyze for the more limited suite of the compounds of concern only.

- Target Area Z2 (Former Incinerator): This target area includes Parcels 139, 140, 150, 151, 154, and 201 in Zone 19 and Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22. These parcels are located to the east of the former incinerator in the direction of the prevailing wind currents. The former incinerator was located in Former Building 68 on Parcel 139. This building was built in 1942 and was demolished 19 years later in 1961. The size of this former building was approximately 400 square feet. Former Building 68 was built to house an incinerator and to store fire department equipment. Compounds or classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed in Table 6–Z19-1 for Zone 19. Approximate sampling locations are shown on Figure 6-Z19-1. Additional sampling for dioxins and furans is provided in Table 6-Z22-1 and shown on Figure 6-Z22-1 for Zone 22.

Parcel 139 Target Areas

A total of four parcel-specific target areas were identified for Parcel 154 as indicated below. Ten surface soil samples and eleven subsurface GeoProbe samples will be collected from the locations shown on Figure 6-154-1.

- Target Area 1 (Open Space): This target area consists of the large stain in the northern half of Parcel 139 near the boundary with Parcel 138. Target Area 1, as shown in Figure 6-139-1, outlines the approximate location of this stain. The stain is approximately ten feet by five feet in size for a total area of 50 square feet. Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs and VOCs. The likelihood of environmental impact from this stain is classified as suspect. Samples to be collected in Target Area 1 are listed in Table 6-139-1.

- Target Area 2 (Demolished Building 182): This target area consists of the area of former Building 182. The size of this target area is approximately 100 square feet (as shown in Figure 6-139-1). Compounds or classes of compounds of concern possible within this target area include TPH, VOCs, and SVOCs. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in Target Area 2 are listed in Table 6-139-1.

- Target Area 3 (Open Space): This target area is located along the southern parcel boundary and is to be field adjusted to completely

encompass all of SHWAP 18. The size of this target area is approximately 150 feet long by 60 feet wide for a total minimum area of 9,000 square feet (as shown in Figure 6-139-1). Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs, and VOCs. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in Target Area 3 are listed in Table 6-139-1.

- Target Area 4 (Open Space): This target area is located in the southeast corner of Parcel 139 and is to be field adjusted to encompass all of the area used to stage off-loaded wastes from the various Navy ships that dock at NAS Alameda. At a minimum, the target area will be 200 feet long by 150 feet wide for a total minimum area of 30,000 square feet (as shown in Figure 6-139-1). Compounds or classes of compounds of concern possible within this target area include various hazardous waste products. Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs, and VOCs. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in Target Area 4 are listed in Table 6-139-1.

Parcel 140 Target Areas

One parcel-specific target area was identified for Parcel 140 as indicated below. Two surface soil samples and nine subsurface GeoProbe samples will be collected from the locations shown on Figure 6-140-1.

- Target Area 1 (Building 168): This target area contains Building 168 and extends 10 feet around the perimeter of the building (as shown in Figure 6-140-1). Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs, VOCs, and metals. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed on Table 6-140-1.

Parcel 150 Target Areas

A total of five parcel-specific target areas were identified for Parcel 150 as indicated below. Fourteen subsurface GeoProbe samples and six soil vapor samples will be collected from the locations shown on Figure 6-150-1.

- Target Area 1 (Open Space I): The soils in the hazardous waste accumulation area, which is located in the northeast corner of Open Space I, have potentially been impacted by spills or leakage of VOCs contained in paints and solvents. This target area covers approximately 1,000 square feet. The likelihood of environmental impact to soils underlying this area is classified as suspect. Samples to be collected in Target Area 1 are listed in Table 6-150-1.

- Target Area 2 (Open Space I): The soils in this area have potentially been impacted by spills or leakage of VOCs contained in paints and solvents. The target area is located in the center of Open Space I and covers approximately 2,000 square feet. The likelihood of environmental impact to soils underlying this area is classified as suspect. Samples to be collected in Target Area 2 are listed in Table 6-150-1.

- Target Area 3 (Open Space II): The soils in this area were noted to be stained and were releasing a gasoline odor. The area has been classified as having suspect impacts from VOCs and TPH. This target area is located in the northeast corner of Open Space II and covers approximately 7,000 square feet. The likelihood of environmental impact to soils underlying this area is classified as suspect. Samples to be collected in Target Area 3 are listed in Table 6-150-1.

- Target Area 4 (Open Space II): The soils in this area were noted to be stained and may be impacted by VOCs or TPH. This target area covers all of Open Space II (10,000 square feet). The likelihood of environmental impact is classified as potential. Samples to be collected in Target Area 4 are listed in Table 6-150-1.

- Target Area 5 (Open Space III): The scrap yard may have been impacted by VOCs and TPH. The target area comprises 80 percent of Open Space III, and is over 10,000 square feet in size. The likelihood of environmental impact to soils underlying this area is classified as potential. Samples to be collected in Target Area 5 are listed in Table 6-150-1.

Parcel 151 Target Areas

A total of two parcel-specific target areas were identified for Parcel 151 as indicated below. Four surface soil samples and twelve subsurface GeoProbe samples will be collected from the locations shown on Figure 6-151-1.

- Target Area 1 (Open Space): This target area is located in the center of the parcel and encompasses the preserved-wood storage area. This target area covers over 10,000 square feet. Compounds of concern possible within this target area include SVOCs and metals associated with wood preservation. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 2 (Open Space): This target area is located along the east boundary of the parcel and covers approximately 9,000 square feet. Compounds of concern possible within this target area include SVOCs, TPH, and VOCs. The likelihood of environmental impact having occurred in this area is classified as potential.

Parcel 154 Target Areas

A total of five parcel-specific target areas were identified for Parcel 154 as indicated below. Nine surface soil samples and seven subsurface GeoProbe samples will be collected from the locations shown on Figure 6-154-1.

- Target Area 1 (Building 167): The area adjacent to the paint booth and resin mixing tank may have been impacted by resins or paints. The dip tank area and soils underlying concrete in the area of the 1,1,1-TCA tank may have been impacted by spills or leakage of hazardous substances that have been stored and utilized in this area. The floor area of the rubber room and the east prop shop was noted to be significantly corroded. The area adjacent to the solvent dip tank that is controlled by the shipboard repair group may have been impacted by solvents. The main entrance of the area may have been impacted by previous operations at the building. This area is covered with a significant stain of unknown origin. Large stains were observed in the Prop components section and the Assembly / Blade section. The target area contains less than 12,000 square feet. Compounds of concern possible within this target area include TPH, SVOCs, and VOCs (1,1,1-TCA) as well as metals in paint residue. The likelihood of impact having occurred at this area is classified as potential.

- Target Area 2 (Open Space I): This area is heavily stained and is adjacent to the hazardous materials storage area for the prop shop and the GAP. The target area contains less than 1,000 square feet. Compounds of concern possible within this target area include TPH, SVOCs, metals, and VOCs. The likelihood of impact having occurred in this area is classified as potential.

- Target Area 3 (Open Space I South of Building 167): This area has been used to store hazardous materials since the construction of Buildings 166 and 167 circa 1947. The target area contains over 10,000 square feet. Compounds of concern possible within this target area include TPH, VOCs, SVOCs, and metals. The likelihood of impact having occurred in this area is classified as potential.

- Target Area 4 (Open Space I South of Building 166): This area has been used to store hazardous materials since the construction of Buildings 166 and 167 circa 1947. The target area contains over 10,000 square feet. Compounds of concern possible within this target area includes TPH, VOCs, SVOCs, and metals. The likelihood of impact having occurred in this area is classified as potential.

- Target Area 5 (Southeast corner of Building 555): A release of an unknown oily materials was observed in this area during site inspection. The target area contains over 100 square feet. Compounds of concern possible within this target area includes TPH, SVOCs, and metals. The likelihood of impact having occurred in this area is classified as potential.

Parcel 159 Target Areas

Two parcel-specific target areas were identified for Parcel 159 as indicated below. Two subsurface GeoProbe soil samples, and two surface soil samples will be collected from the locations shown on Figure 6-159-1.

- Target Area 1 (Building 292): The emergency generator room may have been impacted by spills or leakage of petroleum compounds from the emergency generator. This target area covers approximately 1,000 square feet. Compounds of concern are TPH. The likelihood of environmental impact to soils underlying the concrete is classified as potential. Samples to be collected in this target area are listed in Table 6-159-1.

- Target Area 2 (Open Space): The staining in this area indicates that soils in the south border of this parcel may have been impacted by historical spill events. The target area covers approximately 2,000 square feet. Compounds of concern are TPH. The likelihood of environmental impact to soils underlying the asphalt is classified as potential. Samples to be collected in this target area are listed in Table 6-159-1.

Parcel 160 Target Areas

Two parcel-specific target areas were identified for Parcel 160 as indicated below. A total of five surface soil samples will be collected from the parcel-specific locations shown in Figure 6-160-1.

- Target Area 1 (Open Space): Soils at the open space between and north of Building 551 and 557 may have been impacted by spills or leakage of hazardous substances that have been stored and utilized in this area as indicated by staining. In addition, soils may have been impacted by historical spill events. The target area covers approximately 10,000 square feet. TPH is the compound of concern. The likelihood of environmental impact to soils underlying the asphalt is classified as potential. Samples to be collected in this target area are listed in Table 6-160-1.

- Target Area 2 (Building 557): Soils adjacent to the emergency generator located immediately east of Building 557 may have been impacted by spills or leakage of petroleum compounds. This target area covers approximately 1,000 square feet. Compounds of concern are PCBs and TPH. The likelihood of environmental impact to soils underlying the concrete is classified as potential. Samples to be collected in this target area are listed in Table 6-160-1.

Parcel 163 Target Areas

Two parcel-specific target areas were identified for Parcel 163 as indicated below. One surface soil sample and four subsurface GeoProbe samples will be collected from the locations shown on Figure 6-163-1.

- Target Area 1 (Open Space): Subsurface soils that surround both ASTs may have been impacted by petroleum compounds released from the ASTs and related piping. This target area is over 10,000 square feet in size. The likelihood of environmental impacts having occurred in this target area is classified as suspect.

- Target Area 2 (Open Space): Large scale staining was noted at Parcel 165 in an area adjoining Parcel 163. Subsurface soils at this area may have been impacted by petroleum compounds. This target area is located in the southeast corner of the parcel, and it is less than 1,000 square feet in size. The likelihood of environmental impacts having occurred in this target area is classified as potential.

Parcel 199 Target Areas

No parcel-specific target areas were identified for this parcel.

Parcel 201 Target Areas

A total of four parcel-specific target areas were identified for Parcel 201 as indicated below. Ten subsurface GeoProbe samples will be collected from the locations shown on Figure 6-201-1.

- Target Area 1 (Building 166): This target area encompasses all of Building 166. Soils underlying this building may have been impacted by spills or leakage of hazardous substances that have been stored and utilized in this area. This target area is approximately 10,000 square feet in size. Compounds of concern possible within this target area include TPH, metals, SVOCs, and VOCs. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 2 (Open Space I): This target area encompasses the oil/water separator. Soils adjacent to the oil/water separator may have been impacted. This target area is less than 1,000 square feet in size. Compounds of concern possible within this target area include metals and TPH. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 3 (Open Space I): This target area encompasses the grease trap. Soils adjacent to the grease trap may have been impacted. This target area is less than 1,000 square feet in size. Compounds of concern possible within this target area include metals and TPH. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 4 (Open Space I): This target area encompasses the SWMU/GAP 8 sites. Soils adjacent to the GAP sites may have been impacted. This target area is less than 1,000 square feet in size. Compounds of concern possible within this target area include metals, SVOCs, VOCs and TPH. The likelihood of environmental impact having occurred in this area is classified as potential.

Parcel 202 Target Areas

No parcel-specific target areas were identified for this parcel.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone-wide and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil vapor sampling (SOP 6), and subsurface GeoProbe soil sampling (SOP 14).

Table 6-Z19-1 summarizes screening-level sampling and analysis for the zone-wide target areas. For the zone-wide target areas, a total of ten surface soil samples will be collected from the locations shown on Figure 6-Z19-1. For the parcel-specific target areas, a total of 33 surface soil samples, and 69 subsurface GeoProbe soil samples will be collected from the designated target areas. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-139

PARCEL 139 EVALUATION PLAN

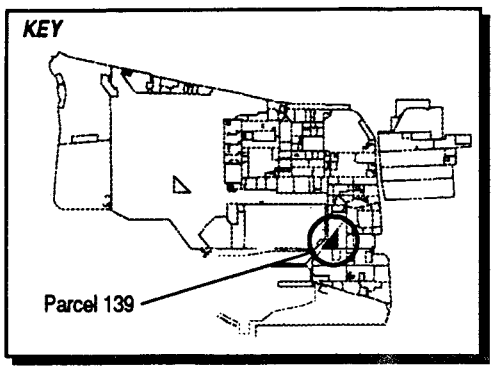
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 139 at NAS Alameda (Figure 6-139-1). The parcel, which is located in the southeastern portion of the base, is approximately five acres in size and is roughly triangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site is located at this parcel. Two zone-wide and four parcel-specific target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface GeoProbe sampling. Table 6-139-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 139, historical activities are discussed below.

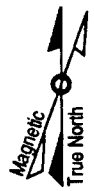
Background and Historical Activities

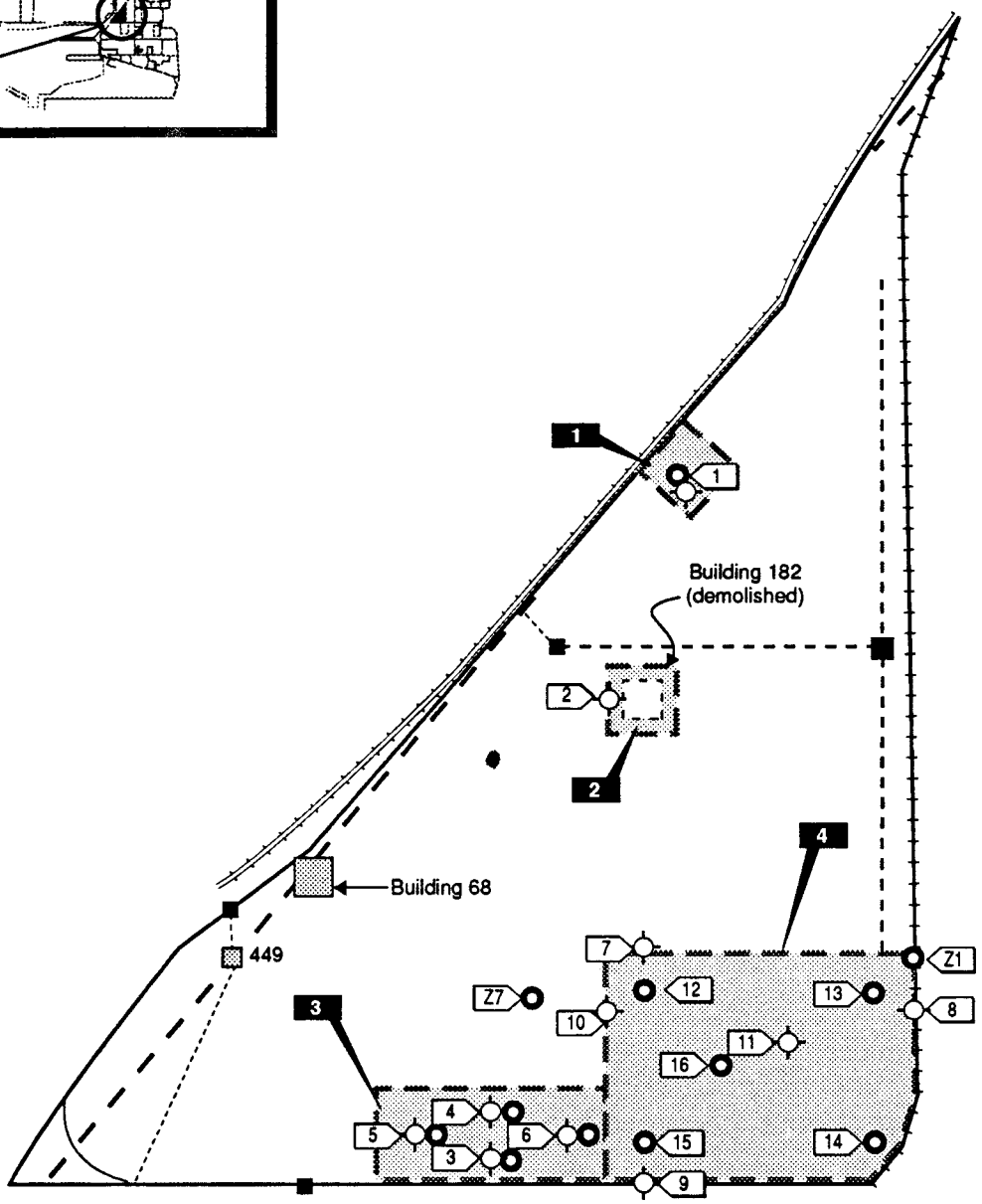
This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 139, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

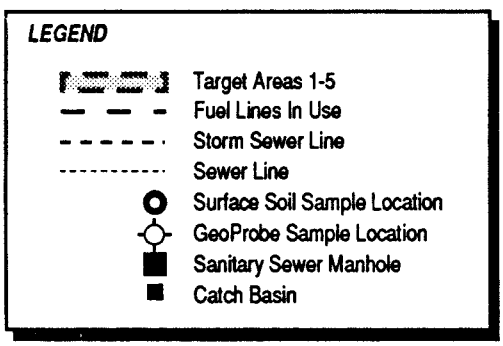
Past and present use of this parcel was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 140, 150, 151, 154, 159, 160, 163, 199, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the









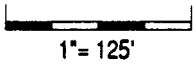


Figure 6-139-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94B

TABLE 6-139-1

Summary of Recommended Samples
NAS Alameda Parcel 139

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
139-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs	TPH, SVOCs	EPA 8015 Modified, EPA 8270
139-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs	TPH, SVOCs	EPA 8015 Modified, CLP RAS
139-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	EPA 8015 Modified, EPA 8270, EPA 8240
139-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	EPA 8015 Modified, CLP RAS
139-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	EPA 8015 Modified, EPA 8270, EPA 8240
139-2-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	EPA 8015 Modified, CLP RAS
139-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	EPA 8240
139-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs	TPH, SVOCs	EPA 8015 Modified
139-4-3-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	EPA 8240
139-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs	TPH, SVOCs	EPA 8015 Modified
139-5-3-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	EPA 8240
139-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs	TPH, SVOCs	EPA 8015 Modified
139-6-3-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	VOCs	VOCs	EPA 8240
139-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs	TPH, SVOCs	EPA 8015 Modified
139-7-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	VOCs	VOCs	EPA 8240
139-8-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	VOCs	VOCs	EPA 8240
139-9-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	VOCs	VOCs	EPA 8240

TABLE 6-139-1

Summary of Recommended Samples
NAS Alameda Parcel 139

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
139-10-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	VOCs	VOCs	EPA 8240
139-11-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	VOCs	VOCs	EPA 8240
139-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	TPH, SVOCs	SVOCs, TPH	EPA 8270, EPA 8015 Modified
139-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
139-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	EPA 8015 Modified
139-14-3-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
139-15-3-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	SVOCs	SVOCs	CLP RAS
139-15-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	TPH	TPH	EPA 8015 Modified
139-16-3-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 4	TPH	SVOCs, TPH	CLP RAS, EPA 8015 Modified
Z19-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, CLP RAS
Z19-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 19 Target Area 2	Dioxins and Furans	Dioxins and Furans	EPA 8280/SAS B

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 68) and one structure (Structure 449-Sewage Lift Station 5) cover less than one percent of the parcel. The remaining area is open space. A portion of the open space in this parcel is part of a larger open space designated as Area 37, which is shared between Parcels 138, 139, and 140. The parcel open space area is presently used for maintenance equipment and vehicle parking, chemical storage, drum storage, and aircraft container storage. Previously, the parcel open space area was used for aircraft parking. Two buildings (Former Building 68 and Building 182) were formerly located on the parcel and have since been demolished. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-139-1.

Parcel 139 is located approximately 300 feet northwest of Installation Restoration (IR) Program Site 9 (Building 410-Paint Stripping), and 500 feet south of IR Site 11 (Building 14-Engine Test Cells). Previous investigations have been conducted at these IR sites but did not include sampling on or immediately around Parcel 139.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described below.

Building 68

Building 68 was constructed in 1988 and provides waterfront services including welding operations (Figure 6-139-1). This building is in good condition. Building 68 is constructed of steel framed walls with a concrete floor and a steel frame roof with corrugated metal roofing. This building covers approximately 1,600 square feet. The space occupied by Building 68 was formerly open space. Utilities located

within and immediately surrounding Building 68 include sanitary sewer, storm sewer, electrical, and fuel lines.

Information collected during the EBS indicates that activities conducted within this building included various waterfront services including welding. These types of industrial processes typically involve the use or generation of chemicals and wastes including fluxes and slag. Welding processes are ongoing at Building 68.

Oils, greases, and lubricants are documented to have been stored in the open space south of Building 68. Approximately one gallon of bearing lubricant is currently being stored in this building. Many small stains caused by unknown chemicals are present on the welding shop's concrete floor.

Building 68 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents (e.g., fires, mishaps, flooding, or crashes) are documented to have occurred within Building 68.

Structure 449

The age of Structure 449 is currently unknown. This small structure is in good condition and is approximately 100 square feet in area. The structure, which rests on a concrete pad, consists of a control panel and access panels for Sewage Lift Station 5. The structure is located in close proximity to Building 68.

Utilities located within and immediately surrounding Structure 449 include sanitary sewer, storm sewer, electrical, and fuel lines. There is no documented evidence of chemical storage or use for this structure.

Building 182 (Demolished)

Building 182 was constructed in 1942 and demolished 44 years later in 1986. This former 100 square foot building was constructed of wood and concrete and was used to house fuel storage tanks and a pump station. The location of this demolished building is shown on Figure 6-139-1.

Open Space

The open space covers over 99 percent of the parcel. The open space is completely paved. Approximately one-half of the pavement is asphalt, which is fair to poor condition; the remainder is concrete, which is generally in good condition. Utilities located within the open space

include underground sanitary sewer, storm sewer, electrical, and fuel lines.

EBS information indicates that activities conducted within this open space include maintenance equipment and vehicle parking, chemical storage, drum storage, and aircraft container storage. Various chemicals are documented to have been stored in lockers located in the asphalt-paved area south of Building 68. These lockers currently house approximately 75 gallons of petroleum products, iodine, varnish, and paint.

The open space area also houses Satellite Hazardous Waste Accumulation Point number 18 (SHWAP 18), which serves as a temporary staging area for collected spilled hazardous wastes. The quantity of stored wastes varies in response to the number and magnitude of incidents. Wastes may be stored for no longer than 24 hours.

The southeast corner of Parcel 139 has been used as a regular staging area for hazardous waste off-loading from two aircraft carriers (the USS Lincoln and the USS Vincent). Anecdotal evidence indicates that several spills have occurred in this area. This staging area is covered in Target Area 4.

An undocumented stain of significant size was identified within Parcel 139 during a visual inspection. The stain was located in the northern half of the parcel along the boundary with Parcel 138. This dark colored stain measured approximately ten feet by five feet in area and was located on broken asphalt pavement.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 139 is bounded by Parcels 138, 140, 154, 155, and 201. Activities of concern on the adjacent parcels include large quantity fuel storage and transport in Parcel 138 (along the northwest boundary with Parcel 139).

No parcels contiguous with Parcel 139 are IR sites, therefore, this PEP does not require sampling specifically in response to the two nearby IR

sites. If continuing investigations at these IR sites reveal a cause for concern at Parcel 139, then sampling on this parcel may be appropriate.

RCRA Sites

This subsection identifies the RCRA site and requirements associated with this site at Parcel 139, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (Site SHWAP 18). A brief description of the RCRA site is provided below. The sampling proposed for the site is described in the Target Areas and Compounds of Concern subsection.

Site SHWAP 18 is a temporary staging area for collected spilled hazardous wastes. No documented releases of chemicals were identified for this site; however, staining was observed during a visual inspection. The quantity and type of waste stored at Site SHWAP 18 varies depending on the number and magnitude of incidents. No permit is required for SHWAP 18 because SHWAPs store hazardous waste that is pending removal to a GAP Site. SHWAP 18 will be investigated as Target Area 3.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 139, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-139-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, and industrial hygiene concerns. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 68. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

TABLE 6-139-2

Summary of Data Gaps
NAS Alameda Parcel 139

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 9 (Building 410, Paint Stripping) is located within 500 feet southeast of Parcel 139. Additional subsurface investigation relative to IR Site 9 is proposed by the IR contractor. • IR Site 11 (Building 14, Engine Test Cells) is located within 500 feet north of Parcel 139. Additional subsurface investigation relative to IR Site 11 is proposed by the IR contractor. • IR Site 13 is located east of Parcel 139. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Large quantities of fuel are stored and transported in Parcel 138 (along the northwest boundary with Parcel 139).

TABLE 6-139-2

Summary of Data Gaps
NAS Alameda Parcel 139

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• Railroad Tracks. • Former Incinerator.
Potential Parcel-Specific Release Areas	• Open Space-northern half of parcel. • Open Space-SHWAP 18. • Open Space-southeast corner of parcel. • Demolished Building 182.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• No steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-139-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 139 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific target areas and is also contained in two zone-wide target areas. This subsection of the PEP discusses the parcel-specific target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above.

- Target Area 1 (Open Space): This target area consists of the large stain in the northern half of Parcel 139 near the boundary with Parcel 138. Target Area 1, as shown in Figure 6-139-1, outlines the approximate location of this stain. The stain is approximately ten feet by five feet in size for a total area of 50 square feet. Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs and VOCs. The likelihood of environmental impact from this stain is classified as suspect. Samples to be collected in Target Area 1 are listed in Table 6-139-1.

- Target Area 2 (Demolished Building 182): This target area consists of the area of former Building 182. The size of this target area is approximately 100 square feet (as shown in Figure 6-139-1). Compounds or classes of compounds of concern possible within this target area include TPH, VOCs, and SVOCs. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in Target Area 2 are listed in Table 6-139-1.

- Target Area 3 (Open Space): This target area is located along the southern parcel boundary and is to be field adjusted to completely encompass all of SHWAP 18. The size of this target area is approximately 150 feet long by 60 feet wide for a total minimum area of 9,000 square feet (as shown in Figure 6-139-1). Compounds or classes of compounds of concern possible within this target area

include TPH, SVOCs, and VOCs. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in Target Area 3 are listed in Table 6-139-1.

- Target Area 4 (Open Space): This target area is located in the southeast corner of Parcel 139 and is to be field adjusted to encompass all of the area used to stage off-loaded wastes from the various Navy ships that dock at NAS Alameda. At a minimum, the target area will be 200 feet long by 150 feet wide for a total minimum area of 30,000 square feet (as shown in Figure 6-139-1). Compounds or classes of compounds of concern possible within this target area include various hazardous waste products. Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs, and VOCs. The likelihood of environmental impact having occurred within this target area is classified as suspect. Samples to be collected in Target Area 4 are listed in Table 6-139-1.

- Zone 19 Target Area 1 (Railroad Tracks): This target area includes all current railroad tracks within or adjacent to the Dock Support Services Zone. Railroad track locations include the boundary between Parcel 139 and Parcel 140, the northern areas of Parcel 159 and Parcel 163, and the mid-section of Parcel 150. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the three track areas for the zone sampling locations. One of the six surface soil samples is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. Samples to be collected in this target area are listed in Table 6-139-1. Approximate sampling locations are shown on Figure 6-139-1.

- Zone 19 Target Area 2 (Former Incinerator): The former incinerator was located in Building 68 on Parcel 139. This building was built in 1942 and was demolished 19 years later in 1961. The size of the former building was approximately 400 square feet. Compounds or classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. Samples to be collected in this target area are listed in Table 6-139-1. Approximate sampling locations are shown on Figure 6-139-1.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, and impacts of the nearby IR sites must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). Table 6-139-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 139. Ten surface soil samples and eleven subsurface GeoProbe samples will be collected from the parcel-specific locations shown on Figure 6-139-1. Two surface soil samples will be collected from the zone-wide locations on this parcel as shown on Figure 6-139-1. Sampling locations shown on Figure 6-139-1 are approximate. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-140

PARCEL 140 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 140 at NAS Alameda (Figure 6-140-1). The parcel, which is located in the southeastern portion of the base, is approximately 6.5 acres in size and is roughly trapezoidal in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Subsurface GeoProbe sampling and surface soil sampling will be used to accomplish the screening-level investigation. Table 6-140-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 140, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 140, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 150, 151, 154, 159, 160, 163, 199, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the sampling program development, the parcels located in this zone were

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-140-1 – PARCEL 155
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

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SENSITIVE

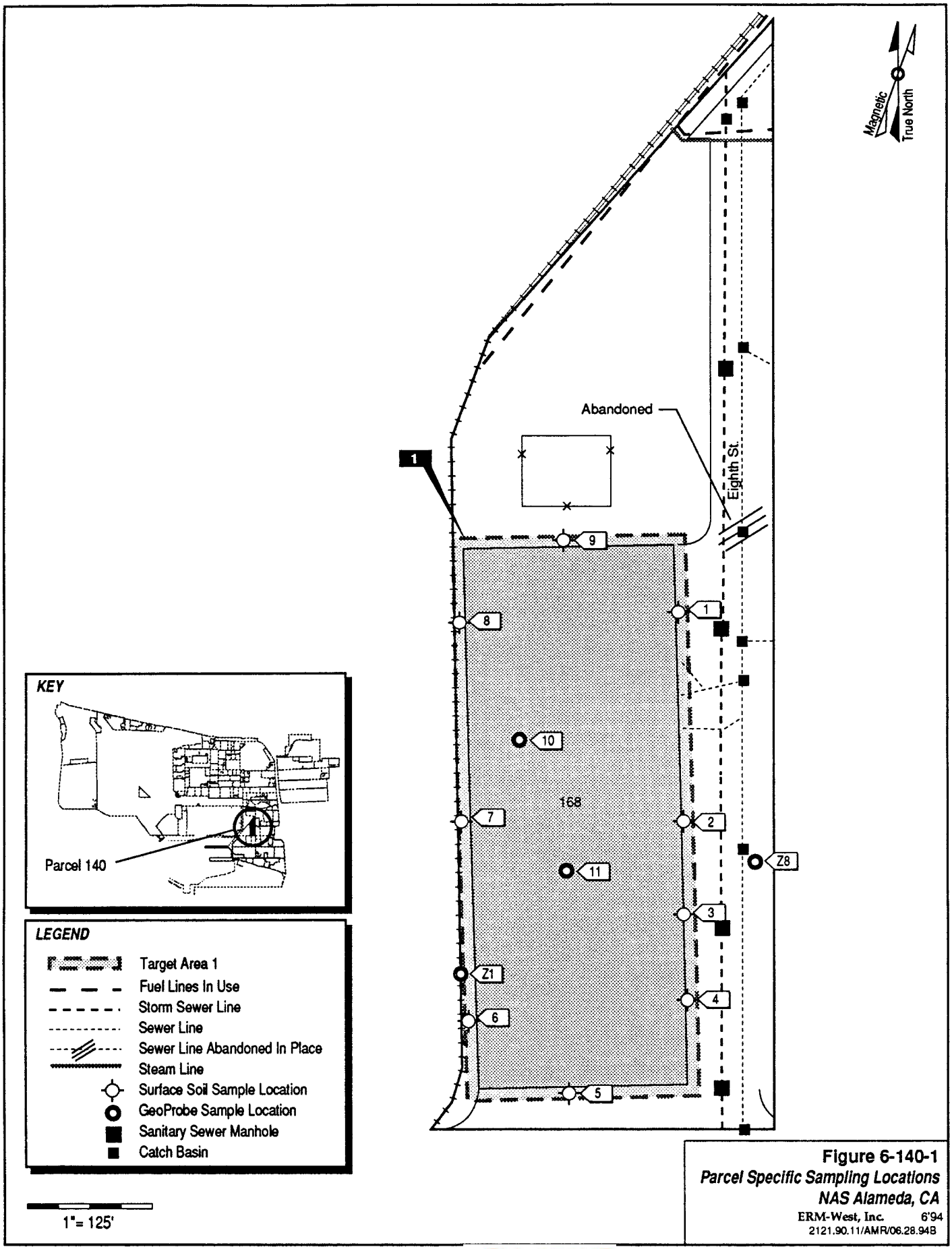

Figure 6-140-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94B

SENSITIVE

TABLE 6-140-1

Summary of Recommended Samples
NAS Alameda Parcel 140

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
140-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, CLP RAS
140-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-6-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-6-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, CLP RAS
140-7-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-8-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240
140-9-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, EPA 8240

TABLE 6-140-1

Summary of Recommended Samples

NAS Alameda Parcel 140

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
140-10-4-S-S-DDMMYY	0.00-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
140-10-4-S-V-DDMMYY*	0.00-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
140-11-4-S-S-DDMMYY	0.00-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals, pH	TPH, SVOCs, VOCs, Metals, pH	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan, pH
140-11-4-S-V-DDMMYY*	0.00-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals, pH	TPH, SVOCs, VOCs, Metals, pH	Modified EPA 8015, CLP RAS
Z19-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, CLP RAS
Z19-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 19 Target Area 2	Dioxins and Furans	Dioxins and Furans	EPA 8280/SAS B

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

considered together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone. Zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 168) covers approximately 45 percent of the parcel. The remaining 55 percent is open space. A portion of the open space in this parcel is part of a larger open space designated as Area 37, which is shared between parcels 138, 139, and 140. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-140-1.

Parcel 140 is located within 500 feet of seven Installation Restoration (IR) Program sites (IR Sites 3, 4, 7B, 9, 11, 13, and 19). Previous investigations have been conducted at these IR sites but they did not include sampling on or immediately adjacent to Parcel 140.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 168

Building 168 was constructed in 1946 and provides warehouse operations. This building is in fair condition and is approximately 120,000 square feet in area with additional interior loft space. This one-story building is constructed with wood framed walls with metal siding, wood frame roof with corrugated metal roofing, and a concrete floor.

Utilities located within and immediately surrounding this building include underground sanitary sewer, storm sewer, water, electrical, and fuel lines. Most of these services are located in the open space east of the building.

Information collected during the EBS indicates that activities conducted within this building included storage and packaging of fuels, oils, and other chemical compounds (chlorinated and non-chlorinated

solvents, corrosives, flammables) for transfer aboard various navy ships. The warehouse space is divided between the Fuel Supply Branch, Serv Mart, PWC, and Ships storage.

The center one-third of Building 168 houses the Fuel Supply Branch shop, which operates and stores fuel transfer and loading equipment (the approximate quantity stored at the time of the site inspection was 200 gallons) and a small repair shop. A large stain of lubricating oil, as recorded in the EBS, covers a 300 square foot area within the Fuel Supply Branch portion of the warehouse. This release is reportedly because of the storage of carts used to pump lubricating oil onto the ships. Five smaller oil stains are also recorded in the EBS for the Fuel Supply Branch. Each of these stains cover about fifteen square feet and occur around heavy equipment such as band saws and drill presses. This area will be covered in Target Area 1.

Building 168 also contains a Serv Mart which acts as a supply center for various chemical compounds (the approximate quantity stored was 3,000 gallons). Three small floor stains and several small areas where the floor is etched have been identified within the Serv Mart area. Sulfuric acid, from fork lift batteries recharging and maintenance, is the probable staining and etching chemical. This area will be covered in Target Area 1.

Activities in the Ships Area of Building 168 include preparing and packaging chemicals for transport to ships (the approximate quantity stored was 3,000 gallons). Approximately 15 percent of the Ships area exhibits small stains.

Activities in the PWC area consisted primarily of cable storage. No hazardous chemicals were observed stored in the area, although dark staining was visible on approximately 15 percent of the floor.

Building 168 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents such as fires or floods are documented to have occurred within Building 168.

Open Space

The open space covers approximately 55 percent of the parcel. This space is located mostly to the north and east of Building 168. The parcel open space area is presently in use for material storage, maintenance equipment parking, and vehicle parking. The ground surface of this open space is approximately 90 percent paved; the remaining unpaved areas are exposed soil. The pavement is a combination of concrete and

asphalt. The condition of the pavement ranges from good to poor; some areas are newly paved while others areas are quite worn.

One transformer and one substation switchgear are located in the open space, east of Building 168. No spills are documented to have occurred within this open space. No other incidents such as fires or floods are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 140 is bounded by Parcels 134, 138, 139, 141, 154, 164, and 201. Activities of concern on the adjacent parcels include large quantities of fuel storage and transport in Parcel 138 along the northwest boundary with this parcel. Also of concern is the incinerator formerly located to the west in Parcel 139. The parcel area is bounded on the north and west by railroad tracks. A portion of these railroad tracks have been removed or covered over with soil and/or asphalt. The presence, or former presence, of railroad tracks creates a possible environmental concern.

No parcels contiguous with Parcel 140 are IR sites; however, there are seven IR sites within 500 feet of this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 140, then sampling on this parcel may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 140, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-140-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to

TABLE 6-140-2

Summary of Data Gaps
NAS Alameda Parcel 140

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting, mating grounds, or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 140.
Installation Restoration (IR) Sites	• IR Sites 3, 4, 7B, 9, 11, 13, and 19 are located within 500 feet of Parcel 140. No subsurface investigation relative to these IR Sites is proposed for Parcel 140. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery (IR Site 13).
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks. • Former Incinerator.
Potential Parcel-Specific Release Areas	• Building 168.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.

TABLE 6-140-2

Summary of Data Gaps
NAS Alameda Parcel 140

Data Gap	Status/Description
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

address the following data gaps at this parcel: transformers, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines is also addressed separately. Sampling associated with underground fuel and sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 140 because no industrial buildings are present.

As noted earlier, Parcel 140 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 140.

Once the data gaps in Table 6-140-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcel 140 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the parcel-specific and zone-wide target areas. This parcel is contained in two zone-wide target areas. One parcel-specific target area was also identified for this parcel. The nature and location of the target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 168): This target area contains Building 168 and extends 10 feet around the perimeter of the building (as shown in Figure 6-140-1). Compounds or classes of compounds of concern possible within this target area include TPH, SVOCs, VOCs, and metals. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this target area are listed on Table 6-140-1.

- Zone 19 Target Area 1 (Railroad Tracks): This target area includes all current railroad tracks within or adjacent to the Dock Support Services Zone. Railroad track locations include the boundary between Parcel 139 and Parcel 140, the northern areas of Parcel 159 and Parcel 163, and the mid-section of Parcel 150. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as

having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the three track areas for the zone sampling locations. One of the six surface soil samples is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. Samples to be collected in this target area are listed in Table 6-140-1. Approximate sampling locations are shown on Figure 6-140-1.

- Zone 19 Target Area 2 (Former Incinerator): The former incinerator was located in Building 68 on Parcel 139. This building was built in 1942 and was demolished 19 years later in 1961. The size of this former building was approximately 400 square feet. Compounds or classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. One of the four surface soil samples proposed to be collected from this zone-wide target area is located on Parcel 140. Samples to be collected in this target area are listed in Table 6-140-1; approximate sampling locations are shown on Figure 6-140-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14) are the screening-level techniques that will be employed to assess conditions in the parcel-specific and zone-wide target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. Table 6-140-1 summarizes screening-level sampling and analysis recommended for the parcel-specific and zone-wide target areas that impact Parcel 140. The locations of the samples to be collected from target areas are shown on Figure 6-140-1.

Nine subsurface GeoProbe samples and two surface soil samples are to be collected in the parcel-specific target area. The samples along the building's eastern edge are to be located in front of the four large roll up doors. The sample locations along the building's western edge are to be spaced as shown in Figure 6-140-1 and are designed to identify any releases that may have resulted from loading and unloading activities associated with railroad cargo. Two surface soil samples will be collected from the zone-wide locations shown on Figure 6-140-1.

Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-150

PARCEL 150 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 150 at NAS Alameda (Figure 6-150-1). The parcel, which is located in the southeast portion of the base, is approximately seven acres in size and is rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Five parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, soil vapor sampling, and GeoProbe subsurface soil sampling. Table 6-150-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been prepared in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 150, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 150, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from non-intrusive investigation phase work which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 151, 154, 159, 160, 163, 199, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities included a variety of dock support services. During

TABLE 6-150-1

Summary of Recommended Samples
NAS Alameda Parcel 150

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
150-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs	EPA 8240
150-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs	CLP RAS
150-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs	EPA 8240
150-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	EPA 8240
150-3-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	CLP RAS
150-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	EPA 8240
150-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	VOCs	VOCs	EPA 8240
150-6-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	EPA 8240
150-7-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	EPA 8240
150-7-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	CLP RAS
150-8-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	TPH, VOCs	TPH, VOCs	EPA 8240
150-9-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	TPH, VOCs	TPH, VOCs	EPA 8240
150-9-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 4	TPH, VOCs	TPH, VOCs	CLP RAS
150-10-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 5	TPH, VOCs	TPH, VOCs	EPA 8015 Modified
150-10-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	EPA 8240
150-11-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 5	TPH	TPH	EPA 8015 Modified
150-11-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	EPA 8240
150-11-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 5	TPH, VOCs	TPH, VOCs	EPA 8015 Modified, CLP RAS
150-12-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	EPA 8240

TABLE 6-150-1

Summary of Recommended Samples

NAS Alameda Parcel 150

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
150-13-4-S-V-DDMMYY	4.0'	GeoProbe	Soil	Target Area 5	TPH	TPH	EPA 8015 Modified
150-13-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	EPA 8240
150-14-4-S-V-DDMMYY	4.0'	GeoProbe	Soil	Target Area 5	TPH	TPH	EPA 8015 Modified
150-14-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	EPA 8240
150-14-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 5	TPH, VOCs	TPH, VOCs	EPA 8015 Modified, CLP RAS
150-15-4-S-V-DDMMYY	4.0'	GeoProbe	Soil	Target Area 5	TPH	TPH	EPA 8015 Modified
150-15-3-V-S-DDMMYY	3'	SVS	Vapor	Target Area 5	VOCs	VOCs	EPA 8240
Z19-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-6-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, CLP RAS
Z19-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 2	Dioxins and Furans	Dioxins and Furans	8280/SAS B

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land area of this parcel. This fill material may have been impacted by hazardous compounds.

Currently, three buildings (Buildings 620, 620A, and 621) and one structure (Structure 302E) cover five percent of the parcel. The remaining 95 percent is open space. The parcel is composed of five distinct areas: a ship yard, a refuse storage yard, Scrap Yard D-7, the family housing maintenance office, and a vehicle parking area. Underground fuel and sewer lines are present on this parcel.

Parcel 150 is adjacent to two Installation Restoration (IR) Program sites; IR Site 13 (the former oil refinery) borders the parcel to the north, and IR Site 16 (the Cans C-2 Area) borders the parcel to the east. Also, IR Sites 9 (Building 410) and 10B (Building 530) are located approximately 100 feet northwest and northeast of the parcel, respectively. No previous investigations have been conducted at Parcel 150, and specific data regarding chemical occurrence at this parcel are not available. Installation of one soil boring (B10B-05) located at the northern boundary of Parcel 150 has been proposed by the IR contractor as part of the investigation of IR Site 13. This proposed boring location is shown in Figure 6-150-1.

Sewer lines present at this parcel are shown in Figure 6-150-1. EBS information indicates that fuel lines are also present at this parcel; however, the locations of these lines are currently unknown. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 621

Building 621 was constructed between 1985 and 1990, and has served as an industrial shop. Building 621 consists of two interconnected single-story structures constructed of corrugated steel with a concrete floor and corrugated steel roof. The building covers approximately 11,000 square feet. The space currently occupied by Building 621 was used for aircraft parking from 1947 through 1970. From 1975 until the construction of Building 621, it appears to have been used as a material and equipment storage yard.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, telephone, steam, potable and fire protection water, and underground electrical lines.

Information collected during the EBS indicates that this building is currently controlled and utilized by Mare Island Naval Shipyard (MINS). Activities conducted within this building have included metal machining. Metal machining processes typically involve the use of cutting oils and the generation of waste oils. During the site inspection, small quantities of oils (under one gallon) were noted adjacent to each lathe or drill press located within this building. Small quantities of solvents were stored throughout the shop area. Numerous minor lubricating oil stains were noted around machining equipment.

Building 621 is not equipped with a heating-ventilation-air conditioning (HVAC) system.

Buildings 621A

Building 621A was constructed between 1985 and 1990, and has served as a storage facility. Building 621A is a one-story Quonset Hut, constructed of corrugated steel with a concrete floor and corrugated steel roof. The building covers approximately 3,000 square feet.

The space currently occupied by Building 621 was used for aircraft parking from 1947 through 1970. From 1975 until the construction of Building 621A, it appears to have been used as a material and equipment storage yard.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, telephone, steam, potable and fire protection water, and underground electrical lines.

Information collected during the EBS indicates that activities conducted within this building included miscellaneous materials storage. Small quantities of oils, solvents, and paints were noted inside this building. Building 621A is not equipped with an HVAC system.

Buildings 620

Building 620 was constructed between 1985 and 1990 and has served as an office and tool supply center. Building 620 is a one-story wood structure with an asphalt roof and a concrete slab floor. The building covers 3,600 square feet.

Building 621 was constructed between 1985 and 1990, and has served as an industrial shop. Building 621 consists of two interconnected single-story structures constructed of corrugated steel with a concrete floor and corrugated steel roof. The building covers approximately 11,000 square feet. The space currently occupied by Building 621 was used for aircraft parking from 1947 through 1970. From 1975 until the construction of Building 621, it appears to have been used as a material and equipment storage yard.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, telephone, steam, potable and fire protection water, and underground electrical lines.

This building has been used for administrative and support activities for housing maintenance services. An aboveground storage tank (AST) is located next to this building; this AST is described in the Open Space IV subsection. The following chemicals were noted at Building 620 during site inspection: 100 gallons of paint, 25 gallons of adhesive, and less than one gallon of chlorinated solvents. There is no designated chemical storage area in this building.

Building 620 is equipped with an HVAC system. No industrial hygiene issues were noted during the site inspection.

Structure 302E

Structure 302E is a visual marker for Navy pilots flying overhead. It is located in the center of the parcel, and consists of a steel pole anchored in a concrete base surrounded by a fence.

Open Space I

Open Space I encompasses the northwest corner of the parcel, and covers approximately 20 percent of the parcel. Open Space I has been used for storage by MINS and by NADEP. The ground cover is mostly asphalt, which is in poor condition and covered with gravel in several locations. Buildings 621 and 621A are located in the open space. Two covered drum storage areas are located in this open space south of Building 621.

EBS information indicates that this area was used for aircraft parking from 1947 through 1970. From 1975 through 1990, Open Space I appears to have been used as a material and equipment storage yard. In 1990, Open Space I appears to have been developed into its current state. Current activities conducted within this open space include scrap metal storage, minor equipment repairs, and storage of ship board equipment and materials. A hazardous waste accumulation area is present along the northeast corner of Building 621. Ten empty 5-gallon latex paint cans and used oil-soaked rags were noted during site inspection. Paints and solvents (less than 20 gallons) are stored in a hazardous materials locker located next to Building 621. Three 55-gallon drums of "CLLA" cleaner are presently stored in this location. This area is covered under Target Area 1.

Two-hundred 55-gallon and forty 20-gallon drums of unknown material were stored south of Building 621. These drums were stored on wooden pallets within and alongside the covered storage areas. Approximately 300 cylinders of compressed gases were also located in this area. This area will be covered under Target Area 2.

An oil-filled transformer and its associated switches are located within a fenced and concrete paved area east of Building 621. No staining was noted around this area.

Open Space II

Open Space II is located in the southwest corner of the parcel, encompasses the fenced area located west of Parcel 151, and covers approximately 20 percent of the parcel. EBS information indicates that this area was used for aircraft parking from 1947 through 1970. From 1970 until early 1994, the space was leased to U.S. Eagle, which used the space as a storage yard for refuse containers and trucks.

In 1994, Montgomery-Watson began using the space as a staging area for Investigative Derived Waste (IDW) for operations on the east side of the Base. The IDW was primarily soil from borings and monitoring

wells, stored in plastic-lined roll-off bins, pending analytical profiling and appropriate disposal. A total of nine bins were used by Montgomery-Watson in this capacity. The bins were removed in March and May of 1995.

At the present time, a4,000-gallon poly tank and four 55-gallon drums are present in Open Space II. These containers belong to ERM-West and have historically been used to store IDW from monitoring well installation and development. Currently, the drums are empty, and the 4,000-gallon poly tank (with secondary containment) is approximately half full with well development water. That water has been profiled and is scheduled for removal in the near future. The drums will be removed from the site at that time. The 4,000-gallon tank will remain at the site for future investigative activities.

Historical photographs indicate the long-term presence of staining over almost the entire open space. During the site inspection, oil stains and a strong gasoline odor were noted over areas of unpaved soil in the northeast section of this open space. This area is covered under Target Areas 3, and 4.

Open Space III

Open Space III is located in the northeast corner of the parcel, covers approximately 20 percent of the parcel, and includes the fenced area known as Scrap Yard D-7. Open Space III is 80 percent paved with broken and deteriorated asphalt (at Scrap Yard D-7) and 20 percent unpaved (along the eastern parcel border).

Four wooden sheds and a sewage lift station are located in Scrap Yard D-7. The four wooden sheds located in this open space are utilized to store various plane parts.

The footprint of a demolished building was noted at the extreme east side of Parcel 150. It is unclear what the former function of the building may have been.

EBS information indicates that this area was used for aircraft parking from 1947 through 1970. Since 1970, Open Space III appears to have been used as a scrap yard for airplanes. Miscellaneous debris is scattered over the entire area. Five 5-gallon drums of a petroleum-based oil are located along the eastern side of the scrap yard. Oil stains are present throughout the scrap yard and are estimated to cover between five and ten percent of the total area. This area is covered under Target Area 5.

Open Space IV

Open Space IV encompasses the southeast corner of the parcel, and covers approximately 20 percent of the parcel. Open Space IV is leased to Machson Services, a housing maintenance contractor for NAS Alameda. The ground cover in this open space consists of asphalt, which is in poor condition and covered with gravel in several locations.

Building 621 is located in this open space and is used by Machson Services for administrative support activities for the housing maintenance program.

An AST is located north of Building 620. The tank has a capacity of 1,000 gallons and is reported to store gasoline. The ground underneath the tank is not paved, but no staining was noted. Secondary containment around the tank consisted of broken cinder blocks. The remainder of the open space is utilized for employee parking and for vehicle storage.

EBS information indicates that this area was used for aircraft parking from 1947 through 1970. From 1975 through 1985, Open Space IV appears to have been used as a material and equipment storage yard. In 1985, Open Space IV appears to have been developed into its current state.

Open Space V

Open Space V covers approximately 20 percent of the parcel, consists of the parking areas within Parcel 150, and is entirely asphalt paved, with the exception of concrete sidewalks . Open Space V includes the large open parking area that is located in the north-central portion of Parcel 150, and the smaller parking area located between Parcels 199 and 202; in addition, this area includes the stretch of Avenue N located between Eight Street and Parcel 149.

Structure 302E, which is used as a visual marker for planes, is located within this open space. Railroad tracks run north to south through this open space.

EBS information indicates that this area was used for aircraft parking from 1947 through 1970. From 1975 through 1985, Open Space V appears to have been used as a material and equipment storage yard. In 1985, Open Space V appears to have been developed into a parking area. Minor staining associated with vehicle parking is present

throughout this open space. This area is covered under Zone 19 Target Area 2.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground storage tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 150 is bounded to the north by Parcels 153 and 211, to the west by Eighth Street (which is part of Parcel 159), to the south by Parcels 165 and 167, and to the east by Parcel 149. Parcel 150 surrounds Parcels 151, 199, and 202. Activities of concern on the adjacent parcels have included a paint stripping facility, an aircraft defueling yard, a missile rework facility, and a staging area for chemically treated lumber.

Also, as discussed previously, Parcel 150 is adjacent to IR Site 13 (the former oil refinery) and IR Site 16 (the Cans C-2 Area). IR Sites 9 (Building 410) and 10B (Building 530) are located within 100 feet.

No previous investigations have been conducted at Parcel 150, although data has been obtained along the boundary of Parcel 150. Samples obtained at Parcel 150 boundaries have not exceeded PRGs. Investigations at neighboring IR sites are on-going. No sampling will be conducted at Parcel 150 unless the continuing investigations at the IR sites reveal a cause for concern. If this is the case, then additional sampling at Parcel 150 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 150, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap is defined here as a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-150-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-

TABLE 6-150-2

Summary of Data Gaps
NAS Alameda Parcel 150

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 16 is located adjacent to the parcel, and IR Sites 9 and 10 are located within 100 feet of Parcel 150. Additional subsurface investigations have been proposed by the IR contractor. • IR Site 13 is located north of Parcel 199. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks, and • Former Incinerator (Parcel 139).

TABLE 6-150-2

Summary of Data Gaps
NAS Alameda Parcel 150

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space I) - hazardous waste accumulation area; • Target Area 2 (Open Space I) - hazardous substance storage area; • Target Area 3 (Open Space II) - NE corner of US Eagle lot; • Target Area 4 (Open Space II) - SW corner of US Eagle lot; • Target Area 5 (Open Space III) - Scrap Yard.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, steam, and water lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

based paint, and asbestos. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3.

Industrial hygiene issues do not appear to be of concern at this parcel. However, a one-time compliance program will determine whether further sampling or cleanup measures are required within buildings before transfer or lease can occur.

Once the data gaps in Table 6-150-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 150 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas and provides an overview of zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. Five parcel-specific and two zone-specific target areas were identified on this parcel based on the potential release areas described above and listed in Table 6-150-2. Samples to be collected in the target areas are listed in Table 6-150-1.

- Target Area 1 (Open Space I): The soils in the hazardous waste accumulation area, which is located in the northeast corner of Open Space I, have potentially been impacted by spills or leakage of VOCs contained in paints and solvents. This target area covers approximately 1,000 square feet. The likelihood of environmental impact to soils underlying this area is classified as suspect. Samples to be collected in Target Area 1 are listed in Table 6-150-1.

- Target Area 2 (Open Space I): The soils in this area have potentially been impacted by spills or leakage of VOCs contained in paints and solvents. The target area is located in the center of Open Space I and covers approximately 2,000 square feet. The likelihood of environmental impact to soils underlying this area is classified as

suspect. Samples to be collected in Target Area 2 are listed in Table 6-150-1.

- Target Area 3 (Open Space II): The soils in this area were noted to be stained and were releasing a gasoline odor. The area has been classified as having suspect impacts from VOCs and TPH. This target area is located in the northeast corner of Open Space II and covers approximately 7,000 square feet. The likelihood of environmental impact to soils underlying this area is classified as suspect. Samples to be collected in Target Area 3 are listed in Table 6-150-1.

- Target Area 4 (Open Space II): The soils in this area were noted to be stained and may be impacted by VOCs or TPH. This target area covers all of Open Space II (10,000 square feet). The likelihood of environmental impact is classified as potential. Samples to be collected in Target Area 4 are listed in Table 6-150-1.

- Target Area 5 (Open Space III): The scrap yard may have been impacted by VOCs and TPH. The target area comprises 80 percent of Open Space III, and is over 10,000 square feet in size. The likelihood of environmental impact to soils underlying this area is classified as potential. Samples to be collected in Target Area 5 are listed in Table 6-150-1.

- Zone 19 Target Area 1 (Railroad Tracks): This target area includes all current railroad tracks within or adjacent to the Dock Support Services Zone. Railroad track locations include the boundary between Parcel 139 and Parcel 140, the northern areas of Parcel 159 and Parcel 163, and the mid-section of Parcel 150. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the three zone track areas. Two of the six surface soil samples are located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. Samples to be collected in this target area are listed in Table 6-139-1. Approximate sampling locations are shown on Figure 6-139-1.

- Zone 19 Target Area 2 (Former Incinerator): A former incinerator was located in Building 68 on Parcel 139. This building was built in 1942 and was demolished 19 years later in 1961. The size of the former building was approximately 400 square feet. Compounds or classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. One of the

four sampling locations in this zone target area is located on Parcel 150. The sample is listed in Table 6-139-1. The approximate sampling location is shown on Figure 6-139-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), and subsurface GeoProbe soil sampling (SOP 14). Table 6-150-1 summarizes screening-level sampling and analysis recommended for the parcel's target areas. Fourteen subsurface GeoProbe soil samples will be collected from the parcel-specific locations shown on Figure 6-150-1. Three surface soil samples will be collected from the zone-specific locations shown in Figure 6-150-1. The sampling locations shown on Figure 6-150-1 are approximate and may be modified in the field. Samples should be collected from areas with the most significant staining. If no staining is evident, sample should be evenly distributed throughout the target area. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above on a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22) and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-151

PARCEL 151 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 151 at NAS Alameda (Figure 6-151-1). The parcel, which is located in the southeast portion of the base, is approximately two acres in size and is rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on the parcel. Two parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation include surface soil sampling, and subsurface GeoProbe soil sampling. Table 6-151-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 151, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 151, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 150, 154, 159, 160, 163, 199, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the sampling program development, the parcels located in this zone were

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-151-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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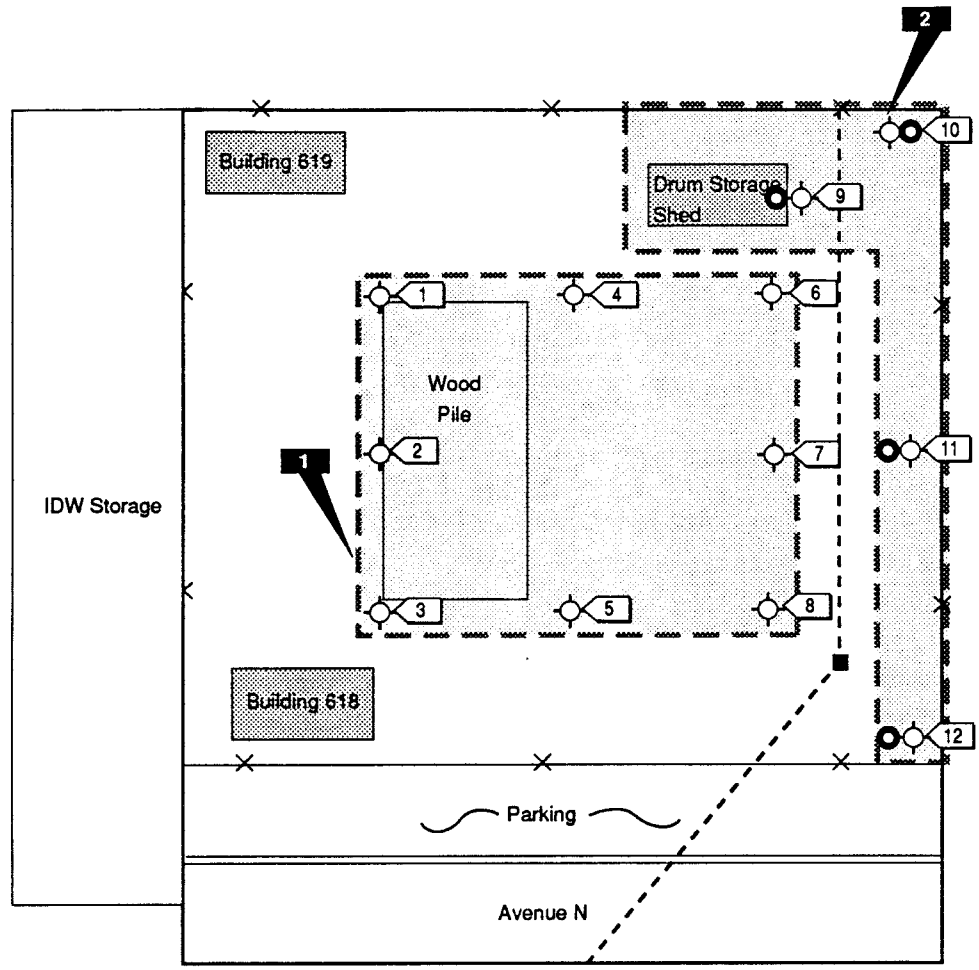
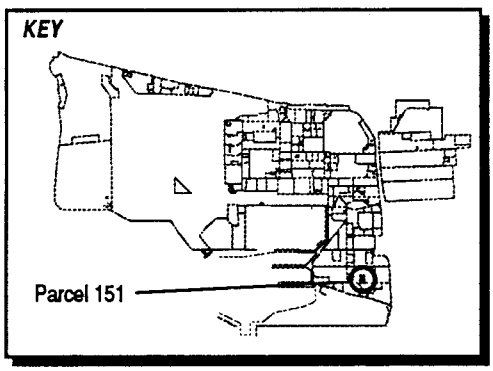
SENSITIVE





LEGEND

- Target Areas 1-2
- Storm Sewer Line
- Soil Vapor Survey Location
- Geoprobe Sample Location
- Catch Basin

1"= 60'

Figure 6-151-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

SENSITIVE

TABLE 6-151-1

Summary of Recommended Samples
NAS Alameda Parcel 151

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
151-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-6-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-7-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-7-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	CLP RAS
151-8-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	EPA 8270, ICAP Scan
151-8-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Metals	SVOCs, Metals	CLP RAS
151-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan
151-9-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, CLP RAS
151-9-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan
151-9-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, CLP RAS
151-10-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan

TABLE 6-151-1

Summary of Recommended Samples
NAS Alameda Parcel 151

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
151-10-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan
151-11-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan
151-11-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan
151-12-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan
151-12-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs	TPH, SVOCs, VOCs	Modified EPA 8015, EPA 8270, ICAP Scan

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 618 and 619) and one structure (a drum storage shed) cover approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently used to store creosote treated wood, empty drums, paving materials, and related equipment. Sewer lines are present on this parcel and are shown on Figure 6-151-1.

Parcel 151 is located within 500 feet of IR Site 13 (the former oil refinery), IR Site 10B (the missile rework facility), and IR Site 16 (Cans C-2 Area). No previous investigations have been conducted at Parcel 151, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 618

Building 618 was constructed between 1975 and 1981. This building is generally in fair condition. Building 618 is a one-story building and is constructed of corrugated metal walls with a concrete floor and metal roof, and covers approximately 1,000 square feet. It is used as a covered material storage facility.

Utilities located within and immediately surrounding Building 618 include underground electrical distribution lines and potable and fire protection water lines.

Information collected during the EBS indicates that activities conducted within this building included storage of paving materials

and related equipment. Industrial chemical products have been stored in this building. These products include: 250 gallons of chlorinated and halogenated solvents; 200 gallons of an oxidizer (calcium hypochlorite), and 200 gallons of latex paint. These compounds are typically stored on wood or metal pallets. Two thousand gallons of corrosives are also stored in this shed. No spills were documented for this area.

Building 618 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No incidents (e.g., fires, mishaps, flooding, or crashes) are documented to have occurred at this building.

Building 619

Building 619 was constructed between 1975 and 1981 and served as a covered materials storage facility. Information collected during the EBS indicates that activities conducted within this building include storage of paving materials and related equipment. The building is generally in fair condition. Building 619 is a single story building constructed of corrugated metal walls with a concrete floor and metal roofing, and covers approximately 1,000 square feet.

Utilities located within and immediately surrounding this building include underground electrical distribution lines and potable and fire protection water lines.

Industrial chemical products have been stored in this building. These products include: sodium hydroxide, cupric sulfate, sodium sulfate, roof sealer, asphalt and petroleum, Forane 77, and caustic soda. A spill of cyclohexylamine is documented to have occurred in July 1992. Approximately 5 gallons of the compound were spilled as a result of a hole in the original drum. The leak was secured and the spilled material was redrummed.

Building 619 is not equipped with a HVAC system. No incidents (e.g., fires, mishaps, flooding, or crashes) are documented to have occurred within Building 619.

Open Space

The open space covers approximately 95 percent of the parcel. The ground surface is entirely paved with asphalt. The pavement is generally in good condition.

Structures located within the open space include a drum storage shed located at the northeast corner of the open space. This shed was built

between 1975 and 1981 and is constructed with a concrete floor and metal roofing. This shed covers approximately 1,000 square feet. Activities conducted within and around this structure consist of storage of empty drums.

Utilities located within and immediately surrounding this open space include sanitary, storm, and industrial sewers, underground electrical distribution lines, and potable and fire protection water lines.

EBS information indicates that activities conducted within this open space includes storage of hazardous materials such as drums of corrosives, paint, and cylinders of compressed gases (on the east side of the open space). A review of historical aerial photographs and EBS information indicate that this open space was utilized for aircraft parking from 1947 through 1970. From 1975 through 1981, the parcel appeared to have been used as a material and equipment storage yard.

The parcel has been used to store treated timbers used in pier building. An accumulation area of large telephone poles and timber treated with creosote and copper green preservative is located in the central area of the open space. This accumulation area is, on average, 50 feet wide by 100 feet long. The wooden poles are stored up to 15 feet high. Many small stains, covering approximately 80 to 90 percent of the storage area were noted beneath the timbers. Review of historical photographs indicates that the treated timber accumulation area is not set in a fixed location, but it is typically located near the center of the parcel. Interviews with area personnel indicate that the logs are treated with creosote before they reach the storage area. The EBS inspectors noticed a strong creosote odor was present in this area.

There is one storm drain located in the southeast portion of the parcel. The area around the drain is stained apparently as a result of the washdown water from the logs and timber. Accumulation of this runoff was observed around the storm drain during site inspections.

No other incidents (i.e., fires, mishaps, or flooding) are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 151 is bounded by Parcel 150 to the north, east, and west, and by Parcels 165 and 167 to the south. Concerns from Parcel 150 include a prevalent gasoline odor, storage of refuse containers and trucks, and assorted oil stains on deteriorated asphalt/dirt ground covering.

There is a potential impact at Parcel 151 because of waste disposal from the former Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of near-by (i.e., Parcel 170 and other surrounding areas). Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 151 may be impacted by TPH and SVOCs.

No parcels contiguous with Parcel 151 are IR sites, therefore, no sampling of parcel boundaries is called for in this PEP. If the continuing investigations at the IR sites reveal a cause for concern, then additional sampling at Parcel 151 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 151, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-151-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, no industrial buildings, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Buildings 618 and 619. A one-time compliance program will determine whether further sampling or cleanup measures are required within the storage areas of these buildings before transfer or lease can occur.

Once the data gaps in Table 6-151-2 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-151-2

Summary of Data Gaps
NAS Alameda Parcel 151

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 10B (Missile Rework) is located within 500 feet north of Parcel 151. • IR Site 13 (Former Oil Refinery) is located within 500 feet north of Parcel 151. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery. • IR Site 16 (Cans C-2 Area) is located within 500 feet west of Parcel 151.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks
Potential Parcel-Specific Release Areas	• Preserved Wood Storage. • Eastern Boundary of Parcel.

TABLE 6-151-2

Summary of Data Gaps
NAS Alameda Parcel 151

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• No steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 151 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific and one zone-wide target areas. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-151-2.

- Target Area 1 (Open Space): This target area is located in the center of the parcel and encompasses the preserved-wood storage area. This target area covers over 10,000 square feet. Compounds of concern possible within this target area include SVOCs and metals associated with wood preservation. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 2 (Open Space): This target area is located along the east boundary of the parcel and covers approximately 9,000 square feet. Compounds of concern possible within this target area include SVOCs, TPH, and VOCs. The likelihood of environmental impact having occurred in this area is classified as potential.

- Zone 19 Target area 2 (Former Incinerator): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface soil sampling (SOP 14).

Table 6-151-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 151. Twelve subsurface soil samples and four surface soil samples will be collected from the locations shown on Figure 6-151-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-154

PARCEL 154 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 154 at NAS Alameda (Figure 6-154-1). The parcel, which is located in the southeast portion of the base, is approximately 14 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains five RCRA sites (SWMU/GAP 67, SWMU/GAP 68, SWMU/GAP 69, SWMU/GAP 71, and SWMU/GAP 72). None of these sites have been identified in the Part B Permit as requiring an RFI. Five parcel-specific investigation areas and one zone-wide target investigation area (target area) have been identified on this parcel. Sampling procedures called for in the screening-level investigation include surface soil sampling, and subsurface soil sampling. Table 6-154-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 154, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 154, consistent with the objectives identified in the Shell Workplan. This subsection also identifies Installation Restoration Sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 150, 151, 159, 160, 163, 199, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services

TABLE 6-154-1

Summary of Recommended Samples
NAS Alameda Parcel 154

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
154-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-1-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-1-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-6-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-7-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-7-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS

TABLE 6-154-1

Summary of Recommended Samples
NAS Alameda Parcel 154

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
154-8-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-9-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-9-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-10-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-11-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-11-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-11-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-11-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-12-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
154-12-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-12-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-12-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-13-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-13-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan

TABLE 6-154-1

Summary of Recommended Samples
NAS Alameda Parcel 154

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
154-14-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-14-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-15-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-16-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-17-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-18-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
154-18-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 4	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
154-19-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 5	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z19-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 19 Target Area 2	Dioxins and Furans	Dioxins and Furans	EPA 8280/SAS B

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time. Dredged material taken from the channel and turning basin was used as fill for the land area of this parcel. This fill material may have been impacted by hazardous compounds.

Currently, five buildings (Buildings 167, 72B, 164, 555, and 340) and one structure (Structure 287-Sewage Lift Station) cover 15 percent of the parcel. The remaining 85 percent is open space. The open space areas consist of vehicle parking areas located in the eastern and western portions of the parcel, and a material storage, vehicle storage, and shop area located between and south of Buildings 166 and 167. One building (Building 318-Light Tower) was formerly located on the parcel and has since been demolished. Underground fuel lines and sewer lines are present on this parcel and are shown on Figure 6-154-1.

Parcel 154 is located adjacent to Installation Restoration (IR) Program Site 9 (Building 410), 300 feet west of IR Site 13 (Former Oil Refinery), and 125 feet southeast of IR Site 17 (Seaplane Lagoon). No previous investigations have been conducted at Parcel 154, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 167

Building 167 was constructed circa 1947 and serves as an aircraft maintenance hangar (Figure 6-154-1). This building is in fair condition. Building 167 is a single story building constructed of concrete with a concrete floor, and covers approximately 60,000 square feet.

Utilities located within and immediately surrounding Building 167 include sanitary sewer, storm sewer, telephone, steam, water, electrical, and industrial sewer lines. An air permit covering dryers, anodizing tanks, degreasers, the spray booth, dipping tanks, the magnetic particle inspection machine, the resin mixing station, the curing oven, abrasive blasting, and miscellaneous chemical usage exists for Building 167. The interior of the building is divided into northwest, northeast, southwest, and southeast shop areas. These are, respectively, a prop components shop, a shipboard repair group, a west prop shop, and an east prop shop. In addition, the building contains small shop areas on its western side, which include a paint and resin shop, a grinding and sandblasting shop, a rubber shop, and a tool area.

Information collected during the EBS indicates that activities conducted within this building included painting; resin mixing; parts washing in solvent dip tanks; metal treatment; metal machining; paint stripping/sandblasting; defueling of aircraft prior to maintenance; and replacing or filling of lubricating and/or hydraulic fluids. These processes can involve the generation of the following potentially hazardous wastes: paints, resins, solvents (both halogenated and non-halogenated), metal treatment wastes, sandblast grit (which may contain heavy metals), petroleum products, empty containers, and rags.

Various acids, alkalis, halogenated solvents, non-halogenated solvents, resins, and heavy metals have been used throughout the ground floor of the building. Five aboveground dip tanks are located against the south wall of Building 167. Two of the tanks contain PD-680; one contains hot oil; one contains alkali; and one contains 1,1,1-trichloroethane (1,1,1-TCA). A sodium hydroxide (NaOH) dip tank is located at the north wall of the west prop shop. Anodizing dip tanks containing chromic and nitric acid are located in the center of the west shop area. Hazardous substances (including acids, bases, halogenated solvents, and non-halogenated solvents) are stored in hazardous material lockers and in an open metal shed against the south wall. Disposal of used chemicals is accomplished by transfer to at a generator accumulation point (GAP) site, or pumping into a portable storage tank located outside Building 167.

GAP sites are located in the prop components shop and in the west prop shop. The GAP site located at the prop components shop contained the following: a 55-gallon drum with paper products, a 55-gallon drum with metal cans, a 55-gallon drum with spent Envirosolv CRX solvent emulsion cleaner, a 25-gallon drum with contaminated towels (solvents and oils), and a 5-gallon can of MEK. All drums were stored on pallets, and the area was surrounded by secondary containment. The GAP site at the west prop shop contained the

following: a 55-gallon drum with lead contaminated glass beads, three 55-gallon drums with metal cans, a 25-gallon drum with MEK, a 25-gallon drum with contaminated towels (solvents and oils), a 25-gallon drum of aerosol cans, a 5-gallon can of MEK, and a 5-gallon can of alcohol. All drums were stored on pallets, and the area was surrounded by secondary containment.

A spill of nitric acid was documented to have occurred on July 14, 1992. Approximately 50 gallons of nitric acid were spilled. The spill was neutralized and cleaned up with absorbents. Review of aerial photographs and site inspection data indicates that undocumented spills of lubricants, halogenated and non-halogenated solvents, acids, alkalis, and heavy metal solutions may have occurred throughout Building 167.

Building 167 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents (e.g.., fires, mishaps, flooding, or crashes) are documented to have occurred within Building 167.

Building 72B

Building 72B is located immediately southeast of Building 166. The building appeared to be a shed constructed of corrugated steel. Building 72B and the area immediately surrounding it are fenced off. Access to this area appeared to be strictly through Building 166. The interior of this building could not be inspected during the site inspection. The building appears to be used as a chemical storage shed.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

Building 164

This building is not shown on the NAS Alameda Base Map, nor does it appear in the building database. Building 164 appears to be an administration building. The exterior of the building is aluminum siding with a wood roof. It appears to be a portable building, and is labeled "PWC Transportation Dept. Dispatch." It is in generally good condition. Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

A storm drain was located immediately south of Building 164. Hoses, a water spigot, and a clean parked vehicle were noted adjacent to this drain. Also, a 55-gallon drum of cleaning compound was observed on the west side of Building 164. Apparently, this area is utilized for vehicle washdown.

The building and associated shack were locked and could not be entered during the site inspection. No chemical storage issues were noted outside.

Building 555

Building 555 is an electrical substation. It is in fair condition and is still in service. It is a one-story building, and appeared to be of concrete construction over a concrete slab. The structure covers approximately 500 square feet. Information collected during the EBS indicates that activities conducted within this building were in accordance with normal procedures for transformer substations. This type of process historically involved the use of PCBs.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

A fenced concrete paved compound is located on the west side of the substation. No oil-filled, potentially PCB-containing equipment was noted. Eight non-PCB, oil-filled switches, and one non-PCB, oil-filled transformer were located in the compound.

Two 55-gallon drums located on the southeast corner of Building 555 were noted during the site inspection. These drums appeared to contain oil. A dark, oily stain (approximately 5 feet by 5 feet) appeared to originate from these drums. This area is covered under Target Area 5.

Building 340

Building 340 is a fire protection pump house. It is in fair condition. It is one story tall, and appears to be of concrete construction over a concrete slab. The structure covers approximately 800 square feet. A small wooden shack is located immediately south of the building. It appears to contain electrical equipment associated with Building 340.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

The pump house is rated to pump 3,050 gallons per minute. Pump house related piping is located in a 10-foot by 10-foot, fenced area located east of the building. A UST (T-340-1) is located in the fenced area. The UST is reported to be active. A vent pipe was evident on the east side of the building.

A transformer was located in a fenced area, on a concrete pad, north of Building 340. It appeared to be in good condition, and no staining was noted on the concrete pad. The building and associated shack were locked and could not be entered during the site inspection.

Structure 287

Structure 287 is a sewage lift station. It is located on a concrete pad. No chemical storage or wastewater discharge issues were noted at this area.

Open Space I

Open Space I is defined by the area between and south of Building 166 and 167. This space occupies approximately 25 percent of the parcel. Open Space I has been used as a support area for operations inside both these buildings. Over 95 percent of this area is paved with concrete.

Utilities located within and immediately surrounding this building include sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines.

EBS information indicate that activities conducted within this open space include chemical, equipment, and material storage operations from 1947 through 1994. Heavy staining was noted in historical photographs of this area. Activities noted during the site inspection were consistent with this history. Areas of note are detailed below.

A hazardous materials storage shed and GAP site for the prop shop is located southwest of Building 167. Hazardous material and miscellaneous material storage yards are located inside fenced areas, directly south of Building 167. Light staining was noted throughout this area. Access to the interior of these storage yards were not made

accessible to the site inspectors. This area will be sampled as Target Area 3.

An industrial dust silo and associated drum was located adjacent to the western wall of Building 166. This area was labeled as a hazardous waste area.

A hazardous material and miscellaneous material storage yard was located south of Building 166. Light staining was noted throughout this area. The Rigger's Support Shop and the hazardous waste storage area may be of concern. The Riggers Support Shop is located directly south of Building 166. Gasoline, oils, and solvents were stored and used in this area, and numerous associated stains were evident. A hazardous waste storage area was located in this yard. Two drums, one containing waste oil and the other containing naphtha and benzene, were stored in a covered accumulation area with secondary containment. An apparent oil stain (15 square feet in size) was associated with this area. This area is covered under Target Area 2.

No other incidents (i.e., fires, mishaps, flooding) are documented to have occurred within Open Space I.

Open Space II

Open Space II is defined as the portion of the parcel's exterior space east of Building 166. This space occupies approximately 25 percent of the parcel. Open Space II is used for vehicle parking (cars, trucks, and buses) and for material and equipment storage. The ground surface of Open Space II is paved with asphalt and concrete. The pavement is generally in fair condition. Structures located within Open Space II include Structure 287 (a sewage lift station).

Utilities located within and immediately surrounding this building include sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines.

EBS information indicate that activities conducted within Open Space II include aircraft parking from 1947 through 1970. Since 1970, Open Space II appears to have been used as a material and equipment storage area. No other incidents (i.e., fires, mishaps, flooding) are documented to have occurred within Open Space II.

Open Space III

Open Space III is defined as the area located west of Building 167, the parking area, and the roadway located in the southernmost parcel area. This space occupies approximately 25 percent of the parcel. The ground surface of Open Space III is completely paved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is covered with concrete.

Building 318 was formerly located in Open Space III. It was a light tower, and was demolished at an unknown date. Utilities located within and immediately surrounding this building include sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines.

EBS information indicates that activities conducted within Open Space III include aircraft parking from 1947 through 1970. Since 1970, Open Space III appears to have been used for parking and some material storage. No other incidents (i.e., fires, mishaps, flooding) are documented to have occurred within Open Space III.

Underground Storage Tanks

One active tank is present at this parcel (Tank T-340-1). The presence of this tank was identified from Naval Air Station drawings and the EBS. Tank T-340-1 is located immediately west of Building 340. Information about the tank including date of installation, capacity, contents, and tightness testing are unavailable. It is believed that Tank T-340-1 contains fuel for the pump system in Building 340.

Parcel Boundary Conditions

Parcel 154 is bounded by Parcels 139, 140, 152, 153, 155, and 201. Parcel 152 is IR Site 9 (Building 410). Activities of concern on adjacent parcels include the former incinerator on Parcel 139, the industrial wastewater treatment plant on Parcel 153, and the industrial operations on Parcel 201.

There is a potential impact at Parcel 154 because waste disposal from the former Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of nearby (i.e., Parcel 170 and other surrounding areas). Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 154 may be impacted by TPH and SVOCs.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with these sites on the parcel, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes five RCRA sites (site numbers SWMU/GAP 67, SWMU/GAP 68, SWMU/GAP 69, SWMU/GAP 71, and SWMU/GAP 72). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the five RCRA sites at this parcel, none require further investigation. A brief description of each of the RCRA sites is provided below.

Site SWMU/GAP 67 is located at Building 167, Shop 96311. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 67 is listed as removed. The chemicals of concern associated with this site included oil and aerosol paint.

Site SWMU/GAP 68 is located at Building 167, Shop 96314. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 68 contains 30-gallon drums. The chemicals of concern associated with this site include petroleum products. This site is currently active.

Site SWMU/GAP 69 is located at Building 167, Shop 96313. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 69 is a large tank, possibly the portable tank described to be located outside the southwest corner of Building 167. The chemicals of concern associated with this site include corrosive waste with heavy metals including caustic soda, nitric acid, and chromic acid. This site is currently active.

Site SWMU/GAP 71 is located at Building 167, Shop 96313. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 71 contains 30-and 55-gallon drums. The chemicals of concern associated with this site include aerosol paint, lubricants, oils, and solvents. This site is currently active.

Site SWMU/GAP 72 is at Building 167, Shop 96313. It is unknown whether any chemicals were released from this site. Site SWMU/GAP 72 contains 55-gallon drums. The chemicals of concern associated with this site include hydraulic oil, PD-680, and lead. This site is currently active.

An industrial dust silo and associated drum was located adjacent to the western wall of Building 166. This area was labeled as a hazardous waste area.

A hazardous waste storage area is located in the yard south of Building 166. Two drums, one containing waste oil and the other containing naphtha and benzene, were stored in a covered accumulation area with secondary containment. An apparent oil stain (15 square feet in size) was associated with this area. This area is covered under Target Area 2.

A hazardous materials storage shed and GAP site for the prop shop is located southwest of Building 167. Hazardous material and miscellaneous material storage yards are located inside fenced areas, directly south of Building 167. Light staining was noted throughout this area. Access to the interior of these storage yards were not made accessible to the site inspectors. This area will be sampled as Target Area 3.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 154, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-154-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs, and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 167. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-154-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 154 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-154-2

Summary of Data Gaps
NAS Alameda Parcel 154

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 9 (Building 410-Paint Stripping) is located adjacent to the east border of Parcel 154. • IR Site 13 (Former Oil Refinery) is located 300 feet east of Parcel 154. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery. • IR Site 17 (Seaplane Lagoon) is located 150 feet northwest of Parcel 154.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks. • Former Incinerator.

TABLE 6-154-2

Summary of Data Gaps
NAS Alameda Parcel 154

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Interior of Building 167. • Open Space I-Hazardous Material Storage, Southwest of Bldg. 167. • Open Space I-South of Bldg. 167. • Open Space I-South of Bldg. 166.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST currently exists at Parcel 154.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area/s and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following eleven parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-154-2.

- Target Area 1 (Building 167): The area adjacent to the paint booth and resin mixing tank may have been impacted by resins or paints. The dip tank area and soils underlying concrete in the area of the 1,1,1-TCA tank may have been impacted by spills or leakage of hazardous substances that have been stored and utilized in this area. The floor area of the rubber room and the east prop shop was noted to be significantly corroded. The area adjacent to the solvent dip tank that is controlled by the shipboard repair group may have been impacted by solvents. The main entrance of the area may have been impacted by previous operations at the building. This area is covered with a significant stain of unknown origin. Large stains were observed in the Prop components section and the Assembly / Blade section. The target area contains less than 12,000 square feet. Compounds of concern possible within this target area include TPH, SVOCs, and VOCs (1,1,1-TCA) as well as metals in paint residue. The likelihood of impact having occurred at this area is classified as potential.

- Target Area 2 (Open Space I): This area is heavily stained and is adjacent to the hazardous materials storage area for the prop shop and the GAP. The target area contains less than 1,000 square feet. Compounds of concern possible within this target area include TPH, SVOCs, metals, and VOCs. The likelihood of impact having occurred in this area is classified as potential.

- Target Area 3 (Open Space I South of Building 167): This area has been used to store hazardous materials since the construction of Buildings 166 and 167 circa 1947. The target area contains over 10,000 square feet. Compounds of concern possible within this

target area include TPH, VOCs, SVOCs, and metals. The likelihood of impact having occurred in this area is classified as potential.

- Target Area 4 (Open Space I South of Building 166): This area has been used to store hazardous materials since the construction of Buildings 166 and 167 circa 1947. The target area contains over 10,000 square feet. Compounds of concern possible within this target area includes TPH, VOCs, SVOCs, and metals. The likelihood of impact having occurred in this area is classified as potential.

- Target Area 5 (Southeast corner of Building 555): A release of an unknown oily materials was observed in this area during site inspection. The target area contains over 100 square feet. Compounds of concern possible within this target area includes TPH, SVOCs, and metals. The likelihood of impact having occurred in this area is classified as potential.

- Zone 19 Target Area 2 (Former Incinerator): The former Incinerator was located in Building 68 on Parcel 139. This building was built in 1942 and was demolished 19 years later in 1961. The size of this former building was compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. One of the four surface soil samples proposed to be collected from this zone-wide target area is located on Parcel 154. Samples to be collected in this target area are listed in Table 6-154-1. Approximate sampling locations are shown on Figure 6-154-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14). Table 6-154-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 154. Nine surface soil samples and seventeen subsurface GeoProbe samples will be collected from the parcel specific target areas and one surface soil sample will be collected from the zone-wide target area. These locations are shown on Figure 6-154-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 20), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-159

PARCEL 159 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 159 at NAS Alameda (Figure 6-159-1). The parcel, which is located in the southeastern portion of the base, is approximately 14 acres in size and has a roughly L-shaped outline. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide target and two parcel-specific investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, and subsurface GeoProbe soil sampling. Table 6-159-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 159, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 159, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-159-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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TELEPHONE: (619) 556-1280
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SENSITIVE

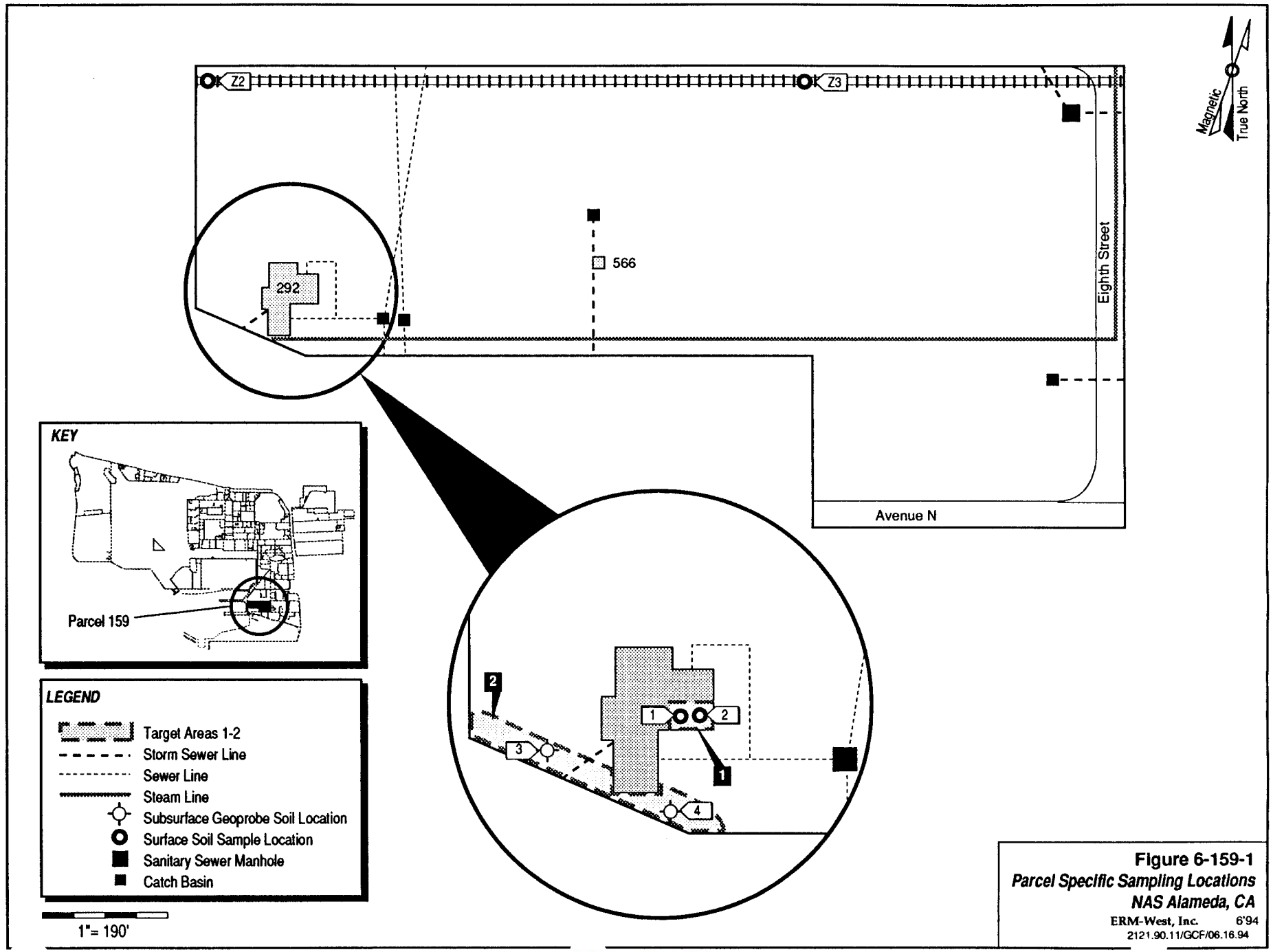


Figure 6-159-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

SENSITIVE

TABLE 6-159-1

Summary of Recommended Samples
NAS Alameda Parcel 159

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
159-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
159-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
159-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
159-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	TPH	TPH	EPA 8015 Modified
159-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	TPH	TPH	EPA 8015 Modified
159-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	TPH	TPH	EPA 8015 Modified
Z19-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270
Z19-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

turning basin was used as fill for the land area of this parcel. This fill material may have been impacted by hazardous compounds.

Currently, two buildings (Buildings 292 and 566) cover approximately one percent of the parcel. The remaining 99 percent is open space. The parcel area is presently in use as a guard/watch tower, rigging shop, and large parking area.

Parcel 159 is located approximately 200 feet southwest of an Installation Restoration (IR) Program site (IR site 9, Building 410-Paint Stripping). No previous investigations have been conducted at Parcel 159, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 292

Building 292 was constructed in 1945 and served as a rigging shop (Figure 6-159-1). Building 292 is a single story building constructed of wood with a concrete foundation, and covers approximately 3,400 square feet. The space occupied by Building 292 was formerly open space used for airplane and missile storage.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution, potable and fire protection water, and steam and condensate lines.

Information collected during the EBS indicates that activities conducted within this building included crane and rigging work. Crane and rigging work include use of heavy machinery and typically involved the use or generation of chemicals and wastes including fuels and lubricants. Crane and rigging work has been performed at Building 292 since 1945.

Gasoline is documented to have been stored and used frequently in Building 292. Approximately 100 gallons of lube oil and grease are presently being stored in this building. Disposal of used chemicals (oily rags) is accomplished by collecting the waste in cans. The cans were stored in the western portion of the building at the time of the visual

inspection. The rags are then bagged and transferred to a waste disposal unit.

On-going spills of generator fuel and oil were documented by site inspectors. Large pans were placed under the generators and were observed by on-site inspectors. Significant staining was noted on the ground surrounding the pans. Absorbent was noted to have been applied to the affected area.

A heating-ventilation-air conditioning (HVAC) system was not documented during the site inspection. No incidents (i.e., fires, mishaps, flooding, or crashes) are documented to have occurred within Building 292.

Building 566

Building 566 was constructed in 1975 and serves as a watch tower and guard station (Figure 6-159-1). Building 566 consists of a ladder leading up to a thirty-foot-high platform. The shack, which sits on top of the platform, has an aluminum frame and measures five feet by three feet. The space occupied by Building 556 was formerly open space used for airplane and missile storage.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution, potable and fire protection water, and steam and condensate lines.

Information collected during the EBS indicates that activities conducted within this building have been confined to security operations. There is no documentation or physical evidence to suggest that chemical use has ever occurred in this building.

Open Space

The open space covers approximately 99 percent of the parcel. The ground surface of the open space is entirely paved. Approximately 95 percent of the paved area is surfaced with asphalt and 5 percent is covered with concrete. The pavement is generally in good condition. There are two temporary structures (a portable toilet and dumpster) located in this Open Space.

Utilities located within and immediately surrounding this Open Space include sanitary and storm sewers, underground electrical distribution, potable and fire protection water, and steam and condensate lines.

EBS information indicates that activities conducted within this open space included aircraft parking from 1947 through 1970. Beginning in 1970, the Open Space appears to have been consistently used as a vehicle parking lot. Staining was noted around Building 292 and at the borders to Parcel 160.

One hundred gallons of lube oil and grease were observed in a Conex storage box located to the east of Building 292 during visual inspections. Also found outside were individual lockers for the following items: flammable materials, grease oil, cleaning gear, and storage hoses pump parts. There is no documentation or physical evidence to suggest that chemical use has ever occurred in this Open Space.

No spills or other incidents (i.e., fires, mishaps, or flooding) are documented to have occurred within the Open Space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 159 is bounded by Parcels 150, 154, 155, 160, 162, 163, 165, 199, and 202. Activities of concern on these adjacent parcels include industrial processes at Parcel 154, fuel storage on Parcel 163, the fueling station at Parcel 165, and the hazardous material/waste storage at Parcel 202.

There is a potential impact at Parcel 159 because of waste disposal from the Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of in the near-by marsh (i.e., Parcel 170 and other former marshlands).

Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 159 may be impacted by TPH and SVOCs associated with IR Site 13. The extent of release associated with IR Site 13 is being addressed by the IRP contractor and is not addressed in the PEP.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 159, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-159-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, and Installation Restoration Sites. Sampling and imaging associated with underground sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 292. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-159-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 159 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-159-2

Summary of Data Gaps
NAS Alameda Parcel 159

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 9 (Building 410) is located within 200 feet northeast of Parcel 159. Additional subsurface investigation relative to IR Site 9 is proposed by the IR contractor. • IR Site 13 is located northeast of Parcel 159. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Building 292, Rigging Shop. • Building 292, Generator Room. • Open Space-North Side of Building 292. • Open Space-Southwest Parcel Boundary.

TABLE 6-159-2

Summary of Data Gaps
NAS Alameda Parcel 159

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above.

- Target Area 1 (Building 292): The emergency generator room may have been impacted by spills or leakage of petroleum compounds from the emergency generator. This target area covers approximately 1,000 square feet. Compounds of concern are TPH. The likelihood of environmental impact to soils underlying the concrete is classified as potential. Samples to be collected in this target area are listed in Table 6-159-1.

- Target Area 2 (Open Space): The staining in this area indicates that soils in the south border of this parcel may have been impacted by historical spill events. The target area covers approximately 2,000 square feet. Compounds of concern are TPH. The likelihood of environmental impact to soils underlying the asphalt is classified as potential. Samples to be collected in this target area are listed in Table 6-159-1.

- Zone 19 Target Area 1 (Railroad Tracks): This target area includes all current railroad tracks within or adjacent to the Dock Support Services Zone. Railroad track locations include the boundary between Parcel 139 and Parcel 140, the northern areas of Parcel 159 and Parcel 163, and the mid-section of Parcel 150. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. Surface soil samples will be collected approximately every 800 linear feet along the three track areas for a total of six zone sampling locations. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. Samples to be collected in this target area are

listed in Table 6-159-1. Approximate sampling locations are shown on Figure 6-159-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), and subsurface GeoProbe soil sampling (SOP 14). Table 6-159-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 159. Two subsurface soil samples, and two surface soil samples will be collected from the locations shown on Figure 6-159-1. In addition, two soil samples will be collected from the zone-wide location shown in Figure 6-159-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-160

PARCEL 160 EVALUATION PLAN

This parcel-specific Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 160 at NAS Alameda (Figure 6-160-1). The parcel, which is located in the southeast portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the sampling objectives outlined in Section 1. No RCRA sites were identified at this parcel. Two target investigation areas (target areas) have been identified on this parcel. Surface soil sampling is the procedure called for in the screening-level investigation in these areas. Table 6-160-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 160, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 160, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern, consistent with objective 2 in Section 1.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with several other parcels (Parcels 139, 140, 150, 151, 154, 159, 163, 199, 201, and 202). This parcel zone has been designated the Dock Support Services Zone (Zone 19). This zone encompasses parcels immediately east of the Dock Zone that have contained open areas and buildings associated with dock activities including vehicle and aircraft parking, storage, sewage facilities, electrical facilities, steam generation, and administration. During

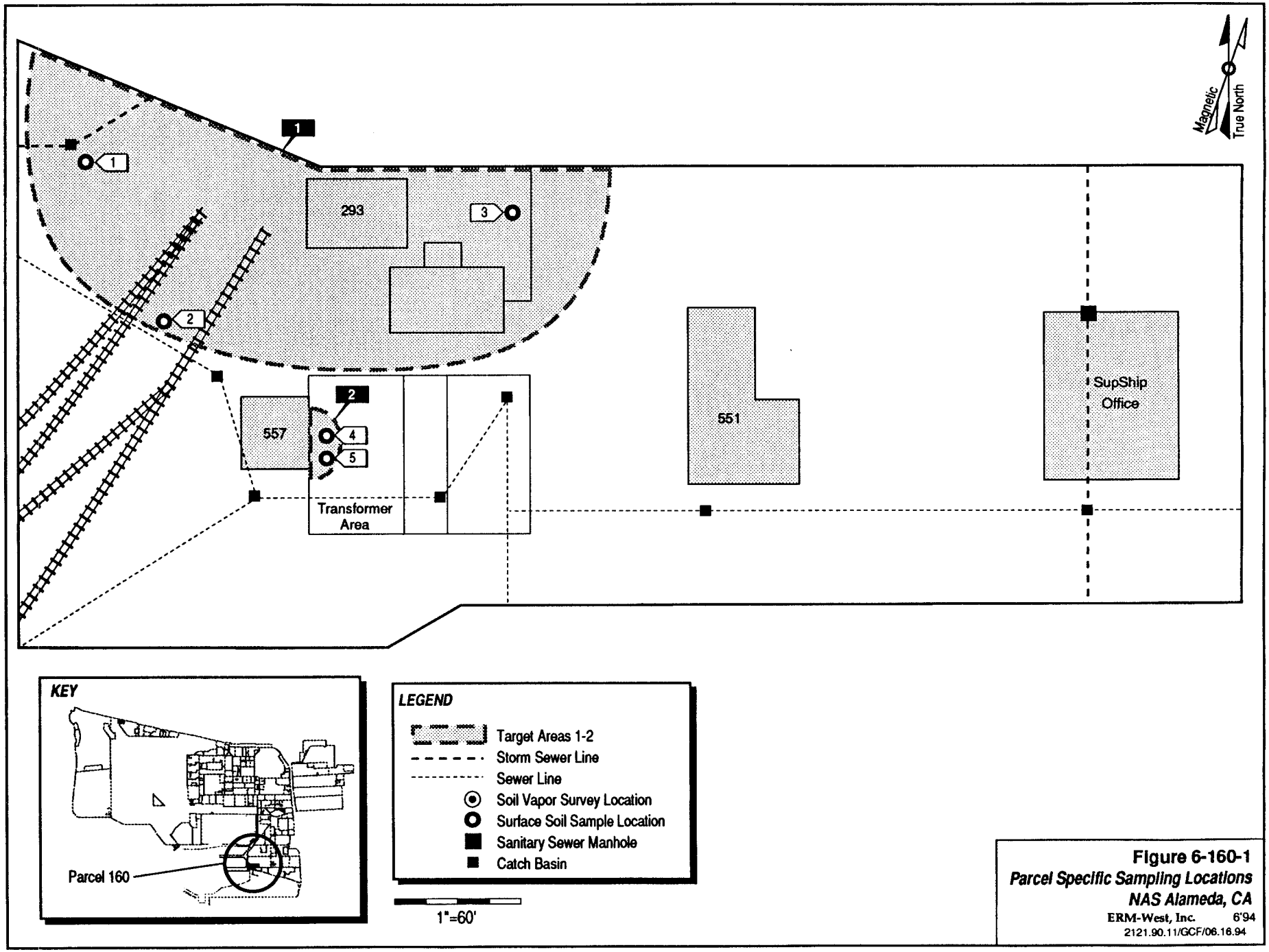


Figure 6-160-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

TABLE 6-160-1

Summary of Recommended Samples
NAS Alameda Parcel 160

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
160-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
160-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
160-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
160-3-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
160-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, PCBs	TPH, PCBs	EPA 8015 Modified, EPA 8080
160-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	TPH, PCBs	TPH, PCBs	EPA 8015 Modified, EPA 8080
160-5-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	TPH, PCBs	TPH, PCBs	EPA 8015 Modified, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

development of the sampling program, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land are of this parcel. This fill material may have been impacted by hazardous compounds.

Currently, three buildings (Buildings 551, 557, and the Supship Office) cover six percent of the parcel. The remaining 94 percent is open space. However, visual inspection revealed numerous trailer type structures in the open space surrounding Building 551.

Parcel 160 is located over 500 feet away from any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 160, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 551

Building 551 was constructed to be used as a sewage holding tank and pump station. It is in fair condition and is still serving its original purpose. The concrete structure covers approximately 5,000 square feet.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution, potable and fire protection water, and steam and condensate lines.

Information collected during the EBS indicates that activities conducted within this building have always been related to sewage storage. This process involves the containment of large amounts of raw sewage. Due to a pump failure in September 1988, up to 800 gallons of raw sewage may have entered the storm drain. A cleanup effort was conducted by AEM Corporation. These 2,000 lb chlorine

cylinders were noted on the western side of Building 551 during visual inspection.

Four storage lockers on the east and north sides of the building are used for equipment storage. No spills or chemical storage were evident.

Supship Office

The Supship Office is a wooden, trailer type structure that has been in use on Parcel 160 since 1988 (Figure 6-160-1). It remains in generally good condition. Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution, potable and fire protection water, and steam and condensate lines. No spills or chemical storage were evident to site reviewers in the Supship building. A heating-ventilation-air conditioning (HVAC) system was not noted either.

Building 557

Building 557 is a transformer substation with an accompanying electrical distribution line (Figure 6-160-1). This building is still standing. The electrical line extends 8,600 linear feet through the Parcel.

Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution, potable and fire protection water, and steam and condensate lines.

Information collected during the EBS indicates that activities conducted within this building were consistent with normal procedures for transformer substations. This type of process historically involved the use of Poly Chlorinated Biphenyls (PCBs).

There are no reported spills or chemical storage associated with this building, although a forklift parking area was noted adjacent to Building 557.

Open Space

The Open space takes up approximately 95 percent of the parcel. Structures located within the open space include numerous trailer offices that may be moved on a fairly regular basis. They are typically constructed of wood and reinforced with steel. The ground surface of the open space is entirely paved. Approximately 90 percent of the

paved area is surfaced with asphalt and 10 percent is concrete. The pavement is generally in good condition. There are four separate railroad track lines in the western area of the parcel. All four are headed northeast; the tracks end in this parcel shortly after converging.

Utilities located within and immediately surrounding this open space include sanitary and storm sewers, underground electrical distribution, overhead electrical distribution, potable and fire protection water, and steam and condensate lines.

EBS information about this area indicates that aircraft parking and aircraft maintenance took place at this parcel through 1970. Engines from aircraft were preserved here and run periodically. Reportedly fuel and oil spills associated with connecting and disconnecting the engines occurred in this area.

From the early 1970s through the late 1980s, this open space housed boat repair facilities. Three buildings associated with boat repair were formerly located in this space (Buildings 217, 293, 447). Buildings 217 and 293 were used as boat repair shops and shelters until they were demolished in 1988. Each semi-permanent structure covered approximately 1,100 square feet. Little information is available regarding the other former building, building 447. It was also a semi-permanent building but only covered approximately 500 square feet. It was removed prior to 1989.

From the late 1980s through the present, the open space has been used by temporary tenants who occupy trailer-type buildings. During the site walk-through, the Mare Island Shipyard Remote Facility (MINS) was noted to occupy several of these trailers. Hazardous material storage lockers were noted throughout this area. Paint was noted at more than one storage locker in this area, but less than 100 gallons of paint were observed. Also, chemicals (which could include solvents, cleaners, oils) used on ships are stored in Parcel 160's hazardous materials lockers when ships are out of port. In addition, batteries were found stored on pallets outside of the MINS trailer.

General parking area stains were noted throughout the area. Specific mention was made of a stain evident beneath the diesel generator east of Building 557.

Visual inspectors located four transformers on this site. No staining was noted at the concrete area surrounding the transformers.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 160 is bounded by Parcels 155, 159, 198, and 162. The fence line is mainly for parking areas and roadway. Issues of concern at neighboring parcels will be addressed in the appropriate PEP.

Parcel 160 may have been potentially impacted by waste disposal from the Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of in the near-by marsh (i.e., Parcel 170 and other former marshlands).

Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 160 may be impacted by TPH and SVOCs. Impacted soils are reported to be confined to depths below the water table.

No parcels contiguous with Parcel 160 are IR sites, therefore, no sampling of parcel boundaries is called for in this PEP. If the continuing investigations at the IR sites reveal a cause for concern, then additional sampling at Parcel 160 may be appropriate.

RCRA Sites

No RCRA sites were identified on this parcel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 160, consistent with the objectives in Section 1 of the Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-160-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the

TABLE 6-160-2

Summary of Data Gaps
NAS Alameda Parcel 160

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 160.
Installation Restoration (IR) Sites	• No IR site is located within 500 feet of this parcel. • IR Site 13 is located northeast of Parcel 160. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program. Transformers are present in building 557.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Release Areas	• Open Space • Building 557 (near generator)
Radiological Compounds	• Radiological compounds are being addressed under a separate program
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.

TABLE 6-160-2

Summary of Data Gaps
NAS Alameda Parcel 160

Data Gap	Status/Description
- Fuel Lines	• No fuel lines identified
- Steam Lines	• No steam lines identified
Wetlands	• No wetlands identified at this parcel.
Other	• No evidence of other data gaps identified.

following data gaps: transformers, lead-based paint, asbestos, and Installation Restoration Sites. Sampling associated with sewer lines is also addressed separately and is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 160 because no industrial buildings are present.

Once the data gaps in Table 6-160-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs, Parcel 160 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observations and accessibility. One zone-wide and two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-160-2. One zone-wide target area was identified for this parcel, although no zone-wide sampling has been proposed at this parcel.

- Target Area 1 (Open Space): Soils at the open space between and north of Building 551 and 557 may have been impacted by spills or leakage of hazardous substances that have been stored and utilized in this area as indicated by staining. In addition, soils may have been impacted by historical spill events. The target area covers approximately 10,000 square feet. TPH is the compound of concern. The likelihood of environmental impact to soils underlying the asphalt is classified as potential. Samples to be collected in this target area are listed in Table 6-160-1.

- Target Area 2 (Building 557): Soils adjacent to the emergency generator located immediately east of Building 557 may have been impacted by spills or leakage of petroleum compounds. This target area covers approximately 1,000 square feet. Compounds of concern are PCBs and TPH. The likelihood of environmental impact to soils underlying the concrete is classified as potential. Samples to be collected in this target area are listed in Table 6-160-1.

- Zone Target Area 2 (Former Incinerator): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level techniques that will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. Table 6-160-1 summarizes screening-level sampling and analysis for the parcel's target areas. A total of five surface soil samples will be collected from the parcel-specific locations shown in Figure 6-160-1. The sample locations shown on Figure 6-160-1 are approximate and may be modified in the field; samples should be located over the area with the most significant staining. If no staining is evident, then the samples should be distributed evenly throughout the target area. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface GeoProbe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-163

PARCEL 163 EVALUATION PLAN

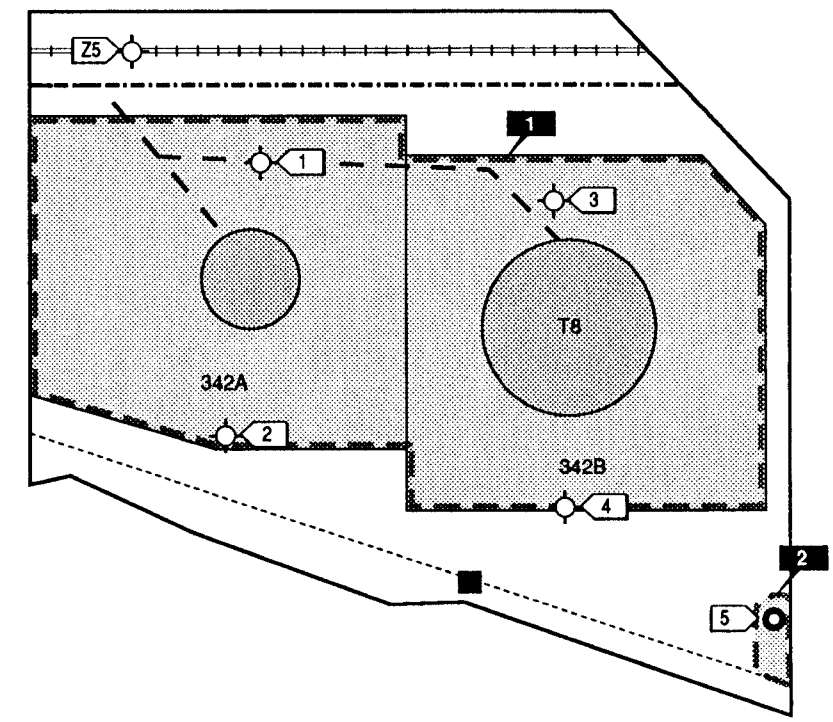
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 163 at NAS Alameda (Figure 6-163-1). The parcel, which is located in the southeastern portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. One RCRA site is located at this parcel. Site SWMU GII-22 has been identified in the Part B Permit as requiring a RCRA Facility Investigation (RFI). One zone-wide and two parcel-specific target investigation area (target areas) has been identified on this parcel. Surface soil sampling (SOP 3), and subsurface Geoprobe soil sampling (SOP 14) will be used to accomplish the screening-level investigation. Table 6-163-1 provides the complete list of samples and analysis prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 163, historical activities are summarized below.

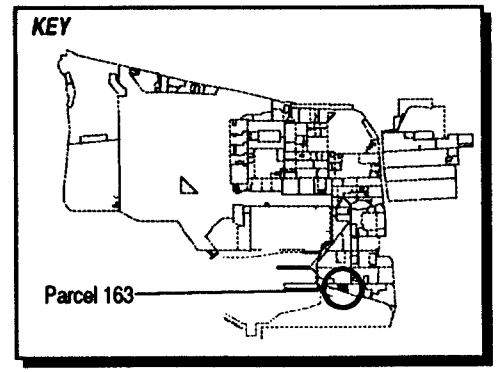
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 163, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 150, 151, 154, 159, 160, 199, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the





LEGEND

- Target Areas 1-2
- Fuel Lines in Use
- Fuel Lines Probably in Use
- Sewer Line
- Surface Soil Sample Location
- GeoProbe Sample Location
- Sanitary Sewer Manhole

1"= 90'

Magnetic
True North

Figure 6-163-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.07.94

TABLE 6-163-1

Summary of Recommended Samples
NAS Alameda Parcel 163

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
163-1-4-S-S-DDMMYY	4.0'	Geo Probe	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
163-2-4-S-S-DDMMYY	4.0'	Geo Probe	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
163-3-4-S-S-DDMMYY	4.0'	Geo Probe	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
163-4-4-S-S-DDMMYY	4.0'	Geo Probe	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
163-4-4-S-V-DDMMYY*	4.0'	Geo Probe	Soil	Target Area 1	TPH	TPH	EPA 8015 Modified
163-5-4-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	EPA 8015 Modified
163-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	TPH	TPH	EPA 8015 Modified
Z19-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 19 Target Area 1	TPH, PCBs, lead, SVOCs	TPH, PCBs, lead, SVOCs	Modified EPA 8015, EPA 8080, ICAP Scan, EPA 8270

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, two structures (Facilities 342A and 342B- above ground storage tanks) cover approximately 10 percent of the parcel. These structures are surrounded by concrete containment pads, which cover approximately 50 percent of the parcel. The remaining 50 percent is open space. The parcel area is presently in use as a fuel storage area. Underground fuel lines and sewer lines are present on this parcel and are shown on Figure 6-163-1.

Parcel 163 is not located within 500 feet of an Installation Restoration (IR) Program site. No previous investigations have been conducted at Parcel 163; therefore, no specific data regarding potential chemical occurrence are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within each open space and building are described in detail below.

Open Space

The parcel area consists entirely of open space. The ground surface of the open space is mostly paved. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete containment pads. The pavement is generally in fair condition. The open space area is fenced, and part of the fence extends into neighboring Parcel 165.

Structures located within the open space include Facilities 342A and 342B, which were constructed around 1950. The structures are above ground storage tanks. These tanks comprise SWMU GII-22 (also known as GAP 26), and are located within Area 342. One of the tanks is

listed as containing waste oil and the other (#342-A) is reported to have stored diesel and it is currently unused. Utilities located within and immediately surrounding the open space include sanitary sewer and fuel lines.

No spills have been documented for this parcel. However, a review of EBS information including open space inspections indicates that undocumented spills may have occurred including open space staining. The ASTs and/or the former UST may have had releases that impacted this parcel. If such release have occurred, there is a potential that subsurface soils may have been impacted by hydrocarbons. No other incident (i.e., fires, mishaps, or flooding) are documented to have occurred within the open space.

Underground Storage Tanks

One UST, used to store waste oil, was formerly present at this parcel in structure 341, however no structure 341 has been identified at this parcel. This tank has been identified as a RCRA tank based on its former use. No record regarding the tank number of this tank is available. A UST-related investigation concerning the UST formerly on-site is pending and will be addressed as part of the UST program for NAS Alameda.

Parcel Boundary Conditions

Parcel 163 is bordered by Parcels 159, 162, and 165. Activities of concern on these adjacent parcels include the tank truck loading station on Parcel 165.

There is a potential impact at Parcel 163 because of waste disposal from the former Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of near-by (i.e., Parcel 170 and other surrounding areas).

Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 163 may be impacted by TPH and SVOCs.

No parcels contiguous with Parcel 163 are IR sites, therefore, no sampling of parcel boundaries is called for in this PEP. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 163, then additional sampling at this parcel may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU GII-22). Site SWMU GII-22 is an underground storage tank in Area 342, NAS Fuels Division. It is unknown whether any chemicals were released from this site. This tank was identified as a RCRA tank based on its contents. The dimensions and capacity of the tank are unknown. Two aboveground storage tanks are also located at SWMU GII-22 (also known as GAP 26), and are located within Area 342. One of the tanks is listed as containing waste oil and the other (#342-A) is reported to have stored diesel and it is currently unused. This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these conditions, the location of this former tank must be addressed as part of the NAS Alameda tank program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 163, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-163-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gap at this parcel: underground storage tanks. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 163 because no buildings are present.

Once the data gaps in Table 6-163-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 163 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-163-2

Summary of Data Gaps
NAS Alameda Parcel 163

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 163.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 163.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program. • IR Site 13 is located northeast of Parcel 163. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Open Space-ASTs. • Open Space-Stain in southeast corner.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST formerly existed at Parcel 163 and has been removed.

TABLE 6-163-2

Summary of Data Gaps
NAS Alameda Parcel 163

Data Gap	Status/Description
Underground Utilities	• Sanitary sewer lines identified.
- Fuel Lines	• Fuel lines identified
- Steam Lines	• No steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-163-2. Samples to be collected from the target areas are listed in Table 6-163-1.

- Target Area 1 (Open Space): Subsurface soils that surround both ASTs may have been impacted by petroleum compounds released from the ASTs and related piping. This target area is over 10,000 square feet in size. The likelihood of environmental impacts having occurred in this target area is classified as suspect.

- Target Area 2 (Open Space): Large scale staining was noted at Parcel 165 in an area adjoining Parcel 163. Subsurface soils at this area may have been impacted by petroleum compounds. This target area is located in the southeast corner of the parcel, and it is less than 1,000 square feet in size. The likelihood of environmental impacts having occurred in this target area is classified as potential.

- Zone 19 Target Area 1 (Railroad Tracks): This target area includes all current railroad tracks within or adjacent to the Dock Support Services Zone. Railroad track locations include the boundary between Parcel 139 and Parcel 140, the northern areas of Parcel 159 and Parcel 163, and the mid-section of Parcel 150. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. Surface soil samples will be collected approximately every 800 linear feet along the three track areas for a total of 6 zone sampling locations. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. Samples to be collected in this target area are listed in Table 6-163-1. Approximate sampling locations are shown on Figure 6-163-1.

Screening-Level Investigation

Surface soil sampling (SOP 3), and subsurface Geoprobe soil sampling (SOP 14) is the screening-level techniques that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-163-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 163. Five surface soil samples will be collected from the parcel-specific locations shown on Figure 6-163-1. One surface soil sample will be collected from the zone-wide location shown on Figure 6-163-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), ienvironmental air monitoring (SOP 20), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-199

PARCEL 199 EVALUATION PLAN

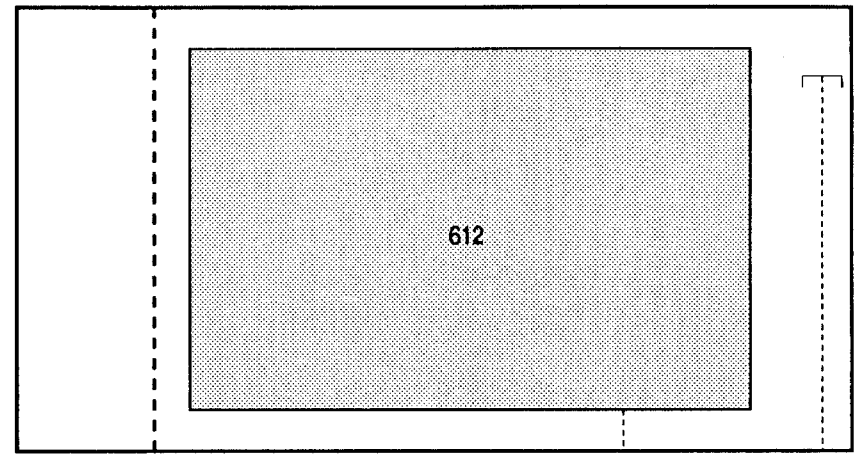
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 199 at NAS Alameda (Figure 6-199-1). The parcel, which is located in the southeast portion of the base, is 0.2 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. No sampling is proposed in this PEP. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. Historical activities on Parcel 199 are discussed below.

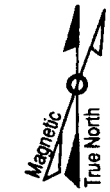
Background and Historical Activities

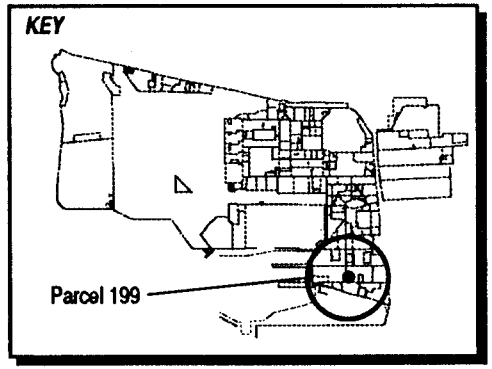
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 199, consistent with the objectives in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 150, 151, 154, 159, 160, 163, 201, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.







LEGEND

- Storm Sewer Line
- Sewer Line
- Capped

Note: 1) No Sampling Is Called For In This PEP

1"= 30'

Figure 6-199-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 612) covers approximately 65 percent of the parcel. The remaining 35 percent is open space. The parcel area is in use as hose storage and testing. Sewer lines are present on this parcel and are shown on Figure 6-199-1.

Parcel 199 is located within 500 feet of Installation Restoration (IR) Program Site 9 (Building 410, Paint Stripping). No previous investigations have been conducted at Parcel 199, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 612

Building 612 was constructed between 1975 and 1981 (Figure 6-199-1). This building is in good condition. Building 612 is a single story building constructed of concrete walls with a concrete floor and corrugated metal roof, and covers approximately 4,000 square feet.

Utilities located within and immediately surrounding Building 612 include sanitary sewer, storm sewer, steam, water, and electrical lines.

Information collected during the EBS indicates that activities conducted within this building include testing and storage of flexible hoses and piping. This process utilizes a water recycling system, which aids in the testing process. Water is pumped through hoses or pipes and any leakage is caught by floor drains and pumped back into the system. There are no known chemical storage issues for this building.

A heating-ventilation-air conditioning (HVAC) system was not identified in Building 612.

Open Space

The open space covers approximately 35 percent of the parcel. The ground surface of the open space is completely paved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is covered with concrete. The asphalt paving is in very poor condition.

An unidentified piping structure was noted south of Building 584. It was unclear what function this structure served. It is possible that its function is associated with fire control or water recycling activities in Building 612.

EBS information indicates that activities conducted within this open space includes vehicle parking. A review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 to about 1970. No staining was noted at parcel 199.

No incidents (i.e., fires, mishaps or flooding) are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 199 is surrounded to the north, east, and south by Parcel 150. Eighth Street (which is part of Parcel 159) borders Parcel 199 to the west. Issues concerning neighboring parcels will be addressed in the appropriate PEP.

There is a potential impact at Parcel 199 from IR Site 13 because of waste disposal from the former Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of near-by (i.e., Parcel 170 and other surrounding areas).

Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 199 may be impacted by TPH and SVOCs.

No parcels contiguous with Parcel 199 are IR sites, therefore, no sampling of parcel boundaries is called for in this PEP. If the

continuing investigations at the IR sites reveal a cause for concern, then additional sampling at Parcel 199 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 199, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-199-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, industrial hygiene concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 612. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-199-1 are addressed, Parcel 199 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area has been identified for this parcel. No parcel-specific target areas were identified for this parcel. The zone-wide target area consists of the railroad tracks that run through Zone 19. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling has been proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 19.

TABLE 6-199-1

Summary of Data Gaps
NAS Alameda Parcel 199

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program .
Installation Restoration (IR) Sites	• IR Site 9 (Building 410) is located within 500 feet of Parcel 199. Additional subsurface investigation relative to IR Site 9 is proposed by the IR contractor. • IR Site 13 is located northeast of Parcel 199. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Zone 19 Target Area 1: Railroad Tracks
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-199-1

Summary of Data Gaps
NAS Alameda Parcel 199

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Z19

SECTION 6-201

PARCEL 201 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 201 at NAS Alameda (Figure 6-201-1). The parcel, which is located in the southeast portion of the base, is approximately three acres in size and is roughly rectangular in shape. The parcel has high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains three RCRA sites (SWMU/GAP 8, SWMU/GAP 65, and SWMU/GAP 66). None of these RCRA sites have been identified in the Part B Permit as requiring an RFI. Four parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Subsurface GeoProbe sampling will be used in the screening-level investigation. Table 6-201-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 201, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 201, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies an Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 150, 151, 154, 159, 160, 163, 199, and 202. This parcel zone has been designated the Dock Support Services Zone (Zone 19). The Dock Support Services Zone encompasses the parcels that are located near the dock area where historical activities indicated dock support services. During the

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-201-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
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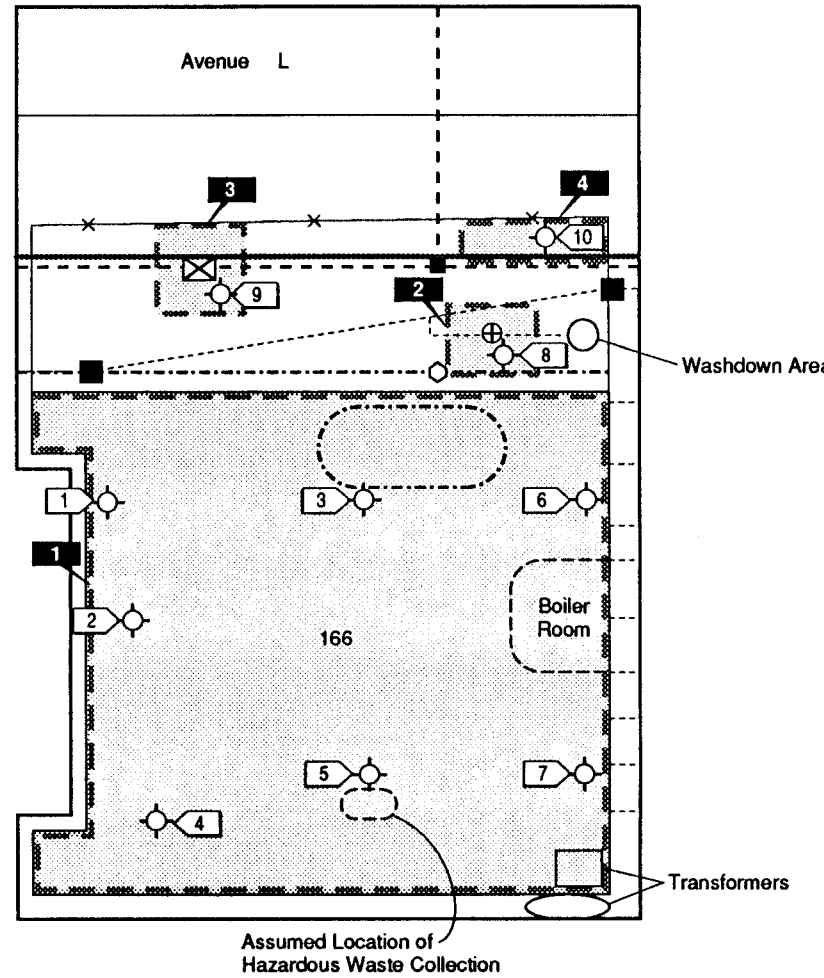
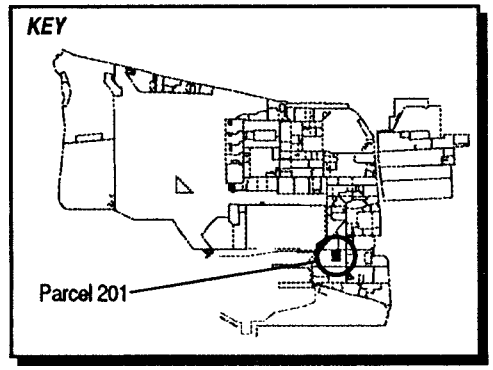
SENSITIVE





LEGEND

- Target Areas 1-4
- Industrial Waste Line
- Storm Sewer Line
- Sewer Line
- Steam Line
- Oil/Water Separator
- Grease Trap
- Subsurface Geoprobe Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin (Industrial Waste)

1"= 90'

Magnetic True North

Figure 6-201-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.13.94

SENSITIVE

TABLE 6-201-1

Summary of Recommended Samples

NAS Alameda Parcel 201

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
201-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-3-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-4-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-5-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-6-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-6-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8015 Modified, CLP RAS
201-7-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-7-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	VOCs	VOCs, TPH, SVOCs, Metals	EPA 8015 Modified, CLP RAS
201-8-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 2	TPH, Metals	TPH, Metals	EPA 8015 Modified, ICAP Scan

TABLE 6-201-1

Summary of Recommended Samples
NAS Alameda Parcel 201

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
201-8-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 2	TPH, Metals	TPH, Metals	EPA 8015 Modified, CLP RAS
201-9-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 3	TPH, Metals	TPH, Metals	EPA 8015 Modified, ICAP Scan
201-9-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 3	TPH, Metals	TPH, Metals	EPA 8015 Modified, CLP RAS
201-10-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 4	VOCs, TPH, SVOCs, Metals	VOCs, TPH, SVOCs, Metals	EPA 8240, EPA 8015 Modified, EPA 8270, ICAP Scan
201-10-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 4	VOCs, TPH, SVOCs, Metals	VOCs, TPH, SVOCs, Metals	EPA 8015 Modified, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land are of this parcel. This fill material may have been impacted by hazardous compounds.

Currently, one building (Buildings 166) covers 50 percent of the parcel. The remaining 50 percent is open space. The open space includes a yard area associated with Building 166, and, to the north, a parking area and roadway. Sewer lines are present on this parcel and are shown on Figure 6-201-1.

Parcel 201 is located within 500 feet of Installation Restoration (IR) Program Site 9 (Building 410). No previous investigations have been conducted at Parcel 201, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 166

Building 166 was constructed around 1947 and served as an aircraft maintenance hangar (Figure 6-201-1). This building is in fair condition. Building 166 is a single story high bay hangar constructed of concrete and steel siding with a concrete floor and tar and gravel roof, and covers approximately 60,000 square feet.

Utilities located within and immediately surrounding Building 166 include sanitary, storm, and industrial sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

Information collected during the EBS indicates that activities conducted within this building included metal machining, sandblasting, painting, degreasing, aircraft defueling, and handling of lubricating and hydraulic fluids. These processes typically involve the generation of the following potentially hazardous wastes: sandblast grit (which may contain heavy metals), solvents (both halogenated and non-halogenated), paints, petroleum products, empty containers, and rags. These processes were conducted in the high bay area of the building.

Various hazardous substances and wastes are documented to have been used in the high bay portion of Building 166. These substances and wastes include ten gallons of PCE and TCA, which were stored in metal containers along the building's southern wall. Approximately 60 gallons of paints (in both aerosol canisters and one to five gallon containers) were stored within three flammable materials lockers located on the west wall and within three flammable materials lockers located on the north wall. Paints are stored in work areas throughout the building. Approximately 20 gallons of lubricants and solvents were stored within two flammable materials lockers located on the east wall. Three 55-gallon drums of lubricants were stored in the center area of this building. Rags contaminated with solvents and lubricants were stored within a grounded metal drum located in the south half of Building 166. Sand blast grit was stored in two 55-gallon drums located in the north half of the building. Historical disposition of used chemicals is unknown. Currently, there are three Generator Accumulation Points (SWMU/GAO 8, SWMU/GAO 65, and SWMU/GAO 66) to collect aerosol paints, various lubricants, thinners, solvents, and hydraulic fluids.

Wastewater discharges from inside this building consisted of boiler blowdown. It is unclear whether boiler blowdown is discharged into the sanitary sewer or the industrial sewer.

No spill events are on record for this building. However, the EBS documentation indicates that over 50 percent of the total floor area within this building is stained. Stains appeared to be mostly the result of releases of petroleum products.

Building 166 is not equipped with a heating-ventilation-air conditioning (HVAC) system, however, industrial hygiene issues may pose a concern for this area because of the industrial processes. No incidents (e.g., fires, mishaps, flooding, or crashes) are documented to have occurred within Building 166.

One 150 kVA pad-mounted, oil-filled transformer was located at the southeast corner of the building. In addition, one 500 kVA pad-

mounted, oil-filled transformer (with associated switch gear) was located southeast of the exterior of the building. No staining was noted at either location.

Open Space I

The open space covers approximately 50 percent of the parcel. Open Space I is defined by the fenced in yard located north of Building 166 and the space immediately surrounding Building 166 to the east, south, and west. This space occupies approximately 25 percent of the parcel. Open Space I is used for miscellaneous materials storage. Approximately 50 percent of the paved area is surfaced with asphalt and 50 percent is covered with concrete. The pavement is generally in good condition.

Structures located within Open Space I include two interconnected portable trailers used for "clean room" applications.

Utilities located within and immediately surrounding Open Space I include sanitary, storm, and industrial sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

EBS information indicates that activities conducted within this open space include miscellaneous materials storage throughout the area, and vehicle washdown in the eastern portion of Open Space I. The drain in this area is connected to an oil/water separator, which appears to be connected to the sanitary sewer. A "clean room," which consisted of two small, interconnected, portable trailers, was noted at the southeast edge of the yard. The "clean room" was locked and unable to be entered. A Proposition 65 warning for a variety of heavy metals was noted on the doorway. A review of aerial photographs indicates that this area has been in its present condition since 1947. Heavy staining has been observed in Open Space I in most of these photographs. A grease trap is located in Open Space I north of Building 166 (see Figure 6-201-1). This facility did not appear to be functioning. At the time of inspection, the grease pit was empty. It appears as though the grease pit is connected to the storm sewer.

No spill events are on record for this area. However, staining is apparent throughout the yard area. Stains appeared to be mostly the result of releases of petroleum products. Two SWMU/GAP sites are located at the northeastern edge of the yard. This area will be detailed below under the section on RCRA Sites.

No other incidents (i.e., fires, mishaps, or flooding) are documented to have occurred within Open Space I.

Open Space II

Open Space II consists of a parking area and Avenue L, both of which are located north of Open Space I. This space occupies approximately 25 percent of the parcel. Approximately one-half of the paved area in this open space is surfaced with asphalt; the remainder is covered with concrete. The pavement is in generally good condition.

Utilities located within and immediately surrounding Open Space II include sanitary, storm, and industrial sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

EBS information indicates that activities conducted within this open space include vehicle parking and general vehicle traffic. A review of aerial photographs indicates that the use of this open space has not changed significantly since the area first appeared as filled land in 1947.

No other incidents (i.e., fires, mishaps, or flooding) are documented to have occurred within Open Space II.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 201 is bounded by Parcels 139, 140, and 154. Activities of concern on these adjacent parcels include chemical storage on Parcels 139, 140, and 154, and aircraft maintenance operations on Parcel 154.

There is a potential impact at Parcel 201 because of waste disposal from the Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of in the near-by marsh (i.e., Parcel 170 and other former marshlands).

Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 201 may be impacted by TPH and SVOCs.

No parcels contiguous with Parcel 201 are IR sites, therefore, no sampling of parcel boundaries is called for in this PEP. If the continuing investigations at the IR sites reveal a cause for concern, then additional sampling at Parcel 201 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with these sites on the parcel, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes three RCRA sites (site numbers SWMU/GAP 8, SWMU/GAP 65, and SWMU/GAP 66). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the three RCRA sites at this parcel, SWMU/GAP 8 requires further investigation. A brief description of each of the RCRA sites is provided below. The sampling proposed for SWMU/GAP 8 is described in the Target Areas and Compounds of Concern subsection.

Site SWMU/GAP 8 is located in the northeast corner of the yard area north of Building 166 (Figure 6-201-1) and has not had any known releases; however, staining was observed during visual inspections. Site SWMU/GAP 8 is 30 feet by 30 feet on cement pavement. The chemicals of concern associated with this site include paint thinner and paint wastes, waste oil, solvents, and hydraulic fluid. This site is currently active.

Site SWMU/GAP 65 is located in Shop 96312 of Building 166 (Figure 6-201-1). It is unknown whether any chemicals were released from this site. Site SWMU/GAP 65 consists of 30 gallon drums and aerosol cans. The chemicals of concern associated with this site include aerosol paint and some oils.

Site SWMU/GAP 66 is located in Shop 96312 of Building 166 (Figure 6-201-1). It is unknown whether any chemicals were released from this site. Site SWMU/GAP 66 consists of 55 gallon drums. The chemicals of concern associated with this site include lube and engine oils and solvents.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 201, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for

TABLE 6-201-2

Summary of Data Gaps
NAS Alameda Parcel 201

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 9 (Building 410) is located within 500 feet east of Parcel 201. Additional subsurface investigation relative to IR Site 9 is proposed by the IR contractor. • IR Site 13 is located northeast of Parcel 201. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks. • Former Incinerator.

TABLE 6-201-2

Summary of Data Gaps
NAS Alameda Parcel 201

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Building 166-Paint Booth. • Building 166. • Open Space I-Oil Water Separator. • Open Space I-Grease Trap. • Open Space I-Gap Sites.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, steam, electrical, and water lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-201-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 166. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-201-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 201 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains four parcel-specific target areas and is also contained in two zone-wide target areas. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 19. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following five parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-201-2. Samples to be collected in these target areas are listed in Table 6-102-1.

- Target Area 1 (Building 166): This target area encompasses all of Building 166. Soils underlying this building may have been impacted by spills or leakage of hazardous substances that have been stored and utilized in this area. This target area is approximately 10,000 square feet in size. Compounds of concern possible within

this target area include TPH, metals, SVOCs, and VOCs. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 2 (Open Space I): This target area encompasses the oil/water separator. Soils adjacent to the oil/water separator may have been impacted. This target area is less than 1,000 square feet in size. Compounds of concern possible within this target area include metals and TPH. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 3 (Open Space I): This target area encompasses the grease trap. Soils adjacent to the grease trap may have been impacted. This target area is less than 1,000 square feet in size. Compounds of concern possible within this target area include metals and TPH. The likelihood of environmental impact having occurred in this area is classified as potential.

- Target Area 4 (Open Space I): This target area encompasses the SWMU/GAP 8 sites. Soils adjacent to the GAP sites may have been impacted. This target area is less than 1,000 square feet in size. Compounds of concern possible within this target area include metals, SVOCs, VOCs and TPH. The likelihood of environmental impact having occurred in this area is classified as potential.

- Zone 19 Target Area 1 (Railroad Tracks): This parcel does not contain any samples from this zone.

- Zone 19 Target Area 2 (Former Incinerator): This parcel does not contain any samples from this zone.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Subsurface GeoProbe soil sampling (SOP 14) is the technique that will be used in the screening level investigation.. Table 6-201-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 201. Ten subsurface soil samples will be collected from the locations shown on Figure 6-201-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and in QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 20), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-202

PARCEL 202 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 202 at NAS Alameda (Figure 6-202-1). The parcel, which is located in the southeast portion of the base, is approximately one acre in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. The parcel contains two RCRA sites (SMWU/GAP 4 and SWMU/unknown). One zone-wide target investigation area (target area) have been identified on this parcel. No parcel-specific target areas have been identified on this parcel. No zone-wide target area samples are located on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 202, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 202, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies underground storage tanks and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 139, 140, 150, 151, 154, 159, 160, 163, 199, and 201. This parcel zone has been designated the Dock Support Services Zone (Zone 19). This zone encompasses parcels located immediately east of the Dock Zone that have contained open areas and buildings associated with dock activities including vehicle and aircraft parking, storage, sewage facilities, electrical facilities, steam generation, and administration. During development of the sampling

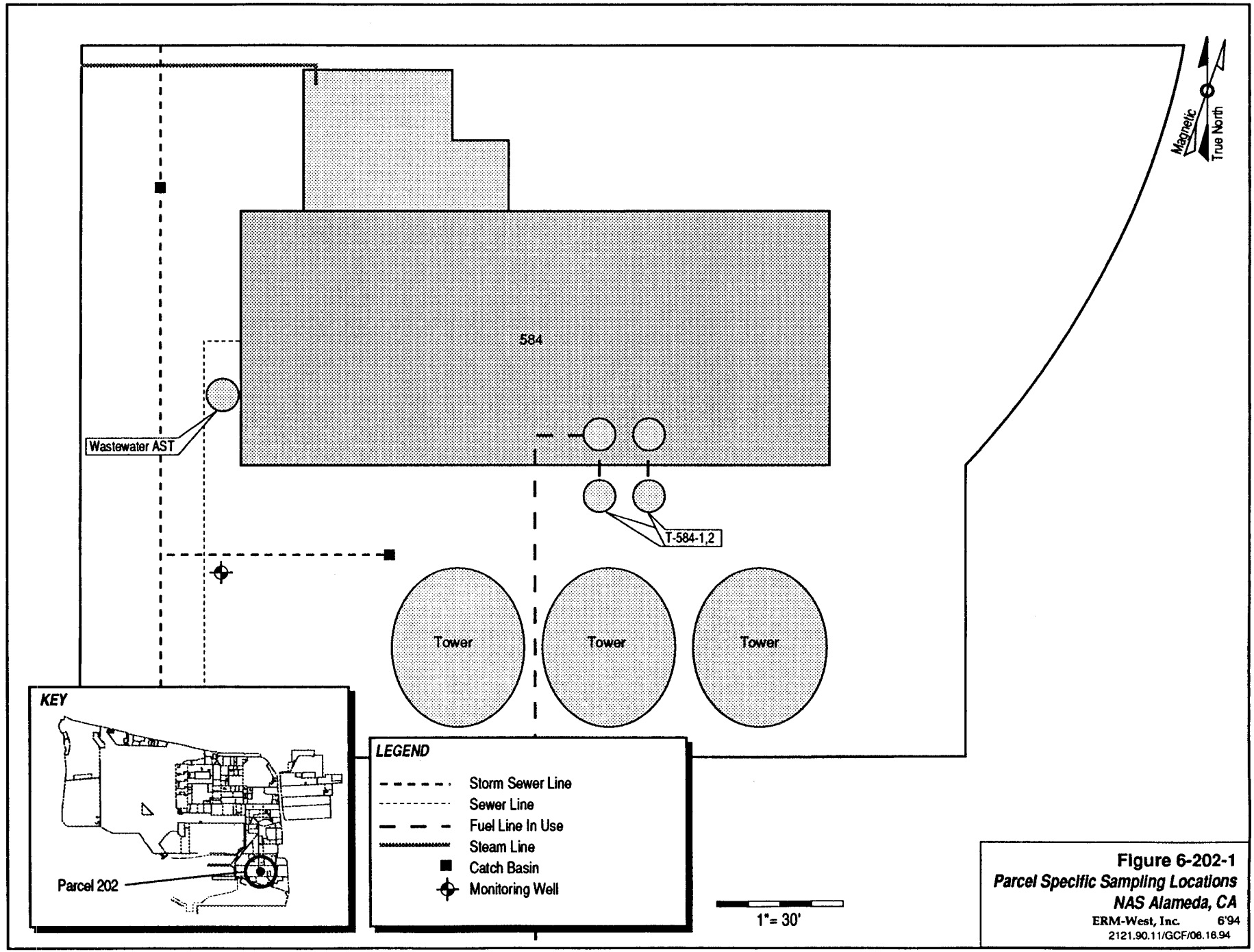


Figure 6-202-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/08.16.94

program, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 19.

Prior to 1942, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 584) covers approximately 35 percent of the parcel. The remaining 65 percent is open space. The parcel area is in use as the Air and Steam Plant and supporting grounds. Underground fuel and sewer lines are present at this parcel and are shown in Figure 6-202-1.

Parcel 202 is not located within 500 feet of an Installation Restoration (IR) Program site. No previous investigations have been conducted at Parcel 202, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 584

Building 584 was constructed between 1975 and 1981 (Figure 6-202-1). This building is in good condition. It has two stories and is constructed of concrete floors and walls with a corrugated metal ceiling. The building is approximately 7,300 square feet in size. Utilities located within and immediately surrounding this building include sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines. Fuel lines apparently enter the building from the south side. These lines connect to the boilers and to USTs.

Air quality permits were issued for the boilers and underground fuel storage tanks related to Building 584. Activities conducted within this building include maintenance and operation of air compressors and a steam plant. This process includes the use of a water testing lab. Site

reviewers noted that plant personnel rinsed laboratory equipment in the sink.

This building supplies compressed air and steam to the piers and the rest of the base. No chromium use was noted in the records search or the site inspection data. A detailed chemical inventory is not available. Chemicals noted during the site inspection include corrosives (caustic soda, sodium sulfite(, lubricating oils, potassium nitrates, and assorted water treatment chemicals. Additional information indicated that approximately 500 gallons of additional corrosives are stored for chemical treatment in the steam plants. Different chemicals are used in the steam plant than those used for water treatment. The building is equipped with a wastewater treatment system for the saline waters produced during the steam generation processes. In addition, interior drains are reported to be connected to the wastewater treatment system. A large aboveground storage tank (AST) is located outside this building and is used to store wastewater prior to treatment.

Two USTs are located along the exterior of the building's southern wall. One tank stores a backup supply of diesel fuel for the boilers located within this building. It was unclear whether the other UST stores diesel fuel or if it is utilized to store wastewater prior to treatment.

Corrosives, lubricating oils, potassium nitrate, and assorted water treatment chemicals are currently stored and used at Building 584. Approximately 140 gallons of corrosives, 150 gallons of oil, and 75 gallons of water treatment chemicals are currently stored inside this building. Corrosives and lubricating oils are stored in 55-gallon drums. Water treatment chemicals are stored in three hazardous materials lockers located adjacent to the water testing laboratory.

During the site inspection, stains were noticed to be present throughout the interior of Building 584. Numerous oil stains, rust stains, and white crystalline stains were observed. In particular, heavy staining was noted adjacent to the west wall of the first floor and adjacent to equipment located at the west wall of the second floor.

Open Space

The open space covers approximately 0.4 acres. The open space is paved in part with asphalt, which is in poor condition. Gravel cover is present throughout. Utilities located within and immediately surrounding this open space include fuel lines, sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines. This

parcel has open space areas that are landscaped or unpaved. These open space areas are shown on Figure 6-202-1. These areas have been unpaved or landscaped since the late 1940s.

Most of the open space surrounding this parcel is used for vehicle parking. Three large condensation towers are also located in the open space. The towers are located south of Building 584 (Figure 6-202-1). The area immediately south of Building 584 is used to store hazardous substances, hazardous wastes, and miscellaneous materials (i.e., wood pallets, pipes). Both the hazardous substance storage area and the hazardous waste storage area are surrounded by sandbag containment. A storm drain was located immediately south of both of these storage areas.

At the time of the site inspection, the hazardous substance storage area included 300 gallons of corrosives, 1,100 gallons of lubricating oil, four gallons of latex paint, and under five gallons of aerosol paint. The hazardous waste storage area contained 110 gallons of waste oil generated from the maintenance of compressors. Dark, oil-like stains were noted both inside and outside the containment berm at the hazardous substance storage area.

A transformer was located at the northwest corner of Building 584 on a concrete pad surrounded by a locked gate. No staining was noted. A white crystalline stain was noted adjacent to a storm drain located at the northwest corner of the open space.

A review of historical aerial photographs and EBS information indicates that this parcel was utilized for aircraft parking from 1947 to about 1970. No staining was noted in the aerial photographs at Parcel 202.

Underground Storage Tanks

Two tanks have been removed from this parcel (Tanks 584-1 and 584-2). The presence of these tanks was identified from historical records and visual inspections. It is unknown when these tanks were installed. These tanks were located south of Building 584 and provided fuel for the boiler in the building. Based on the available information, both tanks used to contain diesel fuel and had capacities of 4,000 gallons each. A cathodic protection system was reportedly installed. Hydrocarbon odors were noted during installation. No data pertaining to tightness or tank integrity has been identified.

Parcel Boundary Conditions

Parcel 202 is surrounded to the north, east, and south by Parcel 150, which is currently in use as a vehicle parking area. Eighth Street (which is part of Parcel 159) borders Parcel 202 to the west.

There is a potential impact at Parcel 202 because of waste disposal from the Pacific Coast Oil Company refinery. Reportedly, some of the wastes generated by the refinery were disposed of in the nearby marsh (i.e., Parcel 170 and other former marshlands).

Based on a review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 202 may be impacted by TPH and SVOCs.

No parcels contiguous with Parcel 202 are IR sites, therefore, no sampling of parcel boundaries is called for in this PEP. If the continuing investigations at the IR sites reveal a cause for concern, then additional sampling at Parcel 202 may be appropriate.

RCRA Sites

This subsection identifies the RCRA sites and requirements associated with this site on the parcel, consistent with the objectives identified in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (SWMU/GAP 4 and SMWU/unknown). Under these criteria, only SWMU/GAP 4 requires further investigation. A brief description of each of the RCRA sites is provided below. The sampling proposed for SWMU/GAP 4 is described in the Target Areas and Compounds of Concern subsection.

SWMU/GAP 4 is the hazardous waste storage area that is located at the south of Building 584. A spill of diesel fuel occurred at SWMU/GAP 4 as a result of overfilling of a UST on November 4, 1993 (Report No. 121649). Approximately 250 gallons of diesel fuel were spilled into a ditch located south of Building 584. The spill was cleaned up using absorbent pads and a vacuum truck. Ten cubic yards of soil were removed.

SWMU/unknown is a hazardous waste storage area locate south of Building 584. SWMU/unknown is a diesel fuel spill that occurred as a result of overfilling of a UST in 1993. The spill was cleaned up using absorbent pads and a vacuum truck, and ten yards of soil were removed. The dimensions of this site are unknown. The chemicals of concern associated with this site include diesel fuel.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 202, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-202-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, and underground storage tanks. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs, and sewer lines is discussed in corresponding protocols presented in Section 3.

Although no IH sampling is specified in this PEP, IH issues are potentially of concern in Building 584. A one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 202 has open space areas that are partially unpaved. Based on current EPA/Cal-EPA policy, unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., unpaved areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 202.

Once the data gaps in Table 6-202-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 202 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area has been identified for this parcel. No parcel-specific target areas were identified for this parcel. The zone-wide target area consists of the area impacted by the incinerator in Zone 19. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling has been proposed for this

TABLE 6-202-1

Summary of Data Gaps
NAS Alameda Parcel 202

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• IR Site 13 is located northeast of Parcel 202. There are possible impacts from wastes reportedly disposed of from former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Former Incinerator.
Potential Parcel-Specific Release Areas	• No Potential Parcel-Specific Release Areas
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Two USTs (Tanks 584-1 and 584-2) currently exist at Parcel 202. • Tanks 584-1 and 584-2: Active. Scheduled to be removed.

TABLE 6-202-1

Summary of Data Gaps
NAS Alameda Parcel 202

Data Gap	Status/Description
Underground Utilities	• Fuel, storm sewer, industrial sewer, and sanitary sewer lines identified.
- Fuel Lines	• No fuel lines identified
- Steam Lines	• Steam lines identified
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 19.

SECTION 6-Z20

ZONE 20 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 20 at NAS Alameda (Figure 6-Z20-1). Zone 20 has been designated the Service Station Zone and encompasses the parcels that are part of the service station facilities or service station support facilities. Zone 20 is comprised of Parcels 112, 113, and 114. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and three parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface and subsurface soil sampling. Figure 6-Z20-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. Two of the parcels in this zone have been tentatively reclassified from BRAC Category 7. Parcels 113 and 114 have been reclassified to BRAC Category 6, based on their status as IR sites.

This ZAP has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 20, historical activities are discussed below.

Zone 20 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 20 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks (USTs), and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and current use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas in the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern (COCs).

Zone 20, the Service Station Zone, encompasses three parcels that are part of the service station facilities or service station support facilities. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for the individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to filling, the area within this zone was comprised predominantly of wetlands. As of 1940, the area within the zone boundary was completely filled; the ground level and grading have not changed significantly since that time.

Currently, three buildings and five structures cover approximately 10 percent of the zone; the remaining 90 percent is open space. Seven buildings formerly located on the zone, have been demolished.

Zone 20 contains IR Site 7A (Naval Exchange Service Station). Because previous investigations have been conducted at Zone 20, specific data regarding chemical occurrence at this zone are available and are discussed in the appropriate PEP.

Sewer and fuel lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene (IH) concerns and asbestos-containing materials (ACMs) on Zone 20 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

One inactive UST is present at Parcel 112 (Tank 506-1). Tank 506-1 was installed at an unknown date and is located west of Building 506 (Figure 6-112-1). Tank 506-1 was used to store waste oil from the auto hobby shop in Building 506, and has a capacity of 1,000 gallons. This

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

tank, which was identified from the EBS, is scheduled to be removed. The available information did not identify why the UST was abandoned. However, based on general comments made by NAS Alameda personnel, a UST was most commonly abandoned because it was leaking. Tank 506-1, which has been identified as a RCRA tank based on its former contents and inclusion in the RFI, has been designated SWMU Site No. UST-16.

Two abandoned USTs are located on the northern side of Building 459 (Figure 6-113-1) on Parcel 113. One UST (459-8) was used to store unknown types of solvents. The other UST (459-7, SWMU/GAP 16) was used to store waste oil and is located immediately north of the solvent tank. Both tanks have 500 gallon capacities, were scheduled for closure in 1987, and are no longer in use. The waste oil tank, which has not been used since failing a tightness test in 1991, was reported to be leaking in 1992. A previous subsurface investigation (ERM-West, 1987) near both tanks detected total petroleum hydrocarbons (TPH) and benzene in soil at maximum concentrations of 78 ppm and 1.2 ppm, respectively (Figure 6-113-1). Based on their former contents, these tanks have been classified as RCRA tanks. These tanks are scheduled to be removed.

Six gasoline USTs located in Parcel 114 are associated with Building 459 (IR Site 7A). Underground storage tanks 459-5 and 459-6, located west of the refueling islands, have capacities of 10,000 and 8,000 gallons, respectively, and have been abandoned in place (cemented over) due to leakage. These steel tanks formerly stored leaded gasoline, and are currently scheduled to be removed.

Four USTs (459-1, 459-2, 459-3, and 459-4) located northwest of the refueling islands were installed in 1964. Three of the tanks are active and in use, having passed the 1993 tank and piping tightness test. These stainless steel tanks, which currently contain unleaded gasoline and have a capacity of 10,000 gallons each. The fourth tank, which is also a 10,000 gallon capacity steel tank, is currently inactive and scheduled for removal. In 1982, fuel lines between the USTs and the refueling islands were reported to be leaking. During the removal and replacement of the leaking lines, a visible oil sheen and apparent soil contamination were noted.

RCRA Sites

This zone includes four RCRA sites (RCRA tanks) on Parcels 112 and 113. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, all the RCRA sites at this zone require further investigation. Because three of

these RCRA sites are abandoned tanks, they are being addressed as part of the UST program and are scheduled to be removed. Any necessary investigation will be implemented as part of the UST program. The other RCRA site (GAP 30) is being addressed as Taget Area 1 on Parcel 112. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 20 is bounded by Zones 16 and 21. Main Street borders Zone 20 to the east. No IR sites are located on Zone 16 or Zone 21.

Zone Target Areas and Compounds of Concern

This zone contains one zone-wide target area and three parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and location of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 20 Target Areas

- Zone 20 Target Area 1 (Filled Wetlands): Zone 20 Target Area 1 includes all parcel areas in the Service Station Zone that overlie former wetlands (all parcels in the zone). These areas may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery. This zone target area is also present on Zone 16, and the area of concern extends into the FISC Alameda Annex. Approximately 50 soil vapor samples will be collected in Zone 16 to assess potential migration of VOCs to soil vapor in unsaturated fill. Because the potential source and likely impacts on Zone 20 are the same as those for Zone 16, the data collected in Zone 16 will also be applied to Zone 20. Should the sampling in Zone 16 indicate that sampling is required in Zone 20, such sampling may be conducted during the detailed investigation phase for this zone or as part of ongoing investigations at IR sites 7A and 13.

Subsequent (detailed evaluation phase) investigations may include the collection of Geoprobe subsurface soil samples from the affected horizon. However, Geoprobe subsurface soil sampling is not required during this phase of the investigation because soil vapor data will provide an adequate assessment of potential risks to human health, and because the general extent of the affected area has been established from prior investigations and document review.

Parcel 112 Target Areas

- Target Area 1 (GAP Site 30): Hazardous materials and wastes stored in Target Area 1 are suspect sources of releases. Drums of PCE, used oil filters, oil-based paints, gas filters, battery electrolytes, and soil samples were observed during the site inspection. One drum was unlabeled. Because staining was also noted in this area, this target area has been classified as having a potential likelihood of impacts. The compounds of concern include VOCs and TPH. The two surface and subsurface soil samples that will be collected from this target area are shown on Figure 6-Z20-1, and listed on Table 6-112-1.

Parcel 113 Target Areas

- Target Area 1 (Steam Cleaning/Degreasing Area Near the South Side of Building 459): The activities conducted in this steam cleaning and degreasing area are potential sources of release. Staining was noted and solvent use was also reported in this area. The target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. The compounds of concern include VOCs and TPH. Two subsurface and two surface soil samples will be collected from this target area.

- Target Area 2 (Oil/Water Separator, South Side of Building 459). The oil/water separator, which consists of a concrete vault, is a potential source of releases to the soil surrounding the separator. Automobile repair activities typically generate waste lubricating fluids, fuels, and other fluids which, if spilled in the service station area, would have been washed into floor drains connected to the oil/water separator. This target area is classified as having a potential likelihood for environmental impacts. The primary compounds of concern are metals, TPH, VOCs, and SVOCs. Two subsurface soil samples will be collected from this target area from the depth corresponding to the bottom of the separator.

Parcel 114 Target Areas

No parcel-specific target areas were identified for this parcel.

Screening-Level Investigation

Subsurface GeoProbe soil sampling (SOP 14) and surface soil sampling (SOP 3) are the screening-level techniques that will be employed to assess conditions in the parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Six subsurface and four surface soil samples will be collected from the locations shown on Figure 6-Z20-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of the compounds of concern identified during the screening-level investigation. This characterization may use some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil gas sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15) and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the SOPs referenced in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-112

PARCEL 112 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 112 at NAS Alameda (Figure 6-112-1). The parcel, which is located in the east-central portion of the base, is approximately two acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. Although Parcel 112 contains no RCRA sites according to the NAS Alameda RCRA Site Summary List, Generator Accumulation Point (GAP) Site 30 was noted during the site inspection on Parcel 112. According to the NAS Alameda RCRA Site Summary list SWMU/GAP 30 is supposed to be located on Parcel 54. One parcel-specific target investigation area (target area) and one zone-wide target investigation area have been identified in this parcel. However, no zone-wide target area samples are being collected at this parcel. Surface and subsurface soil sampling is the sampling procedures called for in the screening-level investigation in the parcel-specific target areas. Table 6-112-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 112, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 112, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-112-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

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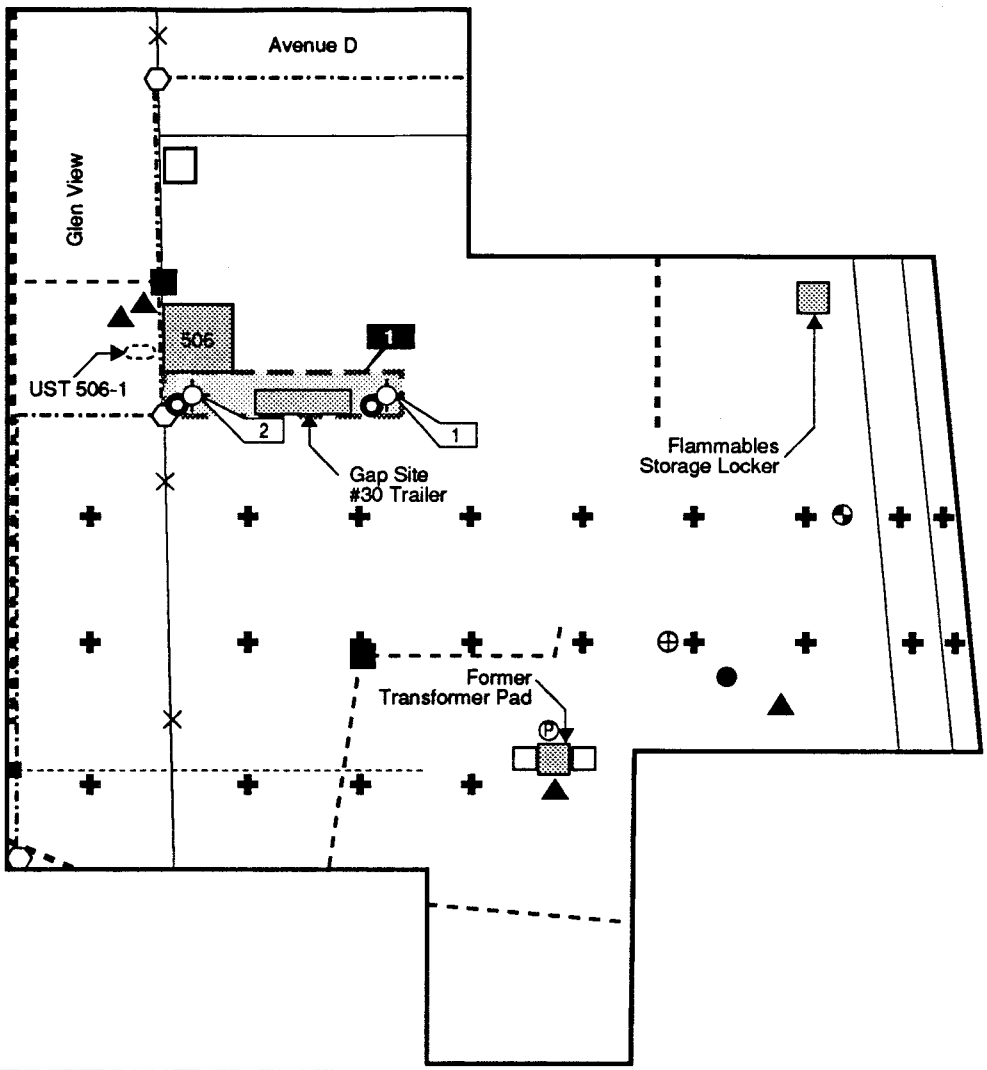
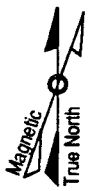
SENSITIVE



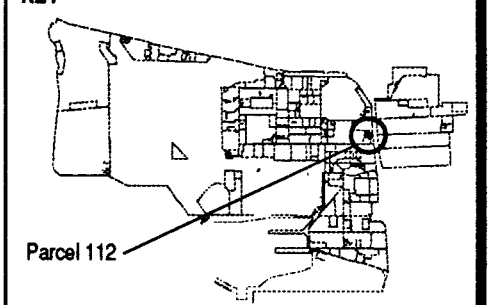


LEGEND

- Target Area
- Storm Sewer Line
- Industrial Waste Line
- Sewer Line
- Steam Line
- GeoProbe Sample Location
- Surface Soil Sample Location
- Proposed Surface Soil Sample Location (PRC/MW)
- PCB Sample Location (ERM)
- Boring Location (ERM)
- Boring Location (JMM)
- Soil Vapor Survey Location (PRC)
- Proposed Monitoring Well Location (PRC/MW)
- Monitoring Well Location (JMM)
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin

Note: *All Locations Are Approximate*

KEY



1"=60'

Figure 6-112-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

SENSITIVE

TABLE 6-112-1

Summary of Recommended Samples
NAS Alameda Parcel 112

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
112-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Fuels	VOCs, TPH	EPA 8240, Mod. EPA 8015
112-1-0-S-S-DDMMYY	0.0'-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
112-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Fuels	VOCs, TPH	EPA 8240, Mod. EPA 8015
112-2-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Solvents, Fuels	VOCs, TPH	CLP RAS, Modified EPA 8015
112-2-0-S-S-DDMMYY	0.0'-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
112-2-0-S-V-DDMMYY*	0.0'-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015

*This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

This parcel has been grouped into a zone with Parcels 113 and 114. This parcel zone has been designated the Service Station Zone (Zone 20). The Service Station Zone encompasses the parcels that have been used as the Naval Exchange service station or support facilities for the service station. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 20.

Filling began in the area covered by this zone in approximately 1930. Prior to filling, the area within this zone was comprised predominantly of wetlands. The area within the zone boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building and four structures cover approximately five percent of the parcel (Figure 6-112-1). The remainder (95 percent) is open space. The parcel area is presently in use as a vehicle parking area, a storage area for miscellaneous equipment, and a hazardous waste accumulation area. Four buildings were formerly located on the parcel and have been demolished. No information was available for three of the four demolished buildings. Sewer lines are present at this parcel and are shown in Figure 6-112-1.

Parcel 112 is located adjacent to Installation Restoration (IR) Program Site 7A. Previous investigations have been conducted at Parcel 112 and specific data regarding chemical occurrence are available.

A previous investigation (ERM-West, 1987) detected PCBs in soil samples collected near a former concrete transformer pad in the southern portion of Parcel 112. Concentrations ranged from 1.9 ppm at the surface to 0.02 ppm at a depth of 1.5 feet. TPH and benzene were detected in another soil boring near the pad, while only benzene was detected in a third soil sample northeast of the transformer pad.

One soil boring, one monitoring well, and approximately 22 soil vapor sampling locations have been placed in the southern portion of Parcel 112 as part of the IR Site 7A investigation (Figure 6-112-1). TPH, VOCs, SVOCs, pesticides, and metals were detected in soil samples. The soil concentrations of beryllium, carbon disulfide, 4,4'-DDE, 4,4'-DDT, naphthalene, and indeno(1,2,3-CD)pyrene, exceeded unrestricted and industrial use PRGs. No chlorinated or vapor phase hydrocarbons were detected at any of the 22 soil vapor sampling locations in Parcel 112. The IR contractor has have proposed additional surface soil samples near the transformer pad and an additional monitoring well in the southeast corner of the parcel.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within each building and the open space are described in detail below.

Building 506

Building 506 was constructed in 1966 and is used for maintenance and storage of miscellaneous equipment (Figure 6-112-1). This metal and wood frame, one-story building has a concrete floor and metal exterior, and covers approximately 460 square feet. Building 506 was formerly an auto hobby shop.

Utilities located within and immediately surrounding Building 506 include underground storm sewer, electrical, and industrial sewer lines. A sink drain in Building 506 is reportedly connected to an underground storage tank immediately west of the building.

Currently, acetylene cylinders, less than 40 gallons of oil, lawn maintenance equipment, safes, and other miscellaneous equipment are stored in Building 506. Drums stored south of Building 506 are labeled as nonhazardous. Several unlabeled drums are also present. There have not been any documented spills or staining at this building.

Building 337 (Demolished)

Building 337 served as a hazardous/flammable materials storage building. This 840-square-foot building was demolished prior to 1981. The exact location of this building within Parcel 112 is not known. No documented spills occurred at former Building 337.

Open Space

Approximately 95 percent of Parcel 112 is open space. In general, the open space is used for vehicle parking, storage of miscellaneous equipment, and a hazardous waste accumulation point. Approximately 50 percent of the open space is paved with asphalt in good condition, 20 percent paved is with concrete in fair condition, and 30 percent is bare soil and grass. The middle portion of the open space is a vacant dirt lot with a concrete transformer pad (no transformer is present).

Structures located within the open space include a metal flammable materials storage locker, a metal storage trailer at GAP Site 30, and two metal CONEX containers (Figure 6-112-1). Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, fuel, industrial sewer, and overhead electrical lines. Three pole-mounted transformers are located near the southern edge of Parcel 112.

A hazardous waste accumulation area (GAP Site 30) was noted southeast of Building 506 during the site inspection. This GAP site is reported on the NAS Alameda RCRA Site Summary List as being located on Parcel 54. Drums of PCE, used oil filters, oil-based paints, fuel filters, battery electrolytes, and soil samples are stored in this area. One drum was not labeled. Staining on the asphalt in this area appears to be the result of oil and other fluid spillage. This stained area is addressed as Target Area 1. A white metal trailer in the drum storage area appeared to be used for hazardous waste and hazardous materials storage (Figure 6-112-1). No chemicals were noted inside the trailer during the site inspection.

A 1,000-gallon waste oil underground storage tank, associated with the former auto hobby shop that was located in Building 506, is located immediately west of Building 506.

A flammable materials storage locker in the northeastern portion of Parcel 112 stores approximately 400 gallons of paint, petroleum products, plastic roof cement, engine starting fluid, and floor sealant. Two CONEX containers located east of GAP Site 30 store paper materials. The concrete-paved northwestern portion of Parcel 112 is used to store tires, air conditioners, restaurant equipment, compressors, appliances, and other miscellaneous equipment. No staining was noted in this area.

Review of historic aerial photographs indicates that four buildings were once located in Parcel 112. All four buildings were demolished prior to 1981. The exact use, construction date, and demolition date of each building are unknown. Aerial photographs indicate that one of the demolished buildings formerly occupied the bare soil open space in the southern half of Parcel 112.

During the site inspection, a dark resin-like material was observed near the base of an electrical utility pole along the southern edge of the parcel. The impacted area covers approximately three square feet.

Underground Storage Tanks

One inactive underground storage tank is present at Parcel 112 (Tank 506-1). Tank 506-1 was installed at an unknown date and is located west of Building 506 (Figure 6-112-1). Tank 506-1 was used to store waste oil from the auto hobby shop in Building 506, and has a capacity of 1,000 gallons. The presence of this tank was identified from the EBS. This tank is scheduled to be removed. The available information did not identify why the tank was abandoned. However, based on general comments made by NAS Alameda personnel, a tank was most commonly abandoned because it was leaking.

Sampling of the tank's contents during a previous investigation (ERM-West, 1988) detected the following compounds: 1,2-dichloroethane, 1,1,1-trichloroethane, TPH as gasoline and diesel, oil and grease, benzene, ethylbenzene, toluene, xylenes, and lead. Two soil borings, one each on the north and west sides of the tank, detected the following maximum concentrations approximately five feet below ground surface: TPH-Diesel (1,100 ppm), oil and grease (1.1%), ethylbenzene (0.03 ppm), toluene (0.15 ppm), and xylenes (0.19 ppm). Semivolatile organic compounds and halogenated volatile organic compounds were not detected in the soil.

This tank has been identified as a RCRA tank based on its former contents and inclusion in the RFI. This tank has been designated SWMU Site No. UST-16.

Parcel Boundary Conditions

Parcel 112 is bounded by Parcels 102, 103, 113, 114, 208 and Main Street. Parcel 113 is IR Program site 7A. Activities of concern on Parcel 113 include automobile repair and fueling. Staining on the pavement in Parcel 113 indicates that spills may have impacted the southern edge of Parcel 112. Of the four underground storage tanks located near the northern edge of Parcel 114, at least one has leaked an unknown quantity of fuel. UST investigations are in progress at Parcels 113 and 114.

No sampling is called for in this PEP in response to the adjacent IR site. If the continuing investigations at the IR site reveals a cause for concern at Parcel 112, then additional sampling on Parcel 112 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes two RCRA sites (site numbers UST-16 and GAP 30). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, both of the RCRA sites at this zone require further investigation. GAP 30 has been designated as a parcel-specific target area. The tank is scheduled to be removed, and any necessary investigation will be implemented as part of the UST program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 112, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-112-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with USTs, and sewer lines is discussed in corresponding protocols presented in Section 3 of the Shell Workplan.

No Industrial Hygiene (IH) sampling is required for Parcel 112 because no industrial buildings are present.

As noted earlier, Parcel 112 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 112.

Once the data gaps in Table 6-112-2 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-112-2

Summary of Data Gaps
NAS Alameda Parcel 112

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 112.
Installation Restoration (IR) Sites	• Parcel 112 is located adjacent to Installation Restoration (IR) Program Site 7A (Service Station). Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands.
Potential Parcel-Specific Release Areas	• Target Area 1 (GAP Site 30)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-112-2

Summary of Data Gaps
NAS Alameda Parcel 112

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One inactive UST is present at this parcel (Tank 506-1). Tank 506-1 was installed at an unknown date and is located west of Building 506 (Figure 6-112-1). Tank 506-1 was used to store waste oil from the auto hobby shop in Building 506, and has a capacity of 1,000 gallons. This tank is scheduled to be removed. It was classified as a RCRA tank.
Underground Utilities	• Sanitary sewer, storm sewer, water, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 112 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone with a zone-wide target area.

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 20. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (GAP Site 30): Hazardous materials and wastes stored in Target Area 1 are suspect sources of release. Drums of PCE, used oil filters, oil-based paints, gasoline filters, battery electrolytes, and soil samples were observed during the site inspection. One drum is not labeled. Because staining was also noted in this area, this target area has been classified as having a potential likelihood of impacts. Compounds of concern include VOCs and TPH. Two subsurface soil samples and two surface soil samples will be collected from this target area, are shown on Figure 6-112-1, and are listed on Table 6-112-1.

- Zone 20 Target Area 1 (Filled Wetlands): Zone 20 Target Area 1 includes all parcel areas in the Service Station Zone that overlie former wetlands (all parcels in the zone). These areas may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery. This zone target area is also present on Zone 16, and the area of concern extends into the FISC Alameda Annex. Approximately 50 soil vapor samples will be collected in Zone 16 to assess potential migration of VOCs to soil vapor in unsaturated fill. Because the potential source and likely impacts on Zone 20 are the same as those for Zone 16, the data collected in Zone 16 will also be applied to Zone 20. Should the sampling in Zone 16 indicate that sampling is required in Zone 20, sampling may be conducted during the detailed investigation phase for this zone, or as part of the ongoing investigations at IR sites 7A and 13.

In addition, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological issues, impacts of the nearby IR site, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

Subsurface GeoProbe soil sampling (SOP 14) and surface soil sampling (SOP 3) are the screening-level techniques that will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-112-1 summarizes screening-level sampling and analysis for the target area on this parcel. The sample locations are shown on Figure 6-112-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-113

PARCEL 113 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 113 at NAS Alameda (Figure 6-113-1). The parcel, which is located in the east-central portion of the base, is approximately one acre in size and is roughly square in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. Two parcel-specific target investigation areas (target areas) and one zone-wide target investigation area have been identified on this parcel. However, no zone-wide target area samples are being collected from this parcel. Sampling procedures called for in the screening-level investigation in the parcel-specific areas include subsurface GeoProbe sampling. Table 6-113-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 113, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 113, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 112 and 114. This parcel zone has been designated the Service Station Zone (Zone 20). The Service Station Zone encompasses the parcels that have been used as the Naval Exchange service station or support facilities. During the sampling program development, the parcels located in this zone were

evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 20.

Filling began in the area covered by this zone in approximately 1930. Prior to filling, the area within this zone was comprised predominantly of wetlands. The area within the zone boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 459) covers approximately 25 percent of the parcel. The remainder (75 percent) is open space. The parcel area is presently in use as a parking area for the automobile repair shop and the automobile parts store located in Building 459. Two buildings were formerly located on the parcel and have since been demolished. Storm, sanitary, and industrial sewer lines are present at this parcel and are shown in Figure 6-113-1.

IR Site 7A is located within Parcel 113. Previous subsurface investigations have been conducted at Parcel 113, and specific data regarding chemical occurrence are available.

Groundwater monitoring and soil vapor surveys have been conducted in Parcel 113 as part of the IR Program site 7A investigation. One groundwater monitoring well is located north of Building 459, while the other monitoring well is located south of Building 459. The groundwater was analyzed for VOCs, SVOCs, pesticides, PCBs, TPH, and metals. The soil samples were analyzed for VOCs, pesticides/herbicides, TPH, and SVOCs. The concentrations of ethylbenzene and arsenic in soil exceeded unrestricted and industrial use PRGs in Boring BO7A-07-001. Manganese concentrations exceeded its unrestricted use PRGs. No chlorinated hydrocarbons or aromatic compounds were detected in the approximately 13 soil vapor locations shown on Figure 6-113-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-113-1 – PARCEL 113
PROPOSED SAMPLE LOCATION MAP

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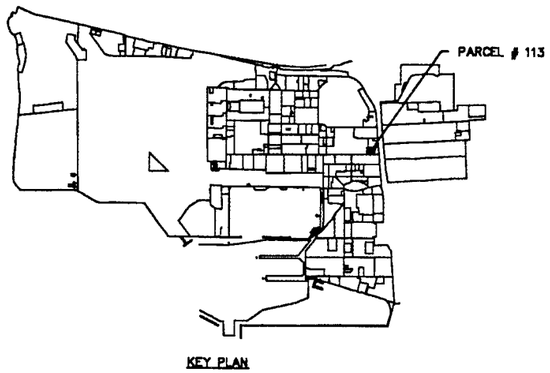
SENSITIVE



KEY PLAN

GENERAL LEGEND

- PARCEL OUTLINE
- SOIL VAPOR SAMPLE LOCATION
- GEOPROBE SAMPLE LOCATION
- SURFACE SOIL SAMPLE LOCATION
- PREVIOUS BORING LOCATION (ERM)
- PREVIOUS SOIL VAPOR SAMPLE LOCATION (PRC)
- PREVIOUS MONITORING WELL LOCATION (JMM)
- PROPOSED BORING LOCATION (PRC/MW)
- PROPOSED CPT/HYDROPUNCH (PRC/MW)
- TARGET AREA AND NUMBER

SANITARY SEWER LINE LEGEND

- SANITARY SEWER MANHOLE
- SW — SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM LINE LEGEND

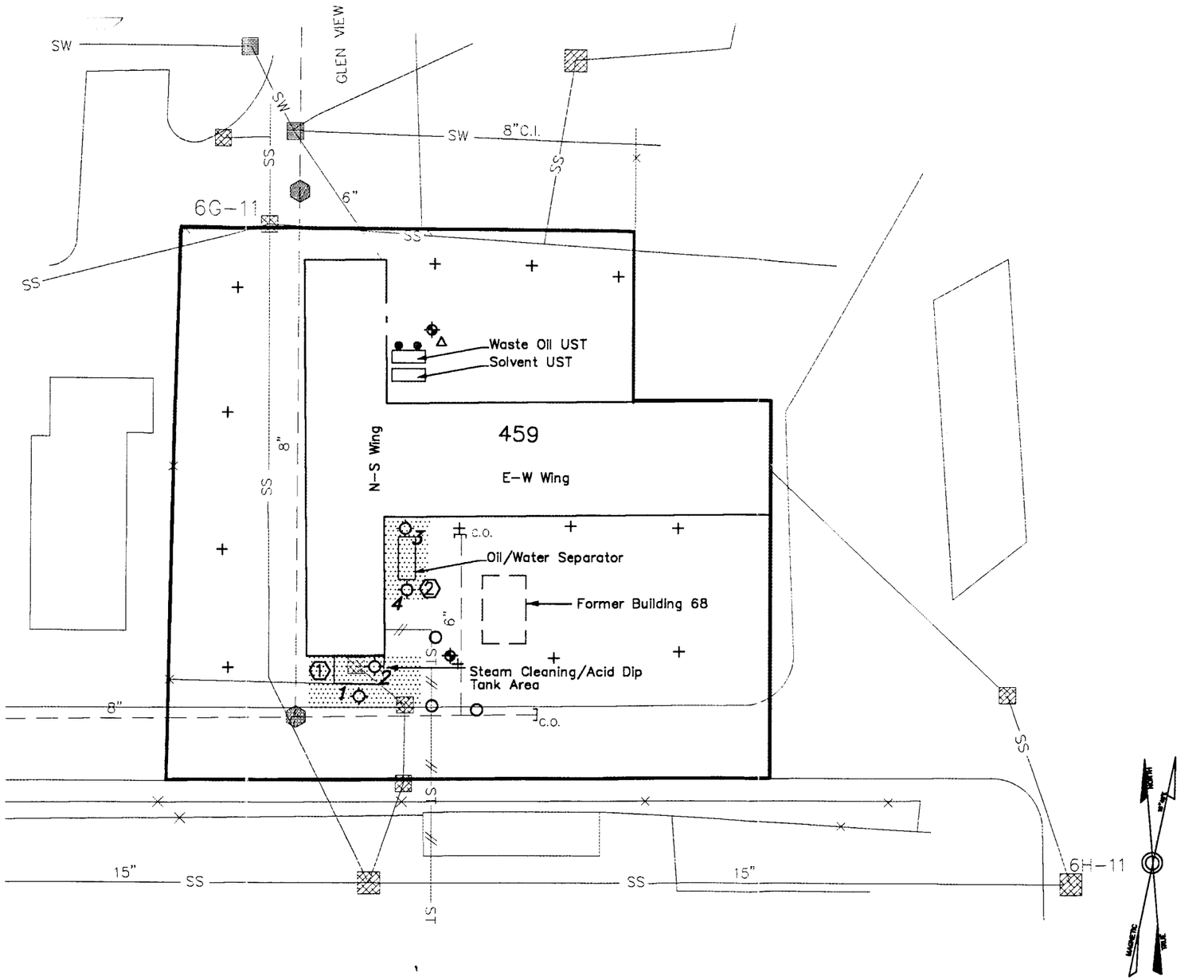
- ST — STEAM LINE

INDUSTRIAL WASTE LINE LEGEND

- INDUSTRIAL WASTE MANHOLE
- INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

- 6G-11 MANHOLE
- CATCH BASIN
- SS — STORM SEWER LINE



SCALE IN FEET

50 0 50 100 150

1" = 50'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-113-1
PARCEL 113
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590113.DWG	PWC 17.F28 (STORM DRAINS) PWC 10A1728 (SANITARY SEWER) PWC 23.1967 (INDUSTRIAL WASTES)
SCALE AS NOTED	DATE: 8.10.98/2121.97.10 — SHEET 1 OF 1

SENSITIVE

TABLE 6-113-1

Summary of Recommended Samples
NAS Alameda Parcel 113

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
113-1-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
113-1-0-S-S-DDMMYY	0.0'-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
113-2-4-S-S-DDMMYY	4.0'	GeoProbe	Soil	Target Area 1	Fuels	TPH	Modified EPA 8015
113-2-4-S-V-DDMMYY*	4.0'	GeoProbe	Soil	Target Area 1	Solvents	VOCs, TPH	
113-2-0-S-S-DDMMYY	0.0'-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
113-2-0-S-V-DDMMYY*	0.0'-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Modified EPA 8015
113-3-4-S-S-DDMMYY	4.0'**	GeoProbe	Soil	Target Area 2	Paint, Waste Oil, Solvents	Metals, SVOCs, VOCs, TPH	ICAP Scan, EPA 8270, Mod. EPA 8015, EPA 8240
113-3-4-S-V-DDMMYY*	4.0'**	GeoProbe	Soil	Target Area 2	Paint, Waste Oil, Solvents	TPH, Metals, SVOCs, VOCs	Modified EPA 8015, CLP RAS
113-4-4-S-S-DDMMYY	4.0'**	GeoProbe	Soil	Target Area 2	Paint, Waste Oil, Solvents	Metals, SVOCs, TPH, VOCs	ICAP Scan, EPA 8270, Mod. EPA 8015, EPA 8240

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.
** These samples will be collected from the depth corresponding to the bottom of the separator

Building 459

Building 459 was constructed in 1962 and has served as an automobile service station since approximately 1966. A repair shop is located in the North-South (N-S) wing and an automobile parts store and storage area are located in the East-West (E-W) wing (Figure 6-113-1). The automotive repair shop was formerly located in the eastern end of the E-W wing. This one-story building has a concrete floor and a metal frame and roof, and covers approximately 11,500 square feet.

Utilities located within and immediately surrounding Building 459 include underground sanitary sewer, storm sewer, steam, electrical, water, and industrial sewer lines, and overhead electrical lines. Air permits for service station gasoline nozzles and a dry cleaner were issued for this building. The building use between 1962 and 1966 is unknown.

Information collected during the EBS indicates that activities conducted within this building included automobile repair and parts/accessories storage. Automobile repair processes, which typically involve lubricating fluids, solvents, fuels, asbestos, and metals (lead), were primarily conducted in the N-S wing and the eastern end of the E-W wing of Building 459. Steam pipes that may be insulated with asbestos-containing lagging were noted within Building 459.

Approximately 75 gallons of gasoline, lubricating oils, and degreasers are stored in Building 459. Used oil filters, gas filters, oily rags, antifreeze, asbestos brake pads, and lead wheel weights are placed in drums and disposed of off-site. Used car batteries are stored in a metal CONEX container on the southern side of Building 459 (N-S wing). Battery disposal practices are unknown. Floor drains in the garage area (N-S wing) appear to drain to an oil/water separator on the southern side of Building 459 (Figure 6-113-1).

Scattered staining exists throughout the N-S wing (automobile repair area). The staining appears to have involved accumulated minor quantities of oily liquids. A small spill involving less than five gallons of motor oil occurred in 1994. According to site inspection data, spills are wiped up with paper towels, which are then thrown in the garbage. Because the staining in this area is relatively minor, and is on a concrete floor, no sampling is proposed at this time.

Although EBS information indicates that a permit for dry cleaning was issued for Building 459, no evidence of a dry cleaning operation was documented during the site inspection. Additional interviews and document review are recommended to obtain information about operations within Building 459 and former Building 158, which reportedly served as a laundry facility.

No other incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 459.

Building 68 (Demolished)

A former Building 68 was previously located on Parcel 139. Former Building 68 was constructed in 1942 and demolished 19 years later in 1961. This demolished building was approximately 2,400 square feet in area and was originally constructed to house an incinerator and smoke stack base, and to store fire department equipment.

Building 158 (Demolished)

Building 158 was constructed in 1945 and served as a craft/hobby shop and laundry facility (Figure 6-114-1). This wood frame building was partially located on both Parcels 113 and 114, covered approximately 19,400 square feet, and has since been demolished. No permits appear to have been issued for this building. No chemicals are documented to have been stored in Building 158. There have not been any documented spills or staining at Building 158. No other incidents, such as fires, mishaps, or flooding are documented to have occurred at Building 158.

Open Space

Open space covers approximately 75 percent of Parcel 113. The open space has been used primarily for vehicle parking; however, portions of the open space have been used for hazardous waste accumulation and steam cleaning/degreasing activities. The open space is 95 percent paved with asphalt and five percent paved with concrete. The pavement is in moderately good condition. One building (Building 158) was formerly located in the open space and has been demolished.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, steam, water, industrial sewer and overhead electrical lines. Three pole-mounted transformers are also present. Two abandoned underground storage tanks are located on the northern side of Building 459 (Figure 6-113-1).

An acid dip tank on the southern side of the service station garage is no longer in use and is heavily corroded. The area near the acid dip tank was used for steam cleaning engine parts and miscellaneous equipment. The drain located in the steam cleaning/dip tank area is stained. This area is addressed by Target Area 1.

A hazardous waste accumulation area is located on the north side of Building 459. Site inspection data indicate that wastes from Building 459 are accumulated in this area and disposed of off-site. No staining was noted by site inspectors in this area. An oil/water separator located on the southern side of Building 459, where the N-S and E-W wings meet, appears to be connected to floor drains in the garage area. Potential impacts to the soil surrounding the oil/water separator are addressed by Target Area 2.

Oil stains are located on the concrete foundation at the wall/foundation interface of the N-S wing; the stains appear to be the result of washdown activities within the garage. Numerous oil stains exist on the asphalt around Building 459. Scattered stains on the southern side of Building 459 appear to be the result of typical automobile engine leakage and accumulated minor vehicle repair/maintenance activities (e.g., oil and transmission fluids replacement) performed by customers of the auto parts store. These areas have been previously investigated as noted above.

Although no chemicals are documented to have been stored or used in the open space, site inspection data indicate that solvents and corrosives were likely used in the in the steam cleaning/acid dip tank area near the south side of Building 459. Unknown types and quantities of chemicals were present in the hazardous waste accumulation area.

No other incidents, such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

Two abandoned underground storage tanks are located on the northern side of Building 459 (Figure 6-113-1) on Parcel 113. One underground tank (459-8) was used to store unknown types of solvents. The other underground tank (UST 459-7, SWMU/GAP 16) was used to store waste oil and is located immediately north of the solvent tank. Both tanks have 500 gallon capacities, were scheduled for closure in 1987, and are no longer in use. The waste oil tank, which has not been used since failing a tightness test in 1991, was reported to be leaking in 1992. A previous subsurface investigation (ERM-West, 1987) near both tanks detected total petroleum hydrocarbons and benzene in soil at maximum concentrations of 78 ppm and 1.2 ppm, respectively (Figure 6-113-1). The waste oil tank has been identified as a RCRA tank based on its former contents. These tanks are scheduled to be removed.

Parcel Boundary Conditions

Parcel 113 is bounded by Parcels 103, 112, 114, and 197. Activities of concern on these adjacent parcels include fuel storage and dispensing on parcels 112 and 114, and material storage on Parcel 197.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/GAP Site 16). This sites was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the tank requires further investigation. This tank will be addressed as part of the UST program.

SWMU/GAP Site 16, located near the north side of Building 459, is a waste oil storage tank. It is unknown whether any chemicals were released from this site. The chemicals of concern associated with this site include metals and TPH. This tank is inactive and scheduled to be removed, and will be investigated as part of the UST program. This tank was identified as a RCRA tank based on its past use and contents. A description of the tank is provided in the Underground Storage Tank subsection above.

Tank 459-8, located on the north side of Building 459, was used to store solvents. It was installed in 1964 and is currently inactive. It has a 500 gallon capacity. It is scheduled to be removed.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue

[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-113-2

Summary of Data Gaps
NAS Alameda Parcel 113

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 113
Installation Restoration (IR) Sites	• IR Site 7A (Service Station) is located on Parcel 113. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Potential impacts from fuel storage in USTs at Parcel 114.
Potential Zone-Wide Release Areas	• Filled Wetlands.
Potential Parcel-Specific Release Areas	• Target Area 1 (Steam Cleaning/Degreasing Area, South Side of Building 459). • Target Area 2 (Oil/Water Separator, South Side of Building 459).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-113-2

Summary of Data Gaps
NAS Alameda Parcel 113

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Two abandoned USTs are located on the northern side of Building 459. One UST (459-8) was used to store solvents; the other tank (UST 459-7, SWMU/GAP 16) was used to store waste oil. Both were scheduled for closure in 1987, and are no longer in use.
Underground Utilities	• Sanitary sewer, storm sewer, water, and industrial sewer lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-113-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs and sewers is discussed in corresponding protocols presented in Section 3 of the Shell Workplan.

No Industrial Hygiene (IH) sampling is required at this parcel because no industrial buildings are present.

Once the data gaps in Table 6-113-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 113 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone with a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 20. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following two parcel-specific target areas were identified based on the potential release areas described above and listed in Table 6-113-2.

- Target Area 1 (Steam Cleaning/Degreasing Area Near the South Side of Building 459): The activities conducted in this steam cleaning and degreasing area are potential sources of release. Staining was noted in this area. Solvent use was also reported in this area The target area covers less than 1,000 square feet and has been classified as having a potential likelihood of impacts. Compounds of concern include VOCs and TPH. Two surface and two subsurface soil samples will be collected from this target area.

- Target Area 2 (Oil/Water Separator, South Side of Building 459). The oil/water separator, which consists of a concrete vault, is a potential migration pathway to the soil surrounding the separator. Automobile repair activities typically generate waste lubricating fluids, fuels, and other fluids which, if spilled in the service station area, would have been washed into floor drains that are connected to the oil/water separator. This target area is classified as having a potential likelihood for environmental impacts. Metals, TPH, VOCs and SVOCs are the primary compounds of concern. Two subsurface soil samples will be collected from this target area from the depth corresponding to the bottom of the separator.

- Zone 20 Target Area 1 (Filled Wetlands): Zone 20 Target Area 1 includes all parcel areas in the Service Station Zone that overlie former wetlands (all parcels in the zone). These areas may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery. This zone target area is also present on Zone 16, and the area of concern extends into the FISC Alameda Annex. Approximately 50 soil vapor samples will be collected in Zone 16 to assess potential migration of VOCs to soil vapor in unsaturated fill. Because the potential source and likely impacts on Zone 20 are the same as those for Zone 16, the data collected in Zone 16 will also be applied to Zone 20. Should the sampling in Zone 16 indicate that sampling is required in Zone 20, sampling may be conducted during the detailed investigation phase for this zone, or as part of the on-going investigations at IR sites 7A and 13.

  Subsequent (detailed evaluation phase) investigations may include the collection of GeoProbe subsurface soil samples from the affected horizon. GeoProbe subsurface soil sampling is not required during this phase of the investigation because soil vapor data will provide an adequate assessment of potential risks to human health, and because the general extent of the affected area has been established from prior investigations and document review.

Screening-Level Investigation

Subsurface soil sampling (SOP 14) and surface soil sampling (SOP 3) are the screening-level techniques that will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Four subsurface soil samples and two surface soil samples will be collected from the target areas on Parcel 113. Table 6-113-1 summarizes screening-level sampling and analysis for the target areas on Parcel 113. The sample locations are

shown on Figure 6-113-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15) and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-114

PARCEL 114 EVALUATION PLAN

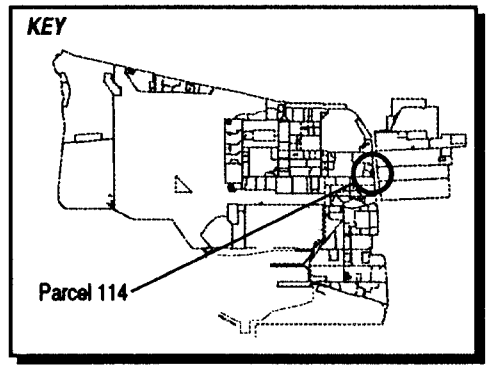
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 114 at NAS Alameda (Figure 6-114-1). The parcel, which is located in the east-central portion of the base, is 0.6 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific target investigation areas (target areas) and one zone-wide target investigation area have been identified on this parcel. No zone-wide target area samples have been proposed for this parcel. A subsurface investigation is currently being conducted by PRC and Montgomery Watson as part of the Installation Restoration (IR) Program. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment requirements. To provide a basis for the proposed investigation of Parcel 114, historical activities are discussed below.

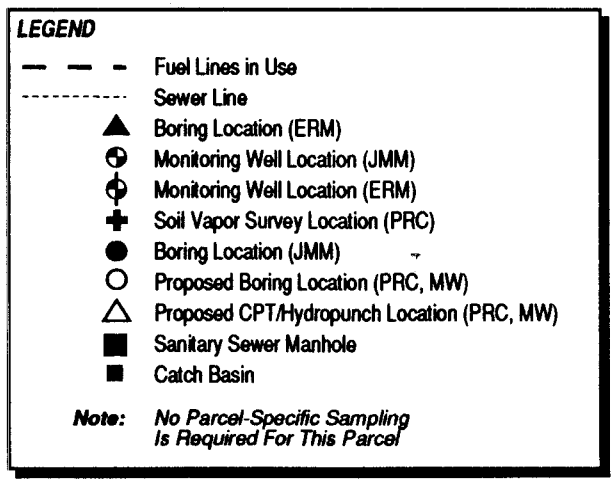
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 114, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 112 and 113. This parcel zone has been designated the Service Station Zone (Zone 20). The Service Station Zone encompasses the parcels that have been used as the Naval Exchange service station or support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel





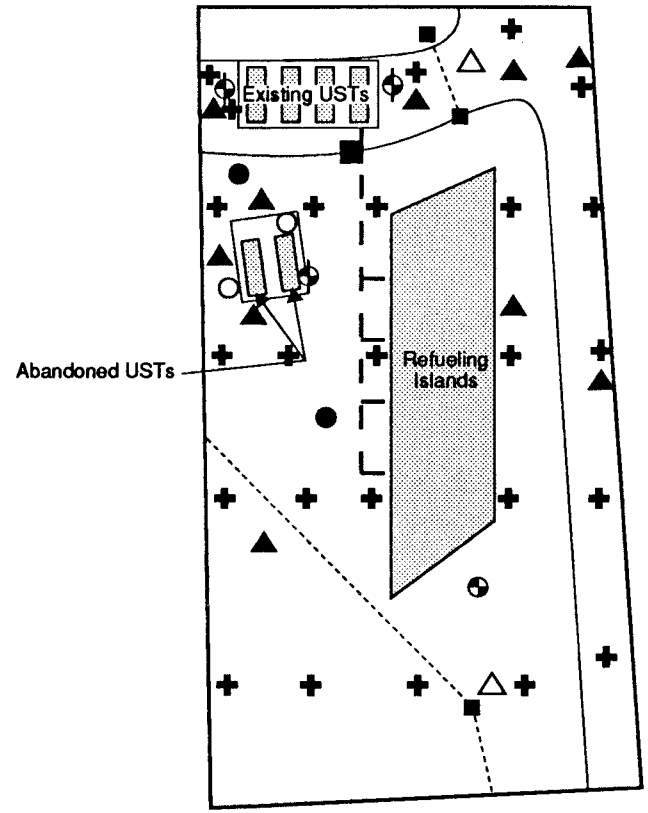


Figure 6-114-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.13.94

should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 20.

Filling began in the area covered by this zone in approximately 1930. Prior to filling, the area within this zone was comprised predominantly of wetlands. The area within the zone boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building and one structure cover approximately five percent of the parcel. The remainder (95 percent) is open space. The parcel area is presently in use as a gasoline fueling and vehicle parking area. Two buildings were formerly located on the parcel and have since been demolished. Fuel and sewer lines present at this parcel are shown in Figure 6-114-1.

Parcel 114 is part of IR Site 7A. Subsurface investigations have been conducted at Parcel 114, and specific data regarding chemical occurrence are available. Sampling locations from previous investigations are shown in Figure 6-114-1.

Six underground storage tanks are located at this parcel. One pair, located west of the refueling islands is abandoned. The other USTs are situated in a cluster of four located in the northwest corner of the parcel; of these four the western most tank is abandoned. A previous investigation was conducted by ERM-West to characterize the soil and groundwater impacts associated with the active and abandoned underground storage tanks. The following compounds were detected in soil samples collected near the tank clusters (maximum concentrations): total petroleum hydrocarbons (14,000 ppm), benzene (54 ppm), toluene (650 ppm), and xylenes (1,200 ppm). Benzene, toluene, and xylenes were also detected in groundwater at maximum concentrations of 31,000 µg/l, 22,000 µg/l, and 12,000 µg/l, respectively. Free product was visible in borings near the two abandoned underground storage tanks. According to the investigation, the contamination extends east from the tanks in the direction of groundwater flow.

Soil vapor, subsurface soil, surface soil, and groundwater samples have been collected from Parcel 114 as part of the IR Site 7A subsurface investigation (Figure 6-114-1). The soil vapor survey detected vapor phase hydrocarbons (BTEX) primarily near the southern-most pair of abandoned USTs, the active USTs, and the refueling islands. Immediately west of the refueling islands, near the pair of abandoned tanks, the soil vapor survey detected benzene at a maximum concentration of 250 µg/l. A monitoring well immediately west of the active underground storage tanks detected elevated concentrations of

TPH, benzene, toluene, and xylenes in soil. TPH and/or benzene, toluene, and xylenes were present in soil samples from every boring in Parcel 114. Concentrations of beryllium and the pesticide 4,4'-DDD in a soil boring located in the southeastern portion of the parcel exceeded unrestricted and industrial use PRGs. According to PRC, the extent of the soil hydrocarbon contamination has not been fully defined in the eastern or northern direction. Further sampling has been proposed in Parcel 114 as part of the IR Site 7A investigation (Figure 6-114-1).

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within the parcel open space and buildings are described in detail below.

Building 158 (Demolished)

Building 158 was constructed in 1945 and served as a craft/hobby shop and laundry facility (Figure 6-114-1). This wood frame building was partially located on both Parcels 113 and 114, covered approximately 19,400 square feet, and has since been demolished. No permits appear to have been issued for this building. No chemicals are documented to have been stored in Building 158. There have not been any documented spills or staining at Building 158. No other incidents, such as fires, mishaps, or flooding are documented to have occurred at Building 158.

Building 284 (Demolished)

Building 284 was constructed in 1945 and served as a bus station (Figure 6-114-1). This 50-square-foot building was demolished in 1953. No chemicals are documented to have been stored or used in Building 284. There have not been any documented spills or staining at Building 284. No other incidents such as fires, mishaps, or flooding are documented to have occurred at Building 284.

Open Space

Open space covers approximately 95 percent of Parcel 114 and is used for vehicle parking and fueling. The ground surface, which is 60 percent paved with asphalt and 40 percent paved with concrete, is generally in good condition. Utilities located within the open space include underground sanitary sewer, storm sewer, water, electrical, fuel, and

industrial sewer lines, and overhead electrical lines. EBS information indicates that this open space has been used primarily as a vehicle fueling and parking area.

A steel frame shelter, which covers the fueling islands, and a 20-square-foot, prefabricated metal building, which is used as a cashier's booth, are located within the open space. No chemicals are documented to have been stored or used in this building.

Although there have not been any documented spills in the open space, stains observed during the site inspection indicate that spills may have occurred around each of the four gasoline dispensing islands. The stains in these areas appear to consist of relatively minor quantities of gasoline. Oil stains (i.e., vehicle parking stains) are scattered throughout the paved asphalt area in the western portion of the parcel. These stains are not addressed by this PEP. No other incidents, such as fires, mishaps, or flooding, are documented to have occurred within the open space.

Underground Storage Tanks

Six underground gasoline storage tanks associated with Building 459 (IR Site 7A) are located in Parcel 114. Underground storage tanks 459-5 and 459-6, located west of the refueling islands, have capacities of 10,000 and 8,000 gallons, respectively, and have been abandoned in place (cemented over) due to leakage. These steel tanks formerly stored leaded gasoline and are currently scheduled to be removed.

The four underground storage tanks (Tanks 459-1, 459-2, 459-3, and 459-4) located northwest of the refueling islands were installed in 1964. These stainless steel tanks currently contain unleaded gasoline, and have a capacity of 10,000 gallons each. Three of the tanks are active and in use, having passed the 1993 tank and piping tightness test. The fourth tank is currently inactive and scheduled for removal. In 1982, fuel lines between the underground storage tanks and the refueling islands were reported to be leaking. During the removal and replacement of the leaking lines, a visible oil sheen and apparent soil contamination were noted.

Parcel Boundary Conditions

Parcel 114 is bounded by Parcels 112, 113, 197 and 900. Activities of concern in Parcel 113, which is also part of IR Site 7A, include automobile repair and fueling, and fuel storage.

No sampling is called for in this PEP in response to the IR site. If the continuing investigations at the IR site reveals a cause for concern at Parcel 114, then additional sampling on Parcel 114 may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6.

Although this parcel was reclassified based on its status as part of an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-114-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3 of the Shell Workplan. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 114 because no industrial buildings are present. Once the data gaps in Table 6-114-1 are addressed, Parcel 114 may be leased or transferred, as appropriate.

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1 This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-114-1

Summary of Data Gaps
NAS Alameda Parcel 114

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 114.
Installation Restoration (IR) Sites	• IR Site 7A is partially located on Parcel 114. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• No PCB issues identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands.
Potential Parcel-Specific Release Areas	• No potential non-IR release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-114-1

Summary of Data Gaps
NAS Alameda Parcel 114

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Six underground gasoline USTs associated with Building 459 (IR Site 7A) are located in Parcel 114. USTs 459-5 and 459-6, located west of the refueling islands, have capacities of 10,000 and 8,000 gallons, respectively, and have been abandoned in place (cemented over) due to leakage. These steel tanks formerly stored leaded gasoline and are currently scheduled to be removed. Four underground storage tanks (Tanks 459-1, 459-2, 459-3, and 459-4) are located northwest of the fueling islands and were installed in 1964. These stainless steel tanks currently contain unleaded gasoline, and have a capacity of 10,000 gallons, each. Three of the tanks are active and in use, having passed the 1993 tank and piping tightness test. The fourth tank is currently inactive and scheduled for removal.
Underground Utilities	• Sanitary sewer, storm sewer, water, electrical, and industrial sewer lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Although potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. One zone-wide target area was identified for Parcel 114. The zone-wide target area consists of the Filled Wetlands. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling has been proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 20.

- Zone 21 Target Area 1 (Filled Wetlands): Zone 21 Target Area 1 includes all parcel areas in the Service Station Zone that overlie former wetlands (all parcels in the zone). These areas may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery. This zone target area is also present on Zone 16, and the area of concern extends into the FISC Alameda Annex. Approximately 50 soil vapor samples will be collected in Zone 16 to assess potential migration of VOCs to soil vapor in unsaturated fill. Because the potential source and likely impacts on Zone 20 are the same as those for Zone 16, the data collected in Zone 16 will also be applied to Zone 20. Should the sampling in Zone 16 indicate that sampling is required in Zone 20, sampling may be conducted during the detailed investigation phase for this zone, or as part of the on-going investigations at IR sites 7A and 13.

  Subsequent (detailed evaluation phase) investigations may include the collection of subsurface soil samples from the affected horizon. subsurface soil sampling is not required during this phase of the investigation because soil vapor data will provide an adequate assessment of potential risks to human health, and because the general extent of the affected area has been established from prior investigations and document review.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, radiological issues, the IR site, and USTs must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-Z21

ZONE 21 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 21 at NAS Alameda (Figure 6-Z21-1). Zone 21 has been designated the Naval Exchange Commercial Zone and encompasses the parcels that have commercial retail activities. Zone 21 is comprised of Parcels 102, 115, 116, 117, 118, 119, 120, 121, 129, 130, 197, 208, and 209. During the sampling program development, the parcels located in this zone were evaluated together. Four zone-wide target investigation areas (target areas) and seven parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-Z21-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z21-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. One of the parcels in this zone (Parcel 129) has been reclassified from BRAC Category 7 to BRAC Category 6. None of the other parcels could be reclassified because the full extent of the impact from the adjacent IR sites has not been defined.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 21, historical activities are discussed below.

Zone 21 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 21 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, potential underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-Z21-1

Summary of Recommended Samples
NAS Alameda Zone 21

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z21-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 2	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, EPA 8080, EPA 8270, ICAP Scan
Z21-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 2	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, CLP RAS
Z21-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-2-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan

TABLE 6-Z21-1

Summary of Recommended Samples
NAS Alameda Zone 21

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z21-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	CLP RAS
Z21-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080

TABLE 6-Z21-1

Summary of Recommended Samples
NAS Alameda Zone 21

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z21-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-13-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	CLP RAS
Z21-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS
Z21-15-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 21, the Naval Exchange Commercial Zone encompasses 11 parcels that contain retail stores (such as the Naval Exchange) and services (such as the beauty shop, the credit union, and the florist shop). During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1930. Prior to filling, the area within this zone was comprised predominantly of wetlands. The area within the zone boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

The former Pacific Coast Oil Refinery (on Old Alameda Point - IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands in this zone in the late 1800s and early 1900s. Based on data collected at the Fleet Industrial Supply Center (FISC) Alameda Annex, elevated levels of benzene and naphthalene are present in the subsurface at an approximate depth of 16 to 20 below ground surface (bgs). The soil samples from this horizon also contained a tar-like material. This impacted horizon was encountered approximately 8 to 12 feet below the water table and was interpreted as the top of the pre-fill marsh sediments. Preliminary sampling results indicate that benzene concentrations for saturated soil samples from this layer were as high as 10 ppm. Groundwater concentrations were much lower (in the parts per billion range) than the soil concentrations.

Currently, 15 buildings and four structures cover approximately 30 percent of the zone. The remaining 70 percent is open space. In addition, 15 buildings and one structure were formerly located on the parcel and have since been demolished. Four bunkers were formerly located in this zone, on Parcels 115, 116, 118, and 119 (one bunker on each parcel). The bunkers were present in this area from

[1] The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

approximately 1953 to 1970. No information is available regarding the materials stored in these bunkers. Other areas of the zone formerly contained large warehouses; railroad tracks were present in parcels 121, 130, and 197, and may have been present in several other parcels (the aerial photographs do not provide sufficient detail to determine whether certain areas are former roads or railroad tracks).

Zone 21 is adjacent to two Installation Restoration (IR) Program sites (IR Sites 3 and 7A). IR Site 3 is Area 97, the Abandoned Fuel Storage Area. IR Site 3 is located directly to the south of Zone 21. A large quantity of fuel (up to 300,000 gallons) was released from IR Site 3 in the late 1960s and early 1970s. Existing investigation data indicate that a plume of hydrocarbons and aromatic solvents is traveling northwest from Area 97. IR Site 3 is known to have impacted three parcels in this zone, Parcels 120, 129 and 209. These parcels are known to have been impacted by releases of petroleum and volatile aromatic hydrocarbons. Additional investigation is planned for the area downgradient (primarily northwest) of Area 97. This investigation will include Parcels 129, 130, and 209. IR Site 7A is the former Naval Exchange Service Station. IR Site 7A is located to the north of Zone 21. Several of the fuel tanks at this IR site are known to have leaked and have been removed. Detailed information regarding the subsurface impacts at each parcel is provided in the individual PEPs.

Sewer lines present on this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 21 will be addressed in other sampling programs and are not considered in this ZAP.

Underground Storage Tanks

One abandoned tank and one potential tank are known to be present in this zone on Parcel 115. The abandoned tank is reported to be located near the east side of Building 173; it is a 2,000 gallon tank. The potential tank was indicated by document review; however, no further information is available regarding this tank, and site inspection did not indicate any evidence of a second UST at this parcel. Both of these tanks are scheduled to be removed.

Document review indicated that a UST (tank number 549-5) may potentially be present on Parcel 197; this tank is reportedly a 10,000-gallon UST that stored automotive gasoline. The tank could not be located during a 1987 precision tank testing study, and no evidence of a UST was noted during the site inspection of this parcel.

However, the site inspection revealed the potential presence of three other USTs in this zone in Parcels 116, 129, and 208. An open pipe tap was noted in Parcel 116; it is potentially part of a UST associated with Building 517, but no additional information is available. A large concrete pad with a metal plate was noted in Parcel 129, east of Building 527. A vent pipe was identified in Parcel 208 on the eastern side of Building 408; this vent pipe may be indicative of a UST.

RCRA Sites

No RCRA sites were identified at this zone.

Zone Boundary Conditions

Zone 21 is bounded by Zones 20, 16, 17, and 22. Zone 21 is bounded by Main Street to the east. Activities of concern on these adjacent zones include the presence of IR sites on Zone 20 (IR Site 7A, the Naval Exchange Service Station), Zone 17 (IR Site 3, the Abandoned Fuel Storage Area), and Zone 22 (IR Site 4, Building 360; IR Site 7C, a Service Station; IR Site 10B, the Missile Rework Operations Building; IR Site 16, the Cans C-2 Area; IR Site 19, Yard D-13/Hazardous Waste Solvents; IR Site 13, the Oil Refinery; and IR Site 9, the Paint Stripping Building). In addition, Parcel 123 on Zone 17 serves as metal recycling/scrap yard and vehicle maintenance area.

Zone Target Areas and Compounds of Concern

This zone contains three zone-wide target areas and 11 parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target areas and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Most of the parcels on this zone also had long-term unpaved areas. According to EPA/Cal-EPA guidance, these long-term unpaved may require sampling for pesticides. However, four of the parcels on this zone (Parcels 116, 118, 120, and 121) also contained former gardening

shops and a plant nursery. These buildings are considered potential pesticide release areas. These four parcels represent the areas likely to show the greatest concentrations of pesticides, if pesticides were released at this zone. They will therefore be sampled and serve as "worst-case" indicator for the potential presence of pesticides in other areas of this zone. No zone target areas have been established for pesticides; if the sampling at Parcels 116, 118, 120, and 121 indicates that potential pesticides releases are of concern, then pesticide sampling may be addressed as a zone-wide issue during the detailed evaluation phase.

Zone 21 Target Areas

The following zone target areas were identified for Zone 21.

- Zone 21 Target Area 1 (Filled Wetlands): This target area includes all parcel areas in the Naval Exchange Commercial Zone that overlie former wetlands (all parcels in the zone except Parcel 209). These areas may have been impacted by historical (prior to filling) releases or disposal of organic compounds from a nearby oil refinery. This zone target area is also present on Zone 16, and the area of concern extends into the FISC Alameda Annex. Approximately 50 soil vapor samples will be collected in Zone 16 to assess potential migration of VOCs to soil vapor in unsaturated fill. Because the potential source and likely impacts on Zone 21 are the same as those for Zone 16, the data collected in Zone 16 will also be applied to Zone 21. Should the sampling in Zone 16 indicate that sampling is required in Zone 21, sampling may be conducted during the detailed investigation phase for this zone, or as part of the on-going investigations at IR Sites 7A and 13.

  Subsequent (detailed evaluation phase) investigations may include the collection of Geoprobe subsurface soil samples from the affected horizon. Geoprobe subsurface soil sampling is not required during this phase of the investigation because soil vapor data will provide an adequate assessment of potential risks to human health, and because the general extent of the affected area has been established from prior investigations and document review.

- Zone 21 Target Area 2 (Railroad Tracks): This target area includes all current and former railroad track areas within the Naval Exchange Commercial Zone. Railroad track locations include the southern boundaries of Parcel 121 and 197, and the southeastern corner of Parcel 130. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars, engines, and ties. In addition, the railroad tracks in Parcel 197 are

located adjacent to a former warehouse, and aerial photo review indicates the presence of parked rail cars (i.e., individual rail cars without a locomotive) on this track.

This target area is classified as having potential likelihood of impacts. Surface soil samples will be collected approximately every 800 linear feet along the two track areas yielding a total of one zone-wide sampling location. One sample is sufficient for this zone because railroad track zone target areas also exist on adjacent zones, and the data from these zones can be assessed for the tracks as a whole. The sample will be collected from the center of the tracks below any coarse subgrade material present. The sample to be collected in this target area is listed in Table 6-Z21-1 and is shown on Figure 6-Z21-1.

It should be noted that railroad track sampling is currently occurring in Zone 16. The target analytes and the need for sampling railroad tracks will be reevaluated after the Zone 16 sampling data are available. If appropriate, the number of target analytes may be reduced, or, if no concerns are identified in Zone 16, the zone target area may be eliminated.

- Zone 21 Target Area 3 (Former Bunkers): This target area includes the areas formerly containing bunkers on Parcels 115, 116, 118, and 119. The bunkers were present from approximately 1953 to 1970. Unknown containers and miscellaneous equipment were stored in the open space around the bunkers prior to 1966. No information is available regarding the activities occurring at these bunkers, or the chemicals/materials (if any) stored in these bunkers. However, significant staining is visible in this area in the 1966 aerial photograph and surrounds the bunkers on the east and west sides. Six surface soil samples and six subsurface soil samples will be collected from this target area. Because no information is available regarding the materials/chemicals stored in this area, the samples will be analyzed for VOCs, SVOCs, TPH, and metals.

- Zone 21 Target Area 4 (Retail Garden Shops and Nurseries): This target area includes Buildings 517 (Parcel 116), Buildings 517A, 512B, the Yard Area (Parcel 118), former Building 264 (Parcel 120), and former Building 222 (Parcel 121). Building 517 is used as a garden shop. Pesticides were stored, handled and used in this area, and were potentially released to the soil. Buildings 512B and 517A have served as pesticide storage areas. Former Building 264 was used as a nursery and pesticides may have been used or stored here. Former Building 222 was used as a garden shop. These areas may have been impacted by historical releases of pesticides. The compounds of

concern in this zone target area are pesticides. Eight surface soil samples will be collected from this target area.

Parcel 116, 117, 118, 119, 121, 130 and 209 Target Areas

- No parcel-specific target areas were identified for these parcels.

Parcel 102 Target Area

- Target Area 1 (Open Space Near Northeastern Corner of Building 152): A 50-gallon aboveground fuel storage tank (and piping) located near the backup generator is a probable source of soil contamination. Stains on the concrete and asphalt around the piping, generator, and fuel tank indicate that releases have occurred in the past. No secondary containment exists for the tank, generator, or piping. The primary compounds of concern in this target area are TPH. Two surface soil samples will be collected from this target area.

Parcel 115 Target Area

- Target Area 1 (Open Space East of Building 173): This target area covers approximately 400 square feet. Three aboveground fuel storage tanks are located near the east side of Building 173. Staining near the middle tank noted during the site inspection indicates that a release occurred. The other tanks are potential sources of release. The compounds of concern in this target area are TPH. The two surface soil samples to be collected at this target area are listed in Table 6-115-1.

Parcel 129 Target Areas

- Target Area 1 (Open Space East and South of Building 527): Although this area has been used primarily for vehicle parking, staining in a 1953 aerial photograph indicates that releases may have occurred. The source of the staining is unknown. This target area covers approximately 16,000 square feet and has been classified as having a potential likelihood of impacts. Because the compounds of concern potentially released at this target area are unknown, the samples collected will be analyzed for TPH, SVOCs, VOCs, and metals. Three surface soil samples and three subsurface soil samples will be collected in this target area. Samples to be collected in Target Area 1 are listed in Table 6-129-1.

- Target Area 2 (Open Space West of Building 527): Staining and material storage observed in a 1947 aerial photograph indicate that releases may have occurred. The staining and equipment storage occurred in rows parallel with the southern parcel boundary. The ground cover appears to have been bare soil. This target area covers approximately 12,000 square feet and has been classified as having a potential likelihood of impacts. Because the compounds of concern potentially released at this target area are unknown, the samples collected will be analyzed for TPH, SVOCs, VOCs, and metals. Three shallow soil and three subsurface soil samples will be collected in this target area. Samples to be collected in Target Area 2 are listed in Table 6-129-1.

Parcel 197 Target Areas

- Target Area 1 (Oil/Water Separator Near Southeast Corner of Building 118): The soil in Target Area 1 may have been impacted by the releases of VOCs, SVOCs, metals, and TPH from the oil/water separator. This target area has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected from the perimeter of the oil/water separator. Samples to be collected in this target area are listed in Table-6-197-1.

- Target Area 2 (Open Space North of Building 118): The open space north of Building 118 has been used as a storage yard for miscellaneous items and a receiving area. A hydraulic lifting device near Loading Bay 1 has leaked a moderate quantity of hydraulic fluid. Oily stains near abandoned air conditioning equipment indicate that releases have occurred. This target area has been classified as having a potential likelihood of impacts. The compounds of concern in this target area include TPH and VOCs. Three subsurface and three surface soil samples will be collected in this target area. Samples to be collected in this target area are summarized in Table 6-197-1.

Parcel 208 Target Area

- Target Area 1 (Open Space East of Building 408): Staining in historical aerial photographs indicates that spills may have occurred in the open space east of the Building 408. This target area covers approximately 6,000 square feet and has been classified as having a potential likelihood of impacts. Because the activities and compounds of concern are unknown, samples will be analyzed for TPH, SVOCs, VOCs, and metals. Two surface and two subsurface

soil samples will be collected in this target area. Samples to be collected in this target area are listed in Table 6-208-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14).

Table 6-Z21-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. A total of 30 surface soil samples and 16 subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-Z21-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-102

PARCEL 102 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 102 at NAS Alameda (Figure 6-102-1). The parcel, which is located in the east-central portion of the base, is approximately four acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. Parcel 102 contains no RCRA sites. One parcel-specific target investigation area (target area) and one zone-wide target area have been identified in this parcel; however, no zone-wide sampling is proposed at Parcel 102. Sampling procedures called for in the screening-level investigation in this area include surface soil sampling. Table 6-102-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 102, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 102 consistent with objectives identified in Section 1 of the Shell Workplan. This subsection also identifies nearby Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 115, 116, 117, 118, 119, 120, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-102-1 – PARCEL 113
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

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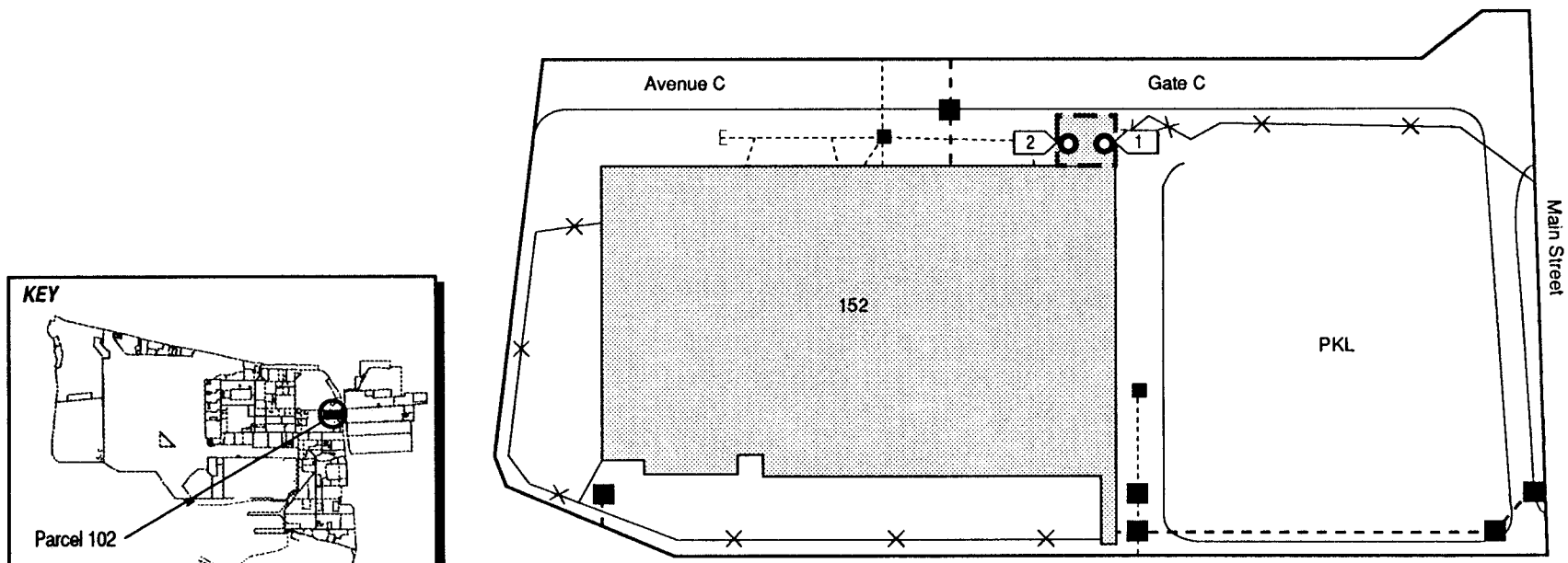
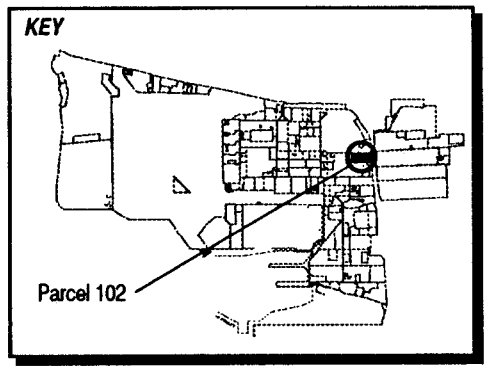
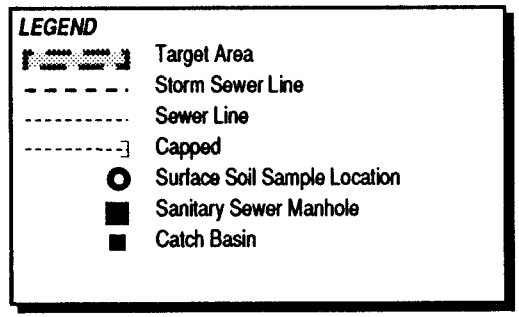
E-MAIL: diane.silva@navy.mil

SENSITIVE







1"= 125'

Figure 6-102-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.05.94

SENSITIVE

TABLE 6-102-1

Summary of Recommended Samples
NAS Alameda Parcel 102

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
102-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015
102-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015
102-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015

* This is the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 102 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point, IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The fill material included dredgings from the Todd Shipyard. The area within the parcel boundary was completely filled as of 1945; the ground level and grading have not changed significantly since that time.

Currently, one building covers approximately 35 percent of the parcel. The remainder (65 percent) is open space. The parcel area is presently in use as a commissary and parking area. One building was formerly located on the parcel and has since been demolished. Sewer lines are present at this parcel and are shown in Figure 6-102-1.

Parcel 102 is located approximately 375 feet north of Installation Restoration (IR) Program Site 7A (Parcel 113). No previous investigations have been conducted at Parcel 102 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 152

Building 152 was constructed in 1945 and serves as a commissary (Figure 6-102-1). This 87,554 square-foot building is in fair condition, and was formerly used as a jail. Building 152 is constructed of wood with a concrete floor and a tar/gravel roof.

Utilities located within and immediately surrounding Building 152 include underground sanitary sewer, storm sewer, steam, water, and electrical lines. A pad-mounted transformer is also located within the building.

Information collected during the EBS indicates that activities conducted within this building include food handling (e.g., meat preparation), refrigerated food storage, and miscellaneous storage. It appears that Building 102 was always used as either a commissary or jail.

Approximately 50 gallons of corrosion/scaling inhibitor (potassium hydroxide and diethylaminoethanol) are currently stored in the boiler room located in the northwestern portion of Building 152. Boiler blowdown is discharged to the sanitary sewer system. A former boiler room is located in the northeastern portion of Building 152. Both boiler rooms have potentially asbestos-containing insulation. The only other chemicals used or stored at Building 152 are working/lubricating fluids for compressors and refrigeration equipment, disinfecting chemicals approved for use in food handling areas, and miscellaneous commercial chemicals for consumer purchase (lighter fluid, household cleaning chemicals, etc.).

Although there have not been any documented spills at Building 152, site inspection data indicate that electrical switches have leaked a small quantity of oil. No other incidents are documented to have occurred. Building 152 is equipped with a heating-ventilation-air conditioning (HVAC) system.

Building 409 (Demolished)

Building 409 was constructed in 1957 and served as a snack bar and beer store. This temporary building, which covered approximately 550 square feet, was demolished. No chemicals are documented to have been stored or used at Building 409. There have not been any documented spills or other incidents at Building 409.

Open Space

Open space makes up approximately 65 percent of Parcel 102. The open space has been used for vehicle parking and recreation. The ground surface is 90 percent paved with asphalt and 10 percent paved with concrete. In general, the pavement is in good condition; however, the interface between the concrete foundation of Building 152 and the surrounding pavement has been damaged by earthquakes.

Building 409 was formerly located in the open space. Utilities located within and immediately surrounding the open space include underground gas, sanitary sewer, storm sewer, steam, water, and

electrical lines. An industrial sewer in Parcel 112 runs near the southern edge of Parcel 102.

Site inspection data indicate that activities conducted within this open space include vehicle parking, recreation (west of Building 152), and loading/unloading of commissary materials (south of Building 152). Fuel transfer occurs at an aboveground storage tank located near the northeastern corner of Building 152. This storage tank has a capacity of approximately 50 gallons and supplies diesel fuel to the commissary's back-up generator. There is no secondary containment for the tank or the aboveground piping. Stains present near the aboveground storage tank appear to be the result of leakage from fuel transfer operations and faulty pipe connections between the tank and generator (this staining is addressed under Target Area 1).

Refrigeration compressors are located on each side of Building 152. Stains around the refrigeration compressors on each side of Building 152 indicate that releases of small quantities of fluid have occurred over asphalt and concrete; these stains do not appear to present a concern.

Site inspection data indicate that five abandoned drums are located in the southwestern portion of Parcel 102. According to the labels on the drums, two 50-gallon drums contain fat oil from the USS Mercy, one five-gallon drum contains liquid plastic, and one 55-gallon drum contains detergent. One drum is not labeled. Approximately 90 gallons of floor polish, paint, and thinner are stored in a metal CONEX container located on the loading dock on the southern side of Building 152. Stains near the loading dock on the south side of Building 152 appear to consist of food materials and minor engine fluid leaks from forklifts and delivery trucks; these stains do not appear to present a concern.

There have not been any documented spills in the open space. Typical vehicle parking stains exist throughout the parcel. The largest stain in the parking area covers approximately 10 square feet; these stains do not appear to present a concern.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 102 is bounded by Parcels 98, 100, 208, and 103 and by Main Street to the east. No parcels contiguous with Parcel 102 are IR sites, therefore, no sampling is called for in this PEP in response to the nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 102, then additional sampling on Parcel 102 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 102, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-102-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 102 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 102.

Once the data gaps in Table 6-102-2 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-102-2

Summary of Data Gaps
NAS Alameda Parcel 102

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 102.
Installation Restoration (IR) Sites	• IR Site 7A (Service Station) is located approximately 375 feet south of Parcel 102. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• The groundwater underneath this parcel may potentially be impacted by releases associated with the wetlands dumping. This concern is being addressed in Zone 16.
Potential Zone-Wide Release Areas	• Filled Wetlands
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space Near Northeastern Corner of Building 152)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-102-2

Summary of Data Gaps
NAS Alameda Parcel 102

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 102 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One parcel-specific target investigation area has been identified in this parcel. One zone-wide target area has been identified at Parcel 102, however, no zone-wide sampling is proposed at this parcel. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Space Near Northeastern Corner of Building 152): A 50-gallon aboveground fuel storage tank (and piping) located near the backup generator is a probable source of soil contamination. Stains on the concrete and asphalt around the piping, generator, and fuel tank indicate that releases have occurred in the past. No secondary containment exists for the tank, generator, or piping. Two surface soil samples will be collected and analyzed for TPH. The samples proposed for this target area are listed in Table 6-102-1.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

Screening-Level Investigation

Surface soil sampling (SOP 3) and will be employed to assess conditions in the target area and to identify areas that require further sampling in the follow-up detailed evaluation phase. Table 6-102-1 summarizes screening-level sampling and analysis for the parcel's target area. Two surface soil samples will be collected from the locations shown in Figure 6-102-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Sampling locations may be adjusted in the field as necessary. The surface soil samples will be collected from the center of the darkest stains.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize the screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15) and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-115

PARCEL 115 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 115 at NAS Alameda (Figure 6-115-1). The parcel, which is located in the east-central portion of the base, is approximately five acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and two zone-wide target investigation areas (target areas) have been identified on Parcel 115. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-115-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 115, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 115 consistent with the objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies the nearby Installation Restoration Program site and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 116, 117, 118, 119, 120, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore,

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-115-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
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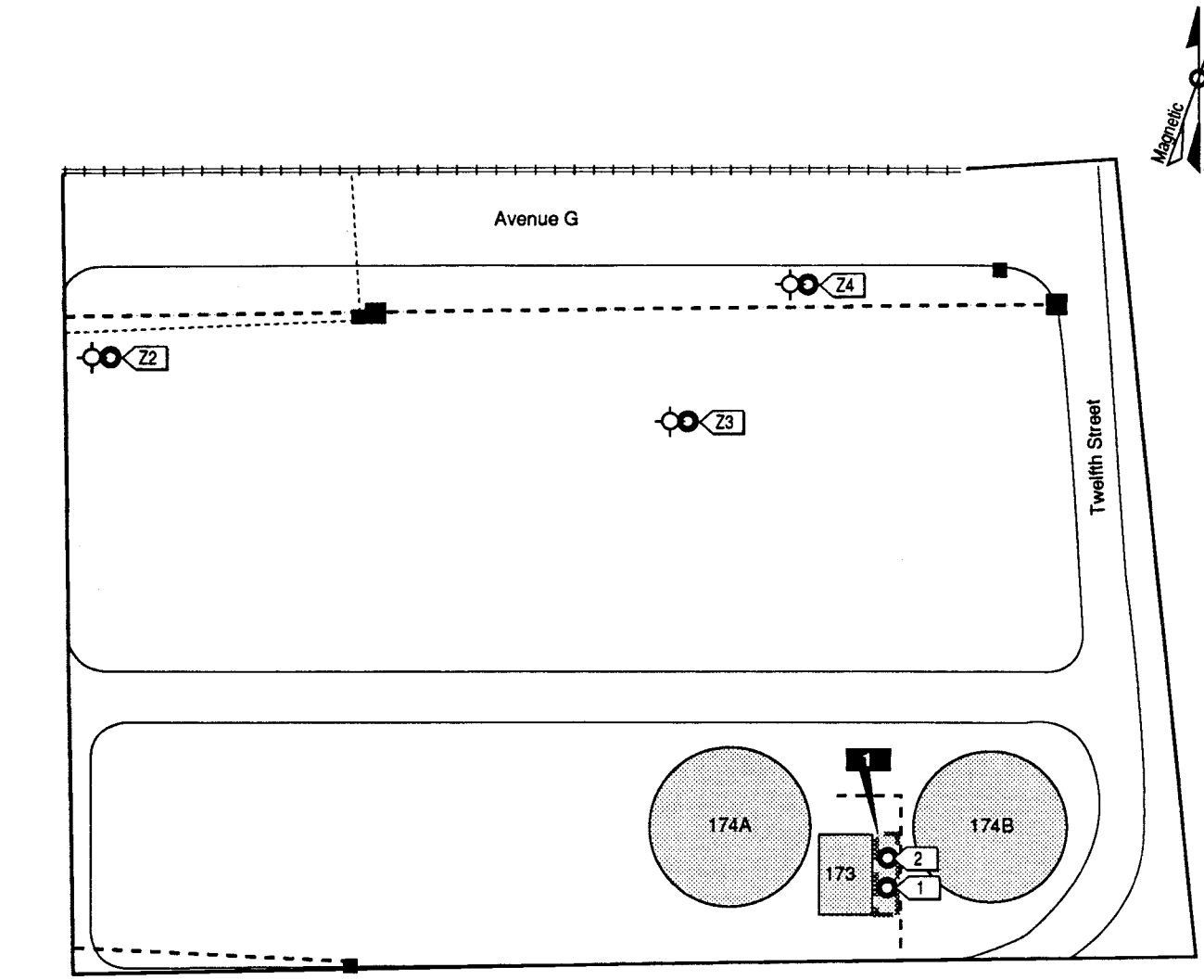
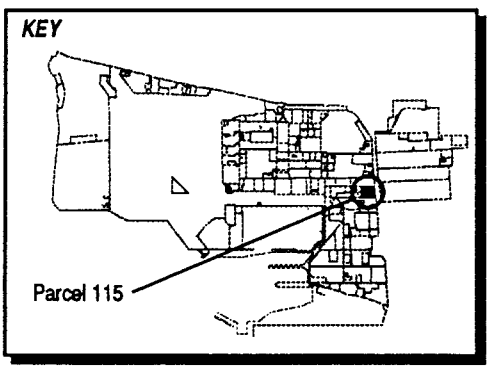
SENSITIVE





LEGEND

- Target Area 1
- Storm Sewer Line
- Sewer Line
- Subsurface Geoprobe Sample Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 90'

Figure 6-115-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

TABLE 6-115-1

Summary of Recommended Samples

NAS Alameda Parcel 115

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Compounds of Concern	Target Analytes	Analytical Method
115-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015
115-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015
115-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel	TPH	Modified EPA 8015
Z21-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-2-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-3-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 115 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930 and included dredged material from the Todd Shipyard. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 173) and two structures (Structures 174A and 174B, Aboveground Water Storage Tanks) cover approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently used as a vehicle parking area and a roadway. Two buildings and one structure were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-115-1.

Parcel 115 is located approximately 400 feet south of Installation Restoration (IR) Program Site 7A (Building 459, Navy Exchange Fuel Station) and approximately 250 feet northeast of IR Site 3 (Area 97, Abandoned Fuel Storage Area). No previous investigations have been conducted at Parcel 115, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 173

Building 173 was constructed prior to 1947 and has served as a water pumping station (Figure 6-115-1). This one-story building is in moderately good condition. Building 173 is constructed of concrete and brick with a concrete floor and a tar/gravel roof, and covers approximately 1,300 square feet. It appears that Building 173 was always used as a pumping station.

Utilities located within and immediately surrounding Building 173 include underground storm sewer, water, and electrical lines. Site inspection data indicate that electrical switches within the building may be oil-filled.

The three water pumps within Building 173 have a pumping capacity of 7,700 gallons per minute. Backup power for the pumps is supplied by three diesel generators. Diesel fuel for the generators is stored in three aboveground storage tanks east of Building 173. Staining noted near the storage tanks will be addressed as Target Area 1. Insulation on the generators' exhaust piping may potentially consist of asbestos-containing materials. A floor drain near the east edge of the building is connected to the storm sewer system. Twelve batteries and approximately two gallons of oil are stored near this floor drain. Disposal practices are unknown.

Although no spills are documented to have occurred in Building 173, floor stains noted during the site inspection indicate that spills may have occurred. The floor stains appear to have involved relatively minor quantities of oil. A 24-square-foot floor stain near Pump No. 2 was also noted during the site inspection. The stain appears to have involved lubricating fluid. No other incidents such as fires, mishaps, or flooding are documented to have occurred in Building 173.

Building 123 (Demolished)

Building 123 was constructed in 1944 and served as a shop, an inert material storage building, and a Navy exchange storage building (Figure 6-115-1). This semi-permanent building was demolished between 1966 and 1970. Building 123 covered approximately 4,030 square feet. No information is available concerning the type of shop or inert materials storage within former Building 123.

No chemicals are documented to have been stored or used at Building 123. No documented spills have occurred at Building 123. No other incidents such as fires, mishaps, or flooding are documented to have occurred.

Open Space

The open space covers approximately 95 percent of Parcel 115 and is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in good condition. The immediate areas around Building 173, Structure 174A, and Structure 174B are covered with bare soil.

Two aboveground water storage tanks (Structures 174A and 174B) are the only structures located within the open space (Figure 6-115-1). Structures 174A and 174B are located west and east of Building 173, respectively. Each concrete tank stores potable water and has a capacity of approximately 530,000 gallons. Both tanks appear to be composed of concrete. No further information exists for Structures 173A and 173B.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, and electrical lines. One PCB-containing transformer (#7223709) is located on a concrete pad near the west side of Building 173. The transformer is mounted on a concrete pad within secondary containment. Railroad tracks define the northern edge of Parcel 115, but are considered to be part of Parcel 197.

Three aboveground storage tanks, located near the east side of Building 173, supply diesel fuel to three backup generators inside the building. Each raised steel tank has an approximate capacity of 100 gallons and is located within concrete secondary containment. Extensive staining within the secondary containment indicates that a moderately large spill occurred under the middle storage tank (this staining is addressed under Target Area 1).

The open space was used primarily for vehicle parking from approximately 1966 to present. Prior to 1966, the open space appears to have been used as a storage area for miscellaneous containers and equipment. Aerial photographs indicate that a bunker was located in the northwestern portion of Parcel 115. The types of materials stored and activities conducted at this structure are unknown. The bunker was demolished between 1966 and 1970. Aerial photographs also indicate that an unknown building was located just north of Structure 174B. This building was constructed between 1953 and 1958, and demolished before 1963.

A large stain in a 1953 aerial photograph indicates that a spill may have occurred near the south side of Avenue G. The stain covers an area measuring approximately 30 feet by 15 feet (this stain is being addressed as part of the zone-wide sampling). Currently, only stains typical of vehicle engine leakage are present in the parking area. No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

Two abandoned underground storage tanks are potentially present at this parcel. No information (such as tank number, size or contents) is

available regarding the first tank. The second underground storage tank is reported to be located near the east side of Building 173 and abandoned. The second tank has an approximate capacity of 2,000 gallons and was used to store gasoline.

Both tanks are scheduled to be removed; however, neither tank has been definitively located.

Parcel Boundary Conditions

Parcel 115 is bounded by Parcels 116, 117, 120, 129, 130, 197, and Main Street. No parcels contiguous with Parcel 115 are IR sites, therefore, no sampling is called for in this PEP in response to the two nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 115, then additional sampling on Parcel 115 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 115, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-115-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 115 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and

TABLE 6-115-2

Summary of Data Gaps
NAS Alameda Parcel 115

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 115.
Installation Restoration (IR) Sites	• IR Site 7A (Service Station) is located approximately 400 feet north of Parcel 115. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor. • IR Site 3 (Area 97) is located approximately 250 feet southwest of Parcel 115. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Former Bunkers
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space East of Building 173)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-115-2

Summary of Data Gaps
NAS Alameda Parcel 115

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One *potential* UST is located at this parcel. No other information is available, but it is scheduled to be removed. • One abandoned 2,000 gallon UST is located east of Building 173; it could not be definitively located, but it is scheduled to be removed.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 115.

Once the data gaps in Table 6-115-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 115 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One parcel-specific and two zone-wide target areas have been identified on Parcel 115. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release areas described above and listed in Table 6-115-2.

- Target Area 1 (Open Space East of Building 173): This target area covers approximately 400 square feet. Three aboveground diesel storage tanks are located near the east side of Building 173. Staining near the middle tank noted during the site inspection indicates that a release occurred. The other tanks are potential sources of release. Compounds of concern include TPH. Two surface soil samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-115-1.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 3 (Former Bunkers): This target area includes the areas formerly containing bunkers on Parcels 115, 116, 118, and 119. The bunkers were present from approximately 1953 to 1970. Unknown containers and miscellaneous equipment were stored in the open space around the bunkers prior to 1966. No information is available regarding the activities occurring at these bunkers, or the chemicals/materials (if any) stored in these bunkers. However, significant staining is visible in this area in the 1966 aerial photograph

and surrounds the bunkers on the east and west sides. Three surface soil samples and three subsurface soil samples will be collected from Parcel 115 at this target area. Because no information is available regarding the materials/chemicals stored in this area, the samples will be analyzed for VOCs, SVOCs, TPH, and metals. Samples to be collected from Parcel 115 in this Target Area are listed in Table 6-115-1.

The railroad tracks located at the northern parcel boundary are being addressed as part of Parcel 197.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14), will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-115-1 summarizes screening-level sampling and analysis for the parcel's target areas. Five surface soil samples and five subsurface soil samples will be collected from the locations shown on Figure 6-115-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Apart from the two surface and subsurface sample locations shown in the most southeastern portion of the parcel, the sample locations shown on Figure 6-115-1 are approximate and should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), Hydropunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-116

PARCEL 116 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 116 at NAS Alameda (Figure 6-116-1). The parcel, which is located in the eastern central portion of the base, is approximately one acre in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Three zone-wide target investigation areas (target areas) have been identified on this parcel. No parcel-specific target areas have been identified. Surface soil sampling and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-116-1 provides the complete list of samples and analyses prescribed by this plan. This parcel specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 116, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 116, consistent with the objectives of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 117, 118, 119, 120, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-116-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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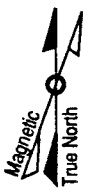
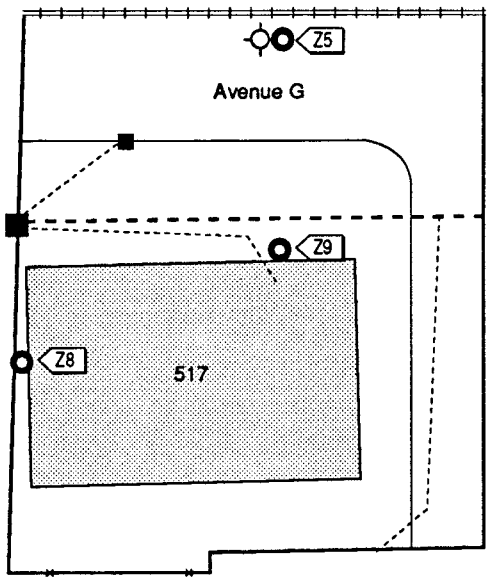
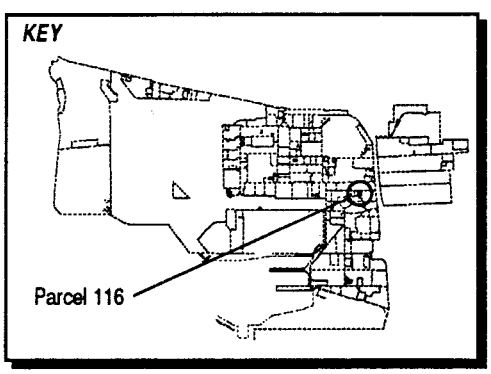
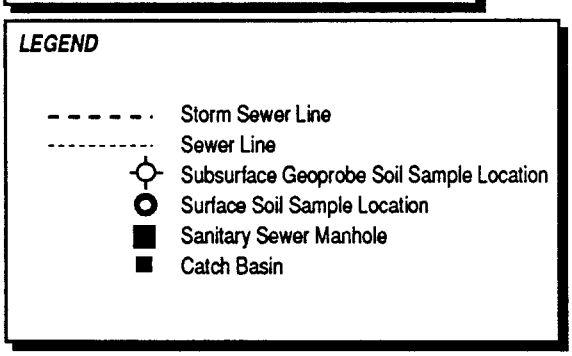








1"= 60'

Figure 6-116-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-116-1

Summary of Recommended Samples

NAS Alameda Parcel 116

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z21-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	CLP RAS
Z21-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 116 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point, IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 517, a retail store) covers approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel area is presently in use as a retail store and associated vehicle parking. . Two buildings were formerly located on the parcel and have since been demolished. Sewer lines are present in this parcel and are shown in Figure 6-116-1.

Parcel 116 is located approximately 500 feet north of Installation Restoration (IR) Program Site 3 (Area 97), and approximately 500 feet southwest of IR Site 7A (Naval Exchange Service Station). Subsurface contamination migration from IR Site 3, onto parcels located northwest of Area 97 is being investigated under the IR program. No previous investigations have been conducted at Parcel 116 and specific data regarding potential chemical occurrence are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 517

Building 517 was constructed around 1970 and serves as a garden shop (Figure 6-116-1). This one-story building covers approximately 8,200 square feet and is in fair condition. Building 517 is constructed of a steel frame with a tile floor. The area occupied by Building 517 was formerly open space used for vehicle parking from approximately 1966 to 1970; Buildings 121 and 122 were located in this area from 1952 to

1966; and vehicle parking and laydown activities occurred in this area from the time of fill completion to 1952.

The only utility located within and immediately surrounding Building 517 is a sanitary sewer line. Potting soil, pesticides, fertilizers and other garden supplies are documented to have been stored in and used at Building 517. There are no spills documented in existing files concerning this building. No other incidents are documented to have occurred at this building. Building 517 is contained in Zone 21 Target Area 4.

Building 121 (Demolished)

Building 121 was constructed around 1952. Its function is unknown, although this building was similar in appearance to the offices and barracks of that period. Building 121 was demolished around 1966. Prior to 1952, the space occupied by Building 121 was open space used for vehicle parking and equipment laydown.

Building 122 (Demolished)

Building 122 was constructed around 1952. Its function is unknown, although this building was similar in appearance to the offices and barracks of that period. Building 122 was demolished around 1966. Prior to 1952, the space occupied by Building 122 was open space used for vehicle parking and equipment laydown.

Open Space

The open space covers approximately 70 percent of the parcel. The open space has been used for vehicle parking since the parcel was filled and was also used for equipment laydown prior to 1952.

Railroad tracks are located along the northern border of the parcel (Figure 6-116-1), and are considered to be part of Parcel 197. The ground surface of the open space is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in fair condition. Utilities located within and immediately surrounding the open space include electrical, water, sanitary and storm sewer lines.

No chemicals are documented to have been stored in or used at the Parcel 116 open space. There are no spills documented in existing files concerning this open space. No other incidents are documented to have occurred at this open space.

Underground Storage Tanks

One underground storage tank may potentially be present in this parcel. An open pipe tap, which is potentially part of a UST associated with Building 517, was identified during the site inspection. No other information is available regarding this potential tank.

Parcel Boundary Conditions

Parcel 116 is bounded by Parcels 197, 118, 120, 117, and 115. No parcels contiguous with Parcel 116 are IR sites, therefore no sampling is called for in this PEP in response to IR Sites. If continuing investigations at IR Sites 3 and 7A reveal a cause for concern at Parcel 116, then additional sampling on Parcel 116 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 116, consistent with the objectives outlined in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-116-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps a this parcel: transformers, lead-based paint, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. However, moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, because Building 157 serves as a garden shop, it will be sampled for pesticides.

No Industrial Hygiene (IH) sampling is required for Parcel 116 because no industrial buildings are present.

TABLE 6-116-2

Summary of Data Gaps
NAS Alameda Parcel 116

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 116.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located approximately 500 feet south of Parcel 116. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor. • IR Site 7A (Naval Exchange Service Station) is located approximately 500 feet northeast of Parcel 116. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Former Bunkers • Retail Garden Shops and Nurseries
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-116-2

Summary of Data Gaps
NAS Alameda Parcel 116

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One open pipe tap was identified during site inspection. It is potentially a UST associated with Building 517.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-116-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 116 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel is contained in three zone-wide target areas. This subsection of the PEP provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and location of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 3 (Former Bunkers): This target area includes the areas formerly containing bunkers on Parcels 115, 116, 118, and 119. The bunkers were present from approximately 1953 to 1970. Unknown containers and miscellaneous equipment were stored in the open space around the bunkers prior to 1966. No information is available regarding the activities occurring at these bunkers, or the chemicals/materials (if any) stored in these bunkers. However, significant staining is visible in this area in the 1966 aerial photograph and surrounds the bunkers on the east and west sides. Because no information is available regarding the materials/chemicals stored in this area, the samples will be analyzed for VOCs, SVOCs, TPH, and metals. One surface soil sample and one subsurface soil sample will be collected from this target area, and are shown on Figure 6-116-1 and listed in Table-6-116-1.

- Zone 21 Target Area 4 (Retail Garden Shops and Nurseries): Building 517 is a garden shop. Pesticides were stored, handled and used in this area, and were potentially released to the soil. Two surface soil samples will be collected from this target area. The samples are shown on Figure 6-116-1 and listed in Table-6-116-1.

Railroad tracks comprise a zone-wide target area. The sampling for this target area is covered in the PEP for Parcel 197.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-116-1 summarizes screening-level sampling and analysis for the parcel's target areas. Three surface soil samples and one subsurface Geoprobe soil sample will be collected from the locations shown on Figure 6-116-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-117

PARCEL 117 EVALUATION PLAN

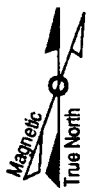
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 117 at NAS Alameda (Figure 6-117-1). The parcel, which is located in the central eastern portion of the base, is approximately 0.2 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide target investigation area (target area) has been identified on Parcel 117; however, no zone-wide target area sampling is proposed for this parcel. No parcel-specific target areas were identified on Parcel 117. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 117, historical activities are discussed below.

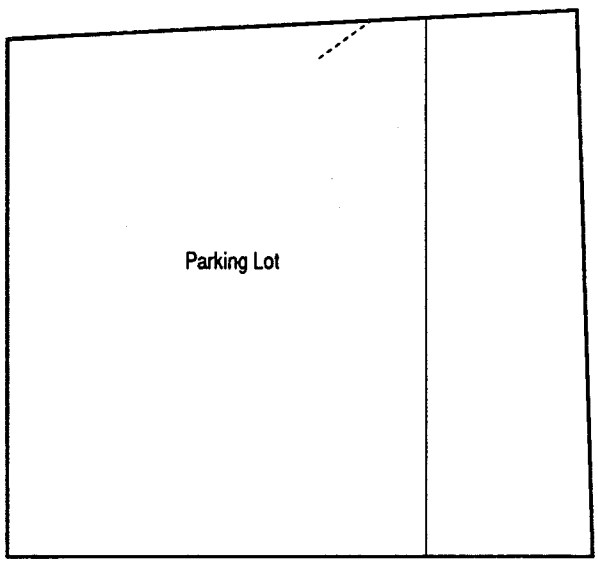
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 117 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 118, 119, 120, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the





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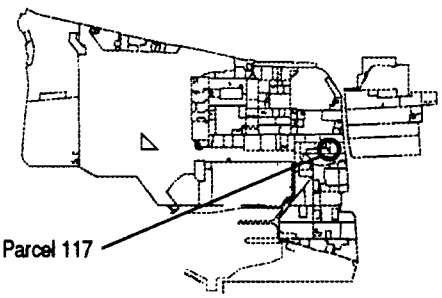

LEGEND

---------- Sewer Line

Note: No screening-level sampling recommended for this parcel.

1"= 30'

Figure 6-117-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
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data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 117 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently the parcel consists entirely of open space. The parcel area is presently in use as a parking lot. Two buildings were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-117-1.

Parcel 117 is located approximately 400 feet north of Installation Restoration (IR) Program Site 3 (Area 97). No previous investigations have been conducted at Parcel 117, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

The parcel consists entirely of open space which is completely paved with asphalt. The pavement is generally in good condition. The parcel area is presently in used for vehicle parking and a roadway.

Buildings 123 and 548 were built around 1945, after the area was filled. The processes associated with Building 123 are unknown. It was demolished around 1970. Building 123 covered approximately 5,000 square feet. Building 548 housed a donut shop and was demolished around 1992. Building 548 was a covered approximately 1,000 square feet.

The utilities identified at this open space include underground steam, electrical, water, storm sewer and sanitary sewer lines. No chemicals

are documented to have been stored in or used at this parcel. No spills or other incidents are documented on this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 117 is bounded by Parcels 116, 120, and 115. No parcels contiguous with Parcel 117 are IR sites, therefore, no sampling is called for in this PEP in response to the one nearby IR site. If the continuing investigations at IR Site 3 (Parcel 131) reveal a cause for concern at Parcel 117, then additional sampling on Parcel 117 may be appropriate. Potential subsurface chemical migration from Parcel 131 (IR Site 3) onto parcels located northwest of Parcel 131, including Parcel 117, is being investigated under the IR program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 117, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-117-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 117 because no buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require

TABLE 6-117-1

Summary of Data Gaps
NAS Alameda Parcel 117

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 117.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located approximately 400 feet south of Parcel 117. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-117-1

Summary of Data Gaps
NAS Alameda Parcel 117

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified. • No underground or aboveground fuel lines identified. • Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 117.

Once the data gaps in Table 6-117-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 117 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. One zone-wide target area was identified for Parcel 117; however, no sampling has been proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 21.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

In addition, concerns pertaining to underground lines, radiological issues, and the impacts of the nearby IR sites must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-118

PARCEL 118 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 118 at NAS Alameda (Figure 6-118-1). The parcel, which is located in the central eastern portion of the base, is approximately 0.5 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Three zone-wide target investigation areas (target areas) have been identified on Parcel 118. No parcel-specific target areas were identified. Surface soil sampling and subsurface Geoprobe soil sampling will be used to accomplish the screening-level investigation. Table 6-118-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 118, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 118 consistent with objective 1 identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 119, 120, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-118-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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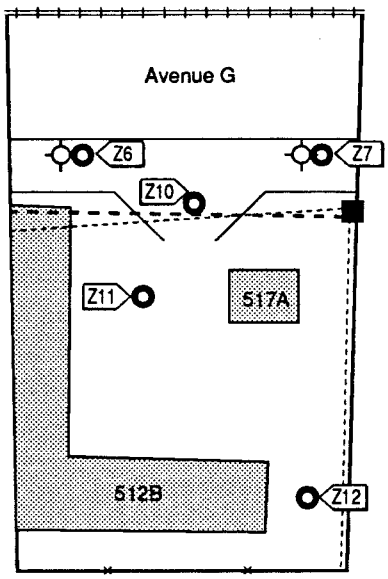
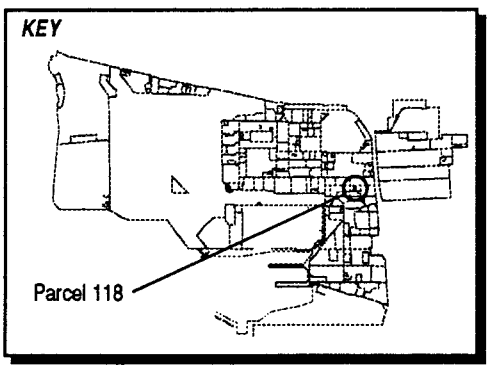
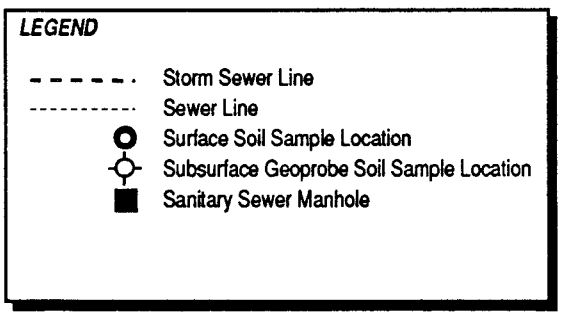
SENSITIVE







1"= 60'

Figure 6-118-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

TABLE 6-118-1

Summary of Recommended Samples
NAS Alameda Parcel 118

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z21-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Zone 21 Target Area 3	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
Z21-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
Z21-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 3	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
Z21-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 118 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, two buildings (Buildings 512B and 517A) cover approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel area is presently used to store gardening supplies and for vehicle parking and a roadway. Two buildings were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-118-1.

Parcel 118 is located approximately 400 feet north of Installation Restoration (IR) Program Site 3 (Area 97). No previous investigations have been conducted at Parcel 118, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 512B

Building 512B was constructed around 1972 and serves as a storage space for garden equipment, pesticides, potting soil, manure, patio equipment, and pool supplies (Figure 6-118-1). This one-story building is in fair condition. Building 512B is constructed of wood and covers approximately 4,500 square feet. Utilities located within and immediately surrounding Building 512B include underground sanitary sewer and storm sewer lines.

It appears that Building 512B was always used to store and sell retail garden supplies. These supplies include pesticides. During the site

inspection, chlorine, and muriatic acid stored for resale were documented in Building 512B. Approximately 200 gallons of chlorine and muriatic acid are stored in Building 512B.

No spills are documented to have occurred in this building. Building 512B is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents have been documented to have occurred in this building. Building 512B is included in Zone 21 Target Area 4.

Building 517A

Building 517A was constructed around 1972 and serves as a storage space for garden equipment, and a small office space (Figure 6-118-1). This one-story building is in fair condition. Building 517A is constructed of wood and covers approximately 500 square feet. Utilities located within and immediately surrounding Building 517A include underground sanitary sewer, and storm sewer lines. It appears that Building 517A was always used to house retail garden supplies, including pesticides.

Lubricating oil and gasoline, and chemicals associated with gardening are documented to have been stored in and used at Building 517A during the site inspection in May 1994. Approximately 10 gallons of lube oil and gasoline, and other chemicals associated with gardening are stored in Building 517A.

No spills are documented to have occurred in this building. Building 517A is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents have been documented to have occurred in this building. Building 517A is included in Zone 21 Target Area 4.

Open Space

The open space covers approximately 70 percent of the parcel. The open space is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in good condition.

Railroad tracks are located along the northern border of the parcel, but are considered to be part of Parcel 197. Buildings 120, and 121 were formerly located in this open space. Their use is unknown and they were demolished in 1970. Buildings 120 and 121 covered approximately 2,000 square feet each. Utilities located within and

immediately surrounding the open space include underground electrical, water, sanitary sewer, and storm sewer lines.

Aerial photographs indicate that a bunker was formerly located on this parcel. The types of materials stored and activities conducted at this structure are unknown. The bunker was demolished between 1966 and 1970.

Chemicals associated with garden equipment and pool equipment were stored in the open space during site inspection in May 1994. No spills are documented to have occurred in the open space. No other incidents are documented to have occurred within the open space. The open space between Buildings 512B and 517A (the Yard Area) is included in Zone 21 Target Area 4.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 118 is bounded by Parcels 197, 119, 120, and 116. Parcel 118 is located within 500 feet of IR Site 3 (Parcel 131). Potential subsurface chemical migration from IR Site 3 onto parcels located northwest of Parcel 131, including Parcel 118, is being investigated under the IR program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 118, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-118-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites.

TABLE 6-118-2

Summary of Data Gaps
NAS Alameda Parcel 118

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 118.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located 400 feet south of Parcel 118. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Former Bunkers • Retail Garden Shops and Nurseries
Potential Parcel-Specific Release Areas	• No potential parcel-specific target areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-118-2

Summary of Data Gaps
NAS Alameda Parcel 118

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 118 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. However, moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Because Buildings 512B and 517A have served as storage areas for pesticides, pesticide sampling has been proposed as a parcel-specific concern for Parcel 118.

Once the data gaps in Table 6-118-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 118 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains three zone-wide target areas. No parcel-specific target areas were identified on this parcel. This subsection of the PEP provides an overview of the zone-wide target areas. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and location of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 3 (Former Bunkers): This target area includes the areas formerly containing bunkers on Parcels 115, 116, 118, and 119. The bunkers were present from approximately 1953 to 1970. Unknown containers and miscellaneous equipment were stored in the open space around the bunkers prior to 1966. No information is available regarding the activities occurring at these bunkers, or the chemicals/materials (if any) stored in these bunkers. However,

significant staining is visible in this area in the 1966 aerial photograph and surrounds the bunkers on the east and west sides. Two surface soil samples and two subsurface Geoprobe soil samples will be collected from Parcel 118; sample locations are shown on Figure 6-118-1. Because no information is available regarding the materials/chemicals stored in this area, the samples will be analyzed for VOCs, SVOCs, TPH, and metals. Samples to be collected in this Target Area are listed in Table 6-118-1.

- Zone 21 Target Area 4 (Retail Garden Shops and Nurseries): Because Buildings 512B and 517A have served as pesticide storage areas, this target area will be sampled for pesticides. Surface soil samples will be collected from under the asphalt paving as close as possible to the following locations: the pesticide delivery and storage area and any side doors. Three surface soil samples will be collected at Parcel 118 and analyzed for pesticides. Samples are shown on Figure 6-118-1 and are listed in Table 6-118-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess the conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-118-1 summarizes the screening-level sampling and analysis recommended for the target areas on Parcel 118. Seven surface soil and two subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-118-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in

Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-119

PARCEL 119 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 119 at NAS Alameda (Figure 6-119-1). The parcel, which is located in the central eastern portion of the base, is approximately 0.7 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two zone-wide target investigation areas (target areas) have been identified on Parcel 119; however, no zone-wide target area sampling is proposed for this parcel. No parcel-specific target areas have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 119, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 119 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 118, 120, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

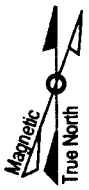
FIGURE 6-119-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

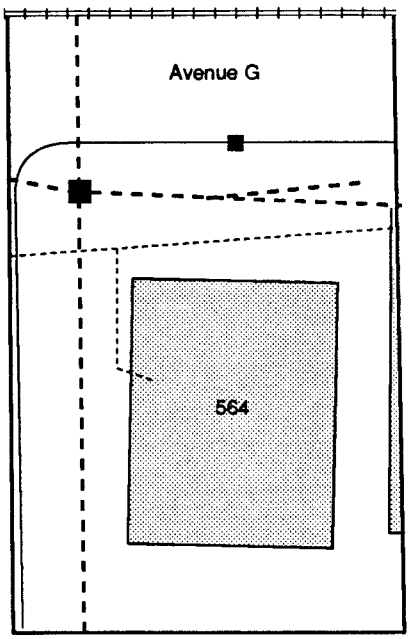
FOR ADDITIONAL INFORMATION, CONTACT:

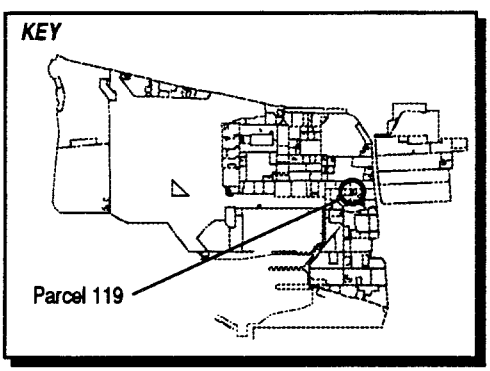
DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE







LEGEND

- Storm Sewer Line
- Sewer Line
- Sanitary Sewer Manhole
- Catch Basin

Note: No screening-level sampling recommended for this parcel.

1"= 60'

Figure 6-119-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 119 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 564) covers approximately 40 percent of the parcel. The remaining 60 percent is open space. The parcel area is presently in for vehicle parking and as a roadway. Two buildings were formerly located on the parcel and has since been demolished. Sewer lines are present on this parcel and are shown on figure 6-119-1.

Parcel 119 is located approximately 400 feet north of Installation Restoration (IR) Program Site 3 (Area 97). Subsurface contamination migration from IR Site 3, onto parcels located northwest of Area 97 is being investigated under the IR program. No previous investigations have been conducted at Parcel 119, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 564

Building 564 was constructed in 1953 and served as a liquor store (Figure 6-119-1). This one-story building is in poor condition and has been abandoned. Building 564 is constructed of wood and covers approximately 8,700 square feet.

Utilities located within and immediately surrounding Building 564 include underground sanitary sewer, storm sewer, water, and electrical lines.

Information collected during the EBS indicates that liquor retail activities were conducted within this building. No chemicals are

documented to have been stored in or used at Building 564. No spills are documented to have occurred in this building. Building 564 is not equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 564.

Open Space

The open space covers approximately 60 percent of the parcel. The open space is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in good condition.

Railroad tracks are located along the northern border, but are considered to be part of Parcel 197. Building 119 and Building 120 (which was formerly located at the border of Parcels 118 and 119, and is also discussed in the PEP for Parcel 118) were formerly located in this open space. Their use is unknown, and they were demolished in 1970. Buildings 119 and 120 covered approximately 2,000 square feet each.

Aerial photographs indicate that a bunker was formerly located on this parcel. The types of materials stored and activities conducted at this structure are unknown. The bunker was demolished between 1966 and 1970.

Utilities located within and immediately surrounding the open space include underground electrical, water, sanitary sewer and storm sewer lines.

EBS information indicates that vehicle parking was conducted within this open space. No chemicals are documented to have been stored in or used at the open space. No spills or other incidents such as fire or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 119 is bounded by Parcels 111, 197, 121, 122, 120, and 118. There are no activities of concern on these adjacent parcels. Parcel 119 is located within 500 feet of Installation Restoration (IR) Program Site 3. Subsurface contamination migration from Parcel 131 (IR Site 3) onto parcels located northwest of Parcel 131, including Parcel 119 is being investigated under the IR program.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 119, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-119-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns and Installation Restoration sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 119 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 119.

Once the data gaps in Table 6-119-1 are addressed and screening-level sampling results from the target areas described below are compared to

TABLE 6-119-1

Summary of Data Gaps
NAS Alameda Parcel 119

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 119.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located 400 feet south of Parcel 119. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Former Bunkers • Retail Garden Shops and Nurseries
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-119-1

Summary of Data Gaps
NAS Alameda Parcel 119

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
	• No underground or aboveground fuel lines identified.
	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the appropriate screening levels, Parcel 119 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

No parcel-specific target areas were identified for this parcel. Two zone-wide target areas were identified for Parcel 119; however, no sampling has been proposed for this parcel. The zone-wide target areas are described in detail in the Zone Analysis Plan for Zone 21.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 3 (Former Bunkers): This target area includes the areas formerly containing bunkers on Parcels 115, 116, 118 and 119. No zone sampling is proposed for this parcel. All samples for this target area will be collected from Parcels 115, 116 and 118.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, radiological issues and the impacts of the nearby IR site must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Screening-Level Investigation

No Screening Level Investigation will be conducted at this parcel. However, results of the zone-wide sampling for Zone 21 and Zone 16 may indicate that follow-up sampling is required for Parcel 119.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize any of the following screening technologies: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the

screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-120

PARCEL 120 EVALUATION PLAN

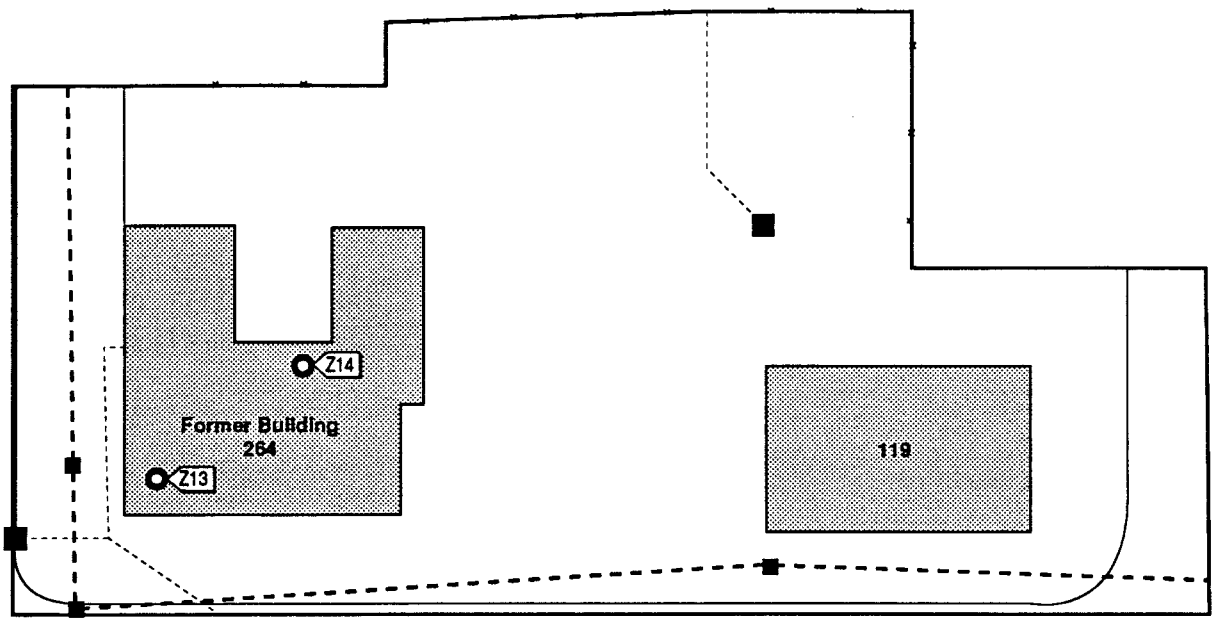
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 120 at NAS Alameda (Figure 6-120-1). The parcel, which is located in the central portion of the base, is 1.6 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. Two zone-wide target investigation areas (target area) have been identified on Parcel 120. No parcel-specific target areas have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation in these areas. Table 6-120-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 120, historical activities are discussed below.

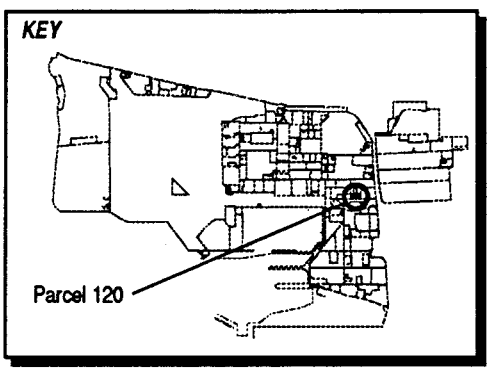
Background and Historical Activities

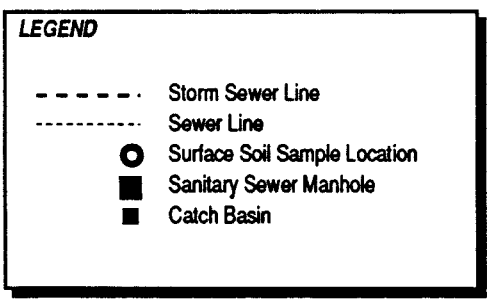
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 120, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 118, 119, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities and businesses. During the sampling program development, the parcels located in this zone were considered







1"= 30'

Figure 6-120-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

TABLE 6-120-1

Summary of Recommended Samples
NAS Alameda Parcel 120

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
120-3-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS
Z21-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-13-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	CLP RAS
Z21-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis plan for Zone 21.

Parcel 120 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point - IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 119, the McDonald's restaurant) covers approximately 10 percent of the parcel (this should not be confused with former Building 119, which was present on Parcel 119). The remainder (90 percent) is open space. The parcel area is presently used as a restaurant and associated vehicle parking. Two buildings, Building 264, an exchange service outlet, and Building 394 (unknown use), were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-120-1.

Parcel 120 is located approximately 200 feet north of Installation Restoration (IR) Program Site 3 (Area 97). Subsurface contamination migration from Parcel 131 (IR Site 3) onto parcels located northwest of Parcel 131, including Parcel 120, is being investigated under the IR program. Specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 119

Building 119 was constructed in 1985 and serves as a McDonald's Restaurant (Figure 6-120-1). This building is generally in good condition. Building 119 is one-story building, is constructed of concrete and brick with a concrete and tile floor, and a tar-and-shingle construction roof. It covers approximately 4,700 square feet. The space occupied by Building 119 was formerly open space used for parking.

Information collected during the EBS indicates that activities conducted within Building 119 consist solely of restaurant activities Building 119 has apparently been used as a McDonald's Restaurant from 1985 to the present.

Utilities located within and immediately surrounding Building 119 include underground water, electrical, sanitary sewer and storm sewer lines. General cleaning agents are documented to have been stored in and used at Building 119 from 1985 to the present. Approximately 150 gallons total of sanitizers, degreaser, wood finish, plaster, paint, floor wax and powder bleach are stored in Building 119. No spills are documented to have occurred in Building 119.

Building 119 is equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 119.

Open Space

The open space at this parcel covers approximately 90 percent of the parcel. In general, the open space is used for parking. One structure, a dumpster enclosure (called a round-up), is located in the open space east of Building 119. The ground surface of the open space is completely paved. Most of the paved area (greater than 90 percent) is surfaced with asphalt and the remainder is covered with concrete. The pavement is generally in fair condition.

Building 264 was formerly located in this open space. It housed an exchange service outlet nursery (associated with the gardening shop on Parcel 121). It was demolished in 1992. Building 264 covered approximately 7,500 square feet (concerns relating to this buildings former presence are addressed under Target Area 1).

Building 394 was also formerly located in this open space. Its purpose is unknown and it was demolished in approximately 1960. Building 394 covered approximately 1,000 square feet.

Utilities located within and immediately surrounding the open space include underground water, electrical, sanitary sewer and storm sewer lines. No chemicals are documented to have been stored in the open space. No spills are documented to have occurred in the open space. There are no other incidents documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 120 is bounded by Parcels 116, 118, 119, 121, 122, 128, 129, 115, and 117. Parcel 131 (IR Site 3) is located to the south of Parcel 120. Activities of concern on these adjacent parcels include painting and paint stripping activities on Parcel 122. The concerns associated with these activities are addressed in the PEP for Parcel 122.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 120, consistent with the objectives outlined in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-120-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps on this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 120 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. However, moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, pesticide sampling has been proposed as a parcel-specific concern for Parcel 120.

TABLE 6-120-2

Summary of Data Gaps
NAS Alameda Parcel 120

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 120.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located 200 feet south of Parcel 120. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Retail Garden Shops and Nurseries
Potential Parcel-Specific Release Areas	• No potential parcel-specific target areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-120-2

Summary of Data Gaps
NAS Alameda Parcel 120

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-120

PARCEL 120 EVALUATION PLAN

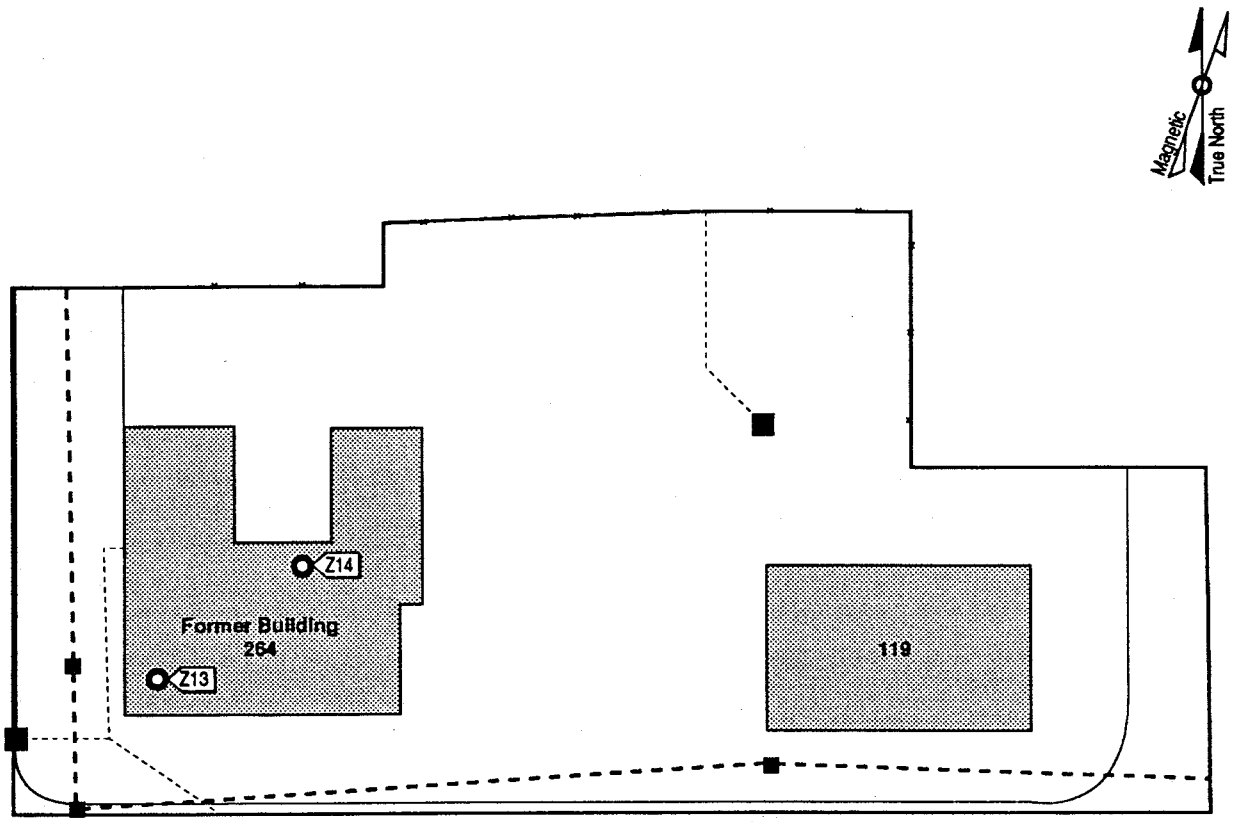
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 120 at NAS Alameda (Figure 6-120-1). The parcel, which is located in the central portion of the base, is 1.6 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA units. Two zone-wide target investigation areas (target area) have been identified on Parcel 120. No parcel-specific target areas have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation in these areas. Table 6-120-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 120, historical activities are discussed below.

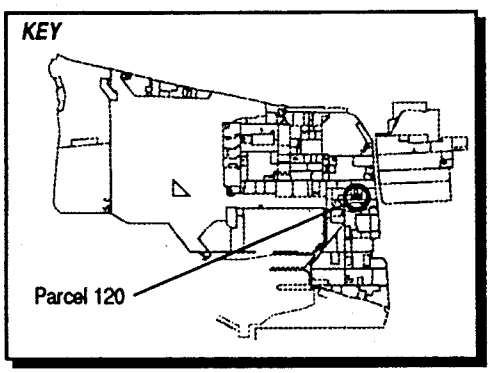
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 120, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 118, 119, 121, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities and businesses. During the sampling program development, the parcels located in this zone were considered





LEGEND

- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin

1"= 30'

Figure 6-120-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

TABLE 6-120-1

Summary of Recommended Samples
NAS Alameda Parcel 120

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
120-3-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS
Z21-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	EPA 8080
Z21-13-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides	Pesticides	CLP RAS
Z21-14-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Zone 21 Target Area 4	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

together. Thus, future data evaluation for each of these parcels should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis plan for Zone 21.

Parcel 120 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point - IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 119, the McDonald's restaurant) covers approximately 10 percent of the parcel (this should not be confused with former Building 119, which was present on Parcel 119). The remainder (90 percent) is open space. The parcel area is presently used as a restaurant and associated vehicle parking. Two buildings, Building 264, an exchange service outlet, and Building 394 (unknown use), were formerly located on the parcel and have since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-120-1.

Parcel 120 is located approximately 200 feet north of Installation Restoration (IR) Program Site 3 (Area 97). Subsurface contamination migration from Parcel 131 (IR Site 3) onto parcels located northwest of Parcel 131, including Parcel 120, is being investigated under the IR program. Specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 119

Building 119 was constructed in 1985 and serves as a McDonald's Restaurant (Figure 6-120-1). This building is generally in good condition. Building 119 is one-story building, is constructed of concrete and brick with a concrete and tile floor, and a tar-and-shingle construction roof. It covers approximately 4,700 square feet. The space occupied by Building 119 was formerly open space used for parking.

Information collected during the EBS indicates that activities conducted within Building 119 consist solely of restaurant activities Building 119 has apparently been used as a McDonald's Restaurant from 1985 to the present.

Utilities located within and immediately surrounding Building 119 include underground water, electrical, sanitary sewer and storm sewer lines. General cleaning agents are documented to have been stored in and used at Building 119 from 1985 to the present. Approximately 150 gallons total of sanitizers, degreaser, wood finish, plaster, paint, floor wax and powder bleach are stored in Building 119. No spills are documented to have occurred in Building 119.

Building 119 is equipped with a heating-ventilation-air conditioning (HVAC) system. No other incidents are documented to have occurred within Building 119.

Open Space

The open space at this parcel covers approximately 90 percent of the parcel. In general, the open space is used for parking. One structure, a dumpster enclosure (called a round-up), is located in the open space east of Building 119. The ground surface of the open space is completely paved. Most of the paved area (greater than 90 percent) is surfaced with asphalt and the remainder is covered with concrete. The pavement is generally in fair condition.

Building 264 was formerly located in this open space. It housed an exchange service outlet nursery (associated with the gardening shop on Parcel 121). It was demolished in 1992. Building 264 covered approximately 7,500 square feet (concerns relating to this buildings former presence are addressed under Target Area 1).

Building 394 was also formerly located in this open space. Its purpose is unknown and it was demolished in approximately 1960. Building 394 covered approximately 1,000 square feet.

Utilities located within and immediately surrounding the open space include underground water, electrical, sanitary sewer and storm sewer lines. No chemicals are documented to have been stored in the open space. No spills are documented to have occurred in the open space. There are no other incidents documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 120 is bounded by Parcels 116, 118, 119, 121, 122, 128, 129, 115, and 117. Parcel 131 (IR Site 3) is located to the south of Parcel 120. Activities of concern on these adjacent parcels include painting and paint stripping activities on Parcel 122. The concerns associated with these activities are addressed in the PEP for Parcel 122.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 120, consistent with the objectives outlined in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another category. The data gaps shown in Table 6-120-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps on this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 120 because no industrial buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. However, moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, pesticide sampling has been proposed as a parcel-specific concern for Parcel 120.

TABLE 6-120-2

Summary of Data Gaps
NAS Alameda Parcel 120

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 120.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located 200 feet south of Parcel 120. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Retail Garden Shops and Nurseries
Potential Parcel-Specific Release Areas	• No potential parcel-specific target areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-120-2

Summary of Data Gaps
NAS Alameda Parcel 120

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-120-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcel 120 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Parcel 120 is contained in two zone-wide target areas. No parcel-specific target areas have been identified at this parcel. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 4 (Retail Garden Shops and Nurseries): Former Building 264 was a nursery, and pesticides may have been used or stored here. The likelihood of environmental impact having occurred within this target area classified as suspect. Two surface soil samples will be collected from the building's former location and are shown on Figure 6-120-1 and are listed in Table-6-120-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the zone-wide target areas and to identify areas that may require further sampling in the follow up detailed evaluation phase. Table 6-120-1 summarizes the screening-level sampling and analysis recommended for the parcel's target area. Two surface soil samples will be collected from the former location of Building 264 and analyzed for pesticides. The sample locations are shown on Figure 6-120-1. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization, if required, may utilize the screening technology discussed above at a sampling higher density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-121

PARCEL 121 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 121 at NAS Alameda (Figure 6-121-1). The parcel, which is located in the eastern central portion of the base, is approximately 0.8 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Three zone-wide target investigation areas (target areas) have been identified on Parcel 121. No parcel-specific target areas have been identified. The sampling procedures called for in the screening-level investigation in these areas is surface soil sampling. Table 6-121-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 121, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 121 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 118, 119, 120, 129, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

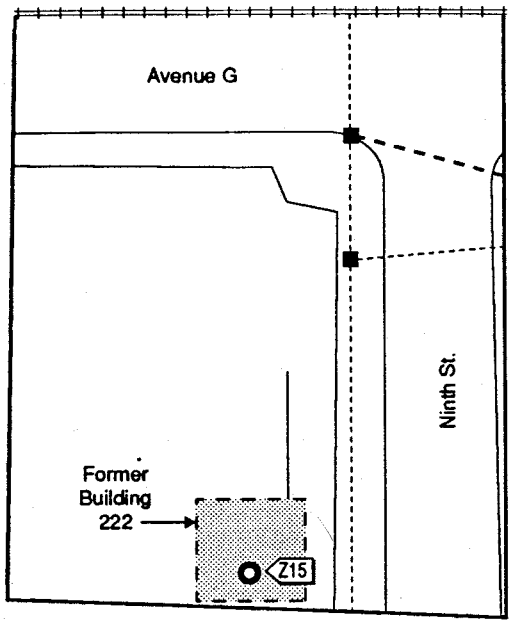
FIGURE 6-121-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

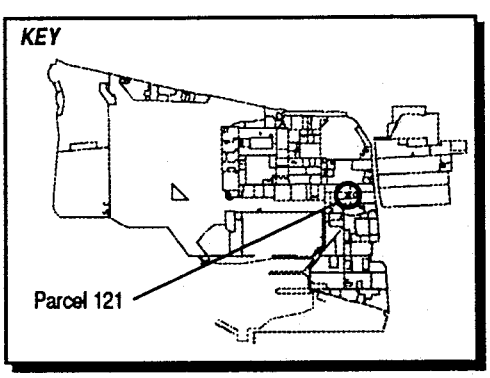
FOR ADDITIONAL INFORMATION, CONTACT:

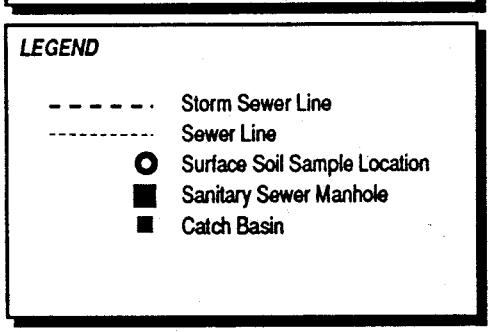
DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE







1"= 60'

Figure 6-121-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

TABLE 6-121-1

Summary of Recommended Samples
NAS Alameda Parcel 121

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z21-15-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS
Z21-15-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Pesticides, Herbicides	Pesticides, Herbicides	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 121 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, the parcel consists entirely of open space. In general, the parcel area is presently in use as an automobile parking lot. One building, Building 222, a garden shop, was formerly located on the parcel and has since been demolished. Sewer lines are present on this parcel and are shown on Figure 6-121-1.

Parcel 121 is located 500 feet northwest of Installation Restoration (IR) Program Site 3 (Area 97). Subsurface contamination migration from Parcel 131 (IR Site 3) onto parcels located northwest of Parcel 131 is being investigated under the IR program.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Open Space

The parcel open space has been used for automobile parking, sidewalks and roadways. Utilities located within and immediately surrounding open space include underground electrical, water, sanitary sewer, and storm sewer lines. Building 222 was formerly located in this open space. It housed a garden shop and was demolished by 1966. Building 222 covered approximately 5,000 square feet. Pesticides are likely to have been stored, handled and used here. Railroad tracks are present along the northern border of the parcel.

No chemicals are documented to have been stored or used Parcel 121. No spills are documented in existing files for this open space. No other incidents are documented to have occurred at this parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 121 is bounded by Parcels 111, 123, 122, 120, 119, and 197. Parcel 131 is identified as IR Site 3 and is located 500 feet southeast of Parcel 121 (Area 97). Railroad tracks border the north side of the parcel. Activities of concern on these adjacent parcels include painting operations on Parcel 122, and vehicle maintenance and accumulation of recyclable scrap metal on Parcel 123.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 121, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-121-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 121 because no buildings are present.

Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. However, moderate-

TABLE 6-121-2

Summary of Data Gaps
NAS Alameda Parcel 121

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 121.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located 500 feet southeast of Parcel 121. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Railroad Tracks • Retail Garden Shops and Nurseries
Potential Parcel-Specific Release Areas	• No potential parcel-specific target areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-121-2

Summary of Data Gaps
NAS Alameda Parcel 121

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, pesticide sampling has been proposed as a parcel-specific concern for Parcel 121.

Once the data gaps in Table 6-121-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 121 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Three zone-wide target investigation areas (target areas) have been identified on this parcel. No parcel-specific target areas have been identified for this parcel. This subsection of the PEP discusses the specific parcel target areas and provides an overview of the zone-wide target areas. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and location of the zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 2 (Railroad Tracks): Zone 21 Target Area 2 includes all current or former railroad tracks within the Naval Exchange Commercial Zone. The railroad tracks located near the southern boundary of Parcel 121 (Figure 6-121-1) are part of this zone-wide target area. However, the sample proposed to be collected from this zone-wide target area is located on Parcel 197.

- Zone 21 Target Area 4 (Retail Garden Shops and Nurseries): On Parcel 121, this target area is located around the former location of Building 222. The compounds of concern within this target area are pesticides. One surface soil sample will be collected from beneath the existing pavement. The sample to be collected in this target area is listed in Table-6-121-1 and shown on Figure 6-121-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-121-1 summarizes the screening-level sampling and analysis recommended Parcel 121. One surface soil sample will be collected from the location shown on Figure 6-121-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization, if required, may utilize the screening technology discussed above at a higher density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-129

PARCEL 129 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 129 at NAS Alameda (Figure 6-129-1). The parcel, which is located in the east-central portion of the base, is approximately two acres in size and is rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two parcel-specific target investigation areas (target areas) and one zone-wide target area have been identified on Parcel 129. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-129-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment guidance. To provide a basis for the proposed investigation of Parcel 129, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 129, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration (IR) Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 118, 119, 120, 121, 130, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have consumer stores and services, including a credit union and

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-129-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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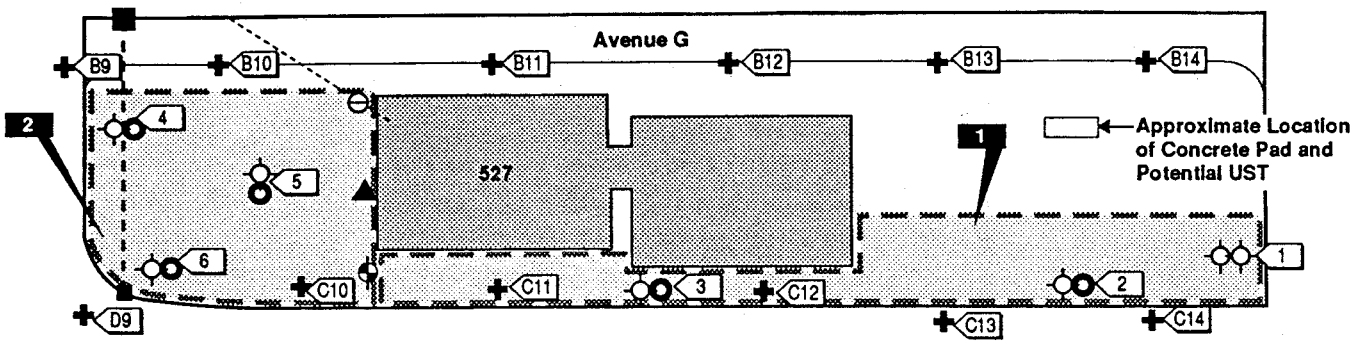
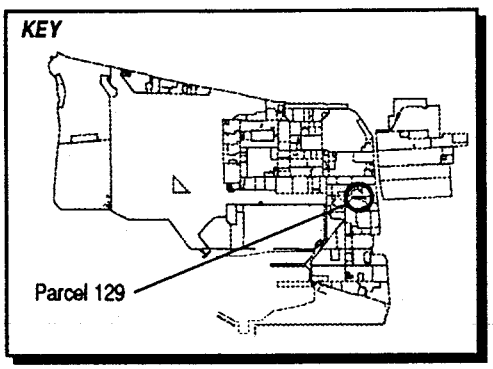
SENSITIVE





1990 Canonie Soil Vapor Survey Results
Maximum Soil Vapor Concentrations (µg/L)

Location	Benzene	Toluene	Ethylbenzene	Xylenes	Hydrocarbons
B5	0.3	0.2	<0.05	<0.06	8
B6	2	12	<0.05	<0.06	34
B7	8,900	22,000	<50	<57	190,000
B8	9,150	23,626	<50	<57	200,000
B9	22,000	24,000	<50	<57	248,000
C5	26,000	47,000	420	64	230,000
C6	36,000	29,000	500	22	400,000
C7	25,000	34,000	56	48	540,000
C8	47,000	26,000	<56	<64	960,000
D6	17,000	31,000	42	100	160,000
D7	29,000	51,000	56	64	660,000
D8	9,200	13,000	<52	<60	163,000
D9	73,000	29,000	1,000	440	810,000

LEGEND

- Target Areas 1 & 2
- Storm Sewer Line
- Sewer Line
- Subsurface Geoprobe Sample Location
- Surface Soil Sample Location
- Previous Monitoring Well Location *(Kennedy, 1980)*
- Previous Soil Vapor Survey Location *(Canonie, 1990)*
- Proposed CPT/Hydropunch Location *(PRC)*
- Proposed Boring Location *(PRC)*
- Sanitary Sewer Manhole
- Catch Basin

1"= 90'

Figure 6-129-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

SENSITIVE

TABLE 6-129-1

Summary of Recommended Samples
NAS Alameda Parcel 129

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
129-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
129-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
129-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
129-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
129-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
129-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

McDonald's restaurant. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should also consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 129 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point - IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 527) covers approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently in use as a vehicle parking area and a credit union. No other buildings or structures were formerly located on this parcel. Underground storm and sanitary sewer lines are present on this parcel and are shown in Figure 6-129-1.

Parcel 129 is located immediately north of Installation Restoration (IR) Program Site 3 (Area 97, the Abandoned Fuel Storage Area). Previous investigations have been conducted at Parcel 129 and specific data regarding chemical occurrence are available.

A soil vapor survey was conducted by Canonie in 1990 to determine the extent of petroleum hydrocarbons in soil from fuel releases at IR Site 3 (Figure 6-129-1). Soil vapor was analyzed for benzene, toluene, ethyl benzene, xylenes, and petroleum hydrocarbons. The maximum soil vapor concentrations of benzene and hydrocarbons along the south side of Avenue G were 0.3 µg/L and 9,000 µg/L, respectively. The soil vapor concentrations of benzene and hydrocarbons immediately southwest of Parcel 129 were 73,000 µg/L and 810,000 µg/L, respectively. The soil vapor concentrations of benzene and hydrocarbons immediately southwest of the northwest parcel corner were 22,000 µg/L and 248,000 µg/L, respectively. The soil vapor benzene concentrations west of Building 527 ranged from less than 1 µg/L to more than 25,000 µg/L near the western parcel boundary.

Based on these data, it appears that the bulk of the volatile compound plume is passing along the western edge of Parcel 129, but that is not currently present underneath Building 527. However, less volatile constituents may be present in the immediate vicinity of Building 527. A soil sample (Kennedy, 1980) taken near the southwest corner of the contained AVGAS at a concentration of 9,200 ppm. Proposed follow-

on activities related to IR Site 3 include additional CPT/Hydropunch and boring locations in Parcel 129 to better define the extent of contamination.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 527

Building 527 was constructed between 1966 and 1970 and has served as a credit union (Figure 6-129-1) since that time. This one-story building is constructed of wood, brick, and concrete, and covers approximately 8,400 square feet. The eastern half of Building 527 was added between 1975 and 1981. The roof was not inspected during the site inspection. The space occupied by Building 527 was formerly open space used as a vehicle parking area, a roadway, and a storage area for unknown materials.

Approximately 30 gallons of typical commercial chemicals, such as paint, varnish, insect spray, herbicide, shredder oil, and demagnetizing liquid, are stored in Building 527. Disposal practices are unknown. There have not been any documented spills in Building 527. Utilities located within Building 527 include underground sanitary sewer, water, and electrical lines.

Between 1978 and 1983, the occupants of Building 527 were evacuated several times due to elevated gasoline vapor concentrations. The gasoline vapors were identified to be a consequence of the fuel released into the sewer system by the former tanks in Parcel 131 (IR Site 3). No other incidents are documented to have occurred on Parcel 131.

Open Space

The open space covers approximately 90 percent of Parcel 129. The open space is completely paved, except for a small buffer of vegetation and bare soil around Building 527. Approximately 95 percent of the paved area is surfaced with asphalt and five percent is covered with concrete. The pavement is generally in good condition. The open space has been used primarily for vehicle parking since approximately 1963. Prior to this time, the parcel was used for the

storage of unknown materials. A portion of the parcel area was previously unpaved.

Utilities located within the open space include underground sanitary sewer, storm sewer, and electrical lines. Two pad-mounted transformers are located near the north side of Building 527. One PCB-containing transformer (No. 70PE9521, greater than 50 ppm PCBs) was removed in 1985. According to EBS information, at least one of the transformers currently located on the north side of the building was sampled in 1993. Sample results are unknown. No chemicals are documented to have been stored in the open space.

A concrete pad located east of Building 527 in the vehicle parking area indicates that an underground storage tank may be present. A two feet by two feet access plate is located in the center of this concrete pad, which is approximately 8 feet by 20 feet in size.

Although no documented spills have occurred in the open space, staining in a 1953 aerial photograph indicates that spills may have occurred in the open space east of Building 527. The staining appears to cover bare soil and impacts an area measuring approximately 40 feet by 400 feet (this staining is addressed by Target Area 1). A 1947 aerial photograph indicates that the western half of the parcel was used as a storage area for unknown materials. Staining around the materials indicates that releases may have occurred (this staining is addressed by Target Area 2). Currently, only typical vehicle parking stains are present in the open space.

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

As noted above, one underground storage tank may be present at this parcel. Although there is no documentation to suggest underground storage tanks (USTs) are present on Parcel 129, site inspection data indicate that an underground storage tank may be located underneath the concrete slab in the parking area east of Building 527.

Parcel Boundary Conditions

Parcel 129 is bounded by Parcels 115, 120, 128, 130, 131, and 209. Parcel 131 is IR Site 3 (Area 97, Abandoned Fuel Storage Area). Over 300,000 gallons of AVGAS were reportedly released from fuel tanks located on Parcel 131 in the 1960s and early 1970s, impacting the

surrounding sanitary and storm sewers. The extent of soil and groundwater contamination has not yet been fully defined.

Parcel Reclassification and Data Gaps Summary

The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 6. Based on the impacts identified at IR Site 3, some remediation is likely to be required before this parcel may be transferred. While this parcel was reclassified because it has been impacted by an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-129-2 must be addressed before the parcel can be leased or transferred.

As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling associated with USTs and sewers is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 129 because no industrial buildings are present.

As noted earlier, Parcel 129 previously had open space areas that were unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 129.

Once the data gaps in Table 6-129-2 are addressed, screening-level sampling results from the target areas described below are compared to the appropriate screening levels, and an appropriate level of

TABLE 6-129-2

Summary of Data Gaps
NAS Alameda Parcel 129

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 129.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located directly south of Parcel 129. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space East and South of Building 527) • Target Area 2 (Open Space West of Building 527)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST is potentially located east of Building 527. A large concrete pad with a metal access plate was observed in this area.

TABLE 6-129-2

Summary of Data Gaps
NAS Alameda Parcel 129

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, natural gas, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

remediation has been carried out, Parcel 129 may be reclassified from BRAC Category 6 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target area. No zone-wide sampling is proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 21. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Space East and South of Building 527): Although this area has been used primarily for vehicle parking, staining in a 1953 aerial photograph indicates that releases may have occurred. The source of the staining is unknown. This target area covers approximately 16,000 square feet and has been classified as having a potential likelihood of impacts. Because the compounds of concern potentially released at this target area are unknown, the samples collected will be analyzed for TPH, SVOCs, VOCs, and metals. Three shallow soil and three subsurface soil samples will be collected in this target area. The samples are shown on Figure 6-129-1 and listed in Table-6-129-1.

- Target Area 2 (Open Space West of Building 527): Staining and material storage observed in a 1947 aerial photograph indicate that releases may have occurred. The staining and equipment storage occurred in rows parallel with the southern parcel boundary. The ground cover appears to have been bare soil. This target area covers approximately 12,000 square feet and has been classified as having a potential likelihood of impacts. Because the compounds of concern potentially released at this target area are unknown, the samples collected will be analyzed for TPH, SVOCs, VOCs, and metals. Three shallow soil and three subsurface soil samples will be collected in this target area. The samples are shown on Figure 6-129-1 and listed in Table-6-129-1.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14), will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-129-1 summarizes screening-level sampling and analysis for the parcel's target areas. Six surface soil samples and six subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-129-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Sample frequency for Target Areas 1 and 2 is much lower than that indicated by the protocol. This is due to the large area of both target areas, and since investigations have been previously conducted and currently are ongoing in these areas as part of the IR program. To avoid redundancy, any target area sampling on this parcel must be coordinated with sampling to be conducted under the IR program.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), Hydropunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-130

PARCEL 130 EVALUATION PLAN

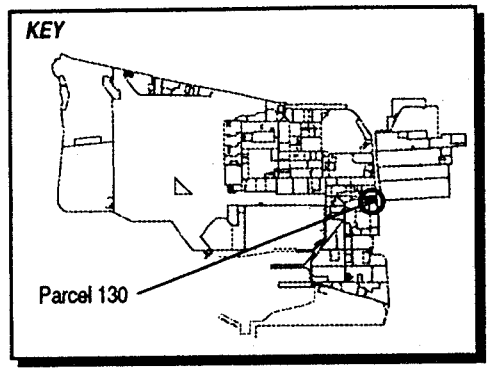
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 130 at NAS Alameda (Figure 6-130-1). The parcel, which is located in the east-central portion of the base, is three acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific target investigation areas (target areas) and two zone-wide target areas have been identified on this parcel; however, no zone-wide target area sampling is proposed for this parcel. This parcel-specific evaluation plan has been prepared in accordance with the Preliminary Endangerment Assessment guidance. To provide a basis for the proposed investigation of Parcel 130, historical activities are discussed below.

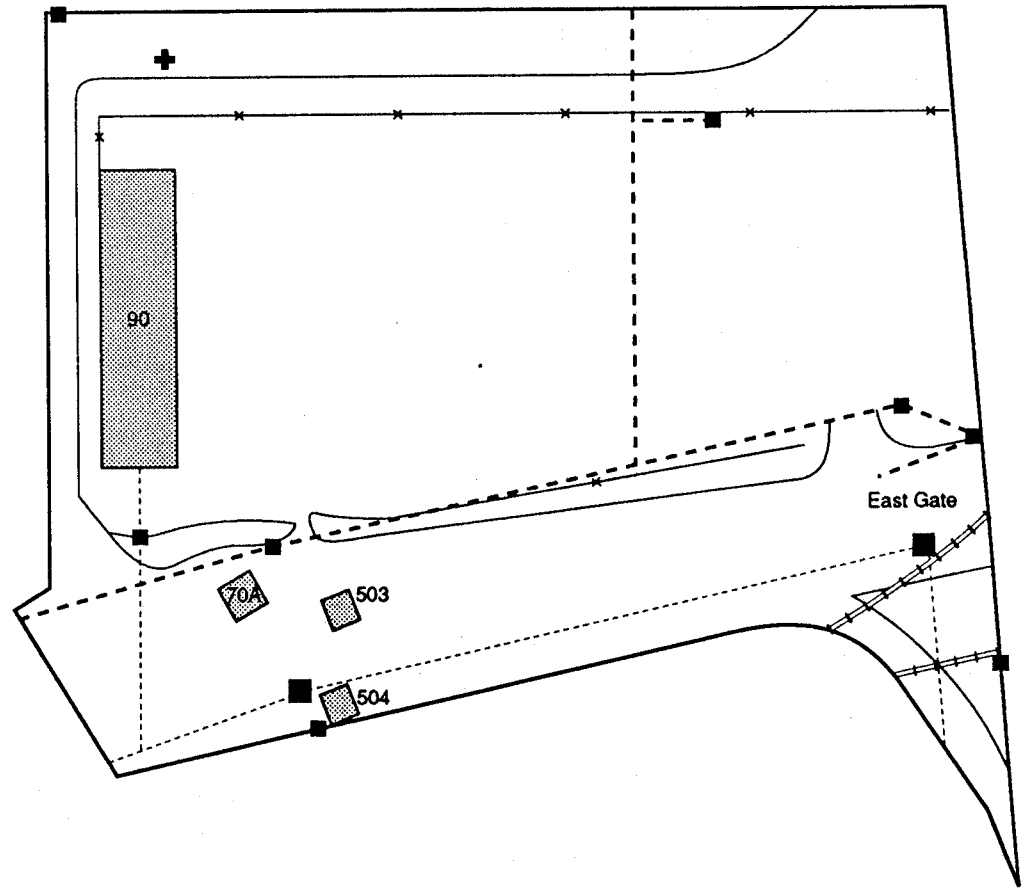
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 130, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies IR sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 102, 115, 116, 117, 118, 119, 120, 121, 129, 197, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should also consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.





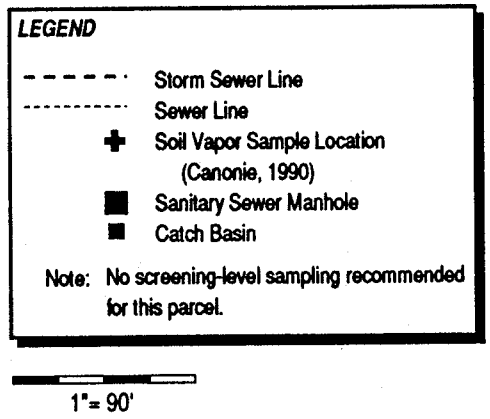


Figure 6-130-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94A

Parcel 130 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 70A, 90, 503 and 504) cover approximately five percent of the parcel. The remaining 95 percent is open space. The parcel area is presently in use as a vehicle parking area. One building (Building 70B) was formerly located on the parcel and has since been demolished. Underground sewer lines are present on this parcel and are shown on Figure 6-130-1.

Parcel 130 is located adjacent to (directly east of) Installation Restoration (IR) Program Site 3 (Area 97, the Abandoned Fuel Storage Area). One soil vapor sample from a previous investigation related to IR Site 3 is the only data regarding chemical occurrence at Parcel 130. The soil vapor sample was analyzed for benzene, toluene, ethylbenzene, and xylene. All four of these compounds were present at concentrations of less than 0.1 µg/L. Based on the available information, the plume associated with IR Site 3 is moving generally northwest, so that Parcel 130 may be located sidegradient to the area of concern.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 90

Building 90 was constructed in 1938 and serves as an administrative and recruiting office (Figure 6-130-1). This building is in moderately good condition. Building 90 is constructed of wood with a tile floor and a tar paper shingled roof. The building covers approximately 5,000 square feet. Utilities located within and immediately surrounding Building 90 include underground sanitary sewer, storm sewer, and electrical lines. It appears Building 90 has served as an administrative office for recruitment since its construction.

Insecticides, paints, and cleaning supplies are documented to have been stored and used in the janitorial room of Building 90 and under a stairway

at the north end of Building 90. Approximately 20 gallons of allethrin, resmethrin, paints, and cleaning solvents are stored in Building 90. Disposal methods are unknown. No documented spills have occurred in Building 90.

Building 503

Building 503 is a concrete guard shack that covers 20 square feet. Building 503 was constructed in 1965.

Building 504

Building 504 is a metal guard shack that covers 20 square feet. Building 504 was constructed in 1965.

Building 70A

Building 70A was constructed in 1941 and has always been used as a gate/sentry house. This 80-square foot building is constructed entirely of concrete. No chemical storage or use has occurred on this site. Site inspection data indicate that oily stains cover most of the southeast portion of the building.

Building 70B (Demolished)

Building 70B was constructed in 1941 and was demolished in 1965. It was used as a gate/sentry house.

Open Space

The open space covers approximately 95 percent of Parcel 130. The open space appears to always have been used for vehicle parking. The open space is 50 percent paved with asphalt and 50 percent unpaved. The pavement is generally in good condition. The unpaved areas are covered with grass. This parcel previously had areas that appeared to be unpaved (bare soil). The only stains identified at the parcel are typical vehicle parking stains in the parking area.

Structures present in the open area include railroad tracks, oil-filled electrical equipment, a high voltage electrical vault, and a control cable TV vault. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, and electrical lines. The railroad tracks are located in the southeast corner of the parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 130 is bounded by Parcels 115, 129, 131, 132, and 209. IR Site 3. is located in Parcel 131. Issues of concern in neighboring parcels are addressed in the appropriate PEP. If on-going investigations at IR Site 3 indicate a concern at Parcel 130, additional sampling may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 130, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-130-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 130 because no industrial buildings are present.

As noted earlier, Parcel 130 has open space areas that were landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 130.

TABLE 6-130-1

Summary of Data Gaps
NAS Alameda Parcel 130

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 130.
Installation Restoration (IR) Sites	• IR Site 3 (Area 97) is located adjacent to (directly west of) Parcel 130. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Railroad Tracks
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-130-1

Summary of Data Gaps
NAS Alameda Parcel 130

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-130-1 are addressed, Parcel 130 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

No parcel-specific target areas and two zone-wide target areas have been identified on this parcel; however, no zone-wide target area sampling is proposed for this parcel. The zone-wide target areas are described in detail in the Zone Analysis Plan for Zone 21. The zone-wide target areas include:

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 2 (Railroad Tracks): Zone 21 Target Area 2 includes all current or former railroad tracks within the Naval Exchange Commercial Zone. The railroad tracks located near the southern boundary of Parcel 130 (Figure 6-130-1) are part of this zone-wide target area. However, the sample proposed to be collected from this zone-wide target area is located on Parcel 197.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, radiological issues, and the impacts of the adjacent IR site must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. If the zone-wide sampling or additional investigation at IR Site 3 indicates that additional investigation is required at this parcel, the characterization effort may utilize any of the following technologies: surface soil sampling (SOP 3), soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-197

PARCEL 197 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 197 at NAS Alameda (Figure 6-197-1). The parcel, which is located in the east-central portion of the base, is 6.5 acres in size and is rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. Two parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe sampling. Table 6-197-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been prepared in accordance with Preliminary Endangerment Assessment guidance. To provide a basis for the proposed investigation of Parcel 197, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 197, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration (IR) Program sites, underground storage tanks and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 115, 116, 117, 118, 119, 120, 121, 129, 130, 208, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Naval Exchange Commercial Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should also consider the data collected for the

TABLE 6-197-1

Summary of Recommended Samples
NAS Alameda Parcel 197

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
197-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, Metals, SVOCs, VOCs	TPH, Metals, SVOCs, VOCs	Modified EPA 8015, ICAP Scan, EPA 8270, EPA 8240
197-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	TPH, Metals, SVOCs, VOCs	TPH, Metals, SVOCs, VOCs	Modified EPA 8015, CLP RAS
197-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, Metals, SVOCs, VOCs	TPH, Metals, SVOCs, VOCs	Modified EPA 8015, ICAP Scan, EPA 8270, EPA 8240
197-3-0-S-S-DDMMYY	0.0' - 0.5'	Surface	Soil	Target Area 2	Waste Oil, Compressor Coolant	TPH	Modified EPA 8015
197-3-0-S-V-DDMMYY*	0.0' - 0.5'	Surface	Soil	Target Area 2	Waste Oil, Compressor Coolant	TPH	Modified EPA 8015
197-4-0-S-S-DDMMYY	0.0' - 0.5'	Surface	Soil	Target Area 2	Waste Oil, Compressor Coolant	TPH	Modified EPA 8015
197-5-0-S-S-DDMMYY	0.0' - 0.5'	Surface	Soil	Target Area 2	Waste Oil, Compressor Coolant	TPH	Modified EPA 8015
Z21-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 21 Target Area 2	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, EPA 8080, EPA 8270, ICAP Scan
Z21-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 21 Target Area 2	TPH, PCBs, SVOCs, Lead	TPH, PCBs, SVOCs, Lead	Modified EPA 8015, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 197 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point - IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 118, the Navy Exchange) and one structure (Structure 118) cover approximately 65 percent of the parcel. The remaining 35 percent is open space. No other buildings or structures were formerly located on the parcel. The parcel area is presently in use as a the Naval Exchange, a vehicle parking area, a roadway, and a storage and receiving area. Sewer lines are present on this parcel and are shown on Figure 6-197-1.

Parcel 197 is located immediately south of Installation Restoration (IR) Program Site 7A. A monitoring well in the northeastern portion of Parcel 197 is part of the on-going subsurface investigation at IR Site 7A (Parcels 113 and 114). Previous investigations have been conducted near Parcel 197 and with the exception of chromium and manganese, soil chemical concentrations are below PRGs and groundwater chemical concentrations are below MCLs.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 118

Building 118 was constructed in 1944 and currently serves as the Navy Exchange (Figure 6-197-1). A retail store and service outlets (Beauty Shop, Hardware Store, Flower Shop, Camera and Watch Repair shop, Sign Display Shop, Shoe Shine Area, etc.) are located within this building. From approximately 1956 to 1970, Building 118 was used as a warehouse for miscellaneous products awaiting shipment to other bases. This one-story, 171,000-square foot building is constructed of wood, with a concrete floor, metal and transite siding, and a composite roof. An informal assessment noted that ACM may be present in the building.

Utilities located within Building 118 include underground sanitary sewer, steam, water, and electrical lines, and overhead electrical lines. Two pad-mounted transformers are located in the southwest corner of the building. Two PCB-containing transformers formerly located in the building were removed in 1990. A third pad-mounted transformer is located in Bay 1. Two pad-mounted transformers are located in the southwest corner of the building.

Small quantities of chemicals are stored in Building 118. They include household-type chemicals stored and sold in the NEX club, small quantities of paint stored and mixed in the Hardware Store, small quantities of household-type chemicals stored in the Beauty Shop, and insecticides, paint, and floral cleaner stored in the Flower Shop. Typical institutional chemicals, including bleach and oven-grill cleaner, are located in the receiving room of Building 118.

EBS information indicates that a dry cleaning plant was formerly located in this building; however, no evidence of a dry cleaning operation was found during the site inspection. Further interviews and document review are recommended to verify this information before screening-level sampling is conducted in Building 118.

Small oil stains are present on the concrete floor of the boiler room. Accumulated water, which may include oil and/or other boiler chemicals, is discharged to a storm drain in the storage yard on the north side of Building 118. No other incidents such as fires, mishaps, or flooding are documented to have occurred.

Open Space

The open space covers approximately 35 percent of Parcel 197 and is completely paved. Approximately 80 percent of the paved area is surfaced with asphalt and 20 percent is covered with concrete. The pavement is generally in good condition. The open space is used for vehicle parking and the storage of miscellaneous items, such as old refrigeration equipment, wood pallets, packaging material, etc. Although materials are stored primarily north of Building 118, historical aerial photographs indicate that materials have been stored on all sides of the building. The area east of Building 118 has been used primarily for vehicle parking since approximately 1963.

Utilities located within the open space include underground sanitary sewer, storm sewer, steam, water, and electrical lines. A pad-mounted PCB-containing transformer is located near the loading dock on the north side of Building 118. Two pole-mounted transformers are also located north of the building. Railroad tracks are located south of Building 197.

A storm drain north of Building 118 may be impacted by discharge from the building's boiler room.

An oil/water separator is located near the southeast corner of Building 118. It is not known if the unit is used by Building 118 or whether the unit is operable (this unit is addressed by Target Area 1).

Structure 118 is located north of Building 118 in the storage yard and receiving area. This metal frame structure has a concrete floor and transite siding. The two compressors located in this structure service a nearby refrigeration unit. Paint overspray from aerosol cans has stained the walls of a metal storage cabinet that is located north Building 118. One aerosol and several one-gallon and five-gallon paint cans are present and appear to be abandoned.

The storage yard north of Building 118 contains miscellaneous materials, including pieces of glass and metal, abandoned air conditioners, and wood pallets, as well as cardboard crushing and other miscellaneous equipment. According to site inspection data, abandoned air conditioner equipment near the north side of the building has leaked coolant and oil. The staining appears to cover approximately 70 square feet of concrete. Oily stains beneath a water cooling system indicate that releases have occurred. The staining covers approximately 24 square feet of concrete and appears to be the result of continuous leakage. Also, a hydraulic loading device, located in Bay 1, has apparently leaked hydraulic fluid. Site inspection data indicate that the staining on the concrete beneath the hydraulic device covers approximately 15 square feet. The staining appears to be the result of continuous leakage of small quantities of fluid (the various staining in this area is addressed by Target Area 2).

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One underground storage tank (UST) may exist at this parcel. EBS information indicates that a 10,000-gallon UST (Tank 549-5) is located in Parcel 197. The tank, which reportedly stores automotive gasoline, could not be located during a 1987 precision tank testing study. No evidence of a UST was noted during the site inspection.

Parcel Boundary Conditions

Parcel 197 is bounded by Parcels 103, 111, 113, 114, 115, 116, 118, 119, and 900. IR Site 7A is located within Parcels 113 and 114. Activities of concern

on these adjacent parcels include automobile repair activities and steam cleaning/degreasing, and leaking underground storage tanks.

If the continuing investigation at IR Site 7A reveals a cause for concern at Parcel 197, then additional sampling on Parcel 197 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 197, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-197-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling associated with and sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 197 because no industrial buildings are present.

As noted earlier, Parcel 197 previously had open space areas that were unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore no pesticide sampling has been proposed for Parcel 197.

Once the data gaps in Table 6-197-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 197 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-197-2

Summary of Data Gaps
NAS Alameda Parcel 197

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 197.
Installation Restoration (IR) Sites	• IR Site 7A (Naval Exchange Service Station) is located adjacent to (directly north of) Parcel 197. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled Wetlands • Railroad Tracks
Potential Parcel-Specific Release Areas	• Target Area 1 (Oil/Water Separator near Southeast Corner of Building 118) • Target Area 2 (Open Space North of Building 118)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-197-2

Summary of Data Gaps
NAS Alameda Parcel 197

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• One UST is potentially located in the open space. Document review indicates that a 10,000-gallon gasoline UST (Tank 549-5) is supposedly located at Parcel 197. However, this tank could not be located during a 1987 precision tank testing program, and the site inspection revealed no evidence of a UST.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains two parcel-specific target areas and is also contained in a zone with two zone-wide target areas. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the ZAP for Zone 21. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-197-2.

- Target Area 1 (Oil/Water Separator Near Southeast Corner of Building 118): The soil in Target Area 1 may have been impacted by the releases of VOCs, SVOCs, metals, and TPH from the oil/water separator. This target area has been classified as having a potential likelihood of impacts. Two subsurface soil samples will be collected in this target area. The samples are shown on Figure 6-197-1 and listed in Table 6-197-1.

- Target Area 2 (Open Space North of Building 118): The open space north of Building 118 has been used as a storage yard for miscellaneous items and a receiving area. Oily stains near abandoned air conditioning equipment indicate that releases have occurred, and a hydraulic lifting device near Loading Bay 1 apparently has leaked a moderate quantity of hydraulic fluid. This target area has been classified as having a potential likelihood of impacts. The compounds of concern in this target area include TPH. Three surface soil samples will be collected in this target area. The samples are shown on Figure 6-197-1 and listed in Table 6-197-1.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

- Zone 21 Target Area 2 (Railroad Tracks): Zone 21 Target Area 2 includes all current or former railroad tracks within the Naval Exchange Commercial Zone. The railroad tracks located near the southern boundary of Parcel 197 are part of this zone-wide target area. The sample proposed to be collected from this zone-wide target area is located on Parcel 197. One surface soil sample will be collected from beneath the railroad ballast. The sample is shown on Figure 6-197-1 and listed in Table-6-197-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-197-1 summarizes screening-level sampling and analysis for the parcel's target areas. Five surface soil samples and three subsurface Geoprobe soil samples will be collected from the locations shown on Figure 6-197-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

All sample locations shown on Figure 6-197-1 are approximate. Because of the uneven distribution of apparent releases in Target Area 2, the sample density is less than the protocol standards stated in Table 3-1. The samples in Target Area 1 should be collected from the depth corresponding to the bottom of the oil/water separator. The samples from Target Area 2 should be located in areas with the most significant staining and cracks. If no staining is evident, then these samples should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), Hydropunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-208

PARCEL 208 EVALUATION PLAN

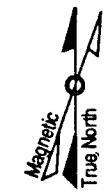
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 208 at NAS Alameda (Figure 6-208-1). The parcel, which is located in the east-central portion of the base, is 0.2 acres in size and is rectangular shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one zone-wide target investigation area (target area) have been identified on Parcel 208. Sampling procedures called for in the screening-level investigation in this area include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-208-1 provides the complete list of samples and analyses prescribed by this plan. This parcel specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 208, historical activities are discussed below.

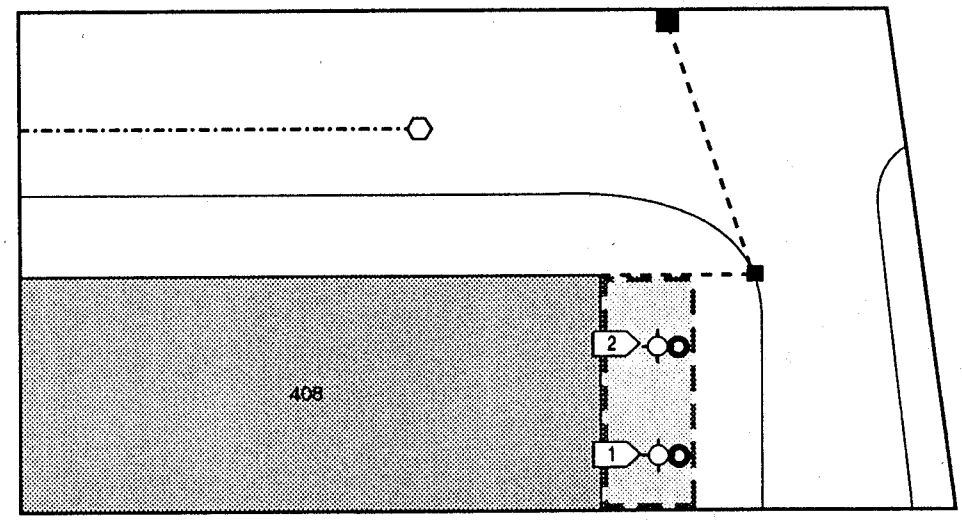
Background and Historical Activities

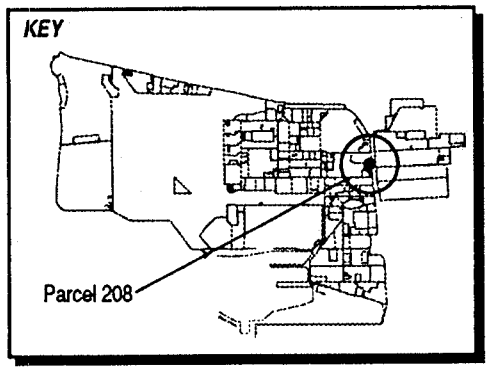
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 208 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 115, 116, 117, 118, 119, 120, 121, 129, 130, 197, and 209. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this







LEGEND

- Target Area
- Storm Sewer Line
- Industrial Waste Line
- Subsurface Geoprobe Sample Location
- Surface Soil Sample Location
- Sanitary Sewer Manhole
- Catch Basin
- Catch Basin

1"= 30'

Figure 6-208-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.12/GCF/07.08.94

TABLE 6-208-1

Summary of Recommended Samples
NAS Alameda Parcel 208

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
208-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
208-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	TPH, SVOCs, Metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
208-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan
208-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, CLP RAS
208-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	TPH, Metals, SVOCs	TPH, Metals, SVOCs	Modified EPA 8015, EPA 8270, ICAP Scan
208-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, VOCs, SVOCs, Metals	TPH, VOCs, SVOCs, Metals	Modified EPA 8015, EPA 8240, EPA 8270, ICAP Scan

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

parcel should also consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.

Parcel 208 originally consisted of marsh land and sloughs. Filling began in the area covered by this parcel in approximately 1930. The former Pacific Coast Oil Refinery (on Old Alameda Point--IR Site 13) was located nearby. Releases from the refinery may have impacted the wetlands at this parcel in the late 1800s and early 1900s. The area within the parcel boundary was completely filled as of 1940; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 408) covers approximately 30 percent of the parcel. The remaining 70 percent is open space. The parcel area is presently in use primarily as a roadway and central support facility (Building 408). Playing courts (Facility 382) were formerly located on the parcel and have since been removed. It appears that the parcel may have been unpaved prior to the construction of Building 408. Underground sewer lines are present on this parcel and are shown in Figure 6-208-1.

Parcel 208 is located approximately 350 feet north of Installation Restoration (IR) Program Site 7A (Building 459 - Navy Exchange Service Station). No previous investigations have been conducted at Parcel 208, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 408

Building 408 was constructed in 1957 and has served as a central support facility (Figure 6-208-1). This one-story building is constructed of steel with a concrete floor and a metal roof, and covers approximately 4,000 square feet. The interior is coated with a spray-type insulating material.

Utilities located within and immediately surrounding Building 408 include underground sanitary sewer, storm sewer, water, and industrial sewer lines, and overhead electrical lines.

Currently, offices, a tool and cleaning chemicals storage area, and a carpenter shop are located within Building 408. The carpenter shop is in the western third of the building, the offices are in the middle third of the building, and the main storage area (chemicals, tools, etc.) is in the eastern third of the building. Small quantities of primer and adhesives were the only chemicals present in the carpenter shop during the site inspection. Apart from the cleaning chemicals (less than 15 gallons) in the janitorial closet, the majority of the chemicals are stored in the eastern portion of Building 408.

Approximately 700 gallons of floor cleaning/polishing compounds, degreasing cleaners, janitorial chemicals, and other nonhalogenated compounds are stored in the eastern portion of the building. It appears that these chemicals are only stored, and not used in this area. EBS information indicates that approximately 500 gallons of nonhalogenated organic compounds, corrosives, and herbicides are located within Building 408. Approximately 300 gallons of waste corrosives, halogenated organic compounds, and asbestos were located within Building 408 in 1993. Disposal practices are unknown. No spills are documented to have occurred at Building 408. No incidents, such as fires, mishaps, or flooding are documented to have occurred within Building 408.

Open Space

The open space covers 70 percent of Parcel 208 and is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in fair condition. Miramar Road and Twelfth Street make up the majority of the open space in Parcel 208.

Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, and industrial sewer lines, and overhead electrical lines. The use of a concrete pad located on the east side of Building 408 is unknown. A drain located in the center of the pad appears to be connected to the storm sewer system.

No chemicals are documented to have been stored or used in the open space. Although no documented spills have occurred within the open space, staining in historical aerial photographs indicates that spills may have occurred near the east side of Building 408. The staining covers an area measuring approximately 15 feet by 40 feet (this stain is addressed by Target Area 1).

No other incidents such as fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

One underground storage tank may be present at this parcel. During the site inspection, a vent pipe was identified on the east side of Building 408, indicating that an underground storage tank may be present in that area.

Parcel Boundary Conditions

Parcel 208 is bounded by Parcels 102, 112, and Main Street. A subsurface investigation related to IR Site 7A is currently in progress at Parcel 112. If the continuing investigations at IR Site 7A reveal a cause for concern at Parcel 208, then additional sampling on Parcel 208 may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 208, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-208-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground sewer lines are also addressed separately. Sampling associated with USTs and sewer lines is discussed in the corresponding protocols presented in Section 3.

No Industrial Hygiene (IH) sampling is required for Parcel 208 because no industrial buildings are present.

As noted earlier, Parcel 208 previously had open space areas that were unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only

TABLE 6-208-2

Summary of Data Gaps
NAS Alameda Parcel 208

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 208.
Installation Restoration (IR) Sites	• IR Site 7A (the Naval Exchange Gas Station) is located 350 feet south of Parcel 208. Additional subsurface investigation relative to IR Site 7A is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Filled wetlands
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space East of Building 408)
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST is potentially located outside Building 408.

TABLE 6-208-2

Summary of Data Gaps
NAS Alameda Parcel 208

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides. Therefore, no pesticide sampling has been proposed for Parcel 208.

Once the data gaps in Table 6-208-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 208 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone-wide target area. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. No zone-wide sampling is proposed at this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling locations is provided in the Zone Analysis Plan for Zone 21. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Open Space East of Building 408): Staining in historical aerial photographs indicates that spills may have occurred in the open space east of the Building 408. This target area covers approximately 6,000 square feet and has been classified as having a potential likelihood of impacts. Because the activities and compounds of concern are unknown, samples will be analyzed for TPH, SVOCs, VOCs, and metals. Two surface and two subsurface soil samples will be collected in this target area. The samples are shown on Figure 6-208-1 and are listed in Table-6-208-1.

- Zone 21 Target Area 1 (Filled Wetlands): No samples are currently proposed for this target area. Sampling in this target area is on hold pending the outcome of the Filled Wetlands sampling in Zone 16.

Screening-Level Investigation

Two screening-level techniques, surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14), will be employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase.

Table 6-208-1 summarizes screening-level sampling and analysis for the parcel's target area. Two subsurface Geoprobe soil samples and two surface soil samples will be collected from the locations shown on Figure 6-208-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Surface soil and subsurface Geoprobe soil sampling locations shown on Figure 6-208-1 are approximate. Before the samples are collected, a geophysical survey is required to identify whether a UST is actually present in this area. If possible, depending on the geophysical results, the surface soil samples and subsurface soil Geoprobe samples should be collected from the center and the edge of the concrete pad located on the east side of Building 408. If a UST or suspect UST is identified as a result of the geophysical survey, then the samples should be moved far enough away to avoid the tank.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), Hydropunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-209

PARCEL 209 EVALUATION PLAN

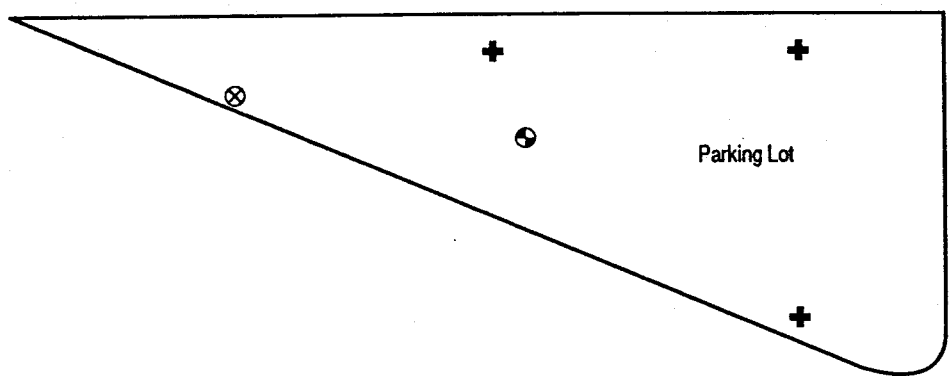
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 209 at NAS Alameda (Figure 6-209-1). The parcel, which is located in the east-central portion of the base, is 0.5 acres in size and is triangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation area (target area) have been identified on Parcel 209. This parcel specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 209, historical activities are discussed below.

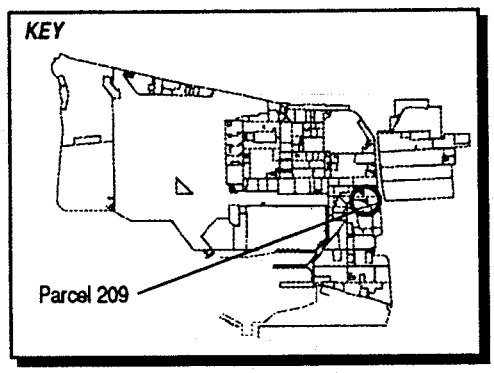
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 209 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program Sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 115, 116, 117, 118, 119, 120, 121, 129, 130, 197, and 208. This parcel zone has been designated the Naval Exchange Commercial Zone (Zone 21). The Zone encompasses the parcels that have commercial retail activities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should also consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 21.





LEGEND

- ⊗ Previous Monitoring Well Location *(Kennedy, 1980)*
- ◒ Previous Monitoring Well Location *(Canonie, 1990)*
- ✚ Previous Soil Vapor Survey Location *(Canonie, 1990)*

Note: *No screening-level sampling recommended for this parcel.*

1"= 60'

Figure 6-209-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda. Filling began in the area covered by this parcel in approximately 1930. Prior to this time, wetlands occupied the parcel area. The area within the parcel boundary was completely filled as of 1939; the ground level and grading have not changed significantly since that time.

Currently, no buildings or structures are located in Parcel 209. The parcel area is presently in use as a vehicle parking area. One building (Building 295, a Personnel Weather Station) was formerly located on the parcel and has since been demolished.

Parcel 209 is located immediately northeast of Installation Restoration (IR) Program Site 3 (Area 97, Abandoned Fuel Storage Area) and approximately 375 feet north of IR Site 4 (Building 360). In addition, the former Pacific Coast Oil Refinery (IR Site 13) was formerly located on Old Alameda. Releases from this site may have impacted Parcel 209. Previous investigations have been conducted at Parcel 209 and specific data regarding chemical occurrence are available.

Sampling locations from previous subsurface investigations on Parcel 209 are shown in Figure 6-209-1. These investigations were conducted to define the extent of petroleum hydrocarbon contamination from fuel releases at IR Site 3 (Parcel 131). Over 300,000 gallons of AVGAS reportedly leaked from fuel tanks located on Parcel 131 in the 1960s and early 1970s, impacting the surrounding sanitary and storm sewers. Three soil vapor survey samples (Canonie, 1990) detected toluene and hydrocarbons at maximum concentrations of 0.2 µg/l and 20,000 µg/l, respectively. The concentrations of benzene, ethylbenzene, and xylenes were below detection limits. One monitoring well (Canonie, 1990) detected TPH and VOCs in soil at the following maximum concentrations: TPH (93.8 ppm), methylene chloride (28 ppb), acetone (200 ppb), carbon disulfide (15 ppb), and toluene (130 ppb). The concentration of hydrocarbons in soil collected from another monitoring well (Kennedy, 1980) was less than 780 ppm. The potential impacts from IR Sites 4 and 13 on this parcel have not yet been evaluated.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 295 (demolished)

Building 295 was constructed in 1946 and served as a personnel weather station. It was a 367-square-foot, semi-permanent building, and was demolished in 1989. It appears that Building 295 was always used as a weather station. No chemicals are documented to have been used or stored in the building. No spills, fires, mishaps, or flooding are documented to have occurred in Building 295.

Open Space

The open space is completely paved with asphalt, except for the concrete foundation of former Building 295. The only utility located in Parcel 209 is an underground electrical line. Open space in Parcel 209 has been used primarily for vehicle parking since approximately 1970. A historical aerial photograph indicates that the open space was used for container storage in 1947. According to aerial photographs, the open space had no apparent use between 1947 and 1970. It appears that the parcel area was unpaved during this time.

Small stains, typical of vehicle engine leakage, are scattered throughout the parking area. No chemicals are documented to have been stored in Parcel 209. No spills, fires, mishaps, or flooding are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 209 is bounded by Parcels 129, 130, and 131. Parcel 131 is IR Site 3 (Area 97, Abandoned Fuel Storage Area). The extent of the AVGAS contamination plume from IR Site 3 has not yet been fully defined.

If the continuing investigations at IR Site 3 or other nearby IR sites reveal a cause for concern at Parcel 209, then sampling may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 209, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-209-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration sites.

No Industrial Hygiene (IH) sampling is required for Parcel 209 because no buildings are present.

As noted earlier, Parcel 209 previously had open space areas that were unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 209.

As discussed in the ZAP for this zone, potential pesticides releases are being evaluated at the four parcels (Parcels 116, 118, 120 and 121) most likely to be impacted, and zone-wide sampling for pesticides will only be conducted if these four parcels show elevated concentrations of pesticides.

Once the data gaps in Table 6-209-1 are addressed, Parcel 209 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

No parcel-specific target areas were identified for this parcel. However, concerns pertaining to the radiological concerns and adjacent and nearby IR sites must be resolved before this parcel can be reclassified, leased, or transferred.

TABLE 6-209-1

Summary of Data Gaps
NAS Alameda Parcel 209

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 209.
Installation Restoration (IR) Sites	• IR Site 3 (the Abandoned Fuel Storage Area) is located adjacent to (southwest) of Parcel 209. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor. • IR Site 4 (Building 360) is located 375 feet south of Parcel 209. Additional investigation relative to IR Site 4 is proposed by the IR contractor. • In addition, IR Site 13 (the former Pacific Coast Oil Refinery), which is located approximately 800 feet south of Parcel 209. Additional investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.

TABLE 6-209-1

Summary of Data Gaps
NAS Alameda Parcel 209

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Electrical lines identified. • No underground or aboveground fuel lines identified. • No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-Z22

ZONE 22 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 22 at NAS Alameda (Figure 6-Z22-1). Zone 22 has been designated the Southeastern Refinery and Heavy Industrial Zone and encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. Zone 22 is comprised of Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. During the sampling program development, the parcels located in this zone were evaluated together. Two zone-wide target investigation areas (target areas) and 16 parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling, subsurface Geoprobe sampling, and soil gas sampling. Table 6-Z22-1 provides a list of samples and analyses prescribed for the zone-wide target areas, and Figure 6-Z22-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 22, historical activities are discussed below.

Zone 22 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 22 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-Z22-1

Summary of Recommended Samples
NAS Alameda Zone 22

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z22-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 1	Incinerator Emissions	Dioxins/Furans	EPA 8280/SAS B
Z22-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 1	Incinerator Emissions	Dioxins/Furans	EPA 8280/SAS B
Z22-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Test Kit, XRF
Z22-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Mod. 8015, CLP RAS
Z22-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Test Kit, XRF
Z22-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Test Kit, XRF
Z22-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Test Kit, XRF

TABLE 6-Z22-1

Summary of Recommended Samples
NAS Alameda Zone 22

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z22-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Test Kit, XRF
Z22-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Modified EPA 8015, CLP RAS
Z22-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, lead	Test Kit, XRF
Z22-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	TPH, PCBs, Lead	Test Kits, XRF
Z22-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	SVOCs	CLP RAS
Z22-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	PCBs, TPH, Lead	Test Kit, XRF
Z22-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	SVOCs	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 22, the Southeastern Refinery and Heavy Industrial Zone, encompasses 18 parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Much of the area encompassed by this zone is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda. Filling began in the remaining zone area in approximately 1942. The zone was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, 27 buildings and three structures cover approximately 30 percent of the zone. The remaining 70 percent is open space. The zone area is presently in use as an industrial area. More than 80 buildings and at least one structure was formerly located on the parcel and have since been demolished.

Zone 22 contains seven Installation Restoration (IR) Program sites (IR Site 4 (Building 360), IR Site 7C (Building 547), IR Site 9 (Building 410), IR Site 10B (Building 530), IR Site 13 (Oil Refinery), IR Site 16 (Cans C-2 Area), and IR Site 19 (Yard D-13)). Information regarding each IR Site is available and is discussed in the appropriate PEPs.

Sewer and fuel lines present in this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 22 will be addressed in other sampling programs and are not considered in this ZAP.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Underground Storage Tanks

One tank may be present at this zone on Parcel 211. Site inspection records indicate that pipes suspected to be UST vent pipes were identified in this area.

Two tanks were formerly present at this zone on Parcel 142 (no record regarding the tank numbers, installation dates, removal dates, or capacity and material stored for these tanks is available). The former presence of these tanks were identified from EBS information. Investigation of these former tanks has not been scheduled. No information is available regarding the integrity of the tanks that were removed.

Three inactive underground storage tanks are present at Parcel 145 (Tanks 547-1, 547-2, and 547-3). The tanks were installed in 1971 and are located in the northwestern portion of the parcel. These tanks were used to store leaded gasoline and each has a capacity of 12,000 gallons. The presence of these tanks was identified from EBS information. The tanks are scheduled to be removed.

One underground storage tank (UST) reportedly exists at Parcel 143 and is associated with Building 163. No other information is available regarding USTs at this parcel.

At least one abandoned underground storage tank is apparently present at Parcel 134 (no record regarding the tank number for this tank is available). The tank was installed in 1953 and is located west of Building 372. There is conflicting data regarding the use of USTs on this parcel. The NAS Alameda UST Inventory identifies one 6,000-gallon UST located at Building 372 that was used to store waste gear oil. This tank was identified during the RFI. The EBS information identifies a 6,000-gallon UST at Building 372 used to store jet fuel. In addition, one unidentified UST at Building 163 is listed for this parcel. This tank may be the same tank identified for Parcel 143. The contents, exact location, or installation date for this tank could not determined during the EBS. The 6,000 gallon tank(s) is/are scheduled for closure.

RCRA Sites

This zone includes 24 RCRA sites located on Parcels 134, 142, 143, 147, and 148. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, of the 24 RCRA sites at this zone, five require further investigation. A brief description of each RCRA site is provided in the corresponding PEP.

The sampling proposed for the sites that require sampling is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 22 is bounded by Zones 17, 19, 21, and 23. Activities of concern on these adjacent zone include engine testing and hazardous materials storage on Zone 17, and dock support services and a former incinerator in Zone 19. Central Avenue borders Zone 22 to the east.

Zone Target Areas and Compounds of Concern

This zone contains two zone-wide target areas and 16 parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

Zone 22 Target Areas

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19. These parcels are located to the east of the former incinerator in the direction of the prevailing wind currents. The former incinerator was located in former Building 68 on Parcel 139. This building was constructed in 1942 and was demolished in 1961. The size of this former building was approximately 400 square feet. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. The two samples to be collected in the zone in this target area are listed in Table 6-Z22-1. The approximate sampling locations for this zone were selected because these areas were not paved between 1942 and 1961. They are shown on Figure 6-Z22-1.

- Zone 22 Target Area 2 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the

Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located throughout the zone. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas for a total of eight surface soil samples for this zone target area. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-Z22-1. The approximate sampling locations are shown on Figure 6-Z22-1.

It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of the compounds of concern are negligible, then the railroad track zone target area may be eliminated in this zone and other zones. Alternately, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then sampling may be modified to analyze for the more limited suite of the compounds of concern, only.

Parcel 132 Target Areas

- Parcel 132 Target Area 1 (Southeastern Portion of Open Space): Target Area 1 covers approximately 4,800 square feet in the eastern and southeastern portion of Parcel 132. Because of the reported former use of this area for agriculture, surface soil samples will be collected and analyzed for pesticides and metals. Heavy staining apparent in historical aerial photographs indicates that other types of materials may have been released historically. Although the source of release is unknown, surface soil samples will also be analyzed for TPH. Four surface soil samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-132-1.

- Parcel 132 Target Area 2 (General Open Space): Emissions from Building 360 located on Parcel 143 are a potential source of contamination that may have impacted the surface soil of Parcel 132. The primary compounds of concern are metals. This target area is classified as having potential likelihood of impacts. Three surface soil samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-132-1.

One surface soil sample for Zone 22 Target Area 2 will also be collected from within this parcel area.

Parcel 133 Target Areas

- No parcel-specific target areas have been identified at this parcel.

Parcel 134 Target Areas

- Target Area 1 (Building 372): This target area addresses the possible release of compounds of concern associated with fuel, oil, solvents, and lubricating oil within Test Cell 13, Test Cell 14, and the Preparation room. The size of this area on the first floor of Building 372 is approximately 10,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect. Seven surface soil and seven subsurface soil samples will be collected from this target area. Samples to be collected in this target area are listed in Table 6-134-1.

- Target Area 2 (Western End of Building 372): This target area addresses the possible release of compounds of concern associated with petroleum products. The size of this area adjacent to Building 372 is approximately 2,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. Three surface soil samples will be collected from Target Area 2. Samples to be collected in this target area are listed in Table 6-134-1.

- Target Area 3 (Building 163): This target area addresses the possible release of compounds of concern associated with use and storage of metals, corrosives, petroleum products, halogenated organic compounds, paint and non-halogenated organic compounds throughout the building. The size of the stained area within Building 163 is approximately 1,500 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. Three subsurface soil and three surface soil samples will be collected from Target Area 3. Samples to be collected in this target area are listed in Table 6-134-1.

- Target Area 4 (Building 414): This target area addresses the possible release of compounds of concern associated with storage of paint stripper and solvents within Building 414, primarily in the northern- and southern-most storage areas. The size of this area within Building 414 is approximately 1,000 square feet. The likelihood of environmental impacts having occurred within this

target area is classified as potential. Two surface soil samples will be collected from Target Area 4. Samples to be collected in this target area are listed in Table 6-134-1.

- Target Area 5 (GAP Site 59, between Buildings 163 and 414): This target area addresses the possible release of compounds of concern associated with storage of petroleum products and lubricating oil. The size of this target area is approximately 2,500 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential. Five surface soil samples will be collected from Target Area 5. Samples to be collected in this target area are listed in Table 6-134-1.

Five surface soil samples for Zone 22 Target Area 2 will be collected from within this parcel area.

Parcel 141 Target Areas

- No parcel-specific target areas were identified for this parcel. One of the surface soil samples for Zone 22 Target Area 2 is located on this parcel.

Parcel 142 Target Areas

- Target Area 1 (Yard D-13): This target area is located over Hazardous Waste Storage Yard D-13. The size of this target area, shown on Figure 6-142-1 is approximate, and encompasses the entire storage area. Compounds or classes of compounds of concern possible within this target area include corrosives, metals, VOCs, SVOCs, PCBs, and petroleum products. The likelihood of environmental impact having occurred within this target area is classified as probable. No sampling is called for in this target area by this PEP; however, sampling investigations are currently underway in this area as part of the IR program.

Parcel 143 Target Area

- Parcel 143 Target Area 1 (Whole Parcel): No sampling is called for in this target area; however, sampling investigations are currently underway in this parcel as part of the IR program. The IR program calls for soil sampling in the open space area of this parcel and from underneath Building 360. Currently, several shallow soil samples, soil borings, and CPT/HydroPunch sample locations are specified for this site by the IR contractor.

Parcel 144 Target Area

- Target Area 1 (Open Space): Target Area 1 extends over the entire parcel area. Compounds or classes of compounds of concern possible within this target area include solvents, SVOCs, PCBs, metals, pesticides, petroleum products, and cyanide. This target area has been identified based on its unknown former use, combined with its proximity to the surrounding industrial area and the former presence of structures that are commonly used for storage. The likelihood of environmental impact having occurred within this target area is classified as potential. Four surface soil samples, four subsurface soil samples, and five soil gas samples will be collected. Samples to be collected in this Target Area are listed on Table 6-144-1.

Parcel 145 Target Area

- Target Area 1 (Entire Parcel): Due to the elevated concentrations of various compounds throughout this parcel, as identified in previous IR site investigations, the entire parcel is being identified as Target Area 1. Compounds or classes of compounds of concern possible within this target area include VOCs, SVOCs, and petroleum products. Environmental impacts have been confirmed within this target area. No sampling is called for in this target area by this PEP, because sampling investigations are currently underway in this area as part of the IR program.

Parcel 146 Target Areas

- No parcel-specific target areas were identified for this parcel.

Parcel 147 Target Areas

- No parcel-specific target areas were identified for this parcel. This parcel is part of IR Site 13. Currently, several soil borings, monitoring wells, and CPT/HydroPunch sample locations are specified for this site by the IR contractor. One surface soil sample proposed for Zone 22 Target Area 1 is located on Parcel 147. The sample to be collected in this target area is listed in Table 6-147-1.

Parcel 148 Target Area

- Target Area 1 (Building 530): This target area is centered over Building 530 as shown in Figure 6-148-1. VOCs, SVOCs, and metals

are the possible compounds of concern within this target area. The likelihood of environmental impacts having occurred within this target area is classified as potential. This parcel has been identified as a target area because soil samples collected near this parcel suggest that slightly elevated concentrations of VOCs, SVOCs, and metals may exist on Parcel 148. All soil sample detections were below unrestricted use PRGs. Building 530 has been identified as a target area because no sampling within the boundaries of this parcel has been conducted or are proposed at this time. Three GeoProbe samples will be collected from this target area. Samples to be collected in this target area are listed on Table 6-148-1.

Parcel 149 Target Area

- Parcel 149 Target Area 1 (Open Space): This target area is encompasses the open space storage area west of Buildings 338A-H. The size of this target area, as shown on Figure 6-149-1, is approximate; the actual size will be adjusted in the field to completely encompass the storage area. Compounds or classes of compounds of concern possible within this target area include corrosives, metals, VOCs, SVOCs, PCBs, and petroleum products. Environmental impacts are known to have occurred within this target area. No sampling is proposed for this target area by this PEP because sampling investigations are currently underway in this area as part of the IR program.

Parcel 152 Target Area

- Parcel 152 Target Area 1 (Whole Parcel): No sampling is called for in this target area, because sampling investigations are currently underway in this parcel as part of the IR program. The IR program calls for soil sampling in the open space area of this parcel and from underneath Building 410. Currently, ten combined GeoProbe and HydroPunch sample locations and one monitoring well location are specified for this site.

Parcel 153 Target Area

- Parcel 153 Target Area 1 (Structure 588): This target area has been established to encompass the former industrial wastewater treatment plant and the area immediately around it, including all the aboveground storage tanks on the east of the facility and the at-grade vaults on the west side. This target area is approximately 7,000 square feet in area. The waste stream at the IWTP included

wastes from Building 410, which contained oils, paints, paint strippers, detergents, phenols, paint strips, and methylene chloride. Compounds of potential concern within this target area also include acids, bases, coagulants, and other wastewater treatment compounds. These samples will also be analyzed for TPH and VOCs because of the potential use of the wastewater vault for other types of liquid storage. The likelihood of environmental impacts having occurred at this target area is classified as potential. Three surface soil samples and two subsurface soil samples will be collected from this target area. One of the eight surface soil samples for Zone 22 Target Area 2 is located on this parcel. Samples to be collected in this target area are listed in Table 6-153-1.

Parcel 164 Target Areas

- No parcel-specific target areas were identified for this parcel.

Parcel 210 Target Areas

- No parcel-specific target areas were identified for this parcel.

Parcel 211 Target Area

- Target Area 1 (Open Space I): Soils at the defueling area may have been impacted by previous defueling operations. The target area contains approximately 5,000 square feet. Compounds of concern possible within this area are petroleum hydrocarbons. The likelihood of environmental impact having occurred at this target area is classified as suspect. Eight surface soil samples will be collected from this target area.

  One surface soil sample for Zone 22 Target Area 1 is located on this parcel. Samples to be collected in this target area are listed in Table 6-Z22-1.

Parcel 214 Target Areas

- No parcel-specific target areas were identified for this parcel.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in the zone and parcel-specific target area(s) and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3), soil gas sampling (SOP 6), and subsurface GeoProbe soil sampling (SOP 14).

Table 6-Z22-1 summarizes screening-level sampling and analysis for the zone and parcel-specific target areas. A total of 52 surface soil samples, 5 soil vapor samples, and 19 subsurface GeoProbe samples will be collected from the locations shown on Figure 6-Z22-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10), and wipe sampling (SOP 20). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-132

PARCEL 132 EVALUATION PLAN

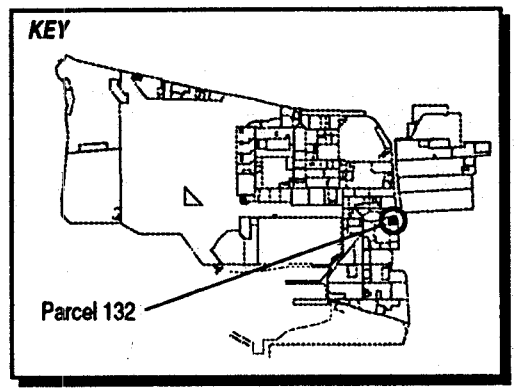
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 132 at NAS Alameda (Figure 6-132-1). The parcel, which is located in the east-central portion of the base, is approximately two acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and two parcel-specific target investigation areas (target areas) have been identified on this parcel. The sampling procedure called for in the screening-level investigation in these areas is surface soil sampling. Table 6-132-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 132, historical activities are discussed below.

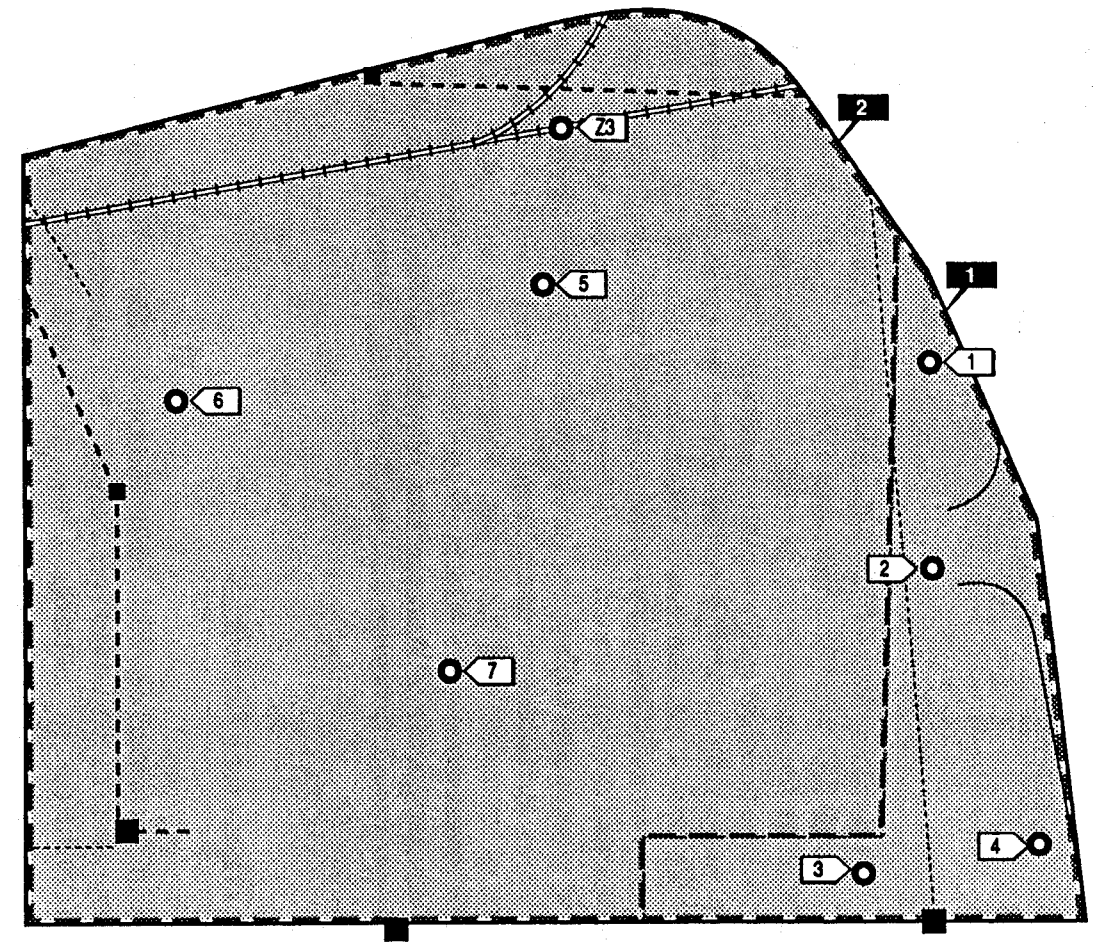
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 132, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support





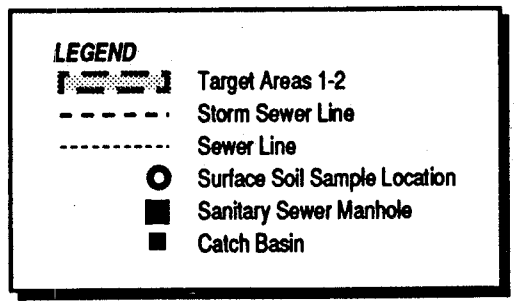


Figure 6-132-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/DS/06.29.94A

TABLE 6-132-1

Summary of Recommended Samples
NAS Alameda Parcel 132

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
132-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Arsenic	TPH, Metals	Test Kit, XRF
132-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS
132-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Arsenic	TPH, Metals	Test Kit, XRF
132-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS
132-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Arsenic	TPH, Metals	Test Kit, XRF
132-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS
132-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Arsenic	TPH, Metals	Test Kit, XRF
132-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Arsenic	TPH, Metals	Mod. EPA 8015, CLP RAS
132-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Pesticides	Pesticides	CLP RAS
132-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metal Emissions	Metals	XRF
132-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metal Emissions	Metals	XRF
132-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 2	Metal Emissions	Metals	XRF
132-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 2	Metal Emissions	Metals	CLP RAS
Z22-3-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target	Fuels, Oils, Metals	TPH, PCBs, lead	Test Kit, XRF
Z22-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 22 Target	Fuels, Oils, Metals	TPH, PCBs, lead	Mod. 8015, CLP RAS

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Parcel 132 is located on the area formerly known as Old Alameda Point and was part of the original peninsula of Alameda.

Currently one structure (a temporary Alameda Police office trailer) is located on the parcel. The remainder of the parcel area consists of a vehicle parking area and grassy open space. No buildings or structures were formerly located on the parcel. Sewer lines are present at this parcel and are shown in Figure 6-132-1.

Parcel 132 is located approximately 250 feet east of Installation Restoration (IR) Program Site 3 and 125 feet northeast of IR Program Site 4. No previous investigations have been conducted at Parcel 132 and specific data regarding potential chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below.

Open Space

Parcel 132 consists entirely of open space, except for the temporary Alameda Police office trailer (Figure 6-132-1). The open space has been used for vehicle parking. The ground surface of the open space is approximately 50 percent paved and 50 percent unpaved. All of the paved area is surfaced with asphalt. The pavement is generally in fair condition, with scattered cracks throughout the asphalt. The unpaved area of the open space is completely covered with grass.

No other structures or buildings were formerly located in Parcel 132. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, water, and electrical lines. Railroad tracks cross the northern portion of the parcel on the south side of Atlantic Avenue (Figure 6-132-1). No permits appear to have been issued for processes occurring within this open space.

EBS information indicates that activities conducted within this open space primarily consisted of vehicle parking. The eastern edge of the parcel originally consisted of a farm and vegetable garden. Available EBS information does not indicate the year in which farming activity ceased on this parcel. It appears that portions of the open space within Parcel 132 have been used for vehicle parking since 1947.

No chemicals are documented to have been stored or used at Parcel 132; however, it is likely that pesticides and herbicides were applied to the former farm/garden areas. This potential for high pesticide use area is addressed by Target Area 1.

Although there have not been any documented spills in Parcel 132, review of historical aerial photographs indicates that undocumented spills may have occurred in the southeastern portion of the parcel (Figure 6-132-1). Dark staining in aerial photographs covers an area measuring approximately 120 by 40 feet. The source of the staining is unknown. The stained area is also addressed by Target Area 1. No other incidents, such as fires, mishaps, or flooding, are documented to have occurred within Parcel 132.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 132 is bounded by Parcels 130, 133, 143, 144 and 900. Neighboring Parcel 143 contains IR Site 4 (Building 360). Activities of concern at Building 360 include painting, sandblasting, and plating. Hazardous residues generated by these operations may have been discharged through roof exhaust vents and impacted surface soil in Parcel 132. Limited sampling is called for in this PEP in response to this IR site (Target Area 2).

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 132, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-132-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns, transformers, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 132 because no industrial buildings are present.

As noted earlier, Parcel 132 has open space areas that are landscaped/ unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides.

Potential concerns related to pesticides have been identified as a parcel-specific data gap for Parcel 132. Pesticide sampling for this parcel has been limited to the area formerly used for farming/vegetable gardens.

Once the data gaps in Table 6-132-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 132 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-132-2

Summary of Data Gaps
NAS Alameda Parcel 132

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 132.
Installation Restoration (IR) Sites	• Neighboring Parcel 143 contains IR Site 4 (Building 360). Activities of concern at Building 360 include painting, sandblasting, and plating. Hazardous residues generated by these operations may have been discharged through roof exhaust vents and impacted surface soil in Parcel 132. Limited sampling is called for in this PEP in response to this IR site.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Agriculture use of pesticides. • Emissions from Building 360.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-132-2

Summary of Data Gaps
NAS Alameda Parcel 132

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. The following target areas were identified based on possible impacts from activities described above involving potentially hazardous substances.

- Parcel 132 Target Area 1 (Southeastern Portion of Open Space): Target Area 1 covers approximately 4,800 square feet in the eastern and southeastern portion of Parcel 132. Because of the reported former use of this area for agriculture, surface soil samples will be collected and analyzed for pesticides. Metal analysis by XRF will also be conducted to screen for arsenic-based pesticides. Heavy staining apparent in historical aerial photographs indicates that other types of materials may have been released historically. Although the source of release is unknown, surface soil samples will also be analyzed for TPH. Samples to be collected in this target area are listed in Table 6-132-1. Approximate sampling locations are shown on Figure 6-132-1.

- Parcel 132 Target Area 2 (General Open Space): Emissions from Building 360 located on Parcel 143 are a potential source of contamination that may have impacted the surface soil of Parcel 132. The primary compounds of concern are metals. This target area is classified as having potential likelihood of impacts. Surface soil samples to be collected in this target area are listed in Table 6-132-1. Approximate sampling locations are shown on Figure 6-132-1.

- Zone 22 Target Area 2 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One of the eight surface soil samples for this zone target area is located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target area is listed in Table 6-132-1. The approximate sampling location is shown on Figure 6-132-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) will be the screening-level technique used to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase.

Table 6-132-1 summarizes screening-level sampling and analysis for the parcel's target areas. Sample locations are shown on Figure 6-132-1. Eight surface soil samples will be collected from the locations shown on Figure 6-132-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Samples should be located in the areas with the most significant staining. If no staining is evident, then the samples should be distributed evenly over the target area.

Detailed Evaluation Phase

The detailed evaluation phase sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), HydroPunch groundwater sampling (SOPs 1 and 15), and monitor-ing well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-133

PARCEL 133 EVALUATION PLAN

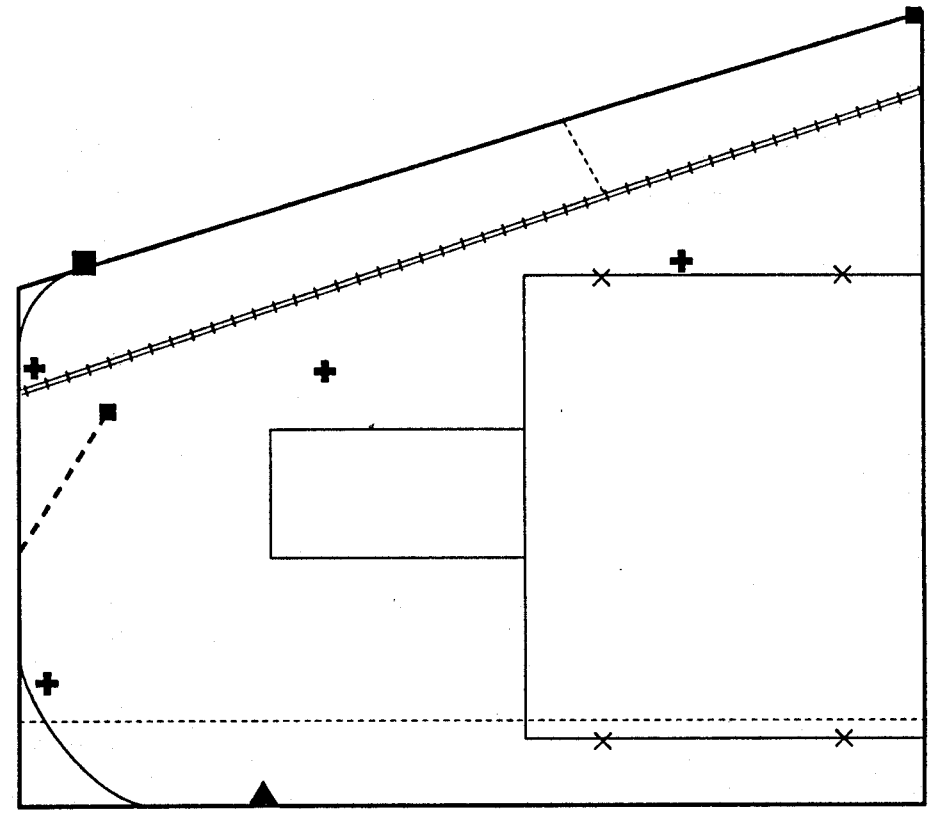
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 133 at NAS Alameda (Figure 6-133-1). The parcel, which is located in the southeastern portion of the base, is approximately 1.4 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide target investigation area (target area) has been identified on this parcel. No samples will be collected for the zone-wide target area on this parcel, however. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 133, historical activities are discussed below.

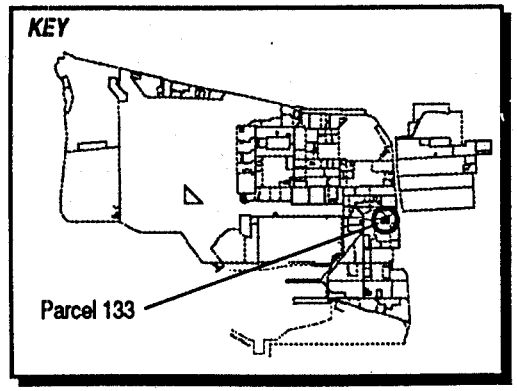
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 133, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel were determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine area on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data





LEGEND

- Storm Sewer Line
- Sewer Line
- Surface Soil Sample Location
- Soil Vapor Sample Location (Canonie, 1990)
- Proposed CPT/Hydropunch
- Sanitary Sewer Manhole
- Catch Basin

1"= 60'

Magnetic
True North

Figure 6-133-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/DS/06.29.94

evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda.

Currently, one building (Building 552) covers approximately five percent of the parcel. The remaining 95 percent is open space. The parcel is currently in use for vehicle parking. One building may have been formerly located on the parcel as evidenced by an unused concrete foundation. No other evidence of former buildings or structures exists on the parcel. Sewer lines are present on this parcel and are shown on Figure 6-133-1.

Parcel 133 is located adjacent to two Installation Restoration (IR) Program sites (IR sites 3 and 4). Previous investigations have been conducted at Parcel 133 and specific data regarding potential chemical occurrence are available. Releases associated with IR Site 3 (Area 97) may have historically impacted Parcel 133. Soil vapor sampling results were compiled in a 1993 report prepared by PRC Environmental Manage-ment, Inc., under contract N62474-88-D-5086, entitled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 1 and 2A.* Ongoing (follow-up) sampling is being performed by the IR contractor.

As part of a former screening-level sampling effort for IR Site 3 summarized in the 1993 PRC report, a total of four soil vapor survey points (F-13, F-14, F-15, and G-13) were located on Parcel 133. This investigation was conducted by Canonie in 1990. The soil vapor was analyzed for benzene, toluene, ethyl benzene, xylene and total hydrocarbons. The concentration ranges for the analytes listed above are: 0.04 µg/L, 0.05 - 0.06 µg/L, 0.05-0.06 µg/L, 0.06 µg/L, and 0.04 - 2 µg/L, respectively.

The 1993 PRC report indicated that all organic compounds were found at concentrations below USEPA's January 1994 industrial and unrestricted use preliminary remediation goals (PRGs) for benzene, toluene, ethyl benzene, xylene and total hydrocarbons. The IR contractor has proposed follow-up sampling for Parcel 133, including one CPT/Hydropunch as shown in Figure 6-133-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 552

Building 552 was constructed between 1975 and 1985 and served as a primary electrical substation (Figure 6-133-1). This building is in moderately good condition. Building 552 is a one-story building constructed of concrete with a metal roof, and covers approximately 3,200 square feet. The space occupied by Building 552 was formerly open space used for vehicle parking.

Utilities located within and immediately surrounding Building 552 include underground sanitary sewer, water, electricity, and storm sewer lines. No permits appear to have been issued for activities conducted this building.

Information collected during the EBS indicates that Building 552 has served as a primary electrical substation since its construction. Use of the building as an electrical substation involved the use of transformers and air switches. No known chemicals or wastes were generated from the use of this equipment within the building.

No chemical storage or use has been documented to have occurred in Building 552. No known spills or staining have occurred in this building. No incidents including fires, mishaps, or flooding are known to have occurred within or immediately surrounding Building 552.

Open Space

The open space covers approximately 95 percent of the parcel. This open space has been used for vehicle parking since pavement was laid. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in fair condition.

Structures located within the open space include railroad tracks, an oil-filled switching gear, a concrete foundation of a demolished building, and three transformers. Of the three transformers, two are relatively clean, and one has heavy staining on its underlying concrete pad. Transformers are being addresses under a separate program. Contents of this transformer, (regarding PCBs) should be determined from this program before any environmental sampling is conducted.

Utilities located within and immediately surrounding the open space include underground sanitary and storm sewers.

EBS information indicates that this open space has historically served as a vehicle parking area. No documented chemical storage or use has occurred in this area. One incident involving a leak from an oil-filled switching gear was documented. The switching gear, located along the west edge of the parcel, has a stain covering approximately 6 square feet in area (the entire base of the switch).

No other incidents, including fires, mishaps, or flooding are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground storage tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 133 is bounded by Parcels 130, 131, 132, 134, and 143. Parcels 131 and 143 are IR Sites 3 and 4, respectively. Activities of concern on Parcel 131 include hazardous materials and waste storage. Neighboring Parcel 143 contains IR Site 4 (Building 360). Activities of concern at Building 360 include painting, sandblasting, and plating. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 133, than additional sampling on Parcel 132 may be appropriate. (Note that recent resampling at Parcel 144, which is in the prevailing down wind direction from Parcel 143, did not show significantly elevated levels of metals.)

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 133, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for

TABLE 6-133-1

Summary of Data Gaps
NAS Alameda Parcel 133

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 133.
Installation Restoration (IR) Sites	• Parcels 131 and 143 are IR Sites 3 and 4, and are located north and south of Parcel 133, respectively. Activities of concern at Building 360 (IR Site 4) include painting, sandblasting, and plating. Activities of concern at IR Site 3 include hazardous materials and waste storage. Soil vapor survey sample results are available for the parcel. Additional subsurface investigation relative to IR Site 3 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR Site parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps ae disclosure issues, only.

TABLE 6-133-1

Summary of Data Gaps
NAS Alameda Parcel 133

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-133-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 133 because no industrial buildings are present.

Once the data gaps in Table 6-133-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 133 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 133. No parcel-specific target areas were identified for this parcel. The zone-wide target areas include the railroad tracks located on the northern portion of the parcel. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling has been proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

SECTION 6-134

PARCEL 134 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 134 at NAS Alameda (Figure 6-134-1). The parcel, which is located in the southeastern portion of the base, is approximately seven acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains five RCRA sites. None of the RCRA sites on Parcel 134 have been identified in the Part B Permit as requiring an RFI. Five parcel-specific and two zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface soil sampling. Table 6-134-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 134, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 134, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy

TABLE 6-134-1

Summary of Recommended Samples
NAS Alameda Parcel 134

Sample Number	Sample Depth	Sample Type	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
134-1-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-1-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-2-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-2-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-2-3-S-V-DDMMYY*	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Mod. EPA 8015, CLP RAS
134-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Mod. EPA 8015, CLP RAS
134-3-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-3-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-4-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-4-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-4-3-S-V-DDMMYY*	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Mod. EPA 8015, CLP RAS
134-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-4-0-S-V-DDMMYY*	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Mod. EPA 8015, CLP RAS
134-5-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-5-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-6-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-6-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-7-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 1	Solvents	VOCs	CLP RAS
134-7-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF

TABLE 6-134-1

Summary of Recommended Samples
NAS Alameda Parcel 134

Sample Number	Sample Depth	Sample Type	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
134-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 1	Fuels, Oils	TPH, Metals	Test Kit, XRF
134-8-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 2	Fuels, Oils	TPH	Test Kit
134-9-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 2	Fuels, Oils	TPH	Test Kit
134-10-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 2	Fuels, Oils	TPH	Test Kit
134-10-3-S-V-DDMMYY*	3.0'	Subsurface	Target Area 2	Fuels, Oils	TPH	Modified EPA 8015
134-11-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 3	Solvents	VOCs	CLP RAS
134-11-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 3	Fuels, Oils	TPH, metals	Test Kit, XRF
134-11-3-S-V-DDMMYY*	3.0'	Subsurface	Target Area 3	Fuels, Oils	TPH, metals	Mod. EPA 8015, CLP RAS
134-11-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 3	Fuels, Oils	TPH, metals	Test Kit, XRF
134-11-0-S-V-DDMMYY*	0.0-0.5'	Surface	Target Area 3	Fuels, Oils	TPH, metals	Mod. EPA 8015, CLP RAS
134-12-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 3	Solvents	VOCs	CLP RAS
134-12-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 3	Fuels, Oils	TPH, metals	Test Kit, XRF
134-12-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 3	Fuels, Oils	TPH, metals	Test Kit, XRF
134-13-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 3	Solvents	VOCs	CLP RAS
134-13-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 3	Fuels, Oils	TPH, metals	Test Kit, XRF
134-13-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 3	Fuels, Oils	TPH, metals	Test Kit, XRF
134-14-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 4	Paints, solvents, cyaninde	VOCs, SVOCs, reactives	CLP RAS, Chapter 7 SW 846
134-14-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 4	Fuels, Oils	TPH, metals	Test Kit, XRF
134-14-3-S-V-DDMMYY*	3.0'	Subsurface	Target Area 4	Fuels, Oils	TPH, metals	Mod. EPA 8015, CLP RAS
134-15-3-S-V-DDMMYY	3.0'	Subsurface	Target Area 4	Paints, solvents, cyaninde	VOCs, SVOCs, reactives	CLP RAS, Chapter 7 SW 846
134-15-3-S-S-DDMMYY	3.0'	Subsurface	Target Area 4	Fuels, Oils	TPH, metals	Test Kit, XRF

TABLE 6-134-1

Summary of Recommended Samples
NAS Alameda Parcel 134

Sample Number	Sample Depth	Sample Type	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
134-16-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 5	Fuels, Oils	TPH	Test Kit
134-17-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 5	Fuels, Oils	TPH	Test Kit
134-18-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 5	Fuels, Oils	TPH	Test Kit
134-18-0-S-V-DDMMYY*	0.0-0.5'	Surface	Target Area 5	Fuels, Oils	TPH	Modified EPA 8015
134-19-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 5	Fuels, Oils	TPH	Test Kit
134-20-0-S-S-DDMMYY	0.0-0.5'	Surface	Target Area 5	Fuels, Oils	TPH	Test Kit
Z22-4-0-S-V-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Test Kit, XRF
Z22-5-0-S-V-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Test Kit, XRF
Z22-6-0-S-V-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Test Kit, XRF
Z22-7-0-S-V-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS

TABLE 6-134-1

Summary of Recommended Samples
NAS Alameda Parcel 134

Sample Number	Sample Depth	Sample Type	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z22-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Test Kit, XRF
Z22-7-0-S-V-DDMMYY*	0.0-0.5'	Surface	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Modified EPA 8015, CLP RAS
Z22-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS
Z22-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Test Kit, XRF

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Part of Parcel 134 is located in an area formerly known as Old Alameda Point; Old Alameda Point is part of the original peninsula of Alameda. Filling that occurred at the parcel was done on the western periphery of the parcel. Filling of this area began in approximately 1942 and was completed as of 1946; the ground level and grading have not changed significantly since that time.

Currently, three buildings (Buildings 372, 163, and 414) cover approximately 10 percent of the parcel. The remaining 90 percent is open space. The parcel area is presently used for chemical and material storage. Building 107 was formerly located on the parcel and has since been demolished. Underground storage tanks, sewer lines and fuel lines are present on this parcel and are shown on Figure 6-134-1.

Parcel 134 is located east of Installation Restoration (IR) Program Site 19 (incinerator), IR Site 11 (Building 14), and IR Site 7B (Building 162); south of IR Sites 4 (Building 360) and 3 (tanks); and west of IR Site 17 (Seaplane Lagoon). Documents suggest possible chemical migration concerns due to these IR Sites. No previous investigations have been conducted at Parcel 134, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 372

Building 372 was constructed in 1953 and has served as an engine testing facility since that time. Building 372 is constructed of concrete with a concrete floor and composite-construction roof. This building is in fair condition. Building 372 is a two-story building covering approximately 18,500 square feet. An extension of the building, located midway along the south wall, is used to store electrical equipment.

The steam pipes that run along the north edge of this building are insulated with potential ACM. An air quality permit was issued for turbine engine testing and solvent cleaning in Building 372.

Utilities located within and immediately surrounding this building include underground natural gas, sanitary sewer, storm sewer, telephone, electrical, steam, water, abandoned fuel, and industrial sewer lines, and overhead electrical lines. Two transformers are located in the open space south of Building 372.

Information collected during the EBS indicates that activities conducted within this building included engine testing. Significant chemical storage is documented to have occurred in the building. The north test cell is presently used for parts storage; fuels and lubricants were previously stored in the north test cell. During visual inspection, a 55 gallon drum of cleaning compounds was observed in the south testing cell. Two lubricating oil systems are located in a room on the first floor at the west end of the building. GAP Site 61 is also located in this building. At the time of visual inspection 55 gallons of oil, 165 gallons of empty aerosol cans, and 10 gallons of adhesive were being stored in this area. Three-hundred gallons of non-halogenated organic compounds were noted in Building 372 during the site inspection. The chemicals were being stored between test cells on the east side near an aircraft oil storage location. No staining was noted in this area at the time of the site inspection.

On the second floor, at the west end of Building 372, fuel and oil systems are located on the north and south side of the room. They are no longer in use. Approximately 20 percent of the floor is spotted with stains. To the northeast of this room lies another concrete room with a lubricating oil system; this system is on the west end of the room. These stained areas will not be sampled because they are located on the second floor, and are thus constitute only an industrial hygiene issue.

There have been numerous releases documented in and around Building 372. Both the north and south test cells are stained over 80 percent of the floor; there were no documented cleanup activities at either location. These stained areas are addressed in Target Area 1. A pinhole leak in a fuel line caused the release of unspecified amounts of JP-5. No cleanup was documented in the EBS files. A 3,000 gallon spill of aviation fuel occurred at Building 372. The response action resulted in the spill area being backfilled with clean soil. Another fuel spill occurred in the southwest corner of Building 372; information about the quantity released and cleanup of this spill was not available. This spill is addresses by Target Area 2. An oil/water separator is also present in this building and is used for disposal of water mixed with jet

fuels and/or oil. Currently, hazardous waste is taken to GAP Site 61 at the west end of the building on the first floor, and GAP site personnel subsequently remove the waste.

No incidents, such as fires, mishaps, flooding, or crashes, are documented to have occurred within or immediately surrounding Building 372.

Building 163

Building 163 was constructed in 1939 and currently serves as an area for aircraft overhaul and maintenance (Figure 6-134-1). Building 163 formerly served as part the Pacific Coast Borax Works, and is the only building remaining from that facility. This building is in fair condition. Building 163 is a one-story building constructed of brick with concrete floors and a composite roof. It covers approximately 12,000 square feet. The floor in this building was noted to be in poor condition during visual inspections. Insulation in Building 163 is documented to contain ACM. Air quality permits regarding abrasive blasting and freon recovery/recycling were issued for this building.

Utilities located within and immediately surrounding Building 163 include underground natural gas, sanitary sewer, storm sewer, telephone, electrical, steam, water, abandoned fuel, and industrial sewer lines, and overhead electrical lines.

Information collected during the EBS indicates that aircraft maintenance has been conducted within this building since the late 1940s. Metals, corrosives, petroleum products, halogenated organic compounds, paint and non-halogenated organic compounds are documented to have been stored in Building 163. A maximum of 1600 gallons of these chemicals were stored in the building. Small capacity chemical storage cabinets exist in Building 163 in the welding and machine shop areas. No information is available regarding past methods of chemical disposal.

Site reviewers noted a 30 foot by 50 foot black stain, of medium intensity, in the northwest corner of the building's machine shop. The concrete floor is in poor condition in the area of this stain. This staining is addressed by Target Area 3.

No incidents, such as fires, mishaps, flooding, or crashes, are documented to have occurred within or immediately surrounding Building 163.

Building 414

Building 414 was constructed in 1957 and has served as a hazardous materials storage area (Figure 6-134-1) since that time. This building is in fair condition. Building 414 has concrete floors and metal walls; it covers approximately 1,600 square feet.

Utilities located within and immediately surrounding Building 414 include underground natural gas, sanitary sewer, storm sewer, electrical, steam, water, abandoned fuel and industrial sewer lines, and overhead electrical lines.

Information collected during the EBS indicates that activities conducted within this building have consisted mainly of hazardous materials storage. An IWTP treating wastewater from the former plating shop in Building 360 is located in the northern part of Building 414. This IWTP is no longer in service, and will be investigated as part of the industrial waste sewer program. The contaminants potentially present in the wastewater are metals, corrosives, petroleum products, fuels, paints, and halogenated and non-halogenated organics. Quantities of release coating, ammonium hydrogen fluoride, caustic soda, caustic potash, isopropanol, paint stripper, and solvents are documented to have been stored in the northern-most compartment of Building 414. New blasting media (including plastic and red grit), plastic packing material, and 300 gallons of paint are stored in the two southern compartments; paint and solvents are stored only in the southern-most compartment. All material in this building are stored on pallets. A berm in the north most compartment separates the alcohol and release coating from other stored materials.

Based upon the visual inspection, the floors in Building 414 have sustained extensive staining from storage of lubrication oil. The staining on the floor of Building 414 is addressed by Target Area 4.

No incidents, such as fires, mishaps, flooding, or crashes, are documented to have occurred within or immediately surrounding this building.

Open Space

Open space covers approximately 90 percent of the parcel. The ground surface of the open space is completely paved. Approximately 90 percent of the paved area is surfaced with asphalt and 10 percent is covered with concrete. The pavement is generally in fair condition. Railroad tracks are located throughout most of the parcel open space. There are also two pre-treatment sites for wastewater and five pump

stations. Fifty thousand gallons of wastewater are handled daily at these two pretreatment sites. Based on EBS information, the wastewater pre-treatment process treats wastewater generated from operations conducted in the buildings located on Parcel 134. The contaminants potentially present in the wastewater are metals, corrosives, petroleum products, fuels, paints, and halogenated and non-halogenated organics.

Utilities located within and immediately surrounding the open space include underground natural gas, sanitary sewer, storm sewer, electrical, steam, water, abandoned fuel and industrial sewer lines, and overhead electrical lines. Two transformers are located in the open space, south of Building 372.

Former Building 107 was constructed in 1940 and served as a cafeteria. It was a temporary structure that covered approximately 6,100 square feet of the parcel. It is unclear, based on aerial photographs and documentation, when this building was demolished.

EBS information indicates that activities conducted within this open space included vehicle parking, drum storage, equipment parking, and general material, equipment, and chemical storage. EBS files indicate the presence of 40 to 50 gallons of paint in the southern portion of the parcel near Building 170 on Parcel 164.

GAP Site 59 is located in this open space. It is a fenced area between Buildings 163 and 414. There are approximately 1,200 gallons of petroleum products in storage tanks at this GAP Site. During visual inspection, extensive staining was noticed in this area, particularly around drip pans. This area is addressed by Target Area 5. Overflows from storage tanks in this area reportedly flow east to a drain which is reportedly connected to a UST.

The area surrounding Building 372 is used for storage. The ground surface is paved with asphalt that is in good condition. During the visual inspection, numerous storage tanks used for collection of oils were observed along the western perimeter of Building 372. An unknown piece of equipment, likely an oil/water separator or sump, was observed west of Building 372. This piece of equipment contained an unknown amount of an oily product. A documented fuel leak of approximately 100 to 200 gallons occurred in 1983 on the west side of Building 372; the documentation indicates that the spill was cleaned up immediately. Potential impacts from fuel storage and undocumented spills are addressed by Target Area 2.

No incidents, such as fires, mishaps, flooding, or crashes, are documented to have occurred in the open space.

Underground Storage Tanks

One abandoned underground storage tank is present at this parcel (no record regarding the tank number for this tank is available). This tank was installed in 1953 and is located west of Building 372. There is conflicting data regarding USTs on this parcel. The NAS Alameda UST Inventory identifies one 6,000-gallon UST located at Building 372 that was used to store waste gear oil. This tank was identified during the RFI. The EBS information identifies a 6,000-gallon UST at Building 372 used to store jet fuel. In addition, one unidentified UST at Building 163 is listed for this parcel. The contents, exact location, or installation date for this tank could not be determined during the EBS. The tank(s) is/are scheduled for closure. The available information did not identify why the tank(s) was abandoned. However, based on general comments made by NAS Alameda personnel, a tank was most commonly abandoned because it was leaking.

Parcel Boundary Conditions

Parcel 134 is bounded by Parcels 142, 147, 141, 140, 164, 200, 137, 135, 131, 133, and 143. Areas of concern among these adjacent parcel include IR Site 3 to the north, IR Site 4 to the east, IR Site 19 to the south, and IR Sites 7B, 11, and 17 to the west. All of these sites are located within 500 feet of Parcel 134. In addition, underground storage tanks are located at nearby parcels.

Proposed sampling as part of the investigation for IR Site 3 includes two boring and one monitoring well in the northern portion of Parcel 134. Additionally, proposed sampling for IR Site 19 includes one CPT/HydroPunch and one monitoring well along the eastern border of Parcel 134. If the investigations at the IR Sites reveal continued concerns at Parcel 134, then additional sampling on Parcel 134 may be appropriate.

RCRA Sites

This parcel includes five RCRA sites (GAP Site 59, GAP Site 61, an unidentified SWMU site, an unidentified AOC, and a 6,000 gallon RCRA UST located west of Building 372). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, of the five RCRA sites at this parcel, two sites (GAP Site 59 and the AOC) require further investigation. One site (GAP Site 61) does not require sampling. A response action is currently scheduled for the unidentified SWMU. Additional (confirmation

sampling) data are required for the SWMU before further sampling recommendations can be made. The UST will be investigated as part of the UST program. The tank was identified as a RCRA tank based on its inclusion in the RFI. A description of the tank is provided in the Underground Storage Tank subsection above. A brief description of each of the RCRA sites is provided below. The sampling proposed for the two sites that require sampling is described in the Target Areas and Compounds of Concern subsection.

GAP Site 59 is defined as Shop 96232, Building 163. It is located in the open space on the parcel in a fenced area between Buildings 163 and 414. Staining was noted during visual inspection, although there are no documented releases. The chemicals of concern include petroleum products and lubricating oil. Gap Site 59 is approximately 50 feet by 70 feet and contains both 55 and 30 gallon drums. Based upon the site inspection, this area is currently active. Because extensive staining was noted during the site inspection, additional investigation is proposed for this area in Target Area 5.

GAP Site 61 is defined as Shop 96232, Building 372. It is located in the oil filter room. There are no documented releases in this area. The chemicals of concern in this area include acetone, naptha with solvents (MEK), paint and thinner, TCA, and MX-4M solvent. GAP Site 61 is approximately 10 feet by 10 feet and contains 55 and 30 gallon drums and 5 gallon containers. This site is currently active. Because no staining was noted during the site inspection, no further investigation is required at this site.

The unidentified SWMU site is defined as the documented JP-5 fuel spill. The spill occurred when a UST overflowed. The site is located in the southwest corner of Building 372. The dimensions of the site are unknown. The chemical of concern associated with this site is JP-5 fuel. It is currently being investigated as part of the RCRA Corrective Action program. If confirmatory samples following soil removal indicate further investigation is required, then additional sampling may be proposed for this area.

The unidentified AOC site is defined as Test Cells 13 and 14 in Building 372. There have been documented releases of fuel in this area. Each test cell is 30 feet by 75 feet in size, and stores JP-5 fuel. Due to the known releases at these two test cells, additional sampling has been proposed in this area as part of Target Area 1.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 134, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-134-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

The one-time compliance program will determine whether further sampling or cleanup measures are required within the buildings on this parcel before transfer or lease can occur.

Once the data gaps in Table 6-134-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 134 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains five parcel-specific target areas and is also contained in a zone with two zone-wide target areas. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 22. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the

TABLE 6-134-2

Summary of Data Gaps
NAS Alameda Parcel 134

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Areas of concern among adjacent parcels include IR Site 3 to the north, IR Site 4 to the east, IR Site 19 to the south, and IR Sites 7B, 11, and 17 to the west. In addition, underground storage tanks are located at nearby parcels. Proposed sampling as part of the investigation for IR Site 3 includes two boring and one monitoring well in the northern portion of Parcel 134. Additionally, proposed sampling for IR Site 19 includes one CPT/HydroPunch and one monitoring well along the eastern border of Parcel 134.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks. • Incinerator.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-134-2

Summary of Data Gaps
NAS Alameda Parcel 134

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Building 372. • Western End of Building 372. • Building 163. • Building 414. • GAP Site 59.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• At least one abandoned underground storage tank is present at this parcel (no tank number available). There is conflicting data regarding UST(s) on this parcel. The NAS Alameda UST Inventory identifies one 6,000-gallon UST located at Building 372 that was used to store waste gear oil. This tank was identified during the RFI. The EBS information identifies a 6,000-gallon UST at Building 372 used to store jet fuel. In addition, one unidentified UST at Building 163 is listed for this parcel. The tank(s) is/are scheduled for closure.
Underground Utilities	• Natural gas, sanitary sewer, storm sewer, electrical, water, abandoned industrial sewer lines, and overhead electrical lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Active underground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-134-2.

- Target Area 1 (Building 372, RCRA AOC): This target area addresses the possible release of compounds of concern associated with fuel, oil, solvents, and lubricating oil within Test Cell 13, Test Cell 14, and the Preparation room, as indicated by staining in these areas. The size of this area on the first floor of Building 372 is approximately 10,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as suspect.

- Target Area 2 (Western End of Building 372): This target area addresses the possible release of compounds of concern associated with petroleum products related to storage of product in this area. Confirmation of cleanup of a known release in this area will also be accomplished by sampling this area. The size of this area adjacent to Building 372 is approximately 2,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential.

- Target Area 3 (Building 163): This target area addresses the possible release of compounds of concern associated with use and storage of metals, corrosives, petroleum products, halogenated organic compounds, paint and non-halogenated organic compounds throughout the building. The size of the stained area within Building 163 is approximately 1,500 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential.

- Target Area 4 (Building 414): This target area addresses the possible release of compounds of concern associated with storage of paint stripper and solvents within Building 414, primarily in the northern- and southern-most storage areas, as evidenced by staining in these areas. This target area is intended to investigate potential surface contamination from storage of chemicals in this building. Sampling for the underground lines associated with the IWTP will be addressed by IT Corp. The compounds of concern in this target area are TPH, VOCs, cyanide, and metals. The size of this area within Building 414 is approximately 1,000 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential.

- Target Area 5 (GAP Site 59, between Buildings 163 and 414): This target area addresses the possible release of compounds of concern associated with storage of petroleum products and lubricating oil, as

evidenced by staining at this GAP site. The size of this target area is approximately 2,500 square feet. The likelihood of environmental impacts having occurred within this target area is classified as potential.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling in this target area is proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

- Zone 22 Target Area 2 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. Five of the eight surface soil samples for this zone target area are located on this parcel. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The samples to be collected in this target area are listed in Table 6-134-1. The approximate sampling locations are shown on Figure 6-134-1.

Screening-Level Investigation

Several screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. Surface soil sampling (SOP 3), and subsurface Geoprobe soil sampling (SOP 14) will be performed in the target areas. Table 6-134-1 summarizes screening-level sampling and analysis for the parcel's target areas. Twenty surface soil samples and ten subsurface soil samples will be collected from approximate target areas. Locations for these samples are shown on Figures 6-134-1 and 6-134-2. Adjustments to the proposed locations

can be made if warranted by field conditions. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Target Area 1 (First Floor of Building 372): Seven subsurface soil samples and seven surface soil samples will be collected from Target Area 1. Samples will be collected in stain locations and beside storage containers. Potential compounds of concern are TPH, metals, and VOCs. Target Area 1 sampling locations are indicated in Table 6-134-1 and are shown on Figure 6-134-2.

Target Area 2 (Western End of Building 372): Three surface soil samples will be collected from Target Area 3. Samples will be collected at stain locations and beside storage containers. TPH is the compound of concern in this target area. Target Area 2 sampling locations are indicated in Table 6-134-1 and are shown on Figure 6-134-1.

Target Area 3 (Building 163): Three subsurface soil and three surface soil samples will be collected from Target Area 3. Samples will be collected at stain locations, beside storage containers, cabinets or drums, and when applicable, at cracks in the building foundation. Compounds of concern in this target area are metals, TPH, and VOCs. Target Area 3 sampling locations are indicated in Table 6-134-1 and are shown on Figure 6-134-1.

Target Area 4 (Building 414): Two surface soil samples will be collected from Target Area 4. Samples will be collected at stain locations, beside storage containers, cabinets or drums, and when applicable, at cracks in the building foundation. The samples from this target area will be analyzed for TPH, VOCs, and metals. The samples in Target Area 4 are indicated in Table 6-134-1 and are shown on Figure 6-134-1.

Target Area 5 (GAP Site 59): Five surface soil samples will be collected from Target Area 5. Samples will be collected at stain locations and beside storage containers or drums. TPH is the primary compound of concern in this target area. Metals will be analyzed for in one of the samples. Target Area 5 sampling locations are indicated in Table 6-134-1 and are shown on Figure 6-134-1.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-141

PARCEL 141 EVALUATION PLAN

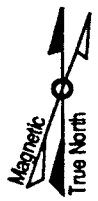
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 141 at NAS Alameda (Figure 6-141-1). The parcel, which is located in the southeastern portion of the base, is 2.7 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. Two zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-141-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 141, historical activities are discussed below.

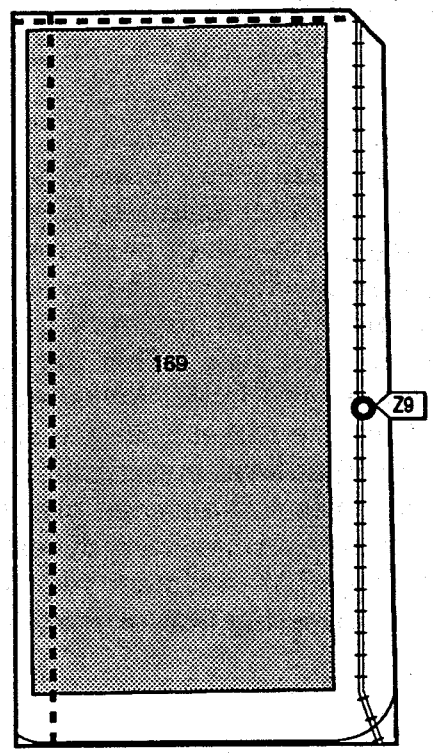
Background and Historical Activities

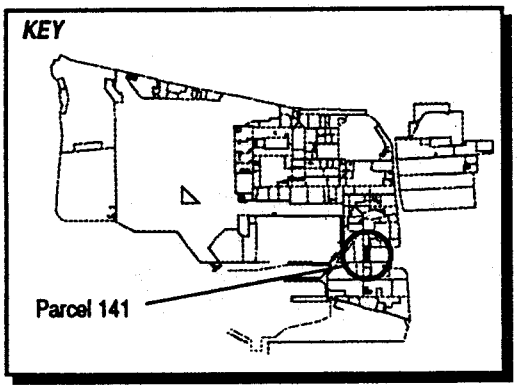
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 141, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

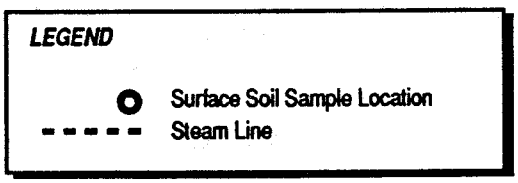
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels









1"= 125'

Figure 6-141-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

TABLE 6-141-1

Summary of Recommended Samples
NAS Alameda Parcel 141

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z22-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Fuels, Oils, PCBs	TPH, PCBs, Lead	Test Kits, XRF
Z22-9-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS

located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 169) covers 90 percent of the parcel. The remaining 10 percent is open space. The parcel area is presently is use as warehouse space. Utilities located within and immediately surrounding this building include sanitary, storm, and industrial sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines. Most of these services run north to south along the western edge of this parcel. Steam lines are the only utility actually shown to be located inside the parcel. This information was collected from CAD files provided by NAS Alameds.

Parcel 141 is located within 500 feet of three Installation Restoration (IR) Program sites (IR Sites 9, 13, and 19). Previous investigations have not been conducted at Parcel 141; therefore, no specific data regarding potential chemical occurrence are available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 169

Building 169 was constructed in 1946 to provide general warehouse operation space. This large building is in fair to good condition, and is approximately 87,000 square feet in area, with additional loft space inside. The building is constructed of wood framing with metal siding, concrete floor, and composite roofing.

Information collected during the EBS indicates that activities conducted within this building included miscellaneous material storage,

ordnance storage, minor forklift maintenance, and administrative activities.

Small quantities of oils and propane are stored on site and are utilized to maintain forklifts. Small quantities of waste oil may occasionally be generated during forklift maintenance activities. However, no waste oil is stored at this parcel. Small oil-like stains were located throughout the building interior, likely from forklift operation in the building. This staining is relatively minor on a concrete flooring surface, and will not be sampled as part of this PEP.

No other incidents (e.g., fires, flooding, crashes) are documented to have occurred within or immediately surrounding Building 169.

Open Space

Open space covers approximately 10 percent of the parcel. Approximately 50 percent of the paved area is surfaced with concrete, and 50 percent is covered with asphalt. Concrete paving is present to the north and immediately surrounding Building 169. No buildings or structures are documented to have formerly existed in the open space.

Railroad tracks run north-south along the eastern edge of the open space. No chemicals storage is documented to have occurred in the open space of this parcel. Small oily stains were noted on the surrounding open space. This staining is relatively minor. No other incidents (e.g. floods, crashes, or fires) are documented to have occurred within the open space on Parcel 141.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 141 is bounded by Parcels 134, 147, 153, and 140 to the north, east, south, and west, respectively. Railroad tracks are located along the eastern side of this parcel.

There is a potential impact at Parcel 141 due to waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some wastes generated by the refinery were disposed of in the nearby marsh

(e.g., Parcel 141 and other former marshlands). In addition, a portion of the fill underlying Parcel 141 was obtained from dredge material from the channel and turning basin during the construction of Pier 3; this fill material is reported to be potentially impacted.

Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 141 may be impacted by TPH and SVOCs. However, impacted soils are reported to be confined to depths below the water table and will not be addressed in this sampling plan.

No parcels contiguous with Parcel 141 are IR sites, therefore, no sampling is called for in this PEP in response to nearby IR sites. If the continuing investigations at the IR sites reveal a cause for concern, then additional sampling at Parcel 141 may be appropriate.

RCRA Sites

sThis parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 141, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-141-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns, lead-based paint, Installation Restoration sites, transformers, and asbestos. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 141 because no industrial buildings are present.

TABLE 6-141-2

Summary of Data Gaps
NAS Alameda Parcel 141

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 141.
Installation Restoration (IR) Sites	• Parcel 141 is located within 500 feet of three Installation Restoration (IR) Program sites (IR Sites 9, 13, and 19). IR Sites 9, 13, and 19 are located south, east, and northeast, respectively. Additional subsurface investigation relative to IR Site 9 and 13 is proposed by the IR contractor. Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 141 may be impacted by TPH and SVOCs. Impacted soils are reported to be confined to depths below the water table.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• Based on review of information obtained in the IRP and discussions with the IRP contractors, it appears that subsurface soils in the vicinity of Parcel 141 may be impacted by TPH and SVOCs. Impacted soils are reported to be confined to depths below the water table.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-141-2

Summary of Data Gaps
NAS Alameda Parcel 141

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• Railroad Tracks: This target area includes all current and former railroad track areas within or adjacent to the Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located in the eastern portion of Parcel 141. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead. • Incinerator: Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 may have been impacted by historical airborne releases of dioxins and furans from the incinerator fomerly housed in former Building 68. Building 68 is upwind of these parcels in prevailing wind conditions. No samples for this zone target area will be collected from Parcel 141.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.

TABLE 6-141-2

Summary of Data Gaps
NAS Alameda Parcel 141

Data Gap	Status/Description
Other	• A portion of the fill underlying Parcel 141 was obtained from dredge material from the channel and turning basin during the construction of Pier 3; this fill material is reported to be potentially impacted.

Once the data gaps in Table 6-141-2 are addressed and screening-level sampling results from the target area described below are compared to the appropriate screening levels, Parcel 141 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Two zone-wide target areas were identified for Parcel 141. No parcel-specific target areas were identified for this parcel. The zone-wide target areas are described in detail in the Zone Analysis Plan for Zone 22. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. The following target areas were identified based on possible impacts from activities described above involving potentially hazardous substances. Samples to be collected in these target areas are listed on Table 6-141-1, and are shown on Figure 6-141-1.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred. The zone-wide target areas include:

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling in this target area is proposed on this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

- Zone 22 Target Area 2 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One of the eight surface soil samples for this zone target area is located on this parcel. The proposed confirmation sample is located on an adjacent parcel. Soil samples will be collected from

the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target area is listed in Table 6-141-1. The approximate sampling location is shown on Figure 6-141-1.

Z22

SECTION 6-142

PARCEL 142 EVALUATION PLAN

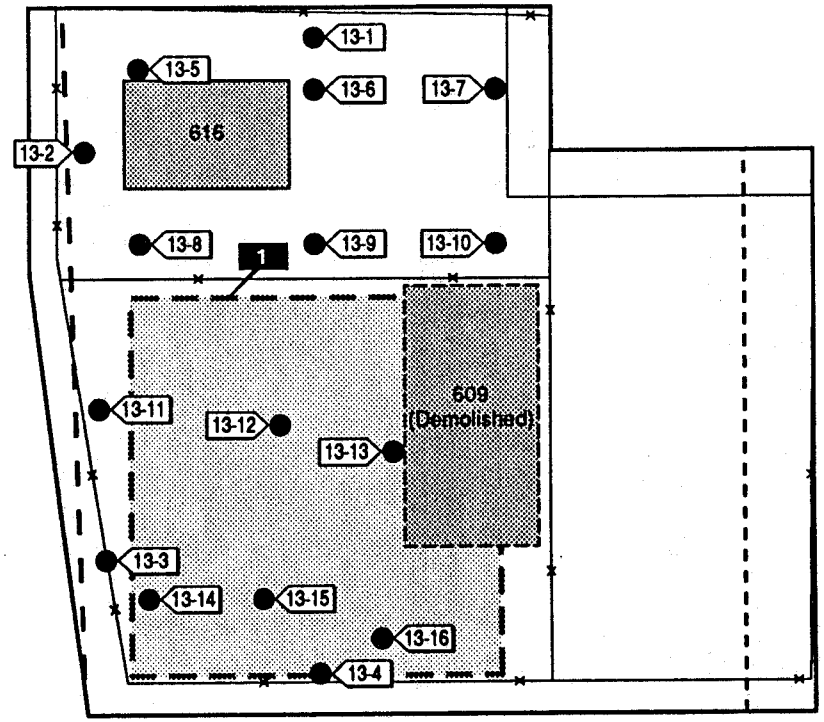
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 142 at NAS Alameda (Figure 6-142-1). The parcel, which is located in the southeastern portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site which is also an IR site (Site 19) and, therefore, is described in the Part B Permit as requiring an RFI. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. However, due to the ongoing IR investigation at this parcel, no sampling is called for by this PEP. No zone-wide samples will be collected from this parcel; zone-specific samples will be collected from adjacent parcels. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for evaluating Parcel 142, historical activities are discussed below.

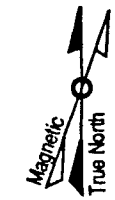
Background and Historical Activities

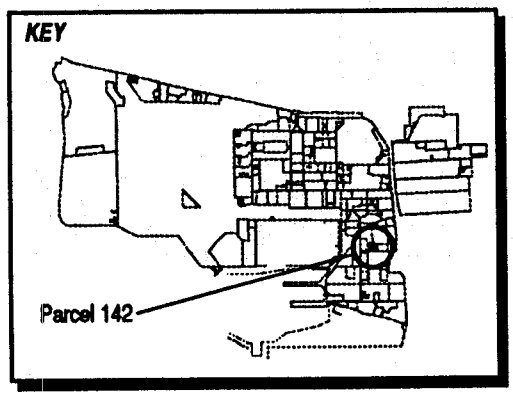
This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 142, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other potential areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as







LEGEND

- Target Area 1
- Fuel Lines in Use
- Storm Sewer Line
- Boring Location *(Canonie Environmental, Inc.)*

Note: *1.) Sampling of Target Area 1 is being addressed by the IR program. No sampling is called for in this PEP.*

1"= 90'

Figure 6-142-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.07.94

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 616

Building 616 was constructed in 1982 and currently serves as office space and a materials storage area. The building originally served as a hazardous materials storage area. This building is in good condition. It is a one-story building constructed with corrugated metal roofing, wood framing, drywall panels, and a concrete floor. The building floor plan covers approximately 1,800 square feet.

Utilities located in or immediately surrounding Building 616 include sanitary sewer, industrial sewer, and storm sewer, underground electrical distribution, potable water and fire protection water, and underground fuel lines.

No chemical storage, spills or staining was noted in Building 616 during the visual site inspection. No other incidents (e.g., fires, flooding, or crashes) have been documented to have occurred within or immediately surrounding Building 616.

Building 609 (Demolished)

Building 609 was constructed in 1975 and demolished 16 years later in 1991. This 11,000 square foot temporary building was used for engine parts storage. The location of this demolished building is shown on Figure 6-142-1. No other information regarding the use and construction of this former building is available.

Yard D-13

Hazardous Waste Storage Yard D-13 was established in 1984 and currently covers over 30,000 square feet. Sometime after 1992, the yard area was upgraded with the addition of a steel vaulted roof. Secondary containment berms have recently been added as well.

Hazardous wastes including corrosives, halogenated and non-halogenated organics, paints, metals, asbestos, PCBs, petroleum products, and various types of fuel have been historically and are currently stored in this area. The quantity of stored chemicals has exceeded one million gallons at times. The typical documented quantity stored (for the period of 1987 through 1992) is approximately 500,000 gallons. In 1993, 75,000 gallons were documented to be in

storage. Air quality permits were issued for an aboveground waste solvent storage tank and for an aboveground waste oil storage tank.

Several spills were documented for Yard D-13 during the period of 1989-1990. These spills include 50 gallons of nitric acid (1989), ten gallons of PD-680 (1990), ten gallons of poly paint (1990), an unknown amount of zyglow penetrant (1990), and 250 gallons of mixed oil and fuel (1990).

Open Space

The remaining open space (excluding Yard D-13) covers approximately 60 percent of the parcel. The open space is completely paved, mostly with asphalt and partially with concrete. The condition of the asphalt varies from new to very poor. Information collected during the EBS indicates that activities conducted within this open space included materials storage.

Various minor staining is documented in this open space. No other incidents (e.g., fires, flooding, crashes, etc.) have been documented to have occurred within this open space.

Underground Storage Tanks

Two underground storage tanks were formerly present at this parcel No record regarding the tank numbers, installation dates, removal dates, or capacity and material(s) stored is available for these tanks. No information is available regarding the integrity of the tanks. The former presence of these tanks were identified from EBS information. Investigation of these former tanks has not been scheduled.

Parcel Boundary Conditions

Parcel 142 is bounded by Parcels 134, 143, 146, and 147. While Parcel 142 is itself IR Site 19, it is also contiguous with IR Sites 4 and 13. IR Site 13 is located on adjacent parcels 146 and 147 and is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. IR Site 4 is Building 360, the engine overhaul facility and is located on Parcel 143. If continuing investigations at either of these contiguous IR sites reveal a cause for concern at Parcel 142, then additional sampling on this parcel may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with the objectives described in Section 1 of the Shell Workplan. This parcel includes one active RCRA site (Building 616 and Yard D-13). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this site requires further investigation. In addition, this site is listed in the Part B Permit and must be investigated as part of the RCRA Facility Investigation (RFI) for NAS Alameda. The require-ments for the RFI are described in detail in Section 8. The RCRA site at this parcel will be investigated as part of the IR program. This RCRA site includes Hazardous Waste Storage Yard D-13 and Building 616. The site has had several known releases (they are listed in the previous subsection describing Yard D-13). This site currently has an approximate storage capacity of 75,000 gallons. Chemicals of concern associated with this site include corrosives, halogenated and non-halogenated organics, paints, metals, asbestos, PCBs, petroleum products, and various types of fuel. Yard D-13 has been designated Target Area 1, but no sampling is proposed at this time, pending IR sampling results.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 142, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-142-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: asbestos, lead based paint, underground storage tanks, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with USTs, fuel lines, and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investiga-

TABLE 6-142-1

Summary of Data Gaps
NAS Alameda Parcel 142

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 142.
Installation Restoration (IR) Sites	• Parcel 142 is bounded by Parcels 134, 143, 146, and 147. While Parcel 142 is itself IR Site 19, it is also contiguous with IR Sites 4 and 13. IR Site 13 is located on adjacent parcels 146 and 147 and is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. IR Site 4 is Building 360, the engine overhaul facility and is located on Parcel 143. Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• Incinerator
Potential Parcel-Specific Release Areas	• Hazardous Waste Storage Yard D-13.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-144-1

Summary of Recommended Samples
NAS Alameda Parcel 144

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
144-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-8-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Modified EPA 8015, CLP RAS
144-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-9-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Modified EPA 8015, CLP RAS

*These are the suggested location for the confirmation samples. The actual locations will depend on field analytical results.

refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

The eastern area of this parcel was part of the original peninsula of Alameda. No filling activities have occurred in this area. Filling began in the western area of this parcel in approximately 1942. Prior to this time, this area of the parcel was inundated by San Francisco Bay. The parcel was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 616) and one structure (D-13, the Hazardous Waste Storage Yard) are present on the parcel. Building 616 covers approximately two percent of the parcel area. The remaining area is either open space or part of Yard D-13. The parcel open space area (other than Yard D-13) is presently used for maintenance equipment and vehicle parking. One building (Building 609) was formerly located on the parcel and has since been demolished. Historically, the entire parcel area has been used for materials storage. Underground fuel and sewer lines are present at this parcel and are shown in Figure 6-142-1.

Parcel 142 is identified as Installation Restoration (IR) Program Site 19. This parcel is also part of IR Site 13, and it is contiguous with IR Site 4. Previous investigations have been conducted at these IR sites. Specific data from 16 borings located on and near Yard D-13 are available. Soil samples from these borings were analyzed for metals, VOCs, and SVOCs. One SVOC exceeded its residential PRG. This compound was benzo(a)pyrene. It exceeded the residential PRG in Borings 13-6 and 13-9. The concentration of benzo(a)pyrene in Boring 13-9 also exceeded its industrial PRG. Figure 6-142-1 presents the approximate locations of the borings. Metals concentrations were compared to typical concentration ranges for soil at NAS Alameda as determined by PRC under CTO 121 Mod. 0001. Copper, lead, and magnesium exceeded the typical range, as indicated in *CLEAN Data Summary Report RI/FS Phase 1 and 2A* (PRC/JMM, 1993). These data, however, were collected during an investigation by Canonie and have not been independently verified.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

TABLE 6-142-1

Summary of Data Gaps
NAS Alameda Parcel 142

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Two underground storage tanks were formerly present at this parcel (no record regarding the tank numbers, installation dates, removal dates, or capacity and material stored for these tanks is available). Investigation of these former tanks has not been scheduled.
Underground Utilities	• Storm sewer, industrial sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

tion and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 142 because no industrial buildings are present. Once the data gaps in Table 6-142-1 are addressed, Parcel 142 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This parcel contains one/two/several parcel-specific target areas and is also contained in a zone with a zone-wide target area/zone-wide target areas.

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area/s. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone ZZZ. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Yard D-13): This target area is located over Hazardous Waster Storage Yard D-13. The size of this target area, shown on Figure 6-142-1, is approximate, and encompasses the entire storage area. Compounds or classes of compounds of concern possible within this target area include corrosives, metals, VOCs, SVOCs, PCBs, and petroleum products. The likelihood of environmental impact having occurred within this target area is classified as probable. No sampling is called for in this target area by this PEP; however, sampling investigations are currently underway in this area as part of the IR program. Additional sampling in this parcel may be necessary pending the results of the current IR investigations.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. No samples are proposed for the zone-wide

target area on Parcel 142. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

In addition, concerns pertaining to: industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the IR site status, must be resolved before this parcel can be reclassified from BRAC Category 6, leased, or transferred.

Z22

SECTION 6-143

PARCEL 143 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 143 at NAS Alameda (Figures 6-143-1 and 6-143-2). The parcel, which is located in the southeastern portion of the base, is approximately 8 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains 12 RCRA sites. None of these RCRA sites have been identified in the Part B Permit as requiring an RFI. This parcel contains IR Site 4 (Building 360). One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. However, due to the ongoing IR investigation at this parcel, no sampling is specified in this PEP. This parcel evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for evaluating Parcel 143, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 143, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration (IR) Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support

facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

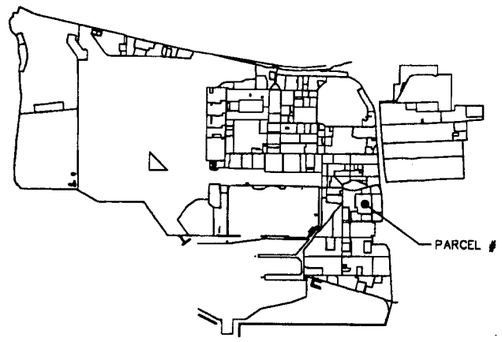
This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda. The ground level and grading have not changed significantly since the Navy acquired this area.

Currently, two buildings (Buildings 360 and 610) are present on the parcel. Building 360, a NADEP operated engine overhaul facility, and Building 610, a speed grinding facility, cover approximately 55 percent of the parcel area. The remaining 45 percent is open space. The open space has been used for material and drum storage, vehicle parking, and equipment parking. Prior to 1953, the entire parcel was used as an equipment storage area. Sewer lines are present at this parcel and are shown in Figure 6-143-1.

Building 360 on Parcel 143 is identified as Installation Restoration (IR) Program Site 4. This parcel is also within 500 feet of IR Sites 3 (Area 97 Aviation Gasoline Tanks), 7C (Service Station), 13 (Oil Refinery), and 19 (Yard D-13 Hazardous Waste Solvents). Previous investigations have been conducted at these IR sites. Specific data regarding chemical occurrence at Parcel 143 from investigations by Canonie Environmental, Inc., Environmental Research Group, Inc., and PRC are available, and are described in the previous and current investigations subsections of this PEP.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Three transformers are currently located at Parcel 143; two in the utility tunnel near column D-4, and one along the exterior west wall of Building 360. Seven PCB-containing transformers were removed from this parcel in 1988. Asbestos-containing insulation has been noted in this parcel on a steam line in the utility tunnel.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.



KEY PLAN

GENERAL LEGEND

- PARCEL OUTLINE
- B360-5 — EXISTING BORING LOCATION (Canonie Environmental, Inc.)
- MW360-2 — EXISTING MONITORING WELL LOCATION (Canonie Environmental, Inc.)
- B04-23 — PROPOSED SOIL BORING LOCATION
- MO4-5 — PROPOSED MONITORING WELL LOCATION
- CPT-S4-02 — PROPOSED CPT\HYDROPUNCH LOCATION
- B04-35 — PROPOSED SHALLOW SOIL SAMPLE LOCATION
- NPS-S4-3 — PROPOSED UTILITY SAMPLE LOCATION

SANITARY SEWER LINE LEGEND

- (2-14) ■ SANITARY SEWER MANHOLE & No.
- —SW— SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON
A.C. – ASBESTOS CONCRETE

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM LINE LEGEND

- —ST— STEAM LINE

INDUSTRIAL WASTE LINE LEGEND

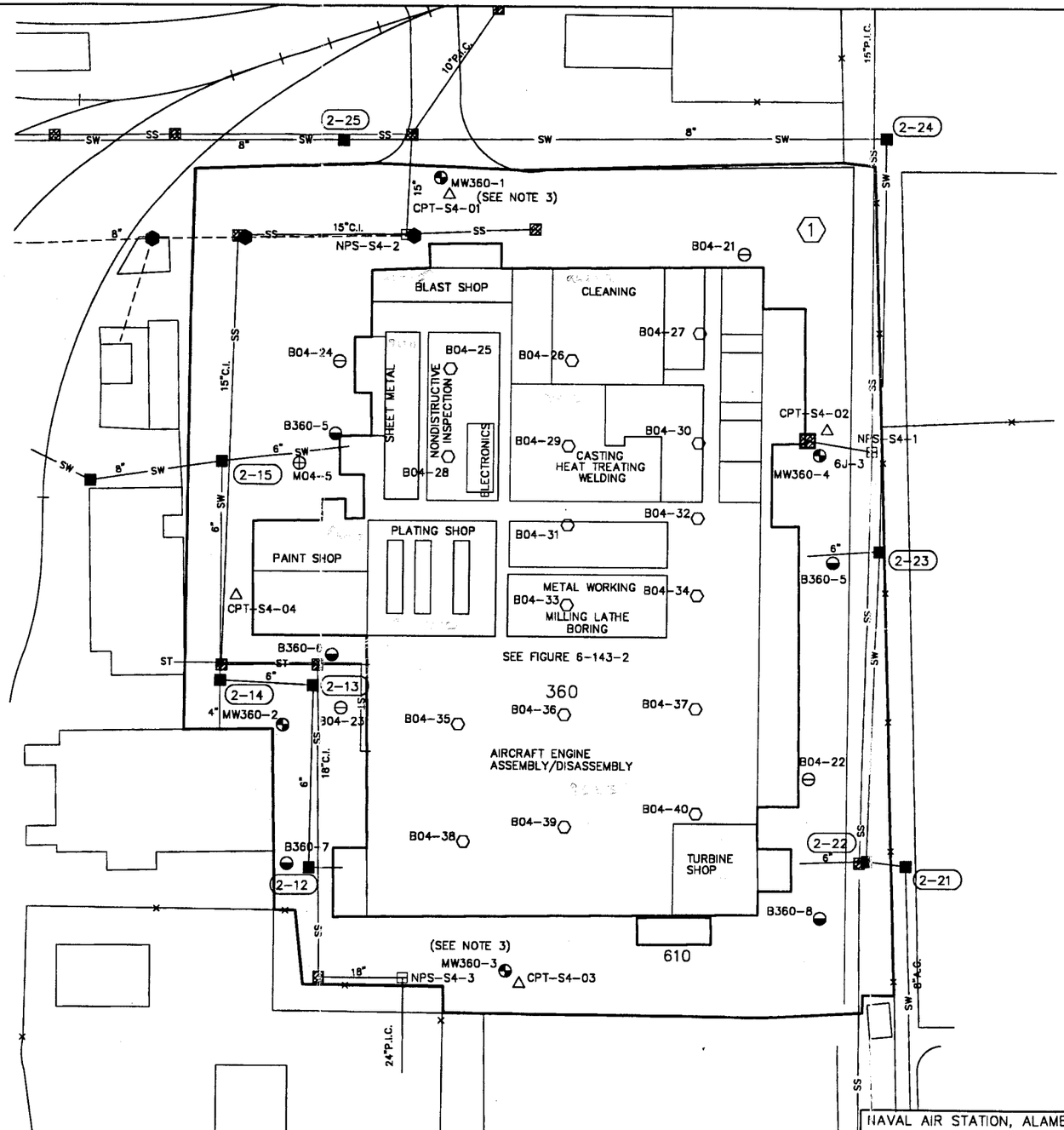
- ⬢ INDUSTRIAL WASTE MANHOLE
- – – – – INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

- 6J-3 ▩ MANHOLE
- ▩ CATCH BASIN
- —SS— STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE
P.I.C. – PAVED INVERT CORREGATED METAL



NOTES:

1) SAMPLING OF TARGET AREA 1 IS BEING ADDRESSED BY THE IR PROGRAM.

NAVAL AIR STATION, ALAMEDA

FIGURE 6-143-1
PARCEL 143
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590143.DWG	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)
SCALE AS NOTED	DATE: 3.07.95/2121.96.45 — SHEET 1 OF 1

Previous Investigations

Canonie Environmental, Inc. drilled nine soil borings located within Parcel 143 in 1990. Four of the borings were later converted to monitoring wells. A total of 110 soil sample were collected from these borings and were analyzed for metals, VOCs, and SVOCs. One SVOC, benzo(a)pyrene, was detected in concentrations exceeding its residential USEPA PRG in Boring 360-4. No other VOC or SVOC was found in excess of residential or industrial PRGs. Nine metals (e.g. arsenic, barium, chromium, cobalt, copper, nickel, sodium, and thallium) were detected at concentrations above the 95th percent upper confidence limit, as described in the SWAT report. All metal sample results fell within the expected range for native soils at NAS Alameda except for lead, which was detected at 1,460 mg/kg. However, this value is below the extreme range maximum of 3,000 mg/kg (expected and extreme ranges were determined by PRC under CTO 121 Mod. 0001). These data were presented in *CLEAN, Data Summary Report RI/FS Phase 1 and 2A* prepared by PRC and JMM (1993). Figure 6-143-1 identifies the approximate locations of these borings.

Environmental Research Group, Inc. collected 19 surface soil samples from beneath the plating shop in Building 360. These samples were collected between August 1982 and July 1983. Samples were tested for pH, cyanide, and various metals. The pH value ranged from 6.3 to 9.8. Cyanide was detected in eight of the 19 samples (all below residen-tial USEPA PRGs) with a maximum concentration of 118 mg/kg, below residential PRG; lead, nickel, and chromium were detected in the samples analyzed for various metals (as reported in *CLEAN, Data Summary Report RI/FS Phase 1 and 2A* by PRC and JMM, 1993). The exact locations of these sample is unknown.

PRC conducted two investigations at the plating shop in Building 360. These investigations were completed by the end of July 1992. In the first investigations, samples from 20 soil borings were collected from beneath the plating shop floor and analyzed form SVOCs, metals, and total cyanide. The approximate location of these borings are shown on Figure 6-143-2. Groundwater samples were also collected and analyzed for VOCs, SVOCs, TPH, metals, and cyanide. In addition, two samples of surface dust and residue were collected from horizontal surfaces inside the plating shop and analyzed for metals content. As reported in *CLEAN, Data Summary Report RI/FS Phase 2B and 3* (PRC/JMM, 1993), four surface soil samples contained only one SVOC and one surface soil sample (boring B04-09) contained three SVOCs. The maximum SVOC concentration detected in the surface soil sample was 1,900 µg/kg of fluoranthene in boring B04-09.

Six metals were identified as compounds of concern in the plating shop investigation: beryllium, total chromium, copper, lead, mercury, and nickel. Total chromium, copper, lead, and nickel were detected in all 20 samples. Total chromium concentrations ranged from 24.0 mg/kg to 1,060 mg/kg; copper concentrations ranged from 9.38 mg/kg to 99.6 mg/kg; lead concentrations ranged from 2.15 mg/kg to 68.5 mg/kg; nickel concentrations ranged from 25.6 mg/kg to 692 mg/kg. Beryllium was detected in ten samples at concentrations ranging from 0.165 mg/kg to 0.424 mg/kg. Mercury was detected in only on sample at 0.111 mg/kg. Cyanide was detected in eight of the 20 samples at concentrations ranging between 1 mg/kg and 3 mg/kg in six of the eight samples, and 16 mg/kg and 19 mg/kg in borings B04-9 and B04-16 respectively. Only beryllium and total chromium were detected above residential USEPA PRGs.

Wipe sample W04-01 was scraped from a stain near boring B04-01. It contained total chromium at a concentration of 83,900 mg/kg. Wipe sample W04-02 was a composite of dust collected from along the walkway between borings B04-15 and B04-19. It contained 2,110 mg/kg of total chromium. In response to these concentrations of total chromium, the Navy closed the plating shop. PRC performed follow-up wipe sampling and confirmed the previous findings of elevated levels of metals on surfaces within the plating shop.

Current Investigations

Based upon the work recommended in the previous investigations, additional soil borings, CPT studies, groundwater samples, and non-point source samples have been proposed for IR Site 360. Previous and current sampling locations are shown in Figure 6-143-1 for the entire parcel and Figure 6-143-2 for the plating shop in Building 360.

Twenty-two additional soil borings have been proposed for IR Site 4. Two of these 22 soil borings will be drilled through the floor of the plating shop; one boring will be drilled outside Building 360 at each corner of the building; sixteen borings will be drilled in a grid pattern through the floor of Building 360. Three samples will be collected from each of the 22 soil borings, one at the surface, one at 2.5 feet bgs, and one at 5.0 feet bgs. All soil samples will be analyzed for VOCs (including BTEX), SVOCs, TPH, metals, and cyanide.

Four CPT sampling locations have been proposed for Parcel 143. The four CPT sampling points will be located on each side of the site in a roughly rectangular grid pattern. A HydroPunch groundwater sample will be collected from the second water bearing zone at each CPT sampling point. Groundwater samples will be analyzed for VOCs

(including BTEX), SVOCs, TPH, metals, and general chemical characteristics including total dissolved solids. Three additional shallow monitoring wells and up to four additional deep monitoring wells have been proposed at this IR site.

Three non-point source samples will be collected from storm drain catch basins at Parcel 143. Samples will be analyzed for VOCs (including BTEX), SVOCs, TPH, metals, and cyanide.

An industrial wastewater treatment plant (IWTP) was installed in Building 414 (located on Parcel 134) to treat effluent generated by the plating shop in Building 360. The wastewater was clarified and then pH-adjusted prior to discharge to the industrial sewer system. The IWTP is no longer in operation. Two 6-inch underground lines carried effluent from the plating shop across Parcel 143 open space to Building 414. These lines are currently abandoned. The IWTP had the following effluent permit exceedances between 1987 and 1990: cadmium six times in 1987, once in 1988, and once in 1989; chromium three times in 1989 and three more times in 1990; cyanide three times in 1987 and once in 1988; nickel twice in 1987; phosphorous once in 1989; silver twice in 1987; zinc once in 1990; and total organic compounds were exceeded once in 1990. Underground sewer lines are currently being addressed by IT Corporation.

Building 360

Building 360 was constructed in 1953 and serves as an aircraft engine and air frame overhaul facility. The condition of this building ranges from fair to poor. This building covers approximately 180,000 square feet. It is constructed of concrete floors, concrete and stucco walls, and a composition roof over an older tar and gravel roof.

Utilities located within and immediately surrounding this building include sanitary, industrial, and storm sewers; underground electrical distribution lines; water lines; and steam lines.

Information collected during the EBS indicates facilities within this building included a paint shop, a sheet metal/metal spray shop, a non-destructive testing investigation (NDI) shop, a blast shop, a welding, casting, and heat treating shop, a cleaning shop, a machine shop, and an engine assembly/disassembly shop. A former plating shop is also located in Building 360. The plating shop area has been closed off from all personnel since the detection of elevated metals concentrations in this area. These shops are discussed individually below.

Plating Shop. Information collected during the EBS indicates that activities conducted within the plating shop included chromium and cyanide bath plating. These types of industrial processes typically involve the use or generation of chemicals and wastes including chromium and cyanide bath wastewater, caustics, permanganate cleaning solvents, hydrochloric acid, nitric acid, paint remover, phosphoric acid, sodium hydroxide, and rust corrosion remover. Disposal of wastewater was accomplished by discharging to the Building 360 industrial wastewater treatment plant. These processes occurred within the plating shop from the 1950's to about 1992. The plating shop is currently inactive. A documented release of 180 gallons of cyanide solution occurred on October 7, 1987, due to a worker error. The solution drained into the sump.

Paint Shop. Information collected during the EBS indicates that paint spray booths and drying ovens have been used in the paint shop since the early 1960's. Currently there are four spray booths, one oven, and one solvent degreasing tank. Stains were noted in front of two spray booths. This shop has a concrete floor with small cracks. A GAP site and several chemical storage cabinets are located in this shop. Chemicals currently stored in this area include approximately 50 gallons of paint, 100 gallons of aluminum powder, 500 gallons of 1,1,1-TCA solvent, and 25 gallons of WD-40 oil. Hazardous wastes currently stored in this shop include five gallons of MEK and two drums storing empty paint cans. No floor drains were noted in this area.

Sheet Metal/Metal Spray Shop. Information collected during the EBS indicates that metal defect testing and repair work have been conducted on the ground floor of this shop. Metal spay operations have been conducted on the mezzanine level of this shop. Both these operations have been occurring in this area shop since the early 1970's. This shop has a concrete floor with small cracks. Four oxygen tanks used in the metal spray process are located on the mezzanine. Several small stains were noted in front of the metal spray booths on the mezzanine. Several chemical storage cabinets are located in this shop. Chemicals currently stored on the ground floor area include small quantities (less than three gallons) of acetylene, epoxy, zinc chloride, diethylenetriamine, and hysol aerospace coating and larger quantities of metal processing oil (100 gallons), lapidary compound (50 gallons), dry cleaning solvent (50 gallons), and release coating compound (20 gallons). Chemicals currently stored on the mezzanine area include small quantities (less than ten gallons) of acetylene, contact cement, layout dye, and spray paint. Three hundred and fifty pounds of metal coating spray are also located on the mezzanine. Hazardous wastes

stored in this shop included a 55-gallon drum of aluminum oxide blasting grit. No floor drains were noted in this area.

NDI Shop. This shop is used to investigate the integrity of various metal parts using non-destructive techniques. Investigative techniques include magnetic particle inspection, eddy current inspection, X-ray analysis, and the application of metal penetrant (ZL-37 Zyglow penetrant). The electronic investigation techniques are performed in a separate room. This shop has a concrete floor with small cracks. Large stains/spills were noted around each of the three penetrant applicators. Several chemical storage cabinets are located in this shop. Chemicals currently stored in this area include approximately 100 gallons of penetrant, 100 gallons of penetrant remover (2-methyl-2,4 pentanediol), five gallons of developer (1,1,1-trichloroethane), 12 gallons of layout dye, and 20 gallons of alcohol. Penetrant and penetrant remover are distributed from tanks (two tanks for each compound) and in spray cans (about 25 pounds of each compound). Hazardous wastes produced in this shop include wasted paper products, empty aerosol cans, and spent batteries (dry and alkaline). Two floor drains are located in this area.

Blast Shop. Information collected during the EBS indicates that aluminum oxide, glass bead, plastic bead, grain abrasive, and water blasting have been conducted in the blast shop. This shop contains seven aluminum oxide blasting booths, two plastic bead blasting booths, and one grain blasting and one glass bead blasting booth. The shop also contains a water blasting booth and two hot water dip tanks. This shop has a concrete floor with small cracks. Two sump pumps are located in this shop. These sumps drain to the industrial sewer system. No chemicals storage was observed in this area during site inspection. A GAP site for spent blasting grit is located in this shop. At the time of inspection, this GAP site contained two 55-gallon drums, one full and the other half full.

Welding, Casting, and Heat Treating Shop. Information collected during the EBS indicates that welding, casting, and metal treating processes have occurred in this shop since the early 1960's. Heat treating ovens, a quench tank, and a large Epsen vacuum furnace and sump are located in this shop. Small oil stains were located in front of most of the machinery in this area. Three larger stains were noted within this shop (the largest was a black stain approximately 100 square feet in size). This shop has a concrete floor with small cracks. Several chemical storage cabinets are located in this shop. A portion of this shop was formerly part of the cleaning shop. Fumes, steam, and chemicals would, on occasion, back up through the floor drains from the cleaning shop into the welding shop. In response to this problem,

these drains were plugged. Chemicals currently stored in this area include limited quantities of oxygen, acetylene, argon, brazing flux with fluorides, welding flux, brazing filler, and other welding compounds. One floor drain was noted in this area.

Cleaning Shop. Information collected during the EBS indicates that several large cleaning tanks and booths are located and have been in use in the cleaning shop since the early 1960's. This shop is used to clean and strip various types of metal parts. Currently there are approximately 35 tanks or booths located within this shop. These include acid and base dip tanks, descaling tanks, and paint and rust remover tanks. Heavy staining is present throughout this shop. This shop has a concrete floor with small cracks. Chemicals currently stored in this area include approximately 400 gallons of trichloroethane, 1,300 gallons of phosphoric acid, 2,600 gallons of sodium hydroxide, 2,600 gallons of nitric acid, 2,600 gallons of F0606 paint remover, 1,300 gallons of dry cleaning solvent, 1,300 gallons of Turco 4008 desealer, and 3,900 gallons of Turco 4181L. At least five floor drains collect wastewater generated within this shop from hot and cold water rinse tanks and steam cleaning tanks. These drains discharge to the industrial sewer system.

Machine Shop. Information collected during the EBS indicates that grinding, lathing, laser cutting, milling, boring, and other metal machining activities have occurred in the machine shop since the early 1960's. Several stains were noted around these machines. This shop has a concrete floor with small cracks. Several chemical storage cabinets are located in this shop. Chemicals currently stored in this area include approximately 100 gallons of coolant, 50 gallons of various oils and lubricants, three gallons of cutting oil, six gallons of rust preventative, and smaller quantities of adhesives, primers, tapping fluids, trichlorotrifluoroethane, penetrating oil, actithane activator, WD-40, layout oil, nitrogen, and helium.

Engine Assembly/Disassembly Shop. Information collected during the EBS indicates that engine assembly and disassembly have occurred in this shop since the early 1970's. Seventeen stains were noted within this area during site inspection. The average stain was approximately ten square feet in size. This shop has a concrete floor with small cracks. The southeast corner of this shop is used for turbine repair. The roof leaks over this part of the shop. A hot oil bath tank is located in the turbine repair area. Several chemical storage cabinets are located in this shop. Chemicals currently stored in this area include small quantities (less than 10 gallons) of solvents, hydraulic fluid, penetrating oils, molybdenum disulfide lubricant, magnesium oxide powder, layout dye, primer, assembly fluid, and other similar compounds.

Approximately 30 cubic feet of Mobil DTE oil are stored in this shop in two reservoirs.

The total permitted chemical inventory for Building 360 is approximately 600,000 gallons of halogenated and non-halogenated organic compounds, metals, paints, petroleum products, corrosives, and fuels. The IWTP within Building 360 has an approximate inventory of 1,170 gallons of corrosives (all stored in tanks).

The total permitted hazardous waste inventory within Building 360 is approximately 1,300 gallons of halogenated and non-halogenated organic compounds, metals, paints, petroleum products, corrosives, fuels, and cyanide. Building 360 has an approximate inventory of 900 gallons of waste sludge (stored in a dedicated sludge tank).

Air quality permits have been issued for spray booths, dryers, degreasers, abrasive blasting, finishing, solvent/chemical cleaning, dipping tanks, magnetic particle inspection, halon fire protection system, and electrophoretic coating operations.

Utilities located within and immediately surrounding this parcel include sanitary, industrial, and storm sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines. A utility tunnel is located beneath Building 360. This tunnel runs the length of Building 360 in a north to south direction. The tunnel is constructed of concrete and has six-foot high walls. The tunnel contains electrical, steam, and water lines. Three high voltage substations (with transformers) are located in this tunnel. Asbestos-containing materials used for pipe insulation are located in this tunnel. Light staining is present along the tunnel floor. A sump pump is located on the northern end of the tunnel.

Building 360 is equipped with several separate heating-ventilation-air conditioning (HVAC) systems. These systems may have been impacted by dust and residue from the industrial processes occurring within this building. The area occupied by Building 360 was formerly open space used for material storage. Prior to that, the Pacific Coast Borax Works were located in this area.

No other incidents such as fires or flooding, are documented to have occurred within Building 360.

Building 610

Building 610 (also known as the machine shop annex) was constructed in 1979 and houses a grinding facility. Building 610 is in generally good

condition. This building is constructed with a reinforced concrete foundation, concrete floors, metal walls, and a composition roof. It covers approximately 2,000 square feet. Industrial processes occurring within this building include various types of metal grinding and machining. Currently, two grinding machines are present. Stains are present on the building's floor.

Open Space

The open space covers approximately 45 percent of the parcel. The open space is completely paved. Approximately 90 percent of this area is paved with concrete and 10 percent is covered with asphalt. The pavement is in generally fair condition.

In 1902, the Pacific Coast Borax Works began operations in a four-story plant at the location where Building 360 now stands. No evidence of this facility remains on Parcel 143.

EBS information indicates that activities conducted within this open space include vehicle parking on the west side of the parcel, container storage along the south side of the parcel, loading areas on all four sides of Building 360, fork lift parking and recharging on the southwest side of Building 360, and operation of two hazardous waste accumulation areas (GAP Site 52, located on the west side of Building 360, and GAP Site 57A, located on the north side of Building 360). These GAP sites are discussed further in the RCRA Sites subsection below.

Five aboveground storage tanks are located in the open space. One tank, which is abandoned, is located along the western side of Building 360 and has an approximate capacity of 500 gallons. The other three tanks each have an approximate capacity of 2,000 gallons and are located north of Building 360. These three tanks are in good condition and are surrounded by a concrete berm. A chemical processing tank and sump, used for pH adjustments, are located north of Building 360. This tank and sump are probably associated with activities in the cleaning shop in Building 360.

Minor staining was noted on the concrete all around Building 360. Prior to the construction of Building 360 in 1953, the open space area was used for equipment storage. Potentially impacted sanitary, storm, and industrial sewers exist on Parcel 143. The storm sewers on Parcel 143 formerly discharged industrial sewage from Building 360 into the Seaplane Lagoon prior to the construction of an industrial sewer system at NAS Alameda.

Underground Storage Tank

One underground storage tank (UST) exists at Parcel 143 and is associated with Building 163. No other information is available regarding USTs at this parcel.

Parcel Boundary Conditions

Parcel 143 is bounded by Parcels 132 and 133 to the north, Parcels 144 and 145 to the east, Parcels 146 and 142 to the south, and by Parcel 134 to the west. Parcel 143 (which contains IR Site 4) is located within 500 feet of IR Sites 7C, 13, and 19. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. If the continuing investigation at these IR sites reveal a cause for concern at Parcel 143, then additional sampling on this parcel may be appropriate.

Activities of concern on adjacent Parcel 142 include the present operation of a permitted hazardous waste storage yard (Yard D-13). Activities of concern on Parcel 134 include the operation of a engine test facility (Building 372) and hazardous waste storage at Buildings 163 and 414. Past activities of concern on Parcel 145 include the former operation of a gasoline service station and car wash.

RCRA Sites

This subsection identifies RCRA sites and requirements associated with these sites on the parcel, consistent with the objectives in Section 1 of the Shell Workplan. This parcel includes 12 RCRA sites (SWMU/GAPs 1, 49A, 50, 51, 52, 53, 55, 56, 57A, 58, 80, and one number unknown). Eight of these sites are active and four have been removed. Of the eight reported active sites, only four were identified during the site inspection. All of the RCRA sites are, or were, located in, or along the perimeter of, Building 360. These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, the 12 RCRA sites at this parcel do not require sampling because the sites are paved, and/or staining was not noted at any of the sites by site inspectors. A brief description of each of the RCRA sites is provided below.

Site SWMU/GAP 1 was located in shop 96234 and did not have any known releases. This site has been removed. The former storage capacity of this site is unknown. The chemicals of concern associated with this site included aluminum oxides.

Site SWMU/GAP 49A was located in shop 96212 and did not have any known releases. This site has been removed. The former storage capacity of this site is unknown. The chemicals of concern associated with this site included aluminum oxides and aluminum chloride.

Site SWMU/GAP 50 was located in shop 96223 and did not have any known releases. This site has been removed. The former storage capacity of this site is unknown. The chemicals of concern associated with this site included glass blasting grit and chromic acid.

Site SWMU/GAP 51 is located in shop 96225 and has not had any known releases. This site is currently active and was identified during the EBS site inspection. Storage at this site includes 5-gallon containers and aerosol cans. The chemicals of concern associated with this site include aerosol paint, epoxy paint, and paint thinner.

Site SWMU/GAP 52 is associated with shop 96231 but is located along the western exterior wall of Building 360. No known releases have occurred at this site. This site is currently active and was identified during the EBS site inspection. Storage at this site includes 55-gallon drums, 30-gallon drums, and aerosol cans. The chemicals of concern associated with this site include lubrication and engine oil, JP-5 fuel, PD-680 solvent, and aerosol paint.

Site SWMU/GAP 53 is located in shop 96225 and has not had any known releases. This site is documented as being currently active but was not identified during the EBS site inspection. Storage at this site includes 55-gallon drums and 30-gallon drums. The chemicals of concern associated with this site include Alseal 518, Sermetal J, and Sermetal 196.

Sites SWMU/GAP 55 and SWMU/GAP 56 are located in shop 96215 and both sites have not had any known releases. Both these sites are documented as being currently active but only site SWMU/GAP 55 was identified during the EBS site inspection. Storage at each site includes 55-gallon drums and large bags. The chemicals of concern associated with each site include glass and plastic blasting grit and aluminum oxides.

Site SWMU/GAP 57A is associated with shop 96215 but is located along the northern exterior wall of Building 360. No known releases have occurred at this site. This site is currently active and was identified during the EBS site inspection. Storage at this site includes various sized bins. The chemicals of concern associated with this site include those associated with various types of blasting grit.

Site SWMU/GAP 58 is located in shop 96211 and has not had any known releases. This site is documented as being currently active but was not identified during the EBS site inspection. Storage at this site includes 55-gallon drums and aerosol cans. The chemicals of concern associated with this site include aerosols (Turco Dy-check developer and remover).

Site SWMU/GAP 80 was located in shop 96223 and did have a known release. Approximately 180 gallons of cyanide were released into a sump in October 1987. This site has been removed. The former storage capacity of this site is unknown. The chemicals of concern associated with this site included cyanide.

An additional SWMU site with an unknown GAP number is located at the pH unit of Building 360. This site is documented as being currently active but was not identified during the EBS site inspection. The storage capacity of this site is unknown. The concerns associated with this site include pH adjusting chemicals.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 143, consistent with the objectives described in Section 1 of the Shell Workplan. The data collected for this parcel indicate that there are no remaining data gaps. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-143-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines are also addressed separately. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with USTs, and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other

TABLE 6-143-1

Summary of Data Gaps
NAS Alameda Parcel 143

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 143 (which contains IR Site 4) is located within 500 feet of IR Sites 7C, 13, and 19. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. Additional subsurface investigation relative to IR Sites 4 and 13 are proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• Former Incinerator.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-143-1

Summary of Data Gaps
NAS Alameda Parcel 143

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• (Whole Parcel): No sampling is called for in this target area; however, sampling investigations are currently underway in this parcel as called for by the IR program. The IR program calls for soil sampling in the open space area of this parcel and from underneath Building 360.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One underground storage tank (UST) exists at Parcel 143 and is associated with Building 163. No other information is available regarding the UST at this parcel.
Underground Utilities	• Sanitary, industrial, and storm sewers; underground electrical distribution lines, and water lines identified. A utility tunnel also exists under Building 360.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 360. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-143-1 are addressed, Parcel 143 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone with a zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 22. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. No sampling will be conducted at this parcel for the parcel-specific target area, because additional sampling is proposed as part of the IR program. No sampling will be done on this parcel for the zone-wide target area, because the zone samples are located on adjacent parcels.

- Parcel 143 Target Area 1 (Whole Parcel): No sampling is called for in this target area; however, sampling investigations are currently underway in this parcel as part of the IR program. The IR program calls for soil sampling in the open space area of this parcel and from underneath Building 360. Currently, several shallow soil samples, soil borings, and CPT/HydroPunch sample locations are specified for this site. Additional sampling in this parcel may be necessary pending the results of other current IR investigations.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. However, the samples proposed for the zone-wide target area are located on adjacent parcels; no sampling in this

target area is proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, the IR site, and USTs must be resolved before this parcel can be reclassified from BRAC Category 6, leased, or transferred.

SECTION 6-144

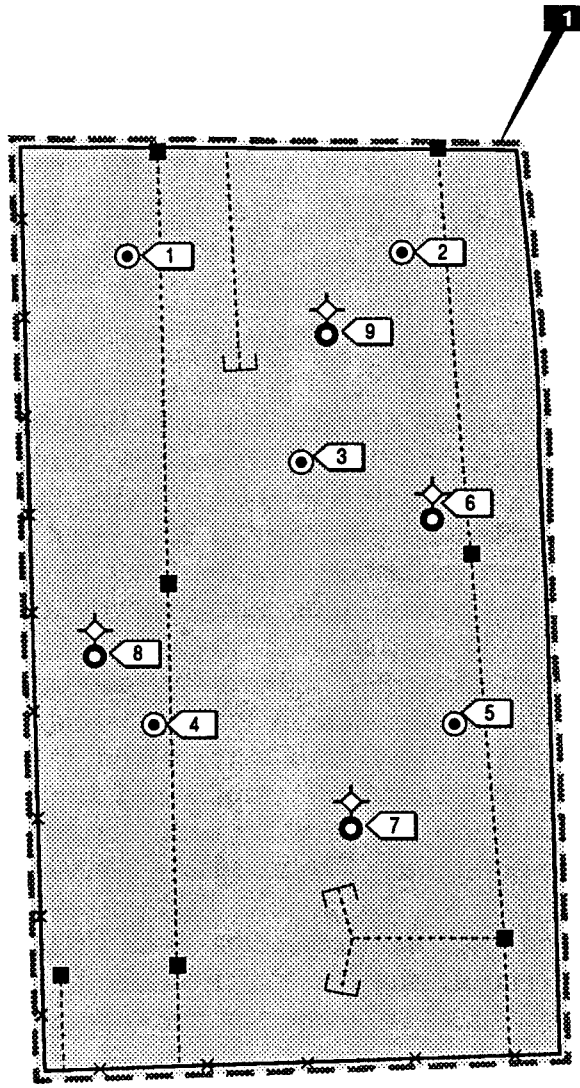
PARCEL 144 EVALUATION PLAN

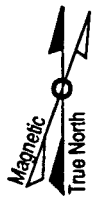
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 144 at NAS Alameda (Figure 6-144-1). The parcel, which is located in the southeastern portion of the base, is approximately 4.5 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific target investigation area (target area) has been identified on this parcel. No zone-wide target areas have been identified. Sampling procedures called for in the screening-level investigation in this area include soil gas sampling, subsurface soil sampling, and surface soil sampling. Table 6-144-1 provides the complete list of samples and analyses prescribed by this plan. This sampling has recently been conducted and no significant concerns were identified. The sampling results are documented in the parcel-specific EBS for the parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 144, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 144, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.





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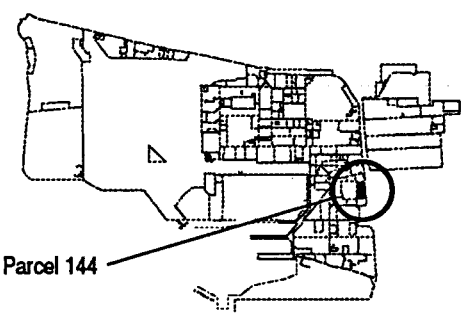


LEGEND

- Target Area 1
- Sewer Line
- Capped
- Soil Vapor Survey Location
- Surface Soil Sample Location
- Subsurface Soil Sample Location
- Catch Basin

1"= 125'

Figure 6-144-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

TABLE 6-144-1

Summary of Recommended Samples
NAS Alameda Parcel 144

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
144-1-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
144-2-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
144-3-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
144-4-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
144-5-3-V-S-DDMMYY	3.0'	SVS	Vapor	Target Area 1	Solvents	VOCs	GC
144-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 145, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22. This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda.

Currently, no buildings or structures are located on the parcel, and the parcel consists entirely of open space. The open space is presently in use as recreational area. Approximately 50 Quonset huts apparently utilized for Marine Corps housing were formerly located on this parcel (Buildings 201 through 260). Because of the proximity of these former buildings to the surrounding industrial area, it is likely that chemicals may have been used or stored in some of these former buildings. Sewer lines are present at this parcel and are shown in Figure 6-144-1.

Parcel 144 is located within 500 feet of five Installation Restoration (IR) Program sites (IR Sites 3, 4, 7C, 13, and 19). Previous investigations have been conducted at each of these IR sites. Previous investigations at IR Site 7C have extended into Parcel 144. Specific data regarding chemical occurrence at this parcel are not available. Current investigations at IR Sites 4 and 19 both call for sampling in or very near to Parcel 144. The Pacific Coast Oil Company Refinery, which operated from 1879 to 1903 on NAS property (now identified as IR Site 13), is located less than 500 feet south of Parcel 144 and therefore may be of concern. This site is being investigated under the IR program.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP. Potential environmental concerns within parcel open space and buildings are described in detail below.

TABLE 6-144-1

Summary of Recommended Samples
NAS Alameda Parcel 144

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
144-8-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-8-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-8-4-S-V-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-9-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-9-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Modified EPA 8015, CLP RAS
144-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Test Kit, XRF
144-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Paints, pesticides	SVOCs, pesticides	CLP RAS
144-9-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Acids, Bases	Reactives	Chapter 7, SW 846
144-9-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Fuels, Oils	TPH, Metals, PCBs	Modified EPA 8015, CLP RAS

*These are the suggested location for the confirmation samples. The actual locations will depend on field analytical results.

Buildings 201-223, 226-227, 230-232, 236-237, and 240-260 (Demolished)

These buildings were constructed in 1945 and were each 1,002 square feet in area and constructed of wood and metal. These buildings were demolished by 1953, with the following exceptions.

- Building 223: This building was used as a maintenance shop and was demolished by 1970.
- Buildings 252 and 257: These buildings were used as navy exchange guest houses and were demolished in 1976.
- Buildings 244-246: These buildings were Quonset huts demolished in 1977.

Open Space

The entire parcel area is currently open space used for recreational activities. The ground surface is almost completely covered with grass; the remaining fraction is paved with concrete. Based on aerial photo review this parcel has had unpaved areas since the 1940s. This open space area is shown on Figure 6-144-1. Three transformers of unknown type (e.g., wet or dry type) and PCB content are located on this parcel. Utilities located within and immediately surrounding this open space include underground sanitary sewer, storm sewer, and potable and fire protection water lines, and overhead electrical lines.

No documented staining or spills have occurred in the open space. No other incidents (e.g., fires, mishaps, flooding, or crashes) are documented to have occurred within the parcel.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground storage tanks are or may have been present at this parcel

Parcel Boundary Conditions

Parcel 144 is bounded by Parcels 132, 143, and 145. Main street borders Parcel 144 along the east. Concerns on adjacent parcels include several

fuel storage tanks and associated fuel lines (the lines are currently abandoned) just south of the parcel boundary in Parcel 145.

Parcel 143 contains IR Site 4 (Building 360). Limited sampling is called for in this PEP in response to this IR site. Parcel 145 contains IR Site 7C (a former service station) that has had documented releases of various petroleum products. Previous investigations (by Canonie) indicate that Parcel 144 has not been affected by IR Site 7C. If the continuing investigations at the IR sites reveal a cause for concern at Parcel 144, then additional sampling on Parcel 144 may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 144, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-144-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently ongoing to address the following data gaps for this parcel: radiological concerns, transformers, and Installation Restoration Sites. Sampling and imaging associated with sewer lines is also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6. No Industrial Hygiene (IH) sampling is required for Parcel 144 because no buildings are present.

As noted earlier, Parcel 144 has an open space area that is landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only intensive-use

TABLE 6-144-2

Summary of Data Gaps
NAS Alameda Parcel 144

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at this parcel
Installation Restoration (IR) Sites	• IR Sites 3, 4, 7C, 13, and 19 are located within 500 feet of Parcel 144. PEP sampling has been performed at Parcel 144. In addition, current investigations at IR Sites 4 and 19 have proposed sampling in or very near to Parcel 144.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Open Space used by industrial facilities.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-144-2

Summary of Data Gaps
NAS Alameda Parcel 144

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, water, and overhead electrical lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) or intermediate-use areas (e.g., existing unpaved parking lots or roadways where records indicate long-term pesticide use to control weeds) will be sampled for pesticides. Therefore, pesticide sampling has been proposed for Parcel 144.

Once the data gaps in Table 6-144-2 are addressed and screening-level sampling results from the target areas described below are compared to PRGs and background concentrations, Parcel 144 may be reclassified from BRAC category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area. The nature and location of the parcel-specific target area was evaluated to determine field investigation and sampling strategies. Final sample locations were determined in the field based on visual observation and accessibility. The following parcel-specific target area was identified based on the potential release areas described above and listed in Table 6-144-2.

- Target Area 1 (Open Space): Target Area 1 extends over the entire parcel area. Compounds or classes of compounds of concern possible within this target area include solvents, SVOCs, PCBs, metals, pesticides, petroleum products, and cyanide. This target area has been identified based on its unknown former use, combined with its proximity to the surrounding industrial area, and the former presence of structures that are commonly used for storage. The likelihood of environmental impact having occurred within this target area is classified as potential. Samples to be collected in this Target Area are listed on Table 6-144-1.

Screening-Level Investigation

Several screening-level techniques were employed to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. These techniques included soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), and surface soil sampling (SOP 3). As stated earlier the proposed sampling at this parcel has recently been completed, and no significant concerns were identified.

Table 6-144-1 summarizes screening-level sampling and analysis recommended for the target area on Parcel 144. Five soil vapor samples, four surface soil samples, and four subsurface soil samples were collected from the approximate locations shown on Figure 6-144-1. Results of sampling and analysis are provided in the parcel specific EBS for this parcel..

The surface soil samples were collected as close to the former soil horizon as possible. This horizon is expected to coincide with the bottom of any topsoil placed in this open field. Sampling was conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization will utilize some of the screening technologies discussed above at a higher density as well as the following technologies not previously discussed: HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-145

PARCEL 145 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 145 at NAS Alameda (Figure 6-145-1). The parcel, which is located in the southeastern portion of the base, is approximately two acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1. No RCRA sites are located on this parcel. A portion of this parcel is identified as IR Site 7C and another portion is identified as part of IR Site 13. One parcel-specific target investigation area (target area) has been identified on this parcel. However, due to the ongoing IR investigation at this parcel, no sampling is called for in this PEP. To provide a basis for evaluating Parcel 145, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 145, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 146, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

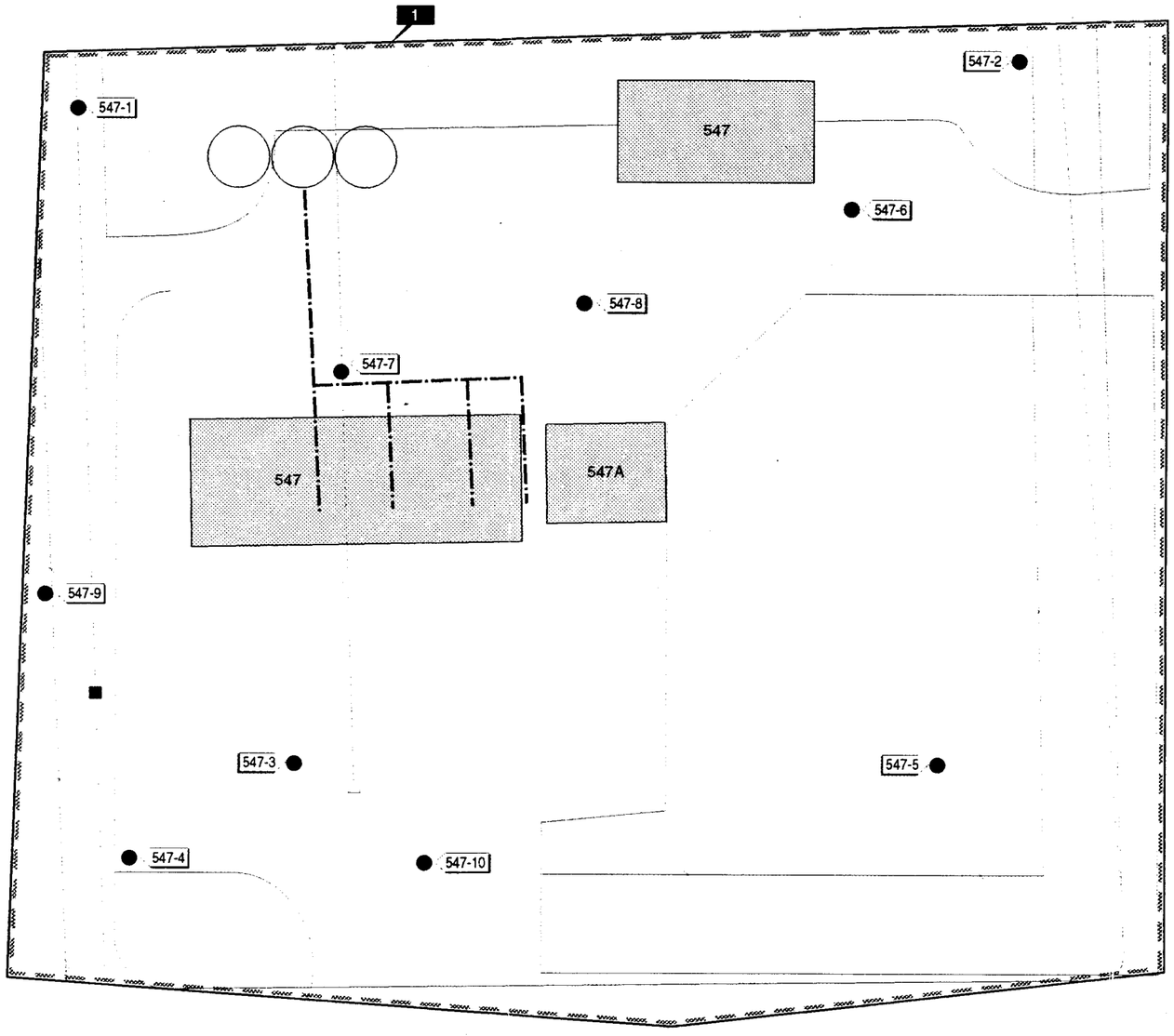
This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda. The ground level and grading have not changed significantly since this parcel became part of NAS Alameda.

Currently, two buildings (Building 547 and Building 547A) and one structure (Structure 547) are present on the parcel. Buildings 547 and 547A combined cover approximately five percent of the parcel area. The remaining area is open space. The parcel area was used as a gasoline service station and car wash. These facilities were operated by the Navy Exchange. Several Quonset huts were formerly located on the parcel and have since been demolished.

Parcel 145 is identified as Installation Restoration (IR) Program Site 7C. This parcel is also part of IR Site 13, and it is adjacent to IR Site 4. Previous investigations have been conducted at these IR sites. Specific data from ten borings located within the parcel are available. Soil samples from these borings were analyzed for metals, pesticides, VOCs, and SVOCs. Several SVOCs and VOCs were detected in concentrations exceeding PRGs. Benzo(a)pyrene exceed the residential PRG in Boring 547-5; however, it did not exceed the industrial PRG. Methylene chloride exceeded the residential and industrial PRG in Boring 547-3. The detection limit for benzene exceeded the industrial PRG in two borings (Borings 547-3 and 547-8), and the detection limit for 1,2-dichloroethane also exceeded the industrial PRG in Boring 547-8. Metals concentrations were compared to typical concentration ranges for soil at NAS Alameda as determined by PRC under CTO 121 Mod. 0001. Zinc, lead, and magnesium exceeded the typical range, as indicated in *CLEAN Data Summary Report RI/FS Phase 1 and 2A* (PRC/JMM, 1993). These concentrations were found in boring 547-7 for zinc, 547-5 for lead, and 547-1 and 547-2 for magnesium. Refer to Figure 6-145-1 for approximate boring locations. These data, however, were collected during an investigation by Canonie and have yet to be independently verified.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.



LEGEND

- Target Area 1
- Fuel Lines Abandoned
- Sewer Line
- Capped
- Boring Location *(Canonie Environmental, Inc.)*
- Catch Basin

Note: *1.) Sampling of Target Area 1 is being addressed by the IR program. No sampling is called for in this PEP.*

1"= 45'

Magnetic
True North

Figure 6-145-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.13.94

Building 547

Building 547 is an abandoned car wash constructed of Plexiglas, with corrugated metal walls and roof. The floor is concrete. No other information is available regarding this building.

Building 547A

Building 547A is a former gasoline service station operated by the Navy Exchange. This building housed the service station bathrooms and the cashier. The station operated from 1971 through 1980. The building is constructed of concrete block, steel, and glass. The building is currently abandoned. No chemical storage, spillage or staining is documented in this building.

Structure 547

Structure 547 encompasses the service station pumping islands. The gasoline meters have been removed. The islands are abandoned. Four concrete islands remain and are covered by a metal roof supported by steel columns.

Open Space

The open space covers approximately 90 percent of the parcel. The open space is 70 percent paved, (mostly with asphalt and with some concrete) and 30 percent unpaved). The asphalt is in generally good condition. The remaining open space is grass-covered. EBS information indicates that activities conducted within this open space included materials storage, vehicle washdown, vehicle parking, and drum storage. Prior to 1970, there were several Quonset huts located on the parcel. The activities associated with these buildings are unknown. Services and utilities located within the open space include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and abandoned underground fuel lines. Various minor staining is documented in the open space around the fueling islands.

Underground Storage Tanks

Three inactive underground storage tanks are present at this parcel (Tanks 547-1, 547-2, and 547-3). The tanks were installed in 1971 and are located north of Building 547. The tanks were used to store leaded gasoline and have capacities of 12,000 gallons, each. These tanks are

scheduled to be removed. The available information did not identify why the tanks were abandoned. However, based on general comments made by NAS Alameda personnel, tanks were most commonly abandoned because they were leaking.

Parcel Boundary Conditions

Parcel 145 is bounded by Parcels 144, 147, 214, and 146. Main Street runs north to south along the parcel's eastern boundary. While Parcel 145 is itself IR Site 7C, it is also part of IR Site 13 and IR Site 4. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903, and IR Site 4 is Building 360, the engine overhaul facility. If the continuing investigations at either of these two IR sites reveal a cause for concern at Parcel 145, then additional sampling on this parcel may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 141, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-145-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns, lead-based paint, Installation Restoration sites, transformers, and asbestos. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

TABLE 6-145-1

Summary of Data Gaps
NAS Alameda Parcel 145

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 145.
Installation Restoration (IR) Sites	• Parcel 145 is IR Site 7C, and is also part of IR Site 13 and near IR Site 4. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903, and IR Site 4 is Building 360, the engine overhaul facility. Additional subsurface investigation relative to IR Sites 4 and 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified that affect Parcel 145.
Potential Parcel-Specific Release Areas	• (Entire Parcel): Due to elevated concentrations of various compounds throughout this parcel, as identified in previous IR site investigations, the entire parcel is identified as Target Area 1.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-145-1

Summary of Data Gaps
NAS Alameda Parcel 145

Data Gap	Status/Description
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• Tanks 547-1, 547-2, and 547-3 are inactive and scheduled to be removed.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• Abandoned, underground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

No Industrial Hygiene (IH) sampling is required for Parcel 145 because no industrial buildings are present.

Once the data gaps in Table 6-145-1 are addressed, Parcel 145 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

One parcel-specific target area was identified for Parcel 145. No zone-wide target areas were identified for this parcel. The zone-wide target areas are described in detail in the Zone Analysis Plan for Zone 22. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. The following target areas were identified based on possible impacts from activities described above involving potentially hazardous substances. Samples to be collected in these target areas are listed on Table 6-145-1, and are shown on Figure 6-145-1.

In addition, concerns pertaining to asbestos, lead-based paint, underground lines, and radiological issues must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred. The zone-wide target areas include:

This subsection of the PEP discusses the specific parcel target area. The nature and location of this area was evaluated to determine field investigation and sampling strategies. The following target area was identified based on possible impacts from activities described above involving potentially hazardous substances.

- Target Area 1 (Entire Parcel): Due to the elevated concentrations of various compounds throughout this parcel, as identified in previous IR site investigations, the entire parcel is being identified as Target Area 1. Compounds or classes of compounds of concern possible within this target area include VOCs, SVOCs, and petroleum products. Environmental impacts have been confirmed within this target area. No sampling is called for in this target area by this PEP; sampling investigations are currently underway in this area as part of the IR program. Additional sampling in this parcel may be necessary pending the results of the current IR investigations.

SECTION 6-146

PARCEL 146 EVALUATION PLAN

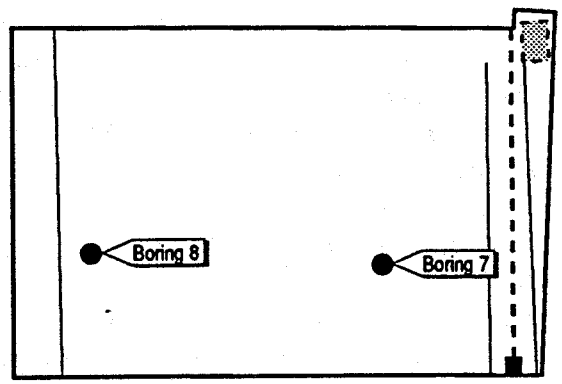
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 146 at NAS Alameda (Figure 6-146-1). The parcel, which is located in the southeastern portion of the base, is 1.8 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. However, no zone-wide samples will be collected from this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 146, historical activities are discussed below.

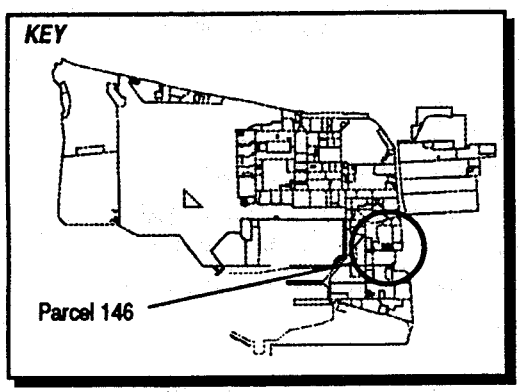
Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 146, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigative phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 147, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data





LEGEND

- Storm Sewer Line
- Existing Soil Boring Location
- Catch Basin

Note: *Collect all Subsurface Soil Samples from just above the Water Table.*

1"= 125'

Figure 6-146-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/AMR/06.28.94

TABLE 6-146-1

Summary of Previous Investigations
NAS Alameda Parcel 146

Chemical Compound	Industrial PRG (ppb)	Residential PRG (ppb)	Concentration 0.5 to 1 feet (ppb)	Concentration 2.5 to 3 feet (ppb)	Concentration 4 to 4.5 feet (ppb)	Concentration 8.5 to 9 feet (ppb)	Concentration 13.5 to 14 feet (ppb)
Boring: BOR-7							
Methylene Chloride	22,000	39,000		31	12	14	14
Acetone	9,200,000	13,400,000		7	8	6	9
Toluene	280,000	280,000		260	9	14	36
Naphthalene	80,000	80,000	<340	49	59	<400	
Pentachlorophenol	7,100	24,000	640	270	1000	170	
Phenanthrene	–	–	<340	94	<380	<400	
Fluoranthene	1,600,000	41,000,000	<340	170	<380	<400	
Pyrene	1,200,000	31,000,000	<340	160	<380	<400	
Benzo(a)anthracene	1,200	3,900	<340	84	<380	<400	
Chrysene	120,000	390,000	<340	130	<380	<400	
Benzo(b)fluoranthene	1,200	3,900	<340	95	<380	<400	
Benzo(k)fluoranthene	1,200	3,900	<340	110	<380	<400	
Benzo(a)pyrene	120	390	<340	120	<380	<400	
Indeno(1,2,3-cd)pyrene	1,200	3,900	<340	90	<380	<400	
Benzo(g,h,i)perylene	–	–	<340	100	<380	<400	
Boring: BOR-8							
Methylene Chloride	22,000	39,000		21	19	22	11
Acetone	9,200,000	13,400,000		6	8	7	29
Toluene	280,000	280,000		8	18	54	13

evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda.

Currently, no buildings or structures are located on the parcel; it consists entireley open space. Structure 298 was formerly located on this parcel. The parcel is presently used for vehicle parking. A review of aerial photographs revealed that the space has been used for vehicle parking since the 1947. There has been no documented storage or use of hazardous materials. Fuel and sewer lines are present at this parcel and are shown in Figure 6-146-1.

Parcel 146 is part of Installation Restoration (IR) Program Site 13. The parcel is also located within 500 feet of three other IR sites (Sites 4, 7C, and 19). Previous investigations have been conducted at and near this parcel as part of the IR site investigation program. Specific data regarding potential chemical occurrence in this area are available.

Results from two core boring retrieved as part of an earlier IR site investigation at Parcel 146 are available. Table 6-146-1 lists the industrial and residential PRGs for the analyzed compounds from the two known borings. Benzo(a)pyrene is the only compound to exceed its residential PRG, but below its industrial PRG. If the continuing investigations at IR Site 13 reveal an additional cause for concern at Parcel 146, then additional sampling on this parcel may be appropriate.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Structure 298 (Demolished)

Structure 298, a small weather station, was constructed in 1946 on a 300 square foot area in the northeast corner of the parcel. The structure was demolished in 1989. No incidents (e.g., fires, crashes, or spills) are documented to have occurred within or immediately surrounding this former building.

Open Space

The open space is currently used for vehicle parking. The ground surface is completely paved with asphalt. Services and utilities located within and immediately surrounding this open space include sanitary and storm sewers, and potable and fire protection water distribution lines. No chemical storage or use is documented to have occurred in this open space. No incidents (e.g., fires, crashes, or spills) are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 146 is bounded by Parcels 142, 143, 145, and 147. Concerns on adjacent parcels include a JP5 fuel release on the eastern side of Building 397 in Parcel 147. The release area is located within 50 feet of the boundary with Parcel 146. Cleanup has been performed in response to this spill. Three fuel storage tanks located near Building 547 just across the boundary between Parcels 146 and 145. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 146, then additional sampling on this parcel may be appropriate.

The Pacific Coast Oil Company Refinery operated from 1879 to 1903 on property now identified as IR Site 13. IR Site 13 encompasses Parcel 146. If the continuing investigation at this IR site reveals a cause for concern at Parcel 146, then additional sampling on this parcel may be appropriate. No IR site related sampling is currently proposed at Parcel 146.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 146, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-146-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 146 because no buildings are present.

Once the data gaps in Table 6-146-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 146 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 146. No parcel-specific target areas were identified for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as

TABLE 6-146-2

Summary of Data Gaps
NAS Alameda Parcel 146

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 146.
Installation Restoration (IR) Sites	• Concerns on adjacent parcels include a JP5 fuel release on the eastern side of Building 397 in Parcel 147. The release area is located within 50 feet of the boundary with Parcel 146. Cleanup has been performed in response to this spill. Three fuel storage tanks located near Building 547 just across the boundary between Parcels 146 and 145. The Pacific Coast Oil Company Refinery operated from 1879 to 1903 on property now identified as IR Site 13. IR Site 13 encompasses Parcel 146. Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor, but not on this parcel.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-146-2

Summary of Data Gaps
NAS Alameda Parcel 146

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• Incinerator: Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 may have been impacted by historical airborne releases of dioxins and furans from the incinerator fomerly housed in former Building 68. Building 68 is upwind of these parcels in prevailing wind conditions. No samples for this zone will collected in Parcel 146.
Potential Parcel-Specific Release Areas	• No potential release areas identified
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

potential. The samples proposed for the zone-wide target area are located on adjacent parcels.

In addition, concerns pertaining to underground lines, radiological issues, and the IR site status must be resolved before this parcel can be reclassified from BRAC Category 6, leased, or transferred.

Z22

SECTION 6-147

PARCEL 147 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 147 at NAS Alameda (Figures 6-147-1 and 6-147-2). The parcel, which is located in the southeast portion of the base, is 3.6 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains one active RCRA site and two RCRA closure sites. The active RCRA site on Parcel 147 has not been identified in the Part B Permit as requiring an RFI. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-147-1 provides the complete list of samples and analyses prescribed by this plan.

Releases associated with IR Site 13 (The Former Pacific Coast Oil Refinery), fuel storage, and aircraft engine testing have historically impacted the open space of this parcel. Soil and groundwater sampling results have been compiled in a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, titled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 1 and 2A*. Ongoing (follow-up) sampling is being performed by the IR contractor.

Because of the ongoing IRP site investigation at this parcel, only zone-wide sampling will be conducted in the screening-level investigation at this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment requirements. To provide a basis for the proposed investigation of Parcel 147, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 147, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

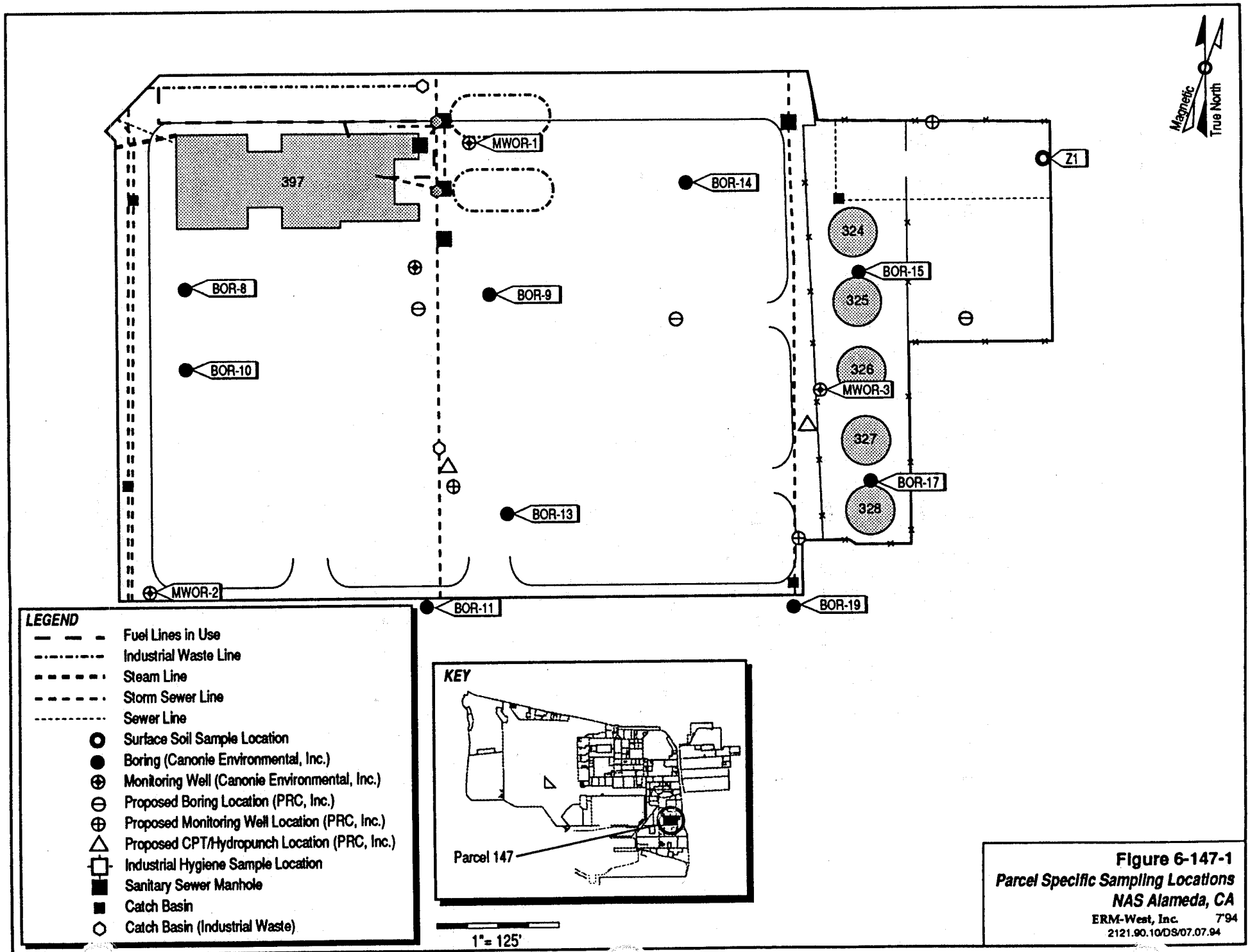


Figure 6-147-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.07.94

TABLE 6-147-1

Summary of Recommended Samples
NAS Alameda Parcel 147

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z22-1-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 1	Incinerator Emissions	Dioxins/Furans	EPA 8280/SAS B

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 148, 149, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Most of this parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda. The filling that occurred at the parcel was done on the western periphery of the parcel. Filling of this area began in approximately 1942 and was completed as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building covers approximately five percent of the parcel. The remaining 95 percent is open space. The eastern most part of the parcel is in use as a material storage area. The rest of the open space is undeveloped. This parcel encompasses part of the MWR (morale, welfare, and recreation) parking lot (which is currently in use for material storage), five concrete storage tank pads, an oil/water separator, and storage crates. Underground fuel and sewer lines are present on this parcel and are shown on Figure 6-147-1.

Parcel 147 is part of Installation Restoration (IR) Program Site 13. Previous investigations have been conducted at Parcel 147 and specific data regarding potential chemical occurrence are available. Parcel 147 is also located near IR Sites 4, 7C, 9, 10B, and 19.

Previous investigations have assessed conditions in the open space at Parcel 147. Follow-up detailed evaluations are being conducted by the IR contractor. As part of a former screening-level sampling effort summarized in the 1993 PRC report, a total of 281 soil samples have been collected different depths from 22 soil borings and 5 monitoring wells throughout IR Site 13. This investigation was conducted by Canonie Environmental, Inc. in 1990. Soil and groundwater samples

were analyzed for metals, PCBs, VOCs, SVOCs, PAHs, pesticides, and TPH. Nine of the soil borings (BOR-8, BOR-9, BOR-10, BOR-11, BOR-13, BOR-14, BOR-15, BOR-17, and BOR-19) and four of the monitoring wells (MW-1, MWOR-1, MWOR-2, and MWOR-3) are located on or adjacent to Parcel 147 (Figure 6-147-1).

The 1993 PRC report indicated that all metals and organic compounds were found at concentrations below USEPA's January 1994 industrial and residential PRGs. No residential or industrial PRGs were found for Beta-BHC, Di-n-butylphthalate, or 2-methylnapthalene. The pesticide Beta-BHC was detected only in BOR-18 at 3.5 µg/kg between 10.5 and 11 feet. The semivolatile compound Di-n-butylphthalate was detected in BOR-11, BOR-13, BOR-15, BOR-17, BOR-19, MWOR-2, and MWOR-3; the concentration detected was greatest in BOR-13 at 12,000 µg/kg between 0.5 and 1 feet. The PAH 2-methylnapthalene was detected in BOR-9, BOR-15, BOR-17, and BOR-19; the concentration detected was greatest in BOR-19 at 17,000 µg/kg between 11 and 11.5 feet.

Groundwater sampling results from the four monitoring wells on Parcel 147 indicate that most detected compounds in the groundwater were below USEPA's December 1993 MCLs, while most organic compounds were above USEPA's December 1993 MCLs.

The IR contractor has proposed follow-up sampling for the open space of Parcel 147 including three borings, two CPT/HydroPunch locations and three monitoring wells as shown in Figure 6-147-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials (ACM) on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 397

Building 397 was constructed in 1958 and continues to serve as engine testing cells and an aircraft overhaul plant services facility. This building was renovated between 1980 and 1981. This one-story building is constructed of concrete cinder blocks with a tar/gravel roof. The floor is paved with concrete. The building covers approximately 17,400 square feet.

Utilities located within and immediately surrounding Building 397 include sanitary sewer, storm sewer, electrical, steam, potable water, fuel and industrial sewer lines, and overhead electrical lines. The piping in Building 397 was formerly insulated with ACM; renovation or removal actions have been documented. Steam lines within the parcel are documented to be covered with ACM. An air quality permit was issued for turbine engine testing and solvent cleaning in Building 397.

Information collected during the EBS indicates that aircraft engine testing has occurred in this building for at least 16 years. Petroleum products, solvents, and up to 600 gallons of aircraft fuel are documented to have been stored in Building 397. During visual inspection, aviation oil and non-halogenated organic compounds were stored in the electrical room, which is located in the central area of the building along the east side. Chemicals are stored in storage cabinets throughout the building. JP-5 fuel was stored in the fuel room on the east side of the building. Empty oil containers and paper products contaminated with JP-5 fuel and lubricating oil are stored on wooden pallets on the south wall of Building 397, east of the garage area. Lubricating oil mixed with JP-5 fuel is stored on plastic catch basins in the same location. Small quantities of metals, halogenated and non-halogenated organic compounds are stored in a storage area west of the bathroom.

Two oil/water separators were observed during site inspection; one is located on the north side and one on the south side within Building 397. These two oil/water separators are currently active and are used to separate lubricating oils and jet fuel from water.

During site inspection, stains were noted in various locations throughout the building. In the fuel room, a five-foot by three-foot black stain was noticed on the concrete floor. On the south side of the engine preparation room, a 35 foot by 50 foot area is 25 percent covered with black stains. Black stains were noted in the southwest corner and in the center of Test Cell 16. A 30 foot by 20 foot area was moderately stained on the western side of Test Cell 15.

No incidents, such as fires, mishaps, flooding or crashes, are documented to have occurred within the current or former buildings.

Open Space

Open space covers 95 percent of Parcel 147. The open space around Building 397 is currently used for materials storage and vehicle parking. This area is paved. The remaining open space is bare soil.

The soil has been regraded recently to prevent run-off onto or from neighboring parcels. Railroad tracks formerly entered this parcel from the southwest, but have been completely removed. Items located on this parcel include part of the MWR parking lot (currently in use for materials storage), five former storage tank concrete pads, an oil/water separator, and storage crates.

Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer, electrical, steam, potable water, fuel and industrial sewer lines, and overhead electrical lines.

Based upon aerial photographs, eight small buildings were formerly located on the parcel in March 1947. The EBS did not indicate the activities conducted or the possible chemicals stored in these former buildings. These former buildings were small rectangular buildings, located on the far east side of Parcel 147, likely used for materials storage. These eight buildings were demolished prior to August 1953. The area occupied by these former buildings is currently open space used for part of the MWR parking lot. Storage crate are located south of this parking lot in Parcel 214 and along the eastern border of Parcel 147. A transportation trailer was located on Parcel 147 and has since been demolished.

The concrete foundations of five former fuel tanks are located in the eastern portion of the parcel. The steel fuel tanks were built in 1947 and were demolished prior to May 1990. The area around the former leaking fuel tanks is considered a RCRA closure site. During visual observation, the concrete pads were in fair condition and showed small scattered stains. The concrete was heavily etched. An unmarked 55-gallon drum was also observed in this area.

One oil/water separator were observed during visual inspection in the open space by the northeast corner of Building 397. The separator is currently not active.

EBS information indicates that activities conducted within this open space have included fuel storage, materials storage, and vehicle parking. A 4,000 to 17,000 gallon jet fuel/oil/water spill occurred along the eastern side of Building 397 due to a fuel leak and a plugged industrial sewer line. Immediate cleanup involved pumping floating free product from the groundwater. Further cleanup involved the skimming of the fuel/oil/water mixture from the sewer with recovery pumps and transferring the material to an oil/water separator. Soil removal was later performed. This spill area is considered a RCRA closure site.

No incidents, such as fires, mishaps, flooding or crashes, are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 147 is bounded by Parcels 142, 145, and 146 to the north, Parcels 147, 210, and 214 to the east, Parcel 211 to the south, and Parcels 134, 141, and 153 to the west. Activities of concern on these adjacent parcels include IR Site 19 on Parcel 142, IR Site 10B on Parcel 211, and IR Site 13 which encompasses all adjacent parcels. The former Seaplane Lagoon, IR Site 17, is located to the west of Parcel 147.

If the continuing investigations at the surrounding IR sites reveal a cause for concern at Parcel 147, then additional sampling on Parcel 147 may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with such sites on a parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one active RCRA site (GAP Site 62) and two RCRA closure sites (the five former fuel storage tanks and the JP-5 fuel spill). GAP Site 62 was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this site does not require sampling because the site is paved and no staining was noted. The RCRA closure sites have been previously discussed as part of the open space. A brief description of GAP Site 62 is provided below.

GAP Site 62 is defined as Shop 96231, Building 397. It is located within the covered area of Building 397 on the south side. There are no documented releases in this area. The chemicals of concern include Mil-L-23699 lubricating and engine oil. The dimensions of GAP Site 62 are approximately 10 feet by 10 feet and it contains both 55 and 30-gallon drums. This area is currently active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 147, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-147-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 397. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur. Evidence of possible releases of fuel and lubricating oil within the engine preparation room, Test Cell 15, Test Cell 16, and the fuel room in Building 397 was noted during the site inspections. The size of these areas within this building is approximately 10,000 square feet. Potential impacts to the environment stemming from spillage in these areas will be addressed as part of the IR investigations.

As noted earlier, Parcel 147 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 147.

TABLE 6-147-2

Summary of Data Gaps
NAS Alameda Parcel 147

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Activities of concern on adjacent parcels include IR Site 19 on Parcel 142, IR Site 10B on Parcel 211, and IR Site 13 which encompasses all adjacent parcels and Parcel 147. The former Seaplane Lagoon, IR Site 17, is located to the west of Parcel 147. Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-147-2

Summary of Data Gaps
NAS Alameda Parcel 147

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• (Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. One sample proposed for the zone-wide target area is located on Parcel 147.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• Active, underground fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Once the data gaps in Table 6-147-1 are addressed, Parcel 147 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 147. No parcel-specific target areas were identified for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22. This zone-wide target area includes:

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. One sample proposed for the zone-wide target area is located on Parcel 147. The sample to be collected in this target area is listed on Table 6-147-1. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

In addition, concerns pertaining to industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, and the IR site status must be resolved before this parcel can be reclassified from BRAC Category 6, leased, or transferred.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level technique that will be used to assess conditions in the zone target area and to identify areas that may require further parcel-specific sampling in the follow-up detailed evaluation phase. Table 6-147-1 summarizes screening-level sampling and analysis for the parcel. One surface soil sample will be collected from the zone-wide target area. The location of this sample is shown on Figure 6-147-1. Adjustments to the proposed location can be made if warranted by field conditions. The sample location as shown in Figure 6-147-1 is located in an area that was unpaved from 1942 to 1961. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during previous investigations. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

The IR contractor has proposed follow-up sampling for the open space of Parcel 147 including three borings, two CPT/HydroPunch, and three monitoring wells as shown in Figure 6-147-1.

Z22

SECTION 6-148

PARCEL 148 EVALUATION PLAN

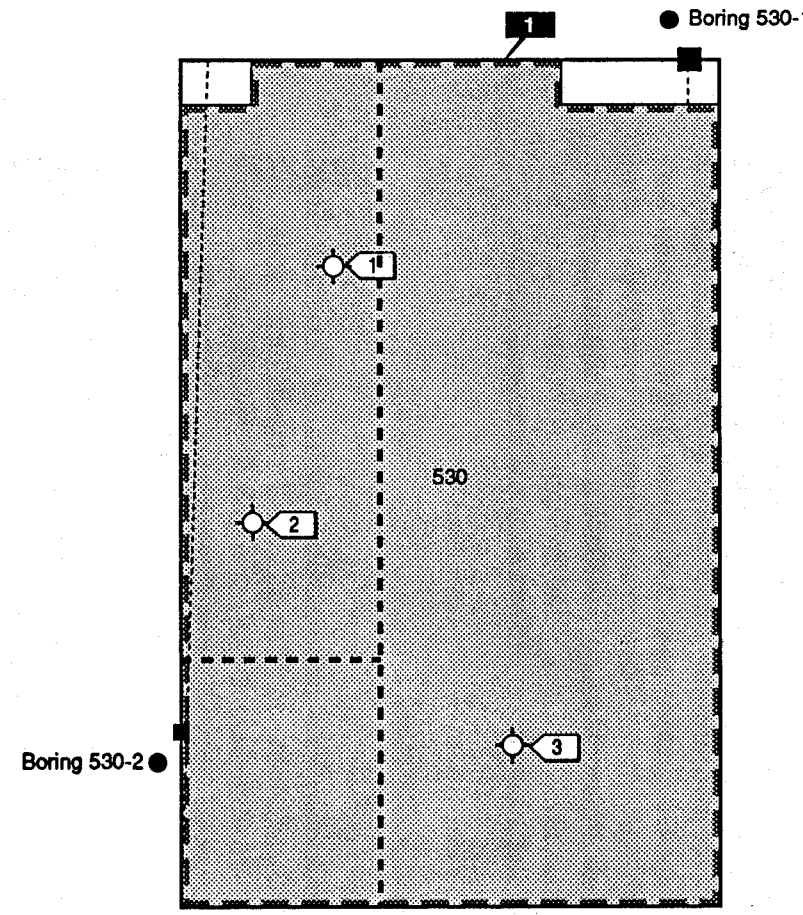
This Parcel Evaluation Plan (PEP) describes the evaluation strategy for Parcel 148 at NAS Alameda (Figure 6-148-1). The parcel, which is located in the southeastern portion of the base, is approximately two acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains three RCRA sites; however, none are listed in the Part B Permit as requiring an RFI. One parcel-specific and no zone-wide target investigation areas (target area) have been identified on this parcel. Subsurface GeoProbe soil sampling will be used to implement the screening-level investigation at this parcel. Table 6-148-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 148, historical activities are discussed below.

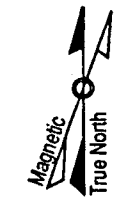
Background and Historical Activities

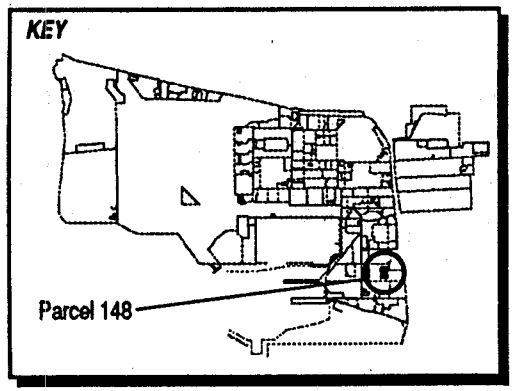
This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 148, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

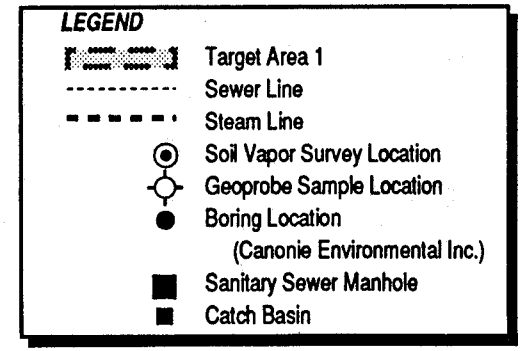
Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with several other parcels (Parcels 132, 133, 134, 141, 142, 143, 145, 146, 147, 149, 152, 153, 164, 210, 211, and 214). This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone. The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or have been used or are









1"= 90'

Figure 6-148-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.18.94

TABLE 6-148-1

Summary of Recommended Samples
NAS Alameda Parcel 148

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
148-1-3-S-S-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Metals	metals	XRF
148-1-3-S-V-DDMMYY*	3.0'	Subsurface	Soil	Target Area 1	Paints, solvents, metals	VOCs, SVOCs, metals	CLP RAS
148-2-3-S-S-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Metals	metals	XRF
148-2-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Paints, solvents, metals	SVOCs, VOCs	CLP RAS
148-3-3-S-S-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Metals	metals	XRF
148-3-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Paints, solvents, metals	SVOCs, VOCs	CLP RAS

*These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results

currently being used as industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for each of these parcels should consider the data collected for the entire zone.

The northeastern area of this parcel was part of the original peninsula of Alameda. No filling activities have occurred in this area. Filling began in the southwestern part of this parcel area in approximately 1942. Prior to this time, this area of the parcel was inundated by San Francisco Bay. The area within the parcel boundary was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 530) is located within this parcel. This building covers approximately 95 percent of the parcel. The remaining area is open space. The parcel open space is presently covered with grass and concrete. Currently, there is no equipment or material storage in this open space. A review of aerial photographs reveal that prior to construction of Building 530 in 1973 the entire parcel area was used for aircraft parking and materials storage. Sewer lines are present at this parcel and are shown in Figure 6-148-1.

Parcel 148 is identified as Installation Restoration (IR) Program Site 10B. Part of IR Site 13 is also located within the boundaries of Parcel 148. IR Site 9 is located within 500 feet of this parcel. No previous investigations have been conducted at Parcel 148. However, IR site investigations have occurred immediately next to this parcel. Specific data regarding potential chemical occurrence in this area are available.

Soil samples collected near this parcel suggest that slightly elevated concentrations of VOCs, SVOCs, and metals may exist on Parcel 148. However, all the soil sample detections were below unrestricted use PRGs. The data, which were collected during a previous investigation by Canonie Environmental and has not been independently verified, is presented in Table 6-148-2. This table lists the PRGs and the reported concentrations for all VOCs and SVOCs detected.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 530

Building 530 was constructed in 1972 and housed missile rework operations which included electrical maintenance, cleaning, grinding, welding, painting, paint stripping, and parts fabrication. This large building is in good condition and is approximately 80,000 square feet in area. The building is constructed with concrete floors and walls and features a steel frame roof with corrugated metal roofing. Services and utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, and steam and condensate lines.

Halogenated and non-halogenated hydrocarbons, metals, acids, and bases are documented to have been used in this building. Many small stains of unknown chemicals are present throughout the building and particularly in the paint shop area. This staining is addressed by Target Area 1. This building has been recently vacated. No other incidents (e.g., fires, floods or crashes) are documented to have occurred within this building.

Building 352 (Demolished)

Building 352 was constructed in 1945 and was 1,002 square feet in area. It was a Quonset hut and was constructed of wood and metal. This building was demolished by 1977. EBS documents indicate that explosives were stored in this structure.

Open Space

Approximately five percent of Parcel 148 is open space. EBS information indicates that activities conducted within this open space have included materials equipment storage and aircraft parking. Currently, there is no storage or use of compounds of concern in this open space. Approximately one half of the open space area is grass covered, the remaining half is paved with concrete which is in good condition.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

TABLE 6-148-2

Summary of Previous Investigations
NAS Alameda Parcel 148

Chemical Compound	Industrial PRG (ppb)	Residential PRG (ppb)	Concentration 2.5 to 3 feet (ppb)	Concentration 6 to 6.5 feet (ppb)	Concentration 8.5 to 9 feet (ppb)	Concentration 11.5 to 12 feet (ppb)	Concentration 13.5 to 14 feet (ppb)
Boring: MW530-1							
VOCs							
Methylene Chloride	22,000	39,000	<6.00	<6.00	53	1,800	11
Acetone	9,200,000	13,400,000	<12.0	30	91	<1,500	<14.0
Toluene	280,000	280,000	77	8	38	<750	140
Ethylbenzene	310,000	310,000	<6.00	<6.00	36	6,200	<7.00
Xylene (total)	99,000	99,000	<6.00	<6.00	170	12,000	11
SVOCs							
2-Methylnaphthalene	–	–	<690	<700	<1,800	41,000	<820
Di-n-butylphthalate	–	–	1,600	3,800	4,500	<16,000	12,000
Boring: MW530-2							
VOCs							
Methylene Chloride	22,000	39,000	6	5	11	7	6
Acetone	9,200,000	13,400,000	<12.0	<11.0	<12.0	18	<10.0
Toluene	280,000	280,000	72	<5.00	8	10	31
SVOCs							
Di-n-butylphthalate	–	–	1000	610	600	4,300	
Pyrene	1,200,000	31,000,000	<340	<350	<420	970	

Parcel Boundary Conditions

Parcel 148 is completely surrounded by Parcel 211. Activities of concern on Parcel 211 include a defueling station located immediately to the west of Building 530. The ground surface in the defueling area is covered with large stains. There are several large fuel and oil storage tanks associated with the defueling process.

The Pacific Coast Oil Company Refinery operated from 1879 to 1903 on property now identified as IR Site 13. Parcel 148 is fully contained within IR Site 13 (therefore, this parcel, which typically is identified as IR Site 10B, is also part of IR Site 13). The past disposal activities associated with the refining area may be of concern at Parcel 148.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with these sites on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes three RCRA sites (sites SWMU/GAP 63, SWMU/GAP 63A, and SWMU/GAP 64). These sites were evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, none of the three RCRA sites at this parcel require sampling because all the sites are paved, and no staining was noted by site inspectors. A brief description of each of the RCRA sites is provided below.

SWMU/GAP 63 is in Shop 94224 in Building 530 and has not had any known releases. The storage containers at this site include 5-gallon containers, 30-gallon drums, and 55-gallon drums. The chemicals of concern associated with this site include acetone, MEK, paints and thinners, 1,1,1,-TCA, and solvent MX-4M. This site is no longer active.

SWMU/GAP 63A is in Shop 94223 in Building 530 and has not had any known releases. The storage containers at this site include 55-gallon drums. Hydraulic oil was stored at this site. This site is no longer active.

SWMU/GAP 64 is in Shop 94224 in Building 530 and has not had any known releases. The storage containers at this site include 30-gallon drums, 55-gallon drums, and aerosol cans. The chemicals of concern associated with this site include aerosol paints, lubricating oil, solvents (including 1,1,1-TCA and MX-4M), rust remover, WD-40, and silicate ester. This site is no longer active.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 148, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-148-3 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 530. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

As noted earlier, Parcel 148 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 148.

Once the data gaps in Table 6-148-3 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 148 may be leased or transferred, as appropriate.

TABLE 6-148-3

Summary of Data Gaps
NAS Alameda Parcel 148

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• The Pacific Coast Oil Company Refinery operated from 1879 to 1903 on property now identified as IR Site 13. Parcel 148 is fully contained within IR Site 13 (therefore, this parcel, which typically is identified as IR Site 10B, is also part of IR Site 13). Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-148-3

Summary of Data Gaps
NAS Alameda Parcel 148

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• (Building 530): This target area is centered over Building 530. VOCs, SVOCs, and metals are the possible compounds of concern This parcel has been identified as a target area because soil samples collected near this parcel suggest that elevated concentrations of VOCs, SVOCs, and metals may exist on Parcel 148. All the soil sample detections were below unrestricted use PRGs. Building 530 has been identified as a target area because no sampling within the boundaries of this parcel has been conducted or is proposed at this time.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of this area were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Target Area 1 (Building 530): This target area is centered over Building 530 as shown in Figure 6-148-1. VOCs, SVOCs, and metals are the possible compounds of concern within this target area. The likelihood of environmental impacts having occurred within this target area is classified as potential. This parcel has been identified as a target area because soil samples collected near this parcel suggest that slightly elevated concentrations of VOCs, SVOCs, and metals may exist on Parcel 148. All soil sample detections were below unrestricted use PRGs. Building 530 has been identified as a target area because no sampling within the boundaries of this parcel has been conducted or is proposed at this time. Samples to be collected in this target area are listed on Table 6-148-1.

Screening-Level Investigation

Subsurface GeoProbe soil sampling (SOP 14) is the screening-level technique that will be used to assess conditions in the target area and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-148-1 summarizes the screening-level sampling and analysis for the target area. Sampling will be conducted in accordance with the referenced SOP in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

GeoProbe samples will be collected from three sampling locations as shown on Figure 6-148-1. The GeoProbe samples will be tested for VOCs, SVOCs, and metals. The samples should be located over areas with the most significant staining. If no staining is evident, then the samples should be evenly spaced throughout the target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level

investigation. This characterization may utilize the same screening technology discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), surface soil sampling (SOP 3), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-149

PARCEL 149 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 149 at NAS Alameda (Figure 6-149-1). The parcel, which is located in the southeastern portion of the base, is 7.7 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. The entire parcel is identified as IR Site 16. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. However, because of the ongoing IR investigation at this parcel, no sampling is proposed in this PEP. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for evaluating Parcel 149, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 149, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 152, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

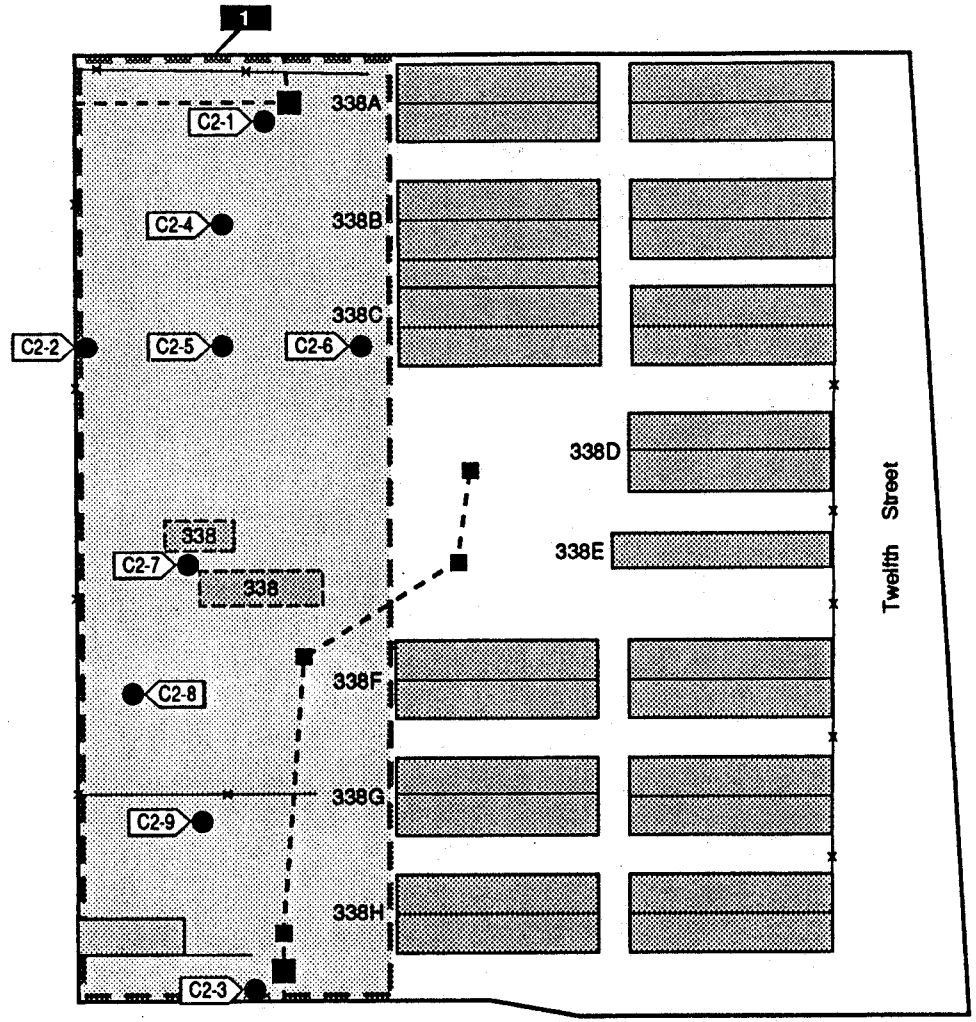
FIGURE 6-149-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

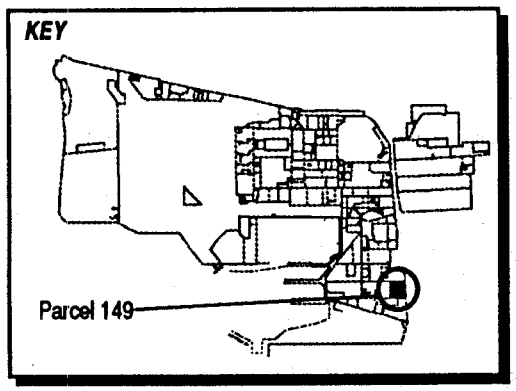
FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE





LEGEND

- Target Area 1
- Storm Sewer Line
- Boring Location *(Canonie Environmental, Inc.)*
- Sanitary Sewer Manhole
- Catch Basin

Note: *1.) Sampling of Target Area 1 is being addressed by the IR program. No sampling is called for in this PEP.*

1"= 125'

Figure 6-149-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 794
2121.90.10/DS/07.07.94

SENSITIVE

evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Filling began in the area covered by this parcel in 1942. This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda. The ground area was filled as of 1946 to make the land level; the ground level and grading have not changed significantly since that time.

Currently, eight buildings (Buildings 338A-338H, also known as the "cans") are present on the parcel. These buildings consist of between one and four "cans" attached together; each "can" is a former metal shipping container approximately 2,800 square feet in size. Buildings 338A-338H cover approximately 20 percent of the parcel area. The remaining area is open space. About half the open space is currently not in use; the remaining area is being used for materials storage. Building 338 was formerly located on the parcel and has since been demolished. Previously, the entire parcel area was used for materials storage and aircraft parking. Underground storm sewer lines are present at this parcel and are shown in Figure 6-149-1.

Parcel 149 is identified as Installation Restoration (IR) Program Site 16. This parcel is also contiguous with IR Site 13. Previous investigations have been conducted at Parcel 149. Specific data from nine borings and 55 surface soil samples are available for this parcel. Samples were analyzed for pesticides, metals, PCBs, VOCs, and SVOCs. Two SVOCs exceeded their PRGs. Benzo(a)pyrene was found in boring C2-4 in concentrations exceeding both its residential and industrial PRG. The common laboratory contaminant bis(2-ethylhexyl)phthalate was found in surface sample SSC2-28 in concentrations exceeding its residential PRG; however, the concentration does not exceed its industrial PRG. Three PCBs (Aroclor-1248, Aroclor-1254, and Aroclor-1260) were found in concentrations above 1 mg/kg in nine surface samples (SSC2-12, 13, 21, 22, 23, 24, 28, 31, and 32). Three of these samples (SSC2-23, 28, 31) had concentrations above 5 mg/kg. Based on ERM's experience, the guidance levels currently in use by DTSC Region 2 for PCBs are between 1 and 5 mg/kg. Metals concentrations were compared to typical concentration ranges for soil at NAS Alameda as determined by PRC under CTO 121 Mod. 0001. Ten metals were detected in concentrations above the expected range (antimony, arsenic, cadmium, copper, lead, magnesium, molybdenum, silver, thallium, and zinc). These results are reported in *CLEAN Data Summary Report RI/FS Phase 1 and 2A* (PRC/JMM, 1993). Refer to Figure 6-149-1 for approximate boring locations. These data were collected during an investigation by Canonie and have not been independently verified.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Buildings 338A-338H

Buildings 338A-338H were put in place in 1948. These buildings, commonly referred to as the "cans," are shipping containers that were converted to storage facilities and office space. Each "can" covers approximately 2,800 square feet. Four "cans" are attached together to form Buildings 338A, 338B, 338C, 338F, 338G, and 338H. Two "cans" are attached together to form Building 338D, and Building 338E consists of one "can". Each "can" is constructed completely of metal. These buildings are in good condition. Buildings 338A and 338C are currently in use as office space and for material and equipment storage (mostly avionics equipment). The remaining buildings currently store material and equipment only.

Prior to the construction of these buildings, this area was used for aircraft parking. Utilities and services located within or immediately surrounding this parcel include storm sewers and underground electrical distribution lines.

No spills or staining is documented to have occurred within the buildings. No other incidents (e.g., fires, flooding or crashes) are documented to have occurred within or immediately surrounding the buildings on the parcel.

Open Space

Open space covers approximately 80 percent of the parcel. Approximately 20 percent of the open space is paved with asphalt. The remaining area is bare soil. A large portion of the unpaved area is covered with temporary runway plates made of perforated steel.

Utilities and services located within or immediately surrounding the open space include storm drains and underground electrical distribution lines.

EBS information indicates that activities conducted within this open space include storage of paints, solvents, acids, bases, and PCB-

containing transformers. The EBS included reports that PCBs were applied in this open space for weed control. Prior to 1948, this area was used for aircraft parking. Previous remediation activities at this parcel include the removal of approximately 10 cubic yards of PCB-contaminated soil by IT Corporation. The PCBs are reported to have been released from a transformer stored in this open space.

No other incidents (e.g., fires, flooding or crashes) are documented to have occurred within or immediately surrounding the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground storage tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 149 is bounded by Parcels 150, 167, 168, 169, and 211. Activities of concern on these adjacent parcels include an automobile repair facility on Parcel 168. Parcel 149 is contiguous with IR Site 13. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. If the continuing investigation at this IR site or other nearby IR sites reveal a cause for concern at Parcel 149, then additional sampling on this parcel may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-149-1

TABLE 6-149-1

Summary of Data Gaps
NAS Alameda Parcel 149

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 149.
Installation Restoration (IR) Sites	• Parcel 149 is identified as Installation Restoration (IR) Program Site 16. This parcel is also contiguous with IR Site 13. Previous investigations have been conducted at Parcel 149. Specific data from nine borings and 55 surface soil samples are available for this parcel. Samples were analyzed for pesticides, metals, PCBs, VOCs, and SVOCs. Two SVOCs exceeded their PRGs. If the continuing investigation at IR site 13 or other nearby IR sites reveal a cause for concern at Parcel 149, then additional sampling on this parcel may be appropriate. Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-149-1

Summary of Data Gaps
NAS Alameda Parcel 149

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space): This target area encompasses the open space storage area west of Buildings 338A-338H. Compounds or classes of compounds of concern possible within this target area include corrosives, metals, VOCs, SVOCs, PCBs, and petroleum products. Environmental impacts have occurred within this target area. No sampling is proposed for this target area by this PEP because investigations are currently underway in this area as part of the IR program.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, radiological concerns, transformers, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 149 because no industrial buildings are present.

As noted earlier, Parcel 149 has and previously had open space areas that were unpaved. Anecdotal evidence indicates that PCBs were historically used for weed control in this area. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Sampling for PCBs and pesticides is being addressed as part of the IR site program.

Once the data gaps in Table 6-149-1 are addressed, Parcel 149 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area. The nature and location of this area was evaluated to determine field investigation and sampling strategies. The following target area was identified based on possible impacts from activities described above involving potentially hazardous substances.

- Parcel 149 Target Area 1 (Open Space): This target area encompasses the open space storage area west of Buildings 338A-338H. The size of this target area, as shown on Figure 6-149-1, is approximate. Compounds or classes of compounds of concern possible within this target area include corrosives, metals, VOCs, SVOCs, PCBs, and petroleum products. Environmental impacts are known to have occurred within this target area. No sampling is proposed for this target area by this PEP because investigations are currently

underway in this area as part of the IR program. Additional sampling in this parcel may be necessary pending the results of the current IR investigations.

SECTION 6-152

PARCEL 152 EVALUATION PLAN

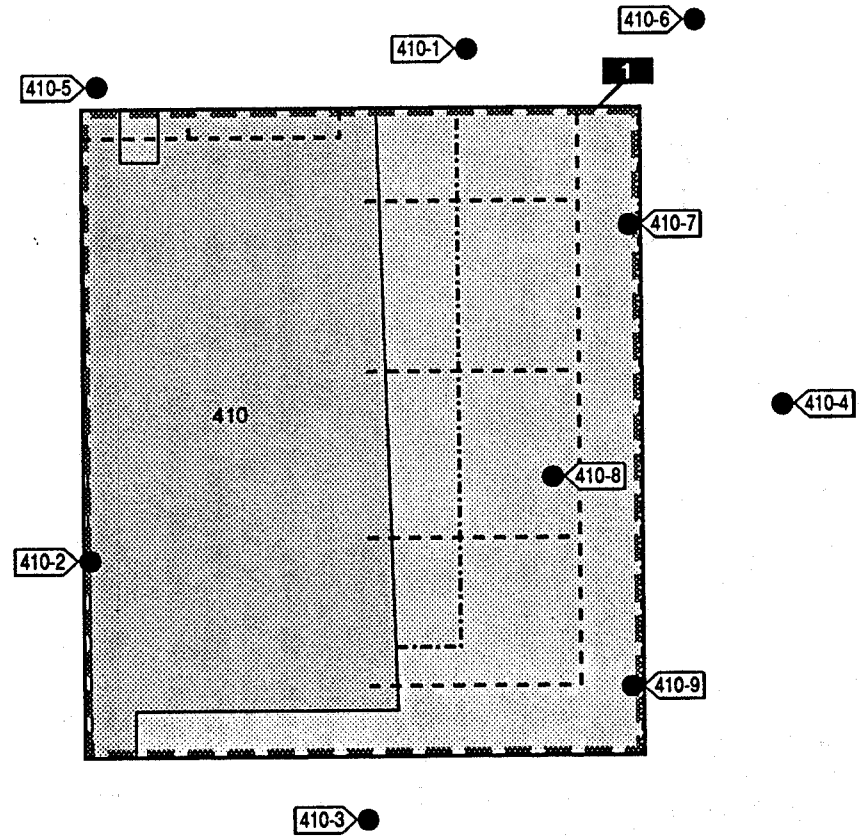
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 152 at NAS Alameda (Figure 6-152-1). The parcel, which is located in the southeastern portion of the base, is 1.6 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a high level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. One zone-wide target investigation area and one parcel-specific target investigation area (target area) identified at this parcel. No zone-wide samples will be collected from this parcel. Due to the ongoing IR investigation at this parcel, no sampling is called for by this PEP. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for evaluating Parcel 152, historical activities are discussed below.

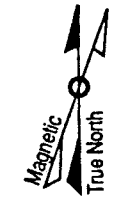
Background and Historical Activities

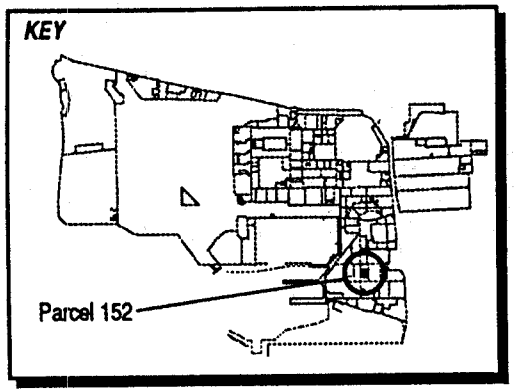
This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 152, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 145, 146, 147, 148, 149, 153, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data







LEGEND

- Target Area 1
- Industrial Waste Line
- Storm Sewer Line
- Boring Location (Canonie Environmental, Inc.)

Note: *1.) Sampling of Target Area 1 is being addressed by the IR Program. No sampling is called for in this PEP.*

1"= 90'

Figure 6-152-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7/94
2121.90.10/DS/07.07.94

evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel was completely inundated by San Francisco Bay. The area within the parcel boundaries was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 410) covers approximately 50 percent of the parcel. The remaining 50 percent of the parcel is open space. The parcel area is presently used for materials storage. Underground sewer lines are present at this parcel and are shown in Figure 6-152-1.

Parcel 152 is located within 500 feet of Installation Restoration (IR) Program Site 13. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. Building 410 (Parcel 152) is identified as Installation Restoration (IR) Program Site 9 (Paint Stripping). Previous investigations have been conducted at this parcel and specific data from nine borings located within and around the parcel are available. Soil samples from these borings were analyzed for metals, VOCs, and SVOCs. One SVOC was detected in concentrations exceeding its PRG in seven of the nine borings. This compound, benzo(a)pyrene, exceed the residential and industrial PRG in Boring 410-7. In borings 410-1, 410-2, 410-3, 410-4, 410-6, and 410-9 it exceeded its residential PRG and, in at least one other sample from each of these borings, the detection limit was above the industrial PRG. Metals concentrations were compared to typical concentration ranges for soil at NAS Alameda as determined by PRC under CTO 121 Mod. 0001. Only magnesium exceeded the typical range, as indicated in *CLEAN Data Summary Report RI/FS Phase 1 and 2A* (PRC/JMM, 1993). These concentrations were found in borings 410-1, 410-5, and 410-7. Refer to Figure 6-152-1 for approximate boring locations. These data, however, were collected during an investigation by Canonie and have not been independently verified.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 410

Building 410 was constructed in 1958 and served as an aircraft stripping facility. This building is in poor condition and is scheduled to be demolished. Building 410 is a single story building with a concrete floor, metal panel walls, and metal roofing. Building 410 is a large hanger, and covers approximately 35,000 square feet.

Utilities located within and immediately surrounding Building 410 include sanitary sewer, storm sewer, water, electrical, and industrial sewer lines.

Information collected during the EBS indicates that activities conducted within this building included aircraft cleaning and stripping, and corrosion control activities. These types of industrial processes typically involved the use or generation of chemicals and wastes including oils, paints, paint strippers, detergents, and waste water containing chromium, phenols and methylene chloride. These processes occurred within Building 410 from 1958 until the 1980s.

Methylene chloride, phenol, and other chemicals associated with aircraft paint stripping and cleaning are documented to have been stored in a half-open shed area attached to the north side of Building 410. Three abandoned above ground storage tanks are also present. Two of the abandoned tanks had a capacity of approximately 10,000 gallons in this area each, and the labels indicated the previous contents were phenol and methylene chloride respectively. Pipe fittings from these tanks lead into the hanger area of Building 410. The third tank had a capacity of approximately 1,500 gallons, and its previous contents are unknown. There is evidence suggesting a fourth tank was present historically.

Anecdotal evidence in the EBS indicates that there were significant fuel spills associated with the connecting and disconnecting of aircraft engines during the cleaning process. Many stains are present in the tank storage area, and etching is evident on the concrete slab underlying the tanks. Wastewater from Building 410 flowed through industrial sewer lines to a nearby IWTP located in Parcel 153.

Building 410 is equipped with a heating-ventilation-air conditioning (HVAC) system. Soot and dust is present at the registers of the HVAC system, however, because the building is scheduled for demolition, the condition of the HVAC system should not be a concern. No other incidents (e.g., flooding, fires, or crashes), are documented to have occurred within or immediately surrounding Building 410.

Open Space

The open space covers approximately 50 percent of the parcel. The open space is completely paved with concrete. The concrete is in generally fair condition. There are many stains on the concrete slab, and the slab is heavily etched in several areas.

EBS information indicates that activities conducted within this open space include aircraft parking and washdown. These activities were conducted in association with the aircraft stripping activity occurring within Building 410. For approximately the last five years, this open space has been used for materials and equipment storage, primarily large avionics equipment.

Review of site inspection data indicates that undocumented spills may have occurred throughout the open space, as evidenced by staining of the concrete surface. These spills appear to be aircraft fuel associated with connecting and disconnecting aircraft engines during the cleaning process and to have involved a relatively significant quantity of released material.

No other incidents, are documented to have occurred within the Open Space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground storage tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 152 (IR Site 9) is bounded by Parcel 153 to the north, east, and south, and by Eighth Street and Parcel 154 to the west. Past activities of concern on Parcel 153 include the former operation of an industrial wastewater treatment plant (Facility 588) associated with Building 410.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 152, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-152-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 152 because the only building present, Building 410, is scheduled for demolition. Once the data gaps in Table 6-152-1 are addressed, Parcel 152 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 22. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies.

- Parcel 152 Target Area 1 (Whole Parcel): No sampling is called for in this target area because sampling investigations are currently underway in this parcel as part of the IR program. The IR program calls for soil sampling in the open space area of this parcel and from

TABLE 6-152-1

Summary of Data Gaps
NAS Alameda Parcel 152

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• The industrial building at Parcel 152 is slated for demolition, therefore.
Installation Restoration (IR) Sites	• IR Site 9 (Building 410) is located completely within the boundary of Parcel 152. IR Site 13 is located within 500 feet east of Parcel 152. Additional subsurface investigation relative to IR Sites 9 and 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site, parcels identified.
Potential Zone-Wide Release Areas	• Incinerator: Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 may have been impacted by historical airborne releases of dioxins and furans from the incinerator fomerly housed in former Building 68. Building 68 is upwind of these parcels in prevailing wind conditions. No samples for this zone will be collected Parcel 152.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-152-1

Summary of Data Gaps
NAS Alameda Parcel 152

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• No potential release areas identified, other than those being addressed by the IR Site Program.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

underneath Building 410. Currently, ten combined GeoProbe and HydroPunch sample locations and one monitoring well location are specified for this site. Additional sampling in this parcel may be necessary pending the results of the current IR investigations.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. The samples proposed for the zone-wide target area are located on adjacent parcels; no sampling in this target area is proposed for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

SECTION 6-153

PARCEL 153 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 153 at NAS Alameda (Figure 6-153-1). The parcel, which is located in the southeastern portion of the base, is 2.4 acres in size and is irregular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. One parcel-specific and one zone wide target investigation area (target area) have been identified on this parcel. The sampling procedures called for in the screening-level investigation in these areas are surface soil sampling and subsurface GeoProbe sampling. Table 6-153-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 153, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 153, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 164, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support

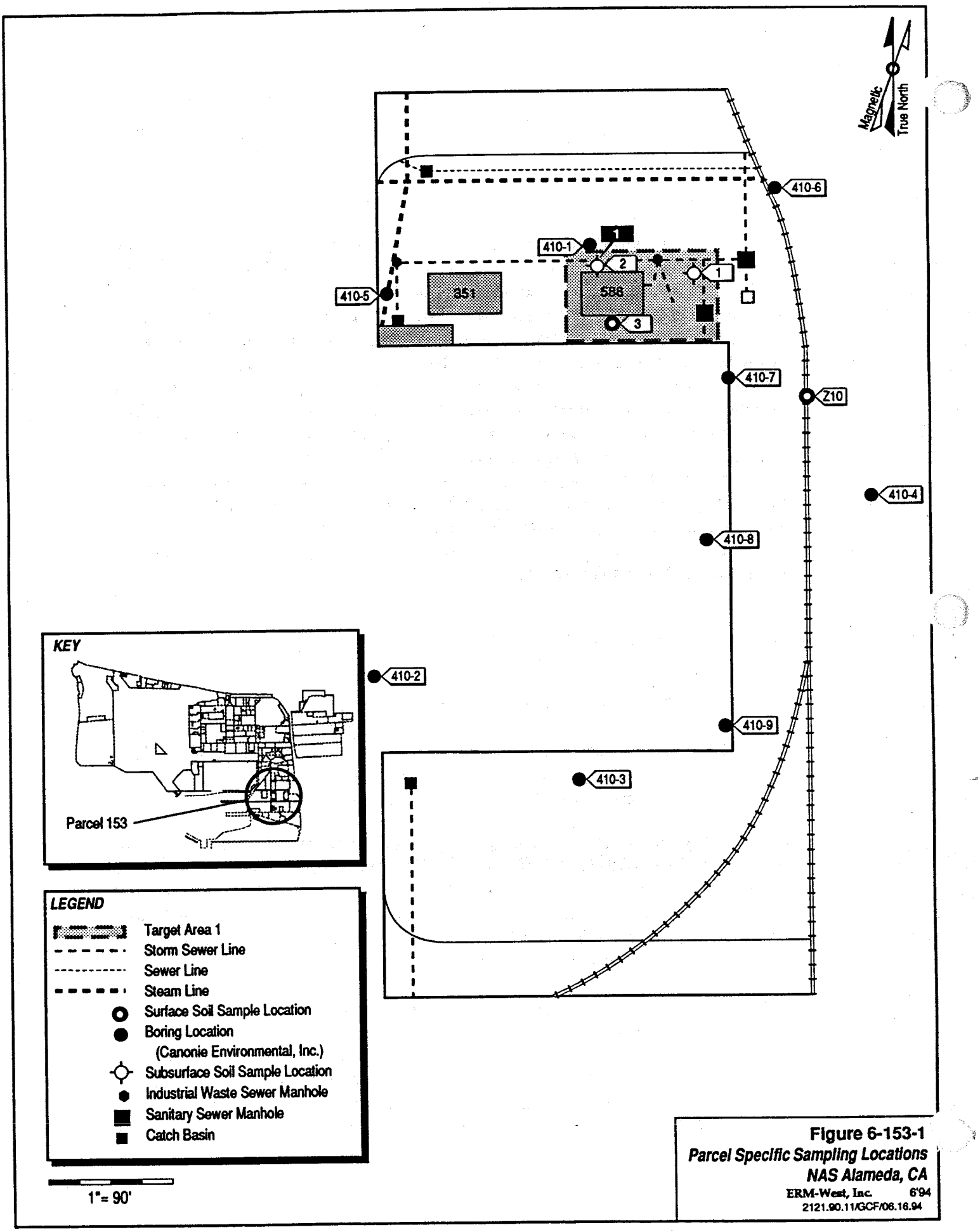


Figure 6-153-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

TABLE 6-153-1

Summary of Recommended Samples
NAS Alameda Parcel 153

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
153-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases, Fuels	pH, TPH	Test Kit
153-1-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
153-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases, Fuels	pH, TPH	Test Kit
153-2-3-S-V-DDMMYY	3.0'	Subsurface	Soil	Target Area 1	Solvents	VOCs	CLP RAS
153-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases, Fuels	pH, TPH	Test Kit
153-3-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Acids, Bases, Fuels	pH, TPH	Ch 7, SW846, Mod. 8015
Z22-10-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	PCBs, Fuels, Oils	PCBs, TPH, Lead	Test Kit, XRF
Z22-10-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	PCBs, Fuels, Oils	PCBs, TPH, Lead	CLP RAS, Mod. 8015
Z22-10-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 2	Creosote, Railroad Tie Tar	SVOCs	CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Filling began in the area covered by this parcel in 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 351) and one structure (Structure 588) are present on the parcel. Building 351, a corrosion control facility, covers approximately one percent of the parcel area. The remaining area, including Structure 588, is open space. The open space is currently used for materials storage. The material stored is mostly large avionics equipment. Prior to 1958, the entire parcel was used for aircraft parking. Underground sewer lines are present at this parcel and are shown in Figure 6-153-1.

This parcel is not an IR site but it is located adjacent to IR Site 9 (the aircraft stripping facility) and within 500 feet of IR Site 13. Previous investigations have been conducted at these IR sites. Many of the data from the investigation at IR Site 9 are located in and around Parcel 153. These data include results from soil analyses from nine borings. The analytes included metals, pesticides, VOCs, and SVOCs. Of all the compounds tested, only one SVOC (benzo(a)pyrene) was detected in concentrations exceeding its PRG. This occurred in seven of the nine borings. In six of these borings (borings 410-1, 410-2, 410-3, 410-4, 410-6, and 410-9) the residential PRG was exceeded at least once and, for each of these six borings, the detection limit was above the industrial PRG at least once. In the seventh boring (boring 410-7) only the residential PRG was exceeded. Metals concentrations were compared to typical concentration ranges for soil at NAS Alameda as determined by PRC under CTO 121 Mod. 0001. Only magnesium exceeded the typical range, as reported in *CLEAN Data Summary Report RI/FS Phase 1 and 2A* (PRC/JMM, 1993). These elevated magnesium concentrations were found in borings 410-1, 410-5, and 410-7. Refer to Figure 6-153-1 for approximate boring locations. These data were collected during an investigation by Canonie and have not been independently verified.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 351

Building 351 was constructed in 1949 and served as a corrosion control facility until 1990. This building is in fair condition. It has a concrete floor and metal wall panels that curve inward as they rise forming the shape of a half cylinder (Quonset Hut). This one-story building covers approximately 2,000 square feet. It is currently abandoned. The space occupied by Building 351 was formerly open space used for aircraft parking.

Utilities located within and immediately surrounding this building include sanitary, industrial, and storm sewers; underground electrical distribution lines; and steam and condensate lines.

The corrosion control activities that were conducted within this building typically involved the use of acids and bases. These processes occurred within Building 351 from the late 1950's into the 1980's.No spills or staining was noted in the building during site inspections. No other incidents (e.g., floods, fires, or crashes) are documented to have occurred within or immediately surrounding Building 351.

Structure 588

Structure 588 is an abandoned industrial wastewater treatment plant (IWTP). It is unknown when this facility was constructed or abandoned. Wastewater from Building 410 (located in Parcel 152), as well as wastewater from other industrial buildings in the southeastern part of the Base, flowed to this IWTP prior to discharge to the sanitary sewer system. Structure 588 consists of an open shed-like structure covering approximately 200 square feet. The structure is two stories tall. An at-grade concrete vault (having a capacity of approximately 16,000 gallons) lies to the west of Structure 588 and is part of the IWTP. Eight ASTs are currently located within Structure 588 or immediately to the east and are all associated with IWTP processes. The area around many of these tanks is corroded and caked with residue. One tank clearly appears to have overflowed at one time. Acids, bases, coagulants, and other IWTP-related chemicals likely were stored and used in this area. The waste stream treated at this IWTP included wastes from Building 410, which contained oils, paints, paint strippers, detergents, phenols, and methylene chloride.

Utilities located within and immediately surrounding this structure include sanitary, industrial, and storm sewers; underground electrical distribution lines; and steam and condensate lines. No other incidents (e.g., floods, fires, or crashes) are documented to have occurred within or immediately surrounding this structure.

Open Space

The open space covers approximately 99 percent of the parcel. The open space is completely paved: most of the area is paved with asphalt; the remainder is paved with concrete. The pavement is in fair condition. There is minor staining throughout this open space. EBS information indicates that activities conducted within this open space included aircraft parking from the 1940's through about 1958. Since then, the open space has been used for materials storage.

Services and utilities located within and immediately surrounding this parcel include sanitary, industrial, and storm sewers; underground electrical distribution lines; and steam and condensate lines.

No spills or staining were observed in the open space, except as previously noted, during site inspections. No other incidents (e.g., floods, fires, or crashes) are documented to have occurred within this open space.

Underground Storage Tanks

No evidence of underground storage tanks (USTs), other than the concrete vault associated with the IWTP, has been identified at this parcel.

Parcel Boundary Conditions

Parcel 153 is bounded by Parcel 211, 150, 154 and 152, and 141 to the east, south, west, and north, respectively. Parcel 152 contains Building 410, which is identified as IR Site 9. Parcel 153 is also located within 500 feet of IR Site 13. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. If the continuing investigations at IR Sites 9 and 13 reveal a cause for concern at Parcel 153, then additional sampling on this parcel may be appropriate. Activities of concern on Parcel 211 include aircraft defueling operations.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 153, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-153-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 351. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-153-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 153 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target area and is also contained in a zone with one zone-wide target area. This subsection of the PEP discusses specific parcel target areas and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas

TABLE 6-153-2

Summary of Data Gaps
NAS Alameda Parcel 153

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 153 is bounded by Parcel 211, 150, 154 and 152, and 141 to the east, south, west, and north, respectively. Parcel 152 contains Building 410, which is identified as IR Site 9. Parcel 153 is also located within 500 feet of IR Site 13. IR Site 13 is the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. Additional subsurface investigation relative to IR Sites 9 and 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-153-2

Summary of Data Gaps
NAS Alameda Parcel 153

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• Railroad Tracks: This target area includes all current and former railroad track areas within or adjacent to the Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located in the eastern portion of Parcel 153. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. • Incinerator: Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 may have been impacted by historical airborne releases of dioxins and furans from the incinerator fomerly housed in former Building 68. Building 68 is upwind of these parcels under prevailing wind conditions. No samples for this zone will be collected from Parcel 153.
Potential Parcel-Specific Release Areas	• Structure 588
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target areas and the proposed sampling is provided in the Zone Analysis Plan for Zone 22. The nature and locations of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on the potential release areas described above and listed in Table 6-153-2.

- Parcel 153 Target Area 1 (Structure 588): This target area has been established to encompass the former industrial wastewater treatment plant and the area immediately around it, including all the aboveground storage tanks on the east of the facility and the at-grade vaults on the west side. This target area is approximately 7,000 square feet in area. Compounds of potential concern within this target area include acids, bases, coagulants, and other wastewater treatment compounds, and compounds released in wastewater stream from Building 400. These samples will also be analyzed for TPH and VOCs because of the potential use of the wastewater vault for other types of liquid storage. The likelihood of environmental impact having occurred at this target area is classified as potential. Samples to be collected in this target area are listed in Table 6-153-1, and shown on Figure 6-153-1.

- Zone 22 Target Area 2 (Railroad Tracks): This target area includes all current and former railroad track areas within or adjacent to the Southeastern Refinery and Heavy Industrial Zone. Railroad tracks are located in the northern portion of the parcel. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars and engines. This target area is classified as having potential likelihood of impacts. One surface soil sample will be collected approximately every 800 linear feet along the track areas. One of the eight surface soil samples for this zone target area is located on this parcel, and is proposed confirmation sample location. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. In the case of former tracks, the location of the tracks will be verified prior to sampling by historical maps, shallow exploratory excavations, metal detectors, or other appropriate means. The sample to be collected in this target area is listed in Table 6-153-1. The approximate sampling location is shown on Figure 6-153-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface GeoProbe soil sampling (SOP 14) are the screening-level techniques that will be employed to assess conditions in target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-153-1 summarizes screening-level sampling and analysis for the parcel target areas. Four surface soil and two subsurface soil samples will be collected from the locations shown on Figure 6-153-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Because low pH increases the mobility of metals in soil, additional soil sampling may be necessary in Target Area 1 if the screening-level results show evidence of low soil pH. If this is the case, then soil samples should be analyzed for metals.

SECTION 6-164

PARCEL 164 EVALUATION PLAN

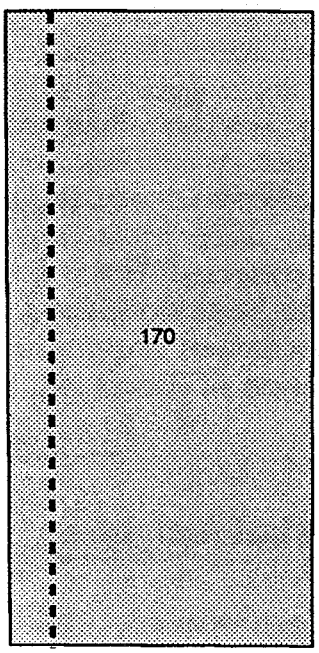
This Parcel-specific Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 164 at NAS Alameda (Figure 6-164-1). The parcel, which is located in the southeastern portion of the base, is 2.1 acres in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel does not contain any RCRA sites. One zone-wide and no parcel-specific target investigation areas (target areas) were identified on this parcel. No zone-wide samples will be collected from this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 164, historical activities are discussed below.

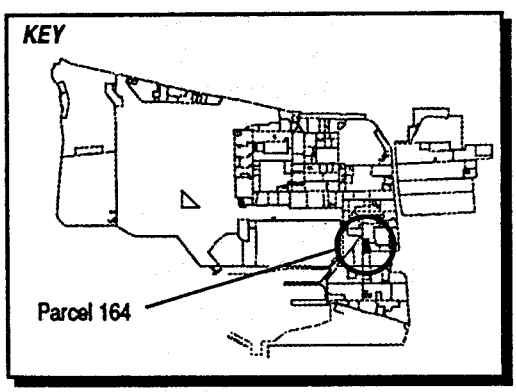
Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 164, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 210, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data





LEGEND

Steam Line

1"= 125'

Figure 6-164-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/AMR/06.28.94

evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

Filling began in the area covered by this parcel in approximately 1942. Prior to this time, the parcel area was completely inundated by San Francisco Bay. The parcel area was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, one building (Building 170) covers 100 percent of the parcel. There is no open space on this parcel. Fuel and sewer lines are present at this parcel and are shown in Figure 6-164-1.

Parcel 164 is located within 500 feet of five Installation Restoration (IR) Program sites (IR sites 4, 7B, 11, 13, and 19). Previous investigations have been conducted at each of these IR sites but they did not include sampling on or immediately around Parcel 164; however, current investigations at IR Site 19 call for sampling in and very near to this parcel.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 170

Building 170 was constructed in 1946 and provides general warehouse operations. This building is in fairly good condition. It covers approximately 92,000 square feet and has additional loft space inside. The building walls are constructed with cement blocks to a height of approximately five feet and continue to the roof with corrugated galvanized metal panels mounted on steel framing. The roof is constructed with a vaulted metal frame and corrugated metal roofing.

Utilities located within and immediately surrounding this building include sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines. Most of these services run north to south along the western edge of the building.

Information collected during the EBS indicates that activities conducted within this building included storage and packaging of aviation equipment. A GAP site has been recently located in the office area located in the northwest corner of the building. This operation handles a continual low-volume throughput of various hazardous materials.

A stain of liquid foam packaging material, as recorded in the EBS, covers about a 15 square foot area along the western building exterior wall in the northern portion of this building. This release is apparently due to the continual use of packaging foam supplied in liquid form in 55-gallon drums.

No other incidents (e.g., crashes, floods, or fires) were documented to have occurred within or immediately surrounding Building 170.

Underground Storage Tanks

No evidence of underground storage tanks (USTs) has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground storage tanks are may have been present at this parcel.

Parcel Boundary Conditions

Parcel 164 is bounded by Parcels 134 and 140. Activities of concern on the adjacent parcels include a 2,000 gallon spill of aviation fuel in Parcel 134 west of Building 372. The spill occurred in 1992 and has been remediated. The spill occurred within approximately 75 feet of Parcel 164. The Pacific Coast Oil Company Refinery, which operated from 1879 to 1903 on property now identified as IR site 13, is located within 500 feet of Parcel 164 and therefore may be of concern.

No parcels contiguous with Parcel 164 are IR sites, therefore, this PEP does not require sampling specifically in response to the five nearby IR sites. If the continuing investigations at any of the IR sites reveal a cause for concern at Parcel 164, then additional sampling on this parcel may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 164, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-164-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: lead-based paint, transformers, asbestos, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines, and sewer lines is discussed in the corresponding protocol presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

Although no Industrial Hygiene (IH) sampling is specified in this PEP, IH issues are potentially of concern in Building 170. The one-time compliance program will determine whether further sampling or cleanup measures are required within this building before transfer or lease can occur.

Once the data gaps in Table 6-164-1 are addressed, Parcel 164 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 164. No parcel-specific target areas were identified for this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is

TABLE 6-164-1

Summary of Data Gaps
NAS Alameda Parcel 164

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• Industrial hygiene issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 164 is located within 500 feet of five Installation Restoration (IR) Program sites (IR sites 4, 7B, 11, 13, and 19). Previous investigations have been conducted at each of these IR sites but they did not include sampling on or immediately around Parcel 164; however, current investigations at IR Site 19 call for sampling in and very near to this parcel. No other current investigations at the five IR sites call for sampling on or very near Parcel 164.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring parcels identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-164-1

Summary of Data Gaps
NAS Alameda Parcel 164

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• Incinerator: Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 may have been impacted by historical airborne releases of dioxins and furans from the incinerator fomerly housed in former Building 68. Building 68 is upwind of these parcels under prevailing wind conditions. No samples for this zone will be collected Parcel 164.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, industrial sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

classified as potential. The samples proposed for the zone-wide target area are located on adjacent parcels. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

In addition, concerns pertaining to: industrial hygiene, asbestos, lead-based paint, PCBs, underground lines, radiological issues, and nearby IR sites, must be resolved before this parcel can be reclassified from BRAC Category 7, leased, or transferred.

SECTION 6-210

PARCEL 210 EVALUATION PLAN

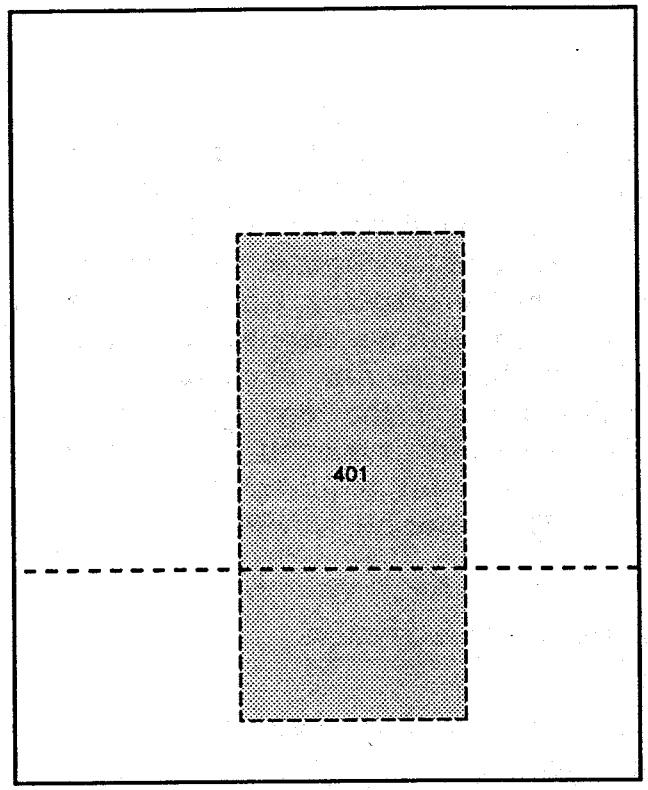
This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 210 at NAS Alameda (Figure 6-210-1). The parcel, which is located in the southeastern portion of the base, is less than an acre in size and is rectangular in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide and no parcel-specific target investigation areas (target areas) have been identified on this parcel. No sampling is proposed for this parcel in the zone target area. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for evaluating Parcel 210, historical activities are discussed below.

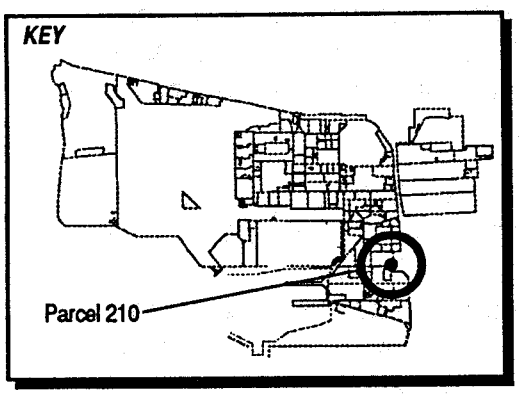
Background and Historical Activities

This subsection summarizes EBS information available for the buildings, open spaces, and boundaries of Parcel 210, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts due to compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 211, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the





LEGEND

Storm Sewer Line

1"= 15'

Figure 6-210-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/07.08.94

entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda.

One building (Building 401, a shelter for bus passengers) was formerly located on the parcel. Building 401 covered approximately 20 percent of the parcel area. Currently, the entire parcel area is open space. Sewer lines are present at this parcel and are shown in Figure 6-210-1.

Parcel 210 is part of Installation Restoration (IR) Program Site 13, and the parcel is located within 500 feet of IR Site 10B. Previous investigations have been conducted at these IR sites. Specific data from several soil borings located near parcel 210 are available. No VOCs, SVOCs, or pesticides detected in these borings exceeded their residential PRGs. These data were collected during an investigation by Canonie and have not been independently verified.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental concern within parcel open space are described in detail below.

Building 401 (Demolished)

Building 401 was constructed in 1945 and served as a passenger bus shelter. The building has been demolished. The type of construction and the construction materials used are unknown. The building covered approximately 150 square feet. No chemical storage or use is documented to have occurred within Buiiding 401.

Open Space

The open space is entirely paved with concrete in good condition. An underground storm sewer line is the only utility located at this parcel.

Underground Storage Tanks

No evidence of underground storage tanks (USTs) has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are present on Parcel 210.

Parcel Boundary Conditions

Parcel 210 is bounded by Parcels 147, 211, and 214. Activities of concern within these parcels includes the past use of five former ASTs (Tanks 324-1 through 324-5) located at Parcel 147. Parcel 210 is located within IR Site 13, the former Pacific Coast Oil Company Refinery, which operated from 1879 to 1903. Investigations are planned for several areas within this IR site. If any of these investigations reveal a cause for concern at Parcel 210, then sampling on this parcel may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 210, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-210-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6. No Industrial Hygiene (IH) sampling is required for Parcel 210 because no buildings are present.

Once the data gaps in Table 6-210-1 are addressed, Parcel 210 may be leased or transferred, as appropriate.

Target Areas and Compounds of Concern

One zone-wide target area was identified for Parcel 210. No parcel-specific target areas were identified for this parcel. The zone-wide

TABLE 6-210-1

Summary of Data Gaps
NAS Alameda Parcel 210

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 210.
Installation Restoration (IR) Sites	• Parcel 210 is located within IR Site 13, the former Pacific Coast Oil Company Refinery which operated from 1879 to 1903. Investigations are planned for several areas within this IR site.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.
Potential Zone-Wide Release Areas	• (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The samples proposed for the zone-wide target area are located on adjacent parcels.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-210-1

Summary of Data Gaps
NAS Alameda Parcel 210

Data Gap	Status/Description
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer lines identified.
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

target area is described in detail in the Zone Analysis Plan for Zone 22. This zone-wide target area includes:

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. The samples proposed for the zone-wide target area are located on adjacent parcels. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

In addition, concerns pertaining to: underground lines, radiological issues, and the IR site status must be resolved before this parcel can be reclassified from BRAC Category 6, leased, or transferred.

SECTION 6-211

PARCEL 211 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 211 at NAS Alameda (Figure 6-211-1). The parcel, which is located in the southeastern portion of the base, is approximately 12 acres in size and is roughly rectangular in shape. The parcel has been classified as requiring a moderate level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. This parcel contains no RCRA sites. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. Surface soil sampling will be used to accomplish the screening-level investigation. Table 6-211-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 211, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 211, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, and 214. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

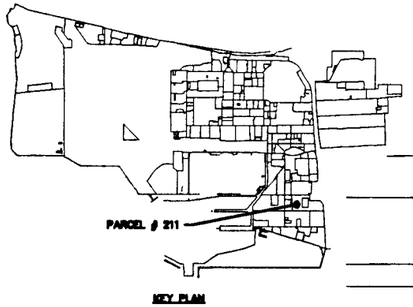
FIGURE 6-211-1 – PARCEL 211
PROPOSED SAMPLE LOCATION MAP

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



GENERAL LEGEND

- PARCEL OUTLINE
- MWOR-2 — MONITORING WELL (Canonie Environmental, Inc.)
- BOR-20 — BORING LOCATION (Canonie Environmental, Inc.)
- 12 — SURFACE SOIL SAMPLE & No.
- (2) — TARGET AREA & No.

SANITARY SEWER LINE LEGEND

- (2-1) — SANITARY SEWER MANHOLE & No.
- L.S.8 — LIFT STATION & No.
- —SW— SANITARY SEWER LINE

MATERIALS:

C.I. – CAST IRON
V.C. – VETRIFIED CLAY

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

STEAM LINE LEGEND

- —ST— STEAM LINE

INDUSTRIAL WASTE LINE LEGEND

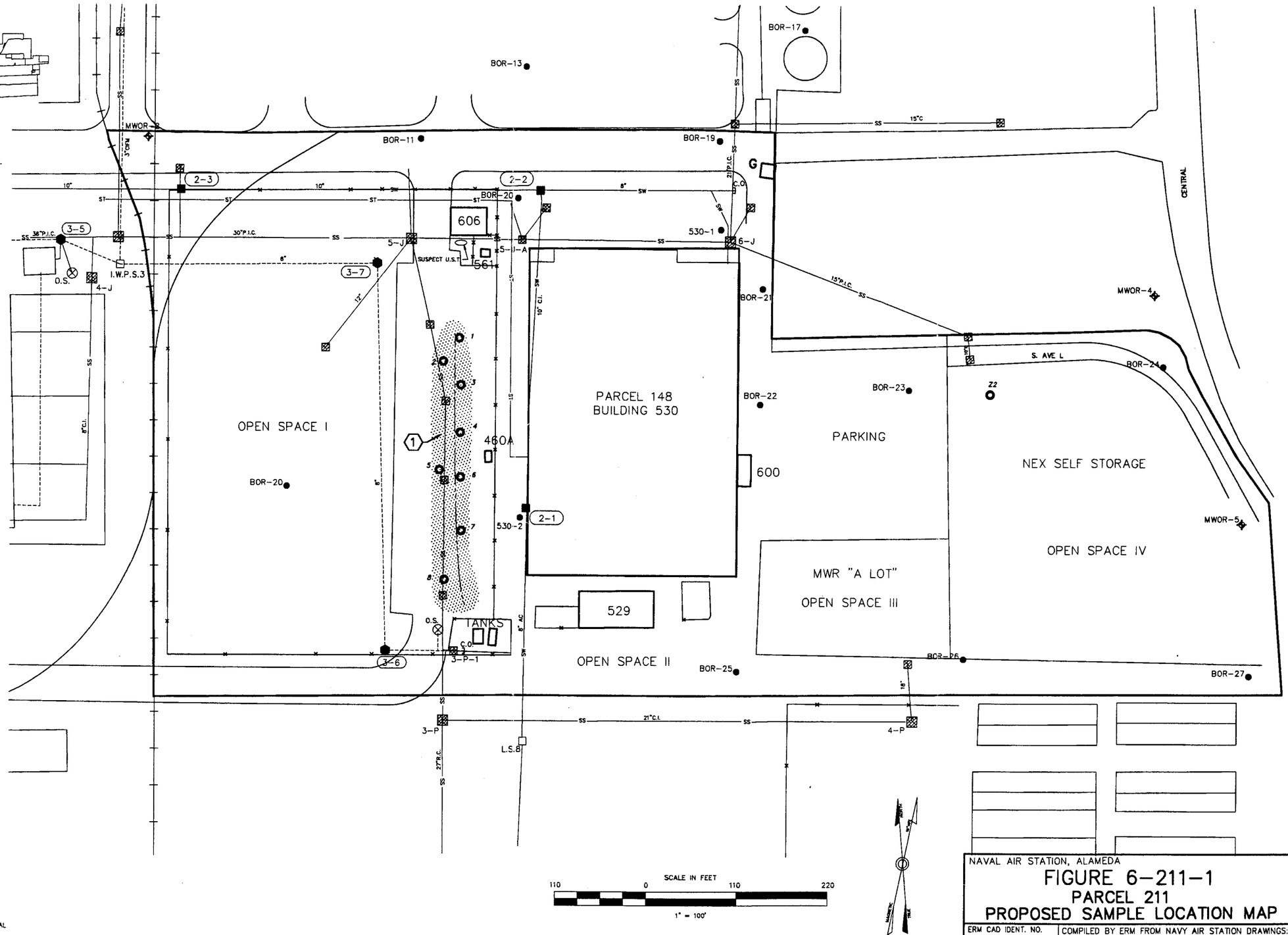
- (3-6) — INDUSTRIAL WASTE MANHOLE & No.
- O.S. — OIL SEPARATOR
- I.W.P.S.3 — PUMP STATION & No.
- ---------- INDUSTRIAL WASTE LINE

STORM DRAIN LEGEND

- 3-P — MANHOLE & No.
- CATCH BASIN
- —SS— STORM SEWER LINE

MATERIALS:

R.C. – REINFORCED CONCRETE
P.I.C. – PAVED INVERT CORREGATED METAL



NAVAL AIR STATION, ALAMEDA

FIGURE 6-211-1
PARCEL 211
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO.	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS:
19590211.DWG F:\HOME\SHARON\NAVY-AS\ALAMEDA\	PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES)
SCALE AS NOTED	DATE: 3.07.95/2121.96.45 — SHEET 1 OF 1

SENSITIVE

TABLE 6-211-1

Summary of Recommended Samples
NAS Alameda Parcel 211

Sample Number	Sample Depth	Type of Sample	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
211-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-3-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-4-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-5-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-5-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	EPA Modified 8015
211-6-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-7-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-8-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	Test Kit
211-8-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Fuels, Oils	TPH	EPA Modified 8015
Z22-2-0-S-V-DDMMYY	0.0-0.5'	Surface	Soil	Zone 22 Target Area 1	Incinerator Emissions	Dioxins/Furans	EPA 8280/SAS B

* These are the suggested locations for confirmation samples analysis. The actual locations will depend on field analytical results.

located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

The northern and eastern portions of this parcel were part of the area known as Old Alameda Point, which was part of the original peninsula of Alameda. The southern and western half of the parcel area was inundated under San Francisco Bay prior to 1942. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time.

Currently, four buildings (Buildings 460A, 529, 600, and 606) and one structure (Structure 561) cover approximately five percent of the parcel. The remaining 95 percent is open space. The following activities occur in this open space: vehicle parking, RV and boat parking, personal storage (in personal storage units), aircraft defueling, and material storage. Sewer lines that are present at this parcel are shown in Figure 6-211-1. The site inspection revealed underground lines associated with fuel transfer operations at this parcel (see discussion under Open Space I); however available maps from NAS Alameda did not indicate the locations of these lines.

Parcel 211 is located within Installation Restoration (IR) Program Site 13 (the former oil refinery area), and also surrounds IR Site 10B (Building 530). In addition, IR sites border the parcel to the west (IR Site 9, Building 410) and to the south (IR Site 16). Previous investigations have been conducted at Parcel 211.

Specific data from the IR Site 13 investigation are available from ten borings within or immediately bordering Parcel 211. In addition, one boring from the investigation of IR Site 9 is located on Parcel 211. Soil samples from these borings were analyzed for metals, pesticides, VOCs, and SVOCs. Benzo(a)pyrene, a SVOC, and Toxaphene, a pesticide, were detected in concentrations which exceeded their PRGs. Benzo(a)pyrene exceeded its residential PRG of 120 µg/kg in Borings MW410-4, MWOR-2, MWOR-5, BOR-11, BOR-12, BOR-23, and BOR-27. However, it only exceed its industrial PRG of 390 µg/kg in borings MWOR-2, BOR-11, and BOR-23. Toxaphene was detected above its residential PRG of 770 µg/kg in boring BOR-26. However, it was not detected at concentrations above its industrial PRG. Additional investigation in this area is necessary to verify these conclusions, and due to the fact that detection limits for samples obtained at this area were frequently above PRGs for Benzo(a)pyrene.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-

containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 460A

Building 460A is a small shed containing control equipment for the defueling facility located in Open Space I. Operations within the defueling area are detailed under Open Space I.

No chemical storage or use is documented to have occurred in this building. No other incidents (e.g., fires, floods, or crashes) are documented to have occurred within or near Building 460A.

Building 529

Building 529 was constructed to supply auxiliary power for Building 530. It is in fair condition and is continues to serve this original purpose. The one-story building is constructed of concrete over a concrete slab. The building covers approximately 3,200 square feet. Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

During the site inspection, nine 55-gallon drums containing petroleum products and miscellaneous chemicals were noted within the building. The floor of this building was covered in several locations with oil-like stains. Since this staining is on concrete in relatively good condition, no sampling is called for at this time. Grated drains were present throughout the interior of this building.

A large fenced off and concrete paved area was located adjacent to Building 529. Two 1500 kVA, oil-filled transformers, both marked as containing PCBs, and numerous oil-filled switches were located in this area. No staining was noted in this area.

Building 600

Building 600 was constructed as a support building for Building 530. This building contains cooling towers and associated cooling equipment. The building is constructed of a metal frame over a concrete pad. Utilities located within and immediately surrounding

this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines. Several 55-gallon drums of lubricating oil and canisters of freon were stored in this location. Minor oil staining was noted throughout the interior of this building.

Building 606

This building is not shown on the NAS Alameda Base Map, nor does it appear in the building database. Building 606 appears to be an administration building. The building is a portable-type building, with aluminum siding and a wood roof. It is in generally good condition. The building was locked and inaccessible during the site investigation. Utilities located within and immediately surrounding this building include sanitary and storm sewers, underground electrical distribution lines, potable and fire protection water lines, and steam and condensate lines.

A suspect UST was noted adjacent to this building. A vent pipe was evident on the southern side of Building 606, that may indicate the presence of an UST at this location.

Structure 561

Structure 561 is a concrete transformer pad. This structure is located within the fenced region that contains the defueling facility. The only transformer evident was labeled as containing less than one part per million PCBs.

Open Space I

Open Space I is defined by the fenced off area located at the western portion of Parcel 211. This open space area contains a material and equipment storage yard and a defueling facility. Open Space I surrounds Buildings 460A and 606, and Structure 561. The eastern half of Open Space I, which is approximately 30 percent of the area, is paved with concrete. The remainder is paved with asphalt. Utilities located within and immediately surrounding this open space include sanitary, storm, and industrial sewers; underground electrical distribution lines; potable and fire protection water lines; and steam and condensate lines. The site inspection revealed underground lines associated with fuel transfer operations at this parcel (see discussion under Open Space I); however available maps from NAS Alameda did not indicate the locations of these lines.

A review of historical aerial photographs and EBS information indicates that Open Space I was utilized for material and equipment storage from 1947 through 1994. The defueling yard, which is located in the eastern half of this open space, was constructed between 1958 and 1963.

A hazardous materials storage shed is located at the eastern side of Open Space I and contains: 10 5-gallon containers of aircraft cleaning compound, 20 5-gallon containers of grease, 30 gallons of oil in assorted containers, and two 5-gallon containers of solvents.

The defueling facility covers 30 percent of Open Space I. This area is paved with concrete. Five defueling pumps are located in the defueling facility. The area around the two northern most pumps was heavily stained. The other three pumps were surrounded by light staining. Storm drains were noted adjacent to two of the pumps. The defueling area is addressed by Target Area 1.

Drainage barrels are utilized to collect fuel remaining in lines after an aircraft is defueled. Fuel is collected and then emptied into the defueling system. Drainage barrels are subsequently stored adjacent to the defueling pumps in an inverted position. Staining was noted at drainage barrel storage areas adjacent to the two northern most pumps.

Defueling pumps are connected via underground piping to a fuel pump located at the southern portion of the yard. The fuel pump is surrounded by a sandbag berm. Staining was noted throughout the bermed interior area. A storm drain was located inside the containment.

The fuel pump is connected via underground piping to the two aboveground storage tanks (ASTs) located at the southeast corner of the site. AST 1 and AST 2 contain, respectively, 10-10 oil and 10-10 oil mixed with fuel. Apparently, prior to defueling, 10-10 oil from AST 1 is pumped into an aircraft through the defueling pumps as an accident prevention measure. Subsequently, the fuel mixed with 10-10 oil is removed from the aircraft, and is pumped into AST 2, where it is stored prior to being recycled. Both of these ASTs are surrounded by containment. Drains were evident inside each containment area; it was unclear if these drains were sealed or where they connected to.

The western half of Open Space I is used for storage of aircraft-related equipment and materials.

Open Space II

Open Space II includes the vehicle parking areas (except the MWR parking area) and surrounding roadways. Minor vehicle parking stains were noted throughout this open space. Approximately 95 percent of this area is paved with asphalt, a small area is paved with concrete and another small area is unpaved. Utilities located within and immediately surrounding this open space include sanitary, storm, and industrial sewers, underground electrical distribution lines, and potable and fire protection water lines.

A review of historical aerial photographs and EBS information indicates that Open Space II was utilized for aircraft parking from 1947 through 1970. The area appeared to be developed to its current state in 1975.

Two apparently non-functional sewage lift stations were located to the west and northwest of Building 530. A water pipe and hose were located over an unpaved 20 foot by 20 foot area in the southwest of the parcel.

Open Space III

Open Space III is the MWR "A Lot." Open Space III is covered in spots by weathered asphalt, but most of the asphalt previously located in this area is no longer present. Gravel has been spread throughout the entire parking area as a cover material, and metal tracks have been laid to provide firmer footing for vehicles. Utilities located within and immediately surrounding this open space include sanitary and storm sewers, underground electrical distribution lines, and potable and fire protection water lines.

A review of historical aerial photographs and EBS information indicates that Open Space III was a grassy undeveloped area from 1947 through 1970. Open Space III appears to have been developed to its current state in 1975.

Open Space III is utilized for parking of recreational vehicles and power boats. Minor vehicle parking stains were noted throughout this area.

Open Space IV

Open Space IV is occupied by the NEX self storage facility. Fifty percent of the open space is occupied by garage-like self storage units. The area is almost entirely paved with asphalt. Utilities located within and

immediately surrounding this open space include sanitary and storm sewers, underground electrical distribution lines, and potable and fire protection water lines.

A review of historical aerial photographs and EBS information indicates that Open Space IV contained an unidentified building in 1947. The footprint for the building is evident in the 1953 aerial photograph. Between 1947 and 1955, this area appeared to have been utilized for miscellaneous material storage. This open space was evidently developed to its current state in 1985.

Underground Storage Tanks

One potential underground storage tank (UST) was noted during the site inspection of Parcel 211, as indicated by a vent pipe originated at the suspect tank location shown on Figure 6-211-1. The tank capacity, material stored, installation date, and activity status are unknown.

Parcel Boundary Conditions

Parcel 211 is bordered to the north by Parcels 147 and Parcel 214, to the south by Parcel 149 and 150, and to the west by Parcel 153. Parcel 211 surrounds Parcel 148. Activities of concern at Parcel 148 include storage and use of solvents and other hazardous materials. Activities of concern at Parcel 149 include storage of solvents, PCBs, and other hazardous materials. Parcel 152 (IR Site 9, Building 410) is located within 500 feet of Parcel 211 and involved aircraft washdown activities and storage and use of solvents and other hazardous materials.

Parcel 211 is located within IR Site 13, the former Pacific Coast Oil Company Refinery, which operated from 1879 through 1903. This area is currently undergoing investigation. If the continuing investigations at the surrounding IR sites reveal a cause for concern at Parcel 211, then additional sampling on Parcel 211 may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 211, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-211-2 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, underground storage tanks, industrial hygiene concerns, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated sewer lines are also addressed separately. Sampling associated with USTs, and sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

The one-time compliance program will determine whether further sampling or cleanup measures are required at this parcel before transfer or lease can occur.

As noted earlier, Parcel 211 has open space areas that are unpaved. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 211.

Once the data gaps in Table 6-211-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 211 may be leased or transferred, as appropriate.

TABLE 6-211-2

Summary of Data Gaps
NAS Alameda Parcel 211

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• IH issues are being addressed under a separate program (one-time compliance).
Installation Restoration (IR) Sites	• Parcel 211 is located within Installation Restoration (IR) Program Site 13 (the former oil refinery area), and also surrounds IR Site 10B (Building 530). In addition, IR sites border the parcel to the west (IR Site 9, Building 410) and to the south (IR Site 16). Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR parcels identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-211-2

Summary of Data Gaps
NAS Alameda Parcel 211

Data Gap	Status/Description
Potential Zone-Wide Release Areas	• (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans.
Potential Parcel-Specific Release Areas	• (Open Space I): Soils at the defueling area may have been impacted by previous defueling operations. The target area contains approximately 5,000 square feet. Compounds of concern possible within this area are petroleum hydrocarbons.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• One UST is *potentially* located south of Building 606, as indicated by vent piping in this area.
Underground Utilities	• Industrial sewer, storm sewer, sanitary sewer, electrical, and water lines identified.
- Steam Lines	• Steam lines identified.
- Fuel Lines	• The site inspection revealed underground lines associated with fuel transfer operations at this parcel (see discussion under Open Space I); however available maps from NAS Alameda did not indicate the locations of these lines.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This parcel contains one parcel-specific target areas and is also contained in a zone with zone-wide target areas. This subsection of the PEP discusses the specific parcel target area and provides an overview of the zone-wide target areas. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 22. The nature and location of the parcel-specific and zone-wide target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility. The following target areas were identified based on possible impacts from activities described above involving potentially hazardous substances.

- Target Area 1 (Open Space I): Soils at the defueling area may have been impacted by previous defueling operations. The target area contains approximately 5,000 square feet. Compounds of concern possible within this area are petroleum hydrocarbons. The likelihood of environmental impact having occurred at this target area is classified as suspect. Samples to be collected in this target area are listed in Table 6-211-1.

- Zone 22 Target Area 1 (Former Incinerator): This target area includes Parcels 134, 141, 142, 143, 146, 147, 152, 153, 164, 210, and 211 in Zone 22, and Parcels 139, 140, 150, 151, 154, and 201 in Zone 19, and encompasses the parcels located downwind of the former incinerator in former Building 68. Classes of compounds of concern possible within this target area include dioxins and furans. The likelihood of environmental impact within this target area is classified as potential. One sample proposed for the zone-wide target area is located on this parcel. The zone-wide target area is described in detail in the Zone Analysis Plan for Zone 22.

Screening-Level Investigation

Surface soil sampling (SOP 3) is the screening-level investigation technique that will be used to assess conditions in the target areas and to identify areas that may require further sampling in the follow-up detailed evaluation phase. Table 6-211-1 summarizes screening-level sampling and analysis for the parcel's target areas. Nine surface soil samples will be collected at the locations shown in Figure 6-211-1. The sample locations shown on Figure 6-211-1 are approximate and may be

modified in the field; samples should be located over the area with the most significant staining. If no staining is evident, then the samples should be distributed evenly over the target area. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize parcel areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above on a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), subsurface Geoprobe soil sampling (SOP 14), chip sampling (SOP 18), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-214

PARCEL 214 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed evaluation strategy for Parcel 214 at NAS Alameda (Figure 6-214-1). The parcel, which is located in the southeast portion of the base, is 3.6 acres in size and is roughly rectangular in shape. This parcel is part of an Installation Restoration (IR) program site and is currently undergoing investigation by the IR contractor. No additional sampling will be required as part of this PEP, although a high level of effort is needed for the parcel to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located on this parcel. No zone-wide or parcel-specific target areas have been identified at thia parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 214, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 214, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 132, 133, 134, 141, 142, 143, 144, 145, 146, 147, 148, 149, 152, 153, 164, 210, and 211. This parcel zone has been designated the Southeastern Refinery and Heavy Industrial Zone (Zone 22). The Southeastern Refinery and Heavy Industrial Zone encompasses the parcels that have been used as refinery or refinery support facilities, or industrial or industrial support facilities. During the sampling program development, the parcels

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-214-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
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SENSITIVE

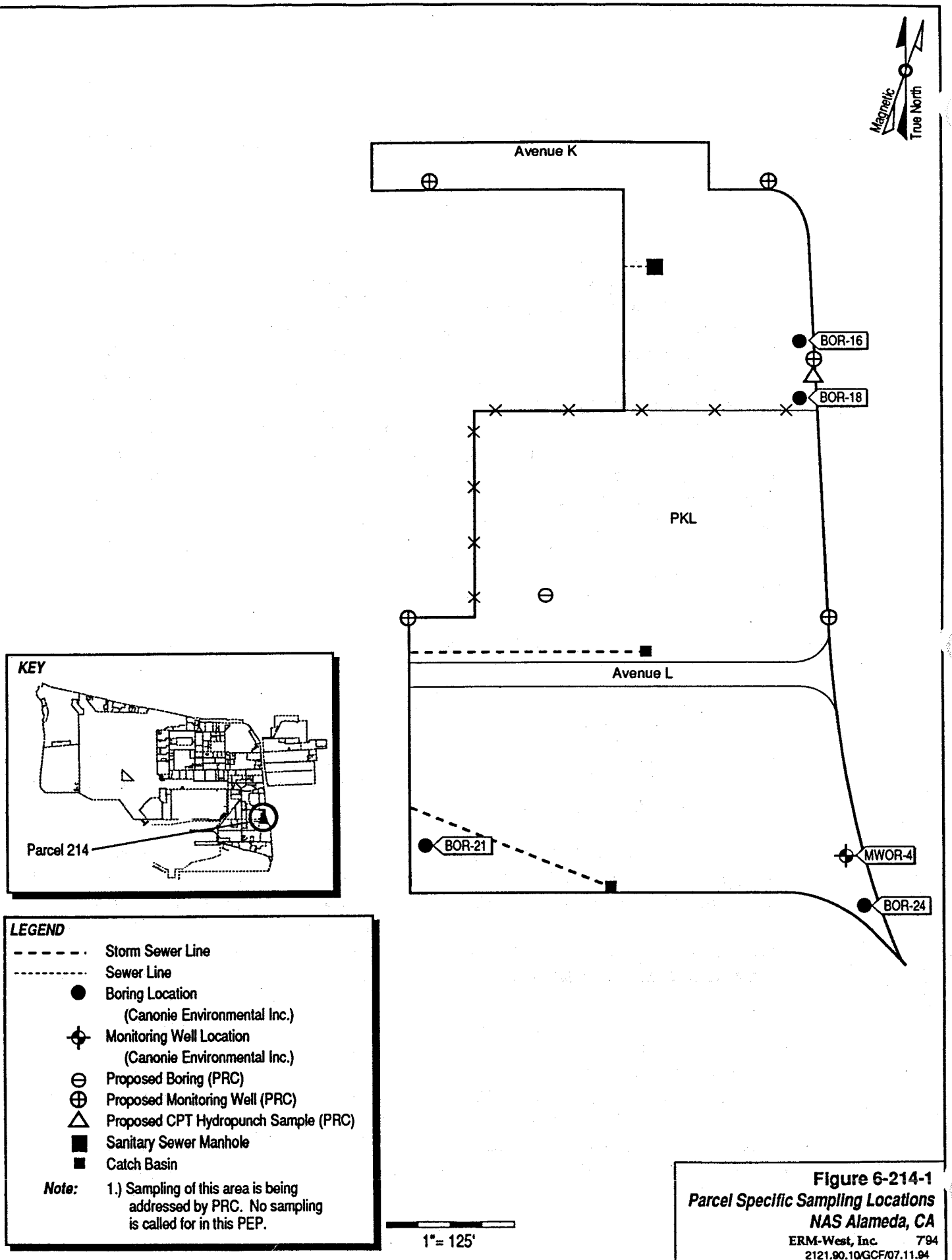

Figure 6-214-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 794
2121.90.10/GCF/07.11.94

SENSITIVE

located in this zone were evaluated together. Therefore, future data evaluation for this parcel should consider the data collected for the entire zone. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 22.

This parcel is located on the area formerly known as Old Alameda Point, and was part of the original peninsula of Alameda.

Currently, structures on this parcel include mobile trailers, a parking lot, a bicycle path, two concrete foundations, and storage lockers. There are currently no permanent buildings on the parcel. Based on aerial photographs, approximately 18 buildings formerly existed on Parcel 214. Underground sewer lines are present on this parcel and are shown on Figure 6-214-1.

Parcel 214 part of Installation Restoration (IR) Program Site 13. Previous investigations have been conducted at Parcel 214 and specific data regarding potential chemical occurrence are available. Parcel 214 is also located near IR Sites 4, 7C, 10B, and 17. Releases associated with IR Site 13 (The Former Pacific Coast Oil Refinery) have historically impacted Parcel 214. Soil and groundwater sampling results are compiled in a 1993 report prepared by PRC Environmental Management, Inc., under contract N62474-88-D-5086, entitled *Naval Air Station, Alameda: Data Summary Report RI/FS Phases 1 and 2A.* Ongoing (follow-up) sampling is being performed by the IR contractor.

As part of a former screening-level sampling effort summarized in the 1993 PRC report, a total of 281 soil samples have been collected at different depths from 22 soil borings and 5 monitoring wells throughout IR Site 13. This investigation was conducted by Canonie in 1990. Soil and groundwater samples were analyzed for metals, PCBs, VOCs, SVOCs, PAHs, pesticides, and TPH. Four of the soil borings (BOR-16, BOR-17, BOR-18, and BOR-20) and one of the monitoring wells (MWOR-4) are located on Parcel 214 as shown in Figure 6-214-1.

The 1993 PRC report indicated that all metals and organic compounds were found at concentrations below USEPA's January 1994 industrial and unrestricted use preliminary remediation goals for soil. No unrestricted use or industrial PRGs were found for Beta-BHC or Di-n-butylphthalate. The pesticide beta-BHC was detected only in BOR-18 at 2.4 µg/kg. The semivolatile compound Di-n-butylphthalate was detected in BOR-17, BOR-18, BOR-20, and MWOR-4; the concentration detected was greatest in BOR-18 at 2,000 µg/kg between 3.5 and 4 ft. Groundwater sampling results from MWOR-4 indicate that most metals detected in groundwater were below USEPA's December 1993 MCLs, while most organic compounds were above USEPA's December 1993 MCLs.

The IR contractor has proposed follow-up sampling for Parcel 214 including one boring, one CPT/HydroPunch, and five monitoring wells as shown in Figure 6-214-1.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Activities of potential environmental or industrial hygiene concern within parcel open space are described in detail below.

Open Space

Parcel 214 consists entirely of open space. The open space is currently used for vehicle parking, a bicycle path, and storage. Approximately 55 percent of the open space is paved with asphalt, 40 percent is landscaped, and five percent is covered with concrete associated with concrete foundations of two former buildings and a bicycle path. The pavement is generally in good condition. The landscaped areas of the open space are primarily covered with grass and contains scattered trees and shrubs. Utilities located within and immediately surrounding the open space include sanitary sewer, storm sewer and underground electrical lines, and overhead electrical lines.

Based upon the aerial aerial photograph review, 18 buildings were formerly located on the parcel in (March 1947). The EBS was not able to identify the activities conducted or the chemicals stored in these former buildings. Of these 18 buildings, 15 were small rectangular buildings located throughout the parcel in two rows, likely used for materials storage. These 15 buildings were demolished prior to August 1953. The area occupied by these former buildings is currently open space used for storage and parking lots.

These 18 buildings also included a large L-shaped building. This building was located in the southeast corner of the parcel. A parking lot, located to the west of this building, was stained with vehicle or aircraft tracks. Airplanes were parked to the west of this parking lot. The large L-shaped building was demolished prior to August 1953. The area occupied by this former building is currently open space used for storage.

Two of the 18 buildings formerly located on the parcel were medium sized rectangular buildings. These two buildings were located in the northeast corner of the parcel. They were demolished prior to

November 1981. The space occupied by these two former buildings is currently a landscaped area.

Structures currently on this parcel include mobile trailers, storage lockers, two parking lots, two concrete foundations, and a bicycle path. One of the mobile trailers is the NEX Self-Storage Office. It is located in the southern portion of the parcel along with the NEX storage lockers. The other mobile trailers are IR contractor trailers. They are located near the former South Gate Entrance on Avenue L. The two parking lots are located in the center of the parcel; the MWR (morale, welfare, and recreation) parking lot is located on the west side of the parcel and the NEX parking lot is located on the east side. The bicycle path runs diagonally across the landscaped area on the northeast corner of the parcel.

No chemicals are documented to have been stored or used at the parcel. No spills, other than related to normal vehicle activities, are documented to have occurred on Parcel 214. No incidents, such as fires, mishaps, flooding or crashes, are documented to have occurred within the open space.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 214 is bounded by Parcel 145 to the north, Parcels 147 and 210 to the west, Parcel 211 to the south, and Central Avenue to the east. Activities of concern on these adjacent parcels include IR Site 7B on Parcel 145, IR Site 10B on Parcel 211, and IR Site 13 which encompasses all adjacent parcels. The former Seaplane Lagoon, IR Site 17 is located to the west of Parcel 214.

If the continuing investigations at the IR sites reveal a cause for concern at Parcel 214, then additional sampling on Parcel 214 may be appropriate.

RCRA Sites

This parcel contains no RCRA sites.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 214, consistent with the objectives described in Section 1 of the Shell Workplan. The available information suggests that this parcel may be reclassified from BRAC Category 7 to BRAC Category 6. Although this parcel was reclassified based on its status as an IR site, several data gaps remain that prevent this parcel from being leased and/or transferred. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being leased or transferred if it is not resolved. The data gaps shown in Table 6-214-1 must be addressed before the parcel can be leased or transferred. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with sewer lines are also addressed separately. Sampling associated with sewers is discussed in the corresponding protocols presented in Section 3. A discussion regarding the coordination of the sampling program presented herein with other investigations is presented in the Coordination with Other Investigation and Assessment Programs at NAS Alameda subsection within Section 6.

No Industrial Hygiene (IH) sampling is required for Parcel 214 because no industrial buildings are present.

As noted earlier, Parcel 214 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (e.g., areas where vegetation was actively suppressed) and intensive-use areas (e.g., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling has been proposed for Parcel 214.

Once the data gaps in Table 6-214-1 are addressed, Parcel 214 may be leased or transferred, as appropriate.

TABLE 6-214-1

Summary of Data Gaps
NAS Alameda Parcel 214

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)[1]	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 214.
Installation Restoration (IR) Sites	• Adjacent parcels include IR Site 7B on Parcel 145, IR Site 10B on Parcel 211, and IR Site 13 which encompasses all adjacent parcels. The former Seaplane Lagoon, IR Site 17 is located to the west of Parcel 214. Additional subsurface investigation relative to IR Site 13 is proposed by the IR contractor.
Lead-Based Paint (LBP)[1]	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment[1]	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring, non-IR site parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

[1] Note: These data gaps are disclosure issues, only.

TABLE 6-214-1

Summary of Data Gaps
NAS Alameda Parcel 214

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, electrical, and water lines identified
- Steam Lines	• No steam lines identified.
- Fuel Lines	• No fuel lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to PCBs, underground lines, radiological concerns, and the IR site status must be resolved before this parcel can be leased or transferred.

SECTION 6-Z23

ZONE 23 ANALYSIS PLAN

This Zone Analysis Plan (ZAP) summarizes the proposed evaluation strategy for Zone 23 at NAS Alameda (Figure 6-Z23-1). Zone 23 has been designated the Southeastern Recreational Zone and encompasses the parcels that have historically been used for recreational activities. Zone 23 is comprised of Parcels 161, 162, 165, 166, 167, 168, 169, and 198. During the sampling program development, the parcels located in this zone were evaluated together. One zone-wide target investigation area (target area) and nine parcel-specific target areas have been identified in this zone. Sampling procedures called for in the screening-level investigation in these areas include surface soil and subsurface Geoprobe soil sampling. Table 6-Z23-1 provides the complete list of samples and analyses prescribed for this zone, and Figure 6-Z23-1 illustrates all sample locations for the entire zone, including parcel-specific sampling. Parcel 161 has tentatively been reclassified to BRAC Category 2.

This zone evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Zone 23, historical activities are discussed below.

Zone 23 Background and Historical Activities

This subsection briefly summarizes EBS information available for buildings, open spaces, and boundaries of Zone 23 consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, underground storage tanks, and other areas of concern. Detailed information regarding parcel-specific concerns and parcel histories is provided in the Parcel Evaluation Plans (PEPs) for the parcels contained in this zone.

Past and present use of this zone was determined from site inspections, employee interviews, and a review of permits, historical records, and

TABLE 6-Z23-1

Summary of Recommended Samples
NAS Alameda Zone 23

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
Z23-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Creosote, Railroad Tie Tar, Fuels, Oils, PCBs	SVOCs, TPH, PCBs, lead	EPA 8170, Modified EPA 8015, EPA 8080, ICAP SCAN
Z23-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Creosote, Railroad Tie Tar, Fuels, Oils, PCBs	SVOCs, TPH, PCBs, lead	EPA 8170, Modified EPA 8015, EPA 8080, ICAP SCAN
Z23-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Creosote, Railroad Tie Tar, Fuels, Oils, PCBs	SVOCs, TPH, PCBs, lead	Modified EPA 8015, CLP RAS

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

historical aerial photographs (the non-intrusive investigation[1]). This information was used to determine areas on the zone where sampling was deemed necessary to delineate potential impacts of compounds of concern.

Zone 23, the Southeastern Recreational Zone, encompasses nine parcels that have been used for recreational activity since the 1970s. Prior to the 1970s, this zone was used for aircraft parking and aircraft services including aircraft fueling and defueling, aircraft maintenance, and aircraft wash down; however, no large scale-staining was noted in aerial photographs. During the sampling program development, the parcels located in this zone were evaluated together to better address zone-wide issues common to all parcels within the zone. This plan details potential zone-wide concerns and summarizes parcel-specific concerns. As noted above, a detailed discussion of specific parcel concerns is provided in the PEPs for individual parcels.

Filling began in the area covered by this zone in approximately 1942. Prior to this time, the zone area was completely inundated by San Francisco Bay. The zone was completely filled as of 1946; the ground level and grading have not changed significantly since that time.

Currently, four buildings and ten structures cover approximately five percent of the zone. The remaining 95 percent is open space. The zone area is presently in use as recreational area for vehicle and RV parking, dock area, picnic area, and maintenance area for the Marina. This zone also contains an auto-hobby shop, a material storage area, a restaurant area, and a fueling station. One building was formerly located on the parcel and has since been demolished.

Zone 23 does not contain any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Zone 23, and specific data regarding chemical occurrence at this zone are not available. However, IR Site 16 (Cans C-2 Area) borders Zone 23 to the north, and IR Site 13 (Former Oil Refinery) is located within 500 feet of Zone 23 to the northeast.

Sewer lines present in this zone are illustrated in the individual PEP figures. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns and asbestos-containing materials on Zone 23 will be addressed in other sampling programs and are not considered in this ZAP.

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1 The data gathered during the non-intrusive investigation are provided in the *Draft Basewide Environmental Baseline Survey/Community Environmental Response Facilitation Act Report for NAS Alameda* (ERM-West, Inc., 1994) Appendix B.

Underground Storage Tanks

One abandoned tank (Tank 608) is present at this zone. It is located on Parcel 168. Limited investigation of this tank has been completed as described in the October 1988 ERM-West, Inc. report entitled *Abandoned Underground Storage Tank Investigation*. Results of the investigation for Tank 608 detected ethylbenzene, toluene, and xylenes in the subsurface soil below August 1994 USEPA PRGs. The available information did not identify why the tank was abandoned. This tank is scheduled to be removed.

RCRA Sites

This zone includes two RCRA sites, SWMU/GAP 17 on Parcel 168 and GAP Site 24 on Parcel 165. These sites were evaluated consistent with the criteria applied to other potential target areas at the zone. Under these criteria, both RCRA sites require further investigation. A brief description of each RCRA site is provided in the corresponding PEP. The sampling proposed for each site is also described in the corresponding PEP.

Zone Boundary Conditions

Zone 23 is bounded by Zone 18 to the west, Zones 19 and 22 to the north, Twelfth Street and private property to the east, and San Francisco Bay to the south. Activities of concern on these adjacent zone include a former incinerator on Zone 19 and several IR sites throughout Zone 22 including IR Site 4 (Building 360), IR Site 7C (Service Stations), IR Site 9 (Building 410), IR Site 10B (Missile Rework Operations), IR Site 11 (Building 14), IR Site 13 (Former Oil Refinery), IR Site 16 (Cans C-2 Area), and IR Site 19 (Yard D-13). If any of the continuing investigations at these IR sites reveal a cause for concern at Zone 23, then sampling on this zone may be appropriate.

Zone 23 Target Areas and Compounds of Concern

This zone contains one zone-wide target area and nine parcel-specific target areas. This subsection of the ZAP discusses the specific zone-wide target area and provides an overview of the parcel-specific target areas. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this zone. Detailed information regarding the parcel-specific target areas and the proposed sampling is provided in the PEPs for individual parcels. The nature and locations of the

zone-wide and parcel-specific target areas were evaluated to determine field investigation and sampling strategies. Final sample locations will be determined in the field based on visual observation and accessibility.

- Zone 23 Target Area 1 (Railroad Tracks): This target area includes all current railroad track areas within or adjacent to the Southeastern Recreational Zone. Railroad track are located in the northwestern corner of Parcels 161 and 165, the northern portion of Parcel 162, and throughout Parcel 198. These areas may have been impacted by historical releases of TPH, PCBs, SVOCs, and lead from railroad cars, engines, and ties. This target area is classified as having potential likelihood of impacts. Surface soil samples will be collected approximately every 800 linear feet along the three track areas, resulting in two zone-wide sampling locations. Samples should be taken from a variety of locations along the railroad tracks including switches, in front of buildings, and along long stretches of track. Soil samples will be collected from the center of the tracks below any coarse subgrade material present. Samples to be collected in this target area are listed in Table 6-Z23-1. Approximate sampling locations are shown on Figure 6-Z23-1.

  It should be noted that railroad track sampling will first be performed in the Housing Zone (Zone 16). If investigations there indicate that the potential releases of compounds of concern are negligible then the railroad track zone target area may be eliminated in this zone and other zones. Alternatively, if the investigations in Zone 16 indicate that only certain compounds of concern are actually associated with the railroad tracks, then sampling may be modified to analyze for the more limited suite of the compounds of concern only.

Parcels 161, 166, and 167 Target Areas

No parcel-specific target areas were identified on these parcels.

Parcel 162 Target Areas

- Target Area 1 (Open Space): This target area is the stained area by the hazardous materials locker, which is less than 100 square feet in size. Surface and subsurface soils may be impacted by solvents or petroleum compounds that were released during past spills within this target area. One subsurface Geoprobe soil sample and one surface soil sample will be collected from the parcel-specific target area. Samples to be collected in this target area are listed on Table 6-162-1.

Parcel 165 Target Areas

Three parcel-specific target areas were identified for Parcel 165 as indicated below. Eight subsurface Geoprobe soil samples and eight surface soil samples will be collected from the location shown on Figure 6-165-1.

- Target Area 1 (Facility 438): This target area is the fueling facility, which is approximately 1,000 square feet in size. Surface soils are suspect of being impacted by petroleum compounds released during fueling operations. No staining was noted; however, a strong diesel odor was observed during a visual inspection. Samples to be collected in this target area are listed on Table 6-165-1.

- Target Area 2 (Former Building 386 - GAP Site 24): This target area is the former location of Building 386, which is approximately 100 square feet in size. Surface and subsurface soils have the potential to have been impacted by compounds that may have been stored at GAP Site 24 in this building. Samples to be collected in this target area are listed on Table 6-165-1.

- Target Area 3 (Southwest Corner of Parcel): This is the stained open space area noted in aerial photographs, which is approximately 10,000 square feet in area. Surface soils have the potential to have been impacted by petroleum compounds spilled during maintenance and aircraft fueling or defueling operations formerly occurring at this parcel. Samples to be collected in this target area are listed on Table 6-165-1.

Parcel 168 Target Areas

Two parcel-specific target areas were identified for Parcel 168 as indicated below. Five subsurface Geoprobe soil samples and five surface soil samples will be collected from the locations shown on Figure 6-168-1.

- Target Area 1 (Building 608): This target area consists of the entire building area and adjacent oil/water separators, which is approximately 10,000 square feet in area. The soil beneath Building 608 may have been impacted by releases of hydrocarbons and solvents from the auto hobby shop operations, primarily the vehicle bay areas on the eastern and western sides of the building, or from the oil/water separators. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-168-1.

- Target Area 2 (Aboveground Storage Tank): This target area consists of the area surrounding the 1,000-gallon aboveground storage tank (AST) located in the open space south of Building 608, which is less than 1,000 square feet in size. The surface and subsurface soil surrounding the AST may have been impacted by releases of waste oils and solvents. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-168-1.

- Target Area 3 (GAP Site 17): This target area consists of the area surrounding GAP Site 17, which is 2,000 square feet in area. The soil beneath GAP Site 17 may have been impacted by releases of waste oils, antifreeze, and solvents. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-168-1.

Parcel 169 Target Areas

- Target Area 1 (Open Space): This target area consists of the grassy area that is covered with paint. The target area is 10,000 square feet in size. This target area also includes the empty drum and chemical storage area located at the northwestern portion of the parcel. Surface and surface soils have potentially been impacted by VOCs, SVOCs, TPH, and pesticides. This target area has been classified as having a potential likelihood of impacts. Four subsurface Geoprobe soil samples and four surface soil samples will be collected from the locations shown on Figure 6-169-1 and listed in Table 6-169-1.

Parcel 198 Target Areas

- Target Area 1 (Building 385): This target area consists of the east half of Building 385, which is approximately 3,000 square feet in area. Surface soils may have been impacted by previous solvent handling operations and storage of petroleum products. Two subsurface Geoprobe soil samples and two surface soil samples will be collected from the locations shown on Figure 6-198-1 and listed on Table 6-198-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in the zone and parcel-specific target areas and to identify areas that may require further sampling in the follow-up detailed evaluation

phase. These two techniques are surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-Z23-1 summarizes screening-level sampling and analysis for the zone-wide target area. Two surface soil samples will be collected from the zone-wide locations shown on Figure 6-Z23-1. Twenty surface soil samples and 20 subsurface Geoprobe soil will be collected from the parcel-specific locations shown on Figure 6-Z23-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling, if required, is intended to more fully characterize the zone areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above at a higher sampling density as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-161

PARCEL 161 EVALUATION PLAN

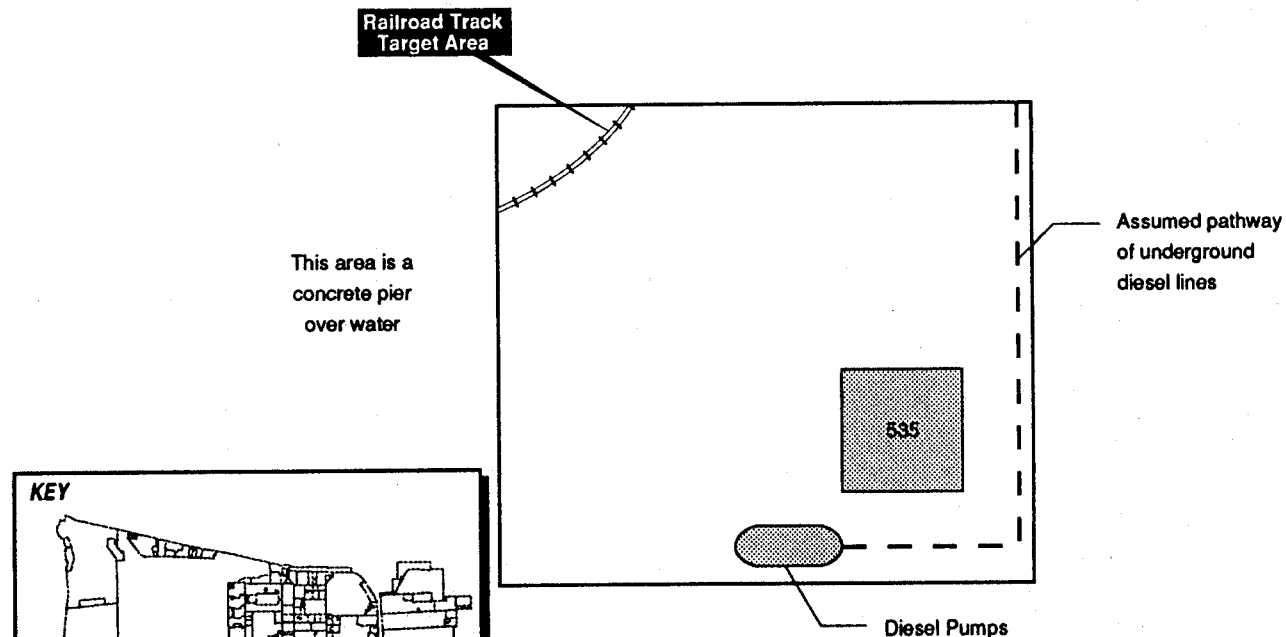
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 161 at NAS Alameda (Figure 6-161-1). The parcel, which is located in the southeast portion of the base, is approximately 7,000 square feet in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One zone-wide target investigation area (target area) has been identified on Parcel 161; however, no zone-wide samples have been proposed for this parcel. No parcel-specific target areas have been identified on Parcel 161. The railroad tracks in the zone-wide target area are not expected to have impacted the parcel, as the parcel is a pier located entirely over water. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 161, historical activities are discussed below.

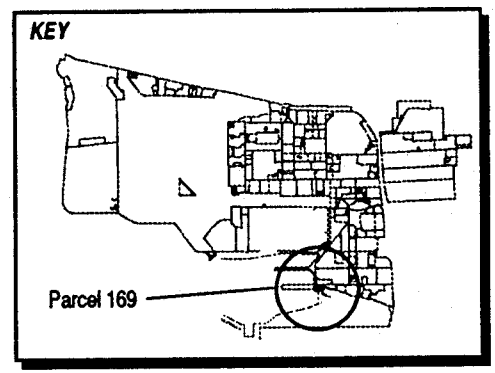
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 161, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 162, 165, 166, 167, 168, 169, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels





LEGEND

— — — Fuel Line In Use

Note: *No screening-level sampling recommended for this parcel.*

1"= 30'

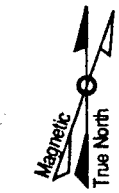


Figure 6-161-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.12/GCF/06.16.94

within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel came into existence during the construction of Pier 3, which occurred between 1942 and 1946. This parcel is composed entirely of a concrete pier area which is underlain by the San Francisco Bay. Currently, one building covers approximately five percent of the parcel. The remaining 95 percent open space. The parcel area is presently in use as a dock area.

Parcel 161 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 161, and specific data regarding chemical occurrence at this parcel are not available.

Subpier fuel lines are present on this parcel and are shown on Figure 6-161-1. Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials will be addressed in other sampling programs and are not considered in this PEP. Activities of potential environmental or industrial hygiene concern within parcel open space and buildings are described in detail below.

Building 535

Building 535 is a small corrugated metal shed with a wood floor. The building occupies 54 square feet. It was constructed in 1976 as a degaussing station. Currently, this building is utilized by the National Oceanic and Atmospheric Administration to measure low and high tides and water temperature. Small quantities of cleaning chemicals and liquid nitrogen were present inside. There are no chemical storage issues with this facility.

Open Space

The parcel is almost entirely open space, and is composed entirely of concrete. It is part of Pier 3 and is underlain by the San Francisco Bay. The open space is presently in use as a dock area and vehicle parking area. Railroad tracks run east to west through the northern portion of the parcel. Utilities located within and immediately surrounding the parcel include subpier fuel and steam lines.

A diesel pump area was noted at the southern portion of the parcel. Minor staining was noted on the concrete containment berm that is built around the diesel pumps. During a visual inspection, it did not appear that this pump area was in use. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 161.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection revealed any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 198 is located to the north and northeast of Parcel 161. The remainder of Pier 3 is located to the west of Parcel 161. The remainder of the parcel is surrounded by the San Francisco Bay. There are no IR sites immediately adjacent to Parcel 161. Activities of concern on the adjacent areas are similar to those concerns on Parcel 161.

Parcel Reclassification and Data Gaps Summary

The data collected for this parcel indicate that there are no remaining data gaps that are likely to impact the BRAC Classification for this parcel.[1] The available information suggests that this parcel may tentatively be reclassified from BRAC Category 7 to BRAC Category 2.

The only data gaps remaining pertain to a disclosure issue (asbestos) and radiological issues (as indicated in Table 6-161-1). Based on its classification, if RASO concurrence is obtained, the parcel is considered suitable for lease or transfer. This parcel is located entirely over water. Therefore, the presence of fuel and steam lines underneath the pier is also not of concern (releases from these lines would result in an impact to San Francisco Bay, not to the parcel itself).

As indicated in Section 6, separate investigations are currently underway to address the remaining issues at this parcel: asbestos and radiological concerns.

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[1] This reclassification assumes that the RASO review does not identify any releases that have impacted this parcel.

TABLE 6-161-1

Summary of Data Gaps
NAS Alameda Parcel 161

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 161.
Installation Restoration (IR) Sites	• No IR site is located on or within 500 feet of Parcel 161.
Lead-Based Paint (LBP)	• No evidence of LBP issues identified.
PCB-Containing Equipment	• No evidence of PCB-Containing Equipment identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks (The tracks are not expected to have impacted the parcel, as the parcel is a pier located entirely over water)
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• No evidence of underground utilities identified.
- Fuel Lines	• Aboveground (under pier) fuel lines identified.

TABLE 6-161-1

Summary of Data Gaps
NAS Alameda Parcel 161

Data Gap	Status/Description
- Steam Lines	• Aboveground (under pier) steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

SECTION 6-162

PARCEL 162 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 162 at NAS Alameda (Figure 6-162-1). The parcel, which is located in the southeast portion of the base, is approximately two acres in size and is roughly square in shape. The parcel has been classified as requiring a low level sampling effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. No zone-wide samples have been proposed for this parcel. Sampling procedures called for in the screening-level investigation in these areas include surface soil sampling and subsurface Geoprobe soil sampling. Table 6-162-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 162, historical activities are summarized below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 162, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 165, 166, 167, 168, 169, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were

considered as a whole during the evaluation. Sampling results from adjacent parcels within the zone should also be considered during future evaluations of this parcel. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land area of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 through about 1953. The dock was constructed in 1953. After this time period, the parcel was apparently used for material storage and as a pipe laydown yard. The parcel was developed to its current state between 1970 and 1975. Historical processes at this parcel likely consisted of aircraft fueling and defueling, aircraft maintenance, and aircraft wash down. This parcel was also utilized for material storage activities. No large scale-staining potentially associated with these activities was noted in aerial photographs.

Currently, one structure covers less than one percent of the parcel. The remaining 99 percent is open space. The parcel area is presently in use as a recreational picnic area. Dock 5, which is attached to this parcel, is a marina with boat slips. Underground fuel and sewer lines are present on this parcel and are shown in Figure 6-162-1.

Parcel 162 is not located within 500 feet of an Installation Restoration (IR) Program site. No previous investigations have been conducted at Parcel 162, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Structure 592

Structure 592 is a sewage lift station located at the southeast corner of the parcel. The lift station is on a clean concrete pad that covers approximately 100 square feet. Switches and controls are mounted on wood backing panel. Access ports and a vent pipe are present. Utilities

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

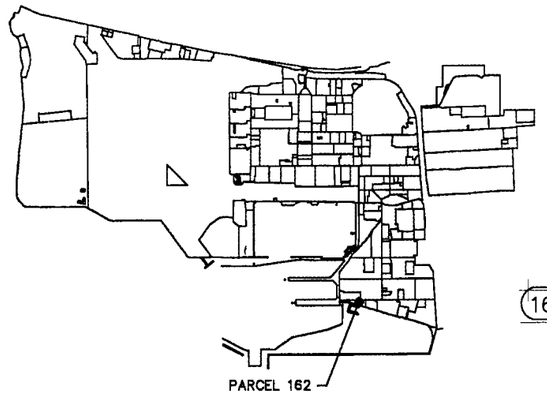
PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-162-1 – PARCEL 162
PROPOSED SAMPLE LOCATION MAP

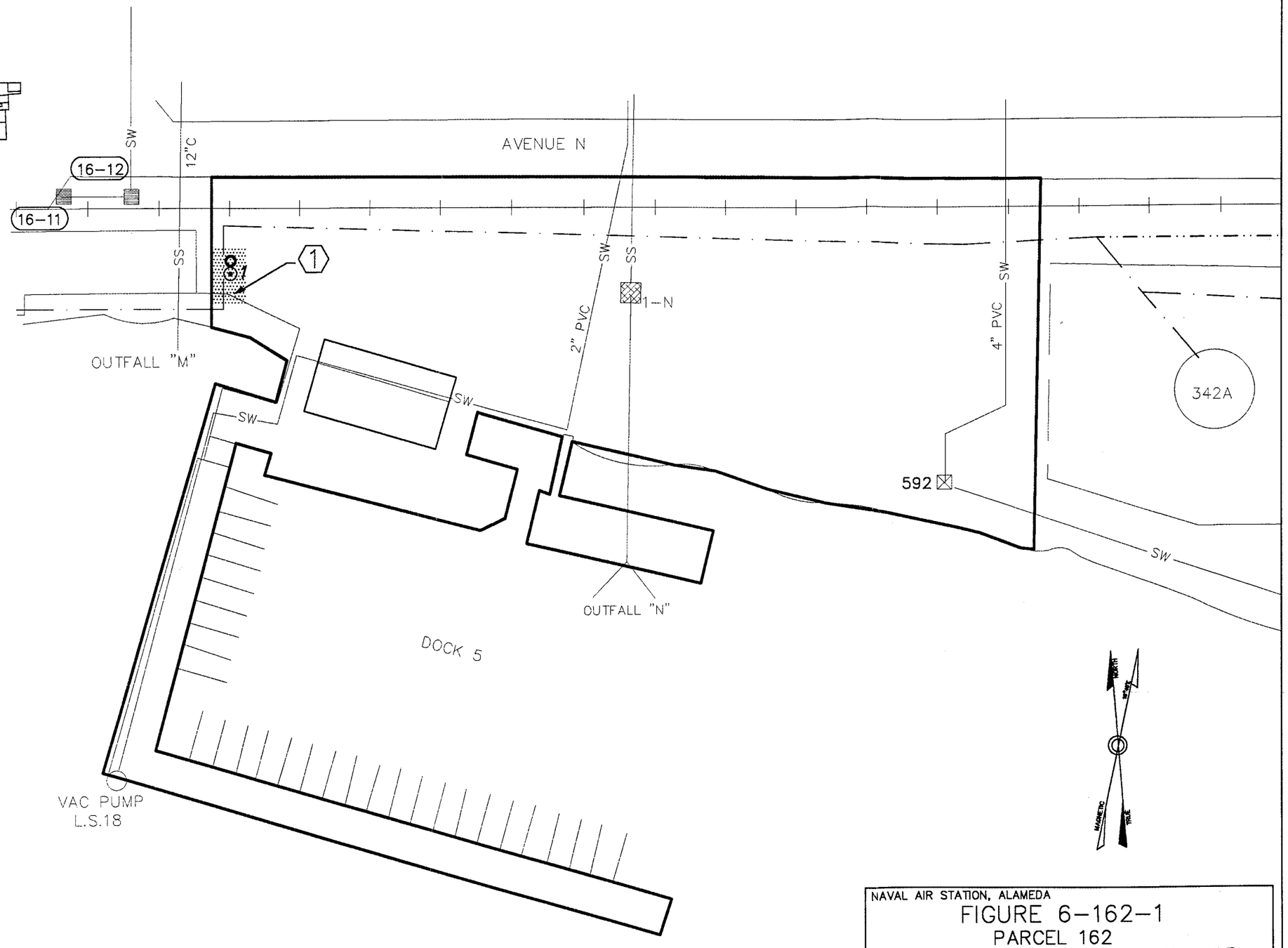
FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil



KEY PLAN



GENERAL LEGEND

- PARCEL OUTLINE
- ⊙1 SOIL VAPOR SURVEY LOCATION
- O1 SURFACE SOIL SAMPLE LOCATION
- (1) TARGET AREA AND NUMBER

SANITARY SEWER LEGEND

- (18-72) SANITARY SEWER MANHOLE (MH No.)
- —SW— SANITARY SEWER LINE
- L.S.18 LIFT STATION & No. (VACUUM PUMP)
- ☒ LIFT STATION (Building 592)

MATERIALS:

PVC – PLASTIC

NOTES:

1. ALL SANITARY SEWERS ARE VITRIFIED CLAY PIPE UNLESS NOTED OTHERWISE.

FUEL LINE LEGEND

- —— · —— FUEL LINE ACTIVE
- — · — · — FUEL LINE PROBABLY IN USE

STORM DRAIN LEGEND

- 1-N ▨ MANHOLE & No.
- —SS— STORM SEWER LINE

SCALE IN FEET

60 0 60 120 180

1" = 60'

NAVAL AIR STATION, ALAMEDA

FIGURE 6-162-1
PARCEL 162
PROPOSED SAMPLE LOCATION MAP

ERM CAD IDENT. NO. 19590162.DWG	COMPILED BY ERM FROM NAVY AIR STATION DRAWINGS: PWC 17,629 (STORM DRAINS) PWC 108,728 (SANITARY SEWER) PWC 23,997 (INDUSTRIAL WASTES) HISTORIC DWGS IN EBS DATABASE (FUEL LINES)	
SCALE AS NOTED	DATE: 5.10.95/2121.97.10	SHEET 1 OF 1

TABLE 6-162-1

Summary of Recommended Samples
NAS Alameda Parcel 162

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
162-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, Solvents, Paints	TPH, VOCs	Modified EPA 8015, CLP RAS
162-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	TPH, Solvents, Paints	TPH, VOCs	Modified EPA 8015, CLP RAS
162-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Petroleum Products	TPH	Modified EPA 8015
162-1-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Petroleum Products	TPH	Modified EPA 8015

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

located within and immediately surrounding Structure 592 include underground storm sewer and electrical lines. No chemical storage has been documented for this facility.

Open Space

The open space covers approximately most of the parcel and is used for recreational activities. Railroad tracks run east to west through the northern portion of the parcel. This open space is covered by asphalt (five percent), grass (75 percent), and a floating wood dock (20 percent). The dock is in good condition. The grassy area is located in the north-central portion of the parcel. This parcel currently has open space areas that are landscaped (as shown on Figure 6-162-1). These areas have been landscaped since the 1970s. Aerial photograph review indicated that prior to this time, the parcel open space was used for vehicle parking.

Utilities located within and immediately surrounding the parcel include electrical, fuel, sanitary sewer, and storm sewer lines. In addition, a storm sewer outfall is located in the southern portion of the parcel. The abandoned underground fuel lines on Parcel 162 connect the aboveground storage tanks on Parcel 163 to the docks on Parcel 155. Chemicals are stored in a hazardous materials locker located over asphalt on the western border of the open space. This locker is utilized to store marina supplies. Less than 75 gallons of petroleum products, non-halogenated solvents, and paints were noted within this locker. A five foot by five foot stain was noted over the asphalt in front of this locker. This stain is addressed by Target Area 1 of this PEP. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 162.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 162 is bordered to the north by Parcels 159 and 160, to the east by Parcel 163, which contains a RCRA site, to the south by the San Francisco Bay, and to the west by Parcel 198. Although oil booms have been encountered along the south shoreline, it does not appear likely

that these have impacted Parcel 162. Issues concerning the RCRA site on Parcel 163 are addressed in the corresponding PEP.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 162, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-162-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and contaminant migration from Installation Restoration sites. Sampling and imaging associated with underground fuel lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 162 because no buildings are present.

As noted earlier, Parcel 162 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required at this parcel.

Once the data gaps in Table 6-162-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 162 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. This parcel contains one parcel-specific target area and is also contained in a zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide

TABLE 6-162-2

Summary of Data Gaps
NAS Alameda Parcel 162

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No evidence of ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 162.
Installation Restoration (IR) Sites	• IR Site 13 is located northeast of Parcel 162. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• No evidence of LBP issues identified.
PCB-Containing Equipment	• No potentially PCB-containing electrical equipment identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space by Hazardous Materials Locker).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Fuel Lines	• Underground fuel lines identified.

TABLE 6-162-2

Summary of Data Gaps
NAS Alameda Parcel 162

Data Gap	Status/Description
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 23. The following target areas were identified based on possible impacts from activities described above involving potentially hazardous substances.

- Target Area 1 (Open Space): This target area is the stained area by the hazardous materials locker, which is less than 100 square feet in size. Surface and subsurface soils may be impacted by solvents or petroleum compounds that were released during past spills within this target area. One surface soil sample and one subsurface soil sample will be collected from this target area. Samples to be collected in this target area are listed on Table 6-162-1.

- Zone 23 Target Area 1 (Railroad Tracks): Zone 23 Target Area 1 includes all current or former railroad tracks within the Southeastern Recreational Zone. The railroad runs through the northern portion of Parcel 162. This parcel does not contain any samples from this zone.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These two techniques are surface soil sampling (SOP 3) and subsurface Geoprobe sampling (SOP 14). Table 6-162-1 summarizes screening-level sampling and analysis for the parcel's target areas. One soil vapor and one surface soil sample will be collected from the parcel-specific target area. The sample locations are shown on Figure 6-162-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. The samples should be located in the area with the most significant staining.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization may utilize some of the screening technologies discussed above on a higher density level as well as the following technologies not previously discussed: soil vapor sampling (SOP 6),

HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-165

PARCEL 165 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 165 at NAS Alameda (Figure 6-165-1). The parcel, which is located in the southeastern portion of the base is 5.8 acres in size and is roughly rectangular in shape. It has been classified as requiring a moderate sampling effort to meet the objectives of the project outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. Three parcel-specific and one zone-wide target investigation areas (target areas) have been identified on this parcel. Sampling procedures called for in the screening-level investigation consist of subsurface Geoprobe soil sampling and surface soil sampling. Table 6-165-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 165, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 165, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 162, 166, 167, 168, 169, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. Sampling results from

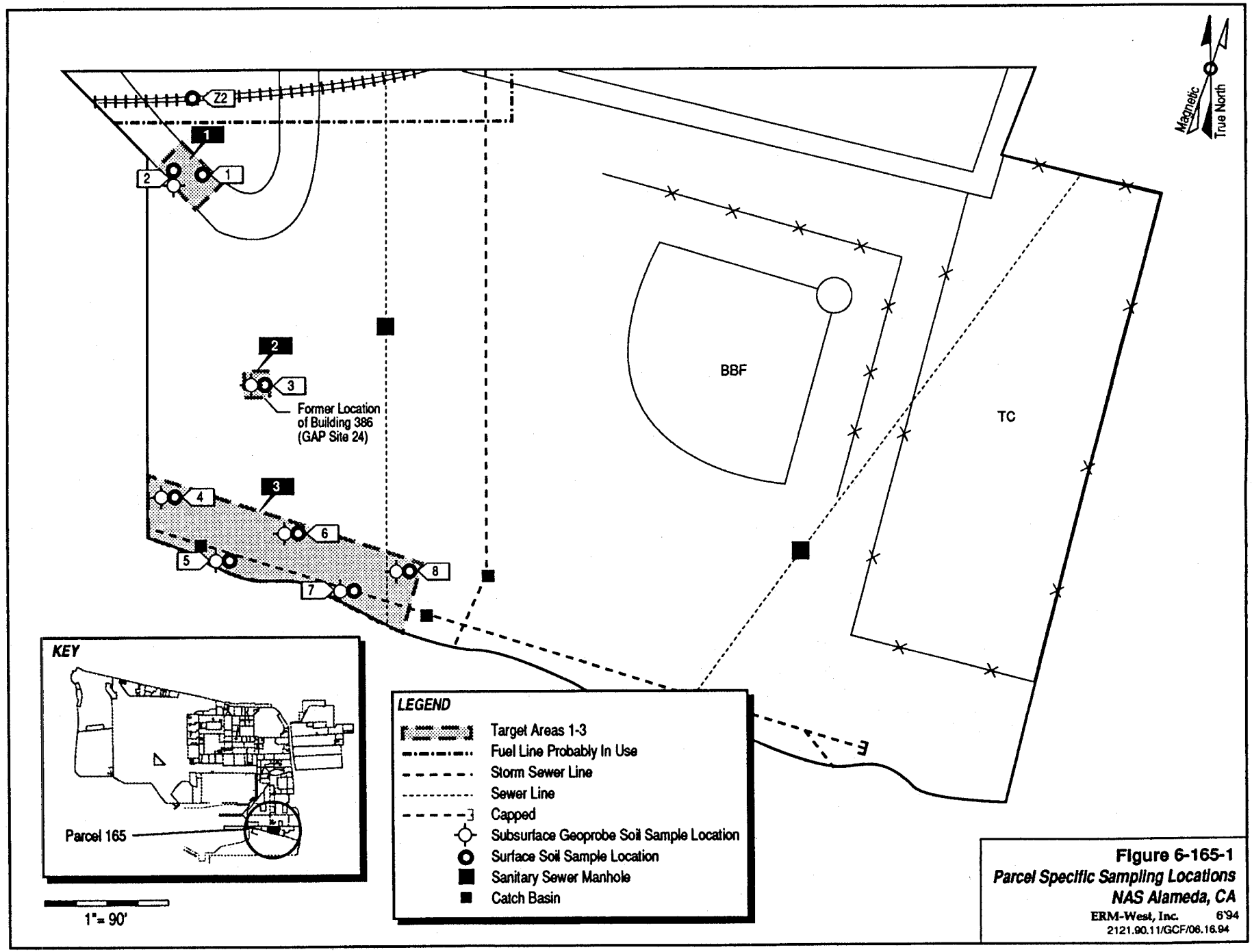


Figure 6-165-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

TABLE 6-165-1

Summary of Recommended Samples
NAS Alameda Parcel 165

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
165-1-0-S-V-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Fuel, Diesel	TPH	Modified EPA 8015
165-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
165-2-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
165-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Fuel, Diesel	TPH	Modified EPA 8015
165-2-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Fuel, Diesel	TPH	Modified EPA 8015
165-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
165-3-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	TPH, SVOCs, VOCs, Metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
165-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Fuel, Metals, PCBs, SVOCs	TPH, Metals, Pesticides, SVOCs	CLP RAS, Modified EPA 8015
165-3-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	Fuel, Metals, PCBs, SVOCs	TPH, Metals, Pesticides, SVOCs	CLP RAS, Modified EPA 8015
165-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	Modified EPA 8015, EPA 8240
165-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	Modified EPA 8015, CLP RAS
165-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
165-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
165-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	Modified EPA 8015, EPA 8240
165-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015

TABLE 6-165-1

Summary of Recommended Samples
NAS Alameda Parcel 165

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
165-6-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	Modified EPA 8015, EPA 8240
165-6-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
165-7-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	Modified EPA 8015, EPA 8240
165-7-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
165-8-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	TPH, VOCs	TPH, VOCs	Modified EPA 8015, EPA 8240
165-8-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	TPH	TPH	Modified EPA 8015
Z23-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Zone 23 Target Area 1	Creosote, Railroad Tie Tar, Fuels, Oils, PCBs	SVOCs, TPH, PCBs, lead	EPA 8170, Modified EPA 8015, EPA 8080, ICAP SCAN
Z23-2-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Zone 23 Target Area 1	Creosote, Railroad Tie Tar, Fuels, Oils, PCBs	SVOCs, TPH, PCBs, lead	Modified EPA 8015, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

adjacent parcels within the zone should be considered during future evaluations of this parcel. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was 100 percent inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land area of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 through 1970. The parcel was developed to its current state between 1970 and 1975. Historical processes at this parcel are likely to have consisted of aircraft fueling and defueling, aircraft maintenance, and aircraft wash down.

Currently, there is one structure located on the parcel (Figure 6-165-1), which covers less than five percent of the parcel. The remainder (over 95 percent) is open space. The parcel area is presently in use as a recreation area, a material storage area, and a fueling station. Fuel and sewer lines are located on this parcel and are shown in Figure 6-165-1. Sampling associated with fuel and sewer lines is discussed in corresponding protocols presented in Section 3.

Parcel 165 is located within 500 feet to the southwest of an Installation Restoration (IR) Program site (IR Site 16). However, no previous investigations have been conducted at Parcel 165, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Facility 438

Facility 438 was constructed in 1958 and has served as a tank truck or car unloading facility and a fueling station (Figure 6-165-1) since that time. The facility is a concrete slab covering approximately 1,000 square feet. Utilities located within and immediately surrounding Facility 438 include sanitary sewer, storm sewer, and electrical lines. Underground diesel lines connect the fueling station with tanks 342A and 342B, which are located on Parcel 163. A small aboveground storage tank (AST) was noted at Facility 438. No staining was noted on the

concrete around the AST; however, a strong diesel odor was observed during the inspection. Current and former use of Facility 438 as a fueling station will be addressed by Target Area 1 of this PEP.

Open Space

Most of the open space consists of grassy fields and recreational structures (i.e., basketball court, tennis court, and baseball diamond). The northern parcel border contains a roadway and is utilized for material storage. The northwestern corner contains Facility 438. Railroad tracks run east-west through the northern portion of the parcel. This parcel currently has open space areas that are landscaped (as shown on Figure 6-165-1). These areas have been landscaped since the 1970s.

Review of historical records, site inspections, permits, interviews, and historic aerial photographs indicate that aircraft parking occurred in Parcel 165 from 1947 through approximately 1975. No large-scale staining was noted in aerial photographs. Former Building 386, which covers 120 square feet, is listed as having been constructed in 1953, and was a aircraft line operations building. This building was not noted during site inspections, and it was unclear if or when this building was demolished. Due to the small size of the building, it was not possible from aerial photograph review to identify when the building was removed. This building is listed as containing GAP Site 24. This indicates that this area had been used to store hazardous materials and/or wastes. It is not known how long this building was present on the parcel, or what hazardous materials or wastes, if any, were stored here.

No spills are documented for this parcel. Review of aerial photographs and site inspection data indicate that undocumented spills may have occurred. In the 1963 and 1966 aerial photographs, the western half of the southern parcel border was noted to be heavily stained. The ground cover appeared to be bare soil. The stained areas correspond to aircraft parking locations, and are likely the result of spilled fuel or lubricating fluids. Staining associated with aerial photographs will be addressed by Target Area 3 of this PEP.

In addition, a structure of uncertain function was noted in this area at the extreme southwest corner of the parcel. Heavy staining was noted on bare soil in the immediate vicinity of this structure, and it was present in aerial photographs from 1953 through 1970. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 165.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 166 and 167, which are recreational areas, border the eastern side of the parcel. Parcels 150 and 159 border the parcel to the north. Parcel 150 contains cyclohexylamine, creosote, paint and copper contamination which is discussed in the PEP for Parcel 150. Parcel 163, which borders this parcel to the west, contains large aboveground diesel tanks and a RCRA unit. Issues pertaining to Parcel 163 are discussed in the PEP for Parcel 163 (Parcel 163 is located in Zone 19). Although oil booms have been encountered along the south shoreline, it does not appear likely that these have impacted Parcel 165.

This parcel has potentially been impacted by waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some of the wastes generated by the refinery were disposed of in nearby former marshlands. Based on review of information contained in the *Data Summary Report RI/FS Phases 1 and 2A* prepared by PRC Environmental Management, Inc. and Montgomery Watson in August 1993 and discussions with the Navy IR contractors, it appears that soils underlying the subject property may be impacted by TPH and SVOCs. Migration of contaminants from the nearby IR sites (i.e., IR Sites 13 and 17) and/or RCRA units may also have impacted this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 165, then sampling on this parcel may be appropriate.

RCRA Sites

This subsection identifies RCRA Site and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel reportedly includes one RCRA site (GAP Site 24). GAP Site 24 was reportedly located in Building 386 in the western portion of the parcel; however, this building was not identified during visual inspection, and a review of aerial photographs could not determine if or when the building was demolished. It is unknown whether any chemicals were released from this site. This site was evaluated consistent with the criteria applied to other potential

target areas at the parcel. Under these criteria, of this RCRA site requires further investigation because of the presence of bare soil in this area. The sampling proposed for the site is described in Target Area 2 in the Target Areas and Compounds of Concern subsection of this PEP.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 165, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-165-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling and imaging associated with underground fuel lines and sewer lines are also addressed separately. Sampling associated with fuel lines and sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 165 because no industrial buildings are present.

As noted earlier, Parcel 165 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore no pesticide sampling is required at this parcel.

Once the data gaps in Table 6-165-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 165 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field

TABLE 6-165-2

Summary of Data Gaps
NAS Alameda Parcel 165

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 165.
Installation Restoration (IR) Sites	• IR Site 16 is located within 500 feet northeast of Parcel 165. • IR Site 13 is located over 500 feet northeast of Parcel 165. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• No LBP identified.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Target Area 1 (Facility 438). • Target Area 2 (Former Building 386 - GAP Site 24). • Target Area 3 (Southwest Corner of Parcel).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-165-2

Summary of Data Gaps
NAS Alameda Parcel 165

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

investigation and sampling strategies. This parcel contains three parcel-specific target areas and is also contained in a zone-wide target area. The discussion of the zone-wide target area focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 23. The following parcel-specific target areas were identified based on the potential release area described above and listed in Table 6-165-2.

- Target Area 1 (Facility 438): Facility 438 has been used as a fueling facility since the late 1950s. This target area is approximately 1,000 square feet in size. Surface soils are suspect of being impacted by petroleum compounds released during fueling operations. No staining was noted; however, a strong diesel odor was observed during visual inspection. The compounds of concern include TPH. Samples to be collected in this target area are listed on Table 6-165-1.

- Target Area 2 (Former Building 386 - GAP Site 24): This target area is the former location of Building 386, which is approximately 100 square feet in size. Surface and subsurface soils have the potential to have been impacted by compounds that may have been stored at GAP Site 24 in this building. The compounds of concern include TPH, VOCs, SVOCs, pesticides, and metals. Samples to be collected in this target area are listed on Table 6-165-1.

- Target Area 3 (Southwest Corner of Parcel): This is the stained open space area noted in aerial photographs and is approximately 10,000 square feet in area. Surface and subsurface soils have the potential to have been impacted by petroleum compounds and solvents released during maintenance and aircraft fueling or defueling operations formerly occurring at this parcel. The compounds of concern include TPH and VOCs. Samples to be collected in this target area are listed on Table 6-165-1.

- Zone 23 Target Area 1 (Railroad Tracks): Zone 23 Target Area 1 includes all current or former railroad tracks within the Southeastern Recreational Zone. The railroad runs through the northwestern portion of Parcel 165. One of the two samples proposed to be collected from this zone-wide target area is located on Parcel 165. The zone-wide target area sample that is located on Parcel 165 is listed on Table 6-165-1. This target area addresses the possible presence of TPH, SVOCs, PCBs, and lead. The likelihood of environmental impacts having occurred within this target area is classified as potential. Samples that are located on Parcel 165 are listed on Table 6-165-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These two techniques are surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). One zone-wide surface soil sample will be collected from the location shown on Figure 6-165-1. Eight parcel-specific subsurface Geoprobe soil samples and eight parcel-specific surface soil samples will be collected from the location shown on Figure 6-165-1. Table 6-165-1 summarizes screening-level sampling and analysis for the parcel's target areas. The sample locations are shown on Figure 6-165-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. Samples should be located in the areas with the most significant staining. If no staining is evident, then the samples should be distributed evenly within each target area.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization will utilize some of the screening technologies discussed above on a higher density level as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-166

PARCEL 166 EVALUATION PLAN

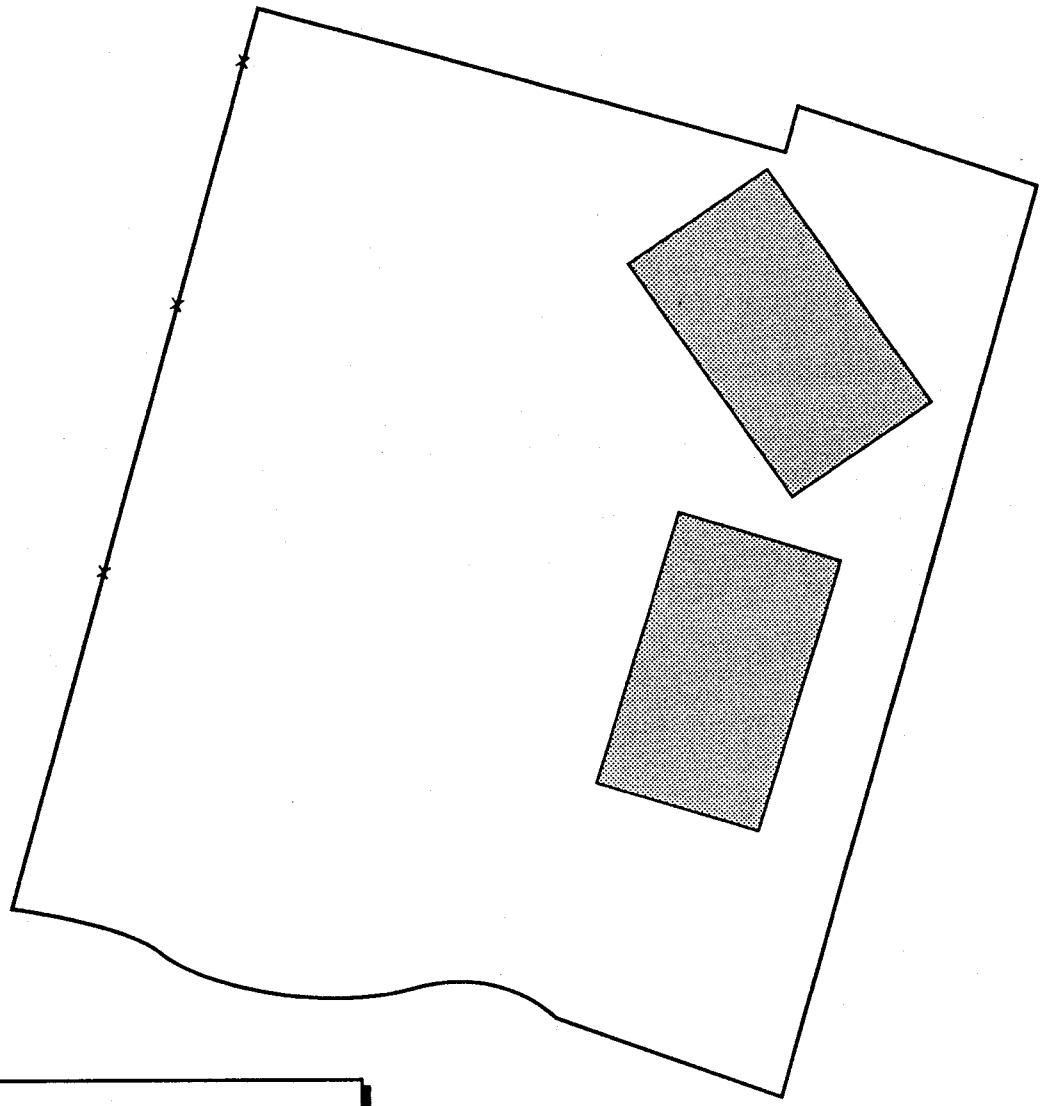
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 166 at NAS Alameda (Figure 6-166-1). The parcel, which is located in the southeast portion of the base, is 1.9 acres in size and is roughly square in shape. The parcel has been classified as requiring a low level of effort to meet the objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 166, historical activities are discussed below.

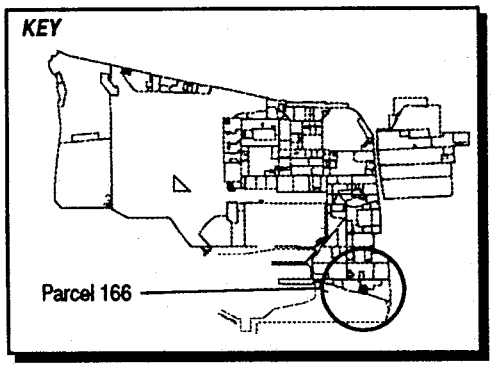
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 165, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 162, 165, 167, 168, 169, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation of this parcel. Sampling results from adjacent parcels within the zone should also be considered during future evaluations of this parcel. Zone-wide considerations and





LEGEND

Note: *No screening-level sampling recommended for this parcel.*

1"=60'

Figure 6-166-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/08.16.94

potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was 100 percent inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land area of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 through 1970. The parcel was developed into a recreation area between 1970 and 1975. Historical processes at this parcel would be likely to have consisted of aircraft fueling and defueling, aircraft maintenance, and aircraft wash down. No large-scale staining was noted in aerial photographs.

Currently, two structures cover approximately 25 percent of the parcel. The remaining 75 percent is open space. In general, the parcel area is presently in use as picnic and recreation area. No buildings or structures are documented as formerly having been located on the parcel.

Parcel 166 is located within 500 feet to the southwest of an Installation Restoration (IR) Program site (IR Site 16). However, no previous investigations have been conducted at Parcel 166, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Open Space

Currently, Parcel 166 consists entirely of open space. The parcel is currently used for recreation. Structures located within the open space include a volleyball court, barbecues, and a covered picnic area. The volleyball court was constructed in 1993. The covered picnic area, consisting of picnic tables covered by a roof, was constructed in 1980. The open space is mostly covered by grass, (80 percent), sand (volleyball court), and gravel. The landscaped open space areas are shown on Figure 6-166-1. These areas have been landscaped since the 1970s. Utilities located within and immediately surrounding Parcel 166 include overhead electrical lines. There are no documented spills for this parcel.

During the site inspection a beached oil spill boom (slickbar) was discovered at the water's edge, on the southeastern parcel boundary (see Parcel 167). No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 166.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

The San Francisco Bay borders the south side of the parcel. The tennis courts on Parcel 165 border the western edge of the parcel. Parcel 167 borders the northern and eastern edges of Parcel 166. Building 542, Fleet Recreation Center, in Parcel 167 borders the northern edge of Parcel 166 and Parcel 167 open space borders the eastern edge of Parcel 166. Although oil booms have been encountered along the south shoreline, it does not appear probable that these have impacted Parcel 166. Parcel 166 is not located in proximity to any IR sites.

This parcel has potentially been impacted by waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some of the wastes generated by the refinery were disposed of in nearby former marshlands. Based on review of information contained in the *Data Summary Report RI/FS Phases 1 and 2A* prepared by PRC Environmental Management, Inc. and Montgomery Watson in August 1993 and discussions with the Navy IR contractors, it appears that soils underlying the subject property may be impacted by TPH and SVOCs. Migration of contaminants from the nearby IR sites (i.e., IR Sites 13 and 17) and/or RCRA units may also have impacted this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 166, then sampling on this parcel may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 166, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for

which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-166-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: radiological concerns and Installation Restoration Sites. No Industrial Hygiene (IH) sampling is required for Parcel 166 because no buildings are present.

As noted earlier, Parcel 166 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Thus, no pesticide sampling is required at this parcel.

Once the data gaps in Table 6-166-1 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 166 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to radiological concerns and impacts of nearby IR sites must be resolved before this parcel can be reclassified, leased, or transferred.

TABLE 6-166-1

Summary of Data Gaps
NAS Alameda Parcel 166

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No evidence of ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 166.
Installation Restoration (IR) Sites	• IR Site 16 is located within 500 feet northeast of Parcel 166. • IR Site 13 is located more than 500 feet north of Parcel 166. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• No evidence of LBP issues identified. (No buildings are present on this parcel.)
PCB-Containing Equipment	• No evidence of PCB-Containing Equipment identified.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• No potential release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• No evidence of underground utilities identified.

TABLE 6-166-1

Summary of Data Gaps
NAS Alameda Parcel 166

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• Floating slickbar identified at the water's edge, on the southeastern parcel boundary.

SECTION 6-167

PARCEL 167 EVALUATION PLAN

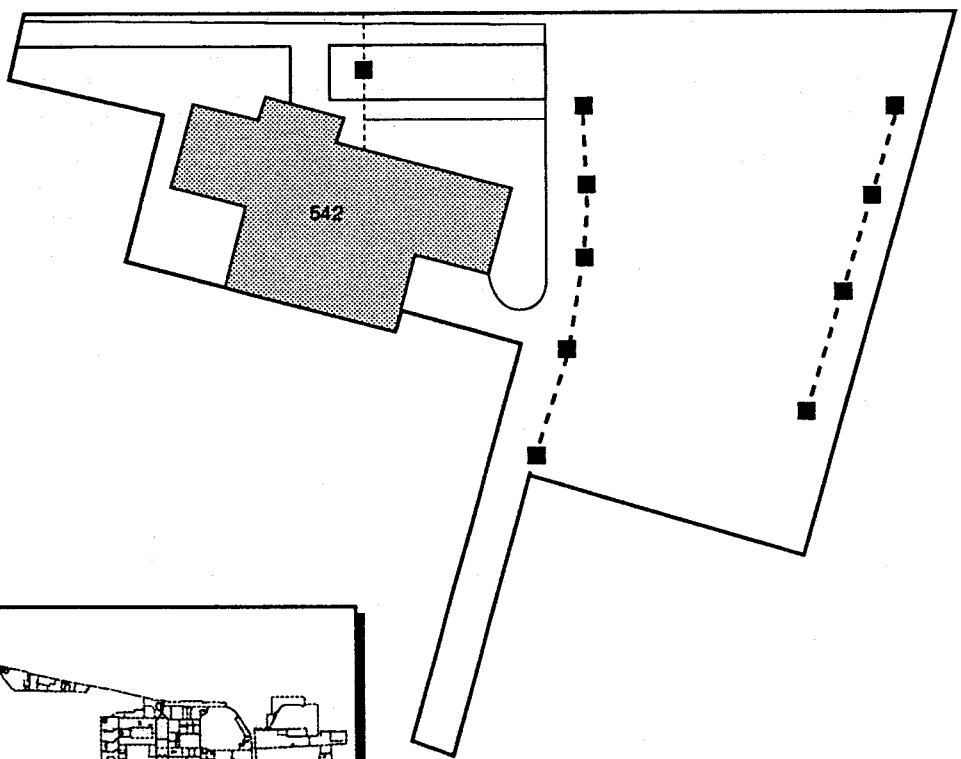
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 167 at NAS Alameda (Figure 6-167-1). The parcel, which is located in the southeastern portion of the base, and is 3.3 acres in size. It is roughly triangular in shape with a narrow panhandle connected to the bay. The parcel has been classified as requiring a low sampling effort to meet the objectives of this project outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. No parcel-specific or zone-wide target investigation areas (target areas) have been identified on this parcel. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 167, historical activities are discussed below.

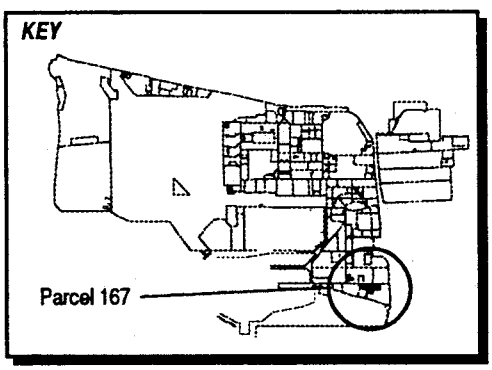
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 167, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 162, 165, 166, 168, 169, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. While no sampling has been proposed at this parcel, sampling results from adjacent parcels within the zone should be considered during future evaluations.





LEGEND

- Sewer Line
- Storm Sewer Line
- Catch Basin

Note: *No screening-level sampling recommended for this parcel.*

1"= 125'

Figure 6-167-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land are of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 through 1970. The parcel was developed to its current state between 1970 and 1975. Historical processes at this parcel are likely to have consisted of aircraft fueling and defueling, aircraft maintenance, and aircraft wash down. No large-scale staining was noted in aerial photographs.

Currently, one building and one structure are located on the parcel (Figure 6-167-1). They cover approximately 15 percent of the parcel. The remaining 85 percent is open space. The parcel area is presently used for vehicle parking and recreation. Sewer lines are located on this parcel and are shown in Figure 6-165-1. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Parcel 167 borders on the southwestern corner of Installation Restoration (IR) Program site (IR Site 16). However, no previous investigations have been conducted at Parcel 167, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Building 542

Building 542 was constructed in 1975 and served as a bowling alley (Figure 6-167-1). This building is generally in good condition. Building 542 is a one-story building. It is constructed of concrete with a tile floor, and covers approximately 23,700 square feet. Utilities located within and immediately surrounding Building 542 include sanitary sewer and electrical lines.

Records indicate that activities conducted within this building included recreation and dining. Current uses of the building include a pizza parlor, a laundromat and general recreation.

Janitorial chemicals are documented to have been stored in and used at Building 542 from 1975 to present. PCB-containing transformers/ ballasts are documented to be present along the west side of Building 542.

Open Space

The open space on this parcel is used as a parking area and for RV campsites. Landscaping and a roadway are present along the northwestern portion of the parcel. The open space covers approximately 85 percent of the parcel. Review of historical records, site inspections, permits, interviews, and historic aerial photographs indicate that aircraft parking occurred in Parcel 167 from 1947 through approximately 1975. The area has been used for recreational purposes since that time.

During the site inspection, an RV sewage dump station was discovered in the northeast corner of Parcel 167. Photographs show evidence of a sewage line leading from the station toward the northeast. It is unknown if the outflow is tied into the base sewage system or a separate septic system.

Sixty percent of the open space is paved with asphalt and the remainder is covered with grass and trees. The landscaped areas are shown on Figure 6-167-1. These areas have been landscaped since the 1970s. Utilities located within and immediately surrounding the open space include underground sanitary sewer, storm sewer, and electrical lines.

There are no documented spills for this parcel. Review of aerial photographs and site inspection data indicates that undocumented spills may have occurred. The stained areas correspond to aircraft parking locations, and are likely the result of spilled fuel or lubricating fluids. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 167.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified

any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcels 150, 151 and 149 border Parcel 167 to the north. Parcel 150 has been identified to contain creosote, paint and copper. Parcel 149 is IR Site 16, which is documented to have stored paint, solvents, bases, acids, and PCB transformers, and to have applied PCB-containing pesticides in its open spaces. Parcel 168 borders this parcel to the east. Parcels 168 (which contains a RCRA unit) and 169 border Parcel 167 to the southeast. Parcel 166, a recreational area, borders Parcel 167 to the south. A baseball field (in Parcel 165) lies to the west. The panhandle area is bordered by Parcels 166, 169 and the Bay. Parcel 167 is located adjacent to the auto hobby shop, and the empty drum and chemical storage area noted at Parcel 169. These issues are discussed in the appropriate PEPs. Although oil booms have been encountered along the south shoreline, it does not appear probable that these have impacted Parcel 167.

This parcel has potentially been impacted by waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some of the wastes generated by the refinery were disposed of in nearby former marshlands. Based on review of information contained in the *Data Summary Report RI/FS Phases 1 and 2A* prepared by PRC Environmental Management, Inc. and Montgomery Watson in August 1993 and discussions with the Navy IR contractors, it appears that soils underlying the subject property may be impacted by TPH and SVOCs. Migration of contaminants from the nearby IR sites (i.e., IR Sites 13 and 17) and/or RCRA units may also have impacted this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 167, then sampling on this parcel may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 167, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-167-1 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As

TABLE 6-167-1

Summary of Data Gaps
NAS Alameda Parcel 167

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings exist at Parcel 167.
Installation Restoration (IR) Sites	• IR Site 16 borders Parcel 167 to the northeast. • IR Site 13 is located more than 500 feet northeast of Parcel 167. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• No potential parcel-specific release areas identified.
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-167-1

Summary of Data Gaps
NAS Alameda Parcel 167

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified. It is unknown if the sanitary sewer outflow is tied into the base sewage system or a separate septic system.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 167 because no industrial buildings are present.

As noted earlier, Parcel 167 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required at this parcel.

Once the data gaps in Table 6-167-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 167 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

Because no potential release areas are located at this parcel, no parcel-specific target areas were identified for this parcel. In addition, no zone-wide target areas were identified. However, concerns pertaining to asbestos, lead-based paint, PCBs, underground lines, radiological concerns, and impacts of the adjacent and nearby IR sites must be resolved before this parcel can be leased or transferred.

Z23

SECTION 6-168

PARCEL 168 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 168 at NAS Alameda (Figure 6-168-1). The parcel, which is located in the southeastern portion of the base, is 1.2 acres in size and is square in shape. This parcel requires a moderate sampling effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. This parcel contains one RCRA site. SWMU/GAP 17 will be investigated as part of this PEP. Three parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil and subsurface Geoprobe soil sampling are the sampling procedures called for in the screening-level investigation. Table 6-168-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 168, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 168, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites, an underground storage tank, and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 162, 165, 166, 167, 169, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. Sampling results from

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 6-168-1 – PARCEL SPECIFIC SAMPLING LOCATIONS

FOR ADDITIONAL INFORMATION, CONTACT:

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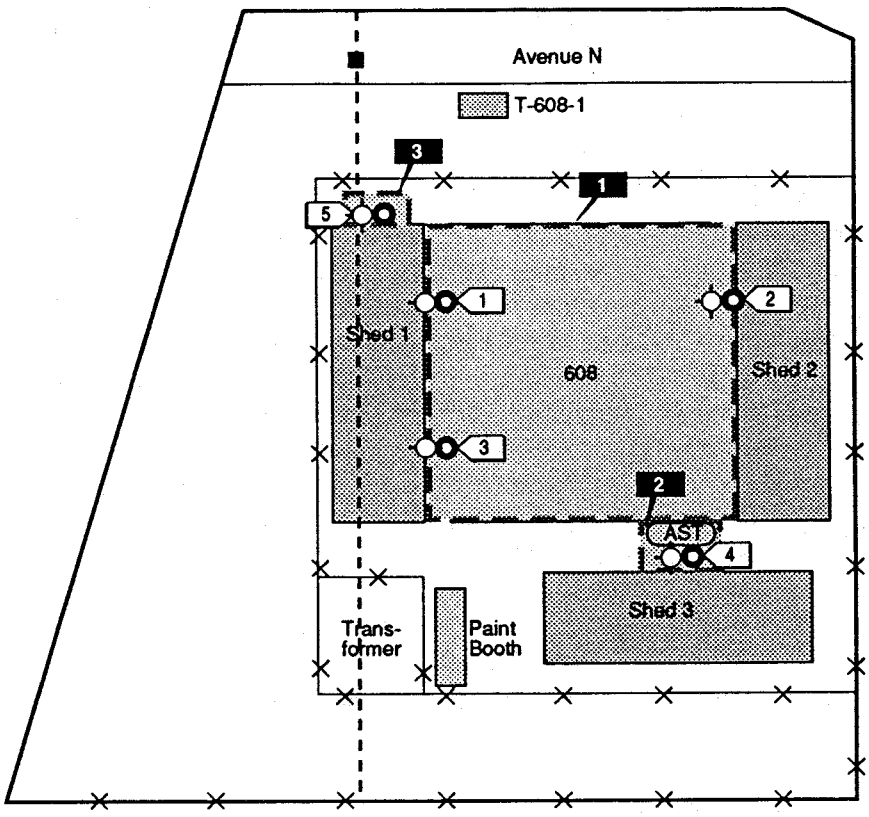
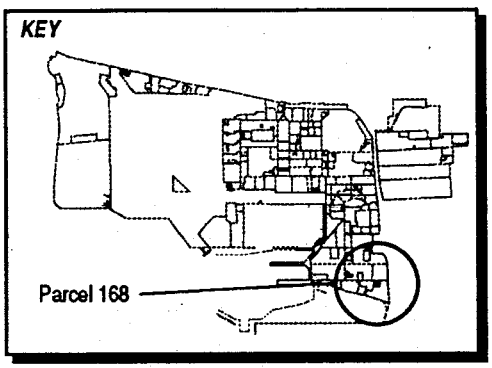
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE





LEGEND

- Target Areas 1-3
- Storm Sewer Line
- Subsurface Geoprobe Soil Sample Location
- Surface Soil Sample Location
- Catch Basin
- AST Aboveground Storage Tank
- Fence

Note: Target 1 includes oil/water separators adjacent to Building 608

1"= 60'

Figure 6-168-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

SENSITIVE

TABLE 6-168-1

Summary of Recommended Samples

NAS Alameda Parcel 168

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
168-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
168-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
168-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Waste oil, Lube oil, metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
168-1-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	Waste oil, Lube oil, metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS
168-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
168-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Waste oil, Lube oil, metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
168-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
168-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	Waste oil, Lube oil, metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
168-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 2	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
168-4-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 2	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
168-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 2	Waste oil, Lube oil, metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
168-4-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 2	Waste oil, Lube oil, metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
168-5-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 3	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan

TABLE 6-168-1

Summary of Recommended Samples
NAS Alameda Parcel 168

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
168-5-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 3	Solvents, TPH, SVOCs, VOCs, metals	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
168-5-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 3	Waste oil, antifreeze, metals	TPH, SVOCs, Metals	Modified EPA 8015, EPA 8270, ICAP Scan
168-5-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 3	Waste oil, antifreeze, metals	TPH, SVOCs, Metals	Modified EPA 8015, CLP RAS

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

adjacent parcels within the zone should be considered during future evaluations of this parcel. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land are of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 through 1970. The parcel was developed to its current state, between 1970 and 1975. Historical processes at this parcel probably included aircraft fueling and defueling, aircraft maintenance, and aircraft wash down. No large scale staining was noted in aerial photographs.

Since 1981 Parcel 168 has been occupied by the auto-hobby shop. Currently, one building and five structures are located on the parcel (Figure 6-168-1). They cover approximately 30 percent of the parcel. The remaining 70 percent is open space. One building was formerly located on the parcel and has since been demolished. Underground sewer lines are present on this parcel and are shown on Figure 6-168-1.

Parcel 168 is directly south of an Installation Restoration (IR) Program site (IR Site 16). However, no previous investigations have been conducted at Parcel 168, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Building 402

Building 402 was located on the northern portion of the parcel. This building contained a maintenance shop and a sand blast shelter. It was constructed in 1950, and demolished in 1961. This information is consistent with historical aerial photographs.

Building 608

Building 608 was constructed in 1981 and has served as a "self-serve" auto repair facility since that time (Figure 6-168-1). This building is generally in fair condition. Building 608 is a one-story building. It is constructed of brick with a concrete floor and wood roof, and covers approximately 10,000 square feet. Utilities located within and immediately surrounding Building 608 include electrical, sanitary sewer, storm sewer, and water lines. Natural gas service was not indicated on maps but is thought to be provided to the building.

The interior of Building 608 contains a sales area, where automotive products can be purchased. Each side of the auto hobby shop is equipped with multiple vehicle service bays. Each of these bays is equipped with a hydraulic lift. Drains connecting to the sanitary sewer were noted adjacent to each bay. Information collected during the EBS indicates that activities conducted within this building include routine automobile servicing, parts degreasing, and occasional paint "touch-ups."

Chemicals relating to automobile servicing are documented to have been stored and used at Building 608 from 1981 to present. Several hazardous substances were noted during the site inspection. They include: miscellaneous petroleum products (lubrication oil, etc.); consumer packaged auto maintenance products (engine and carburetors cleaners, octane boosters, degreasers, etc.); Safety Kleen solvent (Safety Kleen dip tank and brake cleaning machine); canisters of acetylene, oxygen and argon; and two large units of batteries. Chemicals stored and used in Building 608 will be addressed by Target Area 1 in this PEP.

A 500-gallon (some records say 600-gallon) UST is apparently still located adjacent to or underneath Building 608. The tank had previously been utilized to store waste oil. The tank has not been in use since 1987, and is scheduled to be removed.

There are no spills documented for this area; however, stains noted through out the interior of the building indicate that undocumented spills may have occurred.

Shed 1

Shed 1 is located directly west of Building 608, and consists of a metal overhang over concrete paving. It covers approximately 2,000 square feet. SWMU/GAP 17 is located north of this shed. The shed contains a CONEX Box utilized to stage hazardous waste that is generated in this

area. Vehicle service bays make up the remainder of the shed area (Figure 6-168-1). Unlike the service bays located inside Building 608, no hydraulic lifts or drains are located in the outside service bays.

Historical aerial photographs indicate that this area was paved with concrete in 1981, and that the awning appeared between 1985 and 1990. It is not clear how long the GAP site has been located near Shed 1, but considering the nature of Building 608, this area has probably been utilized as a hazardous waste accumulation point for an extended period of time. There are no spills documented for this area; however, minor stains noted at this structure indicate that undocumented spills may have occurred.

Sheds 2 and 3

Shed 2 is located directly east of Building 608, and Shed 3 is located southeast of Building 608. Both structures consist of a metal overhang over concrete paving. Shed 2 covers approximately 2,000 square feet, and Shed 3 covers approximately 1500 square feet. Vehicle service bays make up the interior of these shed areas (Figure 6-168-1). Unlike the service bays located inside Building 608, no hydraulic lifts nor drains are located in the outside service bays.

Historical aerial photographs indicate that these structures appeared between 1985 and 1990. It is not clear how long these areas have been utilized for auto servicing activities, but it appears likely that these activities have occurred here since the sheds were constructed.

There are no spills documented for this area; however, stains noted at this structure indicate that undocumented spills may have occurred. Stains are likely the result of spilled lubricating fluids. Undocumented spills of vehicle fuel or of solvents may have also occurred in this area.

Structure 586

Structure 586 has always served as a sewage lift station (Figure 6-168-1), and is located in the northwest corner or the parcel. Structure 586 is on a concrete pad and covers approximately 1,000 square feet. No chemicals relating to sewage pumping are documented to have been stored in or used at Structure 586.

Paint Booth

The Paint Booth is located in the south-southwest portion of the subject property. Aerial photograph review indicates that this structure was constructed on the parcel between 1981 and 1985. According to site personnel, the paint booth has never been utilized. This was confirmed during the EBS site inspection.

Open Space I

Open Space I consists of all the open space on the parcel, with the exception of the gated area located at the southwest corner of the parcel, and which is identified as Open Space II. This space covers approximately 60 percent of the parcel, and is generally only utilized for vehicle parking. Over 65 percent of this open space is asphalt paved, about 30 percent is paved with concrete, and the remainder (less than five percent of this open space) is covered with gravel. Utilities located within and immediately surrounding Open Space I include electrical, sanitary sewer, and storm sewer lines.

Two sets of oil/water separators were noted in this area; one receives drainage from the western portion of Building 608, and the other receives drainage from the eastern portion of Building 608. Both of these systems are reported to currently be non-operational.

Waste oil generated in Building 608 is stored in a 1,000-gallon aboveground storage tank (AST) located in the open space south of Building 608, and mounted on a concrete pad. A stain was noted over asphalt between the AST and an oil/water separator. The staining adjacent to the AST will be addressed by Target Area 2 in this PEP.

Antifreeze and waste oil filters that were generated in Building 608 was stored at GAP Site 17 prior to their being removed off site. The Safety Kleen solvent is routinely replaced by Safety Kleen. The potential impacts of waste oil storage and releases at GAP Site 17 will be addressed by Target Area 3 in this PEP.

Vehicle wash down activities are frequently performed here, and in all likelihood, occasionally involve the use of commercial soaps and/or drive train degreasers (such as those sold inside Building 608). Pooled water was noted adjacent to three of the four drains that area connect to the non-operational oil/water separators. In addition, a concrete paved vehicle wash down area is located at the south border of the parcel; it is unclear if the drain in this area connects to either of the oil/water separators. Such activities have potentially impacted storm sewer lines.

No chemical storage, except for the storage of waste oil storage that is generated by auto-hobby shop operations, appears to occur in this open space. There are no documented spills for this area; however, stains consistent with typical vehicle parking stains were noted at this open space.

Open Space II

Open Space II is a fenced off, asphalt paved, hazardous material storage area, located at the southwest corner of the parcel. The asphalt in the hazardous materials storage area is in poor condition. Two hazardous materials CONEX Boxes and one small flammable materials locker were noted here. One PCB-containing pad-mounted transformer was also noted in this area. No spills have been reported for this area. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 168.

Underground Storage Tanks

One abandoned underground storage tank (Tank 608) is present at this parcel. It is unknown when this tank was installed. Tank 608 is located adjacent to or underneath Building 608. Tank 608 was used to store waste oil and diesel fuel. This tank has a capacity of between 500 and 600 gallons. The presence of Tank 608 was identified from historical data. Based on the available information, this tank has been abandoned for several years. This tank is scheduled to be removed. This tank failed a tank test on 10/23/91 and the line test was inconclusive. Limited investigation of this tank has been completed (described in the October 1988 ERM-West, Inc. report entitled *Abandoned Underground Storage Tank Investigation*). Ethylbenzene, toluene, and xylenes were detected in the subsurface soil near Tank 608 at concentrations below August 1994 USEPA PRGs.

Parcel Boundary Conditions

Parcel 168 is bordered by Parcel 149 to the north, which is also IR Site 16. IR Site 16 is document to have stored paint, solvents, bases, acids, and PCB transformers, and to have applied PCB-containing pesticides in its open spaces. Parcel 169 borders Parcel 168 to the east and south. An empty drum and chemical storage area is present at the border between Parcels 168 and 169. Parcel 167, which contains commercial facilities, and picnic and parking areas, is present to the west.

This parcel has potentially been impacted by waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some of the wastes generated by the refinery were disposed of in nearby former marshlands. Based on review of information contained in the *Data Summary Report RI/FS Phases 1 and 2A* prepared by PRC Environmental Management, Inc. and Montgomery Watson in August 1993 and discussions with the Navy IR contractors, it appears that soils underlying the subject property may be impacted by TPH and SVOCs. Migration of contaminants from the nearby IR sites (i.e., IR Sites 13 and 17) and/or RCRA units may also have impacted this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 168, then sampling on this parcel may be appropriate.

RCRA Sites

This subsection identifies RCRA Sites and requirements associated with this site on the parcel, consistent with objectives described in Section 1 of the Shell Workplan. This parcel includes one RCRA site (SWMU/GAP 17). This site was evaluated consistent with the criteria applied to other potential target areas at the parcel. Under these criteria, this RCRA site does require further investigation. A brief description of the RCRA site is provided. The sampling proposed for this site is described in Target Area 2 in the Target Areas and Compounds of Concern subsection of this PEP.

SWMU/GAP 17 is located north of Shed 1. It is unknown whether any chemicals were released from this site. The chemicals of concern associated with this site are waste oil, antifreeze, and solvents. The tank has not been used since 1987 and is scheduled for removal in 1994.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 168, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-168-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-

TABLE 6-168-2

Summary of Data Gaps
NAS Alameda Parcel 168

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings are present at Parcel 168.
Installation Restoration (IR) Sites	• IR Site 16 borders Parcel 168 to the north. • IR Site 13 is located more than 500 feet to the north of Parcel 168. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1(Building 608 and adjacent inactive oil-water separators). • Target Area 2 (Aboveground Storage Tank). • Target Area 3 (GAP Site 17).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.

TABLE 6-168-2

Summary of Data Gaps
NAS Alameda Parcel 168

Data Gap	Status/Description
Underground Storage Tanks (USTs)	• Tank 608 is located adjacent or underneath Building 608. This tank is abandoned and is scheduled to be removed. This tank failed a tank test on 10/23/91 and the line test was inconclusive.
Underground Utilities	• Storm sewer, sanitary sewer, and electrical lines identified. • Storm sewers have potentially been impacted by vehicle washdown activities. • Natural gas lines are thought to be present.
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

based paint, asbestos, radiological concerns, and Installation Restoration sites. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 168 because no industrial buildings are present.

Once the data gaps in Table 6-168-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 168 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. This parcel contains two parcel-specific target areas. The following target areas were identified based on the potential release area described above and listed in Table 6-168-2.

- Target Area 1 (Building 608): This target area consists of the entire building area and adjacent oil/water separators, which is approximately 10,000 square feet in area. The soil beneath Building 608 may have been impacted by releases of hydrocarbons and solvents from the auto hobby shop operations, primarily the vehicle bay areas on the eastern and western sides of the building, or from the oil/water separators. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-168-1.

- Target Area 2 (Aboveground Storage Tank): This target area consists of the area surrounding the 1,000-gallon aboveground storage tank (AST) located in the open space south of Building 608, which is less than 1,000 square feet in size. The surface and subsurface soil surrounding the AST may have been impacted by releases of waste oils and solvents. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-168-1.

- Target Area 3 (GAP Site 17): This target area consists of the area surrounding GAP Site 17, which is 2,000 square feet in area. The soil beneath GAP Site 17 may have been impacted by releases of waste oils, antifreeze, and solvents. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-168-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These two techniques are surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Table 6-168-1 summarizes screening-level sampling and analysis for the parcel's target areas. Five parcel-specific subsurface Geoprobe soil samples and five parcel-specific surface soil samples will be collected from the location shown on Figure 6-168-1. Sample locations shown on Figure 6-168-1. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization will utilize some of the screening technologies discussed above on a higher density level as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-169

PARCEL 169 EVALUATION PLAN

This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 169 at NAS Alameda (Figure 6-169-1). The parcel, which is located in the southeast portion of the base, is 9.9 acres in size and is roughly triangular in shape. The parcel requires a low level sampling effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and no zone-wide target investigation areas (target areas) have been identified on this parcel. Surface soil and subsurface Geoprobe soil sampling are the sampling procedures called for in the screening-level investigation. Table 6-169-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 169, historical activities are discussed below.

Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 169, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 162, 165, 166, 167, 168, and 198. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. Sampling results from

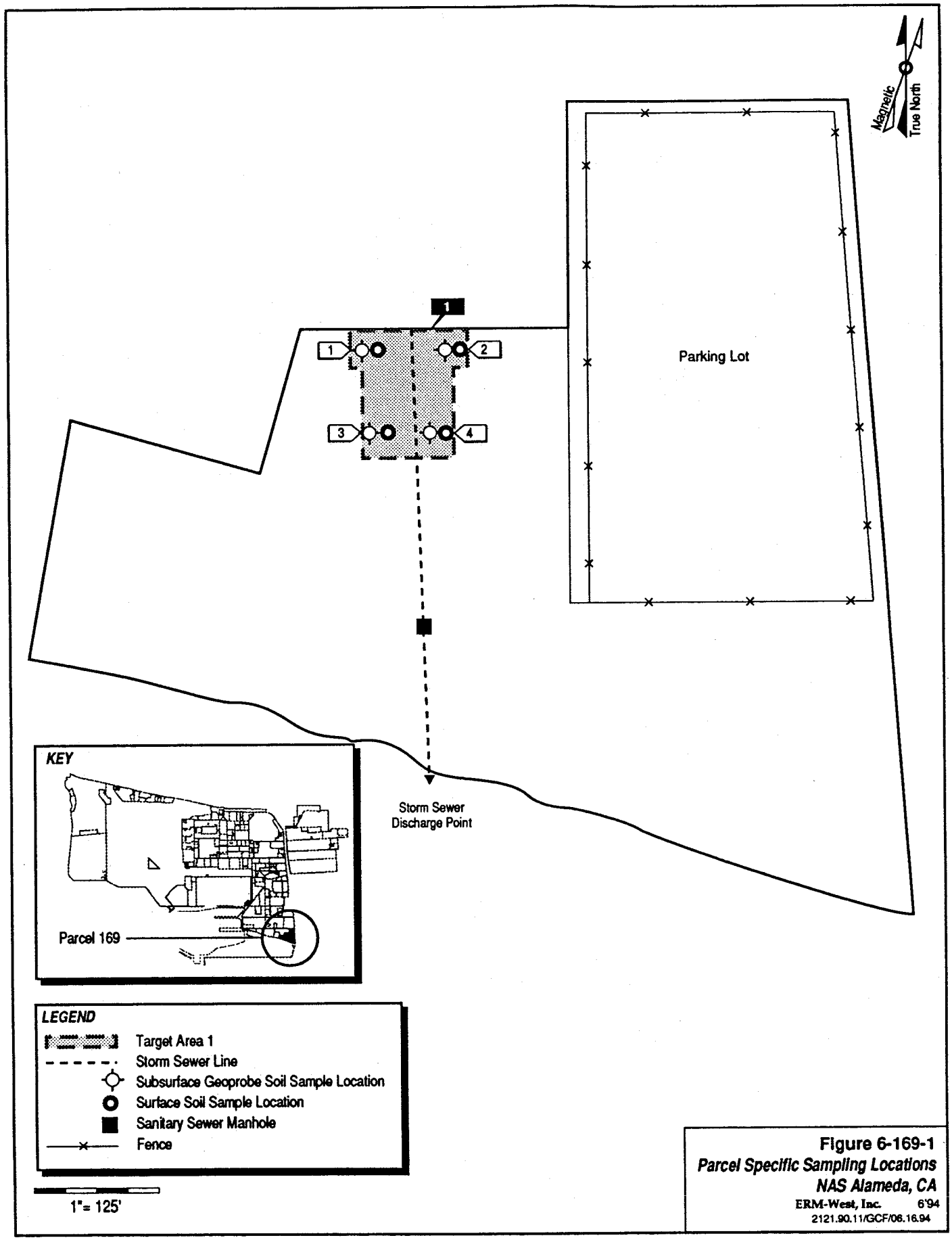


Figure 6-169-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 6'94
2121.90.11/GCF/06.16.94

TABLE 6-169-1

Summary of Recommended Samples
NAS Alameda Parcel 169

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
169-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Paint	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
169-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	Solvents, Paint	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, CLP RAS
169-1-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	SVOCs, Pesticides, TPH	SVOCs, Pesticides, TPH	EPA 8270, EPA 8080, Modified EPA 8015
169-1-0-S-V-DDMMYY*	0-0.5'	Surface	Soil	Target Area 1	SVOCs, Pesticides, TPH	SVOCs, Pesticides, TPH	Modified EPA 8015, CLP RAS
169-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Paint	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
169-2-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	SVOCs, Pesticides, TPH	SVOCs, Pesticides, TPH	EPA 8270, EPA 8080, Modified EPA 8015
169-3-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Paint	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
169-3-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	SVOCs, Pesticides, TPH	SVOCs, Pesticides, TPH	EPA 8270, EPA 8080, Modified EPA 8015
169-4-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	Solvents, Paint	TPH, SVOCs, VOCs, Metals	Modified EPA 8015, EPA 8270, EPA 8240, ICAP Scan
169-4-0-S-S-DDMMYY	0-0.5'	Surface	Soil	Target Area 1	SVOCs, Pesticides, TPH	SVOCs, Pesticides, TPH	EPA 8270, EPA 8080, Modified EPA 8015

* These are the suggested locations for the confirmation samples. The actual locations will depend on field analytical results.

adjacent parcels within the zone should also be considered during future evaluations of this parcel. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel was completely filled between 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land are of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area was utilized for aircraft parking from 1947 through 1970. The parcel was developed to its current state between 1970 and 1975. Historical processes at this parcel probably consisted of aircraft fueling and defueling, aircraft maintenance, and aircraft wash down. No large-scale staining was noted in aerial photographs.

Currently, there are no buildings or structures located on the parcel. The parcel consists entirely of open space. The parcel area is presently in use as an RV park, a vehicle parking area, and a boat launch area. This parcel has apparently never had any structures or buildings on it. Sewer lines are located on this parcel and are shown in Figure 6-169-1. Sampling associated with sewer lines is discussed in corresponding protocols presented in Section 3.

Open Space

The parcel consists entirely of open space. Twenty percent of the open space is landscaped and 80 percent is paved with asphalt in good condition. The grassy area is located in the north-central portion of the parcel. Landscaped areas are shown on Figure 6-167-1. These areas have been landscaped since the 1970s. Utilities located within and immediately surrounding the parcel include electrical lines, storm sewer lines, and a storm sewer outfall located at the south portion of the parcel.

Current processes at Parcel 169 include painting, empty drum and chemical storage, material storage, boat launching, and vehicle parking. The type of chemicals stored at this parcel are unknown. During the site inspection of the grassy area located in the northwestern portion of the parcel, a material and chemical storage area was observed. The presence of metal tracks indicates that this area has been used repeatedly as a material storage area for CONEX Boxes (metal tracks are utilized by the Navy to provide firm footing for CONEX Boxes).

During a site inspection, three large storage lockers (one labeled poison) and approximately 100 empty drums that appeared to have been recently painted green were noted at the grassy area located in the north-central portion of the parcel. The portion of the parcel that has been utilized for storage was approximately 2,000 square feet in size. Green paint stains were observed throughout this area (over 50 percent of a 100 foot by 100 foot square was stained). This 10,000 square foot area with green paint stains and chemical storage is addressed by Target Area 1 in this PEP.

The EBS had previously noted two large storage lockers, one smaller (5 feet by 5 feet by 4 feet) storage locker, and approximately 50 empty drums in this area. Some of these drums had previously contained "Solvent GW 450." A tipped over empty drum and several uncovered and damaged drums were noted during an earlier site inspection in this area. These drums were noted to contain small quantities of fluid. No paint staining was noted during this earlier site inspection. Two pad-mounted, oil-filled transformers were noted at this parcel. No leakage was noted. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 169.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 169 is bordered to the north by Parcel 168 (the auto hobby shop) and Parcel 149 (IR Site 16), to the east by private land, to the south by the San Francisco Bay, and to the west by Parcels 166 and 167 (Parcel 167 contains commercial facilities, picnic areas, and parking areas). IR Site 16 is documented to have stored paint, solvents, bases, acids, and PCB transformers, and to have applied PCB-containing pesticides in its open spaces. Issues pertaining to Parcels 168 and 149 are discussed in the respective PEPs.

This parcel has potentially been impacted by waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some of the wastes generated by the refinery were disposed of in nearby former marshlands. Based on review of information contained in the *Data Summary Report RI/FS Phases 1 and 2A* prepared by PRC

Environmental Management, Inc. and Montgomery Watson in August 1993 and discussions with the Navy IR contractors, it appears that soils underlying the subject property may be impacted by TPH and SVOCs. Migration of contaminants from the nearby IR sites (i.e., IR Sites 13 and 17) and/or RCRA units may also have impacted this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 169, then sampling on this parcel may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 169, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-169-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, radiological concerns, and Installation Restoration Sites. Sampling associated with sewer lines is discussed in the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 169 because no buildings are present.

As noted earlier, Parcel 169 has open space areas that are landscaped. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Thus pesticide sampling is not required at this parcel.

Once the data gaps in Table 6-169-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 169 may be reclassified from BRAC Category 7 to another BRAC category.

TABLE 6-169-2

Summary of Data Gaps
NAS Alameda Parcel 169

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• No ACM issues identified.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No buildings exist at Parcel 169.
Installation Restoration (IR) Sites	• IR Site 16 borders Parcel 169 to the north. • IR Site 13 is located northeast of Parcel 169. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• No LBP issues identified.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring (non-IR) parcels identified.
Potential Zone-Wide Release Areas	• No potential zone-wide release areas identified.
Potential Parcel-Specific Release Areas	• Target Area 1 (Open Space).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.
Underground Utilities	• Storm sewer and electrical lines, and a storm sewer outfall identified.

TABLE 6-169-2

Summary of Data Gaps
NAS Alameda Parcel 169

Data Gap	Status/Description
- Fuel Lines	• No underground or aboveground fuel lines identified.
- Steam Lines	• No steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target area. The nature and locations of this area was evaluated to determine field investigation and sampling strategies. This parcel contains one parcel-specific target area. The following target area was identified based on the potential release area described above and listed in Table 6-169-2.

- Target Area 1 (Open Space): This target area consists of the grassy area that is 50 percent covered with green paint and also includes the empty drum and chemical storage area located at the northwestern portion of the parcel. This target area is approximately 10,000 square feet in size. Surface soils have potentially been impacted by VOCs, SVOCs, TPH, and pesticides. Subsurface soils have potentially been impacted by TPH, SVOCs, VOCs, and metals. This target area has been classified as having a potential likelihood of impacts. Samples to be collected in this target area are listed in Table 6-169-1.

Screening-Level Investigation

Two screening-level techniques will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. These techniques include surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14). Four subsurface Geoprobe soil samples and four surface soil samples will be collected from the parcel-specific location shown on Figure 6-168-1. The subsurface Geoprobe soil samples will be obtained from the paint-sprayed areas. Table 6-169-1 summarizes screening-level sampling and analysis for the parcel's target area. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4. It should be noted that the grassy field area is overlain by metal tracks, which may pose access restrictions and may have to be removed prior to sampling.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization will utilize some of the screening technologies

discussed above on a higher density level as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

SECTION 6-198

PARCEL 198 EVALUATION PLAN

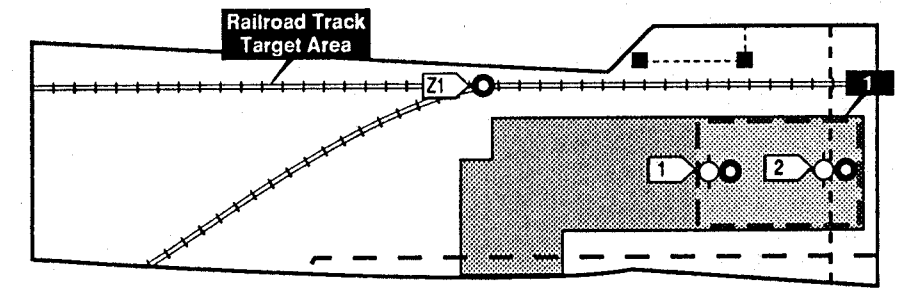
This Parcel Evaluation Plan (PEP) describes the proposed sampling strategy for Parcel 198 at NAS Alameda (Figure 6-198-1). The parcel, which is located in the southeast portion of the base, is 0.4 acres in size and is roughly square in shape. The parcel requires a low level sampling effort to meet the sampling objectives outlined in Section 1 of the Shell Workplan. No RCRA sites are located at this parcel. One parcel-specific and one zone-wide target investigation area (target area) have been identified on this parcel. Surface soil and subsurface Geoprobe soil sampling are the sampling procedures called for in the screening-level investigation. Table 6-198-1 provides the complete list of samples and analyses prescribed by this plan. This parcel-specific evaluation plan has been developed in accordance with Preliminary Endangerment Assessment requirements. To provide a basis for the proposed investigation of Parcel 198, historical activities are discussed below.

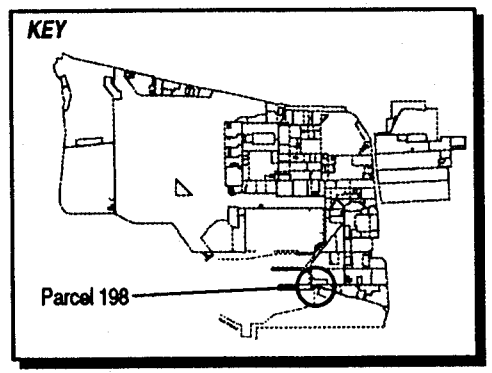
Background and Historical Activities

This subsection summarizes EBS information available for buildings, open spaces, and boundaries of Parcel 198, consistent with the objectives identified in Section 1 of the Shell Workplan. This subsection also identifies Installation Restoration Program sites and other areas of concern.

Past and present use of this parcel was determined from the non-intrusive investigation phase, which included site inspections, employee interviews, and a review of permits, historical records, and historical aerial photographs. This information was used to determine areas on the parcel where sampling was deemed necessary to delineate potential impacts of compounds of concern.

This parcel has been grouped into a zone with Parcels 161, 162, 165, 166, 167, 168, and 169. This parcel zone has been designated the Southeastern Recreational Zone (Zone 23). The Southeastern Recreational Zone encompasses the parcels that have historically been used for recreational activities. The parcels in this zone were considered as a whole during the evaluation. Sampling results from





LEGEND

- Target Area 1
- Fuel Lines in Use
- Storm Sewer Line
- Sewer Line
- Subsurface Geoprobe Sample Location
- Surface Soil Sample Location
- Catch Basin

1"= 60'

Magnetic
True North

Figure 6-198-1
Parcel Specific Sampling Locations
NAS Alameda, CA
ERM-West, Inc. 7'94
2121.90.10/DS/07.13.94

TABLE 6-198-1

Summary of Recommended Samples
NAS Alameda Parcel 198

Sample Number	Sample Depth	Sample Type	Sample Media	Sample Location	Chemicals of Concern	Target Analytes	Analytical Method
198-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel, Oils	TPH	Modified EPA 8015
198-1-0-S-V-DDMMYY*	0.0-0.5'	Surface	Soil	Target Area 1	Diesel, Oils	TPH	Modified EPA 8015
198-1-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
198-1-4-S-V-DDMMYY*	4.0'	Subsurface	Soil	Target Area 1	TPH, Solvents	TPH, VOCs	Modified EPA 8015, CLP RAS
198-2-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Diesel, Oils	TPH	Modified EPA 8015
198-2-4-S-S-DDMMYY	4.0'	Subsurface	Soil	Target Area 1	TPH, Solvents	TPH, VOCs	Modified EPA 8015, EPA 8240
Z23-1-0-S-S-DDMMYY	0.0-0.5'	Surface	Soil	Target Area 1	Creosote, Railroad Tie Tar, Fuels, Oils, PCBs	SVOCs, TPH, PCBs, lead	EPA 8170, Modified EPA 8015, EPA 8080, ICAP SCAN

* This is the suggested location for the confirmation sample. The actual location will depend on field analytical results.

adjacent parcels within the zone should be considered during future evaluations. Zone-wide considerations and potential zone-wide concerns are described in the Zone Analysis Plan for Zone 23.

Prior to 1942, the parcel area was completely inundated under San Francisco Bay. The parcel was completely filled between the dates of 1942 and 1946; the ground level and grading have not changed significantly since that time. Dredged material from the channel and turning basin was used as fill for the land are of this parcel. This fill material may have been impacted by hazardous compounds.

Review of historical aerial photographs indicate that this area were utilized for aircraft parking from 1947 through approximately 1953. The dock was constructed in 1953, and this area was utilized in association with the Marina at that time. In 1958 a boathouse and snack stand were constructed. In 1966, the building and parcel were developed to their present condition. Historical processes at this parcel likely consisted of aircraft storage, restaurant activities, and maintenance activities for the Marina's boats. No large-scale staining was noted in aerial photographs.

Currently, one building covers approximately 25 percent of the parcel. The remainder of the parcel (75 percent) is open space. The open space is mostly paved with asphalt. The parcel is presently used as a restaurant area (with associated parking), and a maintenance area for the Marina. Fuel and sewer lines are located on this parcel and are shown in Figure 6-165-1. Sampling associated with fuel and sewer lines is discussed in corresponding protocols presented in Section 3.

Parcel 198 is not located within 500 feet of any Installation Restoration (IR) Program sites. No previous investigations have been conducted at Parcel 198, and specific data regarding chemical occurrence at this parcel are not available.

Lead-based paint, most PCBs (see protocols in Section 3 for exceptions), radiological considerations, industrial hygiene concerns, and asbestos-containing materials on parcels will be addressed in other sampling programs and are not considered in this PEP.

Building 385

Building 385 was constructed in 1958 and has served as a support shop for the Marina since that time. The uses of the building include a restaurant, snack shop, and a boat house maintenance shop. This building is in good condition. The western half (which contains the restaurant) is constructed of wood frame and concrete. The eastern

half (which contains the boat repair area) is constructed of corrugated steel over a wood frame. The building is underlain by concrete and covers approximately 5,000 square feet. Utilities located within and immediately surrounding Building 385 include underground natural gas, sanitary sewer, storm sewer, steam, electrical, and fuel lines.

Pesticides are documented to have been used on a weekly basis from October 1992 through October 1993; however, pesticide application only occurred on the interior of buildings. Petroleum products (including oils, hydraulic fluid, and diesel fuel), and degreasers (including solvents containing VOCs) were noted to be stored in the boat maintenance area. Boat engines (which may contain residual oils or fuel) were also stored here. According to the operator, chemical storage at this area has been similar and continuous since the construction of the building. Minor staining was noted at the interior of the building. There are no documented spills inside this building. Chemical storage and use in Building 385 will be addressed by Target Area 1 in this PEP.

Building 385 is equipped with a heating-ventilation-air conditioning (HVAC) system on its west side. Heavy dust was noted at the ventilated areas in both portions of the building. In addition, the ventilation system in this building may have been impacted by past pesticide application. Peeling paint was noted at the building's interior and exterior areas.

Open Space

Over 75 percent of the parcel is open space. The open space is almost entirely paved with asphalt. Railroad tracks run east to west through the northern portion of the parcel. Utilities located within and immediately surrounding Building 385 include sanitary sewer, storm sewer, steam, electrical, and fuel lines.

The open space is presently in use as a parking area. A transformer and associated switches were observed at the southern property border. According to EBS information the transformer is a PCB-containing transformer. The transformer and switches are mounted on a concrete pad and are surrounded by a fence. A 5-foot by 5-foot oily stain was noted near the transformer. No other incidents such as fires, mishaps, flooding, or crashes are documented to have occurred within Parcel 198.

Underground Storage Tanks

No evidence of underground storage tanks has been identified at this parcel. Neither the document review nor the site inspection identified any information that indicated that any underground tanks are or may have been present at this parcel.

Parcel Boundary Conditions

Parcel 160 borders Parcel 198 to the north, and contains parking areas, an electrical substation, a sewage substation, and offices. Parcel 162 borders Parcel 198 to the east. Parcel 162 contains parking areas, a restaurant, and a boat maintenance shop. Parcel 198 is bordered to the south by the San Francisco Bay and to the west by Pier 3. Issues pertaining to surrounding parcels are addressed in the respective PEPs.

This parcel has potentially been impacted by waste disposal from the Pacific Coast Oil Company refinery (IR Site 13). Reportedly, some of the wastes generated by the refinery were disposed of in nearby former marshlands. Based on review of information contained in the *Data Summary Report RI/FS Phases 1 and 2A* prepared by PRC Environmental Management, Inc. and Montgomery Watson in August 1993 and discussions with the Navy IR contractors, it appears that soils underlying the subject property may be impacted by TPH and SVOCs. Migration of contaminants from the nearby IR sites (i.e., IR Sites 13 and 17) and/or RCRA units may also have impacted this parcel. If any of the continuing investigations at the nearby IR sites reveal a cause for concern at Parcel 198, then sampling on this parcel may be appropriate.

Parcel Reclassification and Data Gaps Summary

This subsection discusses data gaps and BRAC reclassification issues for Parcel 198, consistent with the objectives described in Section 1 of the Shell Workplan. A data gap as defined here is a parcel-specific issue for which there is a separate ongoing investigation, insufficient information, or no information, and that prevents a parcel from being reclassified from BRAC Category 7 to another BRAC category. The data gaps shown in Table 6-198-2 must be addressed before the parcel can be reclassified from BRAC Category 7 to another BRAC category. As indicated in Section 6, separate investigations are currently underway to address the following data gaps at this parcel: transformers, lead-based paint, asbestos, radiological concerns, and Installation Restoration Sites. Sampling associated with sewer lines is discussed in

TABLE 6-198-2

Summary of Data Gaps
NAS Alameda Parcel 198

Data Gap	Status/Description
Asbestos-Containing Materials (ACM)	• ACM issues are being addressed under a separate program.
Endangered Species	• No nesting or mating grounds or migratory routes for endangered species identified.
Industrial Hygiene (IH) Issues	• No industrial buildings are present at Parcel 198
Installation Restoration (IR) Sites	• IR Site 13 is located more than 500 feet northeast of Parcel 198. There are possible impacts from wastes reportedly disposed of from the former Pacific Coast Oil Company refinery.
Lead-Based Paint (LBP)	• LBP issues are being addressed under a separate program.
PCB-Containing Equipment	• Potentially PCB-containing electrical equipment is being addressed under a separate program.
Potential Groundwater Contamination Migration from Neighboring Parcels	• No evidence of potential groundwater contamination migration from neighboring non-IR parcels identified.
Potential Zone-Wide Release Areas	• Railroad Tracks.
Potential Parcel-Specific Release Areas	• Target Area 1 (Building 358).
Radiological Compounds	• Radiological compounds are being addressed under a separate program.
Underground Storage Tanks (USTs)	• No evidence of current or former USTs identified.

TABLE 6-198-2

Summary of Data Gaps
NAS Alameda Parcel 198

Data Gap	Status/Description
Underground Utilities	• Storm sewer, sanitary sewer, telephone, and electrical lines identified.
- Fuel Lines	• Underground fuel lines identified.
- Steam Lines	• Steam lines identified.
Wetlands	• No wetlands identified.
Other	• No evidence of other data gaps identified.

the corresponding protocols presented in Section 3. No Industrial Hygiene (IH) sampling is required for Parcel 198 because no industrial buildings are present.

As noted earlier, pesticides have been documented to have been applied to open spaces and within Building 385 on Parcel 198. Based on current EPA/Cal-EPA policy, landscaped and unpaved areas that likely received only normal pesticide applications do not require sampling for pesticides prior to lease or transfer. Only moderate-use areas (i.e., areas where vegetation was actively suppressed) and intensive-use areas (i.e., agricultural areas, blending, storage, or distribution areas, etc.) will be sampled for pesticides. Therefore, no pesticide sampling is required for Parcel 198.

Once the data gaps in Table 6-198-2 are addressed and screening-level sampling results from the target areas described below are compared to the appropriate screening levels, Parcel 198 may be reclassified from BRAC Category 7 to another BRAC category.

Target Areas and Compounds of Concern

This subsection of the PEP discusses specific parcel target areas. The nature and locations of these areas were evaluated to determine field investigation and sampling strategies. This parcel contains one parcel-specific target area and is also contained in one zone-wide target area. The discussion of the zone-wide target areas focuses on the zone-wide sampling proposed for this parcel. Detailed information regarding the zone-wide target area and the proposed sampling is provided in the Zone Analysis Plan for Zone 23. The following target areas were identified based on the potential release area described below and listed in Table 6-198-2.

- Target Area 1 (Building 385): This target area consists of the east half of Building 385, which contains approximately 3,000 square feet of area. Surface soils may have been impacted by previous solvent handling operations and storage of petroleum products. Samples to be collected in this target area are listed in Table 6-198-1.

- Zone 23 Target Area 1 (Railroad Tracks): Zone 23 Target Area 1 includes all current or former railroad tracks within the Southeastern Recreational Zone. The railroad runs through the northwestern portion of Parcel 198. One of the two samples proposed to be collected from this zone-wide target area is located on Parcel 198. The zone-wide target area sample that is located on Parcel 198 is listed on Table 6-198-1. This target area addresses the

possible presence of TPH, SVOCs, PCBs, and lead. The likelihood of environmental impacts having occurred within this target area is classified as potential. Samples that are located on Parcel 198 are listed in Table 6-198-1.

Screening-Level Investigation

Surface soil sampling (SOP 3) and subsurface Geoprobe soil sampling (SOP 14) are the screening-level techniques that will be employed to assess conditions in target areas and to identify areas that require further sampling in the follow-up detailed evaluation phase. One zone-wide and two parcel-specific surface soil samples, and two parcel-specific subsurface Geoprobe soil samples will be collected from the sample locations shown on Figure 6-198-1. Table 6-198-1 summarizes screening-level sampling and analysis for the parcel's target areas. Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Detailed Evaluation Phase

The detailed evaluation phase of sampling is intended to more fully characterize the areas with confirmed elevated levels of compounds of concern identified during the screening-level investigation. This characterization will utilize some of the screening technologies discussed above on a higher density level as well as the following technologies not previously discussed: soil vapor sampling (SOP 6), HydroPunch groundwater sampling (SOPs 1 and 15), environmental air monitoring (SOP 22), and monitoring well groundwater sampling (SOPs 1, 2, 8, 9, and 10). Sampling will be conducted in accordance with the referenced SOPs in Appendix A, the screening-level and follow-up sampling protocols in Section 3, and the QA/QC guidelines in Section 4.

Appendix C
1994 Environmental Baseline Survey Summary Tables (on CD-ROM)

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PARCEL 005

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
005	- In 1947, the majority of the parcel appeared vacant. Several structures were present along the N and NW parcel borders. Three piers extended from the NW corner of the parcel. Soil on the N half of the parcel appeared heavily mottled. - In 1953, two runways and a taxiway were present, all piers and structures were gone. Soils adjacent to the runways appeared mottled. - In 1958, the parcel appeared as in 1953 and buildings 379A and B were present. - In 1963 and 1966, the parcel appeared as in 1958. - In 1970, no change. - In 1975, building 509 is present. - In 1981, no change. - In 1985, building 509 is gone. - In 1990-1993, no change.	Pacific Aerial Surveys			JLR073

NAS/NADEP ALAMEDA
Asbestos

Parcel	Location	Survey?	Asbestos?	Friable?	Location of Asbestos	Remarks	Reference
005	45A / general storage shed (AIMD GSE)	No		No		- Informal assessment; no supporting evidence.	BBK007
005	406 / tacan building	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
005	466 / aircraft arresting gear	No		No		- Informal assessment; no supporting evidence.	BBK007
005	467 / aircraft arresting gear	No		No		- Informal assessment; no supporting evidence.	BBK007
005	509 / recreation field	No		No		- Informal assessment; no supporting evidence. No longer exists.	BBK007
005	596 / sewage lift station	No		No		- Informal assessment; no supporting evidence.	BBK007

NAS/NADEP ALAMEDA
Building Information

Parcel	Location	Date Constructed	Sq Footage	Type of Construct.	Use	Applicable Date	Remarks	Reference
005	406	1957	630		tacan building			DB003
005	45A	1958	4,800	Concrete floor, metal walls, metal roof, metal roofing	general storage shed			DB003, DB020
005	466, 467	1961	0.00		aircraft arresting gear			
005	406				TACAN	1/66		DB003
005	379				GCA	1/66		EMC257
005	596				Sewage Lift Station		5 gallons per minute.	EMC257
								BBK200

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
005	406	BBK800

Building Description	Evidence of chemical storage/use and location within building
- TACAN building demolished	
Other Issues	

Parcel:	Location:	Reference:
005	466, 467	BBK802

Building Description	Evidence of chemical storage/use and location within building
- Aircraft arresting gear on asphalt - Two-in. wire rims across runway	- Diesel fuel for diesel motors on each end of yard
Other Issues - None	

NAS/NADEP ALAMEDA
Historical

Parcel	Location(s)	Subject(Historical building, Indian ruins,etc.)	Remarks	Reference
005	Northern boundary of base, above runway	Fill material	Fill material from estuary dredging during construction of Posey Tube in 1920's was used.	EMC217

NAS/NADEP ALAMEDA
Interview

Parcel	Location(s)	Name of Interviewee	Information	Reference
005	NW of runway	Chris A. Bacina, John Gansalver both with NADEP ~ 27 yrs. (510) 263-6298, Building 5, NADEP	- Piles of sand/rubble were historically dumped near the skeet range (parcel 001); dumping was indiscriminate.	D030

NAS/NADEP ALAMEDA
IR

Parcel:	Location:	Reference:
005	Landfill #1	DB007

Describe source of contamination, including chemicals.
12 acre landfill operating 1943 - 1956.
Landfill reportedly received all wastes except liquids.
(IR site or sites)

Describe Contamination
- Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Total Petroleum Hydrocarbon (TPH), pesticides, Polychlorinated Biphenyls (PCBs), and radionuclides in soil at localized areas.
- Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs) in groundwater along western edge (downgradient) of site

Describe Status of Investigation/remediation
Addressed in Solid Wastewater Quality Assessment Test, April 1993.

Parcel:	Location:	Reference:
005	1943 -1956 Disposal Area	EMC404

Describe source of contamination, including chemicals.
Approximately 15,000 to 200,000 tons of waste was disposed at the site between 1943 and 1956. The disposal method consisted of digging trenches to the water table, filling them with waste, and compacting the material with a bulldozer. Cover material was applied on an irregular basis.
(IR site or sites)

Describe Contamination
Waste generated: Aircraft engines, cooked garbage, cables, scrap metal, waste oil, paint waste, solvents, cleaning, compounds, construction debris, and some radioactive material.

Describe Status of Investigation/remediation

NAS/NADEP ALAMEDA
IR

Parcel:	Location:	Reference:
005	1943-1956 Disposal Area	BBK009

Describe source of contamination, including chemicals.
Most solid waste generated on base was disposed of on this site from 1940's-1956.
(IR site or sites)

Describe Contamination
Estimated 15,000-200,000 tons of waste: old aircraft engines, low-level radiological wastes, scrap metal, waste oil, paint wastes, solvents, cleaning compounds, and construction debris.

Describe Status of Investigation/remediation
None specified.

NAS/NADEP ALAMEDA
LUST

Parcel:	Location:	Reference:
005	694-1	DB016

Describe source of contamination, including chemicals.	Describe Contamination
UST unauthorized release (leak) Report 4/1/92 diesel tank leak	
Describe Status of Investigation/remediation leak being confirmed	

NAS/NADEP ALAMEDA
Miscellaneous Information

Parcel	Location	Subject	Remarks	Reference
005	Near N end of runway 13	Monitoring well	Well located where taxiway 12 and runway 13 intersect.	BBK802
005	Area N of runway	Railroad tracks	Railroad tracks running along the northern boundary of the runway were probably buried as the area was filled in. Railroad ties were found during some construction in the area.	DB022

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
005	Runway 13	Photo # 3-17-1 - NW section also along W edge of runway	- Possible herbicide, white in color, see spill/incidents form.	RWB001
005	Section 11	Photo # 3-17-10 - Area with radar equipment, facing SW	- Generator and assorted radar equipment	RWB001
005	Runway 13	Photo # 3-17-2 - Next 7 sign. Directly E of pistol range, facing S	- Photo of melted asphalt, possible stain from engine oil	RWB001
005	Runway 13	Photo # 3-17-3 - Center of runway, directly across from building 11, facing S	- A piece of runway has been removed and replaced	RWB001
005	Runway 13	Photo # 3-17-4 - Arresting equipment, across from ordnance structure, facing N	- Oily stains from arresting equipment	RWB001
005	Runway 13	Photo # 3-17-5 - E side of arresting gear aboveground storage tank, facing N.	- Aboveground storage tank for arresting equipment. - Also illustrates a stain, see spill form.	RWB001
005	Runway 13	Photo # 3-17-6 - On S side of arresting gear, facing N	- Possible staining from engine oils	RWB001
005	Area 12	Photo # 3-17-7 - S arresting gear on side runway near W edge of parcel, facing W	- Stains from oil used in arresting gear	RWB001
005	Area 12	Photo # 3-17-8 - N side of arresting gear, facing N	- Oil stains for fuel tank	RWB001
005	Section 11	Photo # 3-17-9 - W part of the area from old pistol range. - Facing W. - Radar station for tower.	- Oil/water mixture seeping through pipes and equipment. - Oil on compressor-like equipment.	RWB001
005	Open space	Photo # 6-29-10 - W of parcel 8, inside parcel 5 area	- In-ground transformer (?) not positively identified	SDG001
005	Open space	Photo # 6-29-11 - NW corner of parcel 008, (outside) SW view	- Pump station (?)	SDG001
005	Open space	Photo # 6-29-12 - S view of parcel 005 area	- Area of parcel 005	SDG001

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
005	Section 11 of runway	Photo # 3-17-11 - NW corner of parcel 5 - Farthest end of parcel - Facing W	- Possible transformer, see transformer form	RWB001

NAS/NADEP ALAMEDA
Radioactive/Mixed Materials

Parcel	Location	Radioactive/Mixed Materials Present?	Period of Coverage	Description of Materials/Amount	Management Practices	Reference
005	1943-1956 Disposal Area, West Beach Landfill	Yes		Radium 226 wastes on paper wipes and brushes. Metal and wooden workbenches disposed of here.		BBK009

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
005	Runway 13, N end	- Staining, deterioration	- Unknown	- Unknown	- Areas of asphalt deteriorated on N end of runway, appears to be from jet engine blast - White staining on W side of tarmac, stains originate from crack / separation of tarmac and apron (possibly from herbicide application) (3-17-1) - Tar / wheel skid marks throughout runway, ~ five-in. to twelve-in. in diameter, location is sporadic - Dark stain beneath cable o arresting gear, ~ five ft. by three to twelve-in. (3-17-5) - Deterioration and patching of runway on E side of runway		D026
005	W side of runway 13, near end	- Crash / aircraft accident	- Unknown	- Probably hydraulic fluid	- Stain approximately three ft. by three ft.; area looks burned as well	- Unknown	BBK802
005	Near building 406, W side of parcel	- Staining, leak	- Unknown	- Unknown	- Dark oily stain / leak beneath radar section on W side of parcel (3-17-9), substance is dripping out of unit - Dark stain on E side of generator (3-17-10), concrete beneath generator appears discolored (generator is adjacent to radar station)		D026

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
005	Runway 7	- Stain	- Unknown	- Probably diesel fuel — photo 3-17-8	- Five ft. by six in. — on concrete / asphalt of runway - Area looks to be in fairly good condition	- Unknown	D026
005	Runway 7 and S side of parcel	- Staining, deterioration	- Unknown	- Unknown	- Dark stains, ~ five in to twelve in. in diameter sporadically along runway 7 and roadway - Dark stain beneath cable arresting gear ~ 5' x 3' - 12" - Staing around fuel tank (AST) on N side of arresting gear (3-17-8) staining appears to have originated from cap on top of tank - Areas of asphalt deterioration on W end of runway 7, appears to be from jet engine blast		D026
005	Arresting gear vault on east side on runway 13/31	Leak	8/24/87	Polychlorinated Biphenyl (PCB) hydraulic fluid	Approx. 40 gallons	Absorbed and containerized. Contaminated concrete will be removed and disposed. Verification samples will be taken.	BBK206

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
005	Runway 13	~ 100	6/6/94	Unknown	Unknown	- Two aboveground storage tanks associated with arresting gear on runway 13. (photo 3-17-5)	D026
005	Runway 7	~ 100	6/6/94	Unknown	Unknown	- Two aboveground storage tanks associated with arresting gear on runway 7. (photo 3-17-5)	D026

NAS/NADEP ALAMEDA
Storm Water

Parcel	Location	Stormwater Discharge Points	Drainage Area and Sampling	Reference
005	33 Outfalls into SF Bay, Oakland Estuary and Pier Area	33 discharge points located around the perimeter of the station.	Drainage Area: Various Sampling Results: Unknown - Most of piping is corrugated metal which is cracked and/or corroded, causing debris to flush into pipes during storms.	BBK001

NAS/NADEP ALAMEDA
Title Search

Parcel	Location	Issues of Concern/Remarks	Transfer Information and date	Reference
005	Most of NAS maps #3, 4, 5		1072.03 acres from War Department by Executive Order #7467. 1936	DB008
005	Western End	Agreement for antenna from FAA, 1975 Navy NF (R) 23734		DB008
005	Western boundary of Base		38.91 acres from City of Alameda by civil action #35276 1956	DB008
005	Runway Area		929.337 acres Deed 3583-OR-1 from City of Alameda 1937	DB008
005	Runway Area		929.337 acres Deed 3583-OR-1 from City of Alameda 1937	DB008
005	Northern boundary of Base	Perpetual easement for electric pole lines, cables acquired by City of Alameda and Pacific Gas & Electric. Reserved in Civil Action 22463 1943		DB008

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date	PCB's ?	PCB Class	Remarks	Reference
005	W of parcel 008, inside parcel 005 area	Unknown	Unknown	Unknown	Unknown		- Vault with high voltage sign. - Presence or absence of PCBs is unknown.	BBK802
005	E of building 111	Unknown	Unknown	6/11/94	Unknown		- Transformer or switchgear. - It is locked about 40 yards E of building 111. - It is enclosed in a green plastic cabinet and is resting on a concrete foundation. - Presence or absence of PCBs is unknown.	C12
005	NW corner of parcel	Unknown	Unknown	6/6/94	Unknown		- Transformer (possible) at NW-most portion of parcel 005. - No clear indication if it is a transformer or switchgear. - It is humming. - See photo 3-17-11. - Presence or absence of PCBs is unknown.	C12
005	NW corner	Unknown	Unknown	Unknown	Unknown		- Pad-mounted. - Presence or absence of PCBs is unknown.	EMC310
005	N of 379B	S576	Unknown	Unknown	Unknown		- Presence or absence of PCBs is unknown.	EMC310
005	N of 406	S576	Unknown	Unknown	Unknown		- N of 406 on E side of road. - Presence or absence of PCBs is unknown.	EMC310

PARCEL 023

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not exist.	Public Affairs, NAS/NADEP Alameda	11/26/34	MAA-224-77 7	JLR016, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on aerial photo.	Public Affairs, NAS/NADEP Alameda	5/3/40	Accordion folder #54 (NA 27)	JLR015, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map Location: 17-P. - Rinse facility does not appear on aerial photo.	Public Affairs, NAS/NADEP Alameda	July 1942	#3462 (NA 27)	JLR014, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility not apparent on aerial photo.	Pacific Aerial Surveys	3/24/47	AV-11-08-0 6	JLR011, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility not apparent on aerial photo.	Pacific Aerial Surveys	8/14/53	AVM-1010	JLR010, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	3/1/58	SF AREA-2-22	JLR009, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	7/25/63	AV-550-07-21	JLR008, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	4/20/66	AV-710-8-28	JLR007, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	9/8/70	AV-965-7-24	JLR006, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	9/4/75	AVM-1014 (aka: AV-1215-7-23 / AV-1215-8-21)	JLR005, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	1/2/81	AV-2050-07-26	JLR004, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	5/13/85	AV-2655-3-13	JLR003, JLR012 (MAP LOCATION)
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	4/30/90	K-AV-3817-1-6	JLR002, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	259	- Aircraft rinse facility. - Map location: 17-P. - Rinse facility does not appear on map or aerial photo.	Pacific Aerial Surveys	4/8/92	AVM-1011	JLR001, JLR012 (MAP LOCATION)
023	Outside area near buildings 40 and 41	This area is generally open space adjacent to the S and W sides of building 41, and E and S sides of Building 40. A few planes are parked near the two buildings. The aerial photo shows this area to be considerably stained, particularly around and beneath the planes. The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. Between Taxiway #7 and the Seaplane Lagoon, a parking apron strip is also stained. Planes appear parked at various locations on this apron as shown by photos dating from 1970 back to 1947. Staining is apparent around and beneath the parked planes.	Pacific Aerial Surveys	9/8/70	AV-965-7-2 4	JLR006

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area near buildings 39, 40, and 41	This area is generally open space adjacent to the sides of buildings 39, 40, and 41. The area S of buildings is a parking apron adjacent to taxiway #7. Several planes are parked near the buildings. The aerial photo shows this area to be considerably stained, particularly around and beneath the planes (staining is located primarily on the E, W, and S sides of each building). The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. Between taxiway #7 and the Seaplane Lagoon, a parking apron strip is also stained. Planes appear parked at various locations on this apron as shown by photos dating from 1970 back to 1947. Staining is apparent around and beneath the parked planes.	Pacific Aerial Surveys	4/20/66	AV-710-8-2 8	JLR007

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area near buildings 39, 40, and 41	This area is generally open space adjacent to the sides of buildings 39, 40, and 41. The area S of the buildings and adjacent to taxiway #7 is a parking apron. Several planes are parked near the buildings. The aerial photo shows this area to be considerably stained, particularly around and beneath the planes (staining is located primarily on the E, W, and S sides of each building). The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. Between taxiway #7 and the Seaplane Lagoon, a parking apron strip is also stained. Planes appear parked at various locations on this apron as shown by photos dating from 1970 back to 1947. Staining is apparent around and beneath the parked planes.	Pacific Aerial Surveys	7/25/63	AV-550-07-21	JLR008

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area near buildings 39, 40, and 41	This area is generally open space adjacent to the sides of buildings 39, 40, and 41. The area S of the buildings and adjacent to taxiway #7 is a parking apron. Numerous large planes are parked near the buildings. The aerial photo shows this area to be considerably stained, particularly around and beneath the planes (staining is located primarily on the E, W, and S sides of each building). The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. Between taxiway #7 and the Seaplane Lagoon, a parking apron strip is also stained. Planes appear parked at various locations on this apron as shown by photos dating from 1970 back to 1947. Staining is apparent around and beneath the parked planes.	Pacific Aerial Surveys	3/1/58	SF AREA-2-22	JLR009

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area near buildings 12, 39, 40, and 41	This area is generally open space adjacent to the sides of buildings 12, 39, 40, and 41. The area S of the buildings and adjacent to taxiway #7 is a parking apron. Several planes are parked near the buildings. The aerial photo shows this area to be considerably stained, particularly around and beneath the planes (staining is located primarily on the S sides of each building). The stained areas around these buildings increases in size toward the S and W with photos that date back to 1947. Between taxiway #7 and the Seaplane Lagoon, a parking apron strip is also stained. Planes appear parked at various locations on this apron as shown by photos dating from 1970 back to 1947. Staining is apparent around and beneath the parked planes.	Pacific Aerial Surveys	8/14/53	AVM-1010	JLR010

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area near buildings 12, 39, 40, and 41	This area is generally open space adjacent to the sides of buildings 12, 39, 40, and 41. The area S of the buildings and adjacent to taxiway #7 is a parking apron. Numerous planes are parked near the buildings, primarily to the S. The aerial photo shows this area to be considerably stained, particularly around and beneath the planes (staining is located primarily on the S sides of each building). The area currently occupied by building 400 is also stained. Between taxiway #7 and the Seaplane Lagoon, a parking apron strip is also stained. Planes appear parked at various locations on this apron as shown by photos dating from 1970 back to 1947. Staining is apparent around and beneath the parked planes.	Pacific Aerial Surveys	3/24/47	AV-11-08-06	JLR011

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area W of hangars 20 and 21 along taxiway #4	This area is generally open space adjacent to the W side of buildings 20, 21, 22, and 23 (hangars). The aerial photo shows this area to be stained, particularly W of hangars 20 and 21. The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. A large parking apron, known as parking apron #2 (parcel 023), appears to have parked planes consistently present; all of these planes appear to have staining near and beneath them.	Pacific Aerial Surveys	9/8/70	AV-965-7-2 4	JLR006

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area W of hangars 20, 21, 22, and 23 along taxiway # 4	This area is generally open space adjacent to the W side of Buildings 20, 21, 22, and 23 (hangars). The aerial photo shows this area to be stained, particularly W of hangars 20 and 21. Staining also appears (somewhat lighter) to the W of hangars 22 and 23. The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. A large parking apron, known as parking apron #2 (parcel 023), appears to have parked planes consistently present; all of these planes appear to have staining near and beneath them.	Pacific Aerial Surveys	4/20/66	AV-710-8-2 8	JLR007

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area W of hangars 20, 21, 22, and 23 along taxiway # 4	This area is generally open space adjacent to the W side of buildings 20, 21, 22, and 23 (hangars). The aerial photo shows this area to be stained, particularly near and beneath several planes that are parked in front of each hangar. The area to the S of hangar 23 (parcel 030) is also stained. The parcel 030 area also has several parked planes with staining around and beneath them. The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. A large parking apron, known as parking apron #2 (parcel 023), appears to have parked planes consistently present; all of these planes appear to have staining near and beneath them.	Pacific Aerial Surveys	7/25/63	AV-550-07-21	JLR008

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area W of hangars 20, 21, 22, and 23 along taxiway #4	This area is generally open space adjacent to the W side of buildings 20, 21, 22, and 23 (hangars). The aerial photo shows this area to be stained, particularly near and beneath numerous planes that are parked in front of each hangar. The area to the S of hangar 23 (parcel 030) is also stained. The parcel 030 area also has numerous parked planes with staining around and beneath them. The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. A large parking apron, known as parking apron #2 (parcel 023), appears to have parked planes consistently present; all of these planes appear to have staining near and beneath them.	Pacific Aerial Surveys	3/1/58	SF AREA-2-22	JLR009

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area W of Hangars 20, 21, 22, and 23 along taxiway #4	This area is generally open space adjacent to the W side of buildings 20, 21, 22, and 23 (hangars). The aerial photo shows this area to be stained, particularly near and beneath numerous missiles (?) that are located in front of each hangar. The area to the S of hangar 23 (parcel 030) is also stained. The parcel 030 area has numerous parked planes with staining around and beneath them. The stained areas around these buildings increase in size toward the S and W with photos that date back to 1947. A large parking apron, known as parking apron #2 (parcel 023), appears to have parked planes consistently present; all of these planes appear to have staining near and beneath them. Missiles (?) are also present on parking apron #2 (parcel 023), with staining near and beneath them.	Pacific Aerial Surveys	8/14/53	AVM-1010	JLR010

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	Outside area W of hangars 20, 21, 22, and 23 along taxiway # 4	This area is generally open space adjacent to the W side of buildings 20, 21, 22, and 23 (hangars). The aerial photo shows this area to be very darkly stained, particularly near and beneath numerous missiles (?) that are located in front of each hangar. The area to the S of hangar 23 (parcel 030) is also stained. The parcel 030 area has numerous parked planes and missiles (?) with staining around and beneath them. A large parking apron, known as parking apron #2 (parcel 023), appears to have parked planes consistently present; all of these planes appear to have staining near and beneath them. Missiles (?) are also present on parking apron #2 (parcel 023), with staining near and beneath them.	Pacific Aerial Surveys	3/24/47	AV-11-08-06	JLR011

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
023	- In 1947, NW corner was a parking lot, SE corner was part of the bay, NE corner was a baseball field and parking lot, remainder of parcel was runway. - In 1953, the parcel was completely occupied by runways and aircraft parking aprons. Two new runways. - In 1958-1966, no change. - In 1970-1993, parcel was used for parking aprons, runways and landing and takeoff gear, plus beacons and taxiways.	Pacific Aerial Surveys			JLR073

NAS/NADEP ALAMEDA
Asbestos

Parcel	Location	Survey?	Asbestos?	Friable?	Location of Asbestos	Remarks	Reference
023	50 / High Explosive Magazine	No		No		- Informal assessment; no supporting evidence.	BBK007
023	51 / Small Arms Pyrotechnics Magazine	No		No		- Informal assessment; no supporting evidence.	BBK007
023	56 / High Explosive Magazine	No		No		- Informal assessment; no supporting evidence.	BBK007
023	57 / High Explosive Magazine	No		No		- Informal assessment; no supporting evidence.	BBK007
023	58 / Missile Magazine	No		No		- Informal assessment; no supporting evidence.	BBK007
023	100 / transformer vault	No		No		- Informal assessment; no supporting evidence.	BBK007
023	259 / aircraft rinse facility	No		No		- Informal assessment; no supporting evidence.	BBK007
023	272 / Liquid Oxygen / Nitrogen Facility	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	407 / Liquid Oxygen / Nitrogen	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	452 / Aviation Meteorological Facility	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	480 / Wind Direction Indicator	No		No		- Informal assessment; no supporting evidence.	BBK007
023	483 / Aircraft Arresting Gear	No		No		- Informal assessment; no supporting evidence.	BBK007
023	485 / Aircraft Arresting Gear	No		No		- Informal assessment; no supporting evidence.	BBK007
023	488 / Aircraft Compass Calibration Pad	No		No		- Informal assessment; no supporting evidence.	BBK007

NAS/NADEP ALAMEDA
Asbestos

Parcel	Location	Survey?	Asbestos?	Friable?	Location of Asbestos	Remarks	Reference
023	489 / Aircraft Compass Calibration Pad	No		No		- Informal assessment; no supporting evidence.	BBK007
023	490 / Line Maintenance Building	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	492 / Sewage Pumping Station	No		No		- Informal assessment; no supporting evidence.	BBK007
023	496 / Ground Control Approach (GCA) Turntable	No		No		- Informal assessment; no supporting evidence.	BBK007
023	499 / Field Lighting Vault	No		No		- Informal assessment; no supporting evidence.	BBK007
023	511 / Arresting Gear (RW-25)	No		No		- Informal assessment; no supporting evidence.	BBK007
023	512 / Beacon, Ship	No		No		- Informal assessment; no supporting evidence.	BBK007
023	513 / Wheels Up Landing Aid (RW-13)	No		No		- Informal assessment; no supporting evidence.	BBK007
023	519 / Field Monitor Station	No		No		- Informal assessment; no supporting evidence.	BBK007
023	520 / MC-2 Compass Pad	No		No		- Informal assessment; no supporting evidence.	BBK007
023	567 / Arresting Gear	No		No		- Informal assessment; no supporting evidence.	BBK007
023	568 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	569 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	571 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007

NAS/NADEP ALAMEDA
Asbestos

Parcel	Location	Survey?	Asbestos?	Friable?	Location of Asbestos	Remarks	Reference
023	572 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	573 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	574 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	575 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	577 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	578 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	579 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	580 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	581 / Ready Service Ammunition Locker	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
023	599 / Arresting Gear	No		No		- Informal assessment; no supporting evidence.	BBK007

NAS/NADEP ALAMEDA
Building Information

Parcel	Location	Date Constructed	Sq Footage	Type of Construct.	Use	Applicable Date	Remarks	Reference
023	181				Unknown	1953	Demolished.	EMC300
023	332					1953	Demolished.	EMC300
023	71					1953	Demolished.	EMC300
023	71	1950	2,429	Semi-permanent	Gasoline filling station	6/25/62	Demolished. Number reassigned.	DB006
023	270	1944	852	Concrete	Pyrotechnics magazine	7/30/87	Demolished.	DB006
023	332	1947	4113	Semi-permanent	Navy Exchange garage	2/62	Demolished.	DB006
023	495	1964	N/A	Permanent	Airfield arresting gear	3/88	Demolished.	DB006
023	570	1975	48	Permanent	Ammunition locker	12/89	Demolished.	DB006
023	518	1968	144	Semi-permanent	Control console station, covered ground check, flight test	5/87	Demolished.	DB006
023	519	1968	64	Semi-permanent	Field monitor station	5/87	Demolished.	DB006
023	259	1983	944 square yards		Aircraft rinse facility			DB003
023	272	1945	852		Liquid oxygen/nitrogen facility			DB003
023	407	1957	884		Liquid oxygen/nitrogen facility (non-industrial)			DB003
023	452	1960	0.00		Aviation meteorological facility			DB003
023	480	1942	0.00		Wind direction indicator			DB003
023	483, 485	1956/1957	0.00		Aircraft arresting gear			DB003
023	488, 489	1944	2,011		Aircraft compass calibrating pad			DB003

NAS/NADEP ALAMEDA
Building Information

Parcel	Location	Date Constructed	Sq Footage	Type of Construct.	Use	Applicable Date	Remarks	Reference
023	490	1957	630		Line maintenance shelter			DB003
023	496	1964	0.00		Ground control approach (GCA) system			DB003
023	499	1964	1,426		Electrical distribution building / shelter			DB003
023	56	1941	1,415	Concrete floor, walls and roof with dirt roofing	Small arms / pyrotechnics magazine			DB003, DB020
023	567	1975	0.00		Aircraft arresting gear			DB003
023	57	1941	1,415	Concrete floor, walls and roof with dirt roofing	High explosives magazine			DB003, DB020
023	568, 569, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581	1975	48		Ready magazine			DB003
023	58	1941	1,415	Concrete floor, walls and roof with dirt roofing	Missile magazine			DB003, DB020
023	50	1941	1,602		High explosives magazine			DB003, DB020
023	51	1941	1,602	Concrete floor, walls, and roof with dirt roofing	Armory: small arms / ammunition			DB003, DB020
023	511	1967	0.00		Aircraft arresting gear			DB003

NAS/NADEP ALAMEDA
Building Information

Parcel	Location	Date Constructed	Sq Footage	Type of Construct.	Use	Applicable Date	Remarks	Reference
023	512	1964	0.00		Beacon - ship			DB003
023	513	1964	0.00		Wheels-up / wave-off lighting			DB003
023	520	1968	1,111		Aircraft compass calibrating pad			DB003
023	496				Ground Control Approach (GCA) Turntable	1/66		EMC257
023	495				E 27 aircraft arresting gear	1/66		EMC257
023	407				Liquid oxygen facility	1/66		EMC257
023	270				Pyrotechnics magazine	1/66	Between 65 and 57 weapons areas.	EMC257
023	100				Transformer vault		4,160 KVA transformer	BBK200
023	599				Arresting Gear			BBK200
023	570		48		Ammunition Locker			BBK200
023	519		64		Field Monitor Station			BBK200
023	492		2,876		Sewage Pumping Station			BBK200

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
023	568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581	BBK802

Building Description	Evidence of chemical storage/use and location within building
- CONEX boxes (storage lockers) were here at one time, ≈ 25 years ago. They stored ammo.	- None.

Other Issues
- None.

Parcel:	Location:	Reference:
023	483, 611	BBK802

Building Description	Evidence of chemical storage/use and location within building
- Aircraft arresting gear, with diesel motors on both ends.	- Probable diesel fuel ≈ 100 gal. in tank.

Other Issues
- None

Parcel:	Location:	Reference:
023	486	BBK802

Building Description	Evidence of chemical storage/use and location within building
- Aircraft arresting gear facility is absent.	

Other Issues

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
023	496, turntable	BBK800

Building Description	Evidence of chemical storage/use and location within building
- All-steel hut, used to house electronic, radar equipment. Mounted on axle, can rotate 360∞. On concrete pad: clean.	- None.

Other Issues
- Transformer, diesel generator, aboveground storage tank all adjacent.

Parcel:	Location:	Reference:
023	Unnumbered building	EEW1000

Building Description	Evidence of chemical storage/use and location within building
- Metal prefab building 200 ft. NW of building 499.	

Other Issues

Parcel:	Location:	Reference:
023	Unnumbered building	EEW1000

Building Description	Evidence of chemical storage/use and location within building
- ≈ 100 ft. SW of structure 488 (aircraft compass calibration pad). - Prefab-type construction, temporary. - Current use: Storage of magnetic compass calibrator equipment, AC power source, electric heater.	- None.

Other Issues
- Building not on map.

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
023	Building 512 located on wheels by landing aid	EBW1000

Building Description	Evidence of chemical storage/use and location within building
- Wood frame, 40 sq. ft., over water. - Appears abandoned.	- Two transformers (unknown if oil-filled). - Cleaning compounds (trichlorotrifluoroethane)

Other Issues
- IH issue: Peeling, flaking paint.

Parcel:	Location:	Reference:
023	Building 407	EBW1000

Building Description	Evidence of chemical storage/use and location within building
- Description: Concrete floor (with drain), cinder block walls, metal roof. Interior is tiled and includes an office area. - Current use: Liquid nitrogen / oxygen storage. (photo 7-17-13)	- Liquid nitrogen and oxygen.

Other Issues

Parcel:	Location:	Reference:
023	Building 272	EBW1000

Building Description	Evidence of chemical storage/use and location within building
- Description: Metal quonset-type construction, concrete foundation. - Current use: Storage of miscellaneous goods (chairs, etc.).	- None.

Other Issues

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
023	Building 499	EEW1000

Building Description	Evidence of chemical storage/use and location within building
- Description: Concrete building with vent for generator inside (photo 7-17-12). - Current use: Houses backup diesel fueled generator, portable sewage pump.	- 1,000 gal. above ground storage tank located outside building.

Other Issues

Parcel:	Location:	Reference:
023	270	BBK802

Building Description	Evidence of chemical storage/use and location within building
- This building was always used as a ammunitions magazine. - Upon site walk and personal observation this building has clearly been demolished.	- The history of the building indicates ordnance storage.

Other Issues

Parcel:	Location:	Reference:
023	480, Tetrahedron	BBK802

Building Description	Evidence of chemical storage/use and location within building
- Aluminum wind-direction indicator	- None

Other Issues
- None

NAS/NADEP ALAMEDA
Building Inspection

Parcel: (Location)	Reference:
023 (66, 67, 68, 50, 51)	BBK802, BBK823
Building Description - These buildings store live classified ammo and are thus off-limits to inspection.	***Evidence of chemical storage/use and location within building*** - None.
Other Issues - None.	

NAS/NADEP ALAMEDA
Chemical Inventory

Parcel	Location	Chemical Types	Quantities Stored	Uses and Mgmt Practices	Applicable Date	Reference
023	Parking apron number 2, near blast fence	- Liquid oxygen	- Unknown	- Stored in portable, metal shed on W side of apron. - Shed was not entered.	6/6/94	D026
023	50 yards E of Tetrahedron	- Petroleum products	- < 60 gal.	- Storage.	6/7/94	BBK802
023	Building 512 (located on wheels up landing aid)	- Cleaning compounds (e.g., trichlorotrifluoroethane)	- < 1 gal.	- Various aerosol containers stored inside.	6/6/94	EEW1000
023	Open space, area E of parcel 205	- Synthetic oils, freon, trichlorofluoroethane (TCF), paint, and hazardous wastes (JP-5 and hydraulic oil).	- 3 five-gal. pails of paint - 2 55-gal. drums of synthetic oil - 1 55-gal. drum of TCF	- Chemicals appeared to be stored correctly and adequately labeled. (Photo 7-17-24)	6/7/94	DRK001

NAS/NADEP ALAMEDA
Hazardous Waste

Parcel	Location(s)	Hazardous Waste?	Type/Quantity	Description	Applicable Dates	Reference
023	Open space, area E of parcel 205	Yes	- Movable metal collection bin for JP-5, plastic enclosed collection for hydraulic fluid, drums of absorbent and used oil on pallets. (Photo 7-17-24)	- Appear to be labeled and stored correctly.	6/7/94	DRK001

NAS/NADEP ALAMEDA
Historical

Parcel	Location(s)	Subject(Historical building, Indian ruins,etc.)	Remarks	Reference
023	Old Bay Airdrome Turf Strip	The Airdrome was located in the area N of Navy Housing, buildings 2 and 4.	In 1941, a turf landing strip was visible in photographs.	EMC217
023	Along W boundary of parcel 23	Sunken destroyer hulls once formed breakwater. The ships were buried as the area to the W was filled in.		EMC259, EMC260, EMC252
023	Historic District	Historic district: eligible for inclusion on National Register.	The district as a whole is eligible; individual buildings are not eligible. However, any action taken that may alter the visual appearance of any individual building must be approved by the Advisory Council on Historic Preservation.	BBK001, BBK043
023	Northern boundary of base, above runway	Fill material	Fill material from estuary dredging during construction of Posey Tube in 1920's was used.	EMC217
023	Airfield	On 12/02/30, U.S. Army acquired site from the city.	Site named Benton Field.	BBK009

NAS/NADEP ALAMEDA
Interview

Parcel	Location(s)	Name of Interviewee	Information	Reference
023	Runway	- Gil Rivera, Crane & Rigging Foreman (510) 263-3258 or 263- 3259 Bldg 292, Office 23 years at NAS Alameda, supervises crane & rigging, and forklift operators	- Approximately 2-3 years ago a plane made an emergency landing which caused a fuel release on the runway.	D032
023	Aircraft repair areas	Philip Vercelli NADEP employee from 1945-1982 Worked with Production Engineering Group during his last 12-13 years.	The areas along the W and N boundary of the lagoon was used to work on aircraft. There was a lot of fuel/oil/solvent spillage, since any time engines are connected/disconnected there is some spillage. No significant spills in the lagoon. Only minor spillage associated with fueling operations and from surface drainage flowed into the lagoon. PWC would have information about what went on at the docks.	DB021
023	259, aircraft rinse facility	Philip Vercelli NADEP employee from 1945-1982 Worked with Production Engineering Group during his last 12-13 years.	This was a fresh water wash/rinse to remove salt water from aircraft.	DB021
023		Carl Marble, on duty at NAS Alameda from Jan. 1944-1956.	- Former gas station: parcel 023, at end of runway #25 (E end); taken out when runway #25 was put in.	BBK054
023	Ordnance on base/51, 56, 57, 58	Stan Harrison 263-3500 Weapons Office Building 102	- Stan Harrison says he knows of no records of weapons disposal at Alameda. He says there is no known live ordnance buried on Alameda - All ordnance is packaged when brought to Alameda and is packaged (still as is) when shipped out. - There is no live ammo stored or buried other than 1) recent use at the skeet and target range on the West end or 2) that which is stored in the magazines. - There are no known leaks on Alameda. - He does not have knowledge of any popping plant on Alameda which may have been used to burn small ammunition.	EMC214

NAS/NADEP ALAMEDA
Interview

Parcel	Location(s)	Name of Interviewee	Information	Reference
023	Runway area	George Barr, PWC Boiler Plant Foreman, building 10, 263-4266	Bldg 27: sewage life station - pumps sewage across estuary. Pan Am well: originally used to hose off Pan Am Clippers, PWC is in charge of it. Mr. Barr talked to the team who worked on the runway damage after the 1989 earthquake; the report that ship stacks or hulls could be seen through the fissure is false.	BBK044
023	Runway areas	Roberta Hough (51) 865-6963 Member of the Community Advisory Committee	- Dumping of solvents out of the back doors of buildings onto the runway areas occurred in the 1960s.	D030

NAS/NADEP ALAMEDA

IR

Parcel:	Location:	Reference:
023	North of Seaplane Lagoon	KMT003

Describe source of contamination, including chemicals.
Not available from reference.
(Potential contamination migration from IR site)

Describe Contamination
Exact boundary of operable unit in unknown. Sampling has not occurred to define boundary.

Describe Status of Investigation/remediation
N/A from reference

Parcel:	Location:	Reference:
023	Located at the mid point and on the north side of Runway 25, Well M-102A	KMT004

Describe source of contamination, including chemicals.
Area may have been previously used for aircraft maintenance according to aerial photographs reviewed for the SWAT.
Area in vicinity of well is currently used for aircraft runway and parking.

Describe Contamination
Extent unknown.
Surface soils were analyzed from construction of well M-102A and were detect for:
- Non halogenated organics: 4000 ug/kg
- Pesticides: 26 ug/kg
- Polychlorinated Biphenyls (PCBs): 100 ug/kg
- Petroleum products: 3800 mg/kg
- Fuel products: 1700 mg/kg
- non halogenated organics were detected in a water sample at a maximum concentration of 6 ug/L

Describe Status of Investigation/remediation
Well was drilled and soil and water samples were analyzed to determine background levels for the two landfills; however, the levels of the above-listed chemicals of concern were too

NAS/NADEP ALAMEDA
IR

Parcel:	Location:	Reference:
023	M-103A, south of Runway 25 at mid-point of the Runway.	KMT004

Describe source of contamination, including chemicals.	Describe Contamination
Unknown	Extent unknown. Arsenic was detected in soil above the range of concentrations typically found in soil at a concentration of 4.5 mg/kg at 5.5 feet below ground surface. Non halogenated organics were detected at 1 ug/L in a water sample.

Describe Status of Investigation/remediation
Samples were collected and analyzed to help determine background levels as part of a SWAT.

Parcel:	Location:	Reference:
023	M-103B, south of Runway 25 at mid-point of the Runway.	KMT004

Describe source of contamination, including chemicals.	Describe Contamination
Unknown	Extent unknown. Arsenic was detected in soil above the range of concentrations typically found in soil at a concentration of 7.4 mg/kg at 0.5 feet below ground surface. In groundwater samples, non halogenated and halogenated organics were detected at maximum concentrations of 17 ug/L and 1.2 ug/L, respectively.

Describe Status of Investigation/remediation
Samples were collected and analyzed to help determine background levels as part of a SWAT.

Parcel:	Location:	Reference:
023	Well M-103C, east side of Runway 31 at about mid-point of the Runway.	KMT004

Describe source of contamination, including chemicals.	Describe Contamination
Unknown	Extent unknown. Surface soils were detected for the following chemical categories:

	- Petroleum products: 10,000 mg/kg - Fuel products: 3,000 mg/kg
Describe Status of Investigation/remediation Well was drilled and soil cutting was sampled and analyzed to determine background levels for the two landfills. Levels were above detection limits for the chemical compounds listed	

Parcel:	***Location:***	***Reference:***
023	Well M-105A, west of Runway 31, near Facility 270.	KMT004
Describe source of contamination, including chemicals. Unknown	***Describe Contamination*** Extent unknown. Arsenic was detected in soil above the range of concentrations typically found in soil at a concentration of 4.7 mg/kg at 5.5 feet below ground surface.	
Describe Status of Investigation/remediation Sample was collected and analyzed to help determine background levels as part of a SWAT.		

Parcel:	***Location:***	***Reference:***
023	Well M-105B, west of Runway 31, near Facility 270.	KMT004
Describe source of contamination, including chemicals. Unknown	***Describe Contamination*** Extent unknown. Arsenic was detected in soil above the range of concentrations typically found in soil at a concentration of 8.1 mg/kg at 0.5 feet below ground surface.	
Describe Status of Investigation/remediation Sample was collected and analyzed to help determine background levels as part of a SWAT.		

NAS/NADEP ALAMEDA
IR

Parcel:	Location:	Reference:
023	Well M-106A is located on the west end of the E/W taxiway on the north side.	KMT004

Describe source of contamination, including chemicals.
Unknown

Describe Contamination
Extent unknown.
Surface soils were detect for the following chemical categories:
- Petroleum products: 11,000 mg/kg
- Fuel products: 1,000 mg/kg
- halogenated organics were detected in a ground water sample at a concentration of 1 ug/L

Describe Status of Investigation/remediation
Well was drilled and soil and groundwater was analyzed to determine background levels for the two landfills. Levels were above detection limits for the chemical compounds listed

Parcel:	Location:	Reference:
023	Well M-107A, SW corner of the E/W taxiway and Runway 31.	KMT004

Describe source of contamination, including chemicals.
Unknown

Describe Contamination
Extent unknown.
Surface soil samples were detect for the following compounds:
- Petroleum products: 500 mg/kg
- Fuel products: 150 mg/kg

Describe Status of Investigation/remediation
Well was drilled and soil cuttings were analyzed to determine background levels for the two landfills. Levels were above detection limits for the chemical compounds listed above.

Parcel:	Location:	Reference:
023	Well M-108A, mid point on the west side of the tern sanctuary	KMT004

Describe source of contamination, including chemicals.
Unknown

Describe Contamination
Extent unknown.
- Arsenic was detected in soil above the range of concentrations typically found in soil at a

	concentration of 5.3 mg/kg at a depth of 5.5 feet below ground surface. - Non halogenated organics were detected in a ground water sample at concentrations of 2 ug/L.
Describe Status of Investigation/remediation Samples were collected and analyzed to help determine background levels as part of a SWAT.	

Parcel:	***Location:***	***Reference:***
023	Well M-108B, mid point on the west side of the tern sanctuary	KMT004

Describe source of contamination, including chemicals.	***Describe Contamination***
Unknown	Extent unknown. - Arsenic was detected in soil above the range of concentrations typically found in soil at a concentration of 15 mg/kg at a depth of 0.5 feet below ground surface. - Mercury was also detected in soil above the range of concentrations typically found in soil at a concentration of 0.09 mg/kg.
Describe Status of Investigation/remediation Samples were collected and analyzed to help determine background levels as part of a SWAT.	

Parcel:	***Location:***	***Reference:***
023	Well M-109A, center of runway area west of taxiway 5.	KMT004

Describe source of contamination, including chemicals.	***Describe Contamination***
Unknown	Extent unknown. Surface soil samples were detect for the following chemical categories: - Petroleum products: 100 mg/kg - Fuel products: 50 mg/kg Ground water samples: Halogenated organics were detected at a maximum concentration of 7.2 ug/L in the ground water sample analyzed.

	Non halogenated organics were detected at 1.2 ug/L.
Describe Status of Investigation/remediation Sample was collected and analyzed to help determine background levels as part of a SWAT.	

Parcel:	***Location:***	***Reference:***
023	Well M-111A, west of Facility 11 under 1 ft of concrete	KMT004

Describe source of contamination, including chemicals.	***Describe Contamination***
Area may have been previously used for aircraft maintenance according to aerial photographs reviewed during preparation of the SWAT. Currently the well is located next to an aircraft maintenance building.	Extent unknown. - Non halogenated organics were detected at a concentration of 2 ug/L in groundwater sample analyzed.
Describe Status of Investigation/remediation Well was drilled and soil cuttings and ground water samples were analyzed to determine background levels for the two landfills. Levels were above detection limits for the chemical	

Parcel:	***Location:***	***Reference:***
023	M-102A, M-103A, M-104A, M-105A, M-106A, M-107A, M-108A, M-109A, M-110A, M-103B, M-104C, M-105B, M108B	KMT004

Describe source of contamination, including chemicals.	***Describe Contamination***
Unknown	Extent unknown. Metals were detected in groundwater samples that were collected and analyzed; however, no assessment was made as to whether or not remedial action will be required.
Describe Status of Investigation/remediation Samples were collected and analyzed to provide background information for the SWAT of the two landfills west of the runway area.	

NAS/NADEP ALAMEDA
IR

Parcel:	Location:	Reference:
023	North of the runway next to the Oakland Estuary	KMT002, KMT003

Describe source contamination, including chemicals.	Describe Contamination
Not available from reference. (Potential contamination migration from IR site)	Exact boundary of operable unit in unknown. Sampling has not occurred to define boundary. Part or all of boundary is in a groundwater operable unit.

Describe Status of Investigation/remediation
N/A from reference

NAS/NADEP ALAMEDA
Miscellaneous Information

Parcel	Location	Subject	Remarks	Reference
023	E of building 51	Three concrete vaults	Three 6'x5' concrete vaults, unknown use in SE corner of section 5 (photo 3-17-15). In between the vaults on ground are remains of skeet fragments (photo 3-17-16).	D028
023	SW of building 58	Suspected pump set on concrete vault with grate SW of building 58 (photo 3-17-19).	Vent pipes on parcel 007, to the W of parcel 023, were used for release of methane gas during use of the landfill. Vent pipes running along W border of section 13.	D028
023	Old F-4 aircraft	F-4 aircraft used by Fire Department	Used for practice. Aircraft is gutted. Residual fuel, hydraulic fluid, lube oil may have washed off aircraft. No drains were adjacent.	BBK802
023	S of building 26, across runway 25	Two monitoring wells.	Wells are located in grassy area in middle of abandoned runways.	BBK802
023	Area N of runway	Railroad tracks	Railroad tracks running along the northern boundary of the runway were probably buried as the area was filled in. Railroad ties were found during some construction in the area.	DB022

NAS/NADEP ALAMEDA
Oil/Water Separator

Parcel	Location(s)	Detailed Location	Applicable Date(s)	Description	Reference
023	Open space, SE of building 272	- Approximately 200 ft. SE of building 272; unable to locate Oil / Water Separator.	6/6/94	- Concrete aircraft wash rack. Pumps and sewer connection noted, but no Oil / Water Separator observed. (Photo 7-17-15)	DRK001
023	S side of building 12, parking apron #4	- S side of building 12, in N portion of parking apron #4 - Two Oil / Water Separators in this area (photo 7-17-23)	6/7/94	- Design capacity: 30 gal. per minute - Date of Manufacture: 1993 - Oil/Water Separator equipment located within concrete secondary containment - Collect oil/water from spill trenches which surround aircraft parking area.	EEW1000

NAS/NADEP ALAMEDA
Ordnance

Parcel	Location	Ordnance Present?	Applicable Date	Ordnance Type/Use	Management Practices	Reference
023	50	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Force Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215
023	51	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Fore Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215
023	52	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Fore Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215

NAS/NADEP ALAMEDA
Ordnance

Parcel	Location	Ordnance Present?	Applicable Date	Ordnance Type/Use	Management Practices	Reference
023	53	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Fore Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215
023	56	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Fore Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215
023	57	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Fore Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215

NAS/NADEP ALAMEDA
Ordnance

Parcel	Location	Ordnance Present?	Applicable Date	Ordnance Type/Use	Management Practices	Reference
023	58	Yes	Unknown	Explosives types: 1.1 - Hi Explosive Mass Detonating Bomb 1.2 - Mass Fire Detonating Fire 1.3 - Moderate Fore Flame 1.4 - Small Arms Pistol Range is only place where 1.4 was used	Not used except on Pistol Range when it was operational. All ordinance is imported and exported in packaged condition therefore no leaks, residue occur at Alameda, according to site personnel.	EMC215

NAS/NADEP ALAMEDA
Pesticides

Parcel	Location	Storage/ Use?	Type of Use	Type of Pesticides	Reference
023	Fuel Farm: Area 407	Yes	Oct. 92 - Oct. 93: Biannual application (spring/fall) to control mixed grassy weeds.	Round-up (524-308-AA, 20 gal.) Krovar 1 (362-352, 60 lbs.) Amizole (241-168-AA, 30 lbs.)	BBK013

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
023	Section 3	Photo # 3-17-12 - Building 100, facing W	- Contents unknown - Landing fuel vault on sign	RWB001
023	Section 3	Photo # 3-17-13 - Drain directly adjacent to tarmac in front of NW corner of building 20, facing W	- Drains in front of building 20 on parking apron #3, six drains in area	RWB001
023	Section 3, apron 2	Photo # 3-17-14 - Area where aircraft is parked in front of building 20, facing S	- Stains from the fuel from aircraft	RWB001
023	Section 5	Photo # 3-17-15 - Facing W, SE corner of section	- Concrete vault, former use is unknown	D031
023	Section 5	Photo # 3-17-16 - Facing N, SE portion of section	- Broken skeet target on soil	D031
023	Section 5	Photo # 3-17-17 - Facing E, SE portion of section	- Building 51, bunker	D031
023	Section 5	Photo # 3-17-18 - Facing W, SE portion of section	- Building 50, bunker	D031
023	Section 13	Photo # 3-17-19 - Facing W, SW corner of section	- Concrete vault with suspected pump	D031
023	Section 13	Photo # 3-17-20 - Facing NE, SW portion of section	- Building 58, bunker	D031
023	Section 13	Photo # 3-17-21 - Facing SE, west central portion of section	- Building 57, bunker	D031
023	Section 13	Photo # 3-17-22 - Facing S, NW portion of section	- Building 56, bunker	D031
023	Section 5	Photo # 3-18-1 - Facing W, NW corner of section	- Staining on asphalt	D031
023	Open space	Photo # 6-29-13 - S view, E end of runway #25	- Non-PCB oil-filled transformer	SDG001
023	Open space	Photo # 6-29-14 - E end of runway #25, S view	- Close-up view of label on non-pole transformer	SDG001
023	Open space	Photo # 6-29-15 - E end of runway #25, W view	- Runway #25	SDG001

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
023	Open space	Photo # 6-29-16 - Intersection of runways #25 and 31, S view	- Fuel oil aboveground storage tank	SDG001
023	Open space	Photo # 6-29-17 - Intersection of runways #25 and 31, W view	- Pad-mounted transformer	SDG001
023	Open space	Photo # 6-29-18 - Intersection of runways #25 and 31, S view	- RF tower	SDG001
023	Open space	Photo # 6-29-20 - Fire training area of parcel 23, W view	- Hazardous materials storage locker	SDG001
023	Open space	Photo # 6-29-21 - Tetrahedron grass area, SW view	- The tetrahedron	SDG001
023	Open space	Photo # 6-29-22 - 50 yards E of the tetrahedron	- Pad-mounted transformer	SDG001
023	Main runway	Photo # 6-29-3 - From S arresting gear, looking S	- Runway — S (one-third)	SDG001
023	Main runway	Photo # 6-29-5 - Middle of main runway, looking W (near 6)	- Water mark	SDG001
023	Main runway	Photo # 6-29-6 - Located between numbers 2 and 5, W view	- Portion of runway repaved, 20 ft. by 30 ft. — parallelogram	SDG001
023	Main runway	Photo # 6-29-7 - Located between numbers 2 and 5, W view, closer to 5	- Portion of runway repaved, 7 ft. by 7 ft. square	SDG001
023	Main runway	Photo # 6-29-8 - Main runway from #5 looking NW	- Main runway — N half	SDG001
023	Parcel 23, open space	Photo # 7-17-12 - SE view of building 499	- Building 499	DRK001
023	Parcel 23, open space	Photo # 7-17-13 - NE view, N of building 499	- Dry transformer and bank of switches	DRK001
023	Parcel 23, open space	Photo # 7-17-14 - E view, adjacent to building 272	- Washdown area adjacent to building 272	DRK001
023	Parcel 23, open space	Photo # 7-17-15 - NE view, SE of building 272	- Aircraft washrack	DRK001
023	Parcel 23, open space	Photo # 7-17-17 - SW view, NE portion of abandoned runway	- Area stained with firefighting foam, 30 ft. by 20 ft. stain	DRK001

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
023	Parcel 23, open space	Photo # 7-17-18 - N view, N sides of helicopter pad	- Unpaved fueling area with AVGAS tank	DRK001
023	Parcel 23, open space	Photo # 7-17-19 - E view, parking apron at taxiway 7	- Aircraft service area (typical)	DRK001
023	Parcel 23, open space	Photo # 7-17-20 - S view, parking apron at taxiway 7	- 30 ft. by 5 ft. dark oily like stain on concrete	DRK001
023	Parcel 23, open space	Photo # 7-17-21 - SE view, parking apron at taxiway 7	- Oil and paint stains on concrete	DRK001
023	Parcel 23, open space	Photo # 7-17-22 - S view, parking apron at taxiway 7	- Typical stain on concrete	DRK001
023	Parcel 23, open space	Photo # 7-17-23 - W view, parking apron number 4	- Two oil/water separators	DRK001
023	Parcel 23, open space	Photo # 7-17-24 - S view, adjacent to parcel 205	- Hazardous materials area	DRK001

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
023	E-W taxiway	- Stain	Unknown	- Possible oil stains	- NW end of taxiway 70% of area stained (photo 3-18-1). - Deteriorating asphalt throughout S side of E-W taxiway.	- No cleanup performed.	D028
023	Parking apron number 2, near taxiway number 5	- Staining	- Unknown	- Unknown	- Helicopter fueling activities, potential for releases of JP-5. - Dark stains approximately 3 in. to 12 in. in diameter, sporadically along taxiway 4. - Concrete stained dark in parking areas of the parking aprons (photo 3-17-14). - Rust stains emanating from blast fence onto concrete.		D026
023	Parking apron #4	- Stain	Unknown	- Miscellaneous aircraft fuel, fluids	- Numerous stains throughout parking apron. 20 sq. ft. stains noted. Dark on concrete.		EEW1000
023	Arresting gear vault on east side on runway 13/31	Leak	8/24/87	Polychlorinated Biphenyl (PCB) hydraulic fluid	Approx. 40 gallons	Absorbed and containerized. Contaminated concrete will be removed and disposed. Verification samples will be taken.	BBK206

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
023	SE side of building 407	2,000 ea.	6/6/95	Steel	Liquid oxygen	- Two tanks. - Liquid oxygen used for resupplying aircraft.	EEW1000
023	NW side of building 499	~ 1,000	6/6/94	Steel	Diesel	- Raised tank within concrete secondary containment which contains manual drain valve. - Tank supplies fuel to backup generator located within building 499. - Photo 7-17-12.	EEW1000
023	Main runway, aircraft arresting gear	30	6/6/94	Steel	Possibly diesel	- Tank is part of aircraft arresting gear on paved main runway. - Two tanks per arresting gear.	EEW1000

NAS/NADEP ALAMEDA
Underground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
023	490	Unknown	8/1987	Unknown	Unknown	- Possible underground storage tank present. Possible fill pipe at lighting vault.	DB028
023	499	Unknown	8/1987	Unknown	Unknown	- Possible underground storage tank present. Possible fill pipe at lighting vault.	DB029

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

ge Tank Size Gallons)	Date	Applicable Type of Tank	Materials Stored	Remarks	Reference
)	6/7/94	Metal	Aviation fuel	- Photo 7-17-18. - Aboveground steel tank, connected to two large fuel filters and then to a typical gasoline dispenser. - Tank is underlain by a fabric containment system. Fabric appears stained and faded in parts. - Tank labeled "av gas." - Area around tank is unpaved or is mostly unpaved with chunks of deteriorated asphalt.	DRK001
00	6/7/94	Steel	Probably diesel	- Tank is in good condition. - Fill area is slightly stained - asphalt underneath is clean.	BBK802
00	6/7/94	Steel	Probably diesel	- Tanks have slight staining at fill ports. - Asphalt underneath was slightly stained. - There was one tank on each side of runway for each arresting gear.	BBK802

Reference
BBK001

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date Applicable	PCB's ?	PCB Class	Remarks	Reference
023	Inside building 512 (on wheels-up landing aid)	Unknown	Unknown	6/6/94		Unknown	- Two transformers. - Presence or absence of PCBs is unknown.	EEW1000
023	W of building 496	Unknown	Unknown	Unknown		Unknown	- Transformer, unknown if oil-filled, mounted on concrete pad: clean. - Presence or absence of PCBs is unknown.	BBK802
023	~ 50 yards from Tetrahedron	Unknown	Unknown	Unknown		Unknown	- Unidentified type of pad-mounted transformer. - Presence or absence of PCBs is unknown.	BBK802
023	E end of runway #25	Unknown	Unknown	Unknown		Unknown	- Photo numbers 6-29-13 and 6-29-14 show the non-PCB oil-filled, pad-mounted transformer at the E end of runway #25. Size and number of transformer are unknown.	BBK802
023	Open space, S of abandoned runway, NE of helicopter parking pads	Unknown	Unknown	6/7/94		Unknown	- Pole-mount type transformer on concrete pad and fenced in. Dirt underlying transformer, unable to view concrete immediately underneath transformer. - Presence or absence of PCBs is unknown.	DRK001
023	East of Runway 25	R14921	15 KVA	11/1/91, 10/30/86, 9/30/87	Yes	> 50 ppm	14.0 gal Removal / storage date: 10/20/90 Hauled date: 2/14/91.	EMC263
023	407	Unknown	Unknown	Unknown		Unknown	- NW of 407. - Presence or absence of PCBs is unknown.	EMC311

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date Applicable	PCB's ?	PCB Class	Remarks	Reference
023	490	Unknown	Unknown	Unknown	Unknown		- Presence or absence of PCBs is unknown.	EMC311
023	499	Unknown	Unknown	Unknown	Unknown		- Presence or absence of PCBs is unknown.	EMC311
023	513	Unknown	Unknown	Unknown	Unknown		- On the NE end of the pier. - Presence or absence of PCBs is unknown.	EMC311
023	E of building 605	Unknown	Unknown	Unknown	Unknown		- Presence or absence of PCBs is unknown.	DB012
023	SE of 56	Unknown	Unknown	Unknown	Unknown		- E of building 56 on the W side of the road. - Presence or absence of PCBs is unknown.	EMC311
023	NE corner of Seaplane Lagoon	Unknown	Unknown	Unknown	Unknown		- Presence or absence of PCBs is unknown.	DB012
023	NE of 483	Unknown	Unknown	Unknown	Unknown		- NE of 483. - Presence or absence of PCBs is unknown.	EMC311
023	NE portion of runway	Unknown	Unknown	Unknown	Unknown		- SW of number 25 on the runway. - Presence or absence of PCBs is unknown.	DB
023	Runway 25 manhole	Unknown	15 kVA	Unknown	Unknown		- To be replaced by PWC - 3/90. - Presence or absence of PCBs is unknown.	EMC127
023	Runway 25 manhole	Unknown	15 kVA	Unknown	Unknown		- Replaced by PWCSFB - 12/90. - Presence or absence of PCBs is unknown.	EMC126
023	Runway 31, NE manhole	Unknown	10 kVA	Unknown	Unknown		- To be replaced by contractor - 2/90. - Presence or absence of PCBs is unknown.	EMC127

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date Applicable	PCB's ?	PCB Class	Remarks	Reference
023	512	145588	10 KVA	10/21/88	Yes	> 50 ppm	Located in wheels watch. 10.0 gal. Removal / storage date: 3/19/87. Hauled date: 3/19/87.	EMC263
023	513	16858	Unknown	9/30/87	Yes	Unknown	Wheels watch. Removed / stored - 5/19/87.	EMC263
023	499	R15039	15 KVA	9/30/87, 10/30/86	Yes	Unknown	Located inside the building. 9 gal.	EMC263
023	513	R15040	Unknown	9/30/87, 10/30/86	Yes	> 50 ppm	Runway 31. Removed / stored - 5/19/87. 9 gal.	EMC263
023	496	S496	Unknown	Unknown		Unknown	- Pad-mounted. - Presence or absence of PCBs is unknown.	EMC310
023	Runway 31	14856	10 KVA	10/30/86	Yes	> 50 ppm	NE side. 8 gal.	EMC263
023	Runway 31 NE	224856	Unknown	9/30/87	Yes	Unknown		EMC263
023	495	Unknown	Unknown	Unknown		Unknown	- Presence or absence of PCBs is unknown.	EMC310

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	Along southern border of parcel, south of Runway 7, west of 5th Street to Ramp 4.	DB015

Utility Type	Description
Aviation fuel line	

Potential for Contamination
Water filled. Possible contamination; fuel lines are not integrity tested.

Parcel:	Location:	Reference:
023	407	EMC311

Utility Type	Description
electrical	NW of B-407 oil or vacuum switch

Potential for Contamination

Parcel:	Location:	Reference:
023	Natural Gas System	BBK001

Utility Type	Description
Natural gas.	Supplied by PG&E through 2 mains.

Potential for Contamination
Several underground leaks have occurred with Class II and Class III lines.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	536, 541, 266, S315, 537	BBK325

Utility Type	Description
Fuel lines	Abandoned line starts at a cutoff located S of parcel 50 goes N through parcel 50 and at N side parcel 49 goes W to the W side of the hangars and goes N branching out behind each hangar and into/under the locations listed above.

Potential for Contamination
Possible contamination; fuel lines are not integrity tested.

Parcel:	Location:	Reference:
023	Parking Apron #4, Avenue H, First Street, Avenue F, Avenue G	BBK325

Utility Type	Description
Fuel lines	Abandoned line leaves a line in use at parcel 122 (supply from facility 97) goes W and turns N at the parcel line on the W side of First Street and goes N to parcel 37 and parcel 23. Another abandoned line leaves NW corner of parcel 123 and goes W to Fifth Street then N to S side of Avenue F and W to join the line along the W side of First Street.

Potential for Contamination
Possible contamination; fuel lines are not integrity tested.

Parcel:	Location:	Reference:
023	W of 39, 40, 544	BBK325

Utility Type	Description
Fuel lines	Line from N edge of parcel 155 goes N and NW to a network of lines on taxiway 7, N of ramps 3 and 4 on parcel 23. Three lines go N from the network and end in the open areas W of buildings 39, 40, and 41.

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Possible contamination; fuel lines are not integrity tested.

Parcel:	***Location:***	***Reference:***
023	97, 014, 397	BBK325

Utility Type	***Description***
Fuel lines	"In use" fuel lines drain from tanks at 97; one goes N to parcel 122 to join an abandoned fuel line; one goes W to sea plane ramp number 4 pier; one goes S to building 397; one continuous line covers all 3 piers and wharf area of parcel 155. Extensive branching occurs at the 281 tanks in parcel 138. Pier 3 branches E to tanks 342A and B.

Potential for Contamination
Possible contamination; fuel lines are not integrity tested.

Parcel:	***Location:***	***Reference:***
023	20	EMC317

Utility Type	***Description***
Storm drains	One line flows N to outfall A.

Potential for Contamination
Yes. Potentially from building 20.

Parcel:	***Location:***	***Reference:***
023	21	EMC317

Utility Type	***Description***
Storm drains	One line flows N to outfall A.

Potential for Contamination
Yes. Potentially from building 21.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	22	EMC317

Utility Type	Description
Storm drains	The line from buildings 20 - 23 ends in parcel 37 NE of building 373. It turns E to the storage area. At this point a main line from the E side of 1st Street meets it, and it all drains N to outfall #A which is located N of the runway 25 and dumps into the estuary.

Potential for Contamination
Yes. Potential from building 22.

Parcel:	Location:	Reference:
023	23	EMC317

Utility Type	Description
Storm drains	One line flows N to outfall A.

Potential for Contamination
Yes. Potentially from building 23.

Parcel:	Location:	Reference:
023	24	EMC317

Utility Type	Description
Storm drains	Numerous collection catch basins surround building 24 (parcel 030). Storm drain lines run E to a N - S line that runs through parcels 049 and 050. This line continues S through parcels 023, 028, and finally 026 where it turns E to outfall "F".

Potential for Contamination
Yes. Potential contamination from building 24.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	11	EMC317

Utility Type	Description
Storm drains	The catch basins around building 11 (N and S sides) run W, through parcels 051, and 050. The storm drain then runs S through parcel 023, 028, and finally 026 where it turns E to outfall "F".

Potential for Contamination
Yes. Potential contamination from building 11.

Parcel:	Location:	Reference:
023	400	EMC317

Utility Type	Description
Storm drains	The catch basins on the N side of building 400 run W, through parcels 052, 051, and 050. The storm drain then runs S through parcel 023, 028, and finally 026 where it turns E to outfall "F". The catch basins on the S side of building 400 run to a central outfall line running N - S. This line runs through parcel 023 only and terminates at outfall "FF".

Potential for Contamination
Yes. Potential contamination from building 400.

Parcel:	Location:	Reference:
023	12	EMC317

Utility Type	Description
Storm drains	The catch basins on the N side of building 012 run W, through parcels 053, 057, 052, 051, and 050. The storm drain then runs S through parcels 023, 028, and finally 026 where it turns E to outfall "F". The catch basins on the S side of building 012 run W through parcel 052 and then S across parcel 023 terminating at outfall "FF".

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Yes. Potential contamination from building 12.

Parcel:	Location:	Reference:
023	348	EMC317

Utility Type	Description
Storm drains	Flows S to outfall F.

Potential for Contamination
Yes. Potential from building 348.

Parcel:	Location:	Reference:
023	6	EMC317

Utility Type	Description
Storm drains	Flows SE to outfall G.

Potential for Contamination
Yes. Potential from building 6.

Parcel:	Location:	Reference:
023	391	EMC317

Utility Type	Description
Storm drains	Flows SW to outfall G.

Potential for Contamination
Yes. Potential from building 391.

NAS/NADEP ALAMEDA

Utilities Report

Parcel:	Location:	Reference:
023	114	EMC317

Utility Type	Description
Storm drains	Two lines flow N to outfall D. One line flows S to outfall G.

Potential for Contamination
Yes. Potentially from building 114.

Parcel:	Location:	Reference:
023	73B	EMC317

Utility Type	Description
Storm drains	One flows to outfall E. One flows to outfall G.

Potential for Contamination
Yes. Potentially from building 73B.

Parcel:	Location:	Reference:
023	39	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 39.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	40	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 40.

Parcel:	Location:	Reference:
023	41	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 41.

Parcel:	Location:	Reference:
023	607	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 607.

Parcel:	Location:	Reference:
023	162	EMC317

Utility Type	Description
Storm drains	N flows to outfall G. S flows to outfall H.

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Utilities Report

Potential for Contamination
Yes. Potentially from building 162.

Parcel:	Location:	Reference:
023	112	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 112.

Parcel:	Location:	Reference:
023	393	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 393.

Parcel:	Location:	Reference:
023	67	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 67.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	398	EMC317

Utility Type	Description
Storm drains	Flows to outfall G.

Potential for Contamination
Yes. Potentially from building 398.

Parcel:	Location:	Reference:
023	25	EMC316

Utility Type	Description
Industrial sewer	Flows N to parcel 049 then E to parcel 070 then N to parcel 061 where it joins the sanitary sewer line to East Bay Municipal Utilities District (EBMUD).

Potential for Contamination
Yes. Potentially from building 25.

Parcel:	Location:	Reference:
023	SW of 496	DB012

Utility Type	Description
electrical	oil or vacuum switch

Potential for Contamination

Parcel:	Location:	Reference:
023	259 (wash down)	EMC317

Utility Type	Description
Storm drains	Drainage from wash down would collect in catch basin 3R (parcel 023). The stormwater line runs from this catch basin due S into parcel 025, and then turns E beneath building

	515 (parcel 027). The line continues through parcel 026 to outfall "R".
Potential for Contamination Yes. Potential for contamination from facility 259 (plane wash down).	

Parcel:	***Location:***	***Reference:***
023	576	EMC317
Utility Type Storm drains		***Description*** Drains from N of building 576 SE to the bay. Outfall #"T".
Potential for Contamination Potential contamination from runway unknown.		

Parcel:	***Location:***	***Reference:***
023	Runway area (E and W side of runway 13/31)	EMC317
Utility Type Storm drains		***Description*** N of E/W taxiway on both E and W of runway 13/31, these two drains join on the W side of the runway 13/31. Just N of the Perimeter Road it continues S to the bay. Outfall "S". The line begins in parcel #024 and flows SW to outfall "S".
Potential for Contamination Potential contamination from runway area unknown.		

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	373	EMC317

Utility Type	Description
Storm drains	The line from buildings 20 - 23 ends in parcel 37 NE of building 373. It turns E to the storage area. At this point a main line from the E side of 1st Street meets it, and it all drains N to outfall #A which is located N of the runway 25 and dumps into the estuary.

Potential for Contamination
Yes. Potential from building 373.

Parcel:	Location:	Reference:
023	377	EMC317

Utility Type	Description
Storm drains	The line from building 20 -23 ends in parcel 37 NE of building 373. It passes by building 377 to the E; an associated catch basin is E of building 377. It turns E to the storage area. At this point a main line from the E side of 1st Street meets it, and it all drains N to outfall #A which is located N of the runway 25 and dumps into the estuary.

Potential for Contamination
Yes. Potentially from building 377.

Parcel:	Location:	Reference:
023	19	EMC317

Utility Type	Description
Storm drains	Drainage from building 19 (parcel 193) runs N through parcel 030, then SW into parcel 023. The line continues due S into parcel 025, and then turns E beneath building 515 (parcel 027). The line continues E through parcel 026 to outfall "R".

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Yes. Potential for contamination from building 19.

Parcel:	***Location:***	***Reference:***
023	6	EMC317

Utility Type	***Description***
Storm drains	Two lines flow S to outfall F, and FF. One line flows N to outfall B. One line flows N to outfall A.

Potential for Contamination
Yes. Potential contamination from building 5.

Parcel:	***Location:***	***Reference:***
023	5	EMC317

Utility Type	***Description***
Storm drains	Two lines flow S to outfall F, and FF. One line flows N to outfall B. One line flows N to outfall A.

Potential for Contamination
Yes. Potential contamination from building 5.

Parcel:	***Location:***	***Reference:***
023	420	EMC317

Utility Type	***Description***
Storm drains	Drainage from building 420 runs NE to the Oakland Harbor. Discharge at outfall #V. The storm drains line runs from parcel 008, across 023, then N through 011 and 010 to the outfall.

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Yes. Potential from building 420.

Parcel:	***Location:***	***Reference:***
023	420	EMC1000

Utility Type	***Description***
Sanitary sewers	Sanitary sewer drainage from building 420 runs E along a frontage road (N boundary of parcel number 23), then N beneath the estuary to Naval Supply Center Oakland (force main).

Potential for Contamination
Yes. Potential from building 420.

Parcel:	***Location:***	***Reference:***
023	Fuel lines that run along interface between hangars and facility bldgs. of NADEP	BBK009

Utility Type	***Description***
Aviation gas lines; now abandoned.	

Potential for Contamination
- When abandoned, lines were drained and filled with water. Breaks have occurred along pipeline.

Parcel:	***Location:***	***Reference:***
023	Primarily east end of NAS	BBK001

Utility Type	***Description***
Fuel system.	Managed by NAS Alameda Fuels Branch. They also oversee collection storage and disposal of "waste oils." - consists of 13,000 ft of welded steel pipeline. - specific areas were entered on separate templates.

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
None as specified in this reference.

Parcel:	***Location:***	***Reference:***
023	373, 374A, 374B, 375, 376	BBK326

Utility Type	***Description***
Fuel lines	Fuel farm at 373, W across taxiway number 4 then N across runway 25 then W to parcel 018 and N to parcel 016 to 376, 375, 374A and 374B and Pier 4. (Fuel line still in use).

Potential for Contamination
Possible contamination. Fuel lines are not integrity tested.

Parcel:	***Location:***	***Reference:***
023	27, Runway area (NE portion)	EMC317

Utility Type	***Description***
Storm drains	Area W of A/C warm-up apron drains NE across runway 7/25 to junction 2Z, located on the S side of Perimeter Road SE of building 27. N of helicopter parking pads drains along the blast fence going NE then E of the A/C warm-up apron. It drains NW to junction 2Z. E and W sides of taxiway 4, W of building 20, drain to junction 52-2 (N of building 549). This line then continues NW, collecting from the northern side of runway 7/25 to junction 2Z. Terminates at outfall "'Z". The sources of stormwater could be from parcel 023 directly through 022 to the outfall ; or from 023 through 192 and 035 back through 023, before it goes through 022 to the outfall.

Potential for Contamination
Potential contamination from runway unknown.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	25	EMC314, EMC311

Utility Type	Description
Sanitary sewers	Line drains NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes from building 25.

Parcel:	Location:	Reference:
023	19	EMC311

Utility Type	Description
Sanitary sewers	Line leaves E side of building 19 and travels NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 19.

Parcel:	Location:	Reference:
023	24	EMC311

Utility Type	Description
Sanitary sewers	Line leaves building 24 N side and travels NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	22	EMC307

Utility Type	Description
Sanitary sewers	Line flows S to parcel 046 then NE to parcel 061 then NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 22.

Parcel:	Location:	Reference:
023	4	EMC306

Utility Type	Description
Sanitary sewers	Lines flows NE to parcel 061 then NW to main pump N of parcel 22.

Potential for Contamination
Yes. Potentially from building 4.

Parcel:	Location:	Reference:
023	400	EMC307

Utility Type	Description
Sanitary sewers	Line flows NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 400.

Parcel:	Location:	Reference:
023	11	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NE to parcel 061 then NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 11.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	12	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 12.

Parcel:	Location:	Reference:
023	5	EMC311, EMC307

Utility Type	Description
Sanitary sewers	Lines flow NE to parcel 061 then NW to the main pump N of parcel 22.

Potential for Contamination
Yes. Potentially from building 5.

Parcel:	Location:	Reference:
023	39	EMC307

Utility Type	Description
Sanitary Sewer	Line flows NE to parcel 061, then NW to the Main Pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 39.

Parcel:	Location:	Reference:
023	112	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 112.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	67	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 67.

Parcel:	Location:	Reference:
023	066	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 66.

Parcel:	Location:	Reference:
023	163	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 163.

Parcel:	Location:	Reference:
023	372	EMC307

Utility Type	Description
Sanitary sewers	Line flows NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 372.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	360	EMC306, EMC307
Utility Type		**Description**
Sanitary sewers		Line flows NW to main pump N of parcel 022.
Potential for Contamination		
Yes. Potentially from building 360.		

Parcel:	Location:	Reference:
023	530	EMC308
Utility Type		**Description**
Sanitary sewers		Line flows NW to main pump N of parcel 022.
Potential for Contamination		
Yes. Potentially from building 530.		

Parcel:	Location:	Reference:
023	410	EMC308
Utility Type		**Description**
Sanitary sewers		Line flows NW to main pump N of parcel 022.
Potential for Contamination		
Yes. Potentially from building 410.		

Parcel:	Location:	Reference:
023	167	EMC308
Utility Type		**Description**
Sanitary sewers		Lines flow NW to main pump N of parcel 022.
Potential for Contamination		
Yes. Potentially from building 167.		

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	23	EMC307

Utility Type	Description
Sanitary sewers	Line flows N to parcel 046 then NE to parcel 061 then NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 23.

Parcel:	Location:	Reference:
023	21	EMC307

Utility Type	Description
Sanitary sewers	Line flows S to parcel 046 then NE to parcel 061 then NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 21.

Parcel:	Location:	Reference:
023	20	EMC306

Utility Type	Description
Sanitary sewers	Line flows S to parcel 046 then NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 20.

Parcel:	Location:	Reference:
023	377	EMC307

Utility Type	Description
Sanitary sewers	Line flows S to parcel 046 then NE to parcel 061 then NW to main pump N of parcel 022.

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Yes. Potentially from building 377.

Parcel:	Location:	Reference:
023	377A	EMC307
Utility Type	**Description**	
Sanitary sewers	Line flows S to parcel 046 then NE to parcel 061 then NW to main pump N of parcel 022.	
Potential for Contamination		
Yes. Potentially from building 377A.		

Parcel:	Location:	Reference:
023	40	EMC307
Utility Type	**Description**	
Sanitary sewers	Line flows NW to parcel 061 then NW to main pump N of parcel 022.	
Potential for Contamination		
Yes. Potentially from building 40.		

Parcel:	Location:	Reference:
023	041	EMC307
Utility Type	**Description**	
Sanitary sewers	Line flows NW to parcel 061 then NW to main pump N of parcel 022.	
Potential for Contamination		
Yes. Potentially from building 41.		

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	118	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 118.

Parcel:	Location:	Reference:
023	166	EMC308

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 166.

Parcel:	Location:	Reference:
023	459	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 459.

Parcel:	Location:	Reference:
023	459	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 459.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	398	EMC307

Utility Type
Sanitary sewers

Description
Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 398.

Parcel:	Location:	Reference:
023	14	EMC307

Utility Type
Sanitary sewers

Description
Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 14.

Parcel:	Location:	Reference:
023	Area 37	EMC308

Utility Type
Sanitary sewers

Description
Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from area 37.

Parcel:	Location:	Reference:
023	Cans area	EMC306, EMC307

Utility Type
Sanitary sewers

Description
Line flows NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from Cans area.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
023	547	EMC306, EMC307

Utility Type	Description
Sanitary sewers	Line flows NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 547.

Parcel:	Location:	Reference:
023	397	EMC308

Utility Type	Description
Sanitary sewers	Line flows NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 397.

Parcel:	Location:	Reference:
023	349	EMC307

Utility Type	Description
Sanitary sewers	Lines flow NW to main pump N of parcel 022.

Potential for Contamination
Yes. Potentially from building 349.

NAS/NADEP ALAMEDA

Wastewater Report

Parcel:	Location:	Is Industrial Wastewater Generated?	Reference:
023	Open space SE of building 272	Yes	DRK001

Types of Wastewater	Discharge flow drain line
- Aircraft wash rack. (Photo 7-17-15).	- May go directly into sewer, or may enter an Oil/Water Separator first (unknown).

PARCEL 024

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
024	- In 1947-1966, parcel was a vacant area between runways/taxiways. - In 1970-1993, parcel is still vacant and not in use.	Pacific Aerial Surveys			JLR073

NAS/NADEP ALAMEDA
Historical

Parcel	Location(s)	Subject(Historical building, Indian ruins,etc.)	Remarks	Reference
024	Northern boundary of base, above runway	Fill material	Fill material from estuary dredging during construction of Posey Tube in 1920's was used.	EMC217

NAS/NADEP ALAMEDA
Interview

Parcel	Location(s)	Name of Interviewee		Information	Reference
024	Ordnance on base/519, 520	Stan Harrison Weapons Office	263-3500 Building 102	- Stan Harrison says he knows of no records of weapons disposal at Alameda. He says there is no known live ordnance buried on Alameda - All ordnance is packaged when brought to Alameda and is packaged (still as is) when shipped out. - There is no live ammo stored or buried other than 1) recent use at the skeet and target range on the West end or 2) that which is stored in the magazines. - There are no known leaks on Alameda. - He does not have knowledge of any popping plant on Alameda which may have been used to burn small ammunition.	EMC214

NAS/NADEP ALAMEDA
Miscellaneous Information

Parcel	Location	Subject	Remarks	Reference
024	Open space	Least tern area	Information regarding least tern area (especially access issues): contact Laura Collins, EEW1000, EEW1004 510-843-3263	

NAS/NADEP ALAMEDA
Pesticides

Parcel	Location	Storage/ Use?	Type of Use	Type of Pesticides	Reference
024	Least Tern Colony Habitat	Yes	Oct. 92 - Oct. 93: Biannual application (spring/fall) to control mixed grassy weeds.	Round-up (524-308-AA, 20 gal.) Krovar 1 (362-352, 60 lbs.) Amizole (241-168-AA, 30 lbs.)	BBK013

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
024	Open space	Photo # 11-3-5 - View SE	- Parcel photo	SDG001

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
024	Open space, area E of parcel 205	- Stains	- Unknown	- Transformer oils	- Stains throughout transformer area - Overlying concrete - Stains are small (generally two ft. by two ft.) and are under or surround transformers	- None	DRK001
024	Parking aprons at taxiway 4	- Stains	- Unknown	- Hydrocarbons (oil, fuels); paints; solvents	- Minor paint stains and oily stains throughout area; especially in aircraft service areas. Stains are as large as thirty ft. by five ft. on concrete. However, less than five percent of total concrete area covered by stains (photos 7-17-19, 7-17-20, 7-17-21, 7-17-22)	- None	DRK001

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
024	Adjacent to building 407	2,000	Unknown	Unknown	Liquid nitrogen	- Liquid nitrogen.	EEW1000

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
024	Adjacent to building 407	2,000	Unknown	Unknown	Liquid nitrogen	- Liquid nitrogen.	EEW1000

NAS/NADEP ALAMEDA
Title Search

Parcel	Location	Issues of Concern/Remarks	Transfer Information and date	Reference
024	Runway Area		929.337 acres Deed 3583-OR-1 from City of Alameda 1937	DB008
024	Runway Area		929.337 acres Deed 3583-OR-1 from City of Alameda 1937	DB008

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date Applicable	PCB's ?	PCB Class	Remarks	Reference
024	Open space, area E of parcel 205	Unknown	Unknown	Unknown		Unknown	- Large fenced concrete pad. - Transformers, three banks of switches. - Staining evident throughout. - Presence or absence of PCBs is unknown.	DRK001
024	Open space, N of building 499	Unknown	Unknown	Unknown		Unknown	- (Photo 7-17-13). - Dry transformer and oil-filed switches in fenced, concrete paved area. - Presence or absence of PCBs is unknown.	DRK001

PARCEL 025

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
025	- In 1947 and 1953, parcel was part of the bay. - In 1958 and 1963, parcel was open space on fill material. - In 1966, parcel was open space. - In 1970-1993, no change.	Pacific Aerial Surveys			JLR073

NAS/NADEP ALAMEDA
Historical

Parcel	Location(s)	Subject(Historical building, Indian ruins,etc.)	Remarks	Reference
025	Airfield	On 12/2/30, US Army acquired site from the city.	Site named Benton Field.	BBK009

NAS/NADEP ALAMEDA
IR

Parcel:	***Location:***	***Reference:***
025	Well M-109A, SE corner of Runways 31 & 25.	KMT004

Describe source of contamination, including chemicals.	***Describe Contamination***
Unknown	Extent unknown. Surface soil samples were detect for the following chemical categories: - Petroleum products: 7000 mg/kg - Fuel products: 2400 mg/kg Halogenated organics were detected at a maximum concentration of 4.3 µg/L in the groundwater sample analyzed.

Describe Status of Investigation/remediation
Well was drilled and soil cuttings and groundwater samples were analyzed to determine background levels for the two landfills. Levels were above detection limits for the chemical

NAS/NADEP ALAMEDA
Miscellaneous Information

Parcel	Location	Subject	Remarks	Reference
025	West Beach Landfill - area, wetlands near south end of runway 31	Ecological Assessment (EA) prepared by PRC Environmental Management, Inc., Kinnetic Labs, Inc., Toxscan, Inc., The Habitat Restoration Group.	The EA is designed to identify ecological impacts on biota that may be caused by hazardous materials used at, and disposed within, NAS Alameda. Five study areas were included in the EA: (1) the West Beach Landfill Wetland; (2) the Runway Wetland; (3) the Seaplane Lagoon; (4) the Western Bayside (San Francisco Bay), and (5) the Oakland Inner Harbor.	BBK217

NAS/NADEP ALAMEDA
Open Space Survey

Parcel:	Location:	Material Storage No	Outdoor Repair No	Equipment Parking No	Is this open space developed? No
025	Exterior area	Wash Down No	Training No	Disposal No	Other
		Vehicle Parking No	Drum Storage No	Recreational No	

Stains	Ground cover	Describe use	Reference:
- Stain?/muddy darker area at NE corner of parcel. Maybe water – stain is partially on dirt and partially on asphalt. 3' x 40', no hydrocarbon smell evident. (Photo 7-20-2)	- Ground cover is dirt with brush, weeds, sand, gravel, debris	- Area appears to be wetlands (photos 7-20-1, 7-20-7). - Small quantity of miscellaneous debris in parcel. - Empty concrete pad at NE corner (photo 7-15-4). - Gated, concrete pad at NE corner (possibly for transformer) (photo 7-15-5). - Asphalt roadway entering parcel at N/W corner, deteriorated, overgrown, extends 30 to 40 ft. - Wind meter on concrete pad NW parcel. (photo 7-20-8).	DRK001

Are there drains in the area? Yes *Goes Where* - Storm drain on dirt in NE corner set 1/2 foot below and one foot away from asphalt road.
- Storm drain or storm drain central point on dirt (100 ft. S of above mentioned storm drain).
- Storm drain on dirt in N central corner of parcel. Set 1/2 below asphalt road, and one foot away from road.

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
025	Outside space	Photo # 7-20-1. - S view, at NE corner.	- View of parcel.	DRK001
025	Outside space	Photo # 7-20-2. - W view, at NE corner.	- Muddy area, possible stain, (2'-3' by 40') over dirt.	DRK001
025	Outside space	Photo # 7-20-3. - SW view, at NE corner.	- Storm drain and drain control point.	DRK001
025	Outside space	Photo # 7-20-4. - NW view, at NE corner.	- Concrete pad.	DRK001
025	Outside space	Photo # 7-20-5. - S view, at NE corner.	- Gated, empty concrete pad (possibly for transformer).	DRK001
025	Outside space	Photo # 7-20-6. - W view, 200' NE of building 29.	- Abandoned pipe in center of grassy open space.	DRK001
025	Outside space	Photo # 7-20-7. - NE view, at SW corner.	- View of parcel.	DRK001
025	Outside space	Photo # 7-20-8. - SE view, at NW corner.	- Wind meter.	DRK001

NAS/NADEP ALAMEDA
Title Search

Parcel	Location	Issues of Concern/Remarks	Transfer Information and date	Reference
025	Runway Area		929.337 acres Deed 3583-OR-1 from City of Alameda 1937	DB008
025	Runway Area		929.337 acres Deed 3583-OR-1 from City of Alameda 1937	DB008
025	Most of NAS maps #3, 4, 5		1072.03 acres from War Department by Executive Order #7467. 1936	DB008

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
025	269 (wash down)	EMC317

Utility Type	Description
Storm drains	Drainage from wash down would collect in catch basin 3R (parcel 023). The stormwater line runs from this catch basin due S into parcel 025, and then turns E beneath building 515 (parcel 027). The line continues through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from facility 259 (plane wash down).

PARCEL 026

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; area is water.	Public Affairs, NAS/NADEP Alameda	11/26/34	MAA-224-77 7	JLR016, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former) . - Map location: 20-U. - Facility not apparent; area is water.	Public Affairs, NAS/NADEP Alameda	11/26/34	MAA-224-77 7	JLR016, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U - Building not apparent; area is water.	Public Affairs, NAS/NADEP Alameda	5/3/40	Accordion folder #54 (NA 27)	JLR015, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former) . - Map location: 20-U. - Facility not apparent; area is water.	Public Affairs, NAS/NADEP Alameda	5/3/40	Accordion folder #54 (NA 27)	JLR015, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; area is water.	Public Affairs, NAS/NADEP Alameda	July 1942	#3462 (NA 27)	JLR014, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	P779	- Power check pad with sound suppression (former) . - Map location: 20-U. - Facility not apparent; area is water.	Public Affairs, NAS/NADEP Alameda	July 1942	#3462 (NA 27)	JLR014, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; area is water.	Pacific Aerial Surveys	3/24/47	AV-11-08-0 6	JLR011, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former) . - Map location: 20-U. - Facility not apparent; area is water.	Pacific Aerial Surveys	3/24/47	AV-11-08-0 6	JLR011, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	8/14/53	AVM-1010	JLR010, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Facility not apparent; open space, appears untouched.	Pacific Aerial Surveys	8/14/53	AVM-1010	JLR010, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	3/1/58	SF AREA-2-22	JLR009, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Facility not apparent; open space, appears untouched.	Pacific Aerial Surveys	3/1/58	SF AREA-2-22	JLR009, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	7/25/63	AV-550-07-21	JLR008, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former) . - Map location: 20-U. - Facility 461C is apparent on aerial photo.	Pacific Aerial Surveys	7/25/63	AV-550-07-21	JLR008, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	4/20/66	AV-710-8-28	JLR007, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Facility 461C is apparent on aerial photo.	Pacific Aerial Surveys	4/20/66	AV-710-8-28	JLR007, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	9/8/70	AV-965-7-24	JLR006, JLR012 (MAP LOCATION)
026	P779	- Power check pad sound suppression (former). - Map location: 20-U. - Facility 461C is apparent on aerial photo.	Pacific Aerial Surveys	9/8/70	AV-965-7-24	JLR006, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	9/4/75	AVM-1014 (aka: AV-1215-7-23 / AV-1215-8-21)	JLR005, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Facility 461C is apparent on aerial photo.	Pacific Aerial Surveys	9/4/75	AVM-1014 (aka: AV-1215-7-23 / AV-1215-8-21)	JLR005, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building not apparent; appears to be open space.	Pacific Aerial Surveys	1/2/81	AV-2050-07 -26	JLR004, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Facility 461C is apparent on aerial photo.	Pacific Aerial Surveys	1/2/81	AV-2050-07 -26	JLR004, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U - Building not apparent; appears to be open space.	Pacific Aerial Surveys	5/13/85	AV-2655-3-13	JLR003, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Facility 461C is apparent on aerial photo.	Pacific Aerial Surveys	5/13/85	AV-2655-3-13	JLR003, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building apparent.	Pacific Aerial Surveys	4/30/90	K-AV-3817-1-6	JLR002, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Building P779 apparent; former building 461C is no longer present.	Pacific Aerial Surveys	4/30/90	K-AV-3817-1-6	JLR002, JLR012 (MAP LOCATION)
026	29	- Gun test facility (NADEP). - Map location: 19-U. - Building apparent.	Pacific Aerial Surveys	4/8/92	AVM-1011	JLR001, JLR012 (MAP LOCATION)
026	P779	- Power check pad with sound suppression (former). - Map location: 20-U. - Building P779 apparent; former building 461C is no longer present.	Pacific Aerial Surveys	4/8/92	AVM-1011	JLR001, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
026	- In 1947 and 1953, parcel was part of the bay. - In 1958 and 1963, parcel was open space on fill material. - In 1966, parcel was used for aircraft parking, buildings 461A and B were present. - In 1970, facilities 461A, 461B, and 461C are present. - In 1975-1985, no change. - In 1990, building 29 is present and facility 461B has been demolished. - In 1992-1993, no change.	Pacific Aerial Surveys			JLR073

NAS/NADEP ALAMEDA
Air Quality Permit

Parcel	Location	Emission Source #	Emission Source Type	Period of Use	Fuel/Chemical Use	Reference
026	29				Permits issued for gun test system, degreaser, solvent cleaning, dip tank, magnetic inspection machine, spray booth, abrasive blasting.	BBK014

NAS/NADEP ALAMEDA
Asbestos

Parcel	Location	Survey?	Asbestos?	Friable?	Location of Asbestos	Remarks	Reference
026	29 / Gun Test Facility (NADEP)	No		No		- Informal assessment; no supporting evidence.	BBK007
026	461 / Power Check Pad with Sound Suppression	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007

NAS/NADEP ALAMEDA
Building Information

Parcel	Location	Date Constructed	Sq Footage	Type of Construct.	Use	Applicable Date	Remarks	Reference
026	29	1987	19,480	Concrete floor, steel frame with metal siding, steel frame roof with built-up roofing	aircraft weapons overhaul & test			DB003, DB020
026	38	1991	12,653	concrete floor, steel frame with metal siding, steel frame roof with built-up roofing	Aircraft acoustical enclosure			DB003, DB020
026	461	1962	0.00		power check pad with sound suppression			DB003

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
026	Building 29	D006

Building Description	Evidence of chemical storage/use and location within building
- Construction: Concrete walls and floor - Use: Overhaul, repair, and testing of aircraft guns, occupied by NADEP, building was built in 1989 for NADEP operations	- General cleaning supplies in janitor's closet - Materials in flammable locker - Dip-tank for parts cleaning - Hazardous waste storage

Other Issues
- Peeling paint on walls (photo 4-6-8)

Parcel:	Location:	Reference:
026	Facility 461A, 461B, 461C	BBK803

Building Description	Evidence of chemical storage/use and location within building
- Facility 461A has been partially demolished. One side of sound and exhaust barrier remains, along with pad for aircraft parking. - Facility 461B is completely gone. - Facility 461C has been partially demolished. - Former use: Aircraft engine run-up area. - Ground surface: concrete.	- Staining present from former aircraft parking.

Other Issues

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
026	Building 038	BBK808

Building Description	Evidence of chemical storage/use and location within building
- Steel, built 1989. - Prior: Open space where aircraft engines were run-up; bounded by exhaust diverting barrier. - Engine run-up facility, "Hirsh House". - Concrete floor.	- Fire ext. system, some type of foam used. - Fifty-five gal. drums hydraulic fluid for hydraulic engine (DTE 13M Mobil).

Other Issues
- Oil/water separator.

NAS/NADEP ALAMEDA
Chemical Inventory

Parcel	Location	Chemical Types	Quantities Stored	Uses and Mgmt Practices	Applicable Date	Reference
026	Building 29	1. Solder flux 2. Trichloroethane 1,1,1 3. Thermal grenadine 4. Oil VV-L800	1. < 20 gal. in cabinet, < 20-gal. 2. 160 gal. 3. 800 gal. 4. 800 gal.	- Stored in steel "flammable cabinet" in original containers, spray cans, paint cans, glass. - Circuit coating - Lubricant - Tetrahydrofuran — 500 mL - Spray enamel - Bondo — plastic filler - Grease - Lubricating oils - Rifle bore cleaner - Dichloromethane - Commercial industrial cleaner		D006
026	38	1. Fire extinguisher foam 2. Hydraulic fluid (DTE13M Mobil)	1. ~ 200 gal. 2. 1 fifty-five-gal. drum	- Foam is stored in large fire extinguisher system. - Hydraulic fluid kept on concrete floor (clean).	5/13/94	BBK803
026	N end of parcel 026	1. Isopropyl alcohol 2. Lube oil 3. Engine cleaner	1. 1 (fifty-five gal.) 2. 1 (fifty-five gal.) 3. 3 (five gal.)	- Empty containers are stored at adjacent storage area. - Mr. Skowron (BBK803) wasn't sure when or who takes empty containers.	5/3/94	BBK802
026	Outside building 29	1. 1, 1, 1 trichloroethane. 2. Magnaflux: Used for nondestructive inspection.	1. 3 (fifty-five gal.) 2. 1 (fifty-five gal.)	- Chemicals are stored here for future use. Asphalt was clean.	5/3/94	BBK802
026	29	NON HALOGENATED ORGANICS, CORROSIVES, PAINT, METAL	700 GALLONS	ADHESIVE, PAINT, SOLVENTS, BATTERY WATER		EMC001

NAS/NADEP ALAMEDA
Hazardous Waste

Parcel	Location(s)	Hazardous Waste?	Type/Quantity	Description	Applicable Dates	Reference
026	Building 29	Yes	- Three 55-gal. drums with contaminated glass bead blast; aerosol cans with paint, lubricant and solvent residue; paper towels contaminated with oil and grease (photo 4-6-1) - Filters from small paint booth	- Filters are changed-out periodically and disposed as hazardous waste - Hazardous waste storage on pallets - Sand with lead shells stored in concrete pit at end of testing tunnel (photo 4-6-4). Lower portion of sand pile is damp	5/16/94	D006
026	N end of parcel 026, GAP site 74	Yes	- Jet fuel (JP-5) — 1 fifty-five-gal. - Hydraulic fluid — 255 gal. - Engine oil — 1 fifty-five-gal. - Trichlorotrifluoroethane — 6 fifty-five-gal. - Waste paper / plastic (JP-5) and absorbent (JP-5) — 1 fifty-five-gal. - Isopropyl alcohol — 1 fifty-five-gal. - Lube oil — 2 fifty-five-gal. ~900 gal. total	- GAP site 74 - Sixty day accumulation, then ship out - PPE required - SOP was posted	5/3/94	BBK835
026	29	Yes	NON HALOGENATED ORGANICS, PETROLEUM PROD, METALS/150 GAL		1993	EMC204, EMC006

NAS/NADEP ALAMEDA
Historical

Parcel	Location(s)	Subject(Historical building, Indian ruins,etc.)	Remarks	Reference
026	Airfield	On 12/2/30, US Army acquired site from the city.	Site named Benton Field.	BBK009

NAS/NADEP ALAMEDA
Interview

Parcel	Location(s)	Name of Interviewee	Information	Reference
026	Building 38	John Skowron, Code 95833, X7981 Worked on flight line since 1983	- Hydraulic equipment probably PCB-free since fairly new building - Oil/water separator malfunctioned past winter, but containment system worked. PWC fixed system. - Fire extinguisher system uses some sort of foam. - Interior floor is washed down; drains got to oil/water separator. - Spills of hydraulic fluid, oil and fuel happen occasionally. Buckets and solvents are used for clean-up/containment. - Aircraft exhaust is not treated in any way. Compressed air is used to start aircraft engines. He isn't sure of exact operation of oil/water separator.	BBK803
026	Gun Range	Phillip Vercelli NADEP employee from 1945-1982 Worked with Production Engineering Group during his last 12-13 years.	Some hydraulics, probably not much environmentally since it is a relatively new building. They test 20mm weapons by firing them. Water is sprayed to slow down the bullets and they are collected in a tub which is periodically emptied.	DB021
026	NADEP Buildings 29, 38, 461	Elizabeth Berman 263-7179	No lead paint used or disposed at NADEP since lead paint was prohibited No lead remediation or abatement at NADEP No lead testing at NADEP	EMC221, EMC224
026	Aircraft repair areas	Philip Vercelli NADEP employee from 1945-1982 Worked with Production Engineering Group during his last 12-13 years.	The areas along the W and N boundary of the lagoon was used to work on aircraft. There was a lot of fuel/oil/solvent spillage, since any time engines are connected/disconnected there is some spillage. No significant spills in the lagoon. Only minor spillage associated with fueling operations and from surface drainage flowed into the lagoon. PWC would have information about what went on at the docks.	DB021

NAS/NADEP ALAMEDA
Oil/Water Separator

Parcel	Location(s)	Detailed Location	Applicable Date(s)	Description	Reference
026	38	- NW corner of building 38.	5/3/94	- A storm sewer manhole is located near Oil / Water separator. Containment system could hold approximately fifty gal. of spillage. All drains in building drain to this system.	BBK803
026	Bldg. 38	UNKNOWN	UNKNOWN	UNKNOWN FROM REFERENCE	DB024

NAS/NADEP ALAMEDA
Open Space Survey

Parcel:	Location:	Material Storage No	Outdoor Repair No	Equipment Parking Yes	Is this open space developed? Yes
026	Open space	Wash Down No	Training No	Disposal No	Other Aircraft maintenance, flight line
		Vehicle Parking No	Drum Storage No	Recreational No	

Stains	Ground cover	Describe use	Reference:
- Stain: Outside NW corner of building 38, three ft. by four ft. - Stain: Outside SE corner of building 38, former 461C?, two ft. by four ft.	- 90 percent asphalt, 30 percent grass; asphalt is in good condition	- Most of parcel open space involves aircraft maintenance. There is room for about ten aircraft. There is a high likelihood of fuel / oil / hydraulic fluid drilled in this area. - Neighboring area is water, parcels 025, 027 and 028. There is very low potential for adverse impact from these areas. - There is a large, grassy area on W side of parcel that is undeveloped. - Transformer in SW corner of parcel - Navy testing area: Fifty-five-gal. drum of lube oil; plastic container of hazardous waste(?) - Gun test facility: Container (1005-00-222-9449), unknown content. Vegetation seemed water deprived. - N end of parcel: Miscellaneous aircraft maintenance equipment stored on concrete, some were leaking.	BBK803

Are there drains in the area? Yes **Goes Where** - Storm water, possible overflow from oil / water separator (building 38)
- Unknown cones: N end of parcel
- Unknown access hole, uncovered: N end of parcel

NAS/NADEP ALAMEDA
Ordnance

Parcel	Location	Ordnance Present?	Applicable Date	Ordnance Type/Use	Management Practices	Reference
026	S end of building 29		Unknown		- Eight gun pod containers were stored outside, labeled empty.	BBK802
026	W side of building 29		Unknown	- Fourteen cases of 20 mm small arms ammunition; stored outside. - Presence of actual ammo could not be ascertained.	- No spillage observed.	BBK802

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
026	Building 29	Photo # 4-6-1 - Hazardous waste accumulation area in work shop	- Steel drums containing hazardous waste	MAW001
026	Building 29	Photo # 4-6-2 - Flammable storage container in work shop	- Contents of cabinet	MAW001
026	Building 29	Photo # 4-6-3 - Work area with link loading machine	- Link loading machine with oil residue around base	MAW001
026	Building 29	Photo # 4-6-5 - Parts cleaning area	- Four large vats with steel grate over floor drain	MAW001
026	Building 29	Photo # 4-6-6 - Utility/mechanical room	- Floor drain and dust from bullet collection area	MAW001
026	Building 29	Photo # 4-6-7 - Utility/mechanical room	- Floor drain between compressors with oily residue	MAW001
026	Building 29	Photo # 4-6-8 - Trichlorethane 1,1,1 bin	- Cleaning bin with peeling paint in background and floor grate	MAW001
026	Building 29	Photo # 4-6-9 - Steel flammable cabinet (outside N side of building)	- Container of methylene chloride sitting in water, can rusted, stain on top of pavement	MAW001
026	Building 38	Photo # 6-1-1 - W end of building, engine exhaust, looking S	- Exhaust stain on ground	BBK800
026	Outside building 38	Photo # 6-1-10 - E view	- Stain outside SE corner of building 38	BBK800
026	Outside building 38	Photo # 6-1-11 - E of building 38 along E edge of parcel, W view	- Transformer	BBK800
026	Outside building 38	Photo # 6-1-12 - Navy engine test area, E view	- Aboveground storage tank (fuel?)	BBK800
026	Outside building 38	Photo # 6-1-13 - Aircraft maintenance area, E view	- Stain 10 ft. by 10 ft., typical	BBK800
026	Outside building 38	Photo # 6-1-14 - E of building 38, along E edge of parcel, NE view	- Pipe end leaking suspected water	BBK800
026	Outside building 38	Photo # 6-1-15 - N of building 38, along E edge of parcel, E view	- 4,160 volt transformer	BBK800
026	Outside building 38	Photo # 6-1-16 - N of building 38, along E edge of parcel, E view	- Black/orange container	BBK800

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
026	Outside building 38	Photo # 6-1-17 - N of building 38, along E edge of parcel, E view	- Storage container	BBK800
026	Outside building 38	Photo # 6-1-18 - NE view from SW end of parcel	- Overview of parcel	BBK800
026	Outside building 38	Photo # 6-1-19 - N of building 38 in Navy engine test area, N view	- Engine test trailer, hydraulic fluid spill	BBK800
026	Building 38	Photo # 6-1-2 - S view	- A-6 aircraft, entire interior	BBK800
026	Outside building 38	Photo # 6-1-20 - N of building 38, E view	- Remains of facility 461A	BBK800
026	Outside building 29	Photo # 6-1-21 - E of building 29, W view	- Transformer, cooling fine at present	BBK800
026	Outside building 29	Photo # 6-1-22 - S end of building 29, S view	- Cyclone dust separator	BBK800
026	Outside building 29	Photo # 6-1-23 - S end of building 29, W view	- Eight gun pod containers, labeled "EMPTY"	BBK800
026	Outside building 29	Photo # 6-1-24 - N end of building 29, E view	- Four containers with miscellaneous gun parts for disposal	BBK800
026	Outside building 29	Photo # 6-1-25 - W side of building 29, S view	- 5 fifty-five gal. drums	BBK800
026	Outside building 29	Photo # 6-1-26 - W side of building 29, E view	- Ammunition cases	BBK800
026	Outside building 29	Photo # 6-1-27 - W side of building 29, E view	- Unknown white storage containers, possible storage tank	BBK800
026	Building 38	Photo # 6-1-3 - NW corner of building	- Oil/water separator system	BBK800
026	Building 38	Photo # 6-1-4 - S view	- Storm sewer manhole next to oil/water separator	BBK800
026	Building 38	Photo # 6-1-5 - W view	- Oil/water separator	BBK800
026	Building 38	Photo # 6-1-6 - W view	- Transformer	BBK800

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
026	Building 38	Photo # 6-1-7 - S view	- Hydraulic equipment and fifty-five gal. drum of fluid near floor drain	BBK800
026	Building 38	Photo # 6-1-8 - S view	- View of building 38	BBK800
026	Outside building 38	Photo # 6-1-9 - S view	- Stain outside NW corner of building 38	BBK800
026	Outside building 29	Photo # 6-2-1 - E side of building 29, N view	- Orange-brownish stain on asphalt	BBK800
026	W end of parcel 26	Photo # 6-2-10 - N end of parcel 26, E view	- Unknown cover	BBK800
026	W end of parcel 26	Photo # 6-2-11 - N end of parcel, N view	- Unknown hole access	BBK800
026	N end of parcel 26	Photo # 6-2-12 - N end of parcel, SE view	- Overview of GAP site, hazardous waste area, equipment storage	BBK800
026	N end of parcel 26	Photo # 6-2-13 - N end of parcel, SE view .	- Overview of GAP site, hazardous waste area, equipment storage	BBK800
026	Outside building 29	Photo # 6-2-2 - S end of building 29, SE view	- Unknown rusting object	BBK800
026	Outside building 29	Photo # 6-2-3 - N end of building 29, NE view	- Grassy area of parcel 026	BBK800
026	W end of parcel 26	Photo # 6-2-5 - N end of parcel 026, E view	- Dispensing racks, no containment	BBK800
026	W end of parcel 26	Photo # 6-2-6 - N end of parcel 026, E view	- GAP site #74	BBK800
026	W end of parcel 26	Photo # 6-2-7 - N end of parcel 026, E view	- Hazardous waste storage	BBK800
026	W end of parcel 26	Photo # 6-2-8 - N end of parcel 026, E view	- Equipment storage	BBK800
026	W end of parcel 26	Photo # 6-2-9 - N end of parcel 026, E view	- Stain 3.5 ft. by 2 ft.: Possibly hydraulic fluid	BBK800

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
026	29	- Miscellaneous work activities.	- Ongoing - 1,1,1 trichlorethane	- Sand blast shot - 1,1,1 Trichlorethane - Thermol grenadine - Oil VV-L800	- Residue, spillage, splashing, etc. has occurred around parts cleaning area. Crane was used to move parts from bin to bin with some spillage occurring. - Dusty residue present around sandblasting unit, on concrete floor.	- Catch basin below and around bins which leads to sump pump.	D006
026	29	- Unknown	- Unknown	- Petroleum products	- Oily residue around floor drain (photo 4-6-7). - Dust covered floor with floor drains (photo 4-6-6) — dust from bullet catch bin (sand residue).	- Unknown	D006
026	N of building 38, in Navy engine test area	- Leak	- Unknown	- Probably hydraulic fluid	- Amount unknown. Leak overflowed collection pan, spilled on to concrete (3' by 4') photo 6-1-19.	- Unknown	BBK802
026	E of building 38	- Leak	- Unknown	- Possible water	- Continuous leak even presently (1' by 5') Mr. Skowron did not know of any water service to this area.		BBK803
026	SE corner of building 38	- Spill / stain	- Unknown	- Probably JP-5, hydraulic fluid, engine oil.	- Stained from long time use (2' by 4') Surface is concrete (photo 6-1-10).	- Unknown	BBK802
026	NW corner of building 38	- Unknown	- Unknown		- Area seems burned / scorched (3' by 4') Surface is asphalt (photo 6-1-9).	- Unknown	BBK802

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
026	Building 38	- Stain from aircraft exhaust.	- Various	- Unknown	- Residue is left on floor and all sides exhaust pathway to outside air.	- None	BBK803
026	Building 38	- Spill from aircraft.	- Unknown	- Hydraulic fluid, oil, fuel (JP-5)	- Less than 5 gal. per incident spilled on concrete.	- Solvents — otherwise would drain to oil/ water separator.	BBK803
026	N end of parcel 26	- Unknown	- Unknown	- Possible hydraulic fluid.	- Stain on concrete (3 1/2' by 2')	- Unknown — probably none, signs of older spills present in same area.	BBK803
026	Aircraft maintenance area, along E edge of parcel	- Spills	- Various	- JP-5, hydraulic fluid, engine oil.	- Various amounts spilled. - Stained areas are a result of repeated spillage (10' by 10'). - Staining is typical of other aircraft parking areas as well.	- Consistent cleanup began ~ 5 years ago. Prior to that, cleanup was more sporadic.	BBK803
026	E side of building 29	- Unknown	- Unknown	- Unknown	- Area looks rusted over (2' by 1 1/2') on asphalt.	- Unknown	BBK803

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
026	N of building 38	~ 200	Unknown	Unknown	Most likely JP-5	- No secondary containment, labeled as flammable. - Filing practices unknown.	BBK803

NAS/NADEP ALAMEDA
Title Search

Parcel	Location	Issues of Concern/Remarks	Transfer Information and date	Reference
026	Most of NAS maps #3, 4, 5		1072.03 acres from War Department by Executive Order #7467. 1936	DB008

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date	Applicable PCB's ?	PCB Class	Remarks	Reference
026	N of building 38, near Navy engine testing area	Unknown	4,160 V	Unknown		Unknown	- On concrete pad: clean. - Presence or absence of PCBs is unknown.	BBK803
026	E edge of parcel 026, E of building 38	Unknown	Unknown	Unknown		Unknown	- On concrete pad a-top of asphalt. Appears to be an older switch assembly. - Presence or absence of PCBs is unknown.	BBK802
026	Building 38	Unknown	45 kVA	Unknown		Unknown	- Dry-type. - Photo 6-1-6. - Presence or absence of PCBs is unknown.	BBK803
026	E of building 29	Unknown	Unknown	Unknown		Unknown	- Cooling fins visible; transformer on concrete pad on top of grassy area. No spill containment; pad is clean. Photo 6-1-21. - Presence or absence of PCBs is unknown.	BBK802
026	W boundary of Seaplane Lagoon, E of building 515	Unknown	Unknown	Unknown		Unknown	- Presence or absence of PCBs is unknown.	DB012

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
026	494	EMC317

Utility Type	Description
Storm drains	Drainage from building 494 (parcel 027) runs E through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from building 494.

Parcel:	Location:	Reference:
026	6	EMC317

Utility Type	Description
Storm drains	Two lines flow S to outfall F, and FF. One line flows N to outfall B. One line flows N to outfall A.

Potential for Contamination
Yes. Potential contamination from building 5.

Parcel:	Location:	Reference:
026	25	EMC314, EMC311

Utility Type	Description
Sanitary sewers	Line drains NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes from building 25.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
026	Natural Gas System	BBK001

Utility Type	Description
Natural gas.	Supplied by PG&E through 2 mains.

Potential for Contamination
Several underground leaks have occurred with Class II and Class III lines.

Parcel:	Location:	Reference:
026	Natural Gas System	BBK001

Utility Type	Description
Natural gas.	Supplied by PG&E through 2 mains.

Potential for Contamination
Several underground leaks have occurred with Class II and Class III lines.

Parcel:	Location:	Reference:
026	24	EMC317

Utility Type	Description
Storm drains	Numerous collection catch basins surround building 24 (parcel 030). Storm drain lines run E to a N - S line that runs through parcels 049 and 050. This line continues S through parcels 023, 028, and finally 026 where it turns E to outfall "F".

Potential for Contamination
Yes. Potential contamination from building 24.

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
026	11	EMC317

Utility Type	Description
Storm drains	The catch basins around building 11 (N and S sides) run W, through parcels 051, and 050. The storm drain then runs S through parcel 023, 028, and finally 026 where it turns E to outfall "F".

Potential for Contamination
Yes. Potential contamination from building 11.

Parcel:	Location:	Reference:
026	400	EMC317

Utility Type	Description
Storm drains	The catch basins on the N side of building 400 run W, through parcels 052, 051, and 050. The storm drain then runs S through parcel 023, 028, and finally 026 where it turns E to outfall "F". The catch basins on the S side of building 400 run to a central outfall line running N - S. This line runs through parcel 023 only and terminates at outfall "FF".

Potential for Contamination
Yes. Potential contamination from building 400.

Parcel:	Location:	Reference:
026	12	EMC317

Utility Type	Description
Storm drains	The catch basins on the N side of building 012 run W, through parcels 053, 057, 052, 051, and 050. The storm drain then runs S through parcels 023, 028, and finally 026 where it turns E to outfall "F". The catch basins on the S side of building 012 run W through parcel 052 and then S across parcel 023 terminating at outfall "FF".

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Yes. Potential contamination from building 12.

Parcel:	***Location:***	***Reference:***
026	25	EMC316

Utility Type	***Description***
Industrial sewer	Flows N to parcel 049 then E to parcel 070 then N to parcel 061 where it joins the sanitary sewer line to East Bay Municipal Utilities District (EBMUD).

Potential for Contamination
Yes. Potentially from building 25.

Parcel:	***Location:***	***Reference:***
026	259 (wash down)	EMC317

Utility Type	***Description***
Storm drains	Drainage from wash down would collect in catch basin 3R (parcel 023). The stormwater line runs from this catch basin due S into parcel 025, and then turns E beneath building 515 (parcel 027). The line continues through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from facility 259 (plane wash down).

Parcel:	***Location:***	***Reference:***
026	19	EMC317

Utility Type	***Description***
Storm drains	Drainage from building 19 (parcel 193) runs N through parcel 030, then SW into parcel 023. The line continues due S into parcel 025, and then turns E beneath building 515 (parcel 027). The line continues E through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from building 19.

NAS/NADEP ALAMEDA
Wastewater Report

Parcel:	Location:	Is Industrial Wastewater Generated?	Reference:
026	Building 29		D006

Types of Wastewater	Discharge flow drain line
- Dip-tank line has vats containing trichloroethane, thermoil grenadine, water and oil (photo 4-6-5). - A sump exists near the line, this sump is pumped out periodically by maintenance personnel. - According to shop personnel, the vats are never drained, materials are only added to them. - Once in the past, the thermoil grenadine tank was drained because the heating element needed to be replaced. At this time material was pumped out of the vat and placed in 55-gal. drums.	- According to shop personnel, the floor drains are capped off

Parcel:	Location:	Is Industrial Wastewater Generated?	Reference:
026	38	Yes	BBK803

Types of Wastewater	Discharge flow drain line
- Excess/spilled fuel, hydraulic fluid, lube oil, cleaning solvent are generated in this building.	- Drains in building lead to oil water separator located outside building NW corner.

PARCEL 027

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area is primarily water.	Public Affairs, NAS/NADEP Alameda	11/26/34	MAA-224-77 7	JLR016, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent.	Public Affairs, NAS/NADEP Alameda	5/3/40	Accordion folder #54 (NA 27)	JLR015, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent.	Public Affairs, NAS/NADEP Alameda	July 1942	#3462 (NA 27)	JLR014, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	3/24/47	AV-11-08-0 6	JLR011, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	8/14/53	AVM-1010	JLR010, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	3/1/58	SF AREA-2-22	JLR009, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	7/25/63	AV-550-07-21	JLR008, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	4/20/66	AV-710-8-28	JLR007, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	9/8/70	AV-965-7-24	JLR006, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel	Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	9/4/75	AVM-1014 (aka: AV-1215-7-23 / AV-1215-8-21)	JLR005, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; area appears to be completely paved.	Pacific Aerial Surveys	1/2/81	AV-2050-07-26	JLR004, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building not apparent; 5 narrow parallel N-S buildings are apparent.	Pacific Aerial Surveys	5/13/85	AV-2655-3-13	JLR003, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building apparent.	Pacific Aerial Surveys	4/30/90	K-AV-3817-1-6	JLR002, JLR012 (MAP LOCATION)
027	25	- Corrosion control facility (NADEP). - Map location: 19-R. - Building apparent.	Pacific Aerial Surveys	4/8/92	AVM-1011	JLR001, JLR012 (MAP LOCATION)

NAS/NADEP ALAMEDA
Aerial Photo Review-Onsite

Parcel Location	Objects and Description	Photo Source	Photo date	Photo #	Reference
027	- In 1947 and 1953-1966, the parcel was either open space or part of the runway area of parcel 023. Building 494 is present. - In 1970, building 515 was present. - In 1975-1985, no change. - In 1990, buildings 25, 515, 595, 622, 623 and 25A are present. - In 1992, no change. - In 1993, building 515 appears to have been leveled or demolished.	Pacific Aerial Surveys			JLR073

NAS/NADEP ALAMEDA
Air Quality Permit

Parcel	Location	Emission Source #	Emission Source Type	Period of Use	Fuel/Chemical Use	Reference
027	Building 25				Permits issued for solvent use, abrasive blasting, stripper, storage tank, conversion coating, bioreactor unit, equalization tanks, boilers.	BBK014

NAS/NADEP ALAMEDA
Asbestos

Parcel	Location	Survey?	Asbestos?	Friable?	Location of Asbestos	Remarks	Reference
027	IWTP25-A	No		Unknown	- Possible asbestos on steam lines at IWTP site.	- Presence or absence of asbestos is unknown.	BBK808
027	25 / Corrosion Control Facility (NADEP)	No		No		- Informal assessment; no supporting evidence.	BBK007
027	451 / Aviation Meteorological Facility	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
027	494 / Maintenance Building	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
027	515 / Aircraft Weapon Overhaul and Test	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
027	595 / Oxygen Cart Facility	No		No		- Informal assessment; no supporting evidence.	BBK007
027	622 / Steam Heating Building	No	Yes	Unknown		- Informal assessment; no supporting evidence.	BBK007
027	623 / Aviation Gasoline Storage	No		No		- Informal assessment; no supporting evidence.	BBK007
027	520 / MC-2 Compass Pad	No		No		- Informal assessment; no supporting evidence.	BBK007

NAS/NADEP ALAMEDA
Building Information

Parcel	Location	Date Constructed	Sq Footage	Type of Construct.	Use	Applicable Date	Remarks	Reference
027	515	1967	2,200	concrete slab, metal panel, roof beam frame	gun pod testing facility, firing range, aircraft weapons overhaul and test	3/93	demolished. operations transferred to Building 29.	DB003, DB006
027	602	1976	200	permanent	power station, fixed aircraft start system	1990	authorized for demolition.	DB006
027	180	1943	188	Wood frame, roof with metal siding	Shelter miscellaneous pipeline facility			DB003
027	25	1987	54,450	Concrete floor, steel frame with metal siding, steel frame roof with built up roofing	Corrosion Control Facility			DB003, DB020
027	451	1959	0.00		aviation meteorological facility			DB003
027	494	1963	2,876		covered ground check / flight test			DB003
027	595	1976	375		covered ground check/flight test			DB003
027	598	1976	0.00		aircraft ready fuel storage			DB003
027	605	1977	178		covered ground check/flight test			DB003
027	622	1987	9,088		steam / heat building/shelter			DB003
027	623	1987	0.00		jet engine fuel storage			DB003

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
027	Building 451	BBK802

Building Description
- Fenced, wooden structure, 10' x 6', concrete slab surrounded by vegetation. Abandoned.

Evidence of chemical storage/use and location within building
- None.

Other Issues
- None.

Parcel:	Location:	Reference:
027	S side of building 25, substation #15	D021

Building Description
- Construction: Concrete floor and walls, corrugated metal roof.
- Use: Electrical substation #15, a dry-type transformer and vacuum circuit breakers present.

Evidence of chemical storage/use and location within building
- None.

Other Issues

Parcel:	Location:	Reference:
027	Building 25 — Corrosion control facility	AWC100, AWC104, AWC105,

Building Description
- Metal frame with metal roof with rubber coating, concrete floor with trenches running accross each of the hamper sections (3), six trenches in all (2 for each section)
- One PMV grit stripping bay
- One washing bay
- One chemical stripping bay

Evidence of chemical storage/use and location within building
- PMV grit stripper
- Corrosion prevention coatings
- Paint stripping liquid
- Soap for aircraft washing

NAS/NADEP ALAMEDA
Building Inspection

Other Issues
- PPE required for PMV stripping (forced air respirators with hoods)

Parcel:	*Location:*	*Reference:*
027	Building 25A — IWTP (laboratory)	BBK808

Building Description	*Evidence of chemical storage/use and location within building*
- Corrugated steel, walls and roof with concrete floor - Laboratory and central operations for IWTP - Building 85 years old / extension (new) two to three years old	- Lab chemicals and hazardous waste (see other forms)

Other Issues
- PPE used

Parcel:	*Location:*	*Reference:*
027	Building 494	D006

Building Description	*Evidence of chemical storage/use and location within building*
- Construction: Concrete and asphalt floor and walls - Use: Office, work shop / tool and equipment area, locker room, occupied by NADEP for aircraft testing prior to flight, equipment testing is also performed here	- Heating oil tank present in locker room, oil residue present on pans beneath oil part, tank and motor, out of service for ≈ three months, but it is still operable

Other Issues
- Oily stains ≈ six in. to twelve in. diameter in parts storage area (photo 4-6-11)

Parcel:	*Location:*	*Reference:*
027	Building 515	ASC3001

Building Description	*Evidence of chemical storage/use and location within building*
- Building 515 is presently only a concrete slab. It was replaced by building 29 as a gun test facility between 1990 and 1994. - Projectiles were caught in a water tank formerly located on the S side of the building.	

NAS/NADEP ALAMEDA
Building Inspection

No other details are available	
Other Issues	

Parcel:	***Location:***	***Reference:***
027	Building 595	D006
Building Description		***Evidence of chemical storage/use and location within building***
- Construction: Concrete floor, corrugated metal walls and roof - Use: Liquid oxygen converter storage shed		
Other Issues		

Parcel:	***Location:***	***Reference:***
027	Building 622	AWC100, AWC104, AWC105,
Building Description		***Evidence of chemical storage/use and location within building***
- Concrete floor and metal frame and roof - Diesel powered boiler for hotwater heating and diesel backup and 500-gal. storage tank - Switching (electrical) substation for multiple buildings on this portion of the base		- 500-gal. diesel oil storage tank located in the building
Other Issues		

NAS/NADEP ALAMEDA
Building Inspection

Parcel:	Location:	Reference:
027	Building 623	AWC100, AWC104, AWC105,

Building Description	Evidence of chemical storage/use and location within building
- Metal frame building with concrete floor and metal roof - Air compressor contrrol room (original and current use) houses electrical control equipment for air compressor operations	- One drum of lubricating oil located in building, presummable for minor maintenance of control equipment

Other Issues
- Oil stains around backup oil tank and pumps to boiler and was leaking into floor trench (photo 2-2-2)

NAS/NADEP ALAMEDA
Chemical Inventory

Parcel	Location	Chemical Types	Quantities Stored	Uses and Mgmt Practices	Applicable Date	Reference
027	595	- Oxygen	- < 100 gal.	- Liquid oxygen stored here and used to fill small portable aircraft containers.	5/16/94	D006
027	Building 25 — NARF corrosion control facility	- Polymedia v acrylic plastic (plastic grit stripper)	- 50 55-gal. drums	- Dry process for stripping paint off planes. - Recycled until dust. - Dust collected in bag house, sent to PWC.	5/27/94	AWC100, AWC104, AWC105, AWC106
027	Building 25 — NARF corrosion control facility	- Liquid paint stripper (Turco 6037) (Turco Kwik Solv)	- 40 55-gal. drums Turco 6037 (photo 2-2-3) - 4 55-gal. drums Turco Kwik Solv	- Stored on pallets in area with trenches to IWTP. - Used for stripping paint off aircraft. - Disposal handled by PWC.	5/27/94	AWC100, AWC104, AWC105, AWC106
027	Building 25 — NARF corrosion control facility	- Cee bee konverkote conversion coating (corrosive prevention) - Photo 2-2-5	- 20 25-lbs. cans	- Used on aircraft after stripping to prevent rusting. - Stored on pallets in area with trenches that supposedly go to IWTP. - Disposal handled by PWC.	5/27/94	AWC100, AWC104, AWC105, AWC106

NAS/NADEP ALAMEDA
Chemical Inventory

Parcel	Location	Chemical Types	Quantities Stored	Uses and Mgmt Practices	Applicable Date	Reference
027	Building 25A — IWTP	1. Phosphoric acid 2. Polymer chemists defoamer 86 3. Sulfur dioxide 4. Ammonia 5. Floculent polymer (K1513) 6. Lime 7. Soda ash 8. Sulfuric acid	1. 165 gal. 2. 165 gal. 3. ~ 150 gal. 4. 110 gal. 5. Unknown 6. 2,500 lbs. 7. 110 gal. 8. 300 gal.	- All chemicals stored together in one area outside SW corner of lab, except soda ash. All stored on concrete platform. - Soda ash stored near bioreactor to treat low pH. - Areas storing acid clearly showed etching and concrete disintegration. - Some staining present in storage area — primarily acid-related. - Delivery of chemicals through locked gate (cyclone fence) next to lab. - Delivery of sulfuric acid is directly to IWTP. - Delivery of other chemicals is to building 114, where they are picked up for IWTP as needed. - Disposal of drums: Area NE of lab (near influent intake to IWTP) is location of spent, empty drums of chemicals (3 to 6 empty drums stored pending removal). - Spill kit located at NE corner (photo 6-8-4).	5/10/94	BBK808
027	Building 25A — IWTP (GAP Site 31)	- Nutrients with bioreactors for IWTP, aqua ammonia and phosphoric acid.	- 3 55-gal. drums (165 gal.) at any given time.	- Empty containers stored near intake of IWTP. - 6 to 8 stored before being taken to building 114.	5/10/94	BBK808

NAS/NADEP ALAMEDA
Chemical Inventory

Parcel	Location	Chemical Types	Quantities Stored	Uses and Mgmt Practices	Applicable Date	Reference
027	Building 25A — IWTP (laboratory)	1. Quinhydrone 2. HCl 3. Liquinox (cleaner) 4. Solvent cleaner	1. 1 L 2. 500 mL 3. 4 gal. 4. 15 oz.	- Reagents consumed during lab testing. - Storage: Material kept in drawers of all-metal workspace.	5/10/94	BBK808
027	Building 494	1. Hydraulic fluid, lube oil, grease, plastic polish, sealing compound, leak detector compound 2. Isopropyl alcohol, anti-seize compound 3. Oxygen, nitrogen	1. < 50 gal. 2. < 50 gal. 3. 2 cylinders	- Storage in lockers. - One can (≈ 5 gal.) in portable shed (photo 4-6-14). - Hydraulic fluid, lube oil, grease, plastic polish, sealing compound, leak detector compound stored in combustible locker. - Isopropyl alcohol, anti-seize compound stored in flammables locker (photo 4-6-13).	5/16/94	D006
027	Building 623	- Lubricating oil	- 1 55-gal. drum	- Stored on pallet in air compressor room (off building 25). - Room was locked; could not enter; saw drum through window. - Oil supposedly used on control parts.	5/27/94	AWC100, AWC104, AWC105, AWC106

NAS/NADEP ALAMEDA
Chemical Inventory

Parcel	Location	Chemical Types	Quantities Stored	Uses and Mgmt Practices	Applicable Date	Reference
027	Building 25A – IWTP	1. Ammonia 2. Floculent polymer – K1513 and K300 3. Sodium bisulfide 4. Deodorizer 5. Paint	1. 8 55-gal. drums 2. K1513: 1 55-gal. drum; K300: 2 55-gal drums 3. 2 55-gal drums 4. 2 55-gal drums 5. 4 1-gal. containers	- Stored in secured area behind fence (cyclone) with locked gate. - Most chemical drums on pallets. - Area concrete with concrete berm for containment. - Storm drain inlet ≈ three ft. N of bermed area; secondary containment may not be adequate to protect storm drain.	5/10/94	BBK808
027	25 IWTP	CORROSIVE	500 GALLONS	STORED IN TANK		EMC006
027	25	NON HALOGENATED ORGANICS, HALOGENATED ORGANICS, CORROSIVES, PAINT, METAL	40000 GALLONS	SOLVENTS,STRIPPERS/CLEANERS		EMC001

NAS/NADEP ALAMEDA
Hazardous Waste

Parcel	Location(s)	Hazardous Waste?	Type/Quantity	Description	Applicable Dates	Reference
027	Building 25 — Corrosion control facility	Yes	- Used (degenerated) PMV beads that are collected in one of two bag houses and disposed of by PWC. - Spent Turco 6037 paint stripper wash water, collect in floor trenches and pumped to IWTP. - Cee bee konverkote (spent) collected in trenches with fresh water, pump to IWTP. - Soapy wash water from aircraft washing, collected in floor trench and pumped to IWTP.	- One reported release from bag house leak, particulate was cleaned up by facility personnel. - Storage of 10 empty drums of Turco 6037 and cee bee konverkote.	5/27/94	AWC100, AWC104, AWC105, AWC106
027	Building 25A — IWTP	Yes	- ≈ 5,000-gal. / day volume of industrial waste treated daily (1993 information) - No separation of wastewater and storm water is done.	- Paint sludge is removed first, then liquid waste is treated in a series of tanks; the paint sludge is stored temporarily and removed before 90 days (generally within 60 days) (photo 6-8-3) - Material removed by Laidlaw	5/10/94	BBK808
027	Building 25A — IWTP (GAP site 31)	Yes	- Pressed metal / bacterial sludge (F002 waste) - Twenty yard end dump (50 percent full) - (Solid waste material)	- Hauled off by Laidlaw before 90 days; usually 60 days is timeframe for waste removal - Photo 6-8-16	5/10/94	BBK808
027	Building 25A — IWTP (laboratory)	Yes	- Storage in laboratory area (current) 1. Phenol, ammonia, phosphate — corrosive material, three 1-gal. containers 2. Mercury waste — 5-gal. container 3. Spent methylene chloride waste — 20-gal. container	- Moved off site every six months ± (satellite accumulation point); Laidlaw picks up waste when volume is high enough. - Photo 6-8-1, 6-8-2	5/10/94	BBK808
027	25 IWTP	Yes	PAINT, ORGANICS, OIL & GREASE, CHROMIUM SLUDGE/4000 GAL	SLUDGE IS DEWATERED AND DISPOSED OF OFF-SITE		EMC002, EMC006
027	25	Yes	NON HALOGENATED ORGANICS/1400 GAL	STORED IN 55 GAL DRUMS	9/30/93	DB16
027	598	Yes	FUEL & WATER, OIL & WATER	>90<360 DAY STORAGE		EMC002

NAS/NADEP ALAMEDA
Historical

Parcel	Location(s)	Subject(Historical building, Indian ruins,etc.)	Remarks	Reference
027	Airfield	On 12/2/30, US Army acquired site from the city.	Site named Benton Field.	BBK009

NAS/NADEP ALAMEDA
Interview

Parcel	Location(s)	Name of Interviewee	Information	Reference
027	Building 25, associated with IWTP	Donald R. Hill, code 97641, 263-8097	- Prior to construction of building 25, this was open space. - Baghouses are part of plastic medin blast (PMB) system. - Excess, used blast is collected and disposed of at GAP site — door 9 but will be door 11 (high bay). - All wastewater from building goes to associated IWTP (25-A), including paint skins. IWTP separates skins from liquid. They have bioremediation, chronic processes. - No chemicals are stored outside. Three 55-gal. drums of ethyl acetate was outside because it was just delivered. (It was moved inside before I left.) - No spills/leaks have occurred outside according to Mr. Hill. - Building processes have passed all inspections.	BBK804
027	IWTP25-A	- Jim Prior, PWC Code 645, IWTP 25-A, 263-4270	- Mr. Prior has worked there since 1984. He was able to provide extensive information about the treatment processes. He has an operator's manual that we could borrow, if neccessary.	BBK808
027	NADEP Buildings 25, 494, 515, 595, 602, 622, 623	Elizabeth Berman 263-7179	No lead paint used or disposed at NADEP since lead paint was prohibited No lead remediation or abatement at NADEP No lead testing at NADEP	EMC221, EMC224
027	Corrosion Control Facility	Phillip Vercelli NADEP employee from 1945-1982 Worked with Production Engineering Group during his last 12-13 years.	Corrosion Control consisted of stripping aircraft, sandblasting and checking for corrosion. Damaged in earthquake so there may be cracks in the concrete.	DB021

NAS/NADEP ALAMEDA
Oil/Water Separator

Parcel	Location(s)	Detailed Location	Applicable Date(s)	Description	Reference
027	IWTP25-A	- In treatment unit along W edge of IWTP site	5/10/94	- Unknown, but is presently inoperable	BBK808

NAS/NADEP ALAMEDA
Open Space Survey

Parcel:	Location:	Material Storage	Outdoor Repair	Equipment Parking	Is this open space developed?
027	Outside area, parcel 27	Yes	No	Yes	Yes
		Wash Down: No	Training: No	Disposal: No	Other: Undeveloped grassy area
		Vehicle Parking: Yes	Drum Storage: No	Recreational: No	

Stains	Ground cover	Describe use	Reference:
- One area of stressed vegetation S of former building 515 (possible site for sampling). - Stain from compressor: W side of GAP site (x2) - Stain trail at N side of building 25. - Stain below baghouse dispenser. - Many stains at E side of building 494 from truck/maintenance equipment parking. - Group of stains at S side of building 25, possibly from aircraft touring equipment.	- 25 percent concrete (good), 50 percent asphalt (good), 25 percent grass	- The parcel area is used almost solely for vehicular traffic. The most prevalent spill would be from maintenance truck equipment. - The wastewater lines from the IWTP(25-A) in this parcel may be a potential source of contamination if they leak. - No potential contamination from parcels 025, 023 and 028 - Parcel 026: May be possible rain washdown of hazardous waste and GAP site in N end of parcel 026 - Building 515: Demolished 1991-1992; former gun test range - GAP site associated with IWTP for building 25 - Bad odor near IWTP - Unknown gravel mound: S of building 494 - Unknown concrete pad with utility boxes ("Power cable 115V") - Unknown drain and apparatus: W edge of parcel 027 - Trailer tank (PWC) parked on gravel lot, contents unknown - Discarded electrical box: Labeled "RECT. 7" - Bank of electrical equipment: Possible capacitors.	BBK803, BBK804

Are there drains in the area? Yes **Goes Where** - Two storm drains in front of building 25; unknown outfall.
- Several storm drains behind buildng 25; unknown outfall.

NAS/NADEP ALAMEDA
Open Space Survey

Parcel:	Location:	Material Storage No	Outdoor Repair No	Equipment Parking No	Is this open space developed? No
027	Building 515	Wash Down No	Training No	Disposal No	Other Former gun test facility, now concrete slab
		Vehicle Parking No	Drum Storage No	Recreational No	

Stains	Ground cover	Describe use	Reference:
- Stains on the slab appear to be rust colored and possibly due to the construction materials of the former building. Vegetation appears normal.	- There is a concrete slab surrounded by open space	- The site formerly had building 515 located on the concrete slab. It was used as a gun test facility. Projectiles were caught in a water tank on the S side of the building. It is unknown where the water was disposed. Neighboring parcels include 023, 025, 026 and 028. Aircraft move about on neighboring parcels.	ASC3001

Are there drains in the area? No **Goes Where**

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
027	Former site building 515	Photo # 1-24-1 - S side of concrete slab where building 515 was located	- Concrete slab of building 515, facing N	AC001
027	Building 622	Photo # 2-2-1 - Inside building 622	- Backup diesel tank and drain	MEC001
027	Building 622	Photo # 2-2-2 - Inside building 622	- Trench supposedly to IWTP with stains	MEC001
027	Building 25	Photo # 2-2-3 - In washroom	- Drums of stripper Turco 6037	MEC001
027	Building 25	Photo # 2-2-4 - In washroom	- Drainage floor trenches supposedly to IWTP	MEC001
027	Building 25	Photo # 2-2-5 - In washroom	- Cans of corrosive prevention (cee bee konverkote)	MEC001
027	Building 25	Photo # 2-2-6 - In stripping room	- Operation of striping paint over floor trench supposedly to IWTP	MEC001
027	Building 25	Photo # 2-2-7 - Roof	- Apparent stripping grit on roof	MEC001
027	Building 24	Photo # 4-11-10 - Transformer substation 15	- Damaged concrete under battery rack	MAW001
027	Building 494	Photo # 4-6-10 - Heating unit (fuel oil) not used	- Pump system with staining/residue under	MAW001
027	Building 494	Photo # 4-6-11 - Outside parts storage area	- Small stained area on pavement (1 ft. by 1 ft.)	MAW001
027	Building 494	Photo # 4-6-12 - Outside parts storage area (lunch / break area)	- Stained area on pavement (4 ft. by 6 ft.) - Appears to be aged	MAW001
027	Building 494	Photo # 4-6-13 - Flammables storage container covers area	- Flammables storage container with slight stains around base on concrete	MAW001
027	Building 494	Photo # 4-6-14 - Grease gun (portable)	- Grease gun with staining around base (3 ft. by 4 in.)	MAW001
027	Building 595	Photo # 4-6-15 - Three of 6 pad-mounted transformers at SE corner of building 595	- Slight staining around base of 2 transformers	MAW001

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
027	SE end of parcel 027	Photo # 6-2-4 - SE end of parcel 027, SW view	- Abandoned facility 451	BBK800
027	NE corner of parcel 027	Photo # 6-3-17 - NE corner of parcel 027, W view	- Overview of parcel 027	BBK800
027	NE corner of parcel 027	Photo # 6-3-18 - NE corner of parcel 027, W view	- Overview of parcel 027	BBK800
027	N side of building 25	Photo # 6-3-19 - Middle of building 25, N view	- Stain trail of possible engine oil, typical	BBK800
027	W side of building 25	Photo # 6-3-20 - SW corner of building 25, E view	- Stain below dispenser for baghouse	BBK800
027	S side of building 25	Photo # 6-3-21 - Near SE corner of building 25, E view	- Group of stains, possibly from aircraft training equipment	BBK800
027	E side of building 494	Photo # 6-3-22 - Near NE corner of building 494, W view	- Heater oil tank, no secondary containment	BBK800
027	E edge of building 494	Photo # 6-3-23 - E edge of building 494, SW view	- Multiple 6 in. by 6 in. stains from truck parking	BBK800
027	S edge of building 494	Photo # 6-3-24 - NE corner of foundation of building 515, S view	- Foundation of building 515	BBK800
027	S edge of building 494	Photo # 6-3-25 - NE corner of foundation of building 515, S view	- Unknown gravel	
027	S edge of parcel 27	Photo # 6-3-26 - S edge of parcel 27, NE view	- Stressed or water deprived vegetation	
027	S edge of parcel 027	Photo # 6-3-27 - S edge of parcel 027, E view	- Stressed or water deprived vegetation	
027	S edge of parcel 027	Photo # 6-4-1 - SW corner of parcel 027, SE view	- Stressed vegetation SW of former building 515	
027	W edge of parcel 027	Photo # 6-4-10 - SW corner of parcel 027, W view	- Trailer tank	
027	S of building 25	Photo # 6-4-11 - SW corner of parcel 27, SE view	- Compressor and 6 ft. by 5 ft. stain	
027	S of building 25	Photo # 6-4-12 - SW corner of parcel 027, E view	- Stain, possibly lube oil	

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
027	S of building 595	Photo # 6-4-13 - SW corner of parcel 027, W view	- Discarded equipment	
027	S of building 595	Photo # 6-4-14 - SW corner of parcel 027, S view	- Bank of electrical equipment	
027	SW corner of parcel 027	Photo # 6-4-2 - SW corner of parcel 027, E view	- Overview of parcel 027	
027	SW corner of parcel 027	Photo # 6-4-3 - SW corner of parcel 027, NE view	- Overview of parcel 027	
027	SW corner of parcel 027	Photo # 6-4-4 - SW corner of parcel 027, N view	- Overview of parcel 027	
027	SW corner of parcel 027	Photo # 6-4-5 - SW corner of parcel 027, NW view	- Overview of parcel 027	
027	SW corner of parcel 027	Photo # 6-4-6 - SW corner of parcel 027, NW view	- Overview of parcel 027	
027	SW corner of parcel 027	Photo # 6-4-7 - SW corner of parcel 027, NE view	- Unknown concrete pad with utility boxes	
027	SW corner of parcel 027	Photo # 6-4-8 - SW corner of parcel 027, NE view	- Unknown concrete pad with utility boxes (close-up)	
027	W edge of parcel 027	Photo # 6-4-9 - SW corner of parcel 027, S view	- Unknown drain/apparatus	
027	IWTP25-A	Photo # 6-8-1 - Looking SE in current lab for IWTP	- Hazardous waste containers in lab	
027	IWTP25-A	Photo # 6-8-10 - Looking SW and down in NW corner of IWTP site	- Trench system	
027	IWTP25-A	Photo # 6-8-11 - Looking from E to W	- Panoramic view of IWTP site (4 total shots taken)	
027	IWTP25-A	Photo # 6-8-12 - Looking from E to W	- Panoramic view of IWTP site (4 total shots taken)	
027	IWTP25-A	Photo # 6-8-13 - Looking from E to W	- Panoramic view of IWTP site (4 total shots taken)	
027	IWTP25-A	Photo # 6-8-14 - Looking from E to W	- Panoramic view of IWTP site (4 total shots taken)	

NAS/NADEP ALAMEDA
Photo Log

Parcel	Location	Detailed Location and Description	Object Photographed	Reference
027	IWTP25-A	Photo # 6-8-15 - Looking NE, in NW corner of IWTP site	- Sulfuric acid tank and stain	
027	IWTP25-A	Photo # 6-8-16 - Looking W from SE corner of IWTP site	- View of GAP site 31	
027	IWTP25-A	Photo # 6-8-2 - Looking S in current lab	- Hazardous waste containers in lab	
027	IWTP25-A	Photo # 6-8-3 - Looking N in NE corner of IWTP site	- Hazardous waste bin for paint skins	
027	IWTP25-A	Photo # 6-8-4 - Looking S in NE corner of IWTP site	- Spill kit	
027	IWTP25-A	Photo # 6-8-5 - Looking W in NW corner of IWTP site	- Chemical storage area	
027	IWTP25-A	Photo # 6-8-6 - Looking SE in NW corner of IWTP site	- Flocculation and pH adjuster tanks	
027	IWTP25-A	Photo # 6-8-7 - Looking W in NW corner of IWTP site	- Etching due to phosphoric acid leaks	
027	IWTP25-A	Photo # 6-8-8 - Looking S in NW corner of IWTP site	- Etching due to sulfuric acid leaks	
027	IWTP25-A	Photo # 6-8-9 - Looking N in SE corner of IWTP site (bioreaction tank)	- Spill due to broken pump seal	
027	IWTP25-A	Photo # 6-8-17 - Looking SE	- Overview shot of IWTP25-A	

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
027	S of building 25, W of GAP sites	- Unknown	- Unknown / over time	- Probably engine / lube oil	- Dark stain, six ft. by five ft. area (photo 6-4-11) - Another stain is five ft. N of this one (two ft. by three ft.) photo 4-4-12 - Storm drain inlet ~ three ft. from stain.	- Unknown	BBK802
027	E edge of building 494	- Spills / leaks	- Various	- Probably engine oil	- Multiple stains on asphalt (six in. by six in.) from truck maintenance equipment parking	- Unknown	BBK802
027	SW corner of building 25	- Unknown	- Unknown	- Unknown	- Stain below dispenser for plastic media blast (PMB) equipment. Possible rust stain on concrete pad.	- Unknown	BBK802
027	S side of building 25	- Unknown	- Unknown	- Probably engine / lube oil	- Group of stain (one sq. ft. to two sq. ft.) on asphalt, possibly from aircraft towing equipment	- Unknown	BBK802
027	N side of building 25	- Leak	- Unknown	- Probably engine oil or hydraulic fluid	- Trail of one in. diameter spots in one ft. band along N edge of parcel, concrete surface	- Unknown	BBK802
027	Adjacent to S of building 25, substation 15	- Release	Unknown	- Stains below back up batteries. - Unknown	- ~ 4'x4'	- Unknown.	D021
027	Building 25 — Corrosion control facility	- Release of spent PMV grit and dust	1993	- PMV pastic grit / dust	- Unknown	- Cleaned up — shoveled up by facility personnel. Some evidence of residue on roof of building 622 (photo 2-2-7)	AWC100, AWC104, AWC105, AWC106

NAS/NADEP ALAMEDA
Spills and Incidents

Parcel	Location	Type of Incident	Date of Incident	Chemicals Involved	Amounts Spilled or Released	Cleanup, If Done	Reference
027	Building 25A — IWTP	- Pump seal failure between bioreactor tanks	- Week 5/2/94	- Methylene chloride, phenols — being treated (leaking from seal)	- 50 to 75 gal. (< 1,000 gal.) - Material leaking on concrete (photo 6-8-9) - Re-fed into treatment system after collection in drain system	- Scheduled week of 5/9/94	BBK808
027	Building 494	- Staining	- Unknown	- Unknown	- ≈ Six ft. by four ft. dark, oily stain in smoking / break area (photo 4-6-12)		D006
027	Building 622	- Stain	- Unknown	- Diesel oil	- Oil stains around backup oil tank and pumps to boiler and was leaking into floor trench (photo 2-2-2)	- Unknown	AWC100, 104, 105, 106
027	IWTP25-A	- Leaks	- Various	- Phosphoric acid, sulfuric acid	- Occasional small leaks; affected areas are concrete and show etching (photo 6-8-7, 6-8-8)	- Unknown	BBK808
027	NW corner of IWTP25-A	- Spills / leaks	- Various	- Sulfuric acid	- Entire five ft. by eight ft. are in containment underneath tank is stained and etched (photo 6-8-15)	- Unknown	BBK802

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
027	S of building 25	~ 7,000	Unknown	Unknown	Unknown	- Parked on gravel; belongs to PWC. - Trailer tank.	BBK802
027	E side of building 494	~ 60	Unknown	Metal	Heater oil	- No secondary containment. Filled once every one to two years. - Detachable filling hose left draped over tank, residual oil wouldn't leak on to asphalt. - Dark staining at base of tank. - Tank is elevated.	BBK803

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
027	Building 25A — IWTP	32,000	5/10/94	Metal	Chromate, methylene chloride, phenol	- Tank is on concrete slab — cylindrical concrete berm surrounds tank. - Cones within tank — first strip of waste from building 25. - Influent to tank from building 25 is tested approximately every two months via EPA method for heavy metals and phenols. - Secondary containment (concrete around entire exterior area); any overflow or spillage is contained within containment area and fed back into this initial tank. - This is the first tank in a series of tanks and treatment flow-through tanks that treat the industrial waste influent.	BBK808
027	Building 622	500	5/27/94	Metal	Diesel oil	- 500 gal. diesel oil storage tank inside building 622 (no containment).	AWC100

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
027	Building 622	25,000	5/27/94	Metal	Diesel oil	- 25K diesel storage tank (outside) with secondary containment in good condition.	AWC100
027	Building 622 (outside)	~ 15,000 (two)	5/27/94	Metal	Empty (never used)	- Two empty 15,000-gal. storage tanks. Originally to be used for paint stripper. Tanks have never been used.	AWC100, AWC104, AWC105, AWC106
027	IWTP 25-A	42,000	5/10/94	Metal	Wastewater: Phenols, methylene chloride	- One ft. high containment system (photo 6-8-11). - Sampling: Phenols and COD. - Trench collection system (photo 6-8-10) collects any leakage and pumps back into main tank (32,000-gal.). - Trench was simply an all-concrete system located throughout the facility; it was in good condition.	BBK808

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
027	IWTP 25-A	~ 41,000 (total)	5/10/94	Unknown	Various materials (unknown)	- There are many storage tanks for the various purposes of the IWTP ~ 17. - No individual containment system for each tank; however, collection system for entire plant would recapture any leakage and re-route into treatment process. - Sulfuric acid tank has metal containment with staining evident. - Photos 6-8-6, 6-8-15.	BBK808
027	IWTP 25	See remarks	Unknown	Amine epoxy coated steel frame	Phenol contaminated metal hydroxide sludge	Name: Filter Press. Max Volume: 20 sq ft per cycle @ 1.25" thick cakes.	EMC002
027	IWTP 25	400	Unknown	Carbon Steel	Phenol treated water without sludge	Name: Sampling Well	EMC002
027	IWTP 25	500 ea. / see remarks	Unknown	Carbon Steel	Phenol treated water without sludge	Name: TTO Reduction Units Max Volume Storage: 500 each (2x carbon units and sump).	EMC002
027	IWTP 25	500	Unknown	A36 Carbon Steel	Phenol treated water with sludge	Name: Clarifier #2	EMC002
027	IWTP 25	2,750	Unknown	Carbon Steel	Chromium-free waste with phenol	Name: Two Calgon Carbon Units	EMC002

NAS/NADEP ALAMEDA
Aboveground Storage Tanks

Parcel	Location	Storage Tank Size (Gallons)	Date Applicable	Type of Tank	Materials Stored	Remarks	Reference
027	IWTP 25	6,000	Unknown	Mild Steel	Chromium-laden sludge	Name: Sludge Thickener	EMC002
027	IWTP 25	12,540	Unknown	Fiberglass	Phenol waste	Name: Two Bioreactor Units - Phenol waste is destroyed by bacteria.	EMC002
027	IWTP 25	41,000	Unknown	A283C Carbon Steel	Chromium-free waste with phenol	Name: Equalization Tank #2	EMC002
027	IWTP 25	790 (see remarks)	Unknown	Mild Steel	Chromium-free waste with phenol	Name: Neutralization Units - Tank Size = Tank + Sump. - Chromium-free waste with phenol is neutralized.	EMC002
027	IWTP 25	3,000	Unknown	A36 Carbon Steel	Chromium 6-free waste with phenol	Name: Clarifier #1 - Chromium 6-free waste with phenol separates from sludge.	EMC002
027	IWTP 25	6,900	Unknown	A36 Carbon Steel	Paint stripping waste with Chromium 6	Name: Chrome Treatment Unit - Paint stripping waste with Chromium 6 is reduced and precipitated.	EMC002
027	IWTP 25	32,000	Unknown	A283 Carbon Steel	Paint stripping waste with Chromium 6	Name: Equalization Tank #1	EMC002
027	IWTP 25	380	Unknown	Steel	Paint skins from wastewater	Name: Paint Screen with Hopper	EMC002

NAS/NADEP ALAMEDA
Title Search

Parcel	Location	Issues of Concern/Remarks	Transfer Information and date	Reference
027	Most of NAS maps #3, 4, 5		1072.03 acres from War Department by Executive Order #7467. 1936	DB008

NAS/NADEP ALAMEDA
Transformers

Parcel	Location	Transformer#	Size	Date Applicable	PCB's ?	PCB Class	Remarks	Reference
027	W side of building 474	Unknown	Unknown	Unknown		Unknown	- Bank of electrical equipment, possible capacitors on concrete pad in fenced in area (photo 6-4-14). - Presence or absence of PCBs is unknown.	BBK803
027	Substation 15, adjacent to building 25	Unknown	Unknown	5/24/94		Unknown	- Dry transformers only. - Nickel batteries used for tripping breakers have damaged concrete under (photo 4-11-10).	D021
027	595 (SE corner)	Unknown	See below	5/16/94		Unknown	- Six pad-mounted transformers (photo 4-6-15) with two with stains around base. - Three unmarked; three with markings (#15 50 kVA) (#14 50 kVA) (#13 50 kVA). - Presence or absence of PCBs is unknown.	D006
027	SE corner of building 595	Unknown	Unknown	Unknown		Unknown	- Presence or absence of PCBs is unknown.	DB012

NAS/NADEP ALAMEDA
Utilities Report

Parcel:	Location:	Reference:
027	25	EMC314, EMC311

Utility Type	Description
Sanitary sewers	Line drains NE to parcel 061 then NW to the main pump N of parcel 022.

Potential for Contamination
Yes from building 25.

Parcel:	Location:	Reference:
027	Natural Gas System	BBK001

Utility Type	Description
Natural gas.	Supplied by PG&E through 2 mains.

Potential for Contamination
Several underground leaks have occurred with Class II and Class III lines.

Parcel:	Location:	Reference:
027	Natural Gas System	BBK001

Utility Type	Description
Natural gas.	Supplied by PG&E through 2 mains.

Potential for Contamination
Several underground leaks have occurred with Class II and Class III lines.

Parcel:	Location:	Reference:
027	25	EMC316

Utility Type	Description
Industrial sewer	Flows N to parcel 049 then E to parcel 070 then N to parcel 061 where it joins the sanitary sewer line to East Bay Municipal Utilities District (EBMUD).

NAS/NADEP ALAMEDA
Utilities Report

Potential for Contamination
Yes. Potentially from building 25.

Parcel:	***Location:***	***Reference:***
027	259 (wash down)	EMC317

Utility Type	***Description***
Storm drains	Drainage from wash down would collect in catch basin 3R (parcel 023). The stormwater line runs from this catch basin due S into parcel 025, and then turns E beneath building 515 (parcel 027). The line continues through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from facility 259 (plane wash down).

Parcel:	***Location:***	***Reference:***
027	19	EMC317

Utility Type	***Description***
Storm drains	Drainage from building 19 (parcel 193) runs N through parcel 030, then SW into parcel 023. The line continues due S into parcel 025, and then turns E beneath building 515 (parcel 027). The line continues E through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from building 19.

Parcel:	***Location:***	***Reference:***
027	494	EMC317

Utility Type	***Description***
Storm drains	Drainage from building 494 (parcel 027) runs E through parcel 026 to outfall "R".

Potential for Contamination
Yes. Potential for contamination from building 494.

NAS/NADEP ALAMEDA

Wastewater Report

Parcel:	Location:	Is Industrial Wastewater Generated? Yes	Reference:
027	Building 25 — Corrosion control facility		AWC100, AWC104, AWC105

Types of Wastewater	Discharge flow drain line
- Three sources: - Soapy water aircraft wash. - Corrosion prevention coating. - Residuals from stripped off paint and stripper and water. - Photos 2-2-2, 2-2-4.	- To IWTP.

Parcel:	Location:	Is Industrial Wastewater Generated? Yes	Reference:
027	Building 25A — IWTP		BBK808

Types of Wastewater	Discharge flow drain line
- Wastewater comes into plant treated (refer to other forms), and effluent wastewater is sent ultimately to EBMUD. - No separation of wastewater from building 25 and stormwater is performed. - Any spillage is captured in drains and sent back through treatment plant. - Source of wastewater — building 25: Paint stripping and corrosion control influent: tested every two months for EPA 601, heavy metals, phenols.	- Discharge to EBMUD after treatment.

Parcel:	Location:	Is Industrial Wastewater Generated? Yes	Reference:
027	Bldg. 25		EMC008

Types of Wastewater	Discharge flow drain line
- Aircraft paint stripping wastewater, paint skins, halogenated & non-halogenated organics, metals, petroleum product, corrosives.	- Sludge cakes collected at building 25.

NAS/NADEP ALAMEDA
Wastewater Report

Parcel:	Location:	Is Industrial Wastewater Generated?	Reference:
027	Bldg. 26	Yes	EMC002

Types of Wastewater
- Sulfuric acid.
- Sulfur dioxide (SO2).
- Ozonation / ozone.
- Methylene chloride.
- Sodium hydroxide.
- Phosphorous.
- Ammonia.

Discharge flow drain line
- Drains to chrome / phenol / TTO Removal Treatment Plant

NADEP Corrosion Control Facility.

Parcel:	Location:	Is Industrial Wastewater Generated?	Reference:
027	25	Yes	EMC401

Types of Wastewater
- IWTP Effulent Permit exceedances -

Chromium:	18x in 1987
	1x in 1990
	1x in 1991
Toxic Organics:	2x in 1990
Lead:	1x in 1992

Discharge flow drain line
- Not available from reference.

Appendix D
Polynuclear Aromatic Hydrocarbon Field Activity Summary

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APPENDIX D

POLYNUCLEAR AROMATIC HYDROCARBON FIELD ACTIVITY SUMMARY

This appendix has been copied from Appendix D of the Draft Final Site Inspection Report for Transfer Parcel EDC-5 in Alameda Point, dated February 2005.

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ACRONYMS/ABBREVIATIONS

B(a)P	benzo(a)pyrene
BEI	Bechtel Environmental, Inc.
bgs	below ground surface
BNI	Bechtel National, Inc.
BRAC	Base Realignment and Closure
CD	compact disk
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERFA	Community Environmental Response Facilitation Act
CLEAN	Comprehensive Long-Term Environmental Action Navy
CSM	conceptual site model
CTO	contract task order
DHS	(California) Department of Health Services
DOI	(United States) Department of the Interior
DQO	data quality objective
EDC	economic development conveyance
FED	federal agency disposal
FID	flame ionization detector
IDW	investigation-derived waste
IR	Installation Restoration (Program)
µg/kg	micrograms per kilogram
NAD	North American Datum
NAS	Naval Air Station
NEESA	Naval Energy and Environmental Support Activity
OU	operable unit
PAH	polynuclear aromatic hydrocarbon
PBC	public benefit conveyance
PNNL	Pacific Northwest National Laboratory
PRG	preliminary remediation goal
QC	quality control
RCRA	Resource Conservation and Recovery Act
RG	registered geologist
RI	remedial investigation

SIM	selected ion monitoring
SOP	standard operating procedure
SWDIV	Southwest Division Naval Facilities Engineering Command
TtEMI	Tetra Tech EM Inc.
U.S. EPA	United States Environmental Protection Agency

Appendix D
POLYNUCLEAR AROMATIC HYDROCARBON FIELD ACTIVITY SUMMARY

This Polynuclear Aromatic Hydrocarbon (PAH) Field Activity Summary appendix describes the fieldwork performed during the assessment of PAH contamination at eight transfer parcels at Alameda Point (formerly Naval Air Station [NAS] Alameda), Alameda, California (Figure D-1) during the summer of 2002.

D1 INTRODUCTION

NAS Alameda was designated for closure in September 1993 by the U.S. Congress and the Base Realignment and Closure (BRAC) Commission. The base ceased naval operations in April 1997. The Navy is currently in the process of transferring the land for redevelopment. This report presents data tables and a brief evaluation of the analytical data obtained from the PAH assessment fieldwork conducted in 2002. Tables and figures are presented at the end of this appendix.

The Engineering Field Division Southwest BRAC Operations Alameda team and Southwest Division Naval Facilities Engineering Command (SWDIV) requested assessment of PAH concentrations in soil at eight transfer parcels proposed for transfer at Alameda Point. The transfer parcels investigated during the PAH assessment include Transfer Parcels Economic Development Conveyance (EDC)-3, -5, -12, -17, -21, Federal Agency Disposal (FED)-1A, and Public Benefit Conveyance (PBC)-1A and -3, as shown on Figure D-2.

Alameda Point is situated on land created by emplacement of dredge spoils from the Oakland Inner Harbor and the San Francisco Bay. PAHs potentially contained in these dredge spoils (which now underlie the eight transfer parcels investigated during this PAH assessment) may be present at concentrations that pose a risk to human health and/or the environment. Multiple soil samples were collected at each of the transfer parcels to assess PAH concentrations in the soils at these locations.

D1.1 Purpose

The primary purpose of the PAH assessment was to conduct PAH-specific investigations at eight transfer parcels where no PAH release or disposal had been documented. The purpose of this PAH Field Activity Summary is to describe the field activities conducted and report the results of the analyses performed.

A secondary purpose of the PAH assessment was to determine background values for PAHs in fill soils at Alameda Point; a draft PAH Background Study Technical Memorandum was completed in August 2002 (BEI 2002b).

D1.2 Scope

Following preparation, review, and approval of the planning documents (BEI 2002a), PAH-specific soil sampling and analyses were conducted at eight Alameda Point transfer parcels where no PAH release or disposal was known to have occurred.

D1.3 Regulatory Context and Status of Alameda Point

The Navy property transfers will be conducted in accordance with the Community Environmental Response Facilitation Act (CERFA), which the U.S. Congress enacted in October 1992. CERFA added a new subsection to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) that addresses property transfers by federal agencies. CERFA states that federal agencies should ". . . expeditiously identify real property that offers the greatest opportunity for reuse and redevelopment . . ." To accomplish this goal, property at Alameda Point was divided into groupings called disposal, real estate, or transfer parcels. Transfer parcels were named based on the type of conveyance mechanism anticipated (e.g., a federal-agency-to-federal-agency transfer was designated "FED-xx") (TtEMI 2003).

CERCLA Section 120(h)(4) directs federal agencies with jurisdiction over property on which federal government operations are to be terminated to identify parcels of the property ". . . on which no hazardous substances and no petroleum products or their derivatives were known to have been released, or disposed of." CERFA and United States Environmental Protection Agency (U.S. EPA) guidance (U.S. EPA 1997) refer to such parcels as "uncontaminated." Identification of these parcels is based on an investigation of the property, including requirements set forth in CERCLA Section 120(h)(4)(A). Although parcels identified as uncontaminated can be sold or otherwise transferred, any such transfer includes a covenant committing the Navy to perform any remedial action or corrective action found to be necessary after the date of the transfer. The eight transfer parcels investigated during this PAH assessment were originally believed to be uncontaminated according to the CERCLA guidelines; however, they all had one outstanding issue: the potential presence of PAHs in soil. If PAH concentrations in soil could be shown not to be a risk to human or ecological health, and no other environmental issues of concern existed, the eight transfer parcels were thought to be transferable.

The Initial Assessment Study conducted by the Navy (NEESA 1983) identified 12 sources of potentially hazardous waste at NAS Alameda, 4 of which were recommended for further investigation under the Navy Assessment and Control of Installation Pollutants program. However, the California Environmental Protection Agency Department of Health Services (currently the California Department of Health Services) issued a Remedial Action Order to the Navy in 1988 requiring additional investigations at Alameda Point (DHS 1988). In fulfilling this Remedial Action Order, the Navy identified 34 sites (Installation Restoration [IR] Sites 1 through 35; IR Site 18 was eliminated) as CERCLA/IR sites between 1988 and 2004 (TtEMI 2003). IR site locations at Alameda Point are shown on Figure D-2.

Based on recent environmental data, new IR Sites 30, 31, 32, and 35 have been identified and are now located within the boundaries of four of the eight transfer parcels that are the subject of this report (PBC-3, EDC-21, EDC-3, and EDC-5, respectively).

On July 22, 1999, Alameda Point was placed on the National Priorities List (64 *Federal Register* 140, 39878–39885, Final Rule, July 22, 1999). The Comprehensive Environmental Response, Compensation, and Liability Information System identification number for NAS Alameda is CA2170023236.

D1.4 Previous Polynuclear Aromatic Hydrocarbon Studies at Alameda Point

Although samples were collected and analyzed for PAHs during previous investigations at the eight transfer parcels, most of the analytical results were not usable for risk assessment purposes. As a result of the analytical method used, results from previous investigations had elevated detection limits for the seven carcinogenic PAH analytes. The detection limits were elevated above the corresponding preliminary remediation goals (PRGs) for residential soil established by the U.S. EPA (U.S. EPA 2002), and these data consequently did not meet the data quality criteria for human-health risk assessment calculations. Detection limits achieved during the 2002 PAH assessment, however, were below PRGs.

D1.5 Site Locations

The eight transfer parcels investigated during the 2002 PAH assessment are located throughout Alameda Point as shown in Figure D-2. Site boundaries for IR sites contained within these transfer parcels are estimated and therefore subject to change. The current location of each transfer parcel is discussed in the sections that follow.

D1.5.1 TRANSFER PARCEL EDC-3

Transfer Parcel EDC-3 currently includes newly identified IR Site 32 and is located in the northwestern portion of Alameda Point, adjacent to the Oakland Inner Harbor. IR Site 14 (and a related buffer zone) and a portion of IR Site 15 are located adjacent to Transfer Parcel EDC-3.

D1.5.2 TRANSFER PARCEL EDC-5

Transfer Parcel EDC-5 currently includes newly identified IR Site 35 and is located in the northeastern portion of Alameda Point, an area that was formerly used for industrial activities. IR Sites 5, 6, 7, 8, and related buffer zones are located adjacent to Transfer Parcel EDC-5.

D1.5.3 TRANSFER PARCEL EDC-12

Transfer Parcel EDC-12 is located in the southeast portion of Alameda Point, immediately east of Seaplane Lagoon, in the former industrial core of NAS Alameda. IR Site 27 is located adjacent to Transfer Parcel EDC-12.

D1.5.4 TRANSFER PARCEL EDC-17

Transfer Parcel EDC-17 is located in the southernmost portion of Alameda Point, adjacent to the San Francisco Bay, in the former industrial core of NAS Alameda. IR Site 16 is located adjacent to Transfer Parcel EDC-17.

D1.5.5 TRANSFER PARCEL EDC-21

The boundary for Transfer Parcel EDC-21 coincides with the boundary for newly identified IR Site 31 and is located in the northeastern portion of Alameda Point in the Coast Guard housing area.

D1.5.6 TRANSFER PARCEL FED-1A

Transfer Parcel FED-1A currently includes newly identified IR Site 33 and is located in the western portion of Alameda Point in the wildlife refuge area.

D1.5.7 TRANSFER PARCEL PBC-1A

Transfer Parcel PBC-1A currently includes newly identified IR Site 34 and is located in the north-central portion of Alameda Point, adjacent to the Oakland Inner Harbor. A portion of IR Site 15 is located adjacent to Transfer Parcel PBC-1A.

D1.5.8 TRANSFER PARCEL PBC-3

The boundary for Transfer Parcel PBC-3 coincides with the boundary for newly identified IR Site 30 and is located in the northeastern portion of Alameda Point. IR Site 30 includes the George P. Miller Elementary School and the Woodstock Child Development Center.

D1.6 Site Characteristics

Transfer parcel-specific descriptions, operations, and known contamination, as well as general background information relevant to the Alameda area (including climate, topography, geology, hydrogeology, and industrial/fill history) are presented in the draft final Work Plan (BEI 2002a) and therefore are not repeated in this report. Table D-1 presents a summary of site characteristics (e.g., size, geology, and depth to groundwater) for the transfer parcels investigated during the 2002 PAH assessment.

D1.7 Organization

This PAH Field Activity Summary appendix consists of five sections with four attachments.

- Section 1 discusses the scope and background of the PAH assessment.
- Section 2 explains the investigation approach.
- Section 3 provides a brief presentation of the data collected.
- Section 4 provides a summary of the report.
- Section 5 lists the references.
- Attachment D1 contains the analytical results tables and database (on CD).
- Attachment D2 provides copies of the boring logs (on CD).
- Attachment D3 contains copies of the chain-of-custody forms (on CD).
- Attachment D4 provides data quality and validation information and includes data validation case narratives (on CD).

D2 INVESTIGATION APPROACH

This section presents the conceptual site model (CSM) for PAHs in soil and the data quality objectives (DQOs) developed to investigate the CSM. This section also discusses sampling design, field investigation activities, and data quality and validation results for the 2002 PAH assessment.

D2.1 Conceptual Site Model

PAHs in the fill material at Alameda Point are believed to have originated from former petroleum industry activities (e.g., manufactured gas plants and refineries) in the region before the Navy occupied the area. It is likely that these industries released waste, including PAHs, into the San Francisco Bay and what is now the Oakland Inner Harbor. PAHs are persistent in the environment due to low water solubility and high affinity for sorption to organic matter/clays; therefore, PAHs tend to accumulate in sediments like those found in the San Francisco Bay. When dredged bay sediments were used as fill material, it is likely that these sediments contained PAHs (Figure D-3). Because PAH contamination in fill material at Alameda Point is likely to be ubiquitous both horizontally and vertically, a grid sampling method was selected to characterize the nature and extent of the potential PAH contamination at the eight transfer parcels.

D2.2 Data Quality Objectives

As detailed in the draft final Work Plan (BEI 2002a), DQOs were developed following U.S. EPA guidance (U.S. EPA 2000a, 2000b). The DQOs used for the fieldwork described in this PAH Field Activity Summary are presented in Table D-2; the DQOs have been updated from those presented in the draft final Work Plan (BEI 2002a) to reflect the assessment of PAH concentrations at eight transfer parcels at Alameda Point.

D2.3 Sampling Design

The 2002 PAH assessment was designed to collect sufficient data to assess levels of PAHs in the artificial fill material associated with eight transfer parcels. This assessment used a grid-based boring location pattern (aligned with north-south and east-west axes) to standardize the collection of samples of fill soils. The sampling density was one sample per 2 acres for transfer parcels slated for residential or mixed reuse (i.e., Transfer Parcels EDC-5, EDC-12, EDC-17, EDC-21, and PBC-3) and one sample per 5 acres for transfer parcels slated for recreational reuse (i.e., Transfer Parcels FED-1A, PBC-1A, and EDC-3). Method reporting limits for previous PAH sampling at Alameda Point were too high to estimate risks associated with PAHs for over 90 percent of the samples analyzed; as a result, an analytical method with sufficiently low reporting limits was chosen for the 2002 PAH assessment (U.S. EPA Method 8270C, Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry with selected ion monitoring [SIM]).

D2.4 Field Investigation Summary

Field activities were conducted in accordance with the draft final Work Plan (BEI 2002a) and CLEAN Program standard operating procedures (SOPs) (BNI 2002). Subtasks completed as part of the PAH assessment are described in the following subsections.

D2.4.1 BOREHOLE LOCATION SURVEY

Before utility clearance, a California Registered Land Surveyor (CALVADA Surveying, Inc., Corona, California) established preliminary soil borehole locations with a site survey. Geographic information system and global positioning system technologies were used to locate 306 boreholes at the eight transfer parcels. Each location was given a discrete, sequential identification number that also referred to the site at which the borehole

was located. A complete discussion of identification of samples and locations is presented in the draft final Work Plan (BEI 2002a).

Some boreholes were relocated during field sampling activities, due either to subsurface utility issues or sampler refusal, i.e., failure to advance the sampler during two consecutive attempts. These borehole locations were resurveyed subsequent to completion of soil sampling activities. The initial round of surveying took place between April 25 and May 7, 2002, and the final round of surveying was conducted on June 3, 2002.

Borehole locations are referenced to the State Plane Coordinate System, North America, North American Datum (NAD) 1983. Northings/eastings are based on NAD 83 coordinate grids. Elevations were then assigned based on the North American Vertical Datum 1988. The measurements are accurate to plus or minus 0.01 foot vertically and to plus or minus 0.1 foot horizontally. Values for each borehole location were entered into the Bechtel Environmental Integrated Data Management System.

D2.4.2 UTILITY CLEARANCE AND GEOPHYSICAL SURVEY

Underground Services Alert, also referred to as Dig Alert, was used in conjunction with a geophysical subcontractor (NORCAL Geophysical Consultants, Inc., Petaluma, California) to assure that proposed boreholes were not located where they might encounter subsurface obstructions or buried utilities. The geophysical subcontractor used ground-penetrating radar and electromagnetic line-locating methods to evaluate the 306 boring locations. Geophysical clearance was conducted between April 25 and May 29, 2002. Sites were cleared sequentially so that no subsurface investigation activities took place prior to the completion of utility clearance activities.

The area within a 5-foot radius of each subsurface sampling location was cleared using the following protocol.

1. Dig Alert was notified, and meetings were scheduled with interested parties potentially affected by planned drilling activities. Due to the number of sampling locations, proposed borehole location maps were given to the potentially affected parties.
2. Utility companies investigated the location of subsurface utility lines in the immediate vicinity of each proposed sampling location. When a location was clear, the utility company would mark “OK” or a dot with red spray paint. When a location was found to have an obstruction, the utility company used color-coded spray paint to indicate that a new location was required.
3. Before borehole advancement, the geophysical subcontractor cleared each proposed sampling location for potential subsurface obstructions. When a location was found to have an obstruction, a new borehole location was marked.
4. A hand auger was advanced to a depth of 4 to 5 feet below ground surface (bgs) (for this investigation, ground surface refers to the top of the soil layer, excluding concrete, asphalt, gravel subbase, topsoil, and sod root zone) at each borehole to manually check for obstructions. The direct-push borehole was advanced adjacent to the hand-augered borehole, because soil samples were collected at depths shallower than 4 to 5 feet bgs.

D2.4.3 CORING/DIRECT-PUSH SAMPLING

Between April 27 and June 2, 2002, the drilling subcontractor (Precision Sampling, Inc., Richmond, California) performed coring and direct-push sampling activities as part of the PAH assessment. If present, asphalt or concrete was cored, and the surface soil was cleared of visible asphalt particles before sampling. The direct-push method involves use of a mounted hydraulic/percussion drive point. The hydraulic/percussion drive point was advanced downward through the soil. A retractable piston inside the sampler prevented soil collection until the desired sampling depth was reached. The direct-push rods were advanced to the desired depth, where a soil sample was collected in either a split-barrel sampler with stainless steel liners or a hollow-core rod with a butyrate liner.

Each soil boring was visually observed, described, and logged under the direction of a California Registered Geologist and in accordance with SOP 3, Borehole Logging (BNI 2002). Soil boring descriptions included lithology, color, relative density or consistency, moisture, grain size, texture, and other physical features. Soil types were classified according to the Unified Soil Classification System (DOI 1985). Geologic borehole logs for all sampling locations are presented by site on CD in Attachment D2. When the marsh crust layer (an organic-rich peat and grass layer) was encountered, drilling at that location was stopped, and only the fill material above was homogenized and sampled. When native material (e.g., the Young Bay Mud) was encountered at less than 8 feet bgs, it was included in the sample.

Two types of field instruments were used during direct-push sampling to monitor for potentially toxic contaminants:

- flame ionization detector (FID) used in the borehole and in the breathing zone to screen for the presence of volatile organic compounds
- combustible gas indicator used in the borehole to screen for explosive gases

In addition, visual indications of contamination were noted in the field logbook and boring logs.

D2.4.4 SAMPLING METHODOLOGY

Soil samples were collected from the direct-push borings by extraction from the butyrate or stainless steel liners. Extracted samples were placed on a sample table covered with a clean (borehole-dedicated) plastic liner. Samples were extracted from the liner or sleeve in a noninvasive manner that allowed for sample preservation and vertical continuity. Next, the linear core was laid out on the sample table while still inside the butyrate liner, such that a photograph could be taken (with an informational sign describing the sample location, time, and identifying the top of the core). Upon inspection by a field geologist, sample sections representing fill intervals of 0 to 0.5 foot, 0.5 foot to 2 feet, 2 to 4 feet, and 4 to 8 feet bgs were each transferred with a separate plastic scoop into an aluminum tray. Each sample was then homogenized based on the procedure outlined in the draft final Work Plan (BEI 2002a) and the U.S. EPA Region 4 Environmental Investigation Standard Operating Procedures and Quality Assurance Manual (U.S. EPA 2001). This field homogenization consisted of the following quartering procedure performed in a dedicated, disposable aluminum tray.

1. The material in the sample pan was divided into quarters, and each quarter was mixed individually using a dedicated, disposable plastic scoop.
2. Two quarters were then combined to form halves.
3. The two halves were mixed to form a homogeneous matrix.
4. The procedure was repeated several times until the samples were adequately mixed.

Each individual sample was placed in an 8-ounce glass jar provided by the laboratory for shipment. Samples were analyzed for semivolatile organic compounds using U.S. EPA Method 8270C SIM.

The Sampling and Analysis Plan attached to the draft final Work Plan (BEI 2002a) outlined the planned collection of a total of 1,224 samples (306 locations at four depths) at the eight transfer parcels. Upon project completion, 1,201 samples (from 305 locations) had been collected; 23 samples were not collected during the field effort due to sampler/hand-auger refusal, poor recovery, elevated FID/lower explosive limit concentrations, or the presence of marsh crust. The number of samples collected at each transfer parcel is shown by depth interval in Table D-3. There was only one borehole (32EDC-12-17) where no samples could be collected.

In addition, 119 duplicate samples, 21 rinsate samples, and 2 source blank samples were collected for quality control (QC) purposes during the field program.

D2.4.5 SAMPLE CUSTODY AND DOCUMENTATION

Samples were collected and documented in accordance with CLEAN Program SOPs. Sample identification, storage, and shipment and chain-of-custody records are outlined in this subsection.

Identification of Samples and Locations

All environmental media samples collected to support this project were given unique ten-character identifiers as described in attachments to the draft final Work Plan (BEI 2002a) (Attachment A, Sampling and Analysis Plan, and Attachment B, Data Management Plan) and CLEAN Program Procedure T 2.2, Sample Information Management System (BNI 2002). The ten-character identifier consisted of a four-character CTO identifier, a four-character sequential sample number, and a two-digit sequential container number (01 for the first sample container, 02 for the second):

Example: C032000402

where

C032 = the project CTO number
0004 = the sequential sample number (in this case, fourth sample collected)
02 = the sample container identification number

In addition, the sample locations were also given unique 7-to-10-character identifiers which contained two hyphens. The sample location identifier consisted of a 2-character CTO identifier, a hyphenated 4- or 5-character parcel identifier, and, following a second hyphen, a 1- to 3-character sequential borehole identifier:

Example: 32EDC-5-18

where

32 = the project CTO number
EDC-5 = the transfer parcel
-18 = the sequential borehole number

Sample Storage and Shipment

Upon collection, samples were preserved in accordance with procedures described in U.S. EPA SW-846 (U.S. EPA 2000c). Field and QC samples were maintained at approximately 4 degrees Celsius until shipment to the laboratory. The following procedure was used to pack samples for shipment.

1. A sample label was attached to each container and covered with packing tape to prevent moisture damage.
2. A custody seal was placed over the container lid/jar seal to prevent tampering before sample analysis.
3. All glass containers were wrapped in bubble-wrap and sealed in zip-lock bags.
4. Coolers were packed with samples, and ice was used to fill all possible void space. All contents were double-bagged to prevent leakage during shipment.
5. The completed chain-of-custody forms were placed inside a sealed zip-lock bag and taped to the inside of each cooler lid.
6. The cooler seal was covered with two custody seals (one front, one back). Custody seals were then covered with clear packing tape to prevent accidental breaks.
7. The closed cooler was secured with filament-type strapping tape to assure contents did not spill during sample shipment (by FedEx) to the analytical laboratory.

Chain-of-Custody Records

Chain-of-custody protocols, defined in SOP 10, Sample Custody, Transfer, and Shipment (BNI 2002), were followed during the sampling program. Chain-of-custody records accompanied the samples from the field to the laboratory. The records were maintained from the time of sample collection to the time of submittal to delivery courier.

Chain-of-custody records were signed as relinquished or received each time the sample changed possession. The signed chain-of-custody form was sealed in a zip-lock bag and taped to the inside of the cooler lid. Signed custody seals were then attached over the lid/cooler seal to prevent tampering with samples during shipment to the laboratories. Chain-of-custody documentation is presented on CD in Attachment D3.

D2.4.6 INVESTIGATION-DERIVED WASTE MANAGEMENT

Investigation-derived waste (IDW) handling procedures followed the IDW Management Plan included as Attachment D to the draft final Work Plan (BEI 2002a). IDW generated during the PAH assessment activities included soil cuttings, concrete and asphalt cores, personal protective equipment, and decontamination water. IDW was placed into 55-gallon drums, a roll-off bin, and a Baker tank, which were all sealed, labeled, and stored in a designated temporary storage area near the on-site field trailer. This temporary storage area was fenced and locked to prevent tampering.

During fieldwork, the Site Safety and Health Representative maintained records of the following at the field trailer: IDW-container identification number; contents; generator's name, address, and phone number; generation date; and CTO number. All IDW containers were managed as potentially hazardous material in accordance with Title 22 *California Code of Regulations*, Division 4.5, Chapter 10. Specifically, drums were stored on pallets, the Baker tank was stored in a plastic secondary containment device, and the roll-off bin was stored on plastic sheeting. All IDW containers were inspected weekly, and inspection reports were submitted to the BEI Safety and Health Manager.

On August 7, 2002, following receipt of the analytical results for waste profiling, IDW from one Baker tank and twenty-four 55-gallon drums was transferred by the waste management subcontractor (Ecology Control Industries, Torrance, California) to the Crosby and Overton facility for nonhazardous waste in Long Beach, California.

D2.4.7 DEVIATIONS FROM THE DRAFT FINAL WORK PLAN

Three primary deviations from the draft final Work Plan (BEI 2002a) occurred during the fieldwork portion of the investigation. Two of the three deviations relate to improved soil sampling techniques. The first modification was to use stainless steel liners during sampling rather than the butyrate liners discussed in the draft final Work Plan. During field sampling, the presence of heaving sands resulted in butyrate liners being locked within the sample barrel. When this happened, the samples had to be extracted from the sample barrel with a mallet, thus reducing the ability to accurately separate samples by depth. Therefore, stainless steel barrel liners were used because they were less likely to become locked within the sample barrel.

The second modification was made to the homogenization procedure. The draft final Work Plan (BEI 2002a) describes the homogenization procedure for each soil sample as a repeated quartering and mixing process. In addition to this quartering and mixing process, soil was "folded" from the bottom of the tray into the top of the tray. The folding process prevented the settling of finer-grained materials and provided a homogenized sample representative of all grain sizes.

The third modification was made at the request of the tenants in the residential areas where sampling was conducted. The tenants asked that the top 6 inches of each boring be backfilled with topsoil such that grassy or garden areas would not contain a solid core at the ground surface. To accommodate this request, the top 6 inches of each boring were backfilled with topsoil purchased from a local hardware store.

D2.5 Data Quality and Validation

Field and laboratory QC samples were collected during the PAH assessment. QC for analytical data included data verification and validation. These activities were performed to assure that the analytical data obtained from the field activities at Alameda Point were adequate to meet the established DQOs of the draft final Work Plan (BEI 2002a). Attachment D4 contains a detailed description of the data quality tasks conducted for the PAH assessment. Table D-4 shows a breakdown of data quality by transfer parcel. In summary, results from 12 analytes in 15 samples were rejected due to recovery values that fell below acceptance limits of the analytical method. This resulted in 99.9 percent of the data collected being usable (20,409 out of 20,434 analytes).

D3 DATA PRESENTATION

Seventeen PAH compounds were analyzed for and evaluated during the 2002 PAH assessment; seven of these PAH compounds were carcinogenic (cancer-causing) and ten compounds were noncarcinogenic. To simplify the discussion of analytical results, benzo(a)pyrene (B[a]P) equivalent concentrations were calculated for each sample. This section presents the methodology used in this PAH Field Activity Summary for calculating B(a)P equivalent concentrations for carcinogenic PAHs and provides a summary of the PAH assessment results. It also compares B(a)P equivalent concentrations with the human-health screening criterion (620 micrograms per kilogram [µg/kg]) and compares the noncarcinogenic PAH concentrations with U.S. EPA Region 9 human-health PRGs for soil under a residential land-use scenario (U.S. EPA 2002).

D3.1 Calculation of Benzo(a)pyrene Equivalent Concentrations

The characterization of chemical contamination at the eight transfer parcels focused on the evaluation of carcinogenic PAHs by normalizing the toxicity of each carcinogenic PAH relative to the toxicity of B(a)P. Because B(a)P is the only carcinogenic PAH for which U.S. EPA publishes a cancer slope factor, B(a)P equivalent concentrations were calculated for each of the following seven carcinogenic PAHs:

- benz(a)anthracene
- benzo(b)fluoranthene
- benzo(k)fluoranthene
- benzo(a)pyrene
- chrysene
- dibenz(a,h)anthracene
- indeno(1,2,3-cd)pyrene

Toxicity equivalency factors for these seven PAHs are shown in Table D-5 (U.S. EPA 1993).

Each carcinogenic PAH concentration was multiplied by the assigned toxicity equivalency factor and the results were summed to achieve a total B(a)P equivalent concentration. For results reported as "nondetect" (i.e., qualified as "U" [analyte not reported above the detection limit] or "UJ" [analyte was analyzed for but not detected; the sample detection limit is an estimated value]), a value of one-half the detection limit was used. Estimated values ("J" qualified) were used without modification. For samples with associated field duplicates, the highest analyte concentration was selected to represent the sample results.

D3.2 Polynuclear Aromatic Hydrocarbon Assessment Results

To put the results of the B(a)P equivalent values into context, the results were compared with a human-health screening criterion of 620 µg/kg. This criterion was the lowest value agreed upon by the Navy, regulatory agencies, and the City of Alameda during the PAH technical meeting on May 31, 2001 (SWDIV 2001). This screening criterion

corresponds to a risk of 1×10^{-5}. Section D3.2.1 summarizes the comparison for the B(a)P equivalent data.

This PAH Field Activity Summary considered PRGs calculated by U.S. EPA Region 9 under a residential land-use scenario (U.S. EPA 2002). Of the ten noncarcinogenic PAHs, PRGs were available for six. Surrogate PRGs were selected to enable evaluation of the remaining four constituents. These surrogate PRGs were based on chemical similarity with compounds for which PRGs have been developed. Table D-6 presents the PRGs used as the human-health screening criteria for the noncarcinogenic PAHs.

D3.2.1 CARCINOGENIC POLYNUCLEAR AROMATIC HYDROCARBONS

A total of 1,202 soil samples (1,224 planned samples minus 22 uncollectable samples) were collected during the PAH assessment. Analytical results for six carcinogenic analytes in 15 samples were rejected for use after data validation and verification (Attachment D4); analytical results for the remaining 1,187 samples (1,202 minus the 15 rejected samples) were determined to be usable. B(a)P equivalent concentrations were calculated for each of these 1,187 samples.

A summary of B(a)P equivalent results for all sites is presented in Table D-7. This table presents the total number of B(a)P equivalent concentrations at each site that exceed the screening criterion of 620 µg/kg, as well as that number expressed as a percentage of the total number of samples collected at each site. Table D-7 also references the numbers of the tables and figures where analytical data for each site can be viewed numerically and graphically. In Attachment D1, Tables D1-1 through D1-8 present the complete analytical data for carcinogenic PAHs. In this Appendix D, Figures D-4 through D-8 show these data graphically.

Transfer Parcel EDC-5 had the highest percent (6 percent) of B(a)P equivalent concentrations above 620 µg/kg. At Transfer Parcel EDC-5, 31 samples (out of 540 total) had B(a)P equivalent concentrations above 620 µg/kg. All of these samples were fairly evenly distributed across the four depth intervals. The 31 samples with concentrations exceeding 620 µg/kg were predominantly located in the northeastern portion of the transfer parcel (see Figure D-8).

Nine samples (out of 316 total) at Transfer Parcel FED-1A had B(a)P equivalent concentrations above 620 µg/kg. The nine samples with concentrations exceeding 620 µg/kg were from locations in the southeastern portion of the site and generally seem to follow the layout of the former runway.

Transfer Parcels EDC-3, EDC-12, EDC-17, and PBC-3 had no B(a)P equivalent concentrations above 620 µg/kg. At Transfer Parcel EDC-21, one sample (out of 43 total) had a B(a)P equivalent concentration above 620 µg/kg. At Transfer Parcel PBC-1A, two samples (out of 38 total) had B(a)P equivalent concentrations above 620 µg/kg.

D3.2.2 NONCARCINOGENIC POLYNUCLEAR AROMATIC HYDROCARBONS

Noncarcinogenic PAH concentrations ranged from 0.30 µg/kg (2-methylnaphthalene) at Transfer Parcel EDC-12 to 72,000 µg/kg (pyrene) at Transfer Parcel EDC-5. Complete analytical results for the noncarcinogenic PAHs are presented in Attachment D1, Tables D1-9 through D1-16.

D4 SUMMARY

PAH-specific soil sampling and analysis were conducted at eight transfer parcels at Alameda Point. The primary purpose of the PAH assessment was to collect PAH-specific data at eight transfer parcels where no PAH release or disposal had been documented. Soil samples were analyzed for PAHs by the laboratory using U.S. EPA Method 8270C SIM. This analytical method has lower detection limits than other methods and provided a more accurate data set than methods used in previous investigations.

The 2002 PAH assessment used a grid-based boring location pattern (aligned with north-south and east-west axes) to standardize the collection of samples of fill soils. The sampling density was one sample per 2 acres for transfer parcels proposed for residential or mixed reuse (i.e., Transfer Parcels EDC-5, -12, -17, -21, and PBC-3) and one sample per 5 acres for transfer parcels proposed for recreational reuse (i.e., Transfer Parcels FED-1A, PBC-1A, and EDC-3). Four samples were collected at each boring location from the following depth intervals: 0.0 to 0.5 foot, 0.5 foot to 2.0 feet, 2.0 to 4.0 feet, and 4.0 to 8.0 feet bgs. These depth intervals were chosen to characterize soil to which a person might be exposed under four possible exposure scenarios.

B(a)P equivalent concentrations were calculated for 1,202 soil samples collected during the PAH assessment. These B(a)P equivalent concentrations were compared with the human-health screening criterion of 620 µg/kg. Transfer Parcel EDC-5 had the highest percentage (6 percent) of B(a)P equivalent concentrations above 620 µg/kg. At Transfer Parcel EDC-5, 31 samples (out of 540 total) had B(a)P equivalent concentrations above 620 µg/kg. Nine samples (out of 316 total) at Transfer Parcel FED-1A had B(a)P equivalent concentrations above 620 µg/kg. Transfer Parcels EDC-3, -12, -17, and PBC-3 had no B(a)P equivalent concentrations above 620 µg/kg. At Transfer Parcel EDC-21, one sample (out of 43 total) had a B(a)P equivalent concentration above 620 µg/kg. At Transfer Parcel PBC-1A, two samples (out of 38 total) had B(a)P equivalent concentrations above 620 µg/kg.

D5 REFERENCES

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U.S. EPA. *See* United States Environmental Protection Agency.

TABLES

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Table D-1
Transfer Parcel Characteristics Investigated During PAH Assessment

Transfer Parcel	Size (acres)	GROUNDWATER[a]		BAY MUD[a,b]	
		Depth to GW (feet bgs)	Number of Borings in Which GW was Encountered[c]	Depth to Bay Mud[b] (feet bgs)	Number of Borings in Which Bay Mud[b] was Encountered[d]
EDC-3	115	3.0 to 9.0	21/22	3.0 to 7.0	4/22
EDC-5	286	2.5 to 8.5	122/136	4.5 to 8.5	37/136
EDC-12	69	4.0 to 8.5	25/33	not encountered	0/33
EDC-17	17	5.0 to 8.5	7/9	6.0	1/9
EDC-21	24	2.0 to 8.5	5/12	2.5 to 6.5	6/12
FED-1A	400	1.0 to 8.0	79/79	not encountered	0/79
PBC-1A	56	3.0 to 6.5	10/10	6.0 to 7.0	4/10
PBC-3	7	6.5	4/4	4.0 to 5.5	4/4

Notes:
[a] information from boring logs contained in Attachment D2
[b] the Young Bay Mud, which is the upper portion of the Bay Sediment Unit
[c] number of borings in which groundwater was encountered / total number of borings in the transfer parcel
[d] number of borings in which the Bay Mud was encountered / total number of borings in the transfer parcel

Acronyms/Abbreviations:
bgs – below ground surface
EDC – economic development conveyance
FED – federal agency
GW – groundwater
PAH – polynuclear aromatic hydrocarbon
PBC – public benefit conveyance

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Table D-2
Data Quality Objectives

Step 1 State the Problem	Step 2 Identify the Decisions	Step 3 Identify Inputs to the Decisions	Step 4 Define the Study Boundaries	Step 5 Develop Decision Rules	Step 6 Specify Tolerable Limits on Decision Errors	Step 7 Optimize the Sampling Design
PAHs have been reported in artificial fill soils at Alameda Point and other locations in the region. The PAHs are believed to have originated from petroleum industries such as manufactured gas plants and petroleum refineries that operated in the region before the Navy occupied Alameda Point. Fill materials containing PAHs released to the environment by these industries were dredged from the San Francisco Bay and the present-day Oakland Inner Harbor and used to create large portions of Alameda Point that were previously marshes, shallow bays, and low-lying land. Levels of PAHs in artificial fill materials associated with eight transfer parcels at Alameda Point are not currently known. This study will assess the concentrations of PAHs in the fill material and results will be used to determine whether the parcels will be recommended for transfer or for further action.	What are the PAH concentrations in soil at the eight transfer parcels at Alameda Point?	The Navy has designated the boundaries of the eight transfer parcels. Within each transfer parcel, a program designed for unbiased data collection has been established. The program will include a systematic sampling design with data points on a specified grid. The information required will be the concentrations of PAHs reported in soil samples collected from each of the eight transfer parcels and analyzed using U.S. EPA Method 8270C SIM. The information required for data analysis will be the total concentration of seven carcinogenic PAHs normalized for each sample based on relative toxicity (expressed as B[a]P equivalents). This B(a)P equivalent will be used as an indication of the human-health risk associated with PAHs in soil.	The boundaries of the study area are as follows. • The lateral boundaries will encompass the boundaries of the following eight transfer parcels at Alameda Point: EDC-3, -5, -12, -17, -21; FED-1A; PBC-1A, - 3. • The vertical boundaries will encompass artificial fill soil from the ground surface (excluding concrete, asphalt, gravel subbase, topsoil, and the sod root zone) to approximately 8 feet bgs. If the marsh crust is encountered, it will be the vertical lower limit. No samples will be collected at or below the marsh crust. • The investigation will be conducted in 2002.	If the minimum amount of data is collected to reliably calculate PAH concentrations at each of the eight transfer parcels, then transfer decisions can be made. If the minimum amount of data is not collected to reliably calculate PAH concentrations at each of the eight transfer parcels, then transfer decisions can not be made and additional samples may need to be collected.	Sampling design error and measurement error will be limited to the extent practicable. Sampling design error was limited in this study by establishing a grid with a randomly determined origin and a sampling density based on designated future use. U.S. EPA Method 8270C SIM was selected to minimize the occurrence of potential elevated laboratory detection limits.	The sampling design will be optimized as follows: • At each transfer parcel, the sampling density will be one sampling location per 2 acres at parcels proposed for residential or mixed reuse, and one sampling location per 5 acres at parcels designated for recreational reuse. • Approximately 306 direct-push borings will be advanced at the eight transfer parcels, with soil samples collected from each location at four depth intervals: 0.0 to 0.5 foot, 0.5 foot to 2.0 feet, 2.0 to 4.0 feet, and 4.0 to 8.0 feet bgs.

Acronyms/Abbreviations:
B(a)P – benzo(a)pyrene
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon
SIM – selected ion monitoring
SWDIV – Southwest Division Naval Facilities Engineering Command
U.S. EPA – United States Environmental Protection Agency

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Table D-3
Number of Samples by Transfer Parcel and Depth Interval

Transfer Parcel	Number of Borings Outlined in Work Plan	Number of Borings Completed	Total Number of Samples Collected	ACTUAL NUMBER OF SAMPLES COLLECTED BY DEPTH INTERVAL			
				0–0.5 foot bgs	0.5 foot–2.0 feet bgs	2.0–4.0 feet bgs	4.0–8.0 feet bgs
EDC-3	22	22	88	22	22	22	22
EDC-5	136	136	540	136	136	135	133
EDC-12	34	33	132	33	33	33	33
EDC-17	9	9	36	9	9	9	9
EDC-21	12	12	43	12	12	11	8
FED-1A	79	79	316	79	79	79	79
PBC-1A	10	10	38	10	10	9	9
PBC-3	4	4	9	4	3	2	0
TOTAL	**306**	**305**	**1,202**	**305**	**304**	**300**	**293**

Acronyms/Abbreviations:
bgs – below ground surface
EDC – economic development conveyance
FED – federal agency
PBC – public benefit conveyance

Table D-4
Data Quality by Transfer Parcel

Transfer Parcel	Number of Samples Qualified as Unusable	Number of Compounds Rejected During Data Validation	Number of Usable Samples/Number of Total Samples	Percent of Usable Data (%)
EDC-3	6	5	82/88	93
EDC-5	2	2	538/540	99
EDC-12	0	0	132/132	100
EDC-17	0	0	36/36	100
EDC-21	3	2	40/43	93
FED-1A	4	3	312/316	99
PBC-1A	0	0	38/38	100
PBC-3	0	0	9/9	100
TOTAL	**15**	**12**	**1,187/1,202**	**99**

Acronyms/Abbreviations:
EDC – economic development conveyance
FED – federal agency
PBC – public benefit conveyance

Table D-5
Relative Toxicity Equivalency Factors for Seven Carcinogenic PAHs

Polynuclear Aromatic Hydrocarbon	Toxicity Equivalency Factor
benz(a)anthracene	0.1
benzo(b)fluoranthene	0.1
benzo(k)fluoranthene	0.01
benzo(a)pyrene	1
chrysene	0.001
dibenz(a,h)anthracene	1
indeno(1,2,3-cd)pyrene	0.1

Source: U.S. EPA 1993

Acronyms/Abbreviation:
PAH – polynuclear aromatic hydrocarbon

Table D-6
Preliminary Remediation Goals for Ten Noncarcinogenic PAHs

Polynuclear Aromatic Hydrocarbon	Preliminary Remediation Goal (µg/kg)	Surrogate
acenaphthene	3,700,000	none
acenaphthylene	3,700,000	acenaphthene
anthracene	22,000,000	none
benzo(g,h,i)perylene	2,300,000	pyrene
fluoranthene	2,300,000	none
fluorene	2,600,000	none
2-methylnaphthalene	56,000	naphthalene
naphthalene	56,000	none
phenanthrene	22,000,000	anthracene
pyrene	2,300,000	none

Source: U.S. EPA 2002

Acronyms/Abbreviations:
µg/kg – micrograms per kilogram
PAH – polynuclear aromatic hydrocarbon

Table D-7
B(a)P Equivalent Results

Transfer Parcel	Total Number of Samples Collected	Number of Samples with B(a)P Equivalent Concentration > 620 µg/kg	Percent of Samples with B(a)P Equivalent Concentrations > 620 µg/kg (%)	Figure Where Data Are Shown Graphically	Table in Appendix B Where Data Are Presented
EDC-3	88	0	0	3-1	B-1
EDC-5	540	31	6	3-2	B-2
EDC-12	132	0	0	3-3	B-3
EDC-17	36	0	0	3-3	B-4
EDC-21	43	1	2	3-4	B-5
FED-1A	316	9	3	3-5	B-6
PBC-1A	38	2	5	3-1	B-7
PBC-3	9	0	0	3-4	B-8

Acronyms/Abbreviations:
B(a)P – benzo(a)pyrene
EDC – economic development conveyance
FED – federal agency
µg/kg – micrograms per kilogram
PBC – public benefit conveyance

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Figures

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N00236_003722
ALAMEDA POINT

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FIGURES D-1 AND D-2

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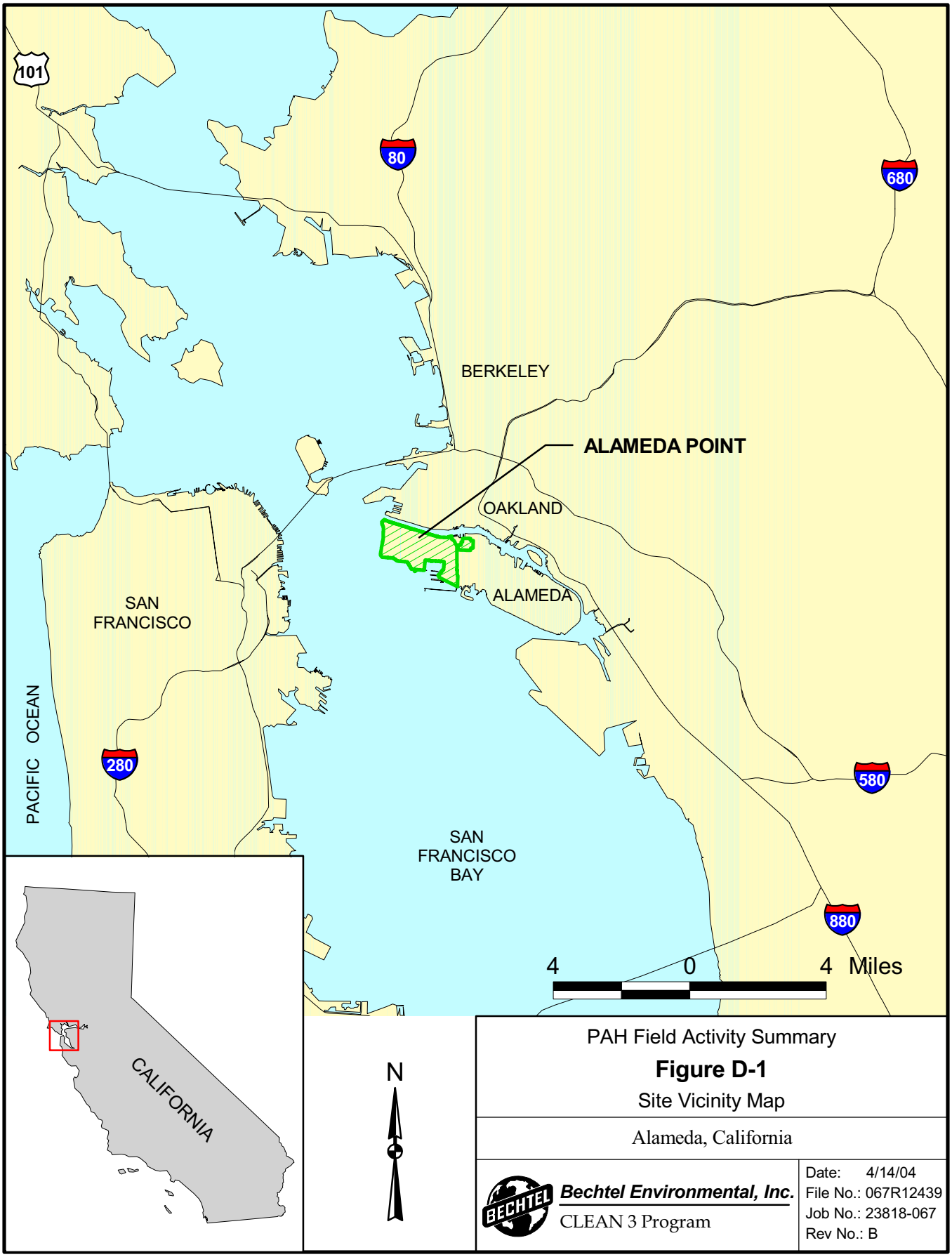

PAH Field Activity Summary

Figure D-1

Site Vicinity Map

Alameda, California

Bechtel Environmental, Inc.

CLEAN 3 Program

Date: 4/14/04
File No.: 067R12439
Job No.: 23818-067
Rev No.: B

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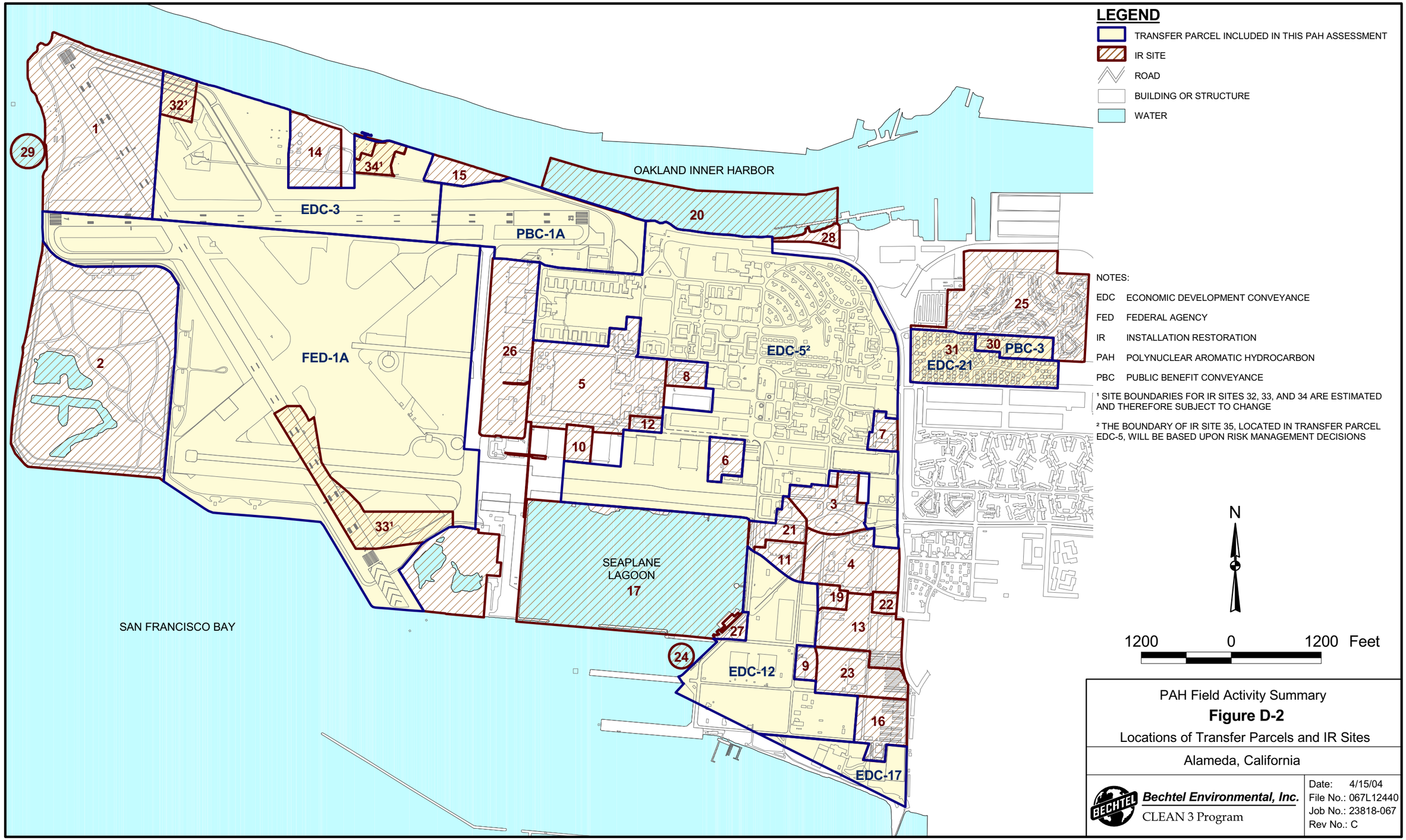
SENSITIVE



LEGEND

- TRANSFER PARCEL INCLUDED IN THIS PAH ASSESSMENT
- IR SITE
- ROAD
- BUILDING OR STRUCTURE
- WATER

NOTES:

EDC ECONOMIC DEVELOPMENT CONVEYANCE

FED FEDERAL AGENCY

IR INSTALLATION RESTORATION

PAH POLYNUCLEAR AROMATIC HYDROCARBON

PBC PUBLIC BENEFIT CONVEYANCE

¹ SITE BOUNDARIES FOR IR SITES 32, 33, AND 34 ARE ESTIMATED AND THEREFORE SUBJECT TO CHANGE

² THE BOUNDARY OF IR SITE 35, LOCATED IN TRANSFER PARCEL EDC-5, WILL BE BASED UPON RISK MANAGEMENT DECISIONS

N

1200 0 1200 Feet

PAH Field Activity Summary

Figure D-2

Locations of Transfer Parcels and IR Sites

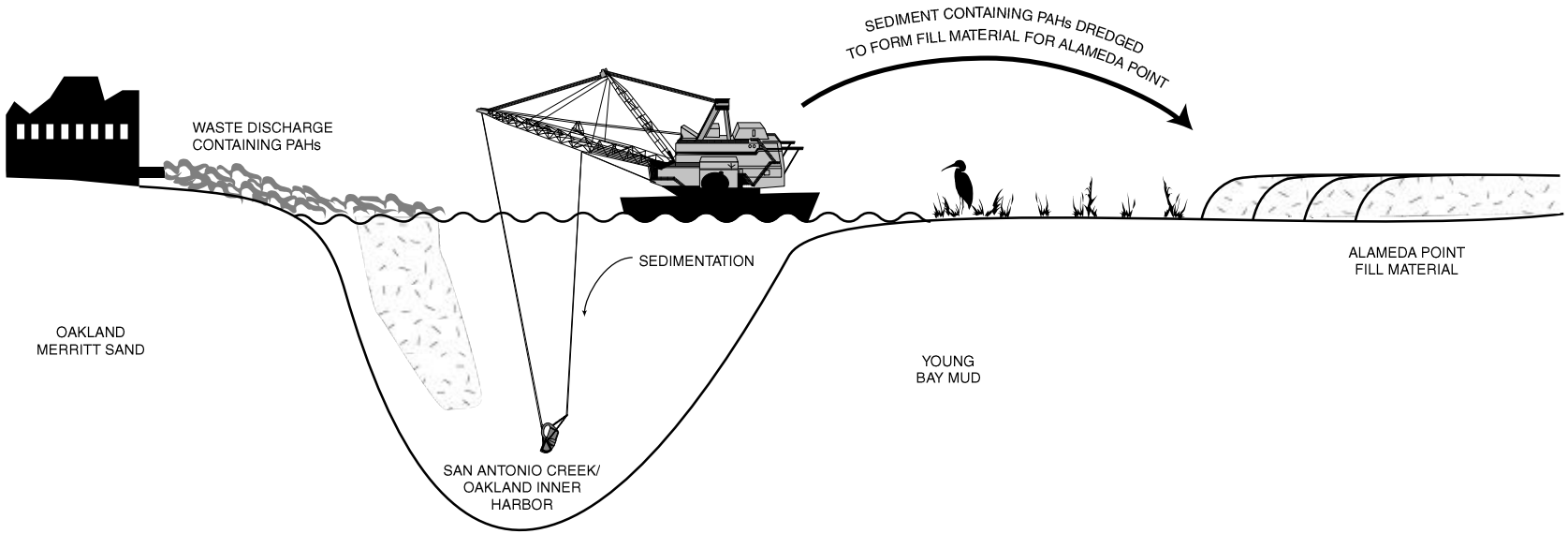
Alameda, California

Bechtel Environmental, Inc.

CLEAN 3 Program

Date: 4/15/04
File No.: 067L12440
Job No.: 23818-067
Rev No.: C

SENSITIVE



NOTE:

PAH - POLYNUCLEAR AROMATIC HYDROCARBON

Field Activity Summary

Figure D-3

Conceptual Site Model

Alameda, California

Bechtel Environmental, Inc.

CLEAN 3 Program

Date: 5/20/04
File No.: 067X12428
Job No.: 23818-067
Rev No.: C

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FIGURES D-4 THROUGH D-6

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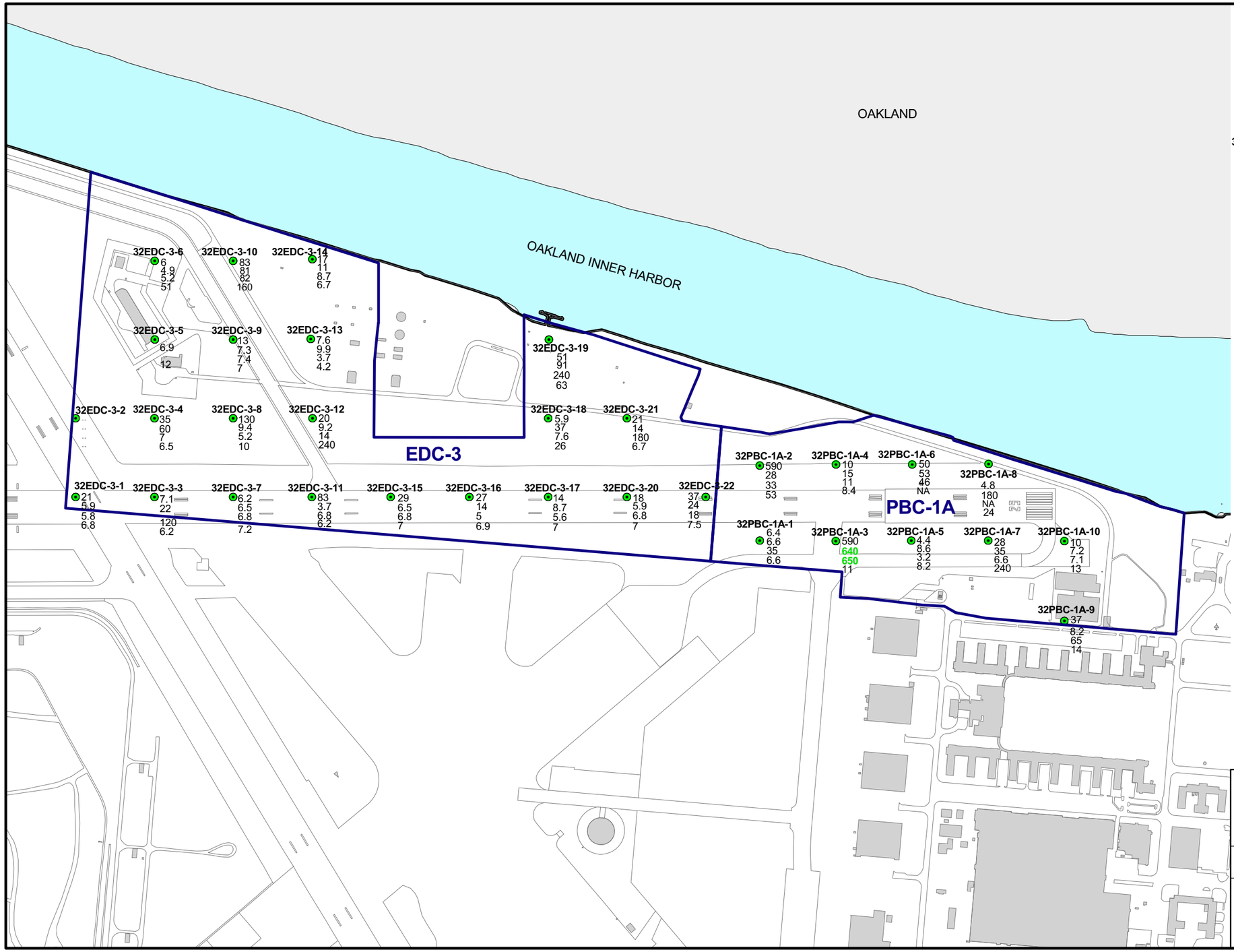


LEGEND

- TRANSFER PARCEL BOUNDARY
- ROAD
- BUILDING OR STRUCTURE
- WATER

32PBC-1A-10
10
7.2
7.1
13

2002 PAH ASSESSMENT SAMPLING LOCATION AND B(a)P EQUIVALENT CONCENTRATIONS IN µg/kg

- 0 – 0.5 FOOT bgs
- 0.5 FOOT – 2 FEET bgs
- 2 – 4 FEET bgs
- 4 – 8 FEET bgs

NOTES:

--	DASH INDICATES B(a)P EQUIVALENT CONCENTRATION NOT AVAILABLE - DATA REJECTED DURING VALIDATION
640	BOLDFACE TYPE INDICATES B(a)P EQUIVALENT CONCENTRATION GREATER THAN 620 µg/kg
B(a)P	BENZO(a)PYRENE
bgs	BELOW GROUND SURFACE
EDC	ECONOMIC DEVELOPMENT CONVEYANCE
µg/kg	MICROGRAMS PER KILOGRAM
NA	UNABLE TO COLLECT SAMPLE
PBC	PUBLIC BENEFIT CONVEYANCE
PAH	POLYNUCLEAR AROMATIC HYDROCARBON

N

600 0 600 Feet

PAH Field Activity Summary

Figure D-4

B(a)P Equivalent Concentrations at Transfer Parcels EDC-3 and PBC-1A

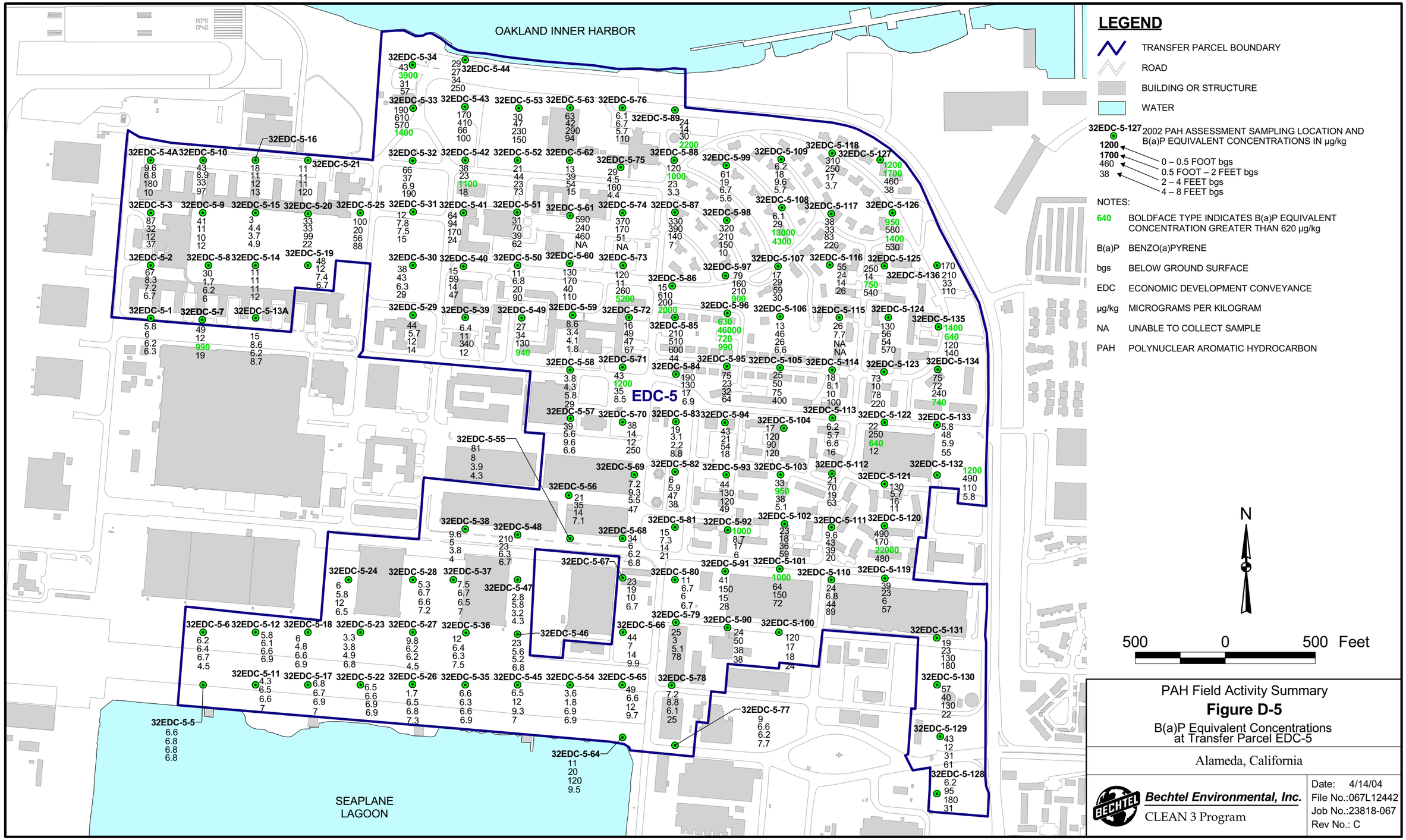
Alameda, California

Bechtel Environmental, Inc.
CLEAN 3 Program

Date : 4/14/04
File No.: 067L12441
Job No.: 23818-067
Rev No.: C

SENSITIVE

SENSITIVE



PAH Field Activity Summary

Figure D-5

B(a)P Equivalent Concentrations at Transfer Parcel EDC-5

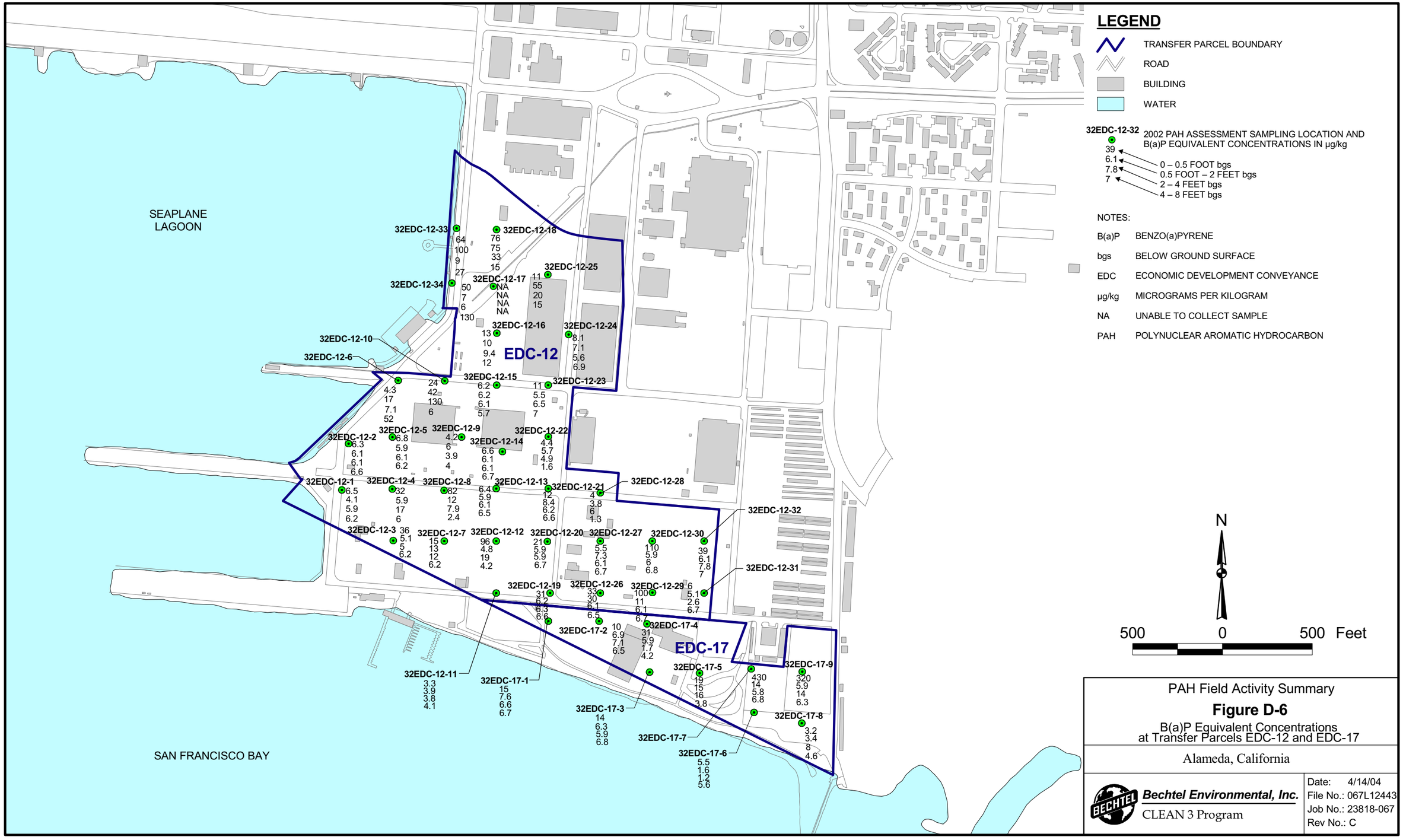
Alameda, California

Bechtel Environmental, Inc.
CLEAN 3 Program

Date: 4/14/04
File No.:067L12442
Job No.:23818-067
Rev No.: C

SENSITIVE

SENSITIVE



PAH Field Activity Summary

Figure D-6

B(a)P Equivalent Concentrations at Transfer Parcels EDC-12 and EDC-17

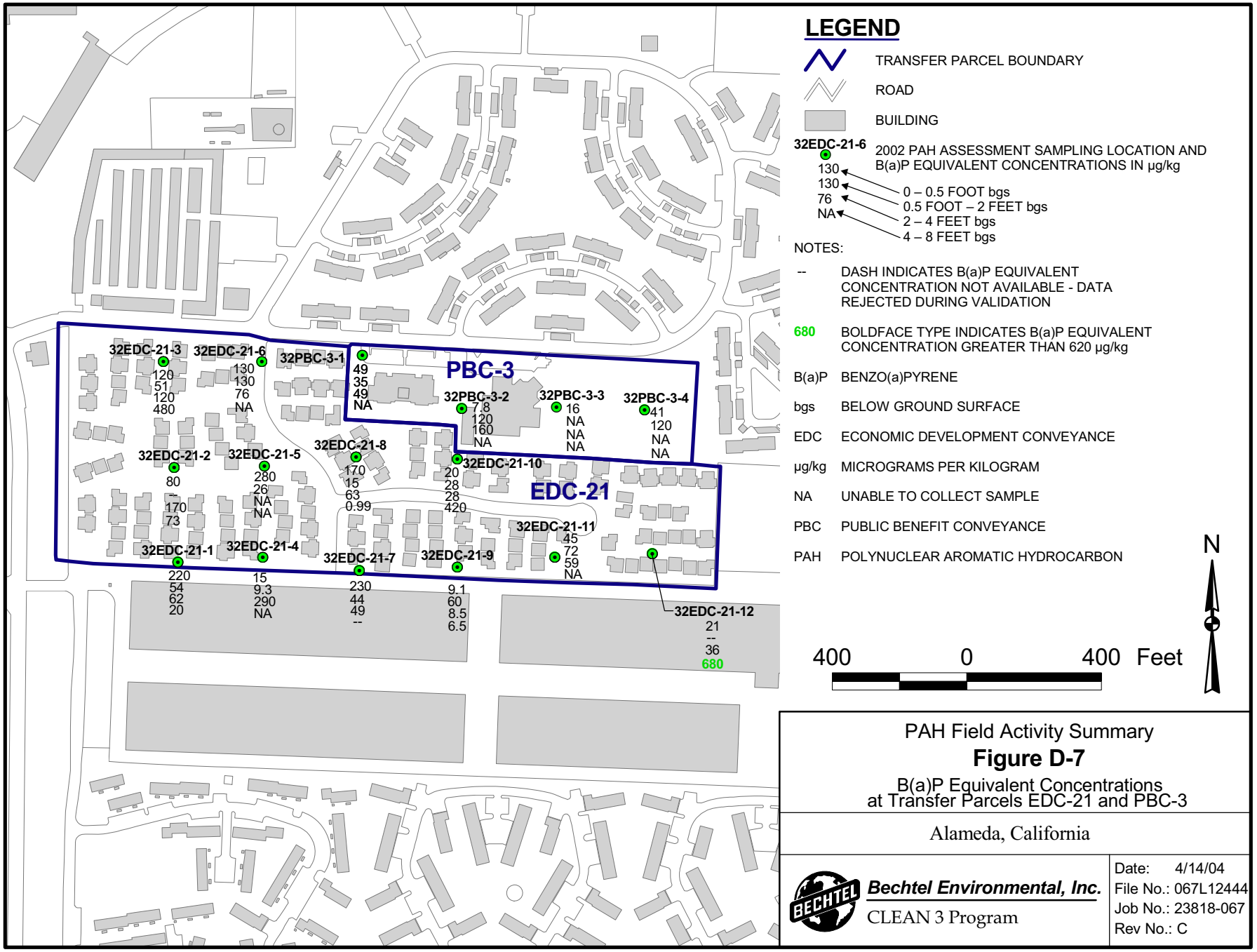
Alameda, California

Bechtel Environmental, Inc.

CLEAN 3 Program

Date: 4/14/04
File No.: 067L12443
Job No.: 23818-067
Rev No.: C

SENSITIVE



LEGEND

TRANSFER PARCEL BOUNDARY

ROAD

BUILDING

32EDC-21-6
130
130
76
NA

2002 PAH ASSESSMENT SAMPLING LOCATION AND B(a)P EQUIVALENT CONCENTRATIONS IN µg/kg

0 – 0.5 FOOT bgs
0.5 FOOT – 2 FEET bgs
2 – 4 FEET bgs
4 – 8 FEET bgs

NOTES:

--	DASH INDICATES B(a)P EQUIVALENT CONCENTRATION NOT AVAILABLE - DATA REJECTED DURING VALIDATION
680	BOLDFACE TYPE INDICATES B(a)P EQUIVALENT CONCENTRATION GREATER THAN 620 µg/kg
B(a)P	BENZO(a)PYRENE
bgs	BELOW GROUND SURFACE
EDC	ECONOMIC DEVELOPMENT CONVEYANCE
µg/kg	MICROGRAMS PER KILOGRAM
NA	UNABLE TO COLLECT SAMPLE
PBC	PUBLIC BENEFIT CONVEYANCE
PAH	POLYNUCLEAR AROMATIC HYDROCARBON

N

400 0 400 Feet

PAH Field Activity Summary

Figure D-7

B(a)P Equivalent Concentrations
at Transfer Parcels EDC-21 and PBC-3

Alameda, California

Bechtel Environmental, Inc.

CLEAN 3 Program

Date: 4/14/04
File No.: 067L12444
Job No.: 23818-067
Rev No.: C

N00236_003722
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FIGURE D-8 – B(a)P EQUIVALENT CONCENTRATIONS AT TRANSFER PARCEL FED-1A

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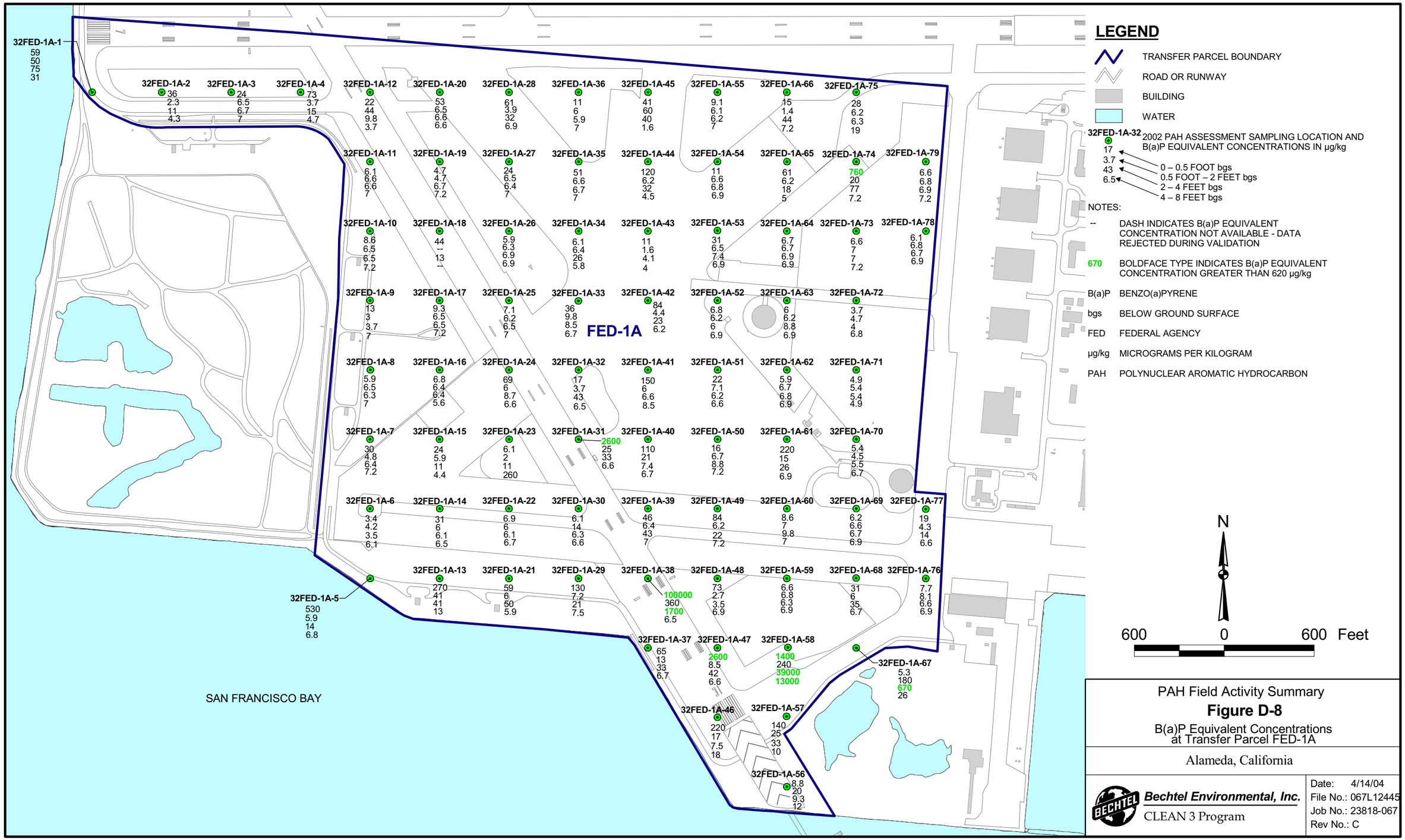

SENSITIVE

ATTACHMENT D1

ANALYTICAL RESULTS TABLES AND DATABASE

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Table D1-1
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-3
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-3-1	0 to 0.5	21	5.2	U	2.7	J	4.3	J	5.2	U	5.3		16		15	
32EDC-3-1	0.5 to 2	5.9	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	1.1	J
32EDC-3-1	2 to 4	5.8	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	0.69	J
32EDC-3-1	4 to 8	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-2	0 to 0.5		6.1	UJ							28	J	6.1	UJ		
32EDC-3-2	0.5 to 2		1.9	J	2	J	5.1	J	2.2	J	12				5.3	UJ
32EDC-3-2	2 to 4		0.97	J	0.84	J	1.5	J	0.62	J	3.9	J			5.7	U
32EDC-3-2	4 to 8		0.64	J	0.43	J	0.88	J	0.47	J	0.48	J			0.73	J
32EDC-3-3	0 to 0.5	7.1	5.7	U	5.7	U	1.7	J	5.7	U	6.1		3.4	J	3.8	J
32EDC-3-3	0.5 to 2	22	15		8.7		12		11		22		3.8	J	11	
32EDC-3-3	2 to 4	120	86		90		78		69		97		12		42	
32EDC-3-3	4 to 8	6.2	2.7	J	1.6	J	2	J	6.1	U	10		2.9	J	2.3	J
32EDC-3-4	0 to 0.5	35	24		12		31		15		26		6		8.4	
32EDC-3-4	0.5 to 2	60	39		19		44		32		42		13	J	14	
32EDC-3-4	2 to 4	7	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	1.5	J
32EDC-3-4	4 to 8	6.5	2.6	J	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	1.8	J
32EDC-3-5	0 to 0.5		2.3	J	2.6	J	4.7	J	2.7	J	6.3	J			2.4	J
32EDC-3-5	0.5 to 2	6.9	3.9	J	2.7	J	7	J	2.7	J	3.9	J	1.5	J	5.4	J
32EDC-3-5	2 to 4		1.5	J	1.3	J	2.4	J	1.6	J	1.5	J			2.5	J
32EDC-3-5	4 to 8	12	8.4	J	4	J	8.9		8	J	4.6	J	1.1	J	8.1	
32EDC-3-6	0 to 0.5	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-3-6	0.5 to 2	4.9	1.5	J	5.4	U	5.4	U	5.4	U	2.1	J	5.4	U	1.8	J
32EDC-3-6	2 to 4	5.2	1.6	J	5.7	U	2.1	J	5.7	U	1.8	J	5.7	U	1.9	J
32EDC-3-6	4 to 8	51	39		16		24		23		19		5.8	J	23	
32EDC-3-7	0 to 0.5	6.2	5.4	U	5.4	U	5.4	U	5.4	U	2.6	J	5.4	U	5.4	U
32EDC-3-7	0.5 to 2	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-3-7	2 to 4	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-7	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32EDC-3-8	0 to 0.5	130	110	U	110	U	110	U	110	U	110	U	110	U	110	U
32EDC-3-8	0.5 to 2	9.4	3.5	J	0.8	J	3.8	J	2.5	J	1.4	J	4.8	J	5.8	
32EDC-3-8	2 to 4	5.2	1.9	J	0.86	J	1.1	J	1.4	J	0.95	J	5.9	UJ	1.8	J
32EDC-3-8	4 to 8	10	6.3	J	2.5	J	3.1	J	4	J	2.7	J	5.9	UJ	4.1	J
32EDC-3-9	0 to 0.5	13	3.9	J	2.9	J	5	J	2.3	J	10		8		5.9	
32EDC-3-9	0.5 to 2	7.3	3.6	J	2.2	J	3	J	3	J	3.4	J	5.4	U	4.4	J
32EDC-3-9	2 to 4	7.4	3.6	J	2	J	2.8	J	2.6	J	3.4	J	5.8	U	3.9	J
32EDC-3-9	4 to 8	7	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	1.4	J
32EDC-3-10	0 to 0.5	83	41	J	35	J	47	J	39	J	110		30	J	32	J
32EDC-3-10	0.5 to 2	81	20	J	16	J	17	J	18	J	22	J	110	U	20	J
32EDC-3-10	2 to 4	82	21	J	19	J	18	J	21	J	29	J	110	U	24	J
32EDC-3-10	4 to 8	160	77	J	76	J	63	J	55	J	93	J	120	U	82	J
32EDC-3-11	0 to 0.5	83	53	J	11	J	110	U	20	J	45	J	18	J	110	U
32EDC-3-11	0.5 to 2	3.7	5.5	U	0.43	J	5.5	U	5.5	U	1.2	J	0.3	J	5.5	U
32EDC-3-11	2 to 4	6.8	6.3	UJ	0.94	J	6.3	UJ	6.3	UJ	0.82	J	6.3	UJ	0.96	J
32EDC-3-11	4 to 8	6.2	5.6	UJ	0.41	J	5.6	UJ	0.37	J	5.6	UJ	5.6	UJ	5.6	UJ
32EDC-3-12	0 to 0.5	20	11		5.3	J	17		7.9		12		5.1	J	13	
32EDC-3-12	0.5 to 2	9.2	5.1	J	2.2	J	3.8	J	2.9	J	3.3	J	5.8	U	5.5	J
32EDC-3-12	2 to 4	14	9.2		3.5	J	6.6		5.6	J	5.4	J	6.1	U	8.7	

Table D1-1
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-3
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-3-12	4 to 8	240	190		82		110		110		100		14		130	
32EDC-3-13	0 to 0.5	7.6	4	J	2.7	J	3.1	J	4	J	4.8	J	5.3	U	3.4	J
32EDC-3-13	0.5 to 2	9.9	6.4	J	2.5	J	6.8	J	2.2	J	8.8	J	2.3	J	5.3	UJ
32EDC-3-13	2 to 4	3.7	2.5	J	1.5	J	2.9	J	2.5	J	1.9	J	0.5	J	2.2	J
32EDC-3-13	4 to 8	4.2	0.75	J	0.74	J	0.71	J	0.57	J	0.77	J	6.4	UJ	0.71	J
32EDC-3-14	0 to 0.5	17	8.6		5.8		8.3		4	J	14		6.6		6.6	
32EDC-3-14	0.5 to 2	11	6.3		4.3	J	5.3	J	5.4	J	8.1		5.7	U	5.3	J
32EDC-3-14	2 to 4	8.7	4.7	J	2.9	J	4.9	J	4.5	J	8.4		5.6	U	3.9	J
32EDC-3-14	4 to 8	6.7	6	U	6	U	6	U	6	U	6	U	6	U	0.64	J
32EDC-3-15	0 to 0.5	29	12		15		22		4	J	51		13		6.1	
32EDC-3-15	0.5 to 2	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-3-15	2 to 4	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-15	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-3-16	0 to 0.5	27	10	J	11		13	J	7.1	J	49		12	J	23	J
32EDC-3-16	0.5 to 2	14	11		4.6	J	3.9	J	7.9		5	J	0.84	J	7.7	
32EDC-3-16	2 to 4	5	1.5	J	5.7	U	5.7	UJ	0.49	J	0.49	J	5.7	U	0.61	J
32EDC-3-16	4 to 8	6.9	6	U	6	U	6	UJ	6	U	6	U	6	U	6	U
32EDC-3-17	0 to 0.5	14	7.9		2.3	J	5.1	U	5.1	U	15		5.2		3.5	J
32EDC-3-17	0.5 to 2	8.7	5.4		1.6	J	2.5	J	5.2	U	4.5	J	5.2	U	5.2	U
32EDC-3-17	2 to 4	5.6	1.9	J	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-3-17	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-3-18	0 to 0.5	5.9	2.3	J	5.5	U	2.4	J	5.5	U	1.8	J	5.5	U	5.5	U
32EDC-3-18	0.5 to 2	37	27		25		25		26		29		4.2	J	9.6	
32EDC-3-18	2 to 4	7.6	3.8	J	1.7	J	3.4	J	6	U	2.9	J	6	U	2.2	J
32EDC-3-18	4 to 8	26	21		6.9		18		7.4		8.9		1.8	J	10	
32EDC-3-19	0 to 0.5	51	37		31		27		28		44		5.5		25	
32EDC-3-19	0.5 to 2	91	60		57		54		36		140		16		37	
32EDC-3-19	2 to 4	240	180		190		130		130		210		19		100	
32EDC-3-19	4 to 8	63	46		39		28		28		56		6.7		28	
32EDC-3-20	0 to 0.5	18	8.8		5.5		11		2.7	J	29		7.1		4.3	J
32EDC-3-20	0.5 to 2	5.9	5.3	U	5.3	U	1.6	J	5.3	U	2.1	J	5.3	U	1.5	J
32EDC-3-20	2 to 4	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-20	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-3-21	0 to 0.5	21	16	J	5.5	U	19	J	17	J	27		5.5	UJ	5.5	UJ
32EDC-3-21	0.5 to 2	14	8.6		4.9	J	7.5		6		8.3		5.9	U	9.6	
32EDC-3-21	2 to 4	180	130		62		93		73		88		15		140	
32EDC-3-21	4 to 8	6.7	6	U	6	U	6	U	6	U	6	U	6	U	0.68	J
32EDC-3-22	0 to 0.5	37	16	J	16		5.1	J	9.9	J	64		17	J	16	J
32EDC-3-22	0.5 to 2	24	19	J	10		8.5	J	4.2	J	30		5.5	UJ	5.5	UJ
32EDC-3-22	2 to 4	18	12	J	10		17	J	8.6	J	44		5.4	UJ	5.4	UJ
32EDC-3-22	4 to 8	7.5	4.2	J	1.1	J	1.1	J	1.2	J	1.1	J	5.9	U	1	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-1	0 to 0.5	5.8	5.2	U	5.2	U	1.6	J	5.2	U	5.2	U	5.2	U	1.3	J
32EDC-5-1	0.5 to 2	6	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	0.8	J
32EDC-5-1	2 to 4	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-1	4 to 8	6.3	5.7	U	1.7	J	2.3	J	5.7	U	2.1	J	5.7	U	2.1	J
32EDC-5-2	0 to 0.5	67	46		27		45		46		51		8.5		49	
32EDC-5-2	0.5 to 2	8.3	4.4	J	2.5	J	4	J	3	J	3.7	J	5.6	U	4.6	J
32EDC-5-2	2 to 4	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32EDC-5-2	4 to 8	6.7	6	U	6	U	1.5	J	6	U	6	U	6	U	1.9	J
32EDC-5-3	0 to 0.5	87	66	J	57	J	57		42		67	J	5.2	U	66	
32EDC-5-3	0.5 to 2	32	23	J	29	J	5.3	U	5.3	U	5.3	UJ	5.3	U	31	
32EDC-5-3	2 to 4	12	6	UJ	27	J	6	U	6	U	6	UJ	6	U	31	
32EDC-5-3	4 to 8	37	27	J	33	J	6	U	6	U	6	UJ	6	U	34	
32EDC-5-4A	0 to 0.5	9.6	3	J	1.8	J	3.7	J	3.3	J	9.4	J	11	U	11	U
32EDC-5-4A	0.5 to 2	6.8	5.2	J	2.5	J	4	J	4.3	J	3.2	J	0.39	J	5.6	
32EDC-5-4A	2 to 4	180	130		110		90		110		120		14		100	
32EDC-5-4A	4 to 8	10	3.5	J	1.7	J	2.5	J	3	J	6	J	12	U	5.2	J
32EDC-5-5	0 to 0.5	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-5	0.5 to 2	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-5-5	2 to 4	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-5-5	4 to 8	6.8	6	U	6	U	6	U	6	U	6	U	6	U	1.3	J
32EDC-5-6	0 to 0.5	6.2	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-6	0.5 to 2	6.4	5.5	U	5.5	UJ	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32EDC-5-6	2 to 4	6.7	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-6	4 to 8	4.5	0.5	J	6.1	UJ	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-7	0 to 0.5	49	31	J	24	J	26		20		30	J	10		28	
32EDC-5-7	0.5 to 2	12	5.7	UJ	26	J	5.7	U	5.7	U	5.7	UJ	5.7	U	29	
32EDC-5-7	2 to 4	990	640	J	830	J	740		580		900	J	150		350	
32EDC-5-7	4 to 8	19	11	J	8.4	J	3.5	J	4.8	J	3.2	J	5.7		8.9	
32EDC-5-8	0 to 0.5	30	22		12		20		24		21		2	J	22	
32EDC-5-8	0.5 to 2	1.7	1.1	J	0.82	J	1.2	J	1.4	J	1.4	J	0.24	J	1.1	J
32EDC-5-8	2 to 4	6.2	5.4	U	5.4	U	5.4	U	0.61	J	5.4	U	5.4	U	5.4	U
32EDC-5-8	4 to 8	6	2.3	J	0.83	J	1.8	J	1.9	J	1.4	J	6.3	U	2.4	J
32EDC-5-9	0 to 0.5	41	31	J	34	J	5.2	U	5.2	U	25	J	5.2	U	36	
32EDC-5-9	0.5 to 2	11	5.4	UJ	26	J	5.4	U	5.4	U	5.4	UJ	5.4	U	27	
32EDC-5-9	2 to 4	10	5.2	UJ	24	J	5.2	U	5.2	U	5.2	UJ	5.2	U	26	
32EDC-5-9	4 to 8	12	5.8	UJ	27	J	5.8	U	5.8	U	5.8	UJ	5.8	U	29	
32EDC-5-10	0 to 0.5	43	18		9.6		28		7.9		55		20		12	
32EDC-5-10	0.5 to 2	8.9	5	J	2.2	J	3.5	J	3	J	3.7	J	5.6	U	5	J
32EDC-5-10	2 to 4	33	25		15		18		16		20		2.5	J	23	
32EDC-5-10	4 to 8	97	75		33		50		39		43		5.9	J	69	
32EDC-5-11	0 to 0.5	4.3	0.78	J	5.3	UJ	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-5-11	0.5 to 2	6.5	5.6	U	5.6	UJ	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-11	2 to 4	6.6	5.7	U	5.7	UJ	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-11	4 to 8	7	6.1	U	6.1	UJ	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-12	0 to 0.5	5.8	5.3	U	1.6	J	2.1	J	1.6	J	2	J	5.3	U	1.3	J
32EDC-5-12	0.5 to 2	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-12	2 to 4	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-12	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-13A	0 to 0.5	15	10		8.5		6.6		7.8		11		5.4	U	7.2	
32EDC-5-13A	0.5 to 2	8.6	4.3	J	4.5	J	2.9	J	3.5	J	5.1	J	6.5	U	2.6	J
32EDC-5-13A	2 to 4	6.2	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	1.6	J
32EDC-5-13A	4 to 8	8.7	4.7	J	4.2	J	3.2	J	3.5	J	5.1	J	5.8	U	3.6	J
32EDC-5-14	0 to 0.5	11	5.4	UJ	26	J	5.4	U	5.4	U	5.4	UJ	5.4	U	29	
32EDC-5-14	0.5 to 2	11	5.5	UJ	25	J	5.5	U	5.5	U	5.5	UJ	5.5	U	28	
32EDC-5-14	2 to 4	11	5.6	UJ	25	J	5.6	U	5.6	U	5.6	UJ	5.6	U	28	
32EDC-5-14	4 to 8	12	6	UJ	26	J	6	U	6	U	6	UJ	6	U	30	
32EDC-5-15	0 to 0.5	3	1.9	J	1.3	J	2.1	J	1.8	J	2.3	J	0.6	J	1.7	J
32EDC-5-15	0.5 to 2	4.4	1.5	J	0.74	J	1.1	J	1.3	J	1.2	J	5.1	U	1.6	J
32EDC-5-15	2 to 4	3.7	0.73	J	0.32	J	5.3	U	0.75	J	0.5	J	5.3	U	0.5	J
32EDC-5-15	4 to 8	4.9	3.7	J	2	J	2.8	J	2.7	J	2.7	J	0.3	J	4	J
32EDC-5-16	0 to 0.5	18	11		4.3	J	6.2	J	7.3	J	7.5	J	10	U	9.6	J
32EDC-5-16	0.5 to 2	11	4.8	J	1.7	J	3.3	J	1.6	J	2.7	J	11	U	3.6	J
32EDC-5-16	2 to 4	12	5.1	J	1.9	J	3.4	J	5.3	J	3.9	J	11	U	6	J
32EDC-5-16	4 to 8	13	10		5.1	J	7.3		7.3		5.8		0.68	J	9	
32EDC-5-17	0 to 0.5	6.8	3	J	3	J	4.1	J	3.9	J	6.7		5.5	U	3	J
32EDC-5-17	0.5 to 2	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-17	2 to 4	6.9	6	UJ	6	U	6	UJ	6	UJ	6	U	6	UJ	6	U
32EDC-5-17	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-18	0 to 0.5	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-5-18	0.5 to 2	4.8	1.3	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-18	2 to 4	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-18	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-19	0 to 0.5	48	32		18		42		13		28		5.6	J	44	
32EDC-5-19	0.5 to 2	12	6.8		3.8	J	8		2.1	J	5.2	J	5.6	U	8.8	
32EDC-5-19	2 to 4	7.4	3.5	J	2.5	J	3.2	J	5.7	U	2.8	J	5.7	U	4.1	J
32EDC-5-19	4 to 8	6.7	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	2	J
32EDC-5-20	0 to 0.5	33	21		13		31		10		23		4.8	J	26	
32EDC-5-20	0.5 to 2	33	24		12		26		8.2		16		5.2	U	30	
32EDC-5-20	2 to 4	99	73		41		71		22		49		7.1		78	
32EDC-5-20	4 to 8	22	15		7.4		14		4.5	J	8.6		5.9	U	17	
32EDC-5-21	0 to 0.5	11	5.3	UJ	26	J	5.3	U	5.3	U	5.3	UJ	5.3	U	30	
32EDC-5-21	0.5 to 2	11	5.4	UJ	25	J	5.4	U	5.4	U	5.4	UJ	5.4	U	30	
32EDC-5-21	2 to 4	11	5.7	UJ	25	J	5.7	U	5.7	U	5.7	UJ	5.7	U	28	
32EDC-5-21	4 to 8	120	94	J	86	J	60		41		81	J	6.1	U	68	
32EDC-5-22	0 to 0.5	6.5	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	1.1	J
32EDC-5-22	0.5 to 2	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.65	J
32EDC-5-22	2 to 4	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-22	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-23	0 to 0.5	3.3	2.1	J	0.97	J	1.8	J	2	J	1.6	J	0.65	J	2.6	J
32EDC-5-23	0.5 to 2	3.8	0.46	J	5.4	U	5.4	U	0.48	J	0.52	J	5.4	U	0.98	J
32EDC-5-23	2 to 4	4.9	1.6	J	1.5	J	1.6	J	1.3	J	1.8	J	5.6	U	1.3	J
32EDC-5-23	4 to 8	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-24	0 to 0.5	6	5.4	UJ	1.5	J	1.7	J	1.3	J	4.5	J	5.4	UJ	5.4	UJ
32EDC-5-24	0.5 to 2	5.8	5.4	UJ	0.56	J	0.78	J	0.48	J	1.2	J	5.4	UJ	5.4	UJ
32EDC-5-24	2 to 4	12	7.9	J	5.5	J	6.3	J	4.9	J	13	J	5.3	UJ	5.3	UJ
32EDC-5-24	4 to 8	6.5	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ
32EDC-5-25	0 to 0.5	100	72		41		65		48		54		9.8		91	
32EDC-5-25	0.5 to 2	20	12		11		17		13		14		2.1	J	25	
32EDC-5-25	2 to 4	56	42		22		31		21		25		3.9	J	41	
32EDC-5-25	4 to 8	88	68		25		48		37		32		4.9	J	74	
32EDC-5-26	0 to 0.5	1.7	1.1	J	0.65	J	1.1	J	0.59	J	1.6	J	0.27	J	1.1	J
32EDC-5-26	0.5 to 2	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-26	2 to 4	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-5-26	4 to 8	7.3	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
32EDC-5-27	0 to 0.5	9.8	6.6	J	2.5	J	5.3	J	4.4	J	4.8	J	1.9	J	4.7	J
32EDC-5-27	0.5 to 2	6.2	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ
32EDC-5-27	2 to 4	6.2	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.55	J
32EDC-5-27	4 to 8	4.5	3.5	J	1.8	J	2.1	J	2.5	J	2.1	J	0.3	J	2.9	J
32EDC-5-28	0 to 0.5	5.3	1.6	J	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-28	0.5 to 2	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-28	2 to 4	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-28	4 to 8	7.2	3.3	J	6.2	U	2.5	J	1.8	J	2	J	6.2	U	2.6	J
32EDC-5-29	0 to 0.5	44	31		21		27		20		30		5.7		27	
32EDC-5-29	0.5 to 2	5.7	2.4	J	1.6	J	1.8	J	5.4	U	5.4	U	5.4	U	2.4	J
32EDC-5-29	2 to 4	12	7.2		4.7	J	4.4	J	4.2	J	5.8		5.6	U	5.6	
32EDC-5-29	4 to 8	14	8.7		5.1	J	6.8		5.3	J	6.4		5.4	U	10	
32EDC-5-30	0 to 0.5	38	29		12		21		17		15		2.1	J	33	
32EDC-5-30	0.5 to 2	43	33		12		23		19		16		2.3	J	35	
32EDC-5-30	2 to 4	6.3	5.6	U	5.6	U	1.7	J	5.6	U	5.6	U	5.6	U	2.6	J
32EDC-5-30	4 to 8	29	22		15		14		12		20		2.4	J	17	
32EDC-5-31	0 to 0.5	12	7.3	J	4.7	J	6.1	J	5	J	6	J	5.7	U	5.7	J
32EDC-5-31	0.5 to 2	7.8	3.7	J	2.1	J	2.9	J	2.3	J	2.5	J	6.6	U	3	J
32EDC-5-31	2 to 4	7.5	3.8	J	1.9	J	3.2	J	2.5	J	2.5	J	5.6	U	3.3	J
32EDC-5-31	4 to 8	15	9.7	J	4.7	J	6.9	J	5.5	J	6.2	J	5.9	U	7.6	J
32EDC-5-32	0 to 0.5	66	46		29		44		37		53		7.6		42	
32EDC-5-32	0.5 to 2	37	27		16		19		19		23		3.1	J	27	
32EDC-5-32	2 to 4	6.9	3.3	J	1.8	J	2.5	J	5.6	U	2.2	J	5.6	U	3.4	J
32EDC-5-32	4 to 8	190	150		73		98		71		89		10		140	
32EDC-5-33	0 to 0.5	190	140	J	74	J	100	J	79	J	90	J	17		120	J
32EDC-5-33	0.5 to 2	610	500	J	310	J	330	J	300	J	310	J	5.8	U	360	J
32EDC-5-33	2 to 4	570	420	J	350	J	260	J	280	J	400	J	56		290	J
32EDC-5-33	4 to 8	1400	1200	J	760	J	650	J	410	J	870	J	6.6	U	800	J
32EDC-5-34	0 to 0.5	43	27	J	21	J	32	J	17	J	52	J	9.1	J	17	
32EDC-5-34	0.5 to 2	3900	3000	J	1700	J	2200	J	1700	J	2200	J	220	J	2300	
32EDC-5-34	2 to 4	31	21	J	12	J	18	J	11	J	24	J	4.8	J	19	
32EDC-5-34	4 to 8	57	44	J	20	J	32	J	22	J	25	J	3.5	J	41	
32EDC-5-35	0 to 0.5	6.6	5.9	U	5.9	U	2	J	5.9	U	3.7	J	5.9	U	1.7	J
32EDC-5-35	0.5 to 2	6.3	5.7	U	5.7	U	1.4	J	5.7	U	5.7	U	5.7	U	1.2	J

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-35	2 to 4	6.6	6	U	6	U	1.9	J	6	U	5.5	J	6	U	1.2	J
32EDC-5-35	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-36	0 to 0.5	12	6.9		6.8		6.6		7		9.7		5.6	U	5.3	J
32EDC-5-36	0.5 to 2	6.4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32EDC-5-36	2 to 4	6.3	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	0.72	J
32EDC-5-36	4 to 8	7.5	3.4	J	6.1	U	3.2	J	6.1	U	6.1	U	6.1	U	4.2	J
32EDC-5-37	0 to 0.5	7.5	3.7	J	3.6	J	3.1	J	3.6	J	5.1	J	5.6	UJ	3.2	J
32EDC-5-37	0.5 to 2	6.7	3.2	J	2	J	2.6	J	2.1	J	2.4	J	5.4	UJ	3.2	J
32EDC-5-37	2 to 4	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	U
32EDC-5-37	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	U
32EDC-5-38	0 to 0.5	9.6	5.1	J	3.4	J	6.2	J	6.3		5.7		5.5	U	6.8	
32EDC-5-38	0.5 to 2	5	1.9	J	1.1	J	1.5	J	1.9	J	1.7	J	5.3	U	1.5	J
32EDC-5-38	2 to 4	3.8	0.75	J	0.6	J	0.66	J	0.88	J	1.4	J	5.3	U	5.3	U
32EDC-5-38	4 to 8	4	0.53	J	5.7	U	5.7	UJ	0.5	J	5.7	U	5.7	U	0.58	J
32EDC-5-39	0 to 0.5	6.4	3.9	J	1.9	J	5.2	J	2.9	J	3.9	J	1.4	J	3.9	J
32EDC-5-39	0.5 to 2	11	7.9		3.8	J	5.8		5.4		4.5	J	1.7	J	7.3	
32EDC-5-39	2 to 4	340	250		170		150		190		200		28		230	
32EDC-5-39	4 to 8	12	11	U	11	U	11	U	11	U	11	U	11	U	1.8	J
32EDC-5-40	0 to 0.5	15	11	J	5.7	J	8.4	J	6.3	J	8.2	J	1.7	J	9	J
32EDC-5-40	0.5 to 2	59	44	J	20	J	31	J	24	J	22	J	5.5		40	J
32EDC-5-40	2 to 4	14	9.2	J	3.9	J	9.9	J	5.7	UJ	4.5	J	5.7	U	5.6	J
32EDC-5-40	4 to 8	47	36	J	17	J	24	J	18	J	21	J	3.8	J	28	J
32EDC-5-41	0 to 0.5	64	45		27		35		41		40		7.8		42	
32EDC-5-41	0.5 to 2	94	70		34		49		55		42		8.3		72	
32EDC-5-41	2 to 4	170	130		76		82		95		87		13		110	
32EDC-5-41	4 to 8	24	18		8.9		14		12		12		1.8	J	18	
32EDC-5-42	0 to 0.5	38	27		18		27		22		27		3.6	J	31	
32EDC-5-42	0.5 to 2	23	16		9.9		16		13		14		2.1	J	21	
32EDC-5-42	2 to 4	1100	860		530		600		510		620		64		730	
32EDC-5-42	4 to 8	18	12		4.6	J	7.9		7.1		6.3		6.2	U	12	
32EDC-5-43	0 to 0.5	170	130		62		94		83		70		13		110	
32EDC-5-43	0.5 to 2	410	310		260		200		260		320		34	J	190	
32EDC-5-43	2 to 4	66	12	J	8.1	J	15	J	9.9	J	13	J	100	U	11	J
32EDC-5-43	4 to 8	100	75		68		67		62		75		10		57	
32EDC-5-44	0 to 0.5	29	11	J	8.1	J	17	J	14	J	27		27	U	27	U
32EDC-5-44	0.5 to 2	27	19	J	10	J	18	J	14	J	37		3	J	20	J
32EDC-5-44	2 to 4	34	16	J	11	J	14	J	23	J	32		28	U	28	U
32EDC-5-44	4 to 8	250	170		120		94	J	150		170		40		130	
32EDC-5-45	0 to 0.5	6.5	5.7	U	2.2	J	2.8	J	5.7	U	2.9	J	5.7	UJ	5.7	U
32EDC-5-45	0.5 to 2	12	6.7		2.7	J	5.3	J	5.4	J	4.9	J	6.4	UJ	7.5	
32EDC-5-45	2 to 4	9.3	5.1	J	4.2	J	4.1	J	4.1	J	6.1		5.8	UJ	4.2	J
32EDC-5-45	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	U
32EDC-5-46	0 to 0.5	23	16		15		16		12		18		3.4	J	8.6	
32EDC-5-46	0.5 to 2	5.6	2.2	J	5.4	U	5.4	U	5.4	U	1.6	J	5.4	U	1.7	J
32EDC-5-46	2 to 4	5.2	1.7	J	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	1.5	J
32EDC-5-46	4 to 8	6.8	2.9	J	6.2	U	2.2	J	6.2	U	6.2	U	6.2	U	2	J

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-47	0 to 0.5	2.8	1.9	J	0.66	J	1.8	J	1.2	J	1	J	0.37	J	2.8	J
32EDC-5-47	0.5 to 2	5.8	4.1	J	1.9	J	3.1	J	2.1	J	1.8	J	0.66	J	4.7	J
32EDC-5-47	2 to 4	3.2	2.3	J	1.6	J	1.7	J	1.5	J	1.9	J	0.39	J	2.1	J
32EDC-5-47	4 to 8	4.3	0.69	J	5.9	UJ	5.9	UJ	0.45	J	5.9	UJ	5.9	UJ	0.81	J
32EDC-5-48	0 to 0.5	210	150		130	J	160	J	54	J	140		18		140	
32EDC-5-48	0.5 to 2	23	16		14	J	21	J	6.8	J	17		2.1	J	15	
32EDC-5-48	2 to 4	6.3	5.6	U	5.6	UJ	5.6	UJ	5.6	UJ	5.6	U	5.6	U	1.1	J
32EDC-5-48	4 to 8	6.7	6	U	6	UJ	6	UJ	6	UJ	6	U	6	U	0.86	J
32EDC-5-49	0 to 0.5	27	19		13		14		15		18		2.9	J	18	
32EDC-5-49	0.5 to 2	34	24		16		16		18		19		3.9	J	24	
32EDC-5-49	2 to 4	130	96		69		66		68		82		7.9	J	85	
32EDC-5-49	4 to 8	940	650		660	J	610	J	470	J	770	J	100	J	610	J
32EDC-5-50	0 to 0.5	11	5.5	J	3.5	J	9.5	J	5.3	UJ	19	J	3.3	J	4.4	J
32EDC-5-50	0.5 to 2	6.8	3.2	J	2	J	6	J	5.3	UJ	13	J	2.6	J	1.5	J
32EDC-5-50	2 to 4	20	14		6.1		12		6.5		16		2.5	J	17	
32EDC-5-50	4 to 8	90	68	J	33	J	61	J	16	J	34	J	5.8	J	68	
32EDC-5-51	0 to 0.5	31	27	U	9.4	J	14	J	11	J	19	J	27	U	27	U
32EDC-5-51	0.5 to 2	70	57	U	30	J	68	J	36	J	160		57	U	57	U
32EDC-5-51	2 to 4	39	24		18		27	J	14		49		8.4		23	
32EDC-5-51	4 to 8	62	46		26		24	J	37		30		7.1		36	
32EDC-5-52	0 to 0.5	21	14	J	9.6	J	13	J	11	J	13	J	3.4	J	13	J
32EDC-5-52	0.5 to 2	44	34	J	20	J	24	J	20	J	21	J	5.3	U	25	J
32EDC-5-52	2 to 4	23	17	J	8.1	J	11	J	9.1	J	10	J	5.4	U	14	J
32EDC-5-52	4 to 8	73	59	J	35	J	37	J	32	J	41	J	5.8	U	37	J
32EDC-5-53	0 to 0.5	30	20		12		21		17		20		4.7	J	21	
32EDC-5-53	0.5 to 2	47	34		20		27		25		22		5.1	J	32	
32EDC-5-53	2 to 4	230	170		120		110		130		130		19		140	
32EDC-5-53	4 to 8	150	110		52		71		75		67		12		110	
32EDC-5-54	0 to 0.5	3.6	0.62	J	0.35	J	0.67	J	0.45	J	0.72	J	5.6	UJ	0.86	J
32EDC-5-54	0.5 to 2	1.8	0.98	J	5.7	UJ	1.3	J	0.97	J	2.1	J	0.3	J	1.4	J
32EDC-5-54	2 to 4	6.9	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
32EDC-5-54	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-55	0 to 0.5	81	52		32		41	J	72		51		16		54	
32EDC-5-55	0.5 to 2	8	4.4	J	2.6	J	2.8	J	2.6	J	3.3	J	5.3	U	4	J
32EDC-5-55	2 to 4	3.9	0.99	J	0.47	J	0.7	J	1.2	J	0.74	J	5.3	U	1.1	J
32EDC-5-55	4 to 8	4.3	1.1	J	0.47	J	0.72	J	1.1	J	0.65	J	5.9	U	1.2	J
32EDC-5-56	0 to 0.5	21	14		15	J	13		15		18		5.3	U	13	
32EDC-5-56	0.5 to 2	35	25		27	J	22		24		32		5.3	U	18	
32EDC-5-56	2 to 4	14	9.3		8.1	J	7.5		9.3		9.5		5.4	U	7.3	
32EDC-5-56	4 to 8	7.1	3.3	J	5.8	UJ	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-57	0 to 0.5	39	27		16		23		16		36		4.3	J	32	
32EDC-5-57	0.5 to 2	5.6	2.3	J	1.4	J	1.8	J	5.4	U	5.4	U	5.4	U	2.6	J
32EDC-5-57	2 to 4	9.6	5.4	J	2.7	J	4.5	J	2.9	J	6		5.5	U	6.5	
32EDC-5-57	4 to 8	6.6	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	1.4	J
32EDC-5-58	0 to 0.5	3.8	0.44	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	0.61	J
32EDC-5-58	0.5 to 2	4.3	1.3	J	0.58	J	0.95	J	0.72	J	0.68	J	5.2	U	1.9	J

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-58	2 to 4	5.8	2.1	J	4.6	J	4.2	J	3.6	J	14	J	2.5	J	5.6	UJ
32EDC-5-58	4 to 8	29	21	J	12	J	12	J	13	J	13	J	2.6	J	26	J
32EDC-5-59	0 to 0.5	8.6	5.5		4.5	J	5.1		5	J	7.6		1.5	J	5.7	
32EDC-5-59	0.5 to 2	3.4	2.3	J	1.5	J	1.7	J	2.1	J	2.2	J	0.53	J	2.5	J
32EDC-5-59	2 to 4	4.1	2.9	J	1.8	J	2.5	J	2.5	J	3.2	J	0.44	J	2.8	J
32EDC-5-59	4 to 8	1.8	1.2	J	0.84	J	0.88	J	1.2	J	1.2	J	0.26	J	1.4	J
32EDC-5-60	0 to 0.5	130	91	J	66	J	78	J	85	J	96	J	12	J	68	
32EDC-5-60	0.5 to 2	170	120	J	100	J	110	J	100	J	110	J	14	J	110	
32EDC-5-60	2 to 4	40	28	J	26	J	27	J	31	J	36	J	4.1	J	24	
32EDC-5-60	4 to 8	110	89	J	41	J	58	J	49	J	49	J	6.7	J	76	
32EDC-5-61	0 to 0.5	590	430	J	340	J	360	J	440	J	490	J	52	J	300	
32EDC-5-61	0.5 to 2	240	180	J	110	J	130	J	140	J	150	J	18	J	140	
32EDC-5-61	2 to 4	460	340	J	240	J	260	J	290	J	320	J	38	J	260	
32EDC-5-62	0 to 0.5	13	8.5		6.7		7.5		6.5		9.3		2.1	J	5.3	J
32EDC-5-62	0.5 to 2	39	29		23		22		19		27		3.6	J	14	
32EDC-5-62	2 to 4	54	40		32		26		24		39		5.2	J	24	
32EDC-5-62	4 to 8	15	9.5		8.6		6.7		7.1		9.7		6.5	U	4.5	J
32EDC-5-63	0 to 0.5	63	45	J	32	J	41	J	36	J	38	J	5.6	J	45	J
32EDC-5-63	0.5 to 2	42	31		17	J	23	J	27		23	J	5.2	J	17	J
32EDC-5-63	2 to 4	290	210		130		150		160		150		31		170	
32EDC-5-63	4 to 8	94	68		35		58		52		45		9.1		72	
32EDC-5-64	0 to 0.5	11	6.3		3.5	J	5.4	J	3.9	J	4.8	J	5.8	U	6.8	
32EDC-5-64	0.5 to 2	20	14		5.2	J	12		7.7		7.8		5.7	U	17	
32EDC-5-64	2 to 4	120	90		53		52		50		65		8.3		67	
32EDC-5-64	4 to 8	9.5	5.3	J	3.9	J	3.8	J	3.4	J	4.1	J	6.1	U	3.7	J
32EDC-5-65	0 to 0.5	49	37		14		27		19		20		3.5	J	42	
32EDC-5-65	0.5 to 2	6.6	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	1.7	J
32EDC-5-65	2 to 4	12	7.6		2.6	J	6.3		4.1	J	3.8	J	5.9	U	9.3	
32EDC-5-65	4 to 8	9.7	5.4	J	2.1	J	3.6	J	2.8	J	2.6	J	6.4	U	5.4	J
32EDC-5-66	0 to 0.5	44	33		13		18		25		20		4.8	J	32	
32EDC-5-66	0.5 to 2	7	3.7	J	0.94	J	1.6	J	5.4	U	1.3	J	5.4	U	5.4	U
32EDC-5-66	2 to 4	14	8.9		9.9		7.4		7.2	U	13		5.4	U	5.2	J
32EDC-5-66	4 to 8	9.9	6	J	1.7	J	3.1	J	6.2	U	2	J	6.2	U	6.2	U
32EDC-5-67	0 to 0.5	23	17		8.6	J	18	J	4.9	J	10		1.8	J	19	
32EDC-5-67	0.5 to 2	19	13		7.8	J	13	J	4.1	J	8.5		5.7	U	12	
32EDC-5-67	2 to 4	10	5.7	J	2.7	J	6	J	6.1	UJ	3.1	J	6.1	U	5.9	J
32EDC-5-67	4 to 8	6.7	6.1	U	6.1	UJ	1.5	J	6.1	UJ	6.1	U	6.1	U	1.5	J
32EDC-5-68	0 to 0.5	34	25		11		20		15		15		2.4	J	30	
32EDC-5-68	0.5 to 2	6	2.5	J	5.3	U	2.4	J	5.3	U	5.3	U	5.3	U	3.1	J
32EDC-5-68	2 to 4	6.2	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	1.1	J
32EDC-5-68	4 to 8	6.8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	0.66	J
32EDC-5-69	0 to 0.5	7.2	3.5	J	2.5	J	3.9	J	2.7	J	5.2	J	5.4	U	3.5	J
32EDC-5-69	0.5 to 2	9.3	5.1	J	2.8	J	5.9		4.9	J	4.6	J	5.3	U	6.2	
32EDC-5-69	2 to 4	5.5	2.2	J	2	J	3.1	J	5.3	U	7.2	J	5.3	U	1.3	J
32EDC-5-69	4 to 8	47	36		25	J	23		25		30	J	2.8	J	30	
32EDC-5-70	0 to 0.5	38	24	J	13	J	22	J	14	J	24	J	8	J	23	J

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-70	0.5 to 2	14	10	J	5.5		6.8	J	6.9	J	6.3		1.1	J	12	J
32EDC-5-70	2 to 4	12	7.9	J	3.5	J	6.8	J	6.1	J	6.6	J	2.6	J	8.1	J
32EDC-5-70	4 to 8	250	180		120		120		120		130		22	J	200	
32EDC-5-71	0 to 0.5	43	31		21	J	27		25		33	J	3.5	J	30	
32EDC-5-71	0.5 to 2	1200	890	J	590	J	800	J	260	J	610	J	91	J	730	
32EDC-5-71	2 to 4	35	25	J	14	J	25	J	8.4	J	16	J	2.8	J	30	
32EDC-5-71	4 to 8	8.5	4.3	J	3	J	4.1	J	5.9	UJ	3.2	J	5.9	UJ	4.6	J
32EDC-5-72	0 to 0.5	16	11	J	6.5	J	14	J	5.6	J	12	J	5.5	U	4.3	J
32EDC-5-72	0.5 to 2	49	35		40	J	28		22		55	J	4.8	J	20	
32EDC-5-72	2 to 4	47	34		20	J	28		22		42	J	5.9	J	17	
32EDC-5-72	4 to 8	67	52	J	38	J	36	J	37	J	43	J	5.2	J	16	J
32EDC-5-73	0 to 0.5	120	86		81	J	60		52		86	J	11		60	
32EDC-5-73	0.5 to 2	11	6.7	J	5.5	J	5.3	J	5.2	J	5.8	J	5.5	U	2.7	J
32EDC-5-73	2 to 4	260	200	J	150	J	140	J	140	J	150	J	19	J	68	J
32EDC-5-73	4 to 8	5200	3800	J	2700	J	2500	J	2100	J	2900	J	620	J	2400	J
32EDC-5-74	0 to 0.5	370	290	J	170	J	240	J	150	J	220	J	29		100	J
32EDC-5-74	0.5 to 2	170	130	J	79	J	90	J	88	J	92	J	13		59	J
32EDC-5-74	2 to 4	51	39	J	21	J	38	J	16	J	42	J	4.4	J	15	J
32EDC-5-75	0 to 0.5	29	21		16		16		21		20		2.5	J	22	
32EDC-5-75	0.5 to 2	4.5	3	J	2.2	J	2.1	J	2.5	J	2.7	J	0.64	J	3.6	J
32EDC-5-75	2 to 4	160	120		110		100		76		92		13		100	
32EDC-5-75	4 to 8	4.4	3.2	J	2.3	J	1.9	J	2.4	J	2.6	J	0.39	J	3.5	J
32EDC-5-76	0 to 0.5	6.1	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	1.2	J
32EDC-5-76	0.5 to 2	6.7	3.2	J	2.9	J	2.2	J	3.4	J	4.1	J	5.4	U	2.3	J
32EDC-5-76	2 to 4	5.7	2.3	J	2.5	J	2.2	J	2.7	J	3.3	J	5.4	U	1.7	J
32EDC-5-76	4 to 8	110	86		55		62		67		79		6.9		71	
32EDC-5-77	0 to 0.5	9	5.5		1.2	J	2.7	J	5.3	U	2.8	J	5.3	U	4.8	J
32EDC-5-77	0.5 to 2	6.6	3.2	J	1	J	1.1	J	5.7	U	1.7	J	5.7	U	5.7	U
32EDC-5-77	2 to 4	6.2	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-77	4 to 8	7.7	4	J	5.7	UJ	5.7	U	5.7	U	4.4	J	5.7	U	5.7	U
32EDC-5-78	0 to 0.5	7.2	3.6	J	2	J	3.3	J	2.3	J	3.6	J	5.4	U	3.5	J
32EDC-5-78	0.5 to 2	8.8	4.9	J	2.9	J	3.6	J	2.9	J	3.6	J	5.4	U	4.8	J
32EDC-5-78	2 to 4	6.1	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	1.3	J
32EDC-5-78	4 to 8	25	18		6.4		11		8.7		7.9		6.2	U	18	
32EDC-5-79	0 to 0.5	25	18		7.5		12		10		8.6		2.6	J	25	
32EDC-5-79	0.5 to 2	3	2.2	J	0.98	J	1.5	J	1.4	J	1.2	J	0.29	J	2.9	J
32EDC-5-79	2 to 4	5.1	1.8	J	0.83	J	1.1	J	1.1	J	0.96	J	5.6	U	2.5	J
32EDC-5-79	4 to 8	78	59		34		36		32		38		6.4	J	52	
32EDC-5-80	0 to 0.5	11	7		4.4	J	5.7		5.2	J	6		5.4	U	6.1	
32EDC-5-80	0.5 to 2	6.7	3.2	J	2.1	J	2.4	J	2.2	J	2.6	J	5.3	U	3.3	J
32EDC-5-80	2 to 4	6	5.4	U	5.4	U	1.5	J	5.4	U	5.4	U	5.4	U	1.8	J
32EDC-5-80	4 to 8	6.7	6	U	6	U	1.6	J	6	U	6	U	6	U	2.2	J
32EDC-5-81	0 to 0.5	15	9.8		7.9	J	12	J	9.5	J	12		2.4	J	9.8	
32EDC-5-81	0.5 to 2	7.3	6.5	U	6.5	UJ	1.7	J	6.5	UJ	6.5	U	6.5	U	2.7	J
32EDC-5-81	2 to 4	14	9.1		5.8	J	7.4	J	5.9	J	8.5		5.3	U	8.1	
32EDC-5-81	4 to 8	21	15		8.8	J	11	J	10	J	9.5		5.8	U	14	

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-82	0 to 0.5	6	5.3	U	5.3	UJ	5.3	UJ	5.3	UJ	5.3	U	5.3	U	1.5	J
32EDC-5-82	0.5 to 2	5.9	5.3	U	5.3	UJ	1.3	J	5.3	UJ	5.3	U	5.3	U	1.4	J
32EDC-5-82	2 to 4	47	32		22	J	36	J	12	J	33		5.8		32	
32EDC-5-82	4 to 8	38	27		16	J	28	J	8.4	J	18		3.1	J	31	
32EDC-5-83	0 to 0.5	19	12		9.7		13	J	13		12		3.2	J	10	
32EDC-5-83	0.5 to 2	3.1	2	J	1.3	J	2.6	J	1.7	J	2.9	J	0.39	J	3.1	J
32EDC-5-83	2 to 4	2.2	1.3	J	0.88	J	1.7	J	1.1	J	1.2	J	0.45	J	2	J
32EDC-5-83	4 to 8	8.8	6.4		4.8	J	4.5	J	6		5.4	J	0.96	J	4.1	J
32EDC-5-84	0 to 0.5	190	140		69	J	100	J	89	J	89		13		170	
32EDC-5-84	0.5 to 2	130	96		42	J	69	J	51	J	51		8.5		110	
32EDC-5-84	2 to 4	17	11		5.1	J	8.5	J	6.4	J	6.2		5.6	U	14	
32EDC-5-84	4 to 8	6.9	6	U	6	UJ	6	UJ	6	UJ	6	U	6	U	6	U
32EDC-5-85	0 to 0.5	210	150		100		120		94		110		25	J	130	
32EDC-5-85	0.5 to 2	510	390	J	190		210		190		190		49	J	250	
32EDC-5-85	2 to 4	600	470	J	210		230		230		230		55	J	260	
32EDC-5-85	4 to 8	44	17	J	9.4	J	16	J	11	J	13	J	18	J	66	
32EDC-5-86	0 to 0.5	15	11		7.2		7.1		6.9		8.5		1.8	J	8.8	
32EDC-5-86	0.5 to 2	610	450		310		290		290		350		60		330	
32EDC-5-86	2 to 4	200	150		92		100		95		110		18		98	
32EDC-5-86	4 to 8	2000	1500		1100		1100		710		1200		190		990	
32EDC-5-87	0 to 0.5	330	250		160	J	170	J	160	J	190		24		220	
32EDC-5-87	0.5 to 2	390	300		190	J	190	J	190	J	210		27		250	
32EDC-5-87	2 to 4	140	110		64	J	65	J	67	J	73		9.5		96	
32EDC-5-87	4 to 8	7	6.1	U	6.1	UJ	6.1	UJ	6.1	UJ	6.1	U	6.1	U	2.3	J
32EDC-5-88	0 to 0.5	120	80	J	55	J	62	J	70	J	72	J	17	J	83	J
32EDC-5-88	0.5 to 2	1000	760	J	430	J	440	J	480	J	540	J	93	J	640	J
32EDC-5-88	2 to 4	23	16	J	11	J	9.6	J	13	J	12	J	3.1	J	14	J
32EDC-5-88	4 to 8	3.3	2.3	J	1.8	J	2.1	J	1.6	J	1.8	J	0.37	J	2.1	J
32EDC-5-89	0 to 0.5	24	17		9		14		12		13		5.5	U	19	
32EDC-5-89	0.5 to 2	14	9		4.6	J	7.2		6.6		7.2		5.4	U	8.9	
32EDC-5-89	2 to 4	30	22		11		15		16		17		5.6	U	22	
32EDC-5-89	4 to 8	2200	1700		1300		970		1000		1300		130		1100	
32EDC-5-90	0 to 0.5	24	18		9	J	14		9.6		11	J	5.6	U	9.9	J
32EDC-5-90	0.5 to 2	50	38		27	J	22		36		33	J	5.3	J	19	J
32EDC-5-90	2 to 4	38	28		10	J	24		16		16	J	4.3	J	19	J
32EDC-5-90	4 to 8	38	30		12	J	23		14		14	J	6.2	U	15	J
32EDC-5-91	0 to 0.5	41	32		8.6		19		17		8.8		4.3	J	21	
32EDC-5-91	0.5 to 2	150	130		27	U	27	U	27	U	27	U	13	J	27	U
32EDC-5-91	2 to 4	15	11		3.8	J	6.7		6.3		4.7	J	1.7	J	8	
32EDC-5-91	4 to 8	28	22		8.7		14		12		11		2.3	J	13	
32EDC-5-92	0 to 0.5	1000	810		530		610		480	J	620		100		14	
32EDC-5-92	0.5 to 2	8.7	4.6	J	2.6	J	3.5	J	4.7	J	3.2	J	5.7	U	5.8	
32EDC-5-92	2 to 4	17	11		13		8.6		9.3	J	16		3	J	8	
32EDC-5-92	4 to 8	6	2.7	J	2.2	J	2.4	J	1.5	J	2.3	J	5.2	U	2	J
32EDC-5-93	0 to 0.5	44	29	J	21	J	28	J	24	J	29	J	7.3	J	22	J
32EDC-5-93	0.5 to 2	130	92	J	43	J	73	J	66	J	53	J	16	J	98	J

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-93	2 to 4	120	80		57		75	J	65		71		18		45	
32EDC-5-93	4 to 8	49	37		13	J	28	J	24		14	J	4.9	J	32	
32EDC-5-94	0 to 0.5	43	30		28		29		23		34		4.2	J	24	
32EDC-5-94	0.5 to 2	21	15		8		12		8.8		11		1.8	J	17	
32EDC-5-94	2 to 4	54	40		23		30		24		36		4.6	J	36	
32EDC-5-94	4 to 8	18	12		6.9		8.7		6.9		8.2		5.7	U	12	
32EDC-5-95	0 to 0.5	75	57		35		41		57	J	41		7		32	
32EDC-5-95	0.5 to 2	23	17		8.7		11		15	J	10		2.5	J	14	
32EDC-5-95	2 to 4	32	23		16		17		24	J	19		4	J	17	
32EDC-5-95	4 to 8	64	47		24		32		46	J	27		7		37	
32EDC-5-96	0 to 0.5	630	440		340		350		370		370		76		370	
32EDC-5-96	0.5 to 2	46000	35000		26000	J	26000		27000		29000	J	4000		20000	
32EDC-5-96	2 to 4	720	500		400		390		400		430		94		420	
32EDC-5-96	4 to 8	990	700		490		540		510		560		120		620	
32EDC-5-97	0 to 0.5	79	52	J	56		56		47	J	62		11		47	
32EDC-5-97	0.5 to 2	160	120	J	82		87		73	J	89		15		74	
32EDC-5-97	2 to 4	210	160	J	110		120		82	J	130		21		100	
32EDC-5-97	4 to 8	900	670	J	480		460		450	J	570		98		350	
32EDC-5-98	0 to 0.5	320	230	J	150	J	160	J	140	J	160	J	39	J	180	J
32EDC-5-98	0.5 to 2	210	150	J	110	J	130	J	93	J	120	J	25	J	120	J
32EDC-5-98	2 to 4	150	110	J	77	J	91	J	64	J	82	J	18	J	85	J
32EDC-5-98	4 to 8	10	6.2	J	5	J	9.3	J	5.6	J	13	J	2.2	J	5	J
32EDC-5-99	0 to 0.5	61	44		36		33		34		42		6.7		28	
32EDC-5-99	0.5 to 2	19	14		9.6		10		9.5		10		2.1	J	8.5	
32EDC-5-99	2 to 4	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-99	4 to 8	5.6	1.7	J	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-5-100	0 to 0.5	120	78		46	J	55		70		68	J	19		110	
32EDC-5-100	0.5 to 2	17	12		6.3	J	8.2		8.8		10	J	2.2	J	16	
32EDC-5-100	2 to 4	18	13		8		8.3		9.1		9.9		2	J	16	
32EDC-5-100	4 to 8	24	18		6.3		10		11		5.6	J	1.8	J	20	
32EDC-5-101	0 to 0.5	1000	800		400	J	550		530		510	J	87		430	J
32EDC-5-101	0.5 to 2	64	49		19	J	41		26		27	J	6		31	J
32EDC-5-101	2 to 4	150	110		46	J	91		72		66	J	14		72	J
32EDC-5-101	4 to 8	72	58		27		41		33		34		5.7	U	42	
32EDC-5-102	0 to 0.5	23	17	J	10	J	11	J	15	J	15	J	2.9	J	9.6	J
32EDC-5-102	0.5 to 2	18	13	J	9.6	J	8.6	J	12	J	14	J	2.8	J	6	J
32EDC-5-102	2 to 4	36	22	J	14	J	33	J	16	J	72	J	8.7	J	7.9	J
32EDC-5-102	4 to 8	59	49	J	11	J	38	J	23	J	35	J	5.5	UJ	22	J
32EDC-5-103	0 to 0.5	33	22		17		22		21		25		4.6	J	18	
32EDC-5-103	0.5 to 2	950	650		600		660		650		750		120		420	
32EDC-5-103	2 to 4	38	25		14		24		17		19		6		30	
32EDC-5-103	4 to 8	5.1	1.7	J	0.83	J	1	J	1.2	J	1.3	J	6.1	U	1.4	J
32EDC-5-104	0 to 0.5	17	11		7.5		12		3.4	J	8.6		5.3	U	11	
32EDC-5-104	0.5 to 2	120	84		43		89		28		57		9.4		120	
32EDC-5-104	2 to 4	90	64		33		66		20		41		8.5		75	
32EDC-5-104	4 to 8	120	92		41		78		21		33		7		79	

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-105	0 to 0.5	25	18		10		18		5.6		11		2.2	J	19	
32EDC-5-105	0.5 to 2	50	34		44		42		15		44		4.7	J	27	
32EDC-5-105	2 to 4	75	53		24		54		13		36		7.6		61	
32EDC-5-105	4 to 8	400	290		180		310		92		220		32		320	
32EDC-5-106	0 to 0.5	13	8.7		4.4	J	6.4		7.5		5.5		1.7	J	10	
32EDC-5-106	0.5 to 2	46	35		23		24		31		29		4	J	23	
32EDC-5-106	2 to 4	26	19		8.2		15		16		12		2.9	J	15	
32EDC-5-106	4 to 8	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.62	J
32EDC-5-107	0 to 0.5	17	12		8.8		11		9.2		14		2.3	J	8.6	
32EDC-5-107	0.5 to 2	29	21		14		19		13		16		2.5	J	17	
32EDC-5-107	2 to 4	59	44		28		36		28		40		5.2	J	34	
32EDC-5-107	4 to 8	30	21	J	14	J	26	J	7.8	J	20	J	3	J	18	J
32EDC-5-108	0 to 0.5	6.1	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	1.2	J
32EDC-5-108	0.5 to 2	29	21		14		22		6.8		15		5.9	U	17	
32EDC-5-108	2 to 4	13000	9900		8300		5800		3000		8500		810		6500	
32EDC-5-108	4 to 8	4300	3200		2300		2100		920		2400		400		2200	
32EDC-5-109	0 to 0.5	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-109	0.5 to 2	18	13		7.6		9.2		8.5		9.2		1.9	J	8.9	
32EDC-5-109	2 to 4	9.6	6.5		3.7	J	5.4	J	4.2	J	6.1		1.8	J	3.5	J
32EDC-5-109	4 to 8	5.7	2	J	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	1.6	J
32EDC-5-110	0 to 0.5	24	17		13		13		13		15		1.9	J	19	
32EDC-5-110	0.5 to 2	6.8	3.2	J	1.6	J	2.5	J	5.5	U	2	J	5.5	U	4.1	J
32EDC-5-110	2 to 4	44	34		8.5		20		17		11		3.1	J	38	
32EDC-5-110	4 to 8	89	68		29		46		38		39		6	J	70	
32EDC-5-111	0 to 0.5	9.6	5.8		3	J	4.8	J	3.7	J	3.6	J	5.1	U	4.5	J
32EDC-5-111	0.5 to 2	43	32		20		22		20		24		4.5	J	18	
32EDC-5-111	2 to 4	39	27		14		26		21		25		5	J	24	
32EDC-5-111	4 to 8	20	14		8.7		13		9.7		13		2.4	J	9.6	
32EDC-5-112	0 to 0.5	21	15		6.1		12		9.7		8.4		2.3	J	15	
32EDC-5-112	0.5 to 2	70	53		37		38		34		48		5.3	J	38	
32EDC-5-112	2 to 4	19	13		7.3		12		7.5		9.7		5.4	U	13	
32EDC-5-112	4 to 8	63	50		20		32		28		19		3.6	J	38	
32EDC-5-113	0 to 0.5	6.2	5.5	U	5.5	U	5.5	U	1.8	J	5.5	U	5.5	U	1.3	J
32EDC-5-113	0.5 to 2	5.7	1.9	J	6	U	6	U	1.8	J	6	U	6	U	1.5	J
32EDC-5-113	2 to 4	6.8	3.2	J	2.6	J	2.3	J	3.1	J	2.9	J	5.8	U	1.8	J
32EDC-5-113	4 to 8	16	10		6.2		14		7.7	J	12		2.8	J	6.7	
32EDC-5-114	0 to 0.5	18	8.2		3.9	J	5.7		6.6		5.4		5.6		27	
32EDC-5-114	0.5 to 2	8.1	1.6	J	0.66	J	1.3	J	0.74	J	0.85	J	4.6	J	17	
32EDC-5-114	2 to 4	10	3.7	J	2.1	J	4.8	J	3.8	J	10		4.6	J	13	
32EDC-5-114	4 to 8	100	74		47		60		74		66		12		70	
32EDC-5-115	0 to 0.5	26	14		5.7		20		4.3	J	26		7.7		19	
32EDC-5-115	0.5 to 2	7.7	3.8	J	1.8	J	3.8	J	5.6	U	2.7	J	5.6	U	5.1	J
32EDC-5-116	0 to 0.5	55	39		23		35		28		29		6.1		42	
32EDC-5-116	0.5 to 2	24	17		11		15		13		13		2.7	J	17	
32EDC-5-116	2 to 4	14	9.7		5.5		8		6.7		6.9		1.4	J	10	
32EDC-5-116	4 to 8	26	19		9.3		13		12		12		2.1	J	21	

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-117	0 to 0.5	38	25	J	16	J	21	J	15	J	19	J	6.2	J	26	J
32EDC-5-117	0.5 to 2	33	23	J	13	J	20	J	16	J	16	J	4.4	J	20	J
32EDC-5-117	2 to 4	83	60	J	33	J	50	J	34	J	38	J	9	J	50	J
32EDC-5-117	4 to 8	220	160	J	110	J	130	J	99	J	120	J	26	J	120	J
32EDC-5-118	0 to 0.5	310	220	J	110	J	200	J	150	J	140	J	35	J	270	J
32EDC-5-118	0.5 to 2	250	180	J	140	J	150	J	110	J	130	J	28	J	130	J
32EDC-5-118	2 to 4	17	12	J	5.2	J	8.9	J	6.8	J	7.5	J	2.2	J	9.8	J
32EDC-5-118	4 to 8	3.7	0.65	J	0.42	J	0.85	J	0.6	J	0.79	J	5.8	UJ	0.59	J
32EDC-5-119	0 to 0.5	39	29		12		18		25		20		3.1	J	36	
32EDC-5-119	0.5 to 2	23	16		8.6		10		14		12		5.4	U	19	
32EDC-5-119	2 to 4	6	5.4	U	1.6	J	5.4	U	2.5	J	2.4	J	5.4	U	1.3	J
32EDC-5-119	4 to 8	57	43		24		42		12		22		3.9	J	31	
32EDC-5-120	0 to 0.5	490	360		230		250		290		260		51		310	
32EDC-5-120	0.5 to 2	170	120		96		100		100		100		20		110	
32EDC-5-120	2 to 4	22000	15000		18000		14000		14000		16000		2400		8500	
32EDC-5-120	4 to 8	480	350		270		270		300		270		54		230	
32EDC-5-121	0 to 0.5	130	100		86		71		97		110		11		63	
32EDC-5-121	0.5 to 2	5.7	4.4	J	1.7	J	2.2	J	2.9	J	2.2	J	0.47	J	4	J
32EDC-5-121	2 to 4	16	10		4.8	J	8.2		8.4		9.5		4	J	7.3	
32EDC-5-121	4 to 8	11	8		3.5	J	6.6		4.9	J	4.8	J	1.1	J	6	
32EDC-5-122	0 to 0.5	22	11		8.7		11		11		20		6.6		22	
32EDC-5-122	0.5 to 2	250	180		92		130		110		110		25		180	
32EDC-5-122	2 to 4	640	430		370		470		400		430		90		300	
32EDC-5-122	4 to 8	12	8.5		6.1	J	8		7.3		6.6		1.7	J	6.7	
32EDC-5-123	0 to 0.5	73	52		46		44		37		54		7.6		39	
32EDC-5-123	0.5 to 2	10	5.9		6.6		4.8	J	5.3	J	7.6		5.5	U	3.9	J
32EDC-5-123	2 to 4	78	59		30		37		33		36		5.9		60	
32EDC-5-123	4 to 8	220	170		82		100		93		140		16		120	
32EDC-5-124	0 to 0.5	130	100		38		58		87	J	53		14		83	
32EDC-5-124	0.5 to 2	56	41		20		25		36	J	25		6.7		35	
32EDC-5-124	2 to 4	54	39		21		34		23	J	30		6.7		29	
32EDC-5-124	4 to 8	570	430		210		270		380	J	260		57		320	
32EDC-5-125	0 to 0.5	250	180	J	93		160		120	J	130		28		160	
32EDC-5-125	0.5 to 2	14	9.5	J	6.8		7.6		7.3	J	8.9		2.1	J	8.5	
32EDC-5-125	2 to 4	750	570	J	420		360		380	J	470		69		330	
32EDC-5-125	4 to 8	540	410	J	230		260		240	J	280		50		250	
32EDC-5-126	0 to 0.5	950	690		560		770		500		680		82		420	
32EDC-5-126	0.5 to 2	580	420		350		430		340		420		54		250	
32EDC-5-126	2 to 4	1400	1000		850		1100		850		1000		140		610	
32EDC-5-126	4 to 8	530	380		300		370		300		360		51		250	
32EDC-5-127	0 to 0.5	1200	830		670		990		340		750		120		630	
32EDC-5-127	0.5 to 2	1700	1200		1100		1400		490		1100		180		840	
32EDC-5-127	2 to 4	460	320		270		390		140		310		48		250	
32EDC-5-127	4 to 8	38	27		16		31		8.9		20		3.3	J	26	
32EDC-5-128	0 to 0.5	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-128	0.5 to 2	95	71		49		76		24		56		6.4		44	

Table D1-2
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-128	2 to 4	180	130		110		150		52		130		15		87	
32EDC-5-128	4 to 8	31	23		13		25		7.4		16		2.7	J	18	
32EDC-5-129	0 to 0.5	43	33		29		23		31		29		3.6	J	7.8	
32EDC-5-129	0.5 to 2	12	7.6		6.1		6.2		5	J	6.3		5.6	U	4.4	J
32EDC-5-129	2 to 4	31	22	J	13		25	J	11	J	24		4	J	6.6	
32EDC-5-129	4 to 8	61	35	J	20		35	J	27	J	28		19	J	16	
32EDC-5-130	0 to 0.5	57	23	J	53	U	20	J	53	U	16	J	53	U	53	U
32EDC-5-130	0.5 to 2	40	30		21		29		16		26		3.9	J	12	
32EDC-5-130	2 to 4	130	92	J	70		95	J	70	J	89		14	J	28	
32EDC-5-130	4 to 8	22	17		5.3	J	17		7.8		7.8		1.8	J	6.7	
32EDC-5-131	0 to 0.5	19	13		6.5		12		9.8		11		2.9	J	15	
32EDC-5-131	0.5 to 2	23	18		6.8		14		10		7.1		1.2	J	13	
32EDC-5-131	2 to 4	130	100		23		70		43		25		12		85	
32EDC-5-131	4 to 8	180	130		40		130		120		63		17		120	
32EDC-5-132	0 to 0.5	1200	780	J	690		700	J	730	J	850		190	J	590	J
32EDC-5-132	0.5 to 2	490	350	J	160		340	J	220	J	430	J	67	J	220	
32EDC-5-132	2 to 4	110	82	J	62	J	58	J	86	J	100	J	16	J	39	J
32EDC-5-132	4 to 8	5.8	4.1	J	2.1	J	2.6	J	2.9	J	3.2	J	0.95	J	2.5	J
32EDC-5-133	0 to 0.5	5.8	2.4	J	2.5	J	3.9	J	5.3	U	12		5.3	U	1.1	J
32EDC-5-133	0.5 to 2	48	33		26		36		29		32		5.7		24	
32EDC-5-133	2 to 4	5.9	5.3	U	1.6	J	2.1	J	5.3	U	3.7	J	5.3	U	1.6	J
32EDC-5-133	4 to 8	55	41		23		31		25		29		4.1	J	38	
32EDC-5-134	0 to 0.5	75	60		23		41		36		29		6.4	U	48	
32EDC-5-134	0.5 to 2	72	53		34		37		37		45		9		29	
32EDC-5-134	2 to 4	240	170		110		120		120		150		32		87	
32EDC-5-134	4 to 8	740	530	J	440	J	390	J	450	J	550	J	100	J	220	J
32EDC-5-135	0 to 0.5	1400	970		850		840		680		860		140		680	
32EDC-5-135	0.5 to 2	640	470		310		370		320		410		52		490	
32EDC-5-135	2 to 4	120	82		56		78		58		74		10		93	
32EDC-5-135	4 to 8	140	99		45		90		63		61		10		130	
32EDC-5-136	0 to 0.5	170	130		87		79		94		100		12		110	
32EDC-5-136	0.5 to 2	210	160		120		91		120		120		18		140	
32EDC-5-136	2 to 4	33	24		11		14		17		14		3.2	J	30	
32EDC-5-136	4 to 8	110	84		38		52		58		46		9.9		100	

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-3
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-12-1	0 to 0.5	6.5	4	J	2.5	J	2.8	J	2.7	J	6.1	J	1.5	J	4	J
32EDC-12-1	0.5 to 2	4.1	2.7	J	2.8	J	2.2	J	2.3	J	2.7	J	0.57	J	2.9	J
32EDC-12-1	2 to 4	5.9	5.3	U	0.51	J	5.3	U	5.3	U	0.41	J	5.3	U	5.3	U
32EDC-12-1	4 to 8	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-2	0 to 0.5	6.3	5.6	U	5.6	U	2.1	J	5.6	U	5.6	U	5.6	U	1.7	J
32EDC-12-2	0.5 to 2	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-2	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-2	4 to 8	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-12-3	0 to 0.5	36	15	J	110	U	11	J	8.4	J	13	J	8.7	J	110	U
32EDC-12-3	0.5 to 2	5.1	3.2	J	1.6	J	3.5	J	1.9	J	4.8	J	1.2	J	2	J
32EDC-12-3	2 to 4	5	1.8	J	0.39	J	1.8	J	1.3	J	3.1	J	5.3	U	5.3	U
32EDC-12-3	4 to 8	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-4	0 to 0.5	32	14	J	5.3	J	20	J	54	U	38	J	14	J	8.2	J
32EDC-12-4	0.5 to 2	5.9	5.3	U	5.3	U	5.3	U	5.3	U	2.6	J	5.3	U	0.89	J
32EDC-12-4	2 to 4	17	12		12		7.7		9.8		17		5.3	U	6.3	
32EDC-12-4	4 to 8	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-12-5	0 to 0.5	6.8	3.1	J	1.5	J	3.3	J	2.3	J	3.3	J	5.6	U	3.5	J
32EDC-12-5	0.5 to 2	5.9	5.3	U	1.8	J	2.7	J	5.3	U	8.6		5.3	U	0.7	J
32EDC-12-5	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-5	4 to 8	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-6	0 to 0.5	4.3	2.7	J	1.9	J	2.3	J	1.7	J	2.3	J	0.74	J	4.3	J
32EDC-12-6	0.5 to 2	17	11		9.7		11		8.2		10		2.1	J	13	
32EDC-12-6	2 to 4	7.1	4.7	J	3.8	J	4.2	J	3.1	J	4.9	J	1	J	5.7	
32EDC-12-6	4 to 8	52	46	J	16	J	9.3	J	7.1	J	130	J	5.6	UJ	5.6	UJ
32EDC-12-7	0 to 0.5	15	3.2	J	52	U	4.8	J	52	U	7.3	J	7.6	J	6.8	J
32EDC-12-7	0.5 to 2	13	8.7		6.2		8.7		6		15		2.5	J	3.8	J
32EDC-12-7	2 to 4	12	5.1	J	1.9	J	4.8	J	54	U	11	J	4.9	J	8.8	J
32EDC-12-7	4 to 8	6.2	2.7	J	1.5	J	2.1	J	5.6	U	5.6	U	5.6	U	3.1	J
32EDC-12-8	0 to 0.5	82	27	J	32	J	53	J	27	J	210		42	J	39	J
32EDC-12-8	0.5 to 2	12	7.8		3.6	J	6.7		7.3		14		2.6	J	5.9	
32EDC-12-8	2 to 4	7.9	4.9	J	2.2	J	3.7	J	3.5	J	9.7		2.2	J	1.8	J
32EDC-12-8	4 to 8	2.4	1.4	J	0.63	J	1.2	J	1.2	J	0.88	J	0.63	J	1.6	J
32EDC-12-9	0 to 0.5	4.2	1.1	J	0.96	J	0.68	J	0.79	J	0.87	J	5.6	U	1.3	J
32EDC-12-9	0.5 to 2	6	5.2	UJ	5.2	U	5.2	UJ	5.2	UJ	5.2	U	5.2	UJ	5.2	UJ
32EDC-12-9	2 to 4	3.9	0.67	J	0.36	J	5.3	UJ	5.3	UJ	0.39	J	5.3	UJ	5.3	UJ
32EDC-12-9	4 to 8	4	0.87	J	0.46	J	0.69	J	0.48	J	0.58	J	5.8	UJ	0.98	J
32EDC-12-10	0 to 0.5	24	17	J	15	J	12	J	7.9	J	7.6	J	3.1	J	16	J
32EDC-12-10	0.5 to 2	42	32		18	J	25		18		22	J	3.9	J	16	J
32EDC-12-10	2 to 4	130	100		76	J	77		63		85	J	11		45	J
32EDC-12-10	4 to 8	6	2.6	J	1.9	J	2	J	5.7	U	2.2	J	5.7	U	1.5	J
32EDC-12-11	0 to 0.5	3.3	2.1	J	1.8	J	2	J	1.6	J	2.2	J	0.63	J	1.7	J
32EDC-12-11	0.5 to 2	3.9	0.59	J	0.38	J	5.4	UJ	5.4	UJ	0.46	J	5.4	UJ	5.4	UJ
32EDC-12-11	2 to 4	3.8	0.53	J	0.38	J	5.3	UJ	5.3	UJ	0.4	J	5.3	UJ	5.3	UJ

Table D1-3
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-12-11	4 to 8	4.1	0.48	J	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ
32EDC-12-12	0 to 0.5	96	30	J	100	UJ	100	U	100	U	100	U	100	U	100	U
32EDC-12-12	0.5 to 2	4.8	1.4	J	5.2	UJ	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-12-12	2 to 4	19	2.4	J	26	UJ	26	U	26	U	26	U	26	U	26	U
32EDC-12-12	4 to 8	4.2	0.77	J	5.3	UJ	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-13	0 to 0.5	6.4	2.8	J	5.3	U	2.1	J	5.3	U	5.3	U	5.3	U	4.3	J
32EDC-12-13	0.5 to 2	5.9	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	0.86	J
32EDC-12-13	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-13	4 to 8	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-12-14	0 to 0.5	6.6	2.9	J	1.5	J	2.7	J	2.2	J	2.9	J	5.7	U	3.7	J
32EDC-12-14	0.5 to 2	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-14	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-14	4 to 8	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-15	0 to 0.5	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-15	0.5 to 2	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-15	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-15	4 to 8	5.7	1.8	J	5.9	U	5.9	U	5.9	U	1.8	J	5.9	U	5.9	U
32EDC-12-16	0 to 0.5	13	8.6		3.7	J	5.2	J	7	U	6		5.3	U	8.6	
32EDC-12-16	0.5 to 2	10	6.1		3.1	J	6.3		5.3	U	10		5.3	U	5.1	J
32EDC-12-16	2 to 4	9.4	5.5		2.6	J	5	J	5.3	U	5.5		5.3	U	4.2	J
32EDC-12-16	4 to 8	12	7.8		3.1	J	5	J	5.9	U	5	J	5.9	U	4.2	J
32EDC-12-18	0 to 0.5	76	52		34	J	58		43		51	J	11		37	J
32EDC-12-18	0.5 to 2	75	57		52	J	59		46		62	J	5.2	U	34	J
32EDC-12-18	2 to 4	33	25		18	J	24		20		24	J	5.2	U	12	J
32EDC-12-18	4 to 8	15	11		4.7	J	9.5		7.3		5.5	J	2.1	J	5.1	J
32EDC-12-19	0 to 0.5	31	21		16		26		27		30		4	J	17	
32EDC-12-19	0.5 to 2	6.2	5.5	U	1.5	J	2.3	J	5.5	U	5.5	U	5.5	U	3	J
32EDC-12-19	2 to 4	6.3	5.7	U	5.7	U	1.5	J	5.7	U	5.7	U	5.7	U	1.6	J
32EDC-12-19	4 to 8	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.88	J
32EDC-12-20	0 to 0.5	21	6	J	52	U	52	U	52	U	13	J	9.1	J	4.4	J
32EDC-12-20	0.5 to 2	5.9	5.2	U	5.2	U	2.5	J	5.2	U	3.7	J	5.2	U	1.2	J
32EDC-12-20	2 to 4	5.9	2.8	J	5.2	U	4.9	J	5.2	U	7		2.2	J	1.2	J
32EDC-12-20	4 to 8	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-21	0 to 0.5	12	7.9		4.3	J	5.4	U	5.6		6.8		5.4	U	6.3	
32EDC-12-21	0.5 to 2	8.4	4.6	J	5.5	UJ	5.5	U	5.5	U	4.6	J	5.5	U	4.4	J
32EDC-12-21	2 to 4	6.2	2.7	J	5.4	UJ	5.4	U	5.4	U	5.4	U	5.4	U	2.7	J
32EDC-12-21	4 to 8	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-12-22	0 to 0.5	4.4	2.9	J	1.2	J	2.6	J	1.6	J	1.7	J	0.52	J	5.9	
32EDC-12-22	0.5 to 2	5.7	3.9	J	1.7	J	3.3	J	2.1	J	1.8	J	0.58	J	6.9	J
32EDC-12-22	2 to 4	4.9	3.3	J	2.4	J	1.8	J	2.4	J	2.1	J	0.57	J	5.8	
32EDC-12-22	4 to 8	1.6	1	J	0.75	J	0.92	J	0.62	J	0.97	J	0.23	J	1.5	J
32EDC-12-23	0 to 0.5	11	7		5.4		4.5	J	7.1	U	7.4		5.4	U	4.4	J
32EDC-12-23	0.5 to 2	5.5	2.5	J	0.5	J	0.81	J	5.2	U	0.65	J	5.2	U	5.2	U

Table D1-3
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-12-23	2 to 4	6.5	3.2	J	1.6	J	1.6	J	5.3	U	2.8	J	5.3	U	5.3	U
32EDC-12-23	4 to 8	7	3.1	J	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-12-24	0 to 0.5	8.1	3.9	J	2.9	J	3.2	J	2.9	J	3.8	J	6.3	U	3.6	J
32EDC-12-24	0.5 to 2	7.1	3.3	J	3.1	J	4	J	3.7	J	5.1	J	5.5	U	2.5	J
32EDC-12-24	2 to 4	5.6	2.4	J	1.5	J	2	J	5.3	U	2.1	J	5.3	U	2.2	J
32EDC-12-24	4 to 8	6.9	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	0.76	J
32EDC-12-25	0 to 0.5	11	6.8		4.2	J	5.5	J	4.4	J	5.7		5.7	U	4.6	J
32EDC-12-25	0.5 to 2	55	39		31		28		23		42		7.4		26	
32EDC-12-25	2 to 4	20	14		7.8		10		8.9		8.8		3.1	J	8.5	
32EDC-12-25	4 to 8	15	11		7.9		7.9		6.5		8.7		1.9	J	7.2	
32EDC-12-26	0 to 0.5	33	27	U	27	U	34		27	U	34		27	U	27	U
32EDC-12-26	0.5 to 2	30	12	J	27	U	13	J	27	U	11	J	27	U	27	U
32EDC-12-26	2 to 4	6.1	5.3	U	5.3	U	2.5	J	5.3	U	2.8	J	5.3	U	5.3	U
32EDC-12-26	4 to 8	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-12-27	0 to 0.5	5.5	2.2	J	5.3	U	2.4	J	5.3	U	4.8	J	5.3	U	1.3	J
32EDC-12-27	0.5 to 2	7.3	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
32EDC-12-27	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-27	4 to 8	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-28	0 to 0.5	4	2.7	J	2.2	J	2.3	J	1.9	J	3.7	J	0.6	J	1.9	J
32EDC-12-28	0.5 to 2	3.8	0.43	J	5.2	UJ	5.2	UJ	5.2	UJ	0.38	J	5.2	UJ	5.2	UJ
32EDC-12-28	2 to 4	6	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ
32EDC-12-28	4 to 8	1.3	0.59	J	0.46	J	5.6	UJ	0.56	J	0.44	J	0.32	J	0.67	J
32EDC-12-29	0 to 0.5	100	58		77		210		97		350		11	J	17	J
32EDC-12-29	0.5 to 2	11	6.9		6.8		11		8.1		21		1.8	J	3.7	J
32EDC-12-29	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	1.5	J	5.3	U	5.3	U
32EDC-12-29	4 to 8	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-30	0 to 0.5	110	48		61		120		5.3	U	290		42		8.9	
32EDC-12-30	0.5 to 2	5.9	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U
32EDC-12-30	2 to 4	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-12-30	4 to 8	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-12-31	0 to 0.5	6	5.2	UJ	5.2	U	5.2	UJ	5.2	UJ	5.2	U	5.2	UJ	5.2	UJ
32EDC-12-31	0.5 to 2	5.1	5.2	UJ	0.46	J	5.2	UJ	5.2	UJ	7.3	J	1.9	J	5.2	UJ
32EDC-12-31	2 to 4	2.6	1.4	J	0.61	J	0.71	J	0.64	J	2	J	0.93	J	1.4	J
32EDC-12-31	4 to 8	6.7	6	UJ	6	UJ	6	UJ	0.35	J	0.52	J	6	UJ	0.76	J
32EDC-12-32	0 to 0.5	39	14		5.7	U	33		5.7	U	59		19		23	
32EDC-12-32	0.5 to 2	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-32	2 to 4	7.8	4	J	2.2	J	4.4	J	5.3	U	3	J	5.3	U	4.9	J
32EDC-12-32	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-12-33	0 to 0.5	64	44	J	25	J	32	J	35	J	28	J	8.9	J	53	J
32EDC-12-33	0.5 to 2	100	65	J	63	J	55	J	48	J	100	J	21	J	37	J
32EDC-12-33	2 to 4	27	19	J	12	J	30	J	15	J	38	J	5.3	UJ	8.7	J
32EDC-12-33	4 to 8	9	4.9	J	1.6	J	2.8	J	2.2	J	1.3	J	6	UJ	6	J
32EDC-12-34	0 to 0.5	50	38		27		26		36		33		4.4	J	22	

Table D1-3
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-12-34	0.5 to 2	7	3	J	2.9	J	5.4		5.4	U	4.4	J	5.4	U	3.9	J
32EDC-12-34	2 to 4	6	5.4	U	5.4	U	1.7	J	5.4	U	5.4	U	5.4	U	1.4	J
32EDC-12-34	4 to 8	130	74		180		180		62		200		17		59	

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-4
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-17
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-17-1	0 to 0.5	15	5.8	J	1.8	J	4.9	J	2.4	J	11	J	8.3		6.7	J
32EDC-17-1	0.5 to 2	7.6	3.4	J	2.1	J	4.5	J	2.8	J	6.2	J	6.2	U	3.6	J
32EDC-17-1	2 to 4	6.6	6	U	6	UJ	1.6	J	6	U	2.4	J	6	U	1.2	J
32EDC-17-1	4 to 8	6.7	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	UJ	5.8	U	5.8	U
32EDC-17-2	0 to 0.5	10	3.6	J	1.5	J	5.3	J	1.9	J	9	J	4.9	J	8.3	J
32EDC-17-2	0.5 to 2	6.9	3.1	J	1.9	J	5.9	J	5.2	UJ	4.6	J	5.2	U	4	J
32EDC-17-2	2 to 4	7.1	6.3	UJ	6.3	UJ	2.1	J	6.3	UJ	2.6	J	6.3	U	2.6	J
32EDC-17-2	4 to 8	6.5	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	U	5.6	UJ
32EDC-17-3	0 to 0.5	14	8.3	J	3.7	J	8.7	J	2.6	J	5.5	J	3.5	J	12	J
32EDC-17-3	0.5 to 2	6.3	3.6	J	1.6	J	3.6	J	2.2	J	4	J	1.8	J	3.9	J
32EDC-17-3	2 to 4	5.9	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	5.3	U	0.72	J
32EDC-17-3	4 to 8	6.8	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	5.9	U	5.9	UJ
32EDC-17-4	0 to 0.5	31	14	J	8.3	J	10	J	13	J	17	J	26	UJ	16	J
32EDC-17-4	0.5 to 2	5.9	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U
32EDC-17-4	2 to 4	1.7	0.42	J	5.3	U	0.64	J	0.33	J	0.39	J	0.89	J	0.76	J
32EDC-17-4	4 to 8	4.2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	0.59	J	0.62	J
32EDC-17-5	0 to 0.5	19	7.9	J	7	J	13	J	8.4	J	17	J	8.5	J	9.6	J
32EDC-17-5	0.5 to 2	15	7.6	J	3.6	J	5.3	J	3.9	J	9.7	J	5.2	J	12	J
32EDC-17-5	2 to 4	16	7.1	J	4.1	J	4.2	J	4.4	J	5.4	J	7.5	J	7.3	J
32EDC-17-5	4 to 8	3.8	0.54	J	0.38	J	5.7	U	0.41	J	0.62	J	5.7	U	0.79	J
32EDC-17-6	0 to 0.5	5.5	5.1	U	0.33	J	0.71	J	0.45	J	0.85	J	5.1	U	5.1	U
32EDC-17-6	0.5 to 2	1.6	0.75	J	0.63	J	1.1	J	0.37	J	2	J	0.46	J	5.2	U
32EDC-17-6	2 to 4	1.2	0.48	J	0.34	J	0.57	J	5.3	U	1.2	J	0.34	J	5.3	U
32EDC-17-6	4 to 8	5.6	1.8	J	0.79	J	1.3	J	0.98	J	0.94	J	7	U	1.3	J
32EDC-17-7	0 to 0.5	430	330	J	250	J	200	J	190	J	300	J	31		240	J
32EDC-17-7	0.5 to 2	14	8.8	J	4.5	J	6.5	J	5.4	J	5.6	J	5.3	U	9	J
32EDC-17-7	2 to 4	5.8	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	U	0.75	J
32EDC-17-7	4 to 8	6.8	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	5.9	U	5.9	UJ
32EDC-17-8	0 to 0.5	3.2	2.1	J	1.2	J	3.7	J	1.9	J	2.6	J	0.34	J	2.2	J
32EDC-17-8	0.5 to 2	3.4	0.43	J	5.2	U	0.54	J	5.2	U	0.42	J	5.2	U	0.64	J
32EDC-17-8	2 to 4	8	3.8	J	2	J	5.8		1.6	J	9.9		3	J	4	J
32EDC-17-8	4 to 8	4.6	1.5	J	0.65	J	1.3	J	0.87	J	1.2	J	5.6	U	1.3	J
32EDC-17-9	0 to 0.5	320	150		370		310		5.4	U	1500		93		25	
32EDC-17-9	0.5 to 2	5.9	5.3	U	1.4	J	1.4	J	5.3	U	5.2	J	5.3	U	5.3	U
32EDC-17-9	2 to 4	14	7.6		7.2		16		5.3	U	33		3.6	J	4.4	J
32EDC-17-9	4 to 8	6.3	5.6	U	5.6	U	5.6	U	5.6	U	3	J	5.6	U	0.74	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-5
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-21
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-21-1	0 to 0.5	220	150	J	120	J	170	J	80	J	320	J	37		71	J
32EDC-21-1	0.5 to 2	54	34	J	26	J	41	J	19	J	78	J	11		23	J
32EDC-21-1	2 to 4	62	41	J	27	J	43	J	23	J	66	J	9.7		37	J
32EDC-21-1	4 to 8	20	14	J	9.5	J	14	J	9.8	J	15	J	2.3	J	17	J
32EDC-21-2	0 to 0.5	80	43	J	20	J	63	J	48	J	68	J	26	J	25	J
32EDC-21-2	0.5 to 2		53	J	32		53	J	70	J	94				36	J
32EDC-21-2	2 to 4	170	140	J	42	J	110	J	64	J	110	J	7.6	J	53	J
32EDC-21-2	4 to 8	73	53	J	37	J	35	J	41	J	47	J	9	J	36	J
32EDC-21-3	0 to 0.5	120	82	J	57	J	67	J	55	J	81	J	13		74	J
32EDC-21-3	0.5 to 2	51	33	J	22	J	35	J	21	J	40	J	8.6		31	J
32EDC-21-3	2 to 4	120	86	J	52	J	76	J	60	J	78	J	11		93	J
32EDC-21-3	4 to 8	480	370	J	200	J	250	J	220	J	250	J	30		360	J
32EDC-21-4	0 to 0.5	15	10	J	6.5	J	10	J	7.2	J	12	J	2.6	J	11	J
32EDC-21-4	0.5 to 2	9.3	4.9	J	3.8	J	7.2	J	2.8	J	12	J	5.5	U	5.3	J
32EDC-21-4	2 to 4	290	220	J	160	J	150	J	140	J	200	J	22		180	J
32EDC-21-5	0 to 0.5	280	180		170	J	200		150		450	J	52	J	71	
32EDC-21-5	0.5 to 2	26	17	J	18	J	22	J	13	J	39	J	4	J	13	J
32EDC-21-6	0 to 0.5	130	82		59		150		5.4	U	190		25		48	
32EDC-21-6	0.5 to 2	130	95		64		77		62		84		9.4		76	
32EDC-21-6	2 to 4	76	53		33		55		32		73		9		45	
32EDC-21-7	0 to 0.5	230	150	J	110		230	J	140		170		33	J	100	
32EDC-21-7	0.5 to 2	44	28	J	18		34	J	26	J	26		9	J	14	J
32EDC-21-7	2 to 4	49	33	J	19	J	36	J	36	J	38	J	7.2	J	27	J
32EDC-21-7	4 to 8		1.1	J	0.86	J	2.1	J	1.9	J	1.3	J			1.5	J
32EDC-21-8	0 to 0.5	170	96		84		120		62		240		42	J	58	
32EDC-21-8	0.5 to 2	15	8.8		5.9		12		6.5	J	21		3.6	J	7.6	
32EDC-21-8	2 to 4	63	31	J	30	J	48	J	18	J	96		22	J	21	J
32EDC-21-8	4 to 8	0.99	0.55	J	0.42	J	0.67	J	0.37	J	1	J	0.25	J	0.79	J
32EDC-21-9	0 to 0.5	9.1	4.9	J	4.8	J	5.7		4.4	J	6.2		5.3	U	4.9	J
32EDC-21-9	0.5 to 2	60	43		29		39		26		47		6.8		30	
32EDC-21-9	2 to 4	8.5	4.5	J	2.8	J	5.1	J	2.9	J	5.1	J	5.5	U	4.4	J
32EDC-21-9	4 to 8	6.5	2.9	J	1.7	J	3	J	5.5	U	3.2	J	5.5	U	3	J
32EDC-21-10	0 to 0.5	20	14	J	6.7		15		7.4	J	11		2.8	J	7.2	
32EDC-21-10	0.5 to 2	28	19	J	11		20		11	J	22		4.3	J	10	
32EDC-21-10	2 to 4	28	19	J	17		26		10	J	34		4.1	J	9.2	
32EDC-21-10	4 to 8	420	310	J	210		230		190	J	270		38		220	
32EDC-21-11	0 to 0.5	45	25	J	17	J	24	J	17	J	40	J	14	J	19	J
32EDC-21-11	0.5 to 2	72	36	J	28	J	61		28	J	100		23	J	36	J
32EDC-21-11	2 to 4	59	31	J	17	J	41	J	21	J	60		18	J	44	J
32EDC-21-12	0 to 0.5	21	14	J	11		14		11	J	14		2.8	J	14	
32EDC-21-12	0.5 to 2				5.8	U	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	U

Table D1-5
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for EDC-21
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	**Depth (feet bgs)**	**B(a)P Equivalents**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-21-12	2 to 4	36	26	J	11		25		12	J	18		3.7	J	23	
32EDC-21-12	4 to 8	680	520	J	400		310		320	J	450		59		260	

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-1	0 to 0.5	59	33		17		32		15		82		18		29	
32FED-1A-1	0.5 to 2	50	33		24		43		11		34		6.5		35	
32FED-1A-1	2 to 4	75	53		30		55		18		43		8.1		52	
32FED-1A-1	4 to 8	31	21		16		22		14		42		4.4	J	19	
32FED-1A-2	0 to 0.5	36	19	J	7.3	J	16	J	17	J	42		13	J	16	J
32FED-1A-2	0.5 to 2	2.3	1.2	J	0.92	J	1.4	J	1.2	J	1.6	J	0.72	J	1.3	J
32FED-1A-2	2 to 4	11	5.6	J	2	J	7	J	3.3	J	12		3.7	J	5.4	J
32FED-1A-2	4 to 8	4.3	1.1	J	0.56	J	0.76	J	0.83	J	0.74	J	6	U	0.99	J
32FED-1A-3	0 to 0.5	24	14		7.8		15		8.3		26		6.5		9.7	
32FED-1A-3	0.5 to 2	6.5	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	0.63	J
32FED-1A-3	2 to 4	6.7	6.1	U	6.1	U	1.5	J	6.1	U	2.3	J	6.1	U	1.2	J
32FED-1A-3	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-4	0 to 0.5	73	45	J	22	J	54	J	49	J	82		16	J	37	J
32FED-1A-4	0.5 to 2	3.7	0.66	J	0.35	J	0.65	J	0.46	J	0.46	J	5.7	U	0.81	J
32FED-1A-4	2 to 4	15	6.7	J	3	J	8.1	J	8.3	J	10	J	12	U	6	J
32FED-1A-4	4 to 8	4.7	1.4	J	0.85	J	0.9	J	1.1	J	0.87	J	6.1	U	0.9	J
32FED-1A-5	0 to 0.5	530	370		230		450		250		310		65	J	260	
32FED-1A-5	0.5 to 2	5.9	3.1	J	1.6	J	3.5	J	3.2	J	2.5	J	1.9	J	3.7	J
32FED-1A-5	2 to 4	14	9.1		5	J	11		7.1		7.9		2.1	J	8.4	
32FED-1A-5	4 to 8	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	UJ	5.9	U
32FED-1A-6	0 to 0.5	3.4	5.2	UJ	1	J	5.2	UJ	5.2	UJ	1.9	J	0.19	J	5.2	UJ
32FED-1A-6	0.5 to 2	4.2	1.3	J	1.4	J	0.84	J	0.79	J	1.9	J	5.2	UJ	1.1	J
32FED-1A-6	2 to 4	3.5	0.74	J	0.78	J	0.59	J	0.4	J	1.5	J	5.2	UJ	0.66	J
32FED-1A-6	4 to 8	6.1	5.5	UJ	0.53	J	5.5	UJ	5.5	UJ	1.1	J	5.5	UJ	5.5	UJ
32FED-1A-7	0 to 0.5	30	12	J	26	U	22	J	26	U	15	J	26	U	26	U
32FED-1A-7	0.5 to 2	4.8	1.4	J	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-7	2 to 4	6.4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-7	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-8	0 to 0.5	5.9	5.2	U	5.2	U	2.4	J	5.2	U	2.1	J	5.2	U	1.7	J
32FED-1A-8	0.5 to 2	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-8	2 to 4	6.3	5.7	U	5.7	U	1.4	J	5.7	U	5.7	U	5.7	U	1	J
32FED-1A-8	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-9	0 to 0.5	13	8.8	J	3.8	J	7.9	J	6	J	8.4	J	2.7	J	6.5	J
32FED-1A-9	0.5 to 2	3	1.7	J	0.79	J	1.5	J	1.2	J	1.6	J	0.88	J	1.8	J
32FED-1A-9	2 to 4	3.7	2.3	J	1.1	J	2.1	J	1.7	J	2.3	J	0.89	J	2	J
32FED-1A-9	4 to 8	7	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ
32FED-1A-10	0 to 0.5	8.6	4.7	J	3	J	5.5		4.7	J	5.9	J	5.1	U	4.7	J
32FED-1A-10	0.5 to 2	6.5	5.6	U	5.6	UJ	5.6	U	5.6	U	5.6	UJ	5.6	U	5.6	U
32FED-1A-10	2 to 4	6.5	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	UJ	5.8	U	0.65	J
32FED-1A-10	4 to 8	7.2	6.2	U	6.2	UJ	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	U
32FED-1A-11	0 to 0.5	6.1	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	5.3	U	5.3	UJ
32FED-1A-11	0.5 to 2	6.6	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	5.7	U	5.7	UJ
32FED-1A-11	2 to 4	6.6	2.9	J	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	U	5.6	UJ
32FED-1A-11	4 to 8	7	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	U	6.1	UJ
32FED-1A-12	0 to 0.5	22	10		20		31		5.2	U	58		6.4		7.1	
32FED-1A-12	0.5 to 2	44	54	U	54	U	54	U	54	U	16	J	8.4	J	54	U

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-12	2 to 4	9.8	3.4	J	1.3	J	1.8	J	1.6	J	3.1	J	11	U	11	U
32FED-1A-12	4 to 8	3.7	0.56	J	0.41	J	0.6	J	0.72	J	0.41	J	5.8	U	0.92	J
32FED-1A-13	0 to 0.5	270	190		110		200		140		150		28	J	160	
32FED-1A-13	0.5 to 2	41	27		22		37		27		30		5.4	J	28	
32FED-1A-13	2 to 4	41	29		18		35		24		30		3.4	J	28	
32FED-1A-13	4 to 8	13	7.9		4.2	J	5.4	J	4.4	J	5.6	J	6.1	UJ	6.4	
32FED-1A-14	0 to 0.5	31	27	U	27	U	27	U	27	U	27	U	27	U	27	U
32FED-1A-14	0.5 to 2	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-14	2 to 4	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32FED-1A-14	4 to 8	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-15	0 to 0.5	24	20	J	3	J	7.6	J	4.1	J	26	J	5.4	UJ	5.4	UJ
32FED-1A-15	0.5 to 2	5.9	5.3	UJ	0.35	J	5.3	UJ	5.3	UJ	0.92	J	5.3	UJ	5.3	UJ
32FED-1A-15	2 to 4	11	6	J	5.3	UJ	2.6	J	2.3	J	12	J	3.7	J	5.3	UJ
32FED-1A-15	4 to 8	4.4	1	J	1.1	J	1.4	J	0.77	J	1.8	J	5.7	UJ	5.7	UJ
32FED-1A-16	0 to 0.5	6.8	3.2	J	2.1	J	3.5	J	2.8	J	3.7	J	5.5	U	2.3	J
32FED-1A-16	0.5 to 2	6.4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-16	2 to 4	6.4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-16	4 to 8	5.6	1.6	J	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-17	0 to 0.5	9.3	5.3		3.1	J	9.4		2.7	J	25		5.2	U	0.75	J
32FED-1A-17	0.5 to 2	6.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-17	2 to 4	6.5	5.8	U	5.8	U	2.9	J	5.8	U	8.8		5.8	U	1.1	J
32FED-1A-17	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-18	0 to 0.5	44	21	J	21	J	26	J	5.6	J	74		16	J	53	U
32FED-1A-18	0.5 to 2		33	J	61		31	J	16	J	160				53	U
32FED-1A-18	2 to 4	13	7.8		11		8.1		4	J	27		2.9	J	2.9	J
32FED-1A-18	4 to 8		5.7	U	5.7	U	5.7	U	5.7	U	5.7	U			5.7	U
32FED-1A-19	0 to 0.5	4.7	1.4	J	0.77	J	2.2	J	1.6	J	2.2	J	5.7	U	1.2	J
32FED-1A-19	0.5 to 2	4.7	1.4	J	1.1	J	1.4	J	1.4	J	1.7	J	5.7	U	1.4	J
32FED-1A-19	2 to 4	6.7	6	U	0.5	J	6	U	6	U	0.59	J	6	U	6	U
32FED-1A-19	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-20	0 to 0.5	53	22		11		36		9.2		51		25		16	
32FED-1A-20	0.5 to 2	6.5	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	0.89	J
32FED-1A-20	2 to 4	6.6	6	U	1.5	J	2.6	J	6	U	3.8	J	6	U	2	J
32FED-1A-20	4 to 8	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.65	J
32FED-1A-21	0 to 0.5	59	40		26		45		33		37		9.4		24	
32FED-1A-21	0.5 to 2	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-21	2 to 4	50	34		23		39		27		32		7.7		22	
32FED-1A-21	4 to 8	5.9	1.8	J	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-22	0 to 0.5	6.9	5.3	U	5.3	U	3.6	J	5.3	U	5.5		3.3	J	5.3	U
32FED-1A-22	0.5 to 2	6	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	1.3	J
32FED-1A-22	2 to 4	6.1	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	0.85	J
32FED-1A-22	4 to 8	6.7	6	U	6	U	6	U	6	U	6	U	6	U	0.64	J
32FED-1A-23	0 to 0.5	6.1	4.7	J	2	J	4.5	J	2	J	4.1	J	0.47	J	2.5	J
32FED-1A-23	0.5 to 2	2	1.3	J	1.5	J	1.3	J	0.96	J	1.8	J	0.29	J	1.5	J
32FED-1A-23	2 to 4	11	6.2		4.7	J	8.6		8.2		18		2.6	J	5.7	J
32FED-1A-23	4 to 8	260	190	J	14	J	21	J	24	J	160	J	34	J	600	U

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-24	0 to 0.5	69	33		36		61		5.4	U	160		25		13	
32FED-1A-24	0.5 to 2	6	5.3	U	5.3	U	2.4	J	5.3	U	3	J	5.3	U	1.6	J
32FED-1A-24	2 to 4	8.7	3.8	J	3.8	J	9.8		5.7	U	21		3.3	J	2.3	J
32FED-1A-24	4 to 8	6.6	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	1.4	J
32FED-1A-25	0 to 0.5	7.1	3.6	J	2.4	J	4.9	J	2.5	J	8.9		5.3	U	0.87	J
32FED-1A-25	0.5 to 2	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-25	2 to 4	6.5	5.7	U	5.7	U	1.6	J	5.7	U	3.7	J	5.7	U	5.7	U
32FED-1A-25	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-26	0 to 0.5	5.9	5.2	U	5.2	UJ	2.4	J	1.9	J	2.7	J	5.2	U	1.9	J
32FED-1A-26	0.5 to 2	6.3	5.6	U	5.6	UJ	5.6	UJ	5.6	UJ	5.6	U	5.6	U	0.76	J
32FED-1A-26	2 to 4	6.9	3	J	2.9	J	3.8	J	5.7	UJ	3.5	J	5.7	U	3.2	J
32FED-1A-26	4 to 8	6.9	6	U	6	UJ	6	UJ	6	UJ	6	U	6	U	6	U
32FED-1A-27	0 to 0.5	24	8.9		7.6	J	15		2.2	J	44	J	12		5.6	
32FED-1A-27	0.5 to 2	6.5	5.6	U	5.6	UJ	5.6	U	5.6	U	5.6	UJ	5.6	U	5.6	U
32FED-1A-27	2 to 4	6.4	5.7	U	5.7	UJ	5.7	U	5.7	U	2.6	J	5.7	U	0.88	J
32FED-1A-27	4 to 8	7	6.1	U	6.1	UJ	6.1	U	6.1	U	6.1	UJ	6.1	U	6.1	U
32FED-1A-28	0 to 0.5	61	53	U	53	U	53	U	53	U	20	J	53	U	53	U
32FED-1A-28	0.5 to 2	3.9	0.82	J	0.83	J	0.9	J	1.1	J	1.2	J	5.6	U	0.74	J
32FED-1A-28	2 to 4	32	28	U	28	U	28	U	28	U	7	J	28	U	28	U
32FED-1A-28	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-29	0 to 0.5	130	83	J	48	J	88	J	65	J	75	J	22	J	66	J
32FED-1A-29	0.5 to 2	7.2	4.8	J	3.4	J	4.7	J	3.6	J	4.2	J	1.1	J	4.1	J
32FED-1A-29	2 to 4	21	14	J	7.8	J	14	J	9.9	J	12	J	3.4	J	12	J
32FED-1A-29	4 to 8	7.5	6.5	UJ	6.5	UJ	6.5	UJ	6.5	UJ	0.61	J	6.5	UJ	6.5	UJ
32FED-1A-30	0 to 0.5	6.1	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	4.9	J	5.3	UJ	5.3	UJ
32FED-1A-30	0.5 to 2	14	10	J	4.8	J	7.3	J	5.6	J	27	J	5.4	UJ	5.4	UJ
32FED-1A-30	2 to 4	6.3	5.7	UJ	2.3	J	0.59	J	0.36	J	0.69	J	5.7	UJ	5.7	UJ
32FED-1A-30	4 to 8	6.6	5.9	UJ	2.6	J	1.3	J	2.1	J	9.9	J	5.9	UJ	5.9	UJ
32FED-1A-31	0 to 0.5	2600	1800		970		1900		900		1200		320		1500	
32FED-1A-31	0.5 to 2	25	17		8.9		23		7.2		15		2.9	J	16	
32FED-1A-31	2 to 4	33	21		13		28		10		16		5.9		20	
32FED-1A-31	4 to 8	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	1	J
32FED-1A-32	0 to 0.5	17	1.9	J	2.8	J	5.5	J	2.3	J	4.2	J	14	J	6.2	J
32FED-1A-32	0.5 to 2	3.7	0.65	J	1.1	J	0.64	J	0.52	J	0.74	J	5.2	UJ	5.2	UJ
32FED-1A-32	2 to 4	43	32	J	18	J	39	J	35	J	23	J	3.7	J	14	J
32FED-1A-32	4 to 8	6.5	5.8	UJ	0.94	J	5.8	UJ	5.8	UJ	5.8	UJ	5.8	UJ	5.8	UJ
32FED-1A-33	0 to 0.5	36	19	J	26	U	35		26	U	41		11	J	26	U
32FED-1A-33	0.5 to 2	9.8	3.3	J	5.2	U	3.1	J	2.7	J	1.7	J	5.3		5.7	
32FED-1A-33	2 to 4	8.5	5.3	U	3.1	J	15		5.3	U	25		3.8	J	1.7	J
32FED-1A-33	4 to 8	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-34	0 to 0.5	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32FED-1A-34	0.5 to 2	6.4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	3	J
32FED-1A-34	2 to 4	26	19		13		13		11		15		2.7	J	12	
32FED-1A-34	4 to 8	5.8	1.8	J	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-35	0 to 0.5	51	28	J	54	UJ	54	UJ	54	UJ	28	J	16	J	14	J
32FED-1A-35	0.5 to 2	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-35	2 to 4	6.7	5.8	UJ	5.8	UJ	5.8	UJ	5.8	UJ	5.8	UJ	5.8	U	5.8	UJ
32FED-1A-35	4 to 8	7	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	U	6.1	UJ
32FED-1A-36	0 to 0.5	11	6.1		3.7	J	9		6.7		11		5.1	U	6.6	
32FED-1A-36	0.5 to 2	6	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	0.59	J
32FED-1A-36	2 to 4	5.9	2.5	J	1.3	J	2.7	J	2.7	J	3.3	J	5.5	U	2.6	J
32FED-1A-36	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-37	0 to 0.5	65	31		17		51		5.4	U	85		24		34	
32FED-1A-37	0.5 to 2	13	8.4		4.9	J	8		2.4	J	5.1	J	5.6	U	8.3	
32FED-1A-37	2 to 4	33	24		15		19		11		25		3.6	J	20	
32FED-1A-37	4 to 8	6.7	6	U	6	U	6	U	6	U	6	U	6	U	1.1	J
32FED-1A-38	0 to 0.5	100000	72000		35000		87000		31000		43000		12000		52000	
32FED-1A-38	0.5 to 2	360	250		140		300		110		180		39		210	
32FED-1A-38	2 to 4	1700	1100		560		1300		620		820		340		840	
32FED-1A-38	4 to 8	6.5	5.7	U	1.4	J	3.9	J	5.7	U	7		5.7	U	2.4	J
32FED-1A-39	0 to 0.5	46	26		19		38		5.9	U	75		14	J	5.8	J
32FED-1A-39	0.5 to 2	6.4	5.7	U	5.7	U	5.7	U	5.7	U	2.4	J	5.7	UJ	0.86	J
32FED-1A-39	2 to 4	43	24		22		41		5.5	U	88		12	J	6.4	
32FED-1A-39	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	U
32FED-1A-40	0 to 0.5	110	50		26		140		51	U	280		44		51	U
32FED-1A-40	0.5 to 2	21	8.6		2.6	J	16		6.3	U	23		10	J	5.4	J
32FED-1A-40	2 to 4	7.4	3.6	J	2.8	J	8.5		5.7	U	19		2.3	J	5.7	U
32FED-1A-40	4 to 8	6.7	6	U	6	U	6	U	6	U	6	U	6	UJ	0.71	J
32FED-1A-41	0 to 0.5	150	73		41		190		5.1	U	410		56	J	12	
32FED-1A-41	0.5 to 2	6	6.2	U	6.2	U	3.1	J	6.2	U	5.8	J	2.1	J	1.1	J
32FED-1A-41	2 to 4	6.6	3.1	J	3.7	J	7.8		5.4	U	25		2.2	J	1.1	J
32FED-1A-41	4 to 8	8.5	3.7	J	3.1	J	9.7		5.8	U	22		3.3	J	1.6	J
32FED-1A-42	0 to 0.5	84	33	J	25	J	61	J	32	J	240		37	J	100	U
32FED-1A-42	0.5 to 2	4.4	1.2	J	5.2	U	0.67	J	0.63	J	1.6	J	5.2	U	5.2	U
32FED-1A-42	2 to 4	23	8.2	J	10	J	25	J	100	U	83	J	5.9	J	100	U
32FED-1A-42	4 to 8	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-43	0 to 0.5	11	6.1	J	3.7	J	7.2	J	5.3	J	5.5	J	3.5	J	7.2	J
32FED-1A-43	0.5 to 2	1.6	1	J	0.95	J	0.94	J	0.9	J	1.3	J	0.27	J	1.1	J
32FED-1A-43	2 to 4	4.1	5.8	U	5.8	U	5.8	UJ	5.8	U	0.8	J	0.54	J	0.64	J
32FED-1A-43	4 to 8	4	0.71	J	0.52	J	0.64	J	0.66	J	0.68	J	6.2	U	0.64	J
32FED-1A-44	0 to 0.5	120	100	U	100	U	100	UJ	100	U	47	J	100	U	100	U
32FED-1A-44	0.5 to 2	6.2	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-44	2 to 4	32	28	U	28	U	28	UJ	28	U	4.3	J	28	U	28	U
32FED-1A-44	4 to 8	4.5	0.73	J	6.1	U	0.73	J	0.66	J	6.1	U	6.1	U	6.1	U
32FED-1A-45	0 to 0.5	41	51	UJ	4	J	51	UJ	51	UJ	14	J	9.8	J	51	UJ
32FED-1A-45	0.5 to 2	60	52	UJ	52	UJ	52	UJ	52	UJ	52	UJ	52	UJ	52	UJ
32FED-1A-45	2 to 4	40	6.3	J	52	UJ	52	UJ	52	UJ	6	J	52	UJ	52	UJ
32FED-1A-45	4 to 8	1.6	0.5	J	6	U	6	U	6	U	6	U	0.35	J	0.76	J
32FED-1A-46	0 to 0.5	220	99		49	J	80		75		59		82		230	
32FED-1A-46	0.5 to 2	17	3.9	J	5.3	UJ	5.3	U	5.3	U	5.3	U	10		29	
32FED-1A-46	2 to 4	7.5	3.2	J	5.6	UJ	5.6	U	5.6	U	5.6	U	5.6	U	8.7	
32FED-1A-46	4 to 8	18	12		5.7	J	7.9		7.9		6.2	J	6.4	U	13	

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-47	0 to 0.5	2600	1800		1300		2100		1100		1700		380		920	
32FED-1A-47	0.5 to 2	8.5	4.8	J	2.6	J	4.4	J	3.1	J	3.6	J	5.3	U	3.6	J
32FED-1A-47	2 to 4	42	28		14		27		20		21		7.5		20	
32FED-1A-47	4 to 8	6.6	2.8	J	1.7	J	6.1	U	6.1	U	1.9	J	6.1	U	2.4	J
32FED-1A-48	0 to 0.5	73	37	J	21	J	43	J	25	J	98	J	26	J	30	J
32FED-1A-48	0.5 to 2	2.7	1.8	J	2.3	J	1.5	J	1.3	J	1.5	J	0.3	J	1.7	J
32FED-1A-48	2 to 4	3.5	1.3	J	1.6	J	2	J	1.3	J	5.8	J	1.7	J	1.5	J
32FED-1A-48	4 to 8	6.9	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
32FED-1A-49	0 to 0.5	84	41		37		76		5.2	U	180		31	J	9.1	J
32FED-1A-49	0.5 to 2	6.2	5.5	U	5.5	U	2	J	5.5	U	4.4	J	2.8	J	1.8	J
32FED-1A-49	2 to 4	22	9		11		18		3.2	J	59		9.5		3.3	J
32FED-1A-49	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-50	0 to 0.5	16	8.4		3.7	J	18		5.2	U	30		4.5	J	4	J
32FED-1A-50	0.5 to 2	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	UJ	2.7	J
32FED-1A-50	2 to 4	8.8	4.4	J	6.2	U	7.3		6.2	U	18		3	J	6.2	U
32FED-1A-50	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U
32FED-1A-51	0 to 0.5	22	6.8		2.5	J	13		5.2	U	18		13		5.4	
32FED-1A-51	0.5 to 2	7.1	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	1.7	J
32FED-1A-51	2 to 4	6.2	5.5	U	5.5	U	1.5	J	5.5	U	5.5	U	2.8	J	2.3	J
32FED-1A-51	4 to 8	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-52	0 to 0.5	6.8	3.4	J	5.1	U	5	J	5.1	U	12		5.1	U	0.72	J
32FED-1A-52	0.5 to 2	6.2	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	1.3	J
32FED-1A-52	2 to 4	6	2.4	J	5.7	U	3.1	J	5.7	U	7.4		5.7	U	0.78	J
32FED-1A-52	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-53	0 to 0.5	31	27	U	27	U	27	U	27	U	27	U	27	U	27	U
32FED-1A-53	0.5 to 2	6.5	2.8	J	5.8	U	5.8	U	5.8	U	1.8	J	5.8	U	1.8	J
32FED-1A-53	2 to 4	7.4	4	J	2.2	J	8	J	5.7	UJ	9.9		2.2	J	1.5	J
32FED-1A-53	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-54	0 to 0.5	11	5.3	U	5.3	UJ	3.1	J	5.3	U	6.3	J	7.1		5.9	
32FED-1A-54	0.5 to 2	6.6	5.7	U	5.7	UJ	5.7	U	5.7	U	5.7	UJ	5.7	U	5.7	U
32FED-1A-54	2 to 4	6.8	5.9	U	5.9	UJ	5.9	U	5.9	U	5.9	UJ	5.9	U	5.9	U
32FED-1A-54	4 to 8	6.9	6	U	6	UJ	6	U	6	U	6	UJ	6	U	6	U
32FED-1A-55	0 to 0.5	9.1	5.1	J	3.2	J	5.6		5.1		6.4		5.1	U	5.1	J
32FED-1A-55	0.5 to 2	6.1	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	1	J
32FED-1A-55	2 to 4	6.2	5.6	U	5.6	U	1.7	J	5.6	U	2.1	J	5.6	U	1.5	J
32FED-1A-55	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-56	0 to 0.5	8.8	4	J	2.2	J	5.2	J	4.8	J	5.4		3.4	J	6.2	
32FED-1A-56	0.5 to 2	20	14		12		9.7		12		14		2.9	J	8.8	
32FED-1A-56	2 to 4	9.3	5.8		2.9	J	6.3		4.6	J	3.9	J	1.8	J	7.2	
32FED-1A-56	4 to 8	12	8.4		3.3	J	7.1		6.7		4.3	J	1.5	J	7.3	
32FED-1A-57	0 to 0.5	140	99		50		120		39		66		17		99	
32FED-1A-57	0.5 to 2	25	17		10		22		6.8		13		2.6	J	17	
32FED-1A-57	2 to 4	33	23		14		29		9.2		18		3.4	J	23	
32FED-1A-57	4 to 8	10	6.1		2.7	J	4.4	J	4.1	J	3.2	J	6.1	U	5.5	J
32FED-1A-58	0 to 0.5	1400	890		550	J	1100		770		710		230		640	
32FED-1A-58	0.5 to 2	240	170		95	J	150		170		130		27		120	

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-58	2 to 4	39000	27000		12000	J	22000		29000		16000		6700		16000	
32FED-1A-58	4 to 8	13000	9000		4700	J	10000		7700		6200		2200		5300	
32FED-1A-59	0 to 0.5	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-59	0.5 to 2	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-59	2 to 4	6.3	6	U	6	U	2.9	J	6	U	6.4		2.4	J	3.2	J
32FED-1A-59	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-60	0 to 0.5	8.6	2.7	J	1.5	J	3.6	J	5.2	U	5.2		5	J	3.1	J
32FED-1A-60	0.5 to 2	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-60	2 to 4	9.8	3.4	J	1.8	J	6.4		5.6	U	15		5.3	J	2.7	J
32FED-1A-60	4 to 8	7	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-61	0 to 0.5	220	100		150		230		54	U	610		82		29	J
32FED-1A-61	0.5 to 2	15	6.4		2.7	J	9.6		6.3	U	21		6.6	J	4.2	J
32FED-1A-61	2 to 4	26	12		11		23		5.9	U	51		10	J	6.4	J
32FED-1A-61	4 to 8	6.9	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	UJ	0.78	J
32FED-1A-62	0 to 0.5	5.9	5.7	U	5.7	U	3.7	J	5.7	U	7.9		2.1	J	2.5	J
32FED-1A-62	0.5 to 2	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-62	2 to 4	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-62	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-63	0 to 0.5	6	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-63	0.5 to 2	6.2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-63	2 to 4	8.8	4.8	J	3.1	J	3.3	J	2.9	J	3.8	J	5.9	U	3.3	J
32FED-1A-63	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-64	0 to 0.5	6.7	5.9	U	5.9	UJ	2.4	J	5.9	UJ	2.6	J	5.9	U	2.3	J
32FED-1A-64	0.5 to 2	6.7	5.8	U	5.8	UJ	5.8	UJ	5.8	UJ	5.8	U	5.8	U	5.8	U
32FED-1A-64	2 to 4	6.9	6	U	6	UJ	6	UJ	6	UJ	6	U	6	U	6	U
32FED-1A-64	4 to 8	6.9	6	U	6	UJ	6	UJ	6	UJ	6	U	6	U	6	U
32FED-1A-65	0 to 0.5	61	53	UJ	53	UJ	53	UJ	53	UJ	5.3	J	53	UJ	53	UJ
32FED-1A-65	0.5 to 2	6.2	5.6	U	5.6	U	5.6	U	0.67	J	5.6	U	5.6	U	0.63	J
32FED-1A-65	2 to 4	18	9	J	6.3	J	63	U	5.9	J	6.2	J	4.2	J	8.4	J
32FED-1A-65	4 to 8	5	1.7	J	0.99	J	1.3	J	1.7	J	1.1	J	5.8	U	1.3	J
32FED-1A-66	0 to 0.5	15	4.6	J	5.9	J	8.6	J	52	UJ	32	J	6.1	J	52	UJ
32FED-1A-66	0.5 to 2	1.4	0.7	J	0.47	J	0.63	J	0.65	J	1.2	J	0.47	J	0.75	J
32FED-1A-66	2 to 4	44	57	U	57	U	57	U	57	U	7.7	J	8.3	J	7.3	J
32FED-1A-66	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-67	0 to 0.5	5.3	2	J	5.2	U	5.2	U	5.2	U	6		5.2	U	1.5	J
32FED-1A-67	0.5 to 2	180	120		62		120		100		88		34		87	
32FED-1A-67	2 to 4	670	450		230		500		270		340		110		320	
32FED-1A-67	4 to 8	26	17		11		17		14		14		4.7	J	12	
32FED-1A-68	0 to 0.5	31	27	UJ	27	UJ	27	UJ	27	UJ	27	UJ	27	UJ	27	UJ
32FED-1A-68	0.5 to 2	6	5.6	UJ	0.44	J	5.6	UJ	5.6	UJ	1	J	5.6	UJ	0.63	J
32FED-1A-68	2 to 4	35	30	U	30	U	30	U	30	U	30	U	30	U	30	U
32FED-1A-68	4 to 8	6.7	6	UJ	0.45	J	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
32FED-1A-69	0 to 0.5	6.2	5.4	U	5.4	U	1.9	J	5.4	U	2.1	J	5.4	U	5.4	U
32FED-1A-69	0.5 to 2	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-69	2 to 4	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-69	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U

Table D1-6
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet bgs)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-70	0 to 0.5	5.4	2	J	0.87	J	1.7	J	1.2	J	1.7	J	6	U	1.4	J
32FED-1A-70	0.5 to 2	4.5	1.1	J	6	U	0.71	J	0.44	J	6	U	6	U	0.66	J
32FED-1A-70	2 to 4	5.5	2.1	J	0.52	J	0.86	J	0.91	J	1	J	6	U	6	U
32FED-1A-70	4 to 8	6.7	2.6	J	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	U
32FED-1A-71	0 to 0.5	4.9	1	J	6	U	6	U	0.36	J	0.57	J	6	U	6	U
32FED-1A-71	0.5 to 2	5.4	1.4	J	6.2	U	6.2	U	0.38	J	6.2	UJ	6.2	U	6.2	U
32FED-1A-71	2 to 4	5.4	1.3	J	6.3	U	6.3	U	6.3	U	6.3	UJ	6.3	U	6.3	U
32FED-1A-71	4 to 8	4.9	0.88	J	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	U
32FED-1A-72	0 to 0.5	3.7	0.86	J	0.46	J	0.58	J	0.76	J	1.1	J	5.3	U	0.82	J
32FED-1A-72	0.5 to 2	4.7	1.5	J	0.65	J	0.65	J	1.3	J	0.91	J	5.8	U	1.9	J
32FED-1A-72	2 to 4	4	0.94	J	0.55	J	0.82	J	0.49	J	0.48	J	5.7	U	0.96	J
32FED-1A-72	4 to 8	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-73	0 to 0.5	6.6	5.9	U	5.9	UJ	5.9	UJ	5.9	UJ	5.9	U	5.9	U	0.93	J
32FED-1A-73	0.5 to 2	7	6.1	U	6.1	UJ	6.1	UJ	6.1	UJ	6.1	U	6.1	U	6.1	U
32FED-1A-73	2 to 4	7.2	6.2	U	6.2	UJ	6.2	UJ	6.2	UJ	6.2	U	6.2	U	6.2	U
32FED-1A-73	4 to 8	7	6.1	U	6.1	UJ	6.1	UJ	6.1	UJ	6.1	U	6.1	U	6.1	U
32FED-1A-74	0 to 0.5	760	480	J	230	J	430	J	460	J	560	J	160	J	440	J
32FED-1A-74	0.5 to 2	20	4.7	J	3	J	3.4	J	3.4	J	4.1	J	29	UJ	4.6	J
32FED-1A-74	2 to 4	77	56	J	33	J	47	J	62		63		8.1	J	40	J
32FED-1A-74	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-75	0 to 0.5	28	27	U	4.4	J	13	J	27	U	34		12	J	5.3	J
32FED-1A-75	0.5 to 2	6.2	5.5	U	5.5	U	5.5	U	5.5	U	2.2	J	5.5	U	1.3	J
32FED-1A-75	2 to 4	6.3	5.7	U	5.7	U	1.5	J	5.7	U	2.2	J	5.7	U	1.6	J
32FED-1A-75	4 to 8	19	13		8.7		7.5		9		9.6		6.2	U	9	
32FED-1A-76	0 to 0.5	7.7	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	3.8	J	4.8	J
32FED-1A-76	0.5 to 2	8.1	4.1	J	2.3	J	3.9	J	6	U	2.2	J	6	U	3.8	J
32FED-1A-76	2 to 4	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.71	J
32FED-1A-76	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-77	0 to 0.5	19	7	J	6	J	7.2	J	11	J	40	J	9.2	J	29	UJ
32FED-1A-77	0.5 to 2	4.3	0.93	J	1	J	1.3	J	0.73	J	2.3	J	6	UJ	0.93	J
32FED-1A-77	2 to 4	14	7	J	5.7	J	2.9	J	8.7	J	31	J	4.1	J	29	UJ
32FED-1A-77	4 to 8	6.6	5.9	UJ	0.42	J	5.9	UJ	5.9	UJ	1	J	5.9	UJ	5.9	UJ
32FED-1A-78	0 to 0.5	6.1	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32FED-1A-78	0.5 to 2	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-78	2 to 4	6.7	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-78	4 to 8	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-79	0 to 0.5	6.6	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-79	0.5 to 2	6.8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-79	2 to 4	6.9	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-79	4 to 8	7.2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-7
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for PBC-1A
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	Depth (feet)	B(a)P Equivalents	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32PBC-1A-1	0 to 0.5	6.4	5.6	U	5.6	U	2	J	5.6	U	4.2	J	5.6	U	5.6	U
32PBC-1A-1	0.5 to 2	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.89	J
32PBC-1A-1	2 to 4	35	27		16		15		16		19		6	U	20	
32PBC-1A-1	4 to 8	6.6	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.85	J
32PBC-1A-2	0 to 0.5	590	510	U	510	U	510	UJ	510	U	510	U	510	U	510	U
32PBC-1A-2	0.5 to 2	28	17	J	3.8	J	18	J	18	J	60	J	7.5	J	6.1	J
32PBC-1A-2	2 to 4	33	23	J	8.4		18	J	2.7	J	55	J	6.8	J	7.4	J
32PBC-1A-2	4 to 8	53	40	J	15		34	J	23	J	20	J	5.6	J	21	J
32PBC-1A-3	0 to 0.5	590	530	U	64	J	530	UJ	530	U	220	J	530	U	530	U
32PBC-1A-3	0.5 to 2	640	550	U	550	U	550	UJ	550	U	550	U	550	U	550	U
32PBC-1A-3	2 to 4	650	560	U	560	U	560	UJ	560	U	43	J	560	U	560	U
32PBC-1A-3	4 to 8	11	8.8		2.6	J	3.4	J	6.1		3.3	J	0.45	J	6.5	
32PBC-1A-4	0 to 0.5	10	6.1		3	J	4.1	J	4	J	4.1	J	5.6	U	4.8	J
32PBC-1A-4	0.5 to 2	15	6.2		2.3	J	9.3		5.6	U	14		6.3		9.6	
32PBC-1A-4	2 to 4	11	7.4		3.1	J	6.5		3.2	J	7.9		1.9	J	7.2	
32PBC-1A-4	4 to 8	8.4	4.4	J	1.7	J	3	J	6.1	U	6.1	U	6.1	U	4.4	J
32PBC-1A-5	0 to 0.5	4.4	0.75	J	0.38	J	6	U	6	U	6	U	6	U	6	U
32PBC-1A-5	0.5 to 2	8.6	5.7	J	5.1	J	5	J	6.6	J	5.8		1.4	J	4.2	J
32PBC-1A-5	2 to 4	3.2	1.9	J	2.3	J	1.2	J	2.2	J	1.7	J	0.79	J	1.8	J
32PBC-1A-5	4 to 8	8.2	4.2	J	2.5	J	1.7	J	3.1	J	2.4	J	6.3	UJ	3.5	J
32PBC-1A-6	0 to 0.5	50	30		19	J	23	J	21	J	28		27	U	20	J
32PBC-1A-6	0.5 to 2	53	35		22	J	27	U	27	U	79		27	U	7.8	J
32PBC-1A-6	2 to 4	46	32		18		34		19		45		7.5		11	
32PBC-1A-7	0 to 0.5	28	16		11		14		8.9		26		7.7		12	
32PBC-1A-7	0.5 to 2	35	25		4.6	J	17		9.4		23		5.2	J	28	
32PBC-1A-7	2 to 4	6.6	3	J	2	J	3.6	J	5.6	U	9.3		5.6	U	2.1	J
32PBC-1A-7	4 to 8	240	170		84		150		110		120		18		250	
32PBC-1A-8	0 to 0.5	4.8	1.2	J	6.8	J	0.83	J	1.2	J	1.4	J	5.5	UJ	0.82	J
32PBC-1A-8	0.5 to 2	180	110	J	120		170	J	170	J	170		34	J	93	J
32PBC-1A-8	4 to 8	24	16	J	14	J	11	J	15	J	23	J	4.8	J	10	J
32PBC-1A-9	0 to 0.5	37	26		18		25		24		27		5.5		13	
32PBC-1A-9	0.5 to 2	8.2	4.2	J	3.5	J	4.1	J	3.1	J	4.1	J	5.9	U	2.7	J
32PBC-1A-9	2 to 4	65	44		57		45		43		58		8.6		18	
32PBC-1A-9	4 to 8	14	9.4		4.3	J	6.6		4.9	J	4.9	J	6.1	U	6	J
32PBC-1A-10	0 to 0.5	10	6.8		4.4	J	5.7		5.2	J	6.2		2.1	J	3.1	J
32PBC-1A-10	0.5 to 2	7.2	3.6	J	2.4	J	2.5	J	2.1	J	2.6	J	5.8	U	2	J
32PBC-1A-10	2 to 4	7.1	3.2	J	6.2	U	2.3	J	6.2	U	6.2	U	6.2	U	2.1	J
32PBC-1A-10	4 to 8	13	8.8		2.5	J	5.7	J	4.3	J	2.9	J	6.1	U	4.9	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-8
B(a)P Equivalent and Carcinogenic PAH Soil Sampling Results
for PBC-3
(results reported in micrograms per kilogram)

			Benzo(a)pyrene		Benz(a)anthracene		Benzo(b)fluoranthene		Benzo(k)fluoranthene		Chrysene		Dibenz(a,h)anthracene		Indeno(1,2,3-c,d)pyrene	
Station ID	**Depth (feet bgs)**	**B(a)P Equivalents**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32PBC-3-1	0 to 0.5	49	33	J	19		42		12	J	34		7.6		23	
32PBC-3-1	0.5 to 2	35	26	J	14	J	31	J	11	J	23	J	3.4	J	12	J
32PBC-3-1	2 to 4	49	36	J	15	J	43	J	18	J	37	J	5.8	J	14	J
32PBC-3-2	0 to 0.5	7.8	4	J	1.8	J	6.9	J	5.3	UJ	11	J	5.3	UJ	5.3	UJ
32PBC-3-2	0.5 to 2	120	90	J	57	J	70	J	60	J	70	J	12	J	68	J
32PBC-3-2	2 to 4	160	120	J	61	J	110	J	65	J	110	J	13	J	43	J
32PBC-3-3	0 to 0.5	16	11	J	6.1	J	8	J	6.7	J	7.7	J	6.1	UJ	8.1	J
32PBC-3-4	0 to 0.5	41	31	J	10	J	23	J	18	J	16	J	4.3	J	27	J
32PBC-3-4	0.5 to 2	120	89	J	65	J	57	J	55	J	66	J	9.4	J	50	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-9
Nonarcinogenic PAH Soil Sampling Results
for EDC-3
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-3-1	0 to 0.5	5.2	U	5.2	U	1.6	J	5.2	U	54		1.9	J	5.2	U	5.2	U	2.4	J	4.2	J
32EDC-3-1	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	9.6		5.2	U	5.2	U	5.2	U	3	J	5.2	U
32EDC-3-1	2 to 4	5.2	U	5.2	U	5.2	U	5.2	U	6.5		5.2	U	5.2	U	5.2	U	4.1	J	5.2	U
32EDC-3-1	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-2	0 to 0.5	0.71	J	6.1	U	6.1	UJ	0.99	J	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	3.5	J	10	J
32EDC-3-2	0.5 to 2	5.3	UJ	5.3	UJ	5.3	U	5.3	UJ	7.1	J	0.37	J	5.3	UJ	5.3	UJ	0.86	J	4.5	J
32EDC-3-2	2 to 4	0.34	J	5.7	UJ	5.7	U	5.7	UJ	2.2	J	0.59	J	5.7	UJ	5.7	UJ	0.46	J	1.6	J
32EDC-3-2	4 to 8	6	UJ	6	UJ	6	UJ	6	UJ	1.2	J	1	J	6	UJ	6	UJ	6	UJ	1.4	J
32EDC-3-3	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	30		2	J	5.7	U	5.7	U	5.7	U	2	J
32EDC-3-3	0.5 to 2	3	J	5.5	U	5.5	U	5.5	U	20		6		5.5	U	5.5	U	11		8.3	
32EDC-3-3	2 to 4	7.4		4.3	J	5.5	U	17		52		120		6.6		2.3	J	62		100	
32EDC-3-3	4 to 8	5.4	J	6.1	U	6.1	U	6.1	U	17		3.8	J	1.7	J	6.1	U	12		5.4	J
32EDC-3-4	0 to 0.5	1.3	J	5.8	U	2.5	J	3.6	J	19		12		5.8	U	1.2	J	6.8		18	
32EDC-3-4	0.5 to 2	2.1	J	5.5	U	6.1		14		65		5.5	U	5.5	U	2.7	J	5.7		5.5	U
32EDC-3-4	2 to 4	6.2	U	6.2	U	6.2	U	1.9	J	17		6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32EDC-3-4	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	2.6	J	2	J	6.1	U	6.1	U	6.1	U	3.2	J
32EDC-3-5	0 to 0.5	0.33	J	5.4	UJ	5.4	U	0.48	J	3	J	4.2	J	5.4	UJ	0.44	J	5	J	5.6	
32EDC-3-5	0.5 to 2	0.77	J	5.4	UJ	5.4	UJ	0.62	J	8.3	J	4.3	J	5.4	UJ	0.58	J	2.5	J	5.9	J
32EDC-3-5	2 to 4	5.8	UJ	5.8	UJ	5.8	U	5.8	UJ	4	J	1.8	J	5.8	UJ	5.8	UJ	1	J	2.5	J
32EDC-3-5	4 to 8	0.68	J	6.1	UJ	6.1	UJ	0.69	J	10		4.9	J	2	J	0.77	J	1.3	J	35	J
32EDC-3-6	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	1.6	J	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-3-6	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	3.2	J	1.9	J	5.4	U	5.4	U	1.5	J	2.2	J
32EDC-3-6	2 to 4	1.3	J	5.7	U	5.7	U	5.7	U	3.6	J	5.7	U	5.7	U	1	J	5.7	U	1.9	J
32EDC-3-6	4 to 8	1400		160		6.2	U	14		35		41		67		950		41		86	
32EDC-3-7	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	1.7	J	5.4	U	5.4	U	5.4	U	1.9	J	5.4	U
32EDC-3-7	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-3-7	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-7	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32EDC-3-8	0 to 0.5	110	U	110	U	110	U	110	U	10	J	110	U	110	U	110	U	110	U	110	U
32EDC-3-8	0.5 to 2	0.49	J	110	U	110	U	0.68	J	24	J	1.4	J	110	U	0.37	J	110	U	1.9	J
32EDC-3-8	2 to 4	0.33	J	5.9	UJ	5.9	UJ	5.9	UJ	3.9	J	1.7	J	5.9	UJ	5.9	UJ	0.63	J	2.2	J
32EDC-3-8	4 to 8	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	6.3	J	3.7	J	5.9	UJ	0.54	J	1.3	J	7.7	J
32EDC-3-9	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	77		3.8	J	5.3	U	5.3	U	2.3	J	5.9	
32EDC-3-9	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	43		4.7	J	5.4	U	5.4	U	1.7	J	7.6	
32EDC-3-9	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	20		4.1	J	5.8	U	5.8	U	2.3	J	5.9	
32EDC-3-9	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	1.9	J	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32EDC-3-10	0 to 0.5	17	J	100	U	100	U	8.8	J	93	J	45	J	100	U	26	J	130		110	
32EDC-3-10	0.5 to 2	18	J	110	U	110	U	110	U	33	J	40	J	110	U	52	J	30	J	69	J
32EDC-3-10	2 to 4	100	J	110	U	110	U	14	J	36	J	69	J	110	U	71	J	84	J	94	J
32EDC-3-10	4 to 8	760		89	J	89	J	390		78	J	220		66	J	830		370		310	
32EDC-3-11	0 to 0.5	21	J	110	U	110	U	110	U	41	J	110	U	53	J	110	U	78	J	12	J
32EDC-3-11	0.5 to 2	0.36	J	5.5	UJ	5.5	U	5.5	U	0.73	J	5.5	U	1.3	J	5.5	UJ	2.3	J	1.4	J
32EDC-3-11	2 to 4	6.3	UJ	6.3	UJ	6.3	UJ	6.3	UJ	6.3	UJ	0.44	J	6.3	UJ	6.3	UJ	0.74	J	1	J
32EDC-3-11	4 to 8	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.5	J
32EDC-3-12	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	35		10		5.3	U	5.3	U	5.3		16	
32EDC-3-12	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	8.2		5.9		5.8	U	5.8	U	5.8	U	8.8	
32EDC-3-12	2 to 4	6.1	U	6.1	U	6.1	U	6.1	U	12		9.1		6.1	U	6.1	U	2.4	J	15	
32EDC-3-12	4 to 8	6.1	U	6.1	U	4.3	J	9.8		150		140		1.9	J	10		21		320	
32EDC-3-13	0 to 0.5	0.73	J	5.3	U	5.3	U	1.6	J	11		3.1	J	5.3	U	0.49	J	2.3	J	4.7	J

Table D1-9
Nonarcinogenic PAH Soil Sampling Results
for EDC-3
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-3-13	0.5 to 2	2	J	1.3	J	1.1	J	2.6	J	21	J	6.3	J	1.2	J	2.6	J	5.9	J	8.4	J
32EDC-3-13	2 to 4	5.8	U	5.8	UJ	5.8	U	5.8	U	4.1	J	1.8	J	5.8	U	5.8	UJ	0.66	J	2.8	J
32EDC-3-13	4 to 8	6.4	UJ	6.4	UJ	6.4	UJ	6.4	UJ	1.1	J	0.65	J	6.4	UJ	6.4	UJ	6.4	UJ	1.1	J
32EDC-3-14	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	44		9.5		5.4	U	5.4	U	3.3	J	14	
32EDC-3-14	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	9.2		7.5		5.7	U	5.7	U	2.4	J	11	
32EDC-3-14	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	9.4		5.6	J	5.6	U	5.6	U	4.6	J	9.8	
32EDC-3-14	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-3-15	0 to 0.5	61		4.1	J	5.3	U	3.3	J	42		6.4		15		19		67		19	
32EDC-3-15	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	2.5	J	5.6	U
32EDC-3-15	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-15	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-3-16	0 to 0.5	30		3.3	J	5.4	U	2	J	20	J	2.1	J	15		26		38		9.9	
32EDC-3-16	0.5 to 2	0.36	J	5.3	U	5.3	U	0.64	J	8.1		15		5.3	U	0.52	J	5.2	J	19	
32EDC-3-16	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	0.48	J	5.7	U	5.7	U	5.7	U	5.7	U	0.48	J
32EDC-3-16	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-3-17	0 to 0.5	5.1	U	2.3	J	5.1	U	5.1	U	16		5.1	U	4.1	J	5.1	U	4.3	J	4.3	J
32EDC-3-17	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	4.1	J	5.2	U	1.5	J	5.2	U	1.3	J	3.2	J
32EDC-3-17	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	2.3	J	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-3-17	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-3-18	0 to 0.5	5.5	U	5.5	U	5.5	U	5.5	U	1.5	J	5.5	U	5.5	U	5.5	U	5.5	U	2.7	J
32EDC-3-18	0.5 to 2	5.9	U	5.9	U	5.9	U	2.1	J	12		31		5.9	U	5.9	U	14		43	
32EDC-3-18	2 to 4	6	U	6	U	6	U	6	U	3.3	J	3.3	J	6	U	6	U	6	U	6.5	
32EDC-3-18	4 to 8	6.3	U	6.3	U	6.3	U	6.3	U	15		12		6.3	U	6.3	U	2.6	J	41	
32EDC-3-19	0 to 0.5	4.2	J	1.5	J	3	J	8.7		31		53		2.3	J	4.4	J	31		74	
32EDC-3-19	0.5 to 2	10		4.2	J	5.4		20		56		90		7.4		7.4		66		120	
32EDC-3-19	2 to 4	9.5		14		5.2	J	45		96		340		18		7.4		150		350	
32EDC-3-19	4 to 8	7		3	J	4.1	J	17		33		85		4.8	J	5.9		48		110	
32EDC-3-20	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	29		6.6		1.4	J	5.4	U	4.3	J	12	
32EDC-3-20	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	3.4	J	1.7	J	5.3	U	5.3	U	5.3	U	2.6	J
32EDC-3-20	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-3-20	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-3-21	0 to 0.5	1.1	J	1.9	J	1	J	2.9	J	5.5	UJ	20		5.5	U	1.3	J	12		18	
32EDC-3-21	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	17		13		5.9	U	5.9	U	4	J	14	
32EDC-3-21	2 to 4	5.9	U	1.7	J	3.7	J	6.7		170		170		1.4	J	4.4	J	37		220	
32EDC-3-21	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-3-22	0 to 0.5	1.9	J	1	J	1.7	J	5.4	U	23	J	5.3	J	2.1	J	1	J	5.5		27	
32EDC-3-22	0.5 to 2	13		2.3	J	5.5	U	1.5	J	6.6	J	4.1	J	20		4.3	J	26		26	
32EDC-3-22	2 to 4	19		1.2	J	1.7	J	5.4	U	16	J	3.2	J	28		10		35		16	
32EDC-3-22	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	0.61	J	2.2	J	5.9	U	5.9	U	1.1	J	3.6	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-5-1	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	1.6	J	1.8	J	5.2	U	5.2	U	5.2	U	2	J
32EDC-5-1	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-1	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-1	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	2.7	J	2.2	J	5.7	U	5.7	U	5.7	U	3	J
32EDC-5-2	0 to 0.5	2.9	J	5.3	U	2.4	J	3.9	J	50		54		1.2	J	2.7	J	29		58	
32EDC-5-2	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	J	5	J	5.6	U	5.6	U	2	J	6.7	
32EDC-5-2	2 to 4	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32EDC-5-2	4 to 8	6	U	6	U	6	U	6	U	2.5	J	2.8	J	6	U	6	U	1.8	J	4	J
32EDC-5-3	0 to 0.5	5.2	U	5.2	U	25		5.2	UJ	56		5.2	UJ	27		5.2	U	39	J	89	J
32EDC-5-3	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	UJ	5.3	U	5.3	UJ	5.3	U	5.3	U	5.3	UJ	5.3	UJ
32EDC-5-3	2 to 4	6	U	6	U	6	U	6	UJ	6	U	6	UJ	6	U	6	U	6	UJ	6	UJ
32EDC-5-3	4 to 8	6	U	6	U	6	U	6	UJ	6	U	6	UJ	6	U	6	U	6	UJ	6	UJ
32EDC-5-4A	0 to 0.5	0.67	J	11	U	11	U	11	U	2.4	J	2.2	J	11	U	11	U	1.6	J	3.7	J
32EDC-5-4A	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	5.9		5.7		5.3	U	0.36	J	1.7	J	8.6	
32EDC-5-4A	2 to 4	0.51	J	0.97	J	9.5		17		99		350		2.4	J	3.5	J	91		440	
32EDC-5-4A	4 to 8	12	U	12	U	12	U	12	U	6.4	J	3.7	J	12	U	12	U	1.9	J	6.6	J
32EDC-5-5	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	UJ	5.7	U	5.7	U	5.7	UJ	5.7	U
32EDC-5-5	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	UJ	5.9	U	5.9	U	5.9	UJ	5.9	U
32EDC-5-5	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	UJ	5.9	U	5.9	U	5.9	UJ	5.9	U
32EDC-5-5	4 to 8	6	U	6	U	6	U	6	U	1.7	J	6	UJ	6	U	6	U	6	UJ	6	U
32EDC-5-6	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	0.48	J	5.4	U	5.4	U	5.4	U	5.4	UJ	5.4	UJ
32EDC-5-6	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	0.48	J	0.62	J	5.5	U	5.5	U	0.41	J	0.7	J
32EDC-5-6	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	0.58	J	0.53	J	5.8	U	5.8	U	5.8	UJ	0.75	J
32EDC-5-6	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	0.81	J	0.37	J	6.1	U	6.1	U	6.1	UJ	1.1	J
32EDC-5-7	0 to 0.5	5.4	U	5.4	U	3.6	J	6.9	J	26		32	J	5.4	U	0.8	J	14	J	36	J
32EDC-5-7	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	UJ	5.7	U	5.7	UJ	5.7	U	5.7	U	5.7	UJ	5.7	UJ
32EDC-5-7	2 to 4	2.5	J	46		2.4	J	170	J	340		1700	J	65		2.5	J	960	J	1100	J
32EDC-5-7	4 to 8	6	U	6	U	2.2	J	5.1	J	6.8		6.4	J	6	U	6	U	1.8	J	4	J
32EDC-5-8	0 to 0.5	2.2	J	5.6	U	1.8	J	2	J	24		29		5.6	U	2.7	J	15		34	
32EDC-5-8	0.5 to 2	0.79	J	6.2	U	6.2	U	6.2	U	1.3	J	1.6	J	6.2	U	0.56	J	1.1	J	1.8	J
32EDC-5-8	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	0.34	J	5.4	U	5.4	U	5.4	U	0.56	J
32EDC-5-8	4 to 8	6.3	U	6.3	U	6.3	U	6.3	U	2.8	J	1.6	J	6.3	U	6.3	U	0.45	J	4.4	J
32EDC-5-9	0 to 0.5	5.2	U	5.2	U	21		5.2	UJ	23		35	J	5.2	U	5.2	U	5.2	UJ	31	J
32EDC-5-9	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	UJ	5.4	UJ
32EDC-5-9	2 to 4	5.2	U	5.2	U	5.2	U	5.2	UJ	5.2	U	5.2	UJ	5.2	U	5.2	U	5.2	UJ	5.2	UJ
32EDC-5-9	4 to 8	5.8	U	5.8	U	5.8	U	5.8	UJ	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	UJ	5.8	UJ
32EDC-5-10	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	65		8.2		1.5	J	5.4	U	9.9		15	
32EDC-5-10	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	6.6		3.5	J	5.6	U	5.6	U	5.6	U	5.7	
32EDC-5-10	2 to 4	6	U	6	U	6	U	1.8	J	28		31		6	U	6	U	9.5		52	
32EDC-5-10	4 to 8	6.2	U	6.5		2.1	J	7.6		83		90		3	J	3.3	J	48		130	
32EDC-5-11	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	0.68	J	0.75	J	5.3	U	5.3	U	0.41	J	1.1	J
32EDC-5-11	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	UJ
32EDC-5-11	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	UJ	5.7	UJ
32EDC-5-11	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	UJ
32EDC-5-12	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	2.2	J	2.5	J	5.3	U	5.3	U	5.3	U	2.9	J
32EDC-5-12	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-12	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-12	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-13A	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	7.9		13		5.4	U	5.4	U	7.7		24	
32EDC-5-13A	0.5 to 2	6.5	U	6.5	U	6.5	U	6.5	U	2.9	J	6.7		6.5	U	6.5	U	3.6	J	12	
32EDC-5-13A	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	2	J	1.9	J	5.5	U	5.5	U	5.5	U	3.1	J
32EDC-5-13A	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	4.6	J	6.3		5.8	U	5.8	U	3.5	J	13	
32EDC-5-14	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	UJ	5.4	UJ
32EDC-5-14	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	UJ	5.5	U	5.5	UJ	5.5	U	5.5	U	5.5	UJ	5.5	UJ
32EDC-5-14	2 to 4	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	U	5.6	UJ	5.6	U	5.6	U	5.6	UJ	5.6	UJ
32EDC-5-14	4 to 8	6	U	6	U	6	U	6	UJ	6	U	6	UJ	6	U	6	U	6	UJ	6	UJ
32EDC-5-15	0 to 0.5	1.3	J	5.3	U	5.3	U	5.3	U	2.1	J	2.7	J	5.3	U	0.77	J	2.3	J	4.1	J
32EDC-5-15	0.5 to 2	5.1	U	5.1	U	5.1	U	5.1	U	1.9	J	1.5	J	5.1	U	5.1	U	0.47	J	2.4	J
32EDC-5-15	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	0.6	J	0.52	J	5.3	U	5.3	U	5.3	U	0.74	J
32EDC-5-15	4 to 8	6	U	6	U	6	U	6	U	4.3	J	4.2	J	6	U	0.37	J	1.2	J	10	
32EDC-5-16	0 to 0.5	1	J	10	U	10	U	1.3	J	15		12		10	U	0.72	J	8.2	J	15	
32EDC-5-16	0.5 to 2	0.69	J	11	U	11	U	11	U	6.9	J	3.6	J	11	U	11	U	1.1	J	5.7	J
32EDC-5-16	2 to 4	1	J	11	U	11	U	11	U	8.1	J	4.7	J	11	U	0.75	J	1.1	J	6.6	J
32EDC-5-16	4 to 8	5.8	U	5.8	U	5.8	U	0.48	J	11		10	J	5.8	U	0.53	J	1.8	J	14	J
32EDC-5-17	0 to 0.5	5.5	U	5.5	U	5.5	U	5.5	U	2.9	J	17		5.5	U	5.5	U	11		11	
32EDC-5-17	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-17	2 to 4	6	U	6	U	6	U	6	U	6	UJ	6	U	6	U	6	U	6	U	6	U
32EDC-5-17	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-18	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	1.4	J	1.6	J	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-5-18	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-18	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-18	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-19	0 to 0.5	6.3	U	6.3	U	3	J	3.9	J	46		35		6.3	U	2.5	J	13		39	
32EDC-5-19	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	9.9		8.8		5.6	U	5.6	U	3.4	J	11	
32EDC-5-19	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	6.3		6.5		5.7	U	5.7	U	4.6	J	7.9	
32EDC-5-19	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	2.1	J	5.9	U	5.9	U	5.9	U	5.9	U	3.9	J
32EDC-5-20	0 to 0.5	5.1	U	5.1	U	3.2	J	4.9	J	29		35		5.1	U	5.1	U	10		37	
32EDC-5-20	0.5 to 2	5.2	U	5.2	U	1.8	J	2.6	J	34		27		5.2	U	5.2	U	9.6		37	
32EDC-5-20	2 to 4	5.3	U	1.4	J	8.8		11		81		110		2.8	J	3.2	J	54		130	
32EDC-5-20	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	19		18		5.9	U	5.9	U	6.1		24	
32EDC-5-21	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	UJ	5.3	U	5.3	UJ	5.3	U	5.3	U	5.3	UJ	5.3	UJ
32EDC-5-21	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	UJ	5.4	UJ
32EDC-5-21	2 to 4	5.7	U	5.7	U	5.7	U	5.7	UJ	5.7	U	5.7	UJ	5.7	U	5.7	U	5.7	UJ	5.7	UJ
32EDC-5-21	4 to 8	6.1	U	6.1	U	65		52	J	66		210	J	51		6.1	U	270	J	270	J
32EDC-5-22	0 to 0.5	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-22	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-5-22	2 to 4	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-22	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-23	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	4	J	1.2	J	5.3	U	0.46	J	0.49	J	1.5	J
32EDC-5-23	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	2.2	J	0.52	J	5.4	U	5.4	U	5.4	U	0.68	J
32EDC-5-23	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	2	J	2.8	J	5.6	U	5.6	U	0.86	J	3.4	J
32EDC-5-23	4 to 8	0.33	J	5.9	U	5.9	U	5.9	U	0.41	J	5.9	U	5.9	U	5.9	U	5.9	U	0.51	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-24	0 to 0.5	5.4	UJ	5.4	UJ	5.4	UJ	0.96	J	5.4	UJ	6.9	J	5.4	UJ	5.4	UJ	2.4	J	5.7	J
32EDC-5-24	0.5 to 2	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	0.6	J	5.4	UJ	5.4	UJ	5.4	UJ	0.65	J
32EDC-5-24	2 to 4	5.3	UJ	5.3	UJ	5.3	UJ	0.46	J	5.3	UJ	8.2	J	5.3	UJ	5.3	UJ	1.7	J	7.4	J
32EDC-5-24	4 to 8	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ
32EDC-5-25	0 to 0.5	5.1	U	1.9	J	3.3	J	4.9	J	99		87		1.4	J	4.1	J	31		130	
32EDC-5-25	0.5 to 2	6.8		5.7		5.3	U	3	J	25		26		5	J	14	J	16		38	
32EDC-5-25	2 to 4	5.6	U	1.6	J	2	J	2.8	J	42		65		5.6	U	2.8	J	16		86	
32EDC-5-25	4 to 8	5.8	U	5.8	U	2.8	J	4.4	J	81		72		5.8	U	5.1	J	22		110	
32EDC-5-26	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	1.6	J	0.95	J	5.3	U	5.3	U	0.75	J	1.1	J
32EDC-5-26	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-26	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	0.37	J	5.9	U	5.9	U
32EDC-5-26	4 to 8	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
32EDC-5-27	0 to 0.5	0.37	J	5.5	UJ	5.5	UJ	0.96	J	4	J	2.2	J	5.5	UJ	0.34	J	3.4	J	2.2	J
32EDC-5-27	0.5 to 2	0.37	J	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ
32EDC-5-27	2 to 4	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.58	J	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.41	J
32EDC-5-27	4 to 8	6.5	U	6.5	U	6.5	U	6.5	U	3.6	J	3.3	J	6.5	U	0.59	J	0.44	J	5.1	J
32EDC-5-28	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	1.7	J	3	J	5.6	U	5.6	U	2.4	J	3.6	J
32EDC-5-28	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-28	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	1.7	J	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-5-28	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	3.7	J	2.9	J	6.2	U	6.2	U	6.2	U	4	J
32EDC-5-29	0 to 0.5	5.5	U	5.5	U	5.5	U	2.5	J	31		32		5.5	U	5.5	UJ	15		41	
32EDC-5-29	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	2.6	J	2.4	J	5.4	U	5.4	UJ	5.4	U	3.5	J
32EDC-5-29	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	6.1		7.7		5.6	U	5.6	UJ	6.6		11	
32EDC-5-29	4 to 8	5.4	U	5.4	U	5.4	U	5.4	U	10		10		5.4	U	5.4	UJ	3.4	J	15	
32EDC-5-30	0 to 0.5	5.5	U	5.5	U	5.5	U	5.5	U	35		37		5.5	U	5.5	UJ	12		53	
32EDC-5-30	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	37		35		5.4	U	5.4	UJ	6		55	
32EDC-5-30	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	2.7	J	2.6	J	5.6	U	5.6	UJ	5.6	U	3.9	J
32EDC-5-30	4 to 8	6.1	U	6.1	U	6.1	U	2.1	J	18		29		6.1	U	6.1	UJ	9		42	
32EDC-5-31	0 to 0.5	5.7	UJ	5.7	U	5.7	U	5.7	U	7.8	J	8.8	J	5.7	U	5.7	UJ	5.7	UJ	11	J
32EDC-5-31	0.5 to 2	6.6	UJ	6.6	U	6.6	U	6.6	U	4.2	J	4.3	J	6.6	U	6.6	UJ	6.6	UJ	5.9	J
32EDC-5-31	2 to 4	5.6	UJ	5.6	U	5.6	U	5.6	U	5.1	J	4	J	5.6	U	5.6	UJ	5.6	UJ	5.6	J
32EDC-5-31	4 to 8	5.9	UJ	5.9	U	5.9	U	5.9	U	12	J	13	J	5.9	U	5.9	UJ	5.9	UJ	16	J
32EDC-5-32	0 to 0.5	3.2	J	5.6	U	1.8	J	3.8	J	57		51		1.4	J	3.9	J	25		62	
32EDC-5-32	0.5 to 2	5.6	U	5.6	U	5.6	U	1.8	J	28		31		5.6	U	5.6	UJ	10		41	
32EDC-5-32	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	4	J	4	J	5.6	U	5.6	UJ	1.6	J	5.1	J
32EDC-5-32	4 to 8	5.9	U	2.5	J	7.8		10		130		180		1.9	J	10	J	33		320	
32EDC-5-33	0 to 0.5	5.7	UJ	2.2	J	9	J	8.2		160	J	180	J	5.7	U	5.7	UJ	26	J	230	J
32EDC-5-33	0.5 to 2	5.8	UJ	9.3		18	J	5.8	U	450	J	940	J	5.8	U	5.8	UJ	410	J	520	J
32EDC-5-33	2 to 4	5.9	UJ	5.9	U	5.9	U	60		350	J	670	J	5.9	U	5.9	UJ	330	J	960	J
32EDC-5-33	4 to 8	6.6	UJ	15		37	J	66		1000	J	1900	J	6.6	U	36	J	130	J	200	J
32EDC-5-34	0 to 0.5	7	J	5.3	UJ	5.3	UJ	1.7	J	31		30	J	2.4	J	3.2	J	19	J	33	J
32EDC-5-34	0.5 to 2	8.1	J	2	J	120	J	88	J	2400		4900	J	6.3	J	56	J	650	J	7000	J
32EDC-5-34	2 to 4	5.2	J	5.9	UJ	5.9	UJ	5.9	UJ	27		21	J	5.9	UJ	5.9	UJ	11	J	33	J
32EDC-5-34	4 to 8	6	UJ	6	UJ	1.7	J	2.1	J	47		61	J	6	UJ	6	UJ	19	J	89	J
32EDC-5-35	0 to 0.5	5.9	U	5.9	U	5.9	U	5.9	U	3.3	J	2	J	5.9	U	5.9	U	5.9	U	3.3	J
32EDC-5-35	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	2	J	5.7	U	5.7	U	5.7	U	5.7	U	2.1	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-35	2 to 4	6	U	6	U	6	U	6	U	2.9	J	6	U	6	U	6	U	6	U	2.8	J
32EDC-5-35	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-36	0 to 0.5	5.6	U	1.8	J	5.6	U	4.4	J	6		22		2.4	J	5.6	U	22		19	
32EDC-5-36	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32EDC-5-36	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-36	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	4	J	2.7	J	6.1	U	6.1	U	6.1	U	4	J
32EDC-5-37	0 to 0.5	5.6	U	2.3	J	5.6	U	2	J	3.3	J	16		2.7	J	5.6	U	24		17	
32EDC-5-37	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	3.9	J	3.9	J	5.4	U	5.4	U	5.4	U	6.8	
32EDC-5-37	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-37	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-38	0 to 0.5	0.61	J	5.5	U	5.5	U	1	J	7.6		4.2	J	5.5	U	0.36	J	1.7	J	5.1	J
32EDC-5-38	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	1.8	J	1.8	J	5.3	U	5.3	U	0.86	J	2.2	J
32EDC-5-38	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	0.65	J	0.96	J	5.3	U	5.3	U	5.3	U	1.2	J
32EDC-5-38	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	0.86	J	0.36	J	5.7	U	5.7	U	5.7	U	0.48	J
32EDC-5-39	0 to 0.5	0.46	J	5.3	U	5.3	U	5.3	U	4.8	J	3.9	J	5.3	U	5.3	U	2	J	5.9	
32EDC-5-39	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	10		8.4		5.2	U	0.48	J	1.5	J	13	
32EDC-5-39	2 to 4	0.8	J	5.2	U	9.8		2.5	J	180		230		5.2	U	3.1	J	5	J	360	
32EDC-5-39	4 to 8	11	U	11	U	11	U	11	U	2.2	J	11	U	11	U	11	U	11	UJ	0.76	J
32EDC-5-40	0 to 0.5	5.5	UJ	5.5	U	5.5	U	5.5	U	13	J	10	J	5.5	U	5.5	UJ	5.5	UJ	17	J
32EDC-5-40	0.5 to 2	5.4	UJ	5.4	U	2.1	J	1.7	J	57	J	35	J	5.4	U	5.4	UJ	5.4	UJ	71	J
32EDC-5-40	2 to 4	5.7	UJ	5.7	U	5.7	U	5.7	U	13	J	7.1	J	5.7	U	5.7	UJ	5.7	UJ	12	J
32EDC-5-40	4 to 8	5.8	UJ	5.8	U	5.8	U	2.2	J	39	J	45	J	5.8	U	5.8	UJ	5.8	UJ	59	J
32EDC-5-41	0 to 0.5	3.3	J	5.6	U	3.3	J	3.2	J	41		44		5.6	U	3.3	J	18		54	
32EDC-5-41	0.5 to 2	0.98	J	1	J	3.2	J	3.3	J	78		63		5.2	U	3.3	J	16		100	
32EDC-5-41	2 to 4	2.6	J	11		13		21		110		190		9.8		6.7		140		250	
32EDC-5-41	4 to 8	0.44	J	5.6	U	5.6	U	1.1	J	19		20		5.6	U	1.2	J	6.5		28	
32EDC-5-42	0 to 0.5	5.1	U	5.1	U	5.1	U	2.1	J	32		34		5.1	U	1.9	J	12		43	
32EDC-5-42	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	22		19		5.2	U	2.1	J	7.4		27	
32EDC-5-42	2 to 4	2.8	J	14		100		150		770		2100		52		26		1800		2600	
32EDC-5-42	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	15		11		6.2	U	6.2	U	2.3	J	22	
32EDC-5-43	0 to 0.5	1.7	J	1.5	J	8.3		7.6		120		120		2	J	4.4	J	38		200	
32EDC-5-43	0.5 to 2	4.7	J	52	U	44	J	130		180	J	760		29	J	6.8	J	590		1000	
32EDC-5-43	2 to 4	100	U	100	U	100	U	100	U	19	J	10	J	100	U	100	U	100	U	12	J
32EDC-5-43	4 to 8	1.1	J	1.5	J	3.4	J	14		53		140		1.9	J	4	J	30		150	
32EDC-5-44	0 to 0.5	10	J	27	U	27	U	2.1	J	28		9.9	J	27	U	3.6	J	19	J	17	J
32EDC-5-44	0.5 to 2	8.5	J	27	U	27	U	2.8	J	31		18	J	27	U	4.4	J	13	J	27	
32EDC-5-44	2 to 4	18	J	28	U	28	U	2.9	J	28	U	9.7	J	28	U	6.4	J	16	J	22	J
32EDC-5-44	4 to 8	14		1.8	J	31		22		140		110		3.1	J	16		88		250	
32EDC-5-45	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	2.1	J	3.7	J	5.7	U	5.7	U	1.8	J	4.5	J
32EDC-5-45	0.5 to 2	6.4	U	6.4	U	6.4	U	6.4	U	11		7.9		6.4	U	6.4	U	6.4	U	12	
32EDC-5-45	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	4.9	J	9.4		5.8	U	5.8	U	7.2		16	
32EDC-5-45	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-46	0 to 0.5	5.5	U	1.9	J	5.5	U	2.7	J	10		24		1.3	J	5.5	U	18		22	
32EDC-5-46	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	2.5	J	3	J	5.4	U	5.4	U	1.5	J	3.7	J
32EDC-5-46	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	2.2	J	2.1	J	5.6	U	5.6	U	5.6	U	2.9	J
32EDC-5-46	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	2.8	J	3	J	6.2	U	6.2	U	6.2	U	5.1	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-47	0 to 0.5	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	2.7	J	1	J	5.3	UJ	5.3	UJ	0.4	J	1.4	J
32EDC-5-47	0.5 to 2	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	4.8	J	2	J	5.6	UJ	5.6	UJ	0.56	J	4	J
32EDC-5-47	2 to 4	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	2.2	J	4.1	J	5.5	UJ	5.5	UJ	1.5	J	4.9	J
32EDC-5-47	4 to 8	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	0.74	J	0.59	J	5.9	UJ	5.9	UJ	5.9	UJ	0.81	J
32EDC-5-48	0 to 0.5	12		15		50		52		120		380		25		36		430		410	
32EDC-5-48	0.5 to 2	5.4	U	5.4	U	4.2	J	5.6		13		33		1.9	J	5.4	U	31		39	
32EDC-5-48	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-5-48	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-49	0 to 0.5	0.33	J	5.1	U	2.4	J	2.4	J	18		38		5.1	U	0.68	J	13		47	
32EDC-5-49	0.5 to 2	0.31	J	5.2	U	3.7	J	2.8	J	24		44		5.2	U	0.78	J	15		57	
32EDC-5-49	2 to 4	0.5	J	5	J	14		15		85		200		2.5	J	2.1	J	71		240	
32EDC-5-49	4 to 8	2.7	J	54		140		200		640	J	1900		19		14	J	1000	J	2200	J
32EDC-5-50	0 to 0.5	18	J	5.3	UJ	5.3	UJ	5.3	UJ	7.4		4.1	J	2	J	44	J	9.6	J	7.2	J
32EDC-5-50	0.5 to 2	9.1	J	5.3	UJ	5.3	UJ	5.3	UJ	4.7	J	2.1	J	5.3	UJ	20	J	6.6	J	4.3	J
32EDC-5-50	2 to 4	8.6		5.4	U	5.4	U	5.4	U	22		8.7		5.4	U	23		7.4		18	
32EDC-5-50	4 to 8	5.9	UJ	2.3	J	5.2	J	6.5	J	62		91	J	5.9	UJ	3.6	J	34	J	110	J
32EDC-5-51	0 to 0.5	27	U	27	U	27	U	27	U	27	U	14	J	27	U	27	U	6.8	J	22	J
32EDC-5-51	0.5 to 2	57	U	57	U	57	U	57	U	64		28	J	57	U	57	U	57	U	57	
32EDC-5-51	2 to 4	5.6	U	5.6	U	1.1	J	1.3	J	26		27		5.6	U	0.96	J	11		47	
32EDC-5-51	4 to 8	5.9	U	5.9	U	4.6	J	8.6		35		55		1.9	J	2	J	34		73	
32EDC-5-52	0 to 0.5	5.4	UJ	5.4	U	5.4	U	1.4	J	15	J	16	J	5.4	U	5.4	UJ	5.4	UJ	21	J
32EDC-5-52	0.5 to 2	5.3	UJ	5.3	U	3.2	J	2.4	J	34	J	47	J	5.3	U	5.3	UJ	5.3	UJ	64	J
32EDC-5-52	2 to 4	5.4	UJ	5.4	U	5.4	U	5.4	U	19	J	17	J	5.4	U	5.4	UJ	5.4	UJ	24	J
32EDC-5-52	4 to 8	5.8	UJ	5.8	U	3.5	J	11		50	J	94	J	5.8	U	5.8	UJ	3.3	J	130	J
32EDC-5-53	0 to 0.5	1.9	J	5.3	U	1.2	J	1.5	J	23		23		5.3	U	1.7	J	12		27	
32EDC-5-53	0.5 to 2	1.4	J	7		2.9	J	3.8	J	33		65		1.9	J	5.1	J	51		76	
32EDC-5-53	2 to 4	2	J	3.6	J	23		30		130		320		9.4		5.7		160		410	
32EDC-5-53	4 to 8	1.8	J	2.1	J	6.9		7.6		120		120		1.9	J	6.7		38		160	
32EDC-5-54	0 to 0.5	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.7	J	1.5	J	5.6	UJ	5.6	UJ	1	J	1.4	J
32EDC-5-54	0.5 to 2	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	1.3	J	4.2	J	5.7	UJ	5.7	UJ	2.4	J	3.9	J
32EDC-5-54	2 to 4	6	UJ	6	UJ	6	UJ	6	UJ	0.41	J	0.52	J	6	UJ	6	UJ	0.54	J	0.53	J
32EDC-5-54	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	2.1	J
32EDC-5-55	0 to 0.5	0.7	J	1.3	J	4.8	J	10		53		47		1.8	J	1.5	J	32		59	
32EDC-5-55	0.5 to 2	5.3	U	5.3	U	5.3	U	0.52	J	4.1	J	5.8		5.3	U	5.3	U	2.7	J	7.6	
32EDC-5-55	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	1.6	J	0.72	J	5.3	U	5.3	U	5.3	U	1	J
32EDC-5-55	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	1.5	J	0.65	J	5.9	U	5.9	U	5.9	U	1.1	J
32EDC-5-56	0 to 0.5	5.3	U	5.3	U	5.3	U	1.4	J	11		25		5.3	U	5.3	U	8.5	J	26	
32EDC-5-56	0.5 to 2	5.3	U	5.3	U	5.3	U	1.2	J	17		27		5.3	U	5.3	U	5.1	J	35	
32EDC-5-56	2 to 4	5.4	U	5.4	U	5.4	U	0.9	J	7.2		12		5.4	U	5.4	U	4.8	J	13	
32EDC-5-56	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	UJ	5.8	U
32EDC-5-57	0 to 0.5	5.4	U	5.4	U	5.4	U	1.8	J	42		28		1.4	J	5.4	U	23		43	
32EDC-5-57	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	2.9	J	2.8	J	5.4	U	5.4	U	5.4	U	3.9	J
32EDC-5-57	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	8.4		4.3	J	5.5	U	5.5	U	3.7	J	6.7	
32EDC-5-57	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	2	J
32EDC-5-58	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	0.61	J	5.4	U	5.4	U	5.4	U	5.4	U	0.45	J
32EDC-5-58	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	2	J	0.93	J	5.2	U	5.2	U	5.2	U	1.6	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-58	2 to 4	31		5.6	U	5.6	U	0.46	J	5.8	J	1.3	J	3.1	J	31		9.9	J	3.3	J
32EDC-5-58	4 to 8	0.52	J	5.6	U	5.6	U	1	J	24	J	20	J	5.6	U	0.76	J	3.9	J	31	J
32EDC-5-59	0 to 0.5	0.32	J	5.1	U	5.1	U	0.76	J	5.9		11		5.1	U	0.36	J	5	J	14	
32EDC-5-59	0.5 to 2	5.1	U	5.1	U	5.1	U	0.53	J	2.4	J	6		5.1	U	0.33	J	5.1		7.4	
32EDC-5-59	2 to 4	5.2	U	5.2	U	5.2	U	5.2	U	3.3	J	4.6	J	5.2	U	5.2	UJ	2	J	6.1	
32EDC-5-59	4 to 8	5.5	U	5.5	U	5.5	U	5.5	U	1.4	J	3.1	J	5.5	U	5.5	UJ	0.92	J	3.8	J
32EDC-5-60	0 to 0.5	2.7	J	3	J	6.4	J	8.7	J	66		150	J	3.3	J	4.5	J	77	J	170	J
32EDC-5-60	0.5 to 2	3.1	J	6.4	J	16	J	23	J	120		270	J	4.5	J	11	J	140	J	370	J
32EDC-5-60	2 to 4	5.2	UJ	2.5	J	2.5	J	6.2	J	25		76	J	2	J	1.9	J	52	J	84	J
32EDC-5-60	4 to 8	5.9	UJ	5.1	J	5.4	J	11	J	84		120	J	3.8	J	6.5	J	61	J	150	J
32EDC-5-61	0 to 0.5	4	J	26	J	3.7	J	52	J	260		990	J	24	J	7.5	J	610	J	1000	J
32EDC-5-61	0.5 to 2	5.3	UJ	5.9	J	7.4	J	16	J	150		310	J	6.6	J	9	J	160	J	370	J
32EDC-5-61	2 to 4	4	J	18	J	5.9	J	38	J	240		690	J	19	J	14	J	410	J	710	J
32EDC-5-62	0 to 0.5	5.7	UJ	5.7	UJ	5.7	U	5.7	UJ	8.5		11		5.7	UJ	5.7	UJ	5.7	UJ	13	
32EDC-5-62	0.5 to 2	5.8	U	5.8	U	5.1	J	6.5		19		49		3.1	J	5.8	U	27		8.8	
32EDC-5-62	2 to 4	7.1	UJ	3.4	J	3.2	J	6.4	J	30		73		2.5	J	2.2	J	35	J	85	
32EDC-5-62	4 to 8	6.5	UJ	6.5	UJ	6.5	U	6.5	UJ	4.9	J	9		6.5	UJ	1.6	J	6.5	UJ	10	
32EDC-5-63	0 to 0.5	1.3	J	1.2	J	2.8	J	4.2	J	36	J	64		5.1	U	5.2		19		70	
32EDC-5-63	0.5 to 2	53	U	53	U	53	U	2.7	J	26	J	31		53	U	3.8	J	7	J	36	
32EDC-5-63	2 to 4	2.5	J	6.7		24		25		160		330		9.8		11		180		390	
32EDC-5-63	4 to 8	0.62	J	1.6	J	4.2	J	3.7	J	69		96		5.9	U	4.1	J	26		120	
32EDC-5-64	0 to 0.5	5.8	U	5.8	U	5.8	U	5.8	U	7.2		7.9		5.8	U	5.8	U	3.6	J	10	
32EDC-5-64	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	19		11		5.7	U	5.7	U	3.1	J	15	
32EDC-5-64	2 to 4	5.9	U	5.9	U	2.1	J	2	J	66		75		5.9	U	3.6	J	8.5		98	
32EDC-5-64	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	4	J	3.9	J	6.1	U	6.1	U	6.1	U	10	
32EDC-5-65	0 to 0.5	5.6	U	5.6	U	1.5	J	1.8	J	46		33		5.6	U	5.6	U	8.7		47	
32EDC-5-65	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	2	J	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-65	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	11		5.8	J	5.9	U	5.9	U	1.8	J	8.8	
32EDC-5-65	4 to 8	6.4	U	6.4	U	6.4	U	6.4	U	5.7	J	5.7	J	6.4	U	6.4	U	6.4	U	7.8	
32EDC-5-66	0 to 0.5	5.5	U	5.5	U	1.8	J	1.1	J	34		29		5.5	U	1.3	J	4.2	J	48	
32EDC-5-66	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	1.9	J	5.4	U	5.4	U	0.44	J	2.8	J
32EDC-5-66	2 to 4	5.4	U	5.4	U	5.4	U	2.1	J	4	J	18		5.4	U	5.4	U	9.6	J	20	
32EDC-5-66	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	4.2	J	4.2	J	6.2	U	0.39	J	1.1	J	9.5	
32EDC-5-67	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	20		17		5.6	U	5.6	U	5.2	J	24	
32EDC-5-67	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	13		14		5.7	U	5.7	U	5.3	J	21	
32EDC-5-67	2 to 4	6.1	U	6.1	U	6.1	U	6.1	U	6.4		3.8	J	6.1	U	6.1	U	6.1	U	7.3	
32EDC-5-67	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	1.9	J	6.1	U	6.1	U	6.1	U	6.1	U	4	J
32EDC-5-68	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	31		22		5.6	U	5.6	U	4.8	J	33	
32EDC-5-68	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	3.7	J	2.5	J	5.3	U	5.3	U	5.3	U	3.5	J
32EDC-5-68	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32EDC-5-68	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-5-69	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	6		4.1	J	5.4	UJ	5.4	U	2.3	J	5	J
32EDC-5-69	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	7		4.6	J	5.3	UJ	5.3	U	2.2	J	4.8	J
32EDC-5-69	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	2.9	J	1.9	J	5.3	UJ	5.3	U	2.5	J	2.7	J
32EDC-5-69	4 to 8	5.5	U	5.5	U	3.3	J	4.4	J	29		71		1.5	J	5.5	U	30	J	85	J
32EDC-5-70	0 to 0.5	0.67	J	10	UJ	10	UJ	1.1	J	43	J	22	J	10	UJ	0.72	J	7.3	J	26	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-70	0.5 to 2	5.4	U	5.4	U	5.4	U	0.5	J	12	J	12		5.4	U	0.48	J	3	J	17	
32EDC-5-70	2 to 4	11	UJ	11	UJ	11	UJ	11	UJ	11	J	6.6	J	11	UJ	11	UJ	2.5	J	8.8	J
32EDC-5-70	4 to 8	0.93	J	15		13		20		180		310		3.8	J	6		200		380	
32EDC-5-71	0 to 0.5	5.1	U	5.1	U	5.1	U	2.3	J	31		48		5.1	UJ	2.3	J	19	J	53	J
32EDC-5-71	0.5 to 2	4.2	J	39	J	63	J	210	J	620		1400	J	21	J	23	J	880	J	1900	J
32EDC-5-71	2 to 4	5.3	UJ	5.3	UJ	1.5	J	2.5	J	29		33	J	5.3	UJ	5.3	UJ	11	J	41	J
32EDC-5-71	4 to 8	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	4.2	J	5.4	J	5.9	UJ	5.9	UJ	2.6	J	12	J
32EDC-5-72	0 to 0.5	5.5	U	5.5	U	2	J	5.5	U	14	J	14	J	5.5	U	5.5	U	5.5	UJ	21	J
32EDC-5-72	0.5 to 2	2.4	J	7.4		6.5	J	7.5		28		96	J	4.9	J	2.6	J	45	J	150	J
32EDC-5-72	2 to 4	2.8	J	6.4	U	3	J	3.1	J	29		42	J	2.9	J	1.6	J	24	J	68	J
32EDC-5-72	4 to 8	5.9	U	4.9	J	4.7	J	13		24	J	100	J	2.1	J	1.8	J	55	J	17	J
32EDC-5-73	0 to 0.5	1	J	6.4		15	J	16		79		180	J	4.3	J	5.4	J	99	J	34	J
32EDC-5-73	0.5 to 2	5.5	U	5.5	U	5.5	UJ	5.5	U	3.8	J	10	J	5.5	U	5.5	U	4.4	J	13	J
32EDC-5-73	2 to 4	0.8	J	11		35	J	35		100	J	350	J	13		3.9	J	310	J	510	J
32EDC-5-73	4 to 8	52	J	62	J	900	J	880	J	2700	J	7700		640	J	100		7500		9700	
32EDC-5-74	0 to 0.5	4.6	J	8.5		34	J	22		170	J	300	J	8.7		9.6		110	J	480	J
32EDC-5-74	0.5 to 2	4.5	J	11		40	J	18		85	J	230	J	12		11		280	J	40	J
32EDC-5-74	2 to 4	4.8	J	5.8	U	3.5	J	3.5	J	25	J	39	J	2.1	J	3.1	J	5.8	UJ	63	J
32EDC-5-75	0 to 0.5	6.3		6	U	2.5	J	1.4	J	21		31		6	U	5.1	J	16		33	
32EDC-5-75	0.5 to 2	1.3	J	6	U	6	U	6	U	3.9	J	3.7	J	6	U	1.1	J	1.9	J	4.7	J
32EDC-5-75	2 to 4	0.96	J	2.5	J	21		19		110		220		5.1	J	3.2	J	110		270	
32EDC-5-75	4 to 8	0.57	J	6	U	6	U	6	U	3.2	J	6.1		6	U	0.77	J	2.5	J	6.9	
32EDC-5-76	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	1.6	J	1.6	J	5.4	U	5.4	U	5.4	U	2.2	J
32EDC-5-76	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	3.3	J	4.6	J	5.4	U	5.4	U	5.4	U	6.3	
32EDC-5-76	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	2.3	J	5.7		5.4	U	5.4	U	2.8	J	5.8	
32EDC-5-76	4 to 8	5.7	U	2.6	J	4.2	J	11		90		150		1.7	J	8.9		56		190	
32EDC-5-77	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	7		1.5	J	5.3	U	0.49	J	1.6	J	2.5	J
32EDC-5-77	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	2.2	J	5.7	U	5.7	U	0.77	J	3	J
32EDC-5-77	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	UJ	5.4	U
32EDC-5-77	4 to 8	5.7	U	5.7	U	5.7	U	1.2	J	5.7	U	5.2	J	5.7	U	5.7	U	4.5	J	9.3	
32EDC-5-78	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	7.5		5.9		5.4	U	5.4	U	3.5	J	6	
32EDC-5-78	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	5.5		4.9	J	5.4	U	5.4	U	5.4	U	6.7	
32EDC-5-78	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	1.6	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-78	4 to 8	6.2	U	1.7	J	6.2	U	6.2	U	20		10		6.2	U	4.8	J	3.9	J	26	
32EDC-5-79	0 to 0.5	0.4	J	5.7	U	1.1	J	0.67	J	26		14		5.7	U	0.54	J	2.9	J	20	
32EDC-5-79	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	3.2	J	1.9	J	5.3	U	5.3	U	0.59	J	2.9	J
32EDC-5-79	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	2.3	J	1.3	J	5.6	U	5.6	U	0.42	J	1.9	J
32EDC-5-79	4 to 8	0.86	J	6.5	U	2.1	J	1.4	J	48		42		6.5	U	1.9	J	3.5	J	65	
32EDC-5-80	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	7.6		7.5		5.4	U	5.4	U	1.5	J	9.9	
32EDC-5-80	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	3.5	J	4.7	J	5.3	U	5.3	U	1.8	J	5.9	
32EDC-5-80	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	3	J	2.3	J	5.4	U	5.4	U	5.4	U	3.1	J
32EDC-5-80	4 to 8	6	U	6	U	6	U	6	U	2.5	J	2.1	J	6	U	6	U	6	U	4.1	J
32EDC-5-81	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	18		17		5.1	U	5.1	U	8.6		20	
32EDC-5-81	0.5 to 2	6.5	U	6.5	U	6.5	U	6.5	U	21		6.5	U	6.5	U	6.5	U	6.5	U	2.3	J
32EDC-5-81	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	13		11		5.3	U	5.3	U	4.1	J	15	
32EDC-5-81	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	16		18		5.8	U	5.8	U	4.1	J	29	

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-82	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	1.6	J	5.3	U	5.3	U	5.3	U	5.3	U	1.9	J
32EDC-5-82	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	1.8	J
32EDC-5-82	2 to 4	5.4	U	5.4	U	5.4	U	2.7	J	31		36		5.4	U	5.4	U	9.9		44	
32EDC-5-82	4 to 8	5.7	U	5.7	U	2	J	2.9	J	32		34		5.7	U	5.7	U	9.4		50	
32EDC-5-83	0 to 0.5	5.2	U	5.2	U	5.2	U	0.71	J	10		14		5.2	U	0.51	J	4.4	J	14	J
32EDC-5-83	0.5 to 2	5.2	U	5.2	U	5.2	U	1.4	J	4.8	J	2	J	5.2	U	5.2	U	1.1	J	3.1	J
32EDC-5-83	2 to 4	5.2	U	5.2	U	5.2	U	5.2	U	2	J	1.2	J	5.2	U	5.2	U	0.51	J	1.7	J
32EDC-5-83	4 to 8	5.5	U	5.5	U	1.1	J	0.93	J	4.2	J	11		5.5	U	5.5	U	5.7		14	J
32EDC-5-84	0 to 0.5	5.6	U	2.8	J	4.6	J	10		180		170		2.2	J	9.1		48		220	
32EDC-5-84	0.5 to 2	5.5	U	5.5	U	2.7	J	3.8	J	120		92		5.5	U	6.1		20		140	
32EDC-5-84	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	15		12		5.6	U	5.6	U	3.2	J	18	
32EDC-5-84	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32EDC-5-85	0 to 0.5	2.4	J	6.6	J	19	J	17	J	130		260		4.6	J	8.4	J	130		350	J
32EDC-5-85	0.5 to 2	3.6	J	19	J	40	J	49	J	250		540	J	11	J	15	J	260		640	J
32EDC-5-85	2 to 4	3.5	J	11	J	50	J	51	J	250		590	J	8	J	15	J	210		700	J
32EDC-5-85	4 to 8	56	UJ	56	UJ					90		28	J	56	UJ	56	UJ	18	J	33	J
32EDC-5-86	0 to 0.5	5.2	UJ	5.2	UJ	1.8	J	5.2	UJ	13		5.2	U	5.2	UJ	0.8	J	5.2	UJ	18	
32EDC-5-86	0.5 to 2	5.6	J	32	J	68		92	J	440		710		23	J	22	J	700	J	980	
32EDC-5-86	2 to 4	2	J	9.2	J	16		25	J	130		230		7.8	J	8.6	J	130	J	300	
32EDC-5-86	4 to 8	24	J	93	J	300		480	J	1200		2800		160	J	85	J	2400	J	3300	
32EDC-5-87	0 to 0.5	3.1	J	4.4	J	20		33		230		380		9.8		11		190		510	
32EDC-5-87	0.5 to 2	6.2	U	6.6		25		42		250		460		12		11		230		600	
32EDC-5-87	2 to 4	5.7	U	2.6	J	9.8		14		94		150		4.4	J	7.5		77		210	
32EDC-5-87	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	2.4	J	1.9	J	6.1	U	6.1	U	2	J	2.4	J
32EDC-5-88	0 to 0.5	1.9	J	1.9	J	8.6	J	11	J	86	J	140		3.2	J	3.1	J	63		170	
32EDC-5-88	0.5 to 2	4.8	J	15	J	72	J	79	J	610	J	1100	J	27	J	20	J	630	J	1300	J
32EDC-5-88	2 to 4	5.8	UJ	5.8	UJ	2.4	J	2.7	J	14	J	30		5.8	UJ	0.84	J	18		38	
32EDC-5-88	4 to 8	6.1	UJ	6.1	UJ			0.51	J	2.1	J	5.5	J	6.1	UJ	6.1	UJ	5.5	J	6.6	
32EDC-5-89	0 to 0.5	5.5	U	5.5	U	5.5	U	1.7	J	24		24		5.5	U	5.5	U	8.6		34	
32EDC-5-89	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	13		13		5.4	U	5.4	U	3.8	J	19	
32EDC-5-89	2 to 4	5.6	U	5.6	U	2.1	J	3.3	J	28		34		5.6	U	5.6	U	18		46	
32EDC-5-89	4 to 8	35		150		250		510		1100		3900		250		60		4000		4600	
32EDC-5-90	0 to 0.5	5.6	UJ	5.6	U	2.2	J	1.7	J	16	J	17	J	5.6	U	5.6	UJ	6.9	J	26	J
32EDC-5-90	0.5 to 2	5.4	UJ	5.4	U	6.5		5.2	J	29	J	61	J	5.4	U	5.4	UJ	29	J	89	J
32EDC-5-90	2 to 4	6.4	UJ	6.4	U	4.7	J	2.4	J	34	J	17	J	6.4	U	6.4	UJ	5.2	J	33	J
32EDC-5-90	4 to 8	6.2	UJ	6.2	U	2.8	J	1.9	J	25	J	23	J	6.2	U	6.2	UJ	7.8	J	49	J
32EDC-5-91	0 to 0.5	5.7	UJ	1.7	J	2.7	J	1.4	J	32		8.4		5.7	UJ	1.5	J	5.7	UJ	15	
32EDC-5-91	0.5 to 2	27	UJ	27	UJ	27	U	27	UJ	47		27	U	27	UJ	27	UJ	27	UJ	27	U
32EDC-5-91	2 to 4	5.4	UJ	5.4	UJ	3.8	J	5.4	UJ	13		3.3	J	5.4	UJ	0.9	J	5.4	UJ	6.1	
32EDC-5-91	4 to 8	6.1	UJ	6.1	UJ	6.1	U	1.7	J	17		17		6.1	UJ	1	J	6.1	UJ	41	
32EDC-5-92	0 to 0.5	3.4	J	8.2		47		31		700		1300		8.2		17		240		1500	
32EDC-5-92	0.5 to 2	5.7	U	5.7	U	5.7	U	1.7	J	7.5		3.4	J	5.7	U	5.7	U	5.7	U	5.5	J
32EDC-5-92	2 to 4	5.1	U	5.1	U	2.5	J	5	J	17		20		2.4	J	0.8	J	24		28	
32EDC-5-92	4 to 8	5.2	U	5.2	U	5.2	U	4.5	J	16		2.5	J	5.2	U	5.2	U	1.8	J	4.2	J
32EDC-5-93	0 to 0.5	1.3	J	5.2	U	2.4	J	5.1	J	23	J	44	J	1.9	J	1.5	J	34	J	51	J
32EDC-5-93	0.5 to 2	0.85	J	0.98	J	5.1	J	6.1	J	110	J	83	J	2.4	J	4.4	J	41	J	110	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-93	2 to 4	2.1	J	3.8	J	4	J	14		44	J	96		5.1	J	2.6	J	46		98	J
32EDC-5-93	4 to 8	0.43	J	5.6	U	1.6	J	1.9	J	32		28	J	5.6	U	1.8	J	9.6	J	63	J
32EDC-5-94	0 to 0.5	5.4	U	2	J	5.4	U	5.7		24		55		1.9	J	5.4	U	31		57	
32EDC-5-94	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	18		14		5.5	U	2.6	J	5.8		19	
32EDC-5-94	2 to 4	13		5.7	U	2.3	J	3.3	J	40		47		5.7	U	180		48		59	
32EDC-5-94	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	13		15		5.7	U	5.7	U	5.3	J	19	
32EDC-5-95	0 to 0.5	5.5	U	1.7	J	3.8	J	4.1	J	50		91		5.5	U	2.3	J	27		120	
32EDC-5-95	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	21		23		5.8	U	5.8	U	6.6		25	
32EDC-5-95	2 to 4	5.6	U	5.6	U	1.7	J	2	J	25		36		5.6	U	1.3	J	14		37	
32EDC-5-95	4 to 8	6.4	U	6.4	U	3.6	J	3.1	J	55		61		6.4	U	2.9	J	21		82	
32EDC-5-96	0 to 0.5	3.2	J	9.3		69		45		280		1100		6.5		20		300		1400	
32EDC-5-96	0.5 to 2	130		260		4100	J	4300	J	24000		58000	J	1200	J	460	J	29000	J	72000	J
32EDC-5-96	2 to 4	3.9	J	12	J	77		89		330		1300		26	J	18	J	510		1600	
32EDC-5-96	4 to 8	12	J	20	J	210		180		480		1800		60	J	92	J	1100		2200	
32EDC-5-97	0 to 0.5	1	J	3	J	13		10		63		140		3.8	J	5.5	U	71		180	
32EDC-5-97	0.5 to 2	0.8	J	3.3	J	16		17		100		240		5.2	J	5.4	U	110		280	
32EDC-5-97	2 to 4	3.9	J	3.7	J	18		20		140		320		5.9		9.2		95		360	
32EDC-5-97	4 to 8	5.6	J	32		54		120		460		920		40		20		520		1300	
32EDC-5-98	0 to 0.5	1.3	J	3.9	J	36	J	31	J	210	J	570	J	9.2	J	5.5		180	J	720	J
32EDC-5-98	0.5 to 2	1.5	J	5	J	24	J	27	J	140	J	390	J	8.2	J	4.8	J	170	J	480	J
32EDC-5-98	2 to 4	0.79	J	2.3	J	17	J	17	J	99	J	220	J	4.5	J	2.9	J	110	J	290	J
32EDC-5-98	4 to 8	0.65	J	1.2	J	6	UJ	1.7	J	7.7	J	15	J	1.3	J	0.58	J	14	J	15	J
32EDC-5-99	0 to 0.5	0.9	J	8.2		7.5		6.2		40		100		4.1	J	2.4	J	100		130	
32EDC-5-99	0.5 to 2	5.7	U	5.7	U	2	J	1.4	J	13		24		5.7	U	5.7	U	16		31	
32EDC-5-99	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-5-99	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	1.7	J	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-5-100	0 to 0.5	12		5.5	U	14		11		110		68		1.8	J	10		29		110	
32EDC-5-100	0.5 to 2	2.2	J	5.4	U	2.3	J	1.6	J	17		8.5		5.4	U	1.8	J	3.9	J	14	
32EDC-5-100	2 to 4	1.7	J	5.8	U	1.6	J	1.4	J	16		11		5.8	U	1.7	J	3.7	J	16	
32EDC-5-100	4 to 8	0.46	J	6.4	U	1.4	J	0.62	J	19		6.5		6.4	U	1.2	J	1.9	J	24	
32EDC-5-101	0 to 0.5	5.5	UJ	9.4		76		45	J	660	J	820	J	5.5	U	5.5	UJ	230	J	1100	J
32EDC-5-101	0.5 to 2	5.5	UJ	5.5	U	3.8	J	2.2	J	52	J	34	J	5.5	U	5.5	UJ	10	J	62	J
32EDC-5-101	2 to 4	5.6	UJ	2.4	J	9.9		33	J	120	J	100	J	5.6	U	5.6	UJ	53	J	140	J
32EDC-5-101	4 to 8	5.7	U	5.7	U	5.1	J	3.2	J	69		54		5.7	U	2.2	J	17		73	
32EDC-5-102	0 to 0.5	0.67	J	5.2	UJ	1.3	J	1.1	J	13	J	21	J	5.2	UJ	0.66	J	9.3	J	27	J
32EDC-5-102	0.5 to 2	0.6	J	5.2	UJ	1.1	J	2.3	J	7.6	J	16	J	5.2	UJ	0.65	J	10	J	18	J
32EDC-5-102	2 to 4	33	J	5.2	UJ	1.7	J	3.3	J	26	J	32	J	3.8	J	14	J	46	J	37	J
32EDC-5-102	4 to 8	4.2	J	5.5	UJ	2.9	J	4.2	J	43	J	24	J	1.5	J	4.5	J	13	J	32	J
32EDC-5-103	0 to 0.5	3.6	J	5.6	U	1.1	J	2.2	J	18		38		1.7	J	2.7	J	17		47	
32EDC-5-103	0.5 to 2	6.8	J	15	J	6.4		45	J	270		930		1.6	J	8.6	J	210		960	
32EDC-5-103	2 to 4	0.88	J	5.5	U	1.8	J	2	J	27		35		5.5	U	2.1	J	8.6		44	
32EDC-5-103	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	1.4	J	1.1	J	6.1	U	0.4	J	0.44	J	3.6	J
32EDC-5-104	0 to 0.5	5.3	U	5.3	U	5.3	U	2.6	J	12		14		5.3	U	5.3	U	6.9		19	
32EDC-5-104	0.5 to 2	5.3	U	3	J	3	J	6		120		92		5.3	U	6		23		100	
32EDC-5-104	2 to 4	5.5	U	5.5	U	4.5	J	6.8		78		60		5.5	U	5.3	J	22		74	
32EDC-5-104	4 to 8	6.1	U	3.3	J	6.4		5.3	J	81		42		1.4	J	7		10		210	

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-105	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	20		17		5.6	U	5.6	U	3	J	22	
32EDC-5-105	0.5 to 2	5.6	U	1.8	J	5.6	U	11		24		74		2.2	J	5.6	U	47		80	
32EDC-5-105	2 to 4	5.5	U	5.5	U	1.7	J	3.6	J	61		26		5.5	U	2.2	J	7.7		75	
32EDC-5-105	4 to 8	5.9	U	5.7	J	21		29		300		450		6.3		10		150		530	
32EDC-5-106	0 to 0.5	0.39	J	5.1	UJ	1.3	J	0.68	J	14		12		5.1	UJ	0.58	J	4.3	J	16	J
32EDC-5-106	0.5 to 2	0.36	J	5.1	U	3.1	J	5.2		27		60		1.5	J	0.87	J	37		75	J
32EDC-5-106	2 to 4	0.74	J	5.4	U	1.5	J	0.9	J	19		26		5.4	U	1.3	J	7.6		39	J
32EDC-5-106	4 to 8	5.9	UJ	5.9	U	5.9	U	5.9	U	2.3	J	0.52	J	5.9	U	5.9	UJ	5.9	U	0.95	J
32EDC-5-107	0 to 0.5	6.2	U	6.2	U	6.2	U	6.2	U	11		12		6.2	U	6.2	U	7.7		19	
32EDC-5-107	0.5 to 2	6.1	U	6.1	U	6.1	U	3.2	J	19		38		6.1	U	3.2	J	28		49	
32EDC-5-107	2 to 4	6.7	U	6.7	U	2.1	J	2.2	J	44		48		6.7	U	3.3	J	21		80	
32EDC-5-107	4 to 8	6.2	U	6.2	U	1.7	J	2	J	21	J	25	J	6.2	U	6.2	U	12	J	35	J
32EDC-5-108	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	1.5	J	5.4	U	5.4	U	5.4	U	5.4	U	2	J
32EDC-5-108	0.5 to 2	5.9	U	5.9	U	2.4	J	2.2	J	19		29		5.9	U	5.9	U	8.9		42	
32EDC-5-108	2 to 4	1300		2900		3000		7200		5300		24000		3500		2200		32000		29000	
32EDC-5-108	4 to 8	11		43		340		830		2000		5300		110		51		2400		7500	
32EDC-5-109	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	2.4	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-109	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	14		17		5.5	U	5.5	U	7.3		24	
32EDC-5-109	2 to 4	0.8	J	5.6	U	5.6	U	5.6	U	9.2		5.6	U	5.6	U	5.6	U	2.4	J	8.9	
32EDC-5-109	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	2.5	J	2.3	J	5.8	U	5.8	U	5.8	U	3.2	J
32EDC-5-110	0 to 0.5	5.4	U	5.4	U	2.1	J	4.5	J	21		28		2.5	J	2.2	J	20		30	
32EDC-5-110	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	4.6	J	2.6	J	5.5	U	5.5	U	5.5	U	3.7	J
32EDC-5-110	2 to 4	5.7	U	5.7	U	3.1	J	2.7	J	40		18		5.7	U	7.8		6.3		26	
32EDC-5-110	4 to 8	6.2	U	6.2	U	4	J	5.6	J	77		59		2	J	7.3		14		120	
32EDC-5-111	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	7.4		5.5		5.1	U	5.1	U	1.5	J	7.3	
32EDC-5-111	0.5 to 2	5.2	U	5.2	U	1.9	J	1.7	J	29		35		5.2	U	1.3	J	5.6		45	
32EDC-5-111	2 to 4	0.7		5.3	U	1.9	J	2.1	J	39		26		5.3	U	1.7	J	4.7	J	47	
32EDC-5-111	4 to 8	5.7	U	5.7	U	5.7	U	1.5	J	15		10		5.7	U	5.7	U	3.3	J	33	
32EDC-5-112	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	16		11		5.3	U	5.3	U	3.4	J	15	
32EDC-5-112	0.5 to 2	5.4	U	5.4	U	1.7	J	2.3	J	42		69		5.4	U	5.4	U	11		87	
32EDC-5-112	2 to 4	3.5	J	5.4	U	5.4	U	5.4	U	15		13		5.4	U	3.3	J	5	J	21	
32EDC-5-112	4 to 8	6	U	6	U	2.4	J	4.1	J	41		31		1.8	J	3.5	J	16		130	
32EDC-5-113	0 to 0.5	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32EDC-5-113	0.5 to 2	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	2.2	J
32EDC-5-113	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	3.4	J	5.8	U	5.8	U	1.8	J	5.2	J
32EDC-5-113	4 to 8	2.9	J	6.2	U	6.2	U	6.2	U	11		5.6	J	6.2	U	1.9	J	4.2	J	27	
32EDC-5-114	0 to 0.5	0.64	J	5.3	UJ	2	J	0.79	J	39		8.6		5.3	UJ	0.69	J	3.2	J	11	J
32EDC-5-114	0.5 to 2	5.5	UJ	5.5	UJ	5.5	UJ	5.5	U	25		1.2	J	5.5	UJ	5.5	UJ	0.47	J	1.6	J
32EDC-5-114	2 to 4	0.5	J	5.3	UJ	1.4	J	0.51	J	24		3.1	J	5.3	UJ	0.63	J	1.7	J	4.9	J
32EDC-5-114	4 to 8	1.3	J	2	J	8.5	J	7.8		81		120		2.2	J	5.6	J	47		170	J
32EDC-5-115	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	29		8.2		5.4	U	5.4	U	3.4	J	14	
32EDC-5-115	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	7.1		3.2	J	5.6	U	5.6	U	5.6	U	4.7	J
32EDC-5-116	0 to 0.5	9.5		5.3	U	2.4	J	3.3	J	37		49	J	1.3	J	9.3		19	J	56	J
32EDC-5-116	0.5 to 2	5.4	U	5.4	U	1.1	J	0.95	J	16		23	J	5.4	U	0.75	J	5.8	J	26	J
32EDC-5-116	2 to 4	0.31	J	5.2	U	5.2	U	0.79	J	9.3		14	J	5.2	U	0.6	J	4.9	J	17	J
32EDC-5-116	4 to 8	0.37	J	5.8	U	1.8	J	1.1	J	20		23	J	5.8	U	1.3	J	5.4	J	32	J

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-5-117	0 to 0.5	0.69	J	5.5	U	2	J	1.9	J	29	J	34	J	5.5	UJ	0.89	J	13	J	40	J
32EDC-5-117	0.5 to 2	0.46	J	5.4	U	1.6	J	1.2	J	28	J	27	J	5.4	UJ	0.85	J	7.1	J	32	J
32EDC-5-117	2 to 4	0.5	J	0.99	J	3.5	J	4.1	J	67	J	120	J	5.4	UJ	1.6	J	24	J	140	J
32EDC-5-117	4 to 8	2.2	J	3.1	J	24	J	22	J	160	J	350	J	8.1	J	9.7		180	J	430	J
32EDC-5-118	0 to 0.5	3.4	J	2.4	J	14	J	11	J	340	J	240	J	2.7	J	11	J	78	J	290	J
32EDC-5-118	0.5 to 2	0.82	J	8.1		27	J	30	J	160	J	740	J	4.3	J	6.2		280	J	850	J
32EDC-5-118	2 to 4	0.41	J	5.7	U	1.7	J	0.77	J	14	J	12	J	5.7	UJ	0.58	J	3.9	J	16	J
32EDC-5-118	4 to 8	2.7	J	5.8	U	5.8	UJ	5.8	UJ	0.71	J	1.4	J	5.8	UJ	6.1		1.8	J	2.3	J
32EDC-5-119	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	45		24		5.4	U	2.5	J	6.1		39	
32EDC-5-119	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	23		17		5.4	U	5.4	U	4.9	J	28	
32EDC-5-119	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	1.7	J	2.5	J	5.4	U	5.4	U	5.4	U	3.2	J
32EDC-5-119	4 to 8	6.1	U	6.1	U	2.9	J	3.9	J	26		27		6.1	U	3.3	J	8		64	
32EDC-5-120	0 to 0.5	8.1	J	5.3		15		28		320		480		3.6	J	20	J	86		550	
32EDC-5-120	0.5 to 2	1.7	J	3	J	3.8	J	9.6	J	100		150	J	1.7	J	5.6	J	35	J	170	J
32EDC-5-120	2 to 4	53	J	900		560	U	2300		5900		23000		420	J	130	J	6400		21000	
32EDC-5-120	4 to 8	3.3	J	7.4		11		25		210		400		5.1	J	12		79		460	
32EDC-5-121	0 to 0.5	0.88	J	5.3	J	5.5	U	11		48		140		2.2	J	1	J	43		160	
32EDC-5-121	0.5 to 2	0.33	J	5.5	UJ	5.5	UJ	5.5	U	4.3	J	2.5	J	5.5	UJ	0.38	J	0.8	J	5.7	
32EDC-5-121	2 to 4	0.58	J	5.6	U	5.6	U	5.6	U	9.2		7.9		5.6	U	0.47	J	2.2	J	11	
32EDC-5-121	4 to 8	0.35	J	5.8	U	5.8	U	5.8	U	5.9		4.3	J	5.8	U	0.74	J	1.1	J	12	
32EDC-5-122	0 to 0.5	0.67	J	5.1	U	2.1	J	2.8	J	21		9		5.1	U	0.55	J	3.6	J	12	
32EDC-5-122	0.5 to 2	2.9	J	11	U	20		15		150		260		3.5	J	13		66		300	
32EDC-5-122	2 to 4	5	J	6	J	27	U	26	J	190		550		27	U	4.3	J	130		530	
32EDC-5-122	4 to 8	6.2	U	6.2	U	6.2	U	0.64	J	5.4	J	9.3		6.2	U	0.69	J	2.2	J	14	
32EDC-5-123	0 to 0.5	5.1	J	1.8	J	4.2	J	7.5		41		74		2.5	J	11		37		80	
32EDC-5-123	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	4.5	J	13		5.5	U	5.5	U	10		13	
32EDC-5-123	2 to 4	5.4	U	5.4	U	5.7		7.1		70		50		2.1	J	6.2		30		87	
32EDC-5-123	4 to 8	17		6	U	8.8		8.6		140		38		5.3	J	17		27		310	
32EDC-5-124	0 to 0.5	1.1	J	5.2	U	11		3.7	J	140		79		1.2	J	6.4		17		95	
32EDC-5-124	0.5 to 2	0.7	J	5.2	U	6.9		3	J	59		36		5.2	U	3.3	J	9.5		41	
32EDC-5-124	2 to 4	2.3	J	5.3	U	4.9	J	4.8	J	46		46		5.3	U	3.6	J	17		58	
32EDC-5-124	4 to 8	3	J	16		28		23		490		590		8.7		18		210		660	
32EDC-5-125	0 to 0.5	2	J	4	J	10		11		230		210		2.9	J	5.5	U	64		260	
32EDC-5-125	0.5 to 2	4.1	J	5.3	U	5.3	U	5.3	U	15		13		5.3	U	5.3	U	8.8		15	
32EDC-5-125	2 to 4	6.1		11		80		65		440		1100		28		5.1	U	680		1400	
32EDC-5-125	4 to 8	3.7	J	6.5		57		26		360		530		14		5.7	U	250		700	
32EDC-5-126	0 to 0.5	4.4	J	11		3.7	J	52		380		810		8.4		12		260		890	
32EDC-5-126	0.5 to 2	3.8	J	8.8		3.1	J	41		230		540		7.1		7.3		210		600	
32EDC-5-126	2 to 4	8.3		23		3.3	J	96		570		1300		15		17		490		1300	
32EDC-5-126	4 to 8	5.8	U	7.6		1.8	J	28		230		430		4.2	J	4.7	J	140		470	
32EDC-5-127	0 to 0.5	2.9	J	8.1		2.5	J	71		490		1000		7		4.8	J	300		860	
32EDC-5-127	0.5 to 2	3.3	J	11		2.8	J	120		630		1500		12		4.3	J	540		1300	
32EDC-5-127	2 to 4	5.3	U	4.2	J	5.3	U	25		200		400		3.2	J	2.1	J	120		350	
32EDC-5-127	4 to 8	5.8	U	5.8	U	1.5	J	2	J	28		27		5.8	U	5.8	U	7.6		37	
32EDC-5-128	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-5-128	0.5 to 2	5.8	U	2.1	J	1.7	J	8		34		92		3.2	J	5.8	U	53		94	

Table D1-10
Noncarcinogenic PAH Soil Sampling Results
for EDC-5
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-5-128	2 to 4	5.7	U	4.9	J	6.1		24		65		270		7.4		2.1	J	170		270	
32EDC-5-128	4 to 8	5.9	U	5.9	U	2	J	3.5	J	16		27		1.7	J	3.9	J	13		41	
32EDC-5-129	0 to 0.5	5.6	U	2	J	3.3	J	3.8	J	13		51		1.8	J	5.6	U	31		83	
32EDC-5-129	0.5 to 2	5.6	U	5.6	U	5.6	U	1.7	J	6.4		13		5.6	U	5.6	U	7.3		16	
32EDC-5-129	2 to 4	1.1	J	5.7	U	2.7	J	3.5	J	19	J	21		5.7	U	1.3	J	10		42	
32EDC-5-129	4 to 8	5.7	U	5.7	U	3.9	J	2.3	J	26	J	31		1.4	J	5.7	U	22		64	
32EDC-5-130	0 to 0.5	53	U	53	U	53	U	53	U	53		53	U	53	U	53	U	16	J	31	J
32EDC-5-130	0.5 to 2	5.4	U	1.7	J	8.3		4.8	J	22		49		4.5	J	5.4	U	57		81	
32EDC-5-130	2 to 4	5.8	U	8.7		19		17		62	J	150		8.9		5.8	U	150		230	
32EDC-5-130	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	12		9.6		5.8	U	5.8	U	2.7	J	33	
32EDC-5-131	0 to 0.5	2.3	J	5.6	U	2.5	J	2.2	J	16		11		5.6	U	4.2	J	4.3	J	30	
32EDC-5-131	0.5 to 2	0.53	J	5.8	U	5.8	U	0.87	J	15		5.7	J	5.8	U	1.1	J	2.2	J	30	
32EDC-5-131	2 to 4	2.7	J	5.8	U	7.3		3.2	J	87		23		1.6	J	10		7.7		140	
32EDC-5-131	4 to 8	2.6	J	1.5	J	6.6		9.5		130		87		3.4	J	10		17		420	
32EDC-5-132	0 to 0.5	6.5	J	14	J	4.7	J	57		540	J	950	J	12	J	11	J	320	J	970	J
32EDC-5-132	0.5 to 2	6.2	J	5.4	J	5.8	J	45		180	J	430	J	7.5	J	11	J	130	J	480	J
32EDC-5-132	2 to 4	1.2	J	2.4	J	1.3	J	6.2	J	50	J	87	J	5.5	UJ	1.5	J	24	J	110	J
32EDC-5-132	4 to 8	0.78	J	6	UJ	6	UJ	0.69	J	3.6	J	3.5	J	6	UJ	0.76	J	1.8	J	9.9	J
32EDC-5-133	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	2.6	J	1.7	J	5.3	U	5.3	U	2	J	2.9	J
32EDC-5-133	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	23		28		5.2	U	5.2	U	5.5		29	
32EDC-5-133	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	2.4	J	1.8	J	5.3	U	5.3	U	5.3	U	2.9	J
32EDC-5-133	4 to 8	5.9	U	5.9	U	2.6	J	4.7	J	44		58		1.4	J	2.2	J	33		76	
32EDC-5-134	0 to 0.5	1.3	J	6.4	U	4.2	J	3.4	J	73		31		6.4	U	4.6	J	10		70	
32EDC-5-134	0.5 to 2	0.9	J	1.5	J	2.3	J	4.4	J	41		51		5.5	U	2.2	J	18		80	
32EDC-5-134	2 to 4	2.8	J	8.7		4.3	J	13		110		130		2.7	J	8.7		44		200	
32EDC-5-134	4 to 8	4.1	J	31	J	5.9	UJ	70	J	250	J	630	J	12	J	4.8	J	280		750	J
32EDC-5-135	0 to 0.5	3.6	J	12		2.5	J	84		530		1200		5.8		5.6		310		1200	
32EDC-5-135	0.5 to 2	11		5	J	53		97		480		800		40		22		670		930	
32EDC-5-135	2 to 4	5.5	U	1.9	J	2.1	J	9.6		96		120		1.8	J	3.7	J	49		130	
32EDC-5-135	4 to 8	5.9	U	5.9	U	2.3	J	2.9	J	140		110		5.9	U	6.3		19		200	
32EDC-5-136	0 to 0.5	2.9	J	5.1	U	7.3		23		91		320	J	3.9	J	4.3	J	110	J	380	J
32EDC-5-136	0.5 to 2	8.7		1.5	J	29		33		120		340	J	13		15		220	J	430	J
32EDC-5-136	2 to 4	0.69	J	5.2	U	2.8	J	2.4	J	30		26	J	5.2	U	2.3	J	9.3	J	31	J
32EDC-5-136	4 to 8	0.73	J	1.2	J	4.3	J	4.8	J	96		110	J	5.9	U	3.9	J	26	J	130	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-11
Noncarcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-12-1	0 to 0.5	2	J	5.5	UJ	5.5	UJ	0.65	J	8.1	J	3.4	J	5.5	UJ	2.7	J	3.8	J	3.7	J
32EDC-12-1	0.5 to 2	0.63	J	5.3	U	5.3	U	0.45	J	2.8	J	3.2	J	5.3	U	0.58	J	2.1	J	4	J
32EDC-12-1	2 to 4	5.3	U	5.3	U	5.3	U	5.3	UJ	0.42	J	5.3	U	5.3	U	5.3	U	0.55	J	5.3	U
32EDC-12-1	4 to 8	5.4	U	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	UJ	5.4	UJ
32EDC-12-2	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	1.7	J	5.6	U	5.6	U	1.6	J	1.7	J
32EDC-12-2	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-2	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-2	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32EDC-12-3	0 to 0.5	110	U	110	U	110	U	110	U	48	J	110	U	110	U	110	U	110	U	110	U
32EDC-12-3	0.5 to 2	0.58	J	5.3	U	5.3	U	5.3	U	5.8		1.7	J	5.3	U	0.44	J	2.6	J	2.2	J
32EDC-12-3	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	2.9	J	0.58	J	5.3	U	5.3	U	1.4	J	1.3	J
32EDC-12-3	4 to 8	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-4	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	73		4.1	J	5.4	U	5.4	U	3.5	J	11	J
32EDC-12-4	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	8.3		5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-4	2 to 4	5.3	U	2.6	J	5.3	U	3.9	J	6.9		27		1.4	J	5.3	U	19		28	
32EDC-12-4	4 to 8	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-12-5	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	6.3		3.3	J	5.6	U	5.6	U	5.6	U	5.9	
32EDC-12-5	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	1.6	J	5.3	U	5.3	U	5.3	U	5.3	U	2.8	J
32EDC-12-5	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-5	4 to 8	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-6	0 to 0.5	0.82	J	5.4	U	5.4	U	5.4	UJ	4.9	J	2.6	J	5.4	U	0.58	J	1.5	J	3.3	J
32EDC-12-6	0.5 to 2	2.5	J	5.4	U	5.4	U	1.2	J	12		12		5.4	U	1.7	J	6.9		14	
32EDC-12-6	2 to 4	1.8	J	5.3	UJ	5.3	UJ	0.66	J	6.4		5.3	J	5.3	UJ	0.96	J	4.3	J	6.4	J
32EDC-12-6	4 to 8	15	J	2.2	J	1.6	J	7.4	J	25	J	40	J	29	J	12	J	59	J	54	J
32EDC-12-7	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	64		1.5	J	5.2	U	5.2	U	1.5	J	6	J
32EDC-12-7	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	8.6		11		5.2	U	5.2	U	7.8		13	
32EDC-12-7	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	33	J	2.8	J	5.4	U	5.4	U	2.1	J	7.1	J
32EDC-12-7	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	4.1	J	3.8	J	5.6	U	5.6	U	5.6	U	4.7	J
32EDC-12-8	0 to 0.5	100	U	100	U	100	U	100	U	67	J	23	J	100	U	100	U	350		94	J
32EDC-12-8	0.5 to 2	0.38	J	5.3	U	5.3	U	1.3	J	7.3		6.1		5.3	U	0.68	J	21		12	
32EDC-12-8	2 to 4	0.77	J	5.2	U	5.2	U	1.2	J	4.8	J	3.3	J	5.2	U	0.48	J	19		7	
32EDC-12-8	4 to 8	5.3	U	5.3	U	5.3	U	5.3	U	1.2	J	1.8	J	5.3	U	5.3	U	0.61	J	2.7	J
32EDC-12-9	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	UJ	1.2	J	1.2	J	5.6	U	5.6	U	0.63	J	1.5	J
32EDC-12-9	0.5 to 2	5.2	U	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	U	5.2	UJ	5.2	U	5.2	U	5.2	U
32EDC-12-9	2 to 4	0.3	J	5.3	UJ	5.3	UJ	5.3	UJ	0.39	J	0.31	J	5.3	UJ	5.3	UJ	0.48	J	0.4	J
32EDC-12-9	4 to 8	5.8	U	5.8	UJ	5.8	UJ	5.8	UJ	1.1	J	0.69	J	5.8	UJ	5.8	U	5.8	UJ	1.1	J
32EDC-12-10	0 to 0.5	0.67	J	5.7	U	1.5	J	1.1	J	18	J	11	J	5.7	U	1	J	3.5	J	16	J
32EDC-12-10	0.5 to 2	5.7	UJ	1.6	J	3.6	J	4.3	J	25	J	41	J	5.7	U	5.7	UJ	13	J	53	J
32EDC-12-10	2 to 4	5.6	UJ	2.6	J	13		22	J	65	J	160	J	5.6	U	5.6	UJ	130	J	230	J
32EDC-12-10	4 to 8	5.7	UJ	5.7	U	5.7	U	5.7	UJ	2.5	J	3.3	J	5.7	U	5.7	UJ	2.1	J	4.9	J
32EDC-12-11	0 to 0.5	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	1.3	J	2	J	5.5	UJ	5.5	UJ	1.3	J	2	J
32EDC-12-11	0.5 to 2	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	0.48	J	0.55	J	5.4	UJ	5.4	UJ	0.47	J	0.68	J
32EDC-12-11	2 to 4	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	0.36	J	0.4	J	5.3	UJ	5.3	UJ	0.42	J	0.46	J

Table D1-11
Noncarcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-12-11	4 to 8	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	0.62	J	5.5	UJ	5.5	UJ	0.57	J	0.71	J
32EDC-12-12	0 to 0.5	100	U	100	U	100	U	100	U	56	J	100	U	100	U	100	U	100	UJ	39	J
32EDC-12-12	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	2.7	J	5.2	U	5.2	U	5.2	U	5.2	UJ	1.3	J
32EDC-12-12	2 to 4	26	U	26	U	26	U	26	U	6.7	J	26	U	26	U	26	U	26	UJ	4.4	J
32EDC-12-12	4 to 8	5.3	U	5.3	U	5.3	U	5.3	U	0.85	J	0.72	J	5.3	U	5.3	U	5.3	UJ	1	J
32EDC-12-13	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	5.7		1.6	J	5.3	U	5.3	U	5.3	U	2.1	J
32EDC-12-13	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	1.5	J	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-13	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-13	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-12-14	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	6.2		4	J	5.7	U	5.7	U	5.7	U	5.5	J
32EDC-12-14	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-14	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-14	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-15	0 to 0.5	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-15	0.5 to 2	5.4	U	5.4	U	5.4	UJ	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32EDC-12-15	2 to 4	5.3	U	5.3	U	5.3	UJ	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-15	4 to 8	5.9	U	5.9	U	5.9	UJ	5.9	U	1.5	J	2	J	5.9	U	5.9	U	5.9	U	2.5	J
32EDC-12-16	0 to 0.5	5.3	U	5.3	U	5.3	U	0.7	J	9.8		6.2		5.3	U	1.6	J	3.7	J	8.3	
32EDC-12-16	0.5 to 2	5.3	U	5.3	U	5.3	U	0.68	J	8.5		5.6		5.3	U	0.68	J	4.3	J	10	
32EDC-12-16	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.7		4.2	J	5.3	U	0.44	J	1.3	J	5.7	
32EDC-12-16	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	4.5	J	5.5	J	5.9	U	5.9	U	1.3	J	7.7	
32EDC-12-18	0 to 0.5	5.2	UJ	2	J	8.2		12	J	64	J	70	J	5.2	U	5.2	UJ	20	J	90	J
32EDC-12-18	0.5 to 2	5.2	UJ	2.5	J	6.3		15	J	46	J	140	J	5.2	U	5.2	UJ	52	J	140	J
32EDC-12-18	2 to 4	5.2	UJ	5.2	U	4.3	J	7.1	J	20	J	37	J	5.2	U	5.2	UJ	21	J	45	J
32EDC-12-18	4 to 8	6.2	UJ	6.2	U	6.2	U	6.2	UJ	7.6	J	5.3	J	6.2	U	6.2	UJ	6.2	UJ	8.3	J
32EDC-12-19	0 to 0.5	5.6	U	5.6	U	1.5	J	4	J	32		33		5.6	U	5.6	U	12		37	
32EDC-12-19	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	2.8	J	2.6	J	5.5	U	5.5	U	5.5	U	3	J
32EDC-12-19	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	1.7	J
32EDC-12-19	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-12-20	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	41	J	5.2	U	5.2	U	5.2	U	5.2	U	3.2	J
32EDC-12-20	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	5.2	J	5.2	U	5.2	U	5.2	U	5.2	U	2	J
32EDC-12-20	2 to 4	5.2	U	5.2	U	5.2	U	5.2	U	9.3		5.2	U	5.2	U	5.2	U	1.7	J	2.3	J
32EDC-12-20	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-21	0 to 0.5	5.4	U	5.4	U	5.4	U	2	J	6.5		11		5.4	U	0.59	J	6.2	J	14	J
32EDC-12-21	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	5.6		3.7	J	5.5	U	0.45	J	1.4	J	5.2	J
32EDC-12-21	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	3	J	1.9	J	5.4	U	0.38	J	0.69	J	2.4	J
32EDC-12-21	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	0.48	J
32EDC-12-22	0 to 0.5	0.33	J	5.6	U	5.6	U	5.6	UJ	7.1		0.95	J	5.6	U	0.48	J	1.1	J	1.7	J
32EDC-12-22	0.5 to 2	0.39	J	5.4	U	5.4	U	5.4	UJ	8.4	J	1.9	J	5.4	U	0.43	J	0.88	J	2.9	J
32EDC-12-22	2 to 4	5.4	U	5.4	U	5.4	U	0.42	J	6.7		3.7	J	5.4	U	0.37	J	1.9	J	4.8	J
32EDC-12-22	4 to 8	5.6	U	5.6	U	5.6	U	5.6	UJ	1.9	J	1.5	J	5.6	U	5.6	U	0.47	J	1.9	J
32EDC-12-23	0 to 0.5	5.4	U	5.4	U	5.4	U	0.59	J	4.6	J	7.5		5.4	U	0.49	J	2.8	J	8.2	
32EDC-12-23	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	0.83	J	5.2	U	5.2	U	0.45	J	1.1	J

Table D1-11
Noncarcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-12-23	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	2.5	J	5.3	U	5.3	U	0.73	J	4.8	J
32EDC-12-23	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	UJ	6	U
32EDC-12-24	0 to 0.5	6.3	U	6.3	U	6.3	U	6.3	U	4	J	6.6		6.3	U	6.3	U	3.4	J	10	
32EDC-12-24	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	2.6	J	3.5	J	5.5	U	5.5	U	1.8	J	4.5	J
32EDC-12-24	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	2.5	J	2.5	J	5.3	U	5.3	U	5.3	U	3.4	J
32EDC-12-24	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	2.7	J
32EDC-12-25	0 to 0.5	5.7	U	5.7	U	5.7	UJ	5.7	U	6.4		8.8		5.7	U	5.7	U	4	J	11	
32EDC-12-25	0.5 to 2	5.8	U	5.8	U	4.3	J	14		33		64		2.2	J	5.8	U	41		79	
32EDC-12-25	2 to 4	7.2	U	7.2	U	7.2	UJ	2.6	J	9.7		18		1.8	J	7.2	U	4	J	43	
32EDC-12-25	4 to 8	5.8	U	5.8	U	5.8	UJ	2.2	J	9.2		16		5.8	U	5.8	U	6.5		21	
32EDC-12-26	0 to 0.5	27	U	27	U	27	U	27	U	31		27	U	27	U	27	U	27	U	27	U
32EDC-12-26	0.5 to 2	27	U	27	U	27	U	27	U	15	J	27	U	27	U	27	U	27	U	27	U
32EDC-12-26	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	3.9	J	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-26	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32EDC-12-27	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	3.8	J	1.9	J	5.3	U	5.3	U	5.3	U	3.3	J
32EDC-12-27	0.5 to 2	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
32EDC-12-27	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-27	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-28	0 to 0.5	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	2	J	4	J	5.4	UJ	0.35	J	2.9	J	4.7	J
32EDC-12-28	0.5 to 2	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	0.31	J	5.2	UJ	5.2	UJ	0.47	J	5.2	UJ
32EDC-12-28	2 to 4	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ
32EDC-12-28	4 to 8	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.57	J	0.61	J	5.6	UJ	5.6	UJ	0.48	J	0.69	J
32EDC-12-29	0 to 0.5	5.5	J	28	U	21	J	36		44		560		16	J	28	U	110		500	
32EDC-12-29	0.5 to 2	5.4	U	1.7	J	5.4	U	2.9	J	5.4		31		5.4	U	5.4	U	5.4	U	34	
32EDC-12-29	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	1.8	J	5.3	U	5.3	U	5.3	U	2	J
32EDC-12-29	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-12-30	0 to 0.5	13		11		5.3	U	10		82		42		5.3	U	5.3	U	590		150	
32EDC-12-30	0.5 to 2	5.1	U	5.1	U	5.1	U	5.1	U	1.7	J	5.1	U	5.1	U	5.1	U	5.1	U	5.1	U
32EDC-12-30	2 to 4	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32EDC-12-30	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32EDC-12-31	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	5.2	UJ	0.6	J	5.2	U	5.2	U	0.39	J	0.84	J
32EDC-12-31	0.5 to 2	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	4.8	J	5.2	UJ	5.2	UJ	5.2	UJ	0.45	J	5.2	UJ
32EDC-12-31	2 to 4	0.39	J	5.2	UJ	5.2	UJ	5.2	UJ	2	J	0.97	J	5.2	UJ	5.2	UJ	0.73	J	1.3	J
32EDC-12-31	4 to 8	6	UJ	6	UJ	6	UJ	6	UJ	0.72	J	0.87	J	6	UJ	6	UJ	0.56	J	0.86	J
32EDC-12-32	0 to 0.5	5.7	U	5.7	U	2	J	2.4	J	67		8.5		5.7	U	5.7	U	6.9		20	
32EDC-12-32	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	1.8	J	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32EDC-12-32	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	5.4		4	J	5.3	U	5.3	U	5.3	U	5.6	
32EDC-12-32	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32EDC-12-33	0 to 0.5	1	J	5.4	U	2.6	J	3.3	J	64	J	38	J	5.4	U	2.5	J	13	J	53	J
32EDC-12-33	0.5 to 2	1.7	J	4.6	J	2	J	20	J	38	J	110	J	4.8	J	1.5	J	56	J	99	J
32EDC-12-33	2 to 4	0.87	J	5.3	UJ	5.3	UJ	1.5	J	14	J	18	J	5.3	UJ	0.96	J	6	J	30	J
32EDC-12-33	4 to 8	0.49	J	6	U	6	U	6	UJ	5.9	J	0.48	J	6	U	0.93	J	0.45	J	3.7	J
32EDC-12-34	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	18		8.2		5.4	U	5.4	U	3.7	J	12	

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Noncarcinogenic PAH Soil Sampling Results
for EDC-12
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-12-34	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	3.7	J	4.2	J	5.4	U	5.4	U	3.2	J	4.2	J
32EDC-12-34	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	2.8	J	5.4	U	5.4	U	3.8	J	3.7	J
32EDC-12-34	4 to 8	530		180		5.6	U	97		46		510		420		200		930		490	

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-12
Noncarcinogenic PAH Soil Sampling Results
for EDC-17
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32EDC-17-1	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	61	J	4.8	J	5.2	U	5.2	U	2.3	J	5.1	J
32EDC-17-1	0.5 to 2	6.2	U	6.2	U	6.2	U	6.2	U	12	J	6.9	J	6.2	U	6.2	U	2.9	J	6.7	
32EDC-17-1	2 to 4	6	U	6	U	6	U	6	U	4.6	J	2.2	J	6	U	6	U	6	UJ	6	U
32EDC-17-1	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	UJ	5.8	U
32EDC-17-2	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	30	J	2.5	J	5.2	U	5.2	U	5.2	UJ	3.6	J
32EDC-17-2	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	5.9	J	5.5	J	5.2	U	5.2	U	2.4	J	6.6	J
32EDC-17-2	2 to 4	6.3	U	6.3	U	6.3	U	6.3	U	6.6	J	2.8	J	6.3	U	6.3	U	2	J	3.9	J
32EDC-17-2	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	UJ	5.6	U	5.6	U	5.6	UJ	5.6	UJ
32EDC-17-3	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	25	J	7.1	J	5.2	U	5.2	U	2.8	J	10	J
32EDC-17-3	0.5 to 2	6.2	U	6.2	U	6.2	U	6.2	U	13	J	4.1	J	6.2	U	6.2	U	1.8	J	5.2	J
32EDC-17-3	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	1.8	J	5.3	UJ	5.3	U	5.3	U	5.3	UJ	5.3	UJ
32EDC-17-3	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	UJ	5.9	UJ	5.9	U	5.9	U	5.9	UJ	5.9	UJ
32EDC-17-4	0 to 0.5	26	UJ	26	UJ	26	UJ	3.6	J	22	J	20	J	26	UJ	26	UJ	9.8	J	24	J
32EDC-17-4	0.5 to 2	5.1	U	5.1	U	5.1	U	5.1	U	2.4	J	5.1	U	5.1	U	0.4	J	5.1	U	5.1	U
32EDC-17-4	2 to 4	0.4	J	5.3	U	5.3	U	5.3	U	1.1	J	0.32	J	5.3	U	0.45	J	5.3	U	0.53	J
32EDC-17-4	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	0.82	J	0.35	J	5.8	U	5.8	U	5.8	U	0.59	J
32EDC-17-5	0 to 0.5	3.5	J	26	UJ	26	UJ	2.1	J	27	J	11	J	26	UJ	2.4	J	6.4	J	13	J
32EDC-17-5	0.5 to 2	26	UJ	26	UJ	26	UJ	3.6	J	15	J	6.5	J	26	UJ	26	UJ	3.1	J	6	J
32EDC-17-5	2 to 4	26	UJ	26	UJ	26	UJ	3.7	J	24	J	8.1	J	26	UJ	26	UJ	3.1	J	10	J
32EDC-17-5	4 to 8	0.43	J	5.7	U	5.7	U	5.7	U	1.9	J	0.72	J	5.7	U	0.38	J	0.39	J	1	J
32EDC-17-6	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	0.58	J	0.36	J	5.1	U	5.1	U	5.1	U	0.67	J
32EDC-17-6	0.5 to 2	0.61	J	5.2	U	5.2	U	5.2	U	0.97	J	0.37	J	5.2	U	5.2	U	0.74	J	0.67	J
32EDC-17-6	2 to 4	0.4	J	5.3	U	5.3	U	5.3	U	1	J	0.45	J	5.3	U	5.3	U	0.65	J	0.55	J
32EDC-17-6	4 to 8	7	U	7	U	7	U	7	U	2.1	J	1.2	J	7	U	0.47	J	0.67	J	2.1	J
32EDC-17-7	0 to 0.5	5.3	U	1.4	J	10		45		230	J	620	J	6		6.9		220	J	740	J
32EDC-17-7	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	11	J	9.4	J	5.3	U	5.3	U	4.2	J	13	J
32EDC-17-7	2 to 4	5.2	U	5.2	U	5.2	U	5.2	U	5.2	UJ	5.2	UJ	5.2	U	5.2	U	5.2	UJ	5.2	UJ
32EDC-17-7	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	UJ	5.9	UJ	5.9	U	5.9	U	5.9	UJ	5.9	UJ
32EDC-17-8	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	2.1	J	2.8	J	5.1	U	0.32	J	1.3	J	3.5	J
32EDC-17-8	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	0.6	J	0.47	J	5.2	U	5.2	U	5.2	U	0.82	J
32EDC-17-8	2 to 4	1.1	J	5.4	U	5.4	U	5.4	U	6.2		2.4	J	5.4	U	0.48	J	3.7	J	4.8	J
32EDC-17-8	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	1.6	J	1.6	J	5.6	U	5.6	U	0.8	J	2.6	J
32EDC-17-9	0 to 0.5	110		38		5.4	U	70		120		220		340		12		2300		490	
32EDC-17-9	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.4		2.3	J
32EDC-17-9	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	14		6.1		2.6	J	5.3	U	26		17	
32EDC-17-9	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	2.4	J	2.3	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
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UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-13
Noncarcinogenic PAH Soil Sampling Results
for EDC-21
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32EDC-21-1	0 to 0.5	85		33		9.1		48		98	J	280	J	36		25		320	J	250	
32EDC-21-1	0.5 to 2	11		5.3	J	1.7	J	8.9		38	J	58	J	5.9		4.1	J	59	J	67	
32EDC-21-1	2 to 4	12		4.2	J	4.3	J	8.9		49	J	58	J	5.3	J	5.3	J	43	J	69	
32EDC-21-1	4 to 8	5.2	U	5.2	U	1.4	J	2.2	J	19	J	23	J	5.2	U	5.2	U	9.4	J	30	
32EDC-21-2	0 to 0.5	12	J	5.4	UJ	5.8		6.9	J	83	J	27		1.9	J	11	J	25	J	41	
32EDC-21-2	0.5 to 2	2.6	J	3.7	J	5.9		12	J	47	J	73		4.2	J	3	J	45	J	91	
32EDC-21-2	2 to 4	2.5	J	2.6	J	10	J	9	J	95	J	100	J	2.2	J	4.6	J	28	J	130	J
32EDC-21-2	4 to 8	0.77	J	1.5	J	5.3	J	6.8	J	45	J	67	J	6.6	UJ	1.7	J	23	J	100	J
32EDC-21-3	0 to 0.5	3.2	J	3.9	J	5.6		11		72	J	140	J	3.7	J	3.6	J	71	J	150	
32EDC-21-3	0.5 to 2	7.6		1.5	J	2	J	5.3	J	41	J	33	J	1.9	J	6.7		24	J	40	
32EDC-21-3	2 to 4	4.4	J	3.1	J	3.4	J	8.6		96	J	130	J	3.4	J	6.3		50	J	150	
32EDC-21-3	4 to 8	4	J	11		20		31		360	J	530	J	6.5		20		120	J	650	
32EDC-21-4	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	16	J	13	J	5.7	U	5.7	U	6.3	J	15	
32EDC-21-4	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	6.6	J	7	J	5.5	U	5.5	U	3.3	J	9.2	
32EDC-21-4	2 to 4	5.6	U	4.2	J	15		21		180	J	370	J	2.9	J	7.5		44	J	450	
32EDC-21-5	0 to 0.5	120		34	J	55	U	41	J	120		260	J	58		54	J	310	J	340	J
32EDC-21-5	0.5 to 2	6.6	J	55	U	55	U	55	U	22	J	21	J	55	U	6	J	18	J	32	J
32EDC-21-6	0 to 0.5	11		4.6	J	2.8	J	7.5		91		81		11		6.8		57		160	
32EDC-21-6	0.5 to 2	5.5	U	1.8	J	3.7	J	11		83		160		1.4	J	3.9	J	46		220	
32EDC-21-6	2 to 4	2.9	J	2.5	J	1.9	J	4.2	J	57		79		2.4	J	3	J	20		110	
32EDC-21-7	0 to 0.5	9.6	J	3.3	J	39		18	J	81		140		3.6	J	10	J	65	J	170	
32EDC-21-7	0.5 to 2	4.2	J	1	J	2.5	J	3.4	J	42	J	21		1.2	J	4.1	J	13	J	27	
32EDC-21-7	2 to 4	3.6	J	1.2	J	10	J	8.5	J	50	J	27	J	1.6	J	4.3	J	16	J	36	J
32EDC-21-7	4 to 8	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	1.9	J	1.9	J	5.3	UJ	5.3	UJ	0.65	J	2.9	J
32EDC-21-8	0 to 0.5	50	J	16	J	54	U	24	J	86		170	J	22	J	18	J	150	J	220	J
32EDC-21-8	0.5 to 2	2.1	J	5.4	U	1.1	J	1.2	J	9.1		11	J	1.2	J	1.1	J	8.1	J	18	J
32EDC-21-8	2 to 4	31	J	54	U	54	U	9.1	J	35	J	60	J	54	U	14	J	59	J	81	J
32EDC-21-8	4 to 8	5.4	U	5.4	U	5.4	U	5.4	U	0.95	J	0.56	J	5.4	U	5.4	U	0.86	J	0.9	J
32EDC-21-9	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	5.8		8.9		5.3	U	5.3	U	2	J	10	
32EDC-21-9	0.5 to 2	5.6	U	5.6	U	3.2	J	2.7	J	38		41		5.6	U	2.7	J	17		73	
32EDC-21-9	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	6.9		4.1	J	5.5	U	5.5	U	1.8	J	6.3	
32EDC-21-9	4 to 8	5.5	U	5.5	U	5.5	U	5.5	U	4.7	J	3.3	J	5.5	U	5.5	U	5.5	U	5	J
32EDC-21-10	0 to 0.5	0.8	J	5.7	U	5.7	U	1.4	J	12		9.8		5.7	U	5.7	U	4.7	J	13	
32EDC-21-10	0.5 to 2	1.3	J	5.5	U	5.5	U	2.8	J	21		19		5.5	U	5.5	U	8.9		25	
32EDC-21-10	2 to 4	1.5	J	2	J	5.5	U	4.1	J	16		30		1.6	J	5.5	U	16		42	
32EDC-21-10	4 to 8	8.1		27		38		27		300		670		25		46		510		790	
32EDC-21-11	0 to 0.5	11	J	55	U	55	U	55	U	37	J	25	J	55	U	7.6	J	9.9	J	33	J
32EDC-21-11	0.5 to 2	16	J	55	U	55	U	55	UJ	110		36	J	55	U	9	J	45	J	74	J
32EDC-21-11	2 to 4	55	U	55	U	55	U	6.2	J	52	J	25	J	55	U	3.4	J	15	J	42	J
32EDC-21-12	0 to 0.5	5.9	U	5.9	U	1.9	J	1.8	J	20		26		5.9	U	5.9	U	8.4		32	
32EDC-21-12	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	1.7	J	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32EDC-21-12	2 to 4	6.7	U	6.7	U	6.7	U	6.7	U	36		27		6.7	U	6.7	U	5.7	J	37	
32EDC-21-12	4 to 8	4.5	J	98		60		180		350		1100		84		6.4	U	1100		1400	

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-14
Noncarcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-1	0 to 0.5	7.3		5.3	U	1.9	J	2.9	J	88		24		2.4	J	3.3	J	14		40	
32FED-1A-1	0.5 to 2	4.8	J	1.6	J	3.6	J	9.7		38		44		3.2	J	4.9	J	24		48	
32FED-1A-1	2 to 4	2.9	J	2.9	J	6.5		21		53		58		4.4	J	4.4	J	24		74	
32FED-1A-1	4 to 8	23		8.6		2.7	J	4.6	J	29		32		17		34		40		53	
32FED-1A-2	0 to 0.5	2.5	J	25	U	25	U	25	U	41		19	J	25	U	2.1	J	7.1	J	19	J
32FED-1A-2	0.5 to 2	0.62	J	5.3	U	5.3	U	5.3	U	1.7	J	2.2	J	5.3	U	0.55	J	1.4	J	2.1	J
32FED-1A-2	2 to 4	1	J	11	U	11	U	11	U	8.8	J	8.6	J	11	U	1.1	J	3.6	J	8.7	J
32FED-1A-2	4 to 8	6	U	6	U	6	U	6	U	0.96	J	0.71	J	6	U	6	U	6	U	1.1	J
32FED-1A-3	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	30		21		5.6	U	5.6	U	9.9		20	
32FED-1A-3	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-3	2 to 4	6.1	U	6.1	U	6.1	U	6.1	U	1.9	J	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-3	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-4	0 to 0.5	13	J	59	U	59	U	5.5	J	56	J	82		59	U	12	J	37	J	83	
32FED-1A-4	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	0.89	J	0.68	J	5.7	U	5.7	U	0.45	J	0.88	J
32FED-1A-4	2 to 4	0.85	J	12	U	12	U	12	U	10	J	7	J	12	U	0.79	J	3.4	J	7.9	J
32FED-1A-4	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	0.88	J	0.55	J	6.1	U	6.1	U	6.1	U	0.97	J
32FED-1A-5	0 to 0.5	5.4	U	7		5.4	U	14		230		280		2.5	J	4	J	65		350	
32FED-1A-5	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	16		1.8	J	5.3	U	5.3	U	5.3	U	2.4	J
32FED-1A-5	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	16		5.9		5.3	U	5.3	U	5.3	U	7.4	
32FED-1A-5	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	2.2	J	5.9	U	5.9	U	5.9	U	5.9	U	2.6	J
32FED-1A-6	0 to 0.5	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	0.79	J	5.2	UJ	5.2	UJ	5.2	UJ	0.38	J	0.45	J
32FED-1A-6	0.5 to 2	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	1	J	1.3	J	5.2	UJ	5.2	UJ	0.46	J	2	J
32FED-1A-6	2 to 4	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	0.8	J	0.88	J	5.2	UJ	5.2	UJ	0.47	J	1.1	J
32FED-1A-6	4 to 8	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ	5.5	UJ
32FED-1A-7	0 to 0.5	7.1	J	19	J	26	U	21	J	34		26	U	9	J	26	U	26	U	26	U
32FED-1A-7	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	1.6	J	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-7	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	2.3	J	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-7	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-8	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	1.8	J	2.9	J	5.2	U	5.2	U	5.2	U	2.6	J
32FED-1A-8	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-8	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	2.4	J	5.7	U	5.7	U	5.7	U	1.9	J
32FED-1A-8	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-9	0 to 0.5	0.62	J	5.1	UJ	5.1	UJ	0.77	J	7.6	J	8.5	J	5.1	UJ	0.69	J	4.1	J	8.3	J
32FED-1A-9	0.5 to 2	5.2	UJ	5.2	UJ	5.2	UJ	5.2	UJ	1.8	J	1.3	J	5.2	UJ	5.2	UJ	0.53	J	1.4	J
32FED-1A-9	2 to 4	0.4	J	5.5	UJ	5.5	UJ	5.5	UJ	2.1	J	1.9	J	5.5	UJ	0.44	J	1	J	2	J
32FED-1A-9	4 to 8	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ
32FED-1A-10	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	6.1		6.7		5.1	UJ	5.1	U	3.5	J	6.7	J
32FED-1A-10	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	U	5.6	UJ	5.6	UJ
32FED-1A-10	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	UJ	5.8	U	5.8	UJ	5.8	UJ
32FED-1A-10	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	UJ	6.2	UJ
32FED-1A-11	0 to 0.5	5.3	U	5.3	U	5.3	UJ	5.3	U	4.8	J	5.3	UJ	5.3	U	5.3	U	5.3	UJ	5.3	UJ
32FED-1A-11	0.5 to 2	5.7	U	5.7	U	5.7	UJ	5.7	U	1.7	J	5.7	UJ	5.7	U	5.7	U	5.7	UJ	5.7	UJ
32FED-1A-11	2 to 4	6.5		5.6	U	5.6	UJ	5.6	U	6.3	J	5.6	UJ	5.6	U	5.5	J	5.6	UJ	3.8	J
32FED-1A-11	4 to 8	6.1	U	6.1	U	6.1	UJ	6.1	U	6.1	UJ	6.1	UJ	6.1	U	6.1	U	6.1	UJ	6.1	UJ
32FED-1A-12	0 to 0.5	85		1.2	J	5.2	U	6		67		17		53		55		230		71	
32FED-1A-12	0.5 to 2	54	U	54	U	54	U	54	U	13	J	54	U	54	U	54	U	3.8	J	54	U

Table D1-14
Noncarcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-12	2 to 4	1.2	J	11	U	11	U	11	U	5.6	J	1.1	J	11	U	1.5	J	5.9	J	2.6	J
32FED-1A-12	4 to 8	0.44	J	5.8	U	5.8	U	5.8	U	1.2	J	0.53	J	5.8	U	5.8	U	5.8	U	0.9	J
32FED-1A-13	0 to 0.5	5.2	U	2.5	J	5.2	U	5.4		150		140		5.2	U	5.4		30		160	
32FED-1A-13	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	29		35		5.3	U	5.3	U	8.4		38	
32FED-1A-13	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	34		33		5.7	U	5.7	U	7.4		40	
32FED-1A-13	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	7.5		9.6		6.1	U	6.1	U	2.6	J	15	
32FED-1A-14	0 to 0.5	27	U	27	U	27	U	27	U	26	J	27	U	27	U	27	U	27	U	27	U
32FED-1A-14	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-14	2 to 4	5.3	U	5.3	U	5.3	U	5.3	U	3.1	J	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32FED-1A-14	4 to 8	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-15	0 to 0.5	1.3	J	5.4	UJ	5.4	UJ	0.79	J	5.4	UJ	1.2	J	5.4	UJ	0.83	J	1.8	J	7.3	J
32FED-1A-15	0.5 to 2	0.33	J	5.3	UJ	5.3	UJ	5.3	UJ	5.3	UJ	0.32	J	5.3	UJ	5.3	UJ	0.38	J	0.75	J
32FED-1A-15	2 to 4	0.93	J	5.3	UJ	5.3	UJ	0.53	J	14	J	0.53	J	5.3	UJ	0.41	J	0.99	J	2.6	J
32FED-1A-15	4 to 8	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	3.4	J	5.7	UJ	5.7	UJ	2.1	J	3.9	J
32FED-1A-16	0 to 0.5	5.5	U	5.5	U	5.5	U	3.6	J	3.3	J	5.3	J	5.5	U	5.5	U	5.5	U	5	J
32FED-1A-16	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-16	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-16	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-17	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	2.8	J	3.3	J	5.2	U	5.2	U	1.8	J	9	
32FED-1A-17	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	U	5.6	U	5.6	UJ	5.6	U
32FED-1A-17	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	6.4		1.8	J	5.8	U	5.8	U	5.8	UJ	3.5	J
32FED-1A-17	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-18	0 to 0.5	18	J	53	UJ					46	J	7	J	18	J	12	J	74		34	J
32FED-1A-18	0.5 to 2	53	UJ	53	UJ					28	J	16	J	53	UJ	3.4	J	5.1	J	83	
32FED-1A-18	2 to 4	1.3	J	5.5	UJ					7.2		4.5	J	5.5	UJ	1.2	J	3.6	J	17	
32FED-1A-18	4 to 8	5.7	UJ	5.7	UJ					5.7	U	5.7	U	5.7	UJ	5.7	UJ	5.7	U	5.7	U
32FED-1A-19	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	2.8	J	1.4	J	5.7	U	5.7	U	0.94	J	2.8	J
32FED-1A-19	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	1.7	J	2	J	5.7	U	5.7	U	0.94	J	2.1	J
32FED-1A-19	2 to 4	6	U	6	U	6	U	6	U	0.67	J	0.98	J	6	U	6	UJ	0.53	J	1.3	J
32FED-1A-19	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	U
32FED-1A-20	0 to 0.5	4.3	J	3.6	J	2	J	3.3	J	83		6		7.1		5.5	U	15		17	
32FED-1A-20	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-20	2 to 4	6	U	6	U	6	U	6	U	6.1		6	U	1.5	J	6	U	2.8	J	2.7	J
32FED-1A-20	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-21	0 to 0.5	5.1	U	1.4	J	5.1	U	1.7	J	30		38		5.1	U	5.1	U	11		39	
32FED-1A-21	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U	5.2	U
32FED-1A-21	2 to 4	5.5	U	5.5	U	5.5	U	1.4	J	26		32		5.5	U	5.5	U	9.4		37	
32FED-1A-21	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-22	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	19		5.3	U	5.3	U	5.3	U	2.4	J	2.4	J
32FED-1A-22	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	2	J	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U
32FED-1A-22	2 to 4	5.4	U	5.4	U	5.4	U	5.4	U	2.1	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-22	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-23	0 to 0.5	0.44	J	5.2	UJ	5.2	UJ	5.2	UJ	2.3	J	3	J	5.2	UJ	5.2	UJ	1.3	J	3	J
32FED-1A-23	0.5 to 2	0.34	J	5.5	UJ	5.5	UJ	5.5	UJ	1.4	J	1.8	J	5.5	UJ	0.36	J	0.65	J	2	J
32FED-1A-23	2 to 4	0.99	J	5.6	U	5.6	U	0.47	J	11		7.8		5.6	U	1	J	4.9	J	9.6	
32FED-1A-23	4 to 8	600	U	600	U	600	U	600	U	85	J	600	U	600	U	600	U	600	U	600	U

Table D1-14
Noncarcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-24	0 to 0.5	22		11		5.4	U	8		62		37		16		2.9	J	170		79	
32FED-1A-24	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	4	J	5.3	U	5.3	U	5.3	U	1.9	J	5.3	U
32FED-1A-24	2 to 4	7.8		5.7	U	5.7	U	5.7	U	11		3.8	J	2.3	J	5.5	J	20		10	
32FED-1A-24	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	2.2	J	5.8	U	5.8	U	5.8	U	2.5	J
32FED-1A-25	0 to 0.5	5.6		5.3	U	5.3	U	5.3	U	3.1	J	3.1	J	5.3	U	2.1	J	7.1	J	4.9	J
32FED-1A-25	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	3.3	J	5.4	UJ	5.4	U	5.4	U	5.4	UJ	5.4	U
32FED-1A-25	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	8.9		5.7	UJ	5.7	U	5.7	U	3.6	J	2.2	J
32FED-1A-25	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	U	6.1	U	6.1	UJ	6.1	U
32FED-1A-26	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	2.6	J	2.7	J	5.2	U	5.2	U	1.6	J	3.3	J
32FED-1A-26	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-26	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	2.9	J	6.4		5.7	U	5.7	U	1.9	J	6.7	
32FED-1A-26	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-27	0 to 0.5	3.9	J	2.6	J	5.2	U	3.4	J	36		7.8		16	J	5.2	U	50	J	16	J
32FED-1A-27	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	U	5.6	UJ	5.6	U	5.6	UJ	5.6	UJ
32FED-1A-27	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	3	J	5.7	U	5.7	UJ	5.7	U	3	J	2.2	J
32FED-1A-27	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	U	6.1	UJ	6.1	UJ
32FED-1A-28	0 to 0.5	53	U	53	U	53	U	53	U	59		53	U	53	U	53	U	9.5	J	8.4	J
32FED-1A-28	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	0.75	J	1.6	J	5.6	U	5.6	U	0.81	J	2	J
32FED-1A-28	2 to 4	28	U	28	U	28	U	28	U	9.6	J	28	U	28	U	28	U	5	J	2.6	J
32FED-1A-28	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-29	0 to 0.5	0.64	J	1.5	J	5.2	UJ	2.5	J	56	J	74	J	5.2	UJ	1.3	J	15	J	61	J
32FED-1A-29	0.5 to 2	5.4	UJ	5.4	UJ	5.4	UJ	5.4	UJ	3.3	J	5	J	5.4	UJ	5.4	UJ	1.1	J	4.8	J
32FED-1A-29	2 to 4	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	10	J	12	J	5.6	UJ	5.6	UJ	2.6	J	11	J
32FED-1A-29	4 to 8	6.5	UJ	6.5	UJ	6.5	UJ	6.5	UJ	0.59	J	0.51	J	6.5	UJ	6.5	UJ	6.5	UJ	0.56	J
32FED-1A-30	0 to 0.5	0.89	J	5.3	UJ	5.3	UJ	5.3	UJ	24	J	0.58	J	5.3	UJ	0.49	J	2.5	J	1	J
32FED-1A-30	0.5 to 2	0.35	J	5.4	UJ	5.4	UJ	0.47	J	7.2	J	2.8	J	5.4	UJ	5.4	UJ	4.3	J	7.9	J
32FED-1A-30	2 to 4	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	5.7	UJ	0.74	J	5.7	UJ	5.7	UJ	5.7	UJ	1.1	J
32FED-1A-30	4 to 8	0.4	J	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	0.81	J	5.9	UJ	5.9	UJ	2	J	2.7	J
32FED-1A-31	0 to 0.5	6.6		27		5.4	U	30		1400		750		13		19		110		780	
32FED-1A-31	0.5 to 2	5.3	U	5.3	U	3.6	J	6.3		23		14		5.3	U	5.3	U	5.7		18	
32FED-1A-31	2 to 4	5.4	U	5.4	U	5.4	U	2.1	J	30		15		5.4	U	5.4	U	6.8		16	
32FED-1A-31	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-32	0 to 0.5	1.4	J	5.2	UJ	5.2	UJ	0.6	J	98	J	1.5	J	5.2	UJ	0.59	J	1.2	J	1.9	J
32FED-1A-32	0.5 to 2	5.2	U	5.2	U	5.2	U	5.2	UJ	2.2	J	0.47	J	5.2	U	5.2	U	5.2	UJ	0.6	J
32FED-1A-32	2 to 4	0.62	J	0.99	J	5.3	UJ	1.1	J	13	J	24	J	5.3	UJ	0.67	J	6.9	J	26	J
32FED-1A-32	4 to 8	5.8	U	5.8	U	5.8	U	5.8	UJ	5.8	UJ	5.8	UJ	5.8	U	5.8	U	5.8	UJ	5.8	UJ
32FED-1A-33	0 to 0.5	26	U	26	U	26	U	26	U	28		26	U	26	U	26	U	36		23	J
32FED-1A-33	0.5 to 2	5.2	U	5.2	U	5.2	U	2.9	J	5.4		5.2	U	5.2	U	5.2	U	1.9	J	1.8	J
32FED-1A-33	2 to 4	0.9	J	5.3	U	5.3	U	5.3	U	8.7		5.3	U	5.3	U	5.3	U	34		12	
32FED-1A-33	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-34	0 to 0.5	5.3	UJ	5.3	UJ	5.3	U	5.3	UJ	5.3	U	5.3	U	5.3	UJ	5.3	UJ	5.3	UJ	5.3	U
32FED-1A-34	0.5 to 2	5.5	UJ	5.5	UJ	5.5	U	5.5	UJ	2.7	J	5.5	U	5.5	UJ	5.5	UJ	5.5	UJ	5.5	U
32FED-1A-34	2 to 4	5.6	UJ	5.6	UJ	3.1	J	3.2	J	16		31		1.6	J	5.6	UJ	5.6	UJ	39	
32FED-1A-34	4 to 8	6.1	UJ	6.1	UJ	6.1	U	6.1	UJ	6.1	U	6.1	U	6.1	UJ	6.1	UJ	6.1	UJ	6.1	U
32FED-1A-35	0 to 0.5	24	J	54	U	54	UJ	54	U	83	J	54	UJ	54	U	54	U	54	UJ	54	UJ
32FED-1A-35	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	2.9	J	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U

Table D1-14
Noncarcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-35	2 to 4	8.9		6.9		5.8	UJ	13		9.4	J	5.8	UJ	4.6	J	2.9	J	5.8	UJ	3.7	J
32FED-1A-35	4 to 8	6.1	U	6.1	U	6.1	UJ	6.1	U	6.1	UJ	6.1	UJ	6.1	U	6.1	U	6.1	UJ	6.1	UJ
32FED-1A-36	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	9.6		13		5.1	U	5.1	U	7.5		13	
32FED-1A-36	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-36	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	3.5	J	3.9	J	5.5	U	5.5	U	2.2	J	4	J
32FED-1A-36	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-37	0 to 0.5	5.4	U	5.4	U	2.2	J	2.2	J	58		18		2.2	J	5.4	U	28		38	
32FED-1A-37	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	8.2		11		5.6	U	5.6	U	4	J	15	
32FED-1A-37	2 to 4	5.7	U	5.7	U	5.7	U	2.5	J	27		27		5.7	U	5.7	U	13		41	
32FED-1A-37	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-38	0 to 0.5	170		670		4.4	J	710		36000		22000		310		360		2800		25000	
32FED-1A-38	0.5 to 2	3.8	J	5.5		5.5	U	9.8		150		170		3.8	J	3.7	J	43		160	
32FED-1A-38	2 to 4	200		37		5.7	U	35		580		490		150		38		380		600	
32FED-1A-38	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	3.8	J	1.7	J	4.5	J	5.7	U	9		3.9	J
32FED-1A-39	0 to 0.5	5.4	J	2.6	J	5.9	U	9.2		32	J	11		11		5.9	U	49		30	
32FED-1A-39	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	3.2	J	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-39	2 to 4	77		12		5.5	U	6.3		24	J	15		47		10		120		31	
32FED-1A-39	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	UJ	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-40	0 to 0.5	1000		27		5.1	U	5.6		92		13		89		290		110		63	
32FED-1A-40	0.5 to 2	26		6.3	U	6.3	U	6.3	U	27	J	6.3	U	2.1	J	7.6		2.9	J	5.3	J
32FED-1A-40	2 to 4	76		2.3	J	5.7	U	5.7	U	3.8	J	5.7	U	6.7		21		7.3		4.9	J
32FED-1A-40	4 to 8	6	U	6	U	6	U	6	U	6	UJ	6	U	6	U	6	U	2.1	J	6	U
32FED-1A-41	0 to 0.5	350		9.4		5.1	U	5.1	U	87	J	40		5.1	U	29		1400		150	
32FED-1A-41	0.5 to 2	6.2	U	6.2	U	6.2	U	2	J	6.5		1.7	J	6.2	U	6.2	U	6.1		2.3	J
32FED-1A-41	2 to 4	32		5.4	U	5.4	U	5.4	U	5	J	4.7	J	5.4	U	2.2	J	120		8.9	
32FED-1A-41	4 to 8	26		5.8	U	5.8	U	5.8	U	8		4.4	J	5.8	U	2.2	J	86		8.6	
32FED-1A-42	0 to 0.5	320		100	U	100	U	43	J	88	J	13	J	100	U	35	J	660		93	J
32FED-1A-42	0.5 to 2	0.36	J	5.2	U	5.2	U	5.2	U	5.2	U	0.49	J	5.2	U	0.35	J	2.5	J	0.98	J
32FED-1A-42	2 to 4	240		100	U	100	U	100	U	17	J	6	J	100	U	19	J	370		25	J
32FED-1A-42	4 to 8	0.31	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	1	J	0.48	J
32FED-1A-43	0 to 0.5	4.8	J	3.5	J	3.4	J	3	J	22	J	3.5	J	4	J	2.6	J	3.1	J	3.9	J
32FED-1A-43	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	1.4	J	1.8	J	5.7	U	5.7	U	1.3	J	2.5	J
32FED-1A-43	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	1.4	J	5.8	U	5.8	U	5.8	U	5.8	U	0.52	J
32FED-1A-43	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	0.8	J	0.72	J	6.2	U	6.2	U	6.2	U	1	J
32FED-1A-44	0 to 0.5	100	U	100	U	100	U	100	U	110		100	U	100	U	12	J	8.9	J	100	U
32FED-1A-44	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	2.8	J	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-44	2 to 4	28	U	28	U	28	U	28	U	28	U	28	U	28	U	28	U	28	U	28	U
32FED-1A-44	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	0.4	J	6.1	U	6.1	U	6.1	U	0.62	J
32FED-1A-45	0 to 0.5	51	UJ	51	UJ	51	UJ	51	UJ	63	J	51	UJ	51	UJ	51	UJ	3.3	J	51	UJ
32FED-1A-45	0.5 to 2	52	UJ	52	UJ	52	UJ	52	UJ	18	J	52	UJ	52	UJ	52	UJ	52	UJ	52	UJ
32FED-1A-45	2 to 4	52	UJ	52	UJ	52	UJ	52	UJ	20	J	52	UJ	52	UJ	52	UJ	52	UJ	52	UJ
32FED-1A-45	4 to 8	6	U	6	U	6	U	6	U	0.79	J	6	U	6	U	6	U	6	U	0.43	J
32FED-1A-46	0 to 0.5	5.3	U	2.3	J	5.3	U	4.7	J	200		73		1.2	J	2.3	J	22	J	68	
32FED-1A-46	0.5 to 2	5.3	U	5.3	U	5.3	U	5.3	U	37		4.3	J	5.3	U	5.3	U	5.3	UJ	5.5	
32FED-1A-46	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	14		5.6	U	5.6	U	5.6	U	5.6	UJ	3.5	J
32FED-1A-46	4 to 8	6.4	U	6.4	U	6.4	U	1.6	J	17		11		6.4	U	6.4	U	4.1	J	18	

Table D1-14
Noncarcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-47	0 to 0.5	16	J	84		54	UJ	130		1100		1800		49	J	80		640		1900	
32FED-1A-47	0.5 to 2	5.3	U	5.3	U	5.3	UJ	5.3	U	4.6	J	5.3	U	5.3	U	5.3	U	5.3	U	4	J
32FED-1A-47	2 to 4	5.4	U	5.4	U	5.4	UJ	5.4	U	24		14		5.4	U	5.4	U	3	J	16	
32FED-1A-47	4 to 8	6.1	U	6.1	U	6.1	UJ	6.1	U	2.7	J	2.6	J	6.1	U	6.1	U	6.1	U	3.9	J
32FED-1A-48	0 to 0.5	1.1	J	5.4	UJ	3.8	J	3.1	J	85	J	8.4	J	5.4	UJ	5.4	UJ	7.2	J	16	J
32FED-1A-48	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	UJ	3.2	J	1.3	J	5.5	U	5.5	U	0.52	J	1.8	J
32FED-1A-48	2 to 4	3.6	J	5.8	U	5.8	U	5.8	UJ	5.3	J	0.59	J	5.8	U	1.6	J	2.3	J	1.9	J
32FED-1A-48	4 to 8	6	U	6	U	6	U	6	UJ	6	UJ	6	UJ	6	U	6	U	6	UJ	6	UJ
32FED-1A-49	0 to 0.5	250		7.4		5.2	U	9.7		51	J	47		5.2	U	17		560		94	
32FED-1A-49	0.5 to 2	3.1	J	5.5	U	5.5	U	5.5	U	13		5.5	U	5.5	U	5.5	U	7.9		2.1	J
32FED-1A-49	2 to 4	140		4.7	J	5.5	U	2.7	J	22		14		3.8	J	11		170		25	
32FED-1A-49	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	4.4	J	6.2	U
32FED-1A-50	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	11	J	6.4		5.2	U	5.2	U	3.3	J	16	
32FED-1A-50	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	1.9	J	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-50	2 to 4	6.2	U	6.2	U	6.2	U	6.2	U	8	J	2	J	6.2	U	6.2	U	6.2	U	8.3	
32FED-1A-50	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-51	0 to 0.5	3.1	J	5.2	U	5.2	U	5.2	U	42		3.6	J	5.2	U	5.2	U	15		5.9	
32FED-1A-51	0.5 to 2	6.3	U	6.3	U	6.3	U	6.3	U	12		6.3	U	6.3	U	6.3	U	6.3	U	2	J
32FED-1A-51	2 to 4	5.5	U	5.5	U	5.5	U	5.5	U	13		1.6	J	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-51	4 to 8	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-52	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	4.2	J	2.1	J	5.1	U	5.1	U	1.8	J	3.2	J
32FED-1A-52	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	2	J	1.7	J	5.5	U	5.5	U	5.5	UJ	2.6	J
32FED-1A-52	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	2.6	J	1.7	J	5.7	U	5.7	U	5.7	UJ	2.8	J
32FED-1A-52	4 to 8	6	U	6	U	6	U	6	U	6	U	6	UJ	6	U	6	U	6	UJ	6	U
32FED-1A-53	0 to 0.5	27	UJ	27	UJ	27	U	27	UJ	35	J	27	U	27	UJ	27	UJ	27	UJ	27	U
32FED-1A-53	0.5 to 2	5.8	UJ	5.8	UJ	5.8	U	5.8	UJ	2.5	J	2.5	J	5.8	UJ	5.8	UJ	5.8	UJ	3.6	J
32FED-1A-53	2 to 4	0.9	J	5.7	UJ	5.7	U	5.7	UJ	8.6	J	5.7	U	5.7	UJ	5.7	UJ	5.7	UJ	6	
32FED-1A-53	4 to 8	6	UJ	6	UJ	6	U	6	UJ	6	U	6	U	6	UJ	6	UJ	6	UJ	6	U
32FED-1A-54	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	60		2.1	J	5.3	UJ	5.3	U	2	J	3.6	J
32FED-1A-54	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	3.8	J	5.7	U	5.7	UJ	5.7	U	5.7	UJ	5.7	UJ
32FED-1A-54	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	3.2	J	5.9	U	5.9	UJ	5.9	U	5.9	UJ	5.9	UJ
32FED-1A-54	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	UJ	6	U	6	UJ	6	UJ
32FED-1A-55	0 to 0.5	5.1	U	5.1	U	5.1	U	5.1	U	7.5		7.7		5.1	U	5.1	U	3.7	J	8.9	
32FED-1A-55	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	3.3	J	1.9	J	5.4	U	5.4	U	5.4	U	2.1	J
32FED-1A-55	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	3	J	2.6	J	5.6	U	5.6	U	5.6	U	3	J
32FED-1A-55	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-56	0 to 0.5	0.62	J	5.3	U	5.3	U	5.3	U	8.7	UJ	3.3	J	5.3	U	0.37	J	2.2	J	4.6	J
32FED-1A-56	0.5 to 2	0.58	J	5.4	U	2.3	J	6		8	UJ	20	J	1.8	J	0.6	J	17	J	26	J
32FED-1A-56	2 to 4	0.37	J	5.6	U	5.6	U	5.6	U	6.5	UJ	3.3	J	5.6	U	0.37	J	1.1	J	4.3	J
32FED-1A-56	4 to 8	0.59	J	4.8	J	5.9	U	1.2	J	6.5	UJ	7	J	5.9	U	0.91	J	2.3	J	13	J
32FED-1A-57	0 to 0.5	5.4	U	5.4	U	5.4	U	1.8	J	94		49		5.4	U	5.4	U	8.2		49	
32FED-1A-57	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	15		14		5.7	U	5.7	U	3.2	J	14	
32FED-1A-57	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	22		18		5.8	U	5.8	U	4.7	J	18	
32FED-1A-57	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.3		5.4	J	6.1	U	6.1	U	6.1	U	11	
32FED-1A-58	0 to 0.5	31		60		36		64		530		560		50		28		130	J	600	
32FED-1A-58	0.5 to 2	5.5	U	3.5	J	5.5	U	5.3	J	92		120		1.2	J	2.2	J	28	J	130	

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for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32FED-1A-58	2 to 4	1100	U	580	J	1100	U	470	J	11000	J	7400		360	J	570	J	1200	J	8600	
32FED-1A-58	4 to 8	48		210		2.7	J	220		3800	J	3600		100		180		720	J	3800	
32FED-1A-59	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	22		5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-59	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-59	2 to 4	6	U	6	U	6	U	6	U	9.6		6	U	6	U	6	U	3.1	J	3.2	J
32FED-1A-59	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-60	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	28		2.4	J	5.2	U	5.2	U	2.5	J	3.6	J
32FED-1A-60	0.5 to 2	6.1	U	6.1	U	6.1	U	6.1	U	2.3	J	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-60	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	19		2.2	J	5.6	U	5.6	U	4.5	J	3.9	J
32FED-1A-60	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-61	0 to 0.5	370		52		5.4	U	43		140		110		200		38		910		290	
32FED-1A-61	0.5 to 2	6.3	U	6.3	U	6.3	U	6.3	U	28	J	4.9	J	2.5	J	6.3	U	11		7.1	
32FED-1A-61	2 to 4	16		4.4	J	1.8	J	2.9	J	30	J	12		17		5.9	U	67		22	
32FED-1A-61	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	UJ	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-62	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	4.5	J	5.7	U	5.7	U	5.7	U	5.7	U	2.9	J
32FED-1A-62	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-62	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-62	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-63	0 to 0.5	5.2	U	5.2	U	5.2	U	5.2	U	6.7		5.2	U	5.2	U	5.2	U	1.4	J	2.7	J
32FED-1A-63	0.5 to 2	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-63	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	4.9	J	6.8		5.9	U	5.9	U	3.8	J	8.1	
32FED-1A-63	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-64	0 to 0.5	5.9	U	5.9	U	5.9	U	5.9	U	23		2.1	J	5.9	U	5.9	U	5.9	U	2.1	J
32FED-1A-64	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-64	2 to 4	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-64	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-65	0 to 0.5	53	UJ	53	UJ	53	UJ	53	UJ	52	J	53	UJ	53	UJ	53	UJ	53	UJ	53	UJ
32FED-1A-65	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	1.6	J	0.42	J	5.6	U	5.6	U	5.6	U	0.63	J
32FED-1A-65	2 to 4	63	UJ	63	UJ	63	UJ	63	UJ	18	J	63	UJ	63	UJ	63	UJ	63	UJ	6.6	J
32FED-1A-65	4 to 8	5.8	U	5.8	U	5.8	U	5.8	U	1.4	J	0.87	J	5.8	U	5.8	U	5.8	U	1.2	J
32FED-1A-66	0 to 0.5	15	J	52	UJ	52	UJ	52	UJ	26	J	52	UJ	52	UJ	4.7	J	22	J	7.8	J
32FED-1A-66	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	1.4	J	0.54	J	5.6	U	5.6	U	0.58	J	1	J
32FED-1A-66	2 to 4	19	J	57	U	57	U	57	U	13	J	57	U	57	U	3.9	J	14	J	6.4	J
32FED-1A-66	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-67	0 to 0.5	5.2	U	5.2	U	5.2	UJ	5.2	U	4.4	J	5.2	U	5.2	U	5.2	U	1.5	J	2.8	J
32FED-1A-67	0.5 to 2	5.3	U	2.4	J	5.3	UJ	1.3	J	96		40		5.3	U	2.5	J	6		50	
32FED-1A-67	2 to 4	4.6	J	13		5.8	UJ	10		340		200		7.1		13		49		240	
32FED-1A-67	4 to 8	6.2	U	6.2	U	6.2	UJ	6.2	U	13		12		6.2	U	6.2	U	2.9	J	12	
32FED-1A-68	0 to 0.5	27	UJ	27	UJ	27	UJ	27	UJ	35	J	27	UJ	27	UJ	27	UJ	27	UJ	27	UJ
32FED-1A-68	0.5 to 2	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.77	J	5.6	UJ	5.6	UJ	5.6	UJ	5.6	UJ	0.44	J
32FED-1A-68	2 to 4	30	U	30	U	30	U	30	U	10	J	30	U	30	U	30	U	30	U	30	U
32FED-1A-68	4 to 8	6	UJ	6	UJ	6	UJ	6	UJ	0.59	J	6	UJ	6	UJ	6	UJ	6	UJ	6	UJ
32FED-1A-69	0 to 0.5	5.4	U	5.4	U	5.4	U	5.4	U	32		5.4	U	5.4	U	5.4	U	5.4	U	5.4	U
32FED-1A-69	0.5 to 2	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-69	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U
32FED-1A-69	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U

Table D1-14
Noncarcinogenic PAH Soil Sampling Results
for FED-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet bgs)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32FED-1A-70	0 to 0.5	0.37	J	6	U	6	U	6	U	1.1	J	1	J	6	U	6	U	6	U	1.7	J
32FED-1A-70	0.5 to 2	6	U	6	U	6	U	6	U	0.57	J	0.5	J	6	U	6	U	6	U	0.68	J
32FED-1A-70	2 to 4	6	U	6	U	6	U	6	U	6	U	0.74	J	6	U	6	U	6	U	0.92	J
32FED-1A-70	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-71	0 to 0.5	6	U	6	U	6	U	6	U	6	U	0.55	J	6	U	6	U	0.52	J	0.9	J
32FED-1A-71	0.5 to 2	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	0.46	J	6.2	U	6.2	U	6.2	U	0.85	J
32FED-1A-71	2 to 4	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U	6.3	U
32FED-1A-71	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-72	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	1.4	J	1	J	5.3	U	0.43	J	1.1	J	1.5	J
32FED-1A-72	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	2.9	J	1.1	J	5.8	U	5.8	U	0.45	J	1.7	J
32FED-1A-72	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	1.8	J	1.2	J	5.7	U	5.7	U	0.59	J	1.4	J
32FED-1A-72	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	0.51	J	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-73	0 to 0.5	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	2.3	J	5.9	U	5.9	U	1.7	J	2.1	J
32FED-1A-73	0.5 to 2	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-73	2 to 4	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-73	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U	6.1	U
32FED-1A-74	0 to 0.5	100	UJ	100	UJ	38	J	56	J	360	J	290	J	100	UJ	100	UJ	59	J	300	J
32FED-1A-74	0.5 to 2	29	UJ	29	UJ	29	UJ	29	UJ	5.6	J	3.9	J	29	UJ	29	UJ	29	UJ	4.9	J
32FED-1A-74	2 to 4	59	U	59	U	59	U	59	U	37	J	30	J	59	U	59	U	6.1	J	42	J
32FED-1A-74	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U
32FED-1A-75	0 to 0.5	17		1.6	J	1.8	J	3.9	J	79		7.3		5.3	U	3.2	J	63		16	
32FED-1A-75	0.5 to 2	5.5	U	5.5	U	5.5	U	5.5	U	9.7		5.5	U	5.5	U	5.5	U	5.5	U	5.5	U
32FED-1A-75	2 to 4	5.7	U	5.7	U	5.7	U	5.7	U	8.2		1.9	J	5.7	U	5.7	U	2.7	J	2.7	J
32FED-1A-75	4 to 8	6.2	U	6.2	U	6.2	U	2.8	J	11		25		6.2	U	6.2	U	16		30	
32FED-1A-76	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	18		5.6	U	5.6	U	5.6	U	5.6	U	5.6	U
32FED-1A-76	0.5 to 2	6	U	6	U	6	U	6	U	3.3	J	4.5	J	6	U	6	U	6	U	6.5	
32FED-1A-76	2 to 4	5.9	U	5.9	U	5.9	U	5.9	U	4.9	J	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-76	4 to 8	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-77	0 to 0.5	19	J	29	UJ	29	UJ	29	UJ	24	J	29	UJ	29	UJ	9.8	J	12	J	11	J
32FED-1A-77	0.5 to 2	0.95	J	6	UJ	6	UJ	6	UJ	1.5	J	0.99	J	6	UJ	0.71	J	1.3	J	2	J
32FED-1A-77	2 to 4	70	J	29	UJ	29	UJ	29	UJ	7.7	J	29	UJ	13	J	33	J	28	J	6.4	J
32FED-1A-77	4 to 8	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	0.74	J	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ	5.9	UJ
32FED-1A-78	0 to 0.5	5.3	U	5.3	U	5.3	U	5.3	U	5.3	U	5.3	UJ	5.3	U	5.3	U	5.3	UJ	5.3	U
32FED-1A-78	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	UJ	5.9	U	5.9	U	5.9	UJ	5.9	U
32FED-1A-78	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	5.8	U	5.8	UJ	5.8	U	5.8	U	5.8	UJ	5.8	U
32FED-1A-78	4 to 8	6	U	6	U	6	U	6	U	6	U	6	UJ	6	U	6	U	6	UJ	6	U
32FED-1A-79	0 to 0.5	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U	5.7	U
32FED-1A-79	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32FED-1A-79	2 to 4	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U	6	U
32FED-1A-79	4 to 8	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U	6.2	U

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-15
Noncarcinogenic PAH Soil Sampling Results
for PBC-1A
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	Depth (feet)	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier	Value	Qualifier
32PBC-1A-1	0 to 0.5	6.3		5.6	U	5.6	U	5.6	U	1.6	J	5.6	U	2.1	J	5.6	U	3.6	J	2.1	J
32PBC-1A-1	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U
32PBC-1A-1	2 to 4	6	U	6	U	1.7	J	3.5	J	21		32		6	U	6	U	13		46	
32PBC-1A-1	4 to 8	5.9	U	5.9	U	5.9	U	5.9	U	5.9	U	2.4	J	5.9	U	5.9	U	1.8	J	3	J
32PBC-1A-2	0 to 0.5	510	U	510	U	510	U	510	U	510	U	510	U	510	U	510	U	510	U	510	U
32PBC-1A-2	0.5 to 2	0.63	J	5.4	U	1.1	J	1	J	17	J	2.7	J	5.4	U	0.41	J	1.2	J	16	
32PBC-1A-2	2 to 4	0.95	J	5.4	U	5.4	U	5.4	U	24	J	1.6	J	5.4	U	0.78	J	2.3	J	10	
32PBC-1A-2	4 to 8	0.47	J	5.9	U	1.2	J	1.4	J	19	J	27		5.9	U	1.9	J	5.9		65	
32PBC-1A-3	0 to 0.5	530	U	530	U	530	U	530	U	530	U	32	J	530	U	530	U	88	J	100	J
32PBC-1A-3	0.5 to 2	550	U	550	U	550	U	550	U	550	U	550	U	550	U	550	U	550	U	550	U
32PBC-1A-3	2 to 4	560	U	560	U	560	U	560	U	560	U	560	U	560	U	560	U	560	U	560	U
32PBC-1A-3	4 to 8	0.51	J	6	U	6	U	6	U	7		7		6	U	0.79	J	1.7	J	12	
32PBC-1A-4	0 to 0.5	5.6	U	5.6	U	5.6	U	5.6	U	9.5		2.8	J	5.6	U	5.6	U	5.6	U	3.6	J
32PBC-1A-4	0.5 to 2	5.6	U	5.6	U	5.6	U	5.6	U	31		4.1	J	5.6	U	5.6	U	2.5	J	7	
32PBC-1A-4	2 to 4	5.8	U	5.8	U	5.8	U	5.8	U	15		7.6		5.8	U	5.8	U	1.9	J	11	
32PBC-1A-4	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	5.6	J	3.8	J	6.1	U	6.1	U	6.1	U	8.5	
32PBC-1A-5	0 to 0.5	0.39	J	6	U	6	U	6	U	3.1	J	6	U	6	U	6	U	6	U	0.44	J
32PBC-1A-5	0.5 to 2	0.67	J	5.7	U	5.7	U	0.88	J	4.8	J	7.5		5.7	U	0.44	J	3.7	J	8.4	
32PBC-1A-5	2 to 4	0.44	J	5.7	U	5.7	U	5.7	U	6.2		2	J	5.7	U	5.7	U	1.2	J	2.8	J
32PBC-1A-5	4 to 8	6.3	UJ	6.3	UJ	6.3	UJ	6.3	UJ	3.9	J	3.3	J	6.3	UJ	0.42	J	1.5	J	4.4	J
32PBC-1A-6	0 to 0.5	27	U	27	U	27	U	27	U	50		29		27	U	27	U	13	J	41	
32PBC-1A-6	0.5 to 2	18	J	22	J	27	U	27	U	33		25	J	35		4.7	J	19	J	59	
32PBC-1A-6	2 to 4	7.4		9.6		1.9	J	12		32		32		11		3.3	J	17		57	
32PBC-1A-7	0 to 0.5	5.4	U	5.4	U	5.4	U	2.4	J	77		18		5.4	U	5.4	U	9.6		21	
32PBC-1A-7	0.5 to 2	5.5	U	5.5	U	2.4	J	5.5	U	42		5	J	5.5	U	2.5	J	4.4	J	9.1	
32PBC-1A-7	2 to 4	5.6	U	5.6	U	5.6	U	5.6	U	12		1.9	J	5.6	U	5.6	U	2	J	3.5	J
32PBC-1A-7	4 to 8	6.1	U	4.9	J	7.2		12		260		160		2.5	J	16		43		240	
32PBC-1A-8	0 to 0.5	0.45	J	5.5	UJ	5.5	UJ	5.5	UJ	2.2	J	0.76	J	5.5	UJ	0.56	J	0.52	J	1.5	J
32PBC-1A-8	0.5 to 2	13	J	5.3	U	46	J	44		110	J	130		5.1	J	20	J	85		250	
32PBC-1A-8	4 to 8	5.5	J	6.4	UJ	3.8	J	4.5	J	16	J	17	J	6.4	UJ	3.8	J	17	J	32	J
32PBC-1A-9	0 to 0.5	0.9	J	1.9	J	5.3	U	3.1	J	19		33		5.3	U	5.3	U	18		38	
32PBC-1A-9	0.5 to 2	5.9	U	5.9	U	5.9	U	5.9	U	3.5	J	5.4	J	5.9	U	5.9	U	1.9	J	6.6	
32PBC-1A-9	2 to 4	2.1	J	8.9		5.5	U	20		22		120		9.5		4.4	J	120		110	
32PBC-1A-9	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	9.4		10		6.1	U	6.1	U	3.9	J	16	
32PBC-1A-10	0 to 0.5	1.3	J	1.5	J	5.4	U	5.4	U	9.4		6.9		1.4	J	1.3	J	5.2	J	9.9	
32PBC-1A-10	0.5 to 2	5.8	U	5.8	U	5.8	U	5.8	U	2.8	J	4.7	J	5.8	U	5.8	U	5.8	U	6.6	
32PBC-1A-10	2 to 4	6.2	U	6.2	U	6.2	U	6.2	U	3.3	J	2.8	J	6.2	U	6.2	U	6.2	U	5.5	J
32PBC-1A-10	4 to 8	6.1	U	6.1	U	6.1	U	6.1	U	7.7		6	J	6.1	U	6.1	U	6.1	U	15	

Acronyms/Abbreviations:
bgs – below ground
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

Table D1-16
Noncarcinogenic PAH Soil Sampling Results
for PBC-3
(results reported in micrograms per kilogram)

		2-Methylnapthalene		Acenaphthene		Acenaphthylene		Anthracene		Benzo(g,h,i)perylene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
Station ID	**Depth (feet bgs)**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**	**Value**	**Qualifier**
32PBC-3-1	0 to 0.5	36		4.9	J	3	J	7.1		39		35	J	16		22		49		63	J
32PBC-3-1	0.5 to 2	2	J	5.3	UJ	1.8	J	1.7	J	21	J	31	J	5.3	UJ	2	J	13	J	43	J
32PBC-3-1	2 to 4	32	J	5	J	2	J	4.6	J	33	J	35	J	7.9	J	15	J	31	J	78	J
32PBC-3-2	0 to 0.5	0.8	J	5.3	UJ	5.3	UJ	5.3	UJ	2.8	J	2.1	J	5.3	UJ	5.3	UJ	3.6	J	6.3	J
32PBC-3-2	0.5 to 2	1.1	J	4.5	J	9.3	J	8.1	J	96	J	150	J	3.5	J	4.7	J	80	J	190	J
32PBC-3-2	2 to 4	4.1	J	6.4	J	11	J	8.2	J	78	J	160	J	3.6	J	7	J	93	J	210	J
32PBC-3-3	0 to 0.5	6.1	UJ	6.1	UJ	6.1	UJ	6.1	UJ	11	J	15	J	6.1	UJ	6.1	UJ	7.5	J	18	J
32PBC-3-4	0 to 0.5	5.7	UJ	5.7	UJ	5.7	UJ	1.7	J	41	J	24	J	5.7	UJ	5.7	UJ	6.2	J	48	J
32PBC-3-4	0.5 to 2	1.1	J	5.4	J	5.3	J	20	J	66	J	150	J	4.2	J	7.2	J	53	J	250	J

Acronyms/Abbreviations:
bgs – below ground surface
PAH – polynuclear aromatic hydrocarbon

Data Qualifiers:
U – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit
J – indicates an estimated value
UJ – indicates the compound or analyte was analyzed for, but was not detected above the stated reporting limit; the reporting limit, in this case, is an estimated value

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
Pay Item : PAH'S USING METHOD 8270C WITH SIM														
FQC	BW	ER		C032CR0602	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.0031 UG/L	J	J	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	ACENAPHTHENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	ACENAPHTHYLENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	ANTHRACENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	BENZO(A)PYRENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	CHRYSENE	0.02 UG/L	J	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	FLUORENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	NAPHTHALENE	0.0074 UG/L	J	J	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	PHENANTHRENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0602	EPA 8270-M	U	PYRENE	0.02 UG/L	U	U	000 REG	5/14/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	ACENAPHTHENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	ACENAPHTHYLENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	ANTHRACENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	BENZO(A)PYRENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
FQC	BW	ER		C032CR0802	EPA 8270-M	U	CHRYSENE	0.02 UG/L	J	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	FLUORANTHENE	0.0033 UG/L	J	J	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	FLUORENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	NAPHTHALENE	0.007 UG/L	J	J	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	PHENANTHRENE	0.0034 UG/L	J	J	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0802	EPA 8270-M	U	PYRENE	0.02 UG/L	U	U	000 REG	5/15/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.0033 UG/L	J	J	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	ACENAPHTHENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	ACENAPHTHYLENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	ANTHRACENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	BENZO(A)PYRENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	CHRYSENE	0.02 UG/L	J	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	FLUORANTHENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	FLUORENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	NAPHTHALENE	0.0047 UG/L	J	J	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	PHENANTHRENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR0901	EPA 8270-M	U	PYRENE	0.02 UG/L	U	U	000 REG	5/16/2002	5/20/2002	5/22/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	ACENAPHTHENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
FQC	BW	ER		C032CR1701	EPA 8270-M	U	ACENAPHTHYLENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	ANTHRACENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	BENZO(A)PYRENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	CHRYSENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	FLUORANTHENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	FLUORENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	NAPHTHALENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	PHENANTHRENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1701	EPA 8270-M	U	PYRENE	0.25 UG/L	U	U	000 REG	5/23/2002	5/24/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	ACENAPHTHENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	ACENAPHTHYLENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	ANTHRACENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	BENZO(A)PYRENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.019 UG/L	J	J	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	CHRYSENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	FLUORANTHENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
FQC	BW	ER		C032CR1801	EPA 8270-M	U	FLUORENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	NAPHTHALENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	PHENANTHRENE	0.25 UG/L		U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1801	EPA 8270-M	U	PYRENE	0.25 UG/L	U	U	000 REG	5/24/2002	5/25/2002	5/29/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.3 NG/L	J	J	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	ACENAPHTHENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	ACENAPHTHYLENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	ANTHRACENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZ(A)ANTHRACENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(A)PYRENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	CHRYSENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	FLUORANTHENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	FLUORENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	NAPHTHALENE	47 NG/L	JB	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	PHENANTHRENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	PYRENE	47 NG/L	U	U	000 REG	5/28/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.8 NG/L	J	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	ACENAPHTHENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	ACENAPHTHYLENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	ANTHRACENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZ(A)ANTHRACENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(A)PYRENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	CHRYSENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	FLUORENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	NAPHTHALENE	9.4 NG/L	JB	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	PHENANTHRENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR1901	EPA 8270-M	U	PYRENE	50 NG/L	U	R	RA1 REG	5/28/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	2-METHYLNAPHTHALENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	ACENAPHTHENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	ACENAPHTHYLENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	ANTHRACENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZ(A)ANTHRACENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(A)PYRENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	CHRYSENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	FLUORANTHENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	FLUORENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	NAPHTHALENE	52 NG/L	JB	U	000 REG	5/30/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
FQC	BW	ER		C032CR2101	EPA 8270-M	U	PHENANTHRENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	PYRENE	52 NG/L	U	U	000 REG	5/30/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	2-METHYLNAPHTHALENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	ACENAPHTHENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	ACENAPHTHYLENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	ANTHRACENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZ(A)ANTHRACENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(A)PYRENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	CHRYSENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	FLUORENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	NAPHTHALENE	2.7 NG/L	JB	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	PHENANTHRENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2101	EPA 8270-M	U	PYRENE	50 NG/L	U	R	RA1 REG	5/30/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	2-METHYLNAPHTHALENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	ACENAPHTHENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	ACENAPHTHYLENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	ANTHRACENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZ(A)ANTHRACENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(A)PYRENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	CHRYSENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	FLUORANTHENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	FLUORENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	NAPHTHALENE	48 NG/L	JB	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	PHENANTHRENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	PYRENE	48 NG/L	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.2 NG/L	J	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	ACENAPHTHENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	ACENAPHTHYLENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	ANTHRACENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZ(A)ANTHRACENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(A)PYRENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	CHRYSENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	FLUORANTHENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	FLUORENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	NAPHTHALENE	5.9 NG/L	JB	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	PHENANTHRENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002
FQC	BW	ER		C032CR2201	EPA 8270-M	U	PYRENE	50 NG/L	U	R	RA1 REG	5/31/2002	6/6/2002	6/7/2002

Pay Item : PAH'S USING METHOD 8270C WITH SIM

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	BENZO(A)PYRENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	CHRYSENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0	C032C75901	EPA 8270-M	U	PYRENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	0.5	C032C76001	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	2	C032C76101	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	CHRYSENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-1	SB	REG	4	C032C76201	EPA 8270-M	U	PYRENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	ANTHRACENE	7.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	BENZ(A)ANTHRACENE	32 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	BENZO(A)PYRENE	64 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	42 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	65 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	35 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	CHRYSENE	39 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	FLUORANTHENE	83 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	FLUORENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	PHENANTHRENE	48 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	FD	4	C032C80201	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	65 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	CHRYSENE	55 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	20 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	FLUORANTHENE	8.2 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	FLUORENE	1.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	PHENANTHRENE	9.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0	C032C79801	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	BENZO(A)PYRENE	5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	CHRYSENE	3.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	0.5	C032C79901	EPA 8270-M	U	PYRENE	5.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	BENZ(A)ANTHRACENE	15 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	23 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	PHENANTHRENE	9.5 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-10	SB	REG	2	C032C80001	EPA 8270-M	U	PYRENE	52 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	BENZ(A)ANTHRACENE	33 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	BENZO(A)PYRENE	75 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	50 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	83 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	39 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	CHRYSENE	43 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	FLUORANTHENE	90 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	69 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	NAPHTHALENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	PHENANTHRENE	23 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-10	SB	REG	4	C032C80101	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.45 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	ACENAPHTHYLENE	1.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	ANTHRACENE	0.62 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.3 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	10 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	FLUORANTHENE	6.5 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	20 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	NAPHTHALENE	1.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	PHENANTHRENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	FD	4	C032CB9801	EPA 8270-M	U	PYRENE	24 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	2-METHYLNAPHTHALENE	12 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	ACENAPHTHYLENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	BENZ(A)ANTHRACENE	46 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	BENZO(A)PYRENE	78 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	55 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	110 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	70 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	CHRYSENE	68 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	19 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	FLUORANTHENE	68 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	FLUORENE	1.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	NAPHTHALENE	10 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	PHENANTHRENE	29 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0	C032CB9401	EPA 8270-M	U	PYRENE	110 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	ACENAPHTHYLENE	2.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.3 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.2 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	17 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.8 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	CHRYSENE	10 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	FLUORANTHENE	8.5 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	16 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	NAPHTHALENE	1.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	PHENANTHRENE	3.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	0.5	C032CB9501	EPA 8270-M	U	PYRENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	ACENAPHTHYLENE	1.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	BENZ(A)ANTHRACENE	8 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.3 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.1 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	CHRYSENE	9.9 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	16 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	NAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	PHENANTHRENE	3.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	2	C032CB9601	EPA 8270-M	U	PYRENE	16 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.46 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	ACENAPHTHYLENE	6.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	ANTHRACENE	6.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.7 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.2 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	CHRYSENE	4.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	FLUORANTHENE	4.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	NAPHTHALENE	0.79 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	PHENANTHRENE	1.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-100	SB	REG	4	C032CB9701	EPA 8270-M	U	PYRENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	ACENAPHTHYLENE	3.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	BENZ(A)ANTHRACENE	19 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	BENZO(A)PYRENE	49 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	52 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	26 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	CHRYSENE	27 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	FLUORANTHENE	34 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	31 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	PHENANTHRENE	10 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0.5	C032CB0001	EPA 8270-M	U	PYRENE	62 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	ACENAPHTHENE	9.4 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	ACENAPHTHYLENE	76 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	ANTHRACENE	45 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	BENZ(A)ANTHRACENE	400 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	BENZO(A)PYRENE	800 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	550 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	660 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	530 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	CHRYSENE	510 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	87 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	FLUORANTHENE	820 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	430 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	PHENANTHRENE	230 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	0	C032CB9901	EPA 8270-M	U	PYRENE	1100 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	ACENAPHTHENE	2.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	ACENAPHTHYLENE	9.9 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	ANTHRACENE	33 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	BENZ(A)ANTHRACENE	46 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	BENZO(A)PYRENE	110 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	91 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	72 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	CHRYSENE	66 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	FLUORANTHENE	100 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	72 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	PHENANTHRENE	53 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	2	C032CC0101	EPA 8270-M	U	PYRENE	140 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.9 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(A)PYRENE	5.1 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.8 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.1 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	CHRYSENE	3.3 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	FLUORANTHENE	6 UG/KG		R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.7 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	PHENANTHRENE	4.3 UG/KG	J	R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	PYRENE	8.2 UG/KG		R	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	J	J	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	ANTHRACENE	3.2 UG/KG	J	J	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(A)PYRENE	58 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	69 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	33 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	CHRYSENE	34 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	FLUORANTHENE	54 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	42 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	NAPHTHALENE	2.2 UG/KG	J	J	RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	PHENANTHRENE	17 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-101	SB	REG	4	C032CC0201	EPA 8270-M	U	PYRENE	73 UG/KG			RA0 REG	5/23/2002	5/28/2002	5/29/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.67 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	ACENAPHTHYLENE	1.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	BENZ(A)ANTHRACENE	10 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	CHRYSENE	15 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	FLUORANTHENE	21 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.6 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	NAPHTHALENE	0.66 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	PHENANTHRENE	9.3 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0	C032CC0301	EPA 8270-M	U	PYRENE	27 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	ACENAPHTHYLENE	1.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.6 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.6 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.6 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	CHRYSENE	14 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	FLUORANTHENE	16 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	NAPHTHALENE	0.65 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	PHENANTHRENE	10 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	0.5	C032CC0401	EPA 8270-M	U	PYRENE	18 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	2-METHYLNAPHTHALENE	33 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	33 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	CHRYSENE	72 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.7 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	FLUORANTHENE	32 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	FLUORENE	3.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.9 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	NAPHTHALENE	14 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	PHENANTHRENE	46 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	2	C032CC0501	EPA 8270-M	U	PYRENE	37 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/4/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	ACENAPHTHYLENE	2.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	ANTHRACENE	4.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/5/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	BENZO(A)PYRENE	49 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	38 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	43 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	23 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	CHRYSENE	35 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	FLUORANTHENE	24 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	FLUORENE	1.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	NAPHTHALENE	4.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	PHENANTHRENE	13 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-102	SB	REG	4	C032CC0601	EPA 8270-M	U	PYRENE	32 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/5/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	ACENAPHTHYLENE	6.4 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	ANTHRACENE	6.9 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	BENZ(A)ANTHRACENE	39 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	BENZO(A)PYRENE	68 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	48 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	51 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	49 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	CHRYSENE	50 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.8 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	FLUORANTHENE	96 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	FLUORENE	1.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	62 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	NAPHTHALENE	3.9 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	PHENANTHRENE	25 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	FD	0.5	C032CC0901	EPA 8270-M	U	PYRENE	120 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	ACENAPHTHYLENE	1.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	BENZ(A)ANTHRACENE	17 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	18 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	21 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	CHRYSENE	25 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	FLUORANTHENE	38 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	FLUORENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	NAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	PHENANTHRENE	17 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0	C032CC0701	EPA 8270-M	U	PYRENE	47 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.8 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	ACENAPHTHENE	15 UG/KG	JQ	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	ACENAPHTHYLENE	53 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	ANTHRACENE	45 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	BENZ(A)ANTHRACENE	600 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	BENZO(A)PYRENE	650 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	660 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	270 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	650 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	CHRYSENE	750 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	120 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	FLUORANTHENE	930 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	FLUORENE	53 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	420 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	NAPHTHALENE	8.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	PHENANTHRENE	210 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	0.5	C032CC0801	EPA 8270-M	U	PYRENE	960 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.88 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	24 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	27 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	CHRYSENE	19 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	FLUORANTHENE	35 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	NAPHTHALENE	2.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	PHENANTHRENE	8.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	2	C032CC1001	EPA 8270-M	U	PYRENE	44 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.83 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	BENZO(A)PYRENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	CHRYSENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	NAPHTHALENE	0.4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	PHENANTHRENE	0.44 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-103	SB	REG	4	C032CC1101	EPA 8270-M	U	PYRENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.5 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	12 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	CHRYSENE	8.6 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	FLUORANTHENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	PHENANTHRENE	6.9 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0	C032CC1201	EPA 8270-M	U	PYRENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	ACENAPHTHENE	3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	ACENAPHTHYLENE	3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	ANTHRACENE	6 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	BENZ(A)ANTHRACENE	43 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	BENZO(A)PYRENE	84 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	89 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	28 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	CHRYSENE	57 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.4 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	FLUORANTHENE	92 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	NAPHTHALENE	6 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	PHENANTHRENE	23 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	0.5	C032CC1301	EPA 8270-M	U	PYRENE	100 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	ACENAPHTHYLENE	4.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	ANTHRACENE	6.8 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	BENZ(A)ANTHRACENE	33 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	BENZO(A)PYRENE	64 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	66 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	78 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	CHRYSENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.5 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	FLUORANTHENE	60 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	75 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	PHENANTHRENE	22 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	2	C032CC1401	EPA 8270-M	U	PYRENE	74 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	ACENAPHTHENE	3.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	ACENAPHTHYLENE	6.4 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	BENZ(A)ANTHRACENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	BENZO(A)PYRENE	92 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	78 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	81 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	21 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	CHRYSENE	33 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	FLUORANTHENE	42 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	FLUORENE	1.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	79 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	NAPHTHALENE	7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-104	SB	REG	4	C032CC1501	EPA 8270-M	U	PYRENE	210 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	ACENAPHTHENE	4.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	ACENAPHTHYLENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	ANTHRACENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	BENZ(A)ANTHRACENE	150 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	BENZO(A)PYRENE	230 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	240 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	230 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	69 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	CHRYSENE	170 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	24 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	FLUORANTHENE	350 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	FLUORENE	6.3 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	240 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	NAPHTHALENE	7.1 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	PHENANTHRENE	150 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	FD	4	C032CC2001	EPA 8270-M	U	PYRENE	420 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	BENZ(A)ANTHRACENE	10 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	20 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	CHRYSENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	PHENANTHRENE	3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0	C032CC1601	EPA 8270-M	U	PYRENE	22 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	ACENAPHTHENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	BENZ(A)ANTHRACENE	44 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	BENZO(A)PYRENE	34 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	42 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	CHRYSENE	44 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	FLUORANTHENE	74 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	FLUORENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	PHENANTHRENE	47 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-105	SB	REG	0.5	C032CC1701	EPA 8270-M	U	PYRENE	80 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	ANTHRACENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	BENZO(A)PYRENE	53 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	54 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	61 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	CHRYSENE	36 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.6 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	FLUORANTHENE	26 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	61 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	NAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	PHENANTHRENE	7.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	2	C032CC1801	EPA 8270-M	U	PYRENE	75 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	ACENAPHTHYLENE	21 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	ANTHRACENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	BENZ(A)ANTHRACENE	180 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	BENZO(A)PYRENE	290 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	310 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	300 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	92 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	CHRYSENE	220 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	32 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	FLUORANTHENE	450 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	FLUORENE	5.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	320 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	NAPHTHALENE	10 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	PHENANTHRENE	140 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-105	SB	REG	4	C032CC1901	EPA 8270-M	U	PYRENE	530 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.39 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	ACENAPHTHYLENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	ANTHRACENE	0.68 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	BENZO(A)PYRENE	8.7 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.4 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	14 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.5 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	CHRYSENE	5.5 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	FLUORANTHENE	12 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	10 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	NAPHTHALENE	0.58 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	PHENANTHRENE	4.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0	C032CC2101	EPA 8270-M	U	PYRENE	16 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.36 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	ACENAPHTHYLENE	3.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	BENZO(A)PYRENE	35 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	24 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	27 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	31 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	CHRYSENE	29 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	FLUORANTHENE	60 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	FLUORENE	1.5 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	23 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	NAPHTHALENE	0.87 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	PHENANTHRENE	37 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	0.5	C032CC2201	EPA 8270-M	U	PYRENE	75 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.74 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	ACENAPHTHYLENE	1.5 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	ANTHRACENE	0.9 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.2 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	BENZO(A)PYRENE	19 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	15 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	FLUORANTHENE	26 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	15 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	NAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	PHENANTHRENE	7.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	2	C032CC2301	EPA 8270-M	U	PYRENE	39 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	FLUORANTHENE	0.52 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.62 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-106	SB	REG	4	C032CC2401	EPA 8270-M	U	PYRENE	0.95 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.8 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.2 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	CHRYSENE	14 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	FLUORANTHENE	12 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.6 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	PHENANTHRENE	7.7 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0	C032CC2501	EPA 8270-M	U	PYRENE	19 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	19 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	CHRYSENE	16 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	FLUORANTHENE	38 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	NAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	PHENANTHRENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	0.5	C032CC2601	EPA 8270-M	U	PYRENE	49 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.7 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	ACENAPHTHENE	6.7 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	BENZ(A)ANTHRACENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	BENZO(A)PYRENE	44 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	36 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	44 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	CHRYSENE	40 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	FLUORANTHENE	48 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	FLUORENE	6.7 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	34 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	PHENANTHRENE	21 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	2	C032CC2701	EPA 8270-M	U	PYRENE	80 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.8 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	CHRYSENE	20 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	FLUORANTHENE	25 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	PHENANTHRENE	12 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-107	SB	REG	4	C032CC2801	EPA 8270-M	U	PYRENE	35 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.6 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	10 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	12 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	CHRYSENE	9.4 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	FLUORANTHENE	18 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	11 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	FD	0.5	C032CC3101	EPA 8270-M	U	PYRENE	26 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0	C032CC2901	EPA 8270-M	U	PYRENE	2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.8 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	CHRYSENE	15 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002

ANALYTICAL RESULTS --- CTO: C032

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	FLUORANTHENE	29 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	PHENANTHRENE	8.9 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	0.5	C032CC3001	EPA 8270-M	U	PYRENE	42 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	2-METHYLNAPHTHALENE	1200 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	ACENAPHTHENE	2400 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	ACENAPHTHYLENE	1800 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	ANTHRACENE	2900 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6100 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(A)PYRENE	9700 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8700 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5100 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2200 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	CHRYSENE	5700 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1100 UG/KG		R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	FLUORANTHENE	6500 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	FLUORENE	2600 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6600 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	NAPHTHALENE	2000 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	PHENANTHRENE	5600 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	PYRENE	5000 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	2-METHYLNAPHTHALENE	1300 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	ACENAPHTHENE	2900 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	ACENAPHTHYLENE	3000 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	ANTHRACENE	7200 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZ(A)ANTHRACENE	8300 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(A)PYRENE	9900 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5800 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5300 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3000 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	CHRYSENE	8500 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	810 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	FLUORANTHENE	24000 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	FLUORENE	3500 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6500 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	NAPHTHALENE	2200 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	PHENANTHRENE	32000 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	2	C032CC3201	EPA 8270-M	U	PYRENE	29000 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	2-METHYLNAPHTHALENE	11 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	ACENAPHTHENE	43 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	ACENAPHTHYLENE	340 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	ANTHRACENE	830 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZ(A)ANTHRACENE	2300 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(A)PYRENE	3500 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2900 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2100 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	920 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	CHRYSENE	2300 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	400 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	FLUORANTHENE	3200 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	FLUORENE	110 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2600 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	NAPHTHALENE	51 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	PHENANTHRENE	1900 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	PYRENE	2900 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	2-METHYLNAPHTHALENE	580 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	ACENAPHTHENE	580 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	ACENAPHTHYLENE	360 UG/KG	JD	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	ANTHRACENE	740 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZ(A)ANTHRACENE	2300 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(A)PYRENE	3200 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2100 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2000 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	850 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	CHRYSENE	2400 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	290 UG/KG	JD	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	FLUORANTHENE	5300 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	FLUORENE	140 UG/KG	JD	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2200 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	NAPHTHALENE	580 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	PHENANTHRENE	2400 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-108	SB	REG	4	C032CC3301	EPA 8270-M	U	PYRENE	7500 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0	C032CC3401	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.6 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	9.2 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	14 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.5 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	CHRYSENE	9.2 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.9 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	PHENANTHRENE	7.3 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	0.5	C032CC3501	EPA 8270-M	U	PYRENE	24 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	BENZO(A)PYRENE	6.5 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	9.2 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	CHRYSENE	6.1 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	PHENANTHRENE	2.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	2	C032CC3601	EPA 8270-M	U	PYRENE	8.9 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	BENZO(A)PYRENE	2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-109	SB	REG	4	C032CC3701	EPA 8270-M	U	PYRENE	3.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	BENZO(A)PYRENE	0.78 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.68 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	FLUORANTHENE	0.75 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	PHENANTHRENE	0.41 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0	C032C80301	EPA 8270-M	U	PYRENE	1.1 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	0.5	C032C80401	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	2	C032C80501	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-11	SB	REG	4	C032C80601	EPA 8270-M	U	PYRENE	6.1 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	ACENAPHTHYLENE	3.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	BENZO(A)PYRENE	64 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	45 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	77 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	38 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	CHRYSENE	37 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	FLUORANTHENE	58 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	FLUORENE	2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	65 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	NAPHTHALENE	7.3 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	PHENANTHRENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	FD	4	C032CC4201	EPA 8270-M	U	PYRENE	120 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	ANTHRACENE	4.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	CHRYSENE	15 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	FLUORANTHENE	28 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	FLUORENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	NAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	PHENANTHRENE	20 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-110	SB	REG	0	C032CC3801	EPA 8270-M	U	PYRENE	30 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	CHRYSENE	2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	FLUORANTHENE	2.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	0.5	C032CC3901	EPA 8270-M	U	PYRENE	3.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	ACENAPHTHYLENE	3.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.5 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	BENZO(A)PYRENE	34 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	40 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	CHRYSENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	FLUORANTHENE	18 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	38 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	NAPHTHALENE	7.8 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	PHENANTHRENE	6.3 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	2	C032CC4001	EPA 8270-M	U	PYRENE	26 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	ACENAPHTHYLENE	4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	BENZ(A)ANTHRACENE	29 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	BENZO(A)PYRENE	68 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	46 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	77 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	38 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	CHRYSENE	39 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	FLUORANTHENE	59 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	FLUORENE	1.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	70 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	NAPHTHALENE	7.2 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	PHENANTHRENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-110	SB	REG	4	C032CC4101	EPA 8270-M	U	PYRENE	110 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	ANTHRACENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	BENZ(A)ANTHRACENE	3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.4 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	CHRYSENE	3.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	PHENANTHRENE	1.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0	C032CC4301	EPA 8270-M	U	PYRENE	7.3 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	ACENAPHTHYLENE	1.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	BENZO(A)PYRENE	32 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	CHRYSENE	24 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	FLUORANTHENE	35 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	NAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	0.5	C032CC4401	EPA 8270-M	U	PYRENE	45 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	ACENAPHTHYLENE	1.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	39 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	21 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	CHRYSENE	25 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	FLUORANTHENE	26 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	24 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	NAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	PHENANTHRENE	4.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	2	C032CC4501	EPA 8270-M	U	PYRENE	47 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	CHRYSENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	FLUORANTHENE	10 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	PHENANTHRENE	3.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-111	SB	REG	4	C032CC4601	EPA 8270-M	U	PYRENE	33 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	BENZO(A)PYRENE	15 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	CHRYSENE	8.4 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	15 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	PHENANTHRENE	3.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0	C032CC4701	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	BENZ(A)ANTHRACENE	37 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	BENZO(A)PYRENE	53 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	38 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	42 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	34 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	CHRYSENE	48 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	FLUORANTHENE	69 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	38 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	PHENANTHRENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	0.5	C032CC4801	EPA 8270-M	U	PYRENE	87 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.3 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.5 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	CHRYSENE	9.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	FLUORANTHENE	13 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	PHENANTHRENE	5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	2	C032CC4901	EPA 8270-M	U	PYRENE	21 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	BENZO(A)PYRENE	50 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	32 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	28 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	CHRYSENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	FLUORENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	38 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	NAPHTHALENE	3.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	PHENANTHRENE	16 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-112	SB	REG	4	C032CC5001	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	FD	0.5	C032CC5301	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0	C032CC5101	EPA 8270-M	U	PYRENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	BENZO(A)PYRENE	1.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	0.5	C032CC5201	EPA 8270-M	U	PYRENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	CHRYSENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	2	C032CC5401	EPA 8270-M	U	PYRENE	5.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.2 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	BENZO(A)PYRENE	10 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.7 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	NAPHTHALENE	1.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	PHENANTHRENE	4.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-113	SB	REG	4	C032CC5501	EPA 8270-M	U	PYRENE	27 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.64 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	ANTHRACENE	0.79 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	BENZO(A)PYRENE	8.2 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	39 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	CHRYSENE	5.4 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	FLUORANTHENE	8.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	NAPHTHALENE	0.69 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	PHENANTHRENE	3.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0	C032CC5601	EPA 8270-M	U	PYRENE	11 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.66 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	BENZO(A)PYRENE	1.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	25 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.74 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	CHRYSENE	0.85 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	PHENANTHRENE	0.47 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	0.5	C032CC5701	EPA 8270-M	U	PYRENE	1.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.5 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	ACENAPHTHYLENE	1.4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	ANTHRACENE	0.51 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	BENZO(A)PYRENE	3.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.8 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.8 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	CHRYSENE	10 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	NAPHTHALENE	0.63 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	PHENANTHRENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	2	C032CC5801	EPA 8270-M	U	PYRENE	4.9 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	ACENAPHTHENE	2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	ACENAPHTHYLENE	8.5 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	ANTHRACENE	7.8 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	BENZ(A)ANTHRACENE	47 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	BENZO(A)PYRENE	74 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	60 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	81 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	74 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	CHRYSENE	66 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	FLUORANTHENE	120 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	FLUORENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	70 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	PHENANTHRENE	47 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-114	SB	REG	4	C032CC5901	EPA 8270-M	U	PYRENE	170 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	CHRYSENE	26 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	FLUORANTHENE	8.2 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	PHENANTHRENE	3.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0	C032CC6001	EPA 8270-M	U	PYRENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	BENZO(A)PYRENE	3.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.1 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	CHRYSENE	2.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	FLUORANTHENE	3.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-115	SB	REG	0.5	C032CC6101	EPA 8270-M	U	PYRENE	4.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	2-METHYLNAPHTHALENE	9.5 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	BENZO(A)PYRENE	39 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	35 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	37 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	CHRYSENE	29 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	FLUORANTHENE	49 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	FLUORENE	1.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	42 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	NAPHTHALENE	9.3 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	PHENANTHRENE	19 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0	C032CC6501	EPA 8270-M	U	PYRENE	56 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	ACENAPHTHYLENE	1.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	ANTHRACENE	0.95 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	15 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	CHRYSENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	FLUORANTHENE	23 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	NAPHTHALENE	0.75 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	0.5	C032CC6601	EPA 8270-M	U	PYRENE	26 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.31 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	ANTHRACENE	0.79 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	BENZO(A)PYRENE	9.7 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	9.3 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.7 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	CHRYSENE	6.9 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	FLUORANTHENE	14 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	10 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	NAPHTHALENE	0.6 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	PHENANTHRENE	4.9 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	2	C032CC6701	EPA 8270-M	U	PYRENE	17 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.37 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.3 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	BENZO(A)PYRENE	19 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	20 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	FLUORANTHENE	23 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	21 UG/KG			000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	NAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-116	SB	REG	4	C032CC6801	EPA 8270-M	U	PYRENE	32 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.69 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	21 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	CHRYSENE	19 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	FLUORANTHENE	34 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	26 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	NAPHTHALENE	0.89 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	PHENANTHRENE	13 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-117	SB	REG	0	C032CC6901	EPA 8270-M	U	PYRENE	40 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.46 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	ACENAPHTHYLENE	1.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	BENZO(A)PYRENE	23 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	CHRYSENE	16 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	FLUORANTHENE	27 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	20 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	NAPHTHALENE	0.85 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	PHENANTHRENE	7.1 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	0.5	C032CC7001	EPA 8270-M	U	PYRENE	32 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	ACENAPHTHENE	0.99 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	ACENAPHTHYLENE	3.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	BENZ(A)ANTHRACENE	33 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	BENZO(A)PYRENE	60 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	50 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	67 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	34 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	CHRYSENE	38 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	FLUORANTHENE	120 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	50 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	NAPHTHALENE	1.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	PHENANTHRENE	24 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	2	C032CC7101	EPA 8270-M	U	PYRENE	140 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	ACENAPHTHENE	3.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	ACENAPHTHYLENE	24 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	ANTHRACENE	22 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(A)PYRENE	160 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	160 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	99 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	CHRYSENE	120 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	26 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	FLUORANTHENE	320 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	FLUORENE	8.1 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	NAPHTHALENE	9.7 UG/KG			000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	PHENANTHRENE	180 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	PYRENE	380 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.5 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	ACENAPHTHENE	29 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	ACENAPHTHYLENE	28 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	ANTHRACENE	46 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZ(A)ANTHRACENE	83 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(A)PYRENE	190 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	150 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	150 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	91 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	CHRYSENE	210 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	FLUORANTHENE	350 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	FLUORENE	9.9 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	NAPHTHALENE	13 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	PHENANTHRENE	190 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-117	SB	REG	4	C032CC7201	EPA 8270-M	U	PYRENE	430 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.9 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	CHRYSENE	3.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.92 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	FLUORANTHENE	7.2 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	FD	0.5	C032CC7501	EPA 8270-M	U	PYRENE	10 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.7 UG/KG	J	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	ACENAPHTHENE	2.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	ACENAPHTHYLENE	16 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	ANTHRACENE	15 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZ(A)ANTHRACENE	95 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(A)PYRENE	210 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	230 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	210 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	160 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	CHRYSENE	140 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	30 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	FLUORANTHENE	280 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	FLUORENE	2.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	180 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	NAPHTHALENE	9.3 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	PHENANTHRENE	74 UG/KG		R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	PYRENE	370 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.4 UG/KG	J	J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	ACENAPHTHENE	29 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	ACENAPHTHYLENE	14 UG/KG	J	J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	ANTHRACENE	11 UG/KG	J	J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(A)PYRENE	220 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	200 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	340 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	150 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	CHRYSENE	140 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	35 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	FLUORANTHENE	240 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	FLUORENE	29 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	270 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	J	J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	PHENANTHRENE	78 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0	C032CC7301	EPA 8270-M	U	PYRENE	290 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/18/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.82 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	ACENAPHTHENE	8.1 UG/KG			000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	ANTHRACENE	30 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZ(A)ANTHRACENE	140 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(A)PYRENE	180 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	150 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	160 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	110 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	CHRYSENE	130 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	28 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	FLUORANTHENE	680 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	FLUORENE	4.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	130 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG			000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	PHENANTHRENE	280 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	PYRENE	780 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	2-METHYLNAPHTHALENE	27 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	ACENAPHTHENE	8.5 UG/KG	JQ	R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	ACENAPHTHYLENE	28 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	ANTHRACENE	54 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZ(A)ANTHRACENE	100 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(A)PYRENE	220 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	170 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	80 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	110 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	CHRYSENE	220 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	FLUORANTHENE	740 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	FLUORENE	27 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	99 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	NAPHTHALENE	8 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	PHENANTHRENE	280 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	0.5	C032CC7401	EPA 8270-M	U	PYRENE	850 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/7/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.41 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	ANTHRACENE	0.77 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.9 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	14 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.8 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	CHRYSENE	7.5 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	FLUORANTHENE	12 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.8 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	NAPHTHALENE	0.58 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	PHENANTHRENE	3.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	2	C032CC7601	EPA 8270-M	U	PYRENE	16 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.42 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	BENZO(A)PYRENE	0.65 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.85 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.71 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	CHRYSENE	0.79 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	FLUORANTHENE	1.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.59 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG			000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-118	SB	REG	4	C032CC7701	EPA 8270-M	U	PYRENE	2.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	BENZO(A)PYRENE	29 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	45 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	FLUORANTHENE	24 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	36 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	NAPHTHALENE	2.5 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0	C032CC7801	EPA 8270-M	U	PYRENE	39 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.6 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	BENZO(A)PYRENE	16 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	10 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	23 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	PHENANTHRENE	4.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	0.5	C032CC7901	EPA 8270-M	U	PYRENE	28 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	CHRYSENE	2.4 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	2	C032CC8001	EPA 8270-M	U	PYRENE	3.2 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	ACENAPHTHYLENE	2.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	BENZO(A)PYRENE	43 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	42 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	CHRYSENE	22 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	FLUORANTHENE	27 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	31 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	PHENANTHRENE	8 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-119	SB	REG	4	C032CC8101	EPA 8270-M	U	PYRENE	64 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.2 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	CHRYSENE	2 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0	C032C80701	EPA 8270-M	U	PYRENE	2.9 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	0.5	C032C80801	EPA 8270-M	U	PYRENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	2	C032C80901	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-12	SB	REG	4	C032C81001	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	ACENAPHTHENE	7.4 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	ANTHRACENE	25 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZ(A)ANTHRACENE	270 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(A)PYRENE	320 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	270 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	210 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	290 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	CHRYSENE	270 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	54 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	FLUORANTHENE	340 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	FLUORENE	5.1 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	230 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	NAPHTHALENE	12 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	PHENANTHRENE	79 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	PYRENE	370 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	2-METHYLNAPHTHALENE	9.9 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	ACENAPHTHENE	8.3 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	ACENAPHTHYLENE	14 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	ANTHRACENE	31 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZ(A)ANTHRACENE	280 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(A)PYRENE	350 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	320 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	300 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	300 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	CHRYSENE	290 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	53 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	FLUORANTHENE	400 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	FLUORENE	3.8 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	300 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	NAPHTHALENE	22 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	PHENANTHRENE	100 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	FD	4	C032CC8601	EPA 8270-M	U	PYRENE	460 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.8 UG/KG	J	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	ACENAPHTHYLENE	15 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	ANTHRACENE	28 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZ(A)ANTHRACENE	230 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(A)PYRENE	330 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	250 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	320 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	290 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	CHRYSENE	260 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	51 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	FLUORANTHENE	460 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	FLUORENE	3.6 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	330 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	NAPHTHALENE	15 UG/KG		R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	PHENANTHRENE	86 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	PYRENE	530 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	2-METHYLNAPHTHALENE	8.1 UG/KG	J	J	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	JQ	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	ACENAPHTHYLENE	18 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	ANTHRACENE	29 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZ(A)ANTHRACENE	240 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(A)PYRENE	360 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	330 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	320 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	290 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	CHRYSENE	280 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	46 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	FLUORANTHENE	480 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	FLUORENE	5.8 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	310 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	NAPHTHALENE	20 UG/KG	J	J	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	PHENANTHRENE	110 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0	C032CC8201	EPA 8270-M	U	PYRENE	550 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	ACENAPHTHENE	3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	ACENAPHTHYLENE	3.8 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	ANTHRACENE	9.6 UG/KG		J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	BENZ(A)ANTHRACENE	96 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	BENZO(A)PYRENE	120 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	100 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	100 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	CHRYSENE	100 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	20 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	FLUORANTHENE	150 UG/KG		J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	FLUORENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG		J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	PHENANTHRENE	35 UG/KG		J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	0.5	C032CC8301	EPA 8270-M	U	PYRENE	170 UG/KG		J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	2-METHYLNAPHTHALENE	53 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	ACENAPHTHENE	900 UG/KG	G		000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	ACENAPHTHYLENE	560 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	ANTHRACENE	2300 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	BENZ(A)ANTHRACENE	18000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	BENZO(A)PYRENE	15000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5900 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	CHRYSENE	16000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2400 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	FLUORANTHENE	23000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	FLUORENE	420 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8500 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	NAPHTHALENE	130 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	PHENANTHRENE	6400 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	2	C032CC8401	EPA 8270-M	U	PYRENE	21000 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.6 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	ACENAPHTHENE	4.8 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	ACENAPHTHYLENE	7.4 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	ANTHRACENE	17 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	BENZ(A)ANTHRACENE	150 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	BENZO(A)PYRENE	190 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	190 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	130 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	CHRYSENE	150 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	35 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	FLUORANTHENE	200 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	FLUORENE	3.8 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	150 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	NAPHTHALENE	8.2 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	PHENANTHRENE	57 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-120	SB	REG	4	C032CC8501	EPA 8270-M	U	PYRENE	240 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.88 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	BENZ(A)ANTHRACENE	86 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	BENZO(A)PYRENE	100 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	71 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	48 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	97 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	CHRYSENE	110 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	FLUORANTHENE	140 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	FLUORENE	2.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	63 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	NAPHTHALENE	1 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	PHENANTHRENE	43 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-121	SB	REG	0	C032CC8701	EPA 8270-M	U	PYRENE	160 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.33 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	UJ	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	UJ	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	BENZO(A)PYRENE	4.4 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	CHRYSENE	2.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.47 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	UJ	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	NAPHTHALENE	0.38 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	PHENANTHRENE	0.8 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	0.5	C032CC8801	EPA 8270-M	U	PYRENE	5.7 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.58 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	BENZO(A)PYRENE	10 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.2 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	9.2 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.4 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	CHRYSENE	9.5 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	FLUORANTHENE	7.9 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.3 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	NAPHTHALENE	0.47 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	PHENANTHRENE	2.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	2	C032CC8901	EPA 8270-M	U	PYRENE	11 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.35 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	BENZO(A)PYRENE	8 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.6 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.9 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	CHRYSENE	4.8 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	FLUORANTHENE	4.3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	NAPHTHALENE	0.74 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	PHENANTHRENE	1.1 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-121	SB	REG	4	C032CC9001	EPA 8270-M	U	PYRENE	12 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.67 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.7 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	FLUORANTHENE	9 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	NAPHTHALENE	0.55 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	PHENANTHRENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0	C032CC9101	EPA 8270-M	U	PYRENE	12 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	ACENAPHTHYLENE	20 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	ANTHRACENE	15 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	BENZ(A)ANTHRACENE	92 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	BENZO(A)PYRENE	180 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	150 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	110 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	CHRYSENE	110 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	25 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	FLUORANTHENE	260 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	FLUORENE	3.5 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	180 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	NAPHTHALENE	13 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	PHENANTHRENE	66 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	0.5	C032CC9201	EPA 8270-M	U	PYRENE	300 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	JQ	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	ANTHRACENE	26 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	BENZ(A)ANTHRACENE	370 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	BENZO(A)PYRENE	430 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	470 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	190 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	400 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	CHRYSENE	430 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	90 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	FLUORANTHENE	550 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	FLUORENE	27 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	300 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	NAPHTHALENE	4.3 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	PHENANTHRENE	130 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	2	C032CC9301	EPA 8270-M	U	PYRENE	530 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	ANTHRACENE	0.64 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	BENZO(A)PYRENE	8.5 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.3 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	CHRYSENE	6.6 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	FLUORANTHENE	9.3 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.7 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	NAPHTHALENE	0.69 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	PHENANTHRENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-122	SB	REG	4	C032CC9401	EPA 8270-M	U	PYRENE	14 UG/KG			000 REG	5/31/2002	6/3/2002	6/4/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	CHRYSENE	7.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	FLUORANTHENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	FD	0.5	C032CC9701	EPA 8270-M	U	PYRENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	ACENAPHTHENE	1.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	ACENAPHTHYLENE	4.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	ANTHRACENE	7.5 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	BENZ(A)ANTHRACENE	46 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	BENZO(A)PYRENE	52 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	44 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	41 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	37 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	CHRYSENE	54 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	FLUORANTHENE	74 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	FLUORENE	2.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	39 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	NAPHTHALENE	11 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	PHENANTHRENE	37 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0	C032CC9501	EPA 8270-M	U	PYRENE	80 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	BENZO(A)PYRENE	5.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	CHRYSENE	5.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	FLUORANTHENE	7.1 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	PHENANTHRENE	3.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	0.5	C032CC9601	EPA 8270-M	U	PYRENE	8.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	ANTHRACENE	7.1 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	BENZ(A)ANTHRACENE	30 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	BENZO(A)PYRENE	59 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	37 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	70 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	33 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	CHRYSENE	36 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	FLUORANTHENE	50 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	FLUORENE	2.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	60 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	PHENANTHRENE	30 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	2	C032CC9801	EPA 8270-M	U	PYRENE	87 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	2-METHYLNAPHTHALENE	17 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	ACENAPHTHYLENE	8.8 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	ANTHRACENE	8.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	BENZ(A)ANTHRACENE	82 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	BENZO(A)PYRENE	170 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	93 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	CHRYSENE	140 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	FLUORANTHENE	38 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	FLUORENE	5.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	NAPHTHALENE	17 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	PHENANTHRENE	27 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-123	SB	REG	4	C032CC9901	EPA 8270-M	U	PYRENE	310 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	ANTHRACENE	3.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	BENZ(A)ANTHRACENE	38 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	BENZO(A)PYRENE	100 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	58 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	87 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	CHRYSENE	53 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	FLUORANTHENE	79 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	FLUORENE	1.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	83 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	NAPHTHALENE	6.4 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	PHENANTHRENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0	C032CC0001	EPA 8270-M	U	PYRENE	95 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	ACENAPHTHYLENE	6.9 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	ANTHRACENE	3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	BENZO(A)PYRENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	25 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	59 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	36 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	CHRYSENE	25 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	FLUORANTHENE	36 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	35 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	PHENANTHRENE	9.5 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	0.5	C032CD0101	EPA 8270-M	U	PYRENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	ACENAPHTHYLENE	4.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	BENZO(A)PYRENE	39 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	34 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	46 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	23 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	CHRYSENE	30 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	FLUORANTHENE	46 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	NAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	PHENANTHRENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	2	C032CD0201	EPA 8270-M	U	PYRENE	58 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	2-METHYLNAPHTHALENE	3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	ACENAPHTHENE	16 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	ACENAPHTHYLENE	28 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	ANTHRACENE	23 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	BENZ(A)ANTHRACENE	210 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	BENZO(A)PYRENE	430 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	270 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	490 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	380 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	CHRYSENE	260 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	57 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	FLUORANTHENE	590 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	FLUORENE	8.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	320 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	NAPHTHALENE	18 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	PHENANTHRENE	210 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-124	SB	REG	4	C032CD0301	EPA 8270-M	U	PYRENE	660 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	ACENAPHTHENE	4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	ACENAPHTHYLENE	51 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	ANTHRACENE	24 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	BENZ(A)ANTHRACENE	210 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	BENZO(A)PYRENE	380 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	240 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	340 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	230 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	CHRYSENE	250 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	47 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	FLUORANTHENE	440 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	FLUORENE	7.4 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	240 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	PHENANTHRENE	140 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	FD	4	C032CD0801	EPA 8270-M	U	PYRENE	580 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	2-METHYLNAPHTHALENE	2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	ACENAPHTHENE	4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	ACENAPHTHYLENE	10 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	BENZ(A)ANTHRACENE	93 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	BENZO(A)PYRENE	180 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	160 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	230 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	CHRYSENE	130 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	FLUORANTHENE	210 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	FLUORENE	2.9 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	160 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	PHENANTHRENE	64 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0	C032CD0401	EPA 8270-M	U	PYRENE	260 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.8 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	BENZO(A)PYRENE	9.5 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.6 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.3 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	CHRYSENE	8.9 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	FLUORANTHENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.5 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	PHENANTHRENE	8.8 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	0.5	C032CD0501	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	ACENAPHTHYLENE	80 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	ANTHRACENE	65 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	BENZ(A)ANTHRACENE	420 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	BENZO(A)PYRENE	570 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	360 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	440 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	380 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	CHRYSENE	470 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	69 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	FLUORANTHENE	1100 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	FLUORENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	330 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	PHENANTHRENE	680 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	2	C032CD0601	EPA 8270-M	U	PYRENE	1400 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.7 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	ACENAPHTHYLENE	57 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	ANTHRACENE	26 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	BENZ(A)ANTHRACENE	230 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	BENZO(A)PYRENE	410 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	260 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	360 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	240 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	CHRYSENE	280 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	50 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	FLUORANTHENE	530 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	FLUORENE	14 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	250 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	PHENANTHRENE	250 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-125	SB	REG	4	C032CD0701	EPA 8270-M	U	PYRENE	700 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	ACENAPHTHYLENE	3.7 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	ANTHRACENE	52 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	BENZ(A)ANTHRACENE	560 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	BENZO(A)PYRENE	690 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	770 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	380 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	500 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	CHRYSENE	680 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	82 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	FLUORANTHENE	810 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	FLUORENE	8.4 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	420 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	NAPHTHALENE	12 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	PHENANTHRENE	260 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0	C032CD0901	EPA 8270-M	U	PYRENE	890 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	ACENAPHTHENE	8.8 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	ACENAPHTHYLENE	3.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	ANTHRACENE	41 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	BENZ(A)ANTHRACENE	350 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	BENZO(A)PYRENE	420 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	430 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	230 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	340 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	CHRYSENE	420 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	54 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	FLUORANTHENE	540 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	FLUORENE	7.1 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	250 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	NAPHTHALENE	7.3 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	PHENANTHRENE	210 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	0.5	C032CD1001	EPA 8270-M	U	PYRENE	600 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	2-METHYLNAPHTHALENE	8.3 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	ACENAPHTHENE	23 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	ACENAPHTHYLENE	3.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	ANTHRACENE	96 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZ(A)ANTHRACENE	850 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(A)PYRENE	1000 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1100 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	570 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	850 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	CHRYSENE	1000 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	140 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	FLUORANTHENE	1300 UG/KG	E	R	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	FLUORENE	15 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	610 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	NAPHTHALENE	17 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	PHENANTHRENE	490 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	PYRENE	1300 UG/KG	E	R	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	2-METHYLNAPHTHALENE	56 UG/KG	U	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	ACENAPHTHENE	22 UG/KG	JD	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	ACENAPHTHYLENE	56 UG/KG	U	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	ANTHRACENE	99 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZ(A)ANTHRACENE	840 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(A)PYRENE	970 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1000 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	590 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	800 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	CHRYSENE	1000 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	130 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	FLUORANTHENE	1300 UG/KG	D		DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	FLUORENE	15 UG/KG	JD	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	620 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	NAPHTHALENE	56 UG/KG	U	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	PHENANTHRENE	490 UG/KG	D	R	DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	2	C032CD1101	EPA 8270-M	U	PYRENE	1300 UG/KG	D		DL1 REG	5/30/2002	5/31/2002	6/3/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	ACENAPHTHENE	7.6 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	ANTHRACENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	BENZ(A)ANTHRACENE	300 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	BENZO(A)PYRENE	380 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	370 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	230 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	300 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	CHRYSENE	360 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	51 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	FLUORANTHENE	430 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	FLUORENE	4.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	250 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	NAPHTHALENE	4.7 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	PHENANTHRENE	140 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-126	SB	REG	4	C032CD1201	EPA 8270-M	U	PYRENE	470 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	ACENAPHTHENE	8.1 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	ANTHRACENE	71 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	BENZ(A)ANTHRACENE	670 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	BENZO(A)PYRENE	830 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	990 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	490 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	340 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	CHRYSENE	750 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	120 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	FLUORANTHENE	1000 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	FLUORENE	7 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	630 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	NAPHTHALENE	4.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	PHENANTHRENE	300 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-127	SB	REG	0	C032CD1301	EPA 8270-M	U	PYRENE	860 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	ACENAPHTHYLENE	2.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	ANTHRACENE	120 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZ(A)ANTHRACENE	1100 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(A)PYRENE	1200 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1500 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	630 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	490 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	CHRYSENE	1100 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	180 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	FLUORANTHENE	1700 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	FLUORENE	12 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	840 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	NAPHTHALENE	4.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	PHENANTHRENE	540 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	PYRENE	1300 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	2-METHYLNAPHTHALENE	55 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	ACENAPHTHENE	16 UG/KG	JD	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	ACENAPHTHYLENE	55 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	ANTHRACENE	110 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZ(A)ANTHRACENE	1000 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(A)PYRENE	1200 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1400 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	640 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	510 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	CHRYSENE	1100 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	180 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	FLUORANTHENE	1500 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	FLUORENE	15 UG/KG	JD	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	830 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	NAPHTHALENE	55 UG/KG	U	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	PHENANTHRENE	500 UG/KG	D	R	DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	0.5	C032CD1401	EPA 8270-M	U	PYRENE	1300 UG/KG	D		DL1 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	ACENAPHTHENE	4.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	ANTHRACENE	25 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	BENZ(A)ANTHRACENE	270 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	BENZO(A)PYRENE	320 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	390 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	200 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	140 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	CHRYSENE	310 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	48 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	FLUORANTHENE	400 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	FLUORENE	3.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	250 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	NAPHTHALENE	2.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	PHENANTHRENE	120 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	2	C032CD1501	EPA 8270-M	U	PYRENE	350 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	ACENAPHTHYLENE	1.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	31 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.9 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	FLUORANTHENE	27 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	26 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	PHENANTHRENE	7.6 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-127	SB	REG	4	C032CD1601	EPA 8270-M	U	PYRENE	37 UG/KG			000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.4 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.8 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	FLUORANTHENE	22 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.4 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	FD	0.5	C032CD1901	EPA 8270-M	U	PYRENE	27 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0	C032CD1701	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	ACENAPHTHENE	2.1 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	ANTHRACENE	8 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	BENZ(A)ANTHRACENE	49 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	BENZO(A)PYRENE	71 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	76 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	34 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	CHRYSENE	56 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.4 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	FLUORANTHENE	92 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	FLUORENE	3.2 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	44 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	PHENANTHRENE	53 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	0.5	C032CD1801	EPA 8270-M	U	PYRENE	94 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	ACENAPHTHENE	4.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	ANTHRACENE	24 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	150 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	65 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	52 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	CHRYSENE	130 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	15 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	FLUORANTHENE	270 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	FLUORENE	7.4 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	87 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	NAPHTHALENE	2.1 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	PHENANTHRENE	170 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	2	C032CD2001	EPA 8270-M	U	PYRENE	270 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	BENZO(A)PYRENE	23 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	25 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.4 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	CHRYSENE	16 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	FLUORANTHENE	27 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	FLUORENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	NAPHTHALENE	3.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	PHENANTHRENE	13 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-128	SB	REG	4	C032CD2101	EPA 8270-M	U	PYRENE	41 UG/KG			000 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	ACENAPHTHENE	2 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	ACENAPHTHYLENE	3.3 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	BENZ(A)ANTHRACENE	29 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	BENZO(A)PYRENE	33 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	23 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	31 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	CHRYSENE	29 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.6 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	FLUORANTHENE	51 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	FLUORENE	1.8 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.8 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	PHENANTHRENE	31 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0	C032CD2201	EPA 8270-M	U	PYRENE	83 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.3 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	27 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	CHRYSENE	12 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.7 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.5 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	PHENANTHRENE	2.9 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	PYRENE	16 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	RA0 REG	5/24/2002	5/28/2002	5/29/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(A)PYRENE	7.6 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.2 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.4 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5 UG/KG	J	J	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	CHRYSENE	6.3 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	FLUORANTHENE	13 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.4 UG/KG	J	J	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	PHENANTHRENE	7.3 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	0.5	C032CD2301	EPA 8270-M	U	PYRENE	16 UG/KG			RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	ANTHRACENE	1.8 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	CHRYSENE	25 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4 UG/KG	J	R	000 REG	5/24/2002	5/25/2002	5/26/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	FLUORANTHENE	19 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.6 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	PHENANTHRENE	9.2 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	PYRENE	41 UG/KG		R	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.1 UG/KG	J	J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	ACENAPHTHYLENE	2.7 UG/KG	J	J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	ANTHRACENE	3.5 UG/KG	J	J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG		J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	25 UG/KG		J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG		J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG		J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	CHRYSENE	24 UG/KG			RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4 UG/KG	J	J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	FLUORANTHENE	21 UG/KG			RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.6 UG/KG			RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	NAPHTHALENE	1.3 UG/KG	J	J	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	2	C032CD2401	EPA 8270-M	U	PYRENE	42 UG/KG			RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	ACENAPHTHYLENE	3.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(A)PYRENE	35 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	35 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	27 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	CHRYSENE	28 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	19 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	FLUORENE	1.4 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	16 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	PHENANTHRENE	22 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	PYRENE	64 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	ACENAPHTHYLENE	2.6 UG/KG	J	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	ANTHRACENE	2.8 UG/KG	J	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(A)PYRENE	20 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	15 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	17 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	CHRYSENE	16 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.9 UG/KG	J	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	FLUORANTHENE	29 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	PHENANTHRENE	16 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-129	SB	REG	4	C032CD2501	EPA 8270-M	U	PYRENE	44 UG/KG		R	RA0 REG	5/24/2002	5/28/2002	5/29/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.2 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	10 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.3 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	CHRYSENE	6 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	UJ	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	FLUORANTHENE	7.8 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.5 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	PHENANTHRENE	2.1 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	PYRENE	32 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	ANTHRACENE	1.9 UG/KG	J	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.9 UG/KG	J	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	12 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.4 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	CHRYSENE	6.4 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	FLUORANTHENE	10 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.9 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	PHENANTHRENE	2.6 UG/KG	J	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	FD	4	C032CD3001	EPA 8270-M	U	PYRENE	31 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	2-METHYLNAPHTHALENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	ACENAPHTHENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	ACENAPHTHYLENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	ANTHRACENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	BENZ(A)ANTHRACENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	BENZO(A)PYRENE	23 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	53 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	CHRYSENE	16 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	FLUORANTHENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	FLUORENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	NAPHTHALENE	53 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	PHENANTHRENE	16 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0	C032CD2601	EPA 8270-M	U	PYRENE	31 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	ACENAPHTHENE	1.7 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	ACENAPHTHYLENE	8.3 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	BENZO(A)PYRENE	30 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	29 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	22 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	CHRYSENE	26 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	FLUORANTHENE	49 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	FLUORENE	4.5 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	PHENANTHRENE	57 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	0.5	C032CD2701	EPA 8270-M	U	PYRENE	81 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	ACENAPHTHENE	8.7 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	ACENAPHTHYLENE	19 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	ANTHRACENE	17 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	70 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(A)PYRENE	92 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	95 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	62 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	70 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	CHRYSENE	89 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	14 UG/KG		J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	FLUORANTHENE	150 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	FLUORENE	8.9 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	PHENANTHRENE	150 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	PYRENE	230 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	3 UG/KG	J	R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	ACENAPHTHYLENE	20 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	ANTHRACENE	28 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	74 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(A)PYRENE	96 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	84 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	68 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	85 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	CHRYSENE	90 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	15 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	FLUORANTHENE	190 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	FLUORENE	10 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	33 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	NAPHTHALENE	11 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	PHENANTHRENE	180 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	2	C032CD2801	EPA 8270-M	U	PYRENE	220 UG/KG		R	RA0 REG	5/24/2002	5/25/2002	5/28/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	12 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.8 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	CHRYSENE	7.8 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	FLUORANTHENE	9.6 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.7 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	PHENANTHRENE	2.7 UG/KG	J	J	000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-130	SB	REG	4	C032CD2901	EPA 8270-M	U	PYRENE	33 UG/KG			000 REG	5/24/2002	5/25/2002	5/26/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.5 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.8 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	CHRYSENE	11 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	15 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	NAPHTHALENE	4.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	PHENANTHRENE	4.3 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0	C032CD3101	EPA 8270-M	U	PYRENE	30 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.53 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	ANTHRACENE	0.87 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.8 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	10 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	CHRYSENE	7.1 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	NAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	PHENANTHRENE	2.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	0.5	C032CD3201	EPA 8270-M	U	PYRENE	30 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	ACENAPHTHYLENE	7.3 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	BENZO(A)PYRENE	100 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	70 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	87 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	43 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	CHRYSENE	25 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	FLUORANTHENE	23 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	FLUORENE	1.6 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	85 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	NAPHTHALENE	10 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	PHENANTHRENE	7.7 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	2	C032CD3301	EPA 8270-M	U	PYRENE	140 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.6 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	ACENAPHTHENE	1.5 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	ACENAPHTHYLENE	6.6 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	ANTHRACENE	9.5 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZ(A)ANTHRACENE	40 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	130 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	CHRYSENE	63 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	17 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	FLUORANTHENE	87 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	FLUORENE	3.4 UG/KG	J	J	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	NAPHTHALENE	10 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	PHENANTHRENE	17 UG/KG			000 REG	5/24/2002	5/26/2002	5/29/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	PYRENE	420 UG/KG	E	R	000 REG	5/24/2002	5/26/2002	5/29/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	2-METHYLNAPHTHALENE	11 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	ACENAPHTHENE	13 UG/KG	U	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	ACENAPHTHYLENE	7.6 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	ANTHRACENE	10 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZ(A)ANTHRACENE	43 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	140 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	160 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	100 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	CHRYSENE	64 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	15 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	FLUORANTHENE	90 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	FLUORENE	2.9 UG/KG	J	R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	NAPHTHALENE	18 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	PHENANTHRENE	20 UG/KG		R	DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-131	SB	REG	4	C032CD3401	EPA 8270-M	U	PYRENE	420 UG/KG			DL1 REG	5/24/2002	5/26/2002	5/31/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	J	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	ACENAPHTHENE	12 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	ACENAPHTHYLENE	4.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	ANTHRACENE	53 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZ(A)ANTHRACENE	530 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(A)PYRENE	600 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	490 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	290 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	600 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	CHRYSENE	670 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	120 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	FLUORANTHENE	810 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	FLUORENE	9.6 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	260 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	NAPHTHALENE	7.3 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	PHENANTHRENE	270 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	PYRENE	750 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.5 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	ACENAPHTHENE	14 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	ACENAPHTHYLENE	54 UG/KG	U	R	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	ANTHRACENE	57 UG/KG			DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZ(A)ANTHRACENE	690 UG/KG			DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(A)PYRENE	780 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	700 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	540 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	730 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	CHRYSENE	850 UG/KG			DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	190 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	FLUORANTHENE	950 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	FLUORENE	12 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	590 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	PHENANTHRENE	320 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0	C032CD3501	EPA 8270-M	U	PYRENE	970 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/13/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	ACENAPHTHENE	4.1 UG/KG	J	R	000 REG	5/28/2002	5/29/2002	6/1/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	ACENAPHTHYLENE	4.7 UG/KG	J	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	ANTHRACENE	25 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZ(A)ANTHRACENE	180 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(A)PYRENE	240 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	160 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	160 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	270 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	CHRYSENE	250 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	53 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	FLUORANTHENE	290 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	FLUORENE	4.7 UG/KG	J	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	130 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	NAPHTHALENE	7.2 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	PHENANTHRENE	110 UG/KG		R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	PYRENE	310 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	ANTHRACENE	45 UG/KG			DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZ(A)ANTHRACENE	160 UG/KG			DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(A)PYRENE	350 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	340 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	220 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	CHRYSENE	430 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	67 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	FLUORANTHENE	430 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	FLUORENE	7.5 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	220 UG/KG			DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	J	J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	PHENANTHRENE	130 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	0.5	C032CD3601	EPA 8270-M	U	PYRENE	480 UG/KG		J	DL1 REG	5/28/2002	5/29/2002	6/7/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	ACENAPHTHENE	2.4 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	ACENAPHTHYLENE	1.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	BENZ(A)ANTHRACENE	62 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	BENZO(A)PYRENE	82 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	58 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	86 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	CHRYSENE	100 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	FLUORANTHENE	87 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	39 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	NAPHTHALENE	1.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	PHENANTHRENE	24 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	2	C032CD3701	EPA 8270-M	U	PYRENE	110 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.78 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	ANTHRACENE	0.69 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	BENZO(A)PYRENE	4.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.95 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	FLUORENE	6 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	NAPHTHALENE	0.76 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-132	SB	REG	4	C032CD3801	EPA 8270-M	U	PYRENE	9.9 UG/KG		J	000 REG	5/28/2002	5/29/2002	6/1/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	FD	2	C032CD4201	EPA 8270-M	U	PYRENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	BENZO(A)PYRENE	2.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	PHENANTHRENE	2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0	C032CD3901	EPA 8270-M	U	PYRENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	BENZO(A)PYRENE	33 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	36 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	23 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	CHRYSENE	32 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	FLUORANTHENE	28 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	24 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	0.5	C032CD4001	EPA 8270-M	U	PYRENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	BENZO(A)PYRENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	CHRYSENE	3.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	2	C032CD4101	EPA 8270-M	U	PYRENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	ACENAPHTHYLENE	2.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	BENZO(A)PYRENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	31 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	44 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	CHRYSENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	FLUORANTHENE	58 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	FLUORENE	1.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	38 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	NAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	PHENANTHRENE	33 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-133	SB	REG	4	C032CD4301	EPA 8270-M	U	PYRENE	76 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	ACENAPHTHYLENE	4.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	ANTHRACENE	3.4 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	BENZO(A)PYRENE	60 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	73 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	36 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	CHRYSENE	29 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	48 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	NAPHTHALENE	4.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0	C032CD4401	EPA 8270-M	U	PYRENE	70 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	ACENAPHTHENE	1.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	ACENAPHTHYLENE	2.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	BENZ(A)ANTHRACENE	34 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	BENZO(A)PYRENE	53 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	37 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	41 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	37 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	CHRYSENE	45 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	FLUORANTHENE	51 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	29 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	NAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	PHENANTHRENE	18 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	0.5	C032CD4501	EPA 8270-M	U	PYRENE	80 UG/KG			000 REG	5/28/2002	5/29/2002	5/29/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	ACENAPHTHENE	8.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	ACENAPHTHYLENE	4.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	ANTHRACENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	BENZO(A)PYRENE	170 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	120 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	110 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	CHRYSENE	150 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	32 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	FLUORANTHENE	130 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	FLUORENE	2.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	87 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	NAPHTHALENE	8.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	PHENANTHRENE	44 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	2	C032CD4601	EPA 8270-M	U	PYRENE	200 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ACENAPHTHENE	31 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	UJ	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ANTHRACENE	70 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZ(A)ANTHRACENE	440 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(A)PYRENE	530 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	390 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	250 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	450 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	CHRYSENE	550 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	100 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	FLUORANTHENE	630 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	FLUORENE	12 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	220 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	NAPHTHALENE	4.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	PHENANTHRENE	260 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	PYRENE	750 UG/KG		J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.3 UG/KG	J	R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ACENAPHTHENE	35 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ACENAPHTHYLENE	30 UG/KG	U	R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ANTHRACENE	60 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZ(A)ANTHRACENE	500 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(A)PYRENE	590 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	480 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	190 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	530 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	CHRYSENE	600 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	86 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	FLUORANTHENE	700 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	FLUORENE	14 UG/KG	J	R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	NAPHTHALENE	6.5 UG/KG	J	R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	PHENANTHRENE	280 UG/KG	D		DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	PYRENE	840 UG/KG		R	DL1 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.5 UG/KG	J	R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ACENAPHTHENE	19 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ACENAPHTHYLENE	41 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	ANTHRACENE	60 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZ(A)ANTHRACENE	310 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(A)PYRENE	430 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	290 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
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32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	220 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	310 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	CHRYSENE	350 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	49 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	FLUORANTHENE	730 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	FLUORENE	23 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	160 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	PHENANTHRENE	400 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-134	SB	REG	4	C032CD4701	EPA 8270-M	U	PYRENE	860 UG/KG		R	RA0 REG	5/28/2002	5/31/2002	6/4/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	BENZ(A)ANTHRACENE	17 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	BENZO(A)PYRENE	35 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	44 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	CHRYSENE	24 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	FLUORANTHENE	49 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	39 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	PHENANTHRENE	8.3 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	FD	4	C032CD5201	EPA 8270-M	U	PYRENE	72 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	ACENAPHTHENE	12 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	ANTHRACENE	84 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZ(A)ANTHRACENE	850 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(A)PYRENE	970 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	840 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	530 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	680 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	CHRYSENE	860 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	140 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	FLUORANTHENE	1200 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	FLUORENE	5.8 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	680 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	PHENANTHRENE	310 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	PYRENE	1100 UG/KG	E	R	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	2-METHYLNAPHTHALENE	28 UG/KG	U	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	JD	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	ACENAPHTHYLENE	28 UG/KG	U	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	ANTHRACENE	84 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZ(A)ANTHRACENE	830 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(A)PYRENE	930 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	850 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	430 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	730 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	CHRYSENE	870 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	110 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	FLUORANTHENE	1200 UG/KG	D		DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	FLUORENE	28 UG/KG	U	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	510 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	NAPHTHALENE	28 UG/KG	U	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	PHENANTHRENE	300 UG/KG	D	R	DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0	C032CD4801	EPA 8270-M	U	PYRENE	1200 UG/KG	D		DL1 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	2-METHYLNAPHTHALENE	11 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	ACENAPHTHENE	5 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	ACENAPHTHYLENE	53 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	ANTHRACENE	97 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	BENZ(A)ANTHRACENE	310 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	BENZO(A)PYRENE	470 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	370 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	480 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	320 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	CHRYSENE	410 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	52 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	FLUORANTHENE	800 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	FLUORENE	40 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	490 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	NAPHTHALENE	22 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	PHENANTHRENE	670 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	0.5	C032CD4901	EPA 8270-M	U	PYRENE	930 UG/KG			000 REG	5/28/2002	5/29/2002	5/31/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	ACENAPHTHENE	1.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	ANTHRACENE	9.6 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	BENZ(A)ANTHRACENE	56 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	BENZO(A)PYRENE	82 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	78 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	96 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	58 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	CHRYSENE	74 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	10 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	FLUORANTHENE	120 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	FLUORENE	1.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	93 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	NAPHTHALENE	3.7 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	PHENANTHRENE	49 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	2	C032CD5001	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	ACENAPHTHYLENE	2.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	BENZ(A)ANTHRACENE	45 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	BENZO(A)PYRENE	99 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	90 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	63 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	CHRYSENE	61 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	10 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	FLUORANTHENE	110 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	130 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	NAPHTHALENE	6.3 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	PHENANTHRENE	19 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-135	SB	REG	4	C032CD5101	EPA 8270-M	U	PYRENE	200 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.73 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	ACENAPHTHYLENE	4.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	BENZO(A)PYRENE	52 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	31 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	70 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	36 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	CHRYSENE	28 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	FLUORANTHENE	61 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	68 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	NAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	PHENANTHRENE	17 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	FD	4	C032CD5701	EPA 8270-M	U	PYRENE	74 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	ACENAPHTHYLENE	7.3 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	ANTHRACENE	23 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZ(A)ANTHRACENE	87 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	79 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	91 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	94 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	CHRYSENE	100 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	FLUORANTHENE	290 UG/KG	E	R	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	FLUORENE	3.9 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	NAPHTHALENE	4.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	PHENANTHRENE	110 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	PYRENE	350 UG/KG	E	R	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.6 UG/KG	J	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	ACENAPHTHENE	10 UG/KG	U	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	ACENAPHTHYLENE	8.3 UG/KG	J	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	ANTHRACENE	26 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZ(A)ANTHRACENE	100 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(A)PYRENE	150 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	99 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	130 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	CHRYSENE	130 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9 UG/KG	J	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	FLUORANTHENE	320 UG/KG		J	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	FLUORENE	4.1 UG/KG	J	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	91 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	J	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	PHENANTHRENE	130 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-136	SB	REG	0	C032CD5301	EPA 8270-M	U	PYRENE	380 UG/KG		J	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	2-METHYLNAPHTHALENE	8.7 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	ACENAPHTHENE	1.5 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	ACENAPHTHYLENE	29 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	ANTHRACENE	33 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZ(A)ANTHRACENE	120 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(A)PYRENE	160 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	91 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	CHRYSENE	120 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	FLUORANTHENE	330 UG/KG	E	R	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	FLUORENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	NAPHTHALENE	15 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	PHENANTHRENE	220 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	PYRENE	420 UG/KG	E	R	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	2-METHYLNAPHTHALENE	9.6 UG/KG	J	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	ACENAPHTHYLENE	34 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	ANTHRACENE	36 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZ(A)ANTHRACENE	130 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(A)PYRENE	190 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	130 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	150 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	CHRYSENE	150 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	21 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	FLUORANTHENE	340 UG/KG		J	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	FLUORENE	18 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	NAPHTHALENE	19 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	PHENANTHRENE	260 UG/KG		R	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	0.5	C032CD5401	EPA 8270-M	U	PYRENE	430 UG/KG		J	DL1 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.69 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	ACENAPHTHYLENE	2.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	BENZO(A)PYRENE	24 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	30 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	CHRYSENE	14 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	FLUORANTHENE	26 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	NAPHTHALENE	2.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	PHENANTHRENE	9.3 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	2	C032CD5501	EPA 8270-M	U	PYRENE	31 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.67 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	ACENAPHTHENE	1.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	ACENAPHTHYLENE	4 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	BENZ(A)ANTHRACENE	38 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	BENZO(A)PYRENE	84 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	52 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	96 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	58 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	CHRYSENE	46 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.9 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	FLUORANTHENE	110 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	100 UG/KG			000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	NAPHTHALENE	3.9 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	PHENANTHRENE	26 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-136	SB	REG	4	C032CD5601	EPA 8270-M	U	PYRENE	130 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/1/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	ACENAPHTHYLENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	ANTHRACENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	BENZO(A)PYRENE	4.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	CHRYSENE	5.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	FLUORANTHENE	6.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	FLUORENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	NAPHTHALENE	6.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	PHENANTHRENE	3.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	FD	0.5	C032C81301	EPA 8270-M	U	PYRENE	12 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.5 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	BENZO(A)PYRENE	10 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	CHRYSENE	11 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	FLUORANTHENE	13 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.2 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	PHENANTHRENE	7.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0	C032C81101	EPA 8270-M	U	PYRENE	24 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	BENZO(A)PYRENE	3.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	CHRYSENE	4.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	FLUORANTHENE	6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	PHENANTHRENE	3.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	0.5	C032C81201	EPA 8270-M	U	PYRENE	9.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	2	C032C81401	EPA 8270-M	U	PYRENE	3.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	BENZO(A)PYRENE	4.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	CHRYSENE	5.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	FLUORANTHENE	6.3 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	PHENANTHRENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-13	SB	REG	4	C032C81501	EPA 8270-M	U	PYRENE	13 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	29 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0	C032C81601	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	BENZ(A)ANTHRACENE	25 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	0.5	C032C81701	EPA 8270-M	U	PYRENE	5.5 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	BENZ(A)ANTHRACENE	25 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	2	C032C81801	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-14	SB	REG	4	C032C81901	EPA 8270-M	U	PYRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	BENZ(A)ANTHRACENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	BENZO(A)PYRENE	3.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	CHRYSENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	NAPHTHALENE	0.37 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	PHENANTHRENE	0.72 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	FD	4	C032C82401	EPA 8270-M	U	PYRENE	10 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	BENZO(A)PYRENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	CHRYSENE	2.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	FLUORANTHENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	NAPHTHALENE	0.77 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	PHENANTHRENE	2.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0	C032C82001	EPA 8270-M	U	PYRENE	4.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	ANTHRACENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.74 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	BENZO(A)PYRENE	1.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	CHRYSENE	1.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	PHENANTHRENE	0.47 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	0.5	C032C82101	EPA 8270-M	U	PYRENE	2.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.32 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	BENZO(A)PYRENE	0.73 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.75 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	CHRYSENE	0.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	FLUORANTHENE	0.52 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	2	C032C82201	EPA 8270-M	U	PYRENE	0.74 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	BENZO(A)PYRENE	2.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	CHRYSENE	2.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	FLUORANTHENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	PHENANTHRENE	1.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-15	SB	REG	4	C032C82301	EPA 8270-M	U	PYRENE	8.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	2-METHYLNAPHTHALENE	1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	ACENAPHTHENE	10 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	ACENAPHTHYLENE	10 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	ANTHRACENE	1.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	CHRYSENE	7.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	10 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	FLUORANTHENE	12 UG/KG			000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	FLUORENE	10 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	NAPHTHALENE	0.72 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	PHENANTHRENE	8.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/13/2002	5/14/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		ResultType	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	2-METHYLNAPHTHALENE	52 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	ACENAPHTHENE	52 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	ACENAPHTHYLENE	52 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	ANTHRACENE	52 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.3 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(A)PYRENE	8.2 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.4 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	14 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.9 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	CHRYSENE	7.2 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.8 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	FLUORANTHENE	12 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	FLUORENE	52 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.6 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	NAPHTHALENE	52 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	PHENANTHRENE	10 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0	C032C82501	EPA 8270-M	U	PYRENE	16 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.69 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	ANTHRACENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(A)PYRENE	4.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	CHRYSENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	FLUORENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	PHENANTHRENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	PYRENE	5.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	2-METHYLNAPHTHALENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	ACENAPHTHENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	ACENAPHTHYLENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	ANTHRACENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(A)PYRENE	4.4 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	8 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.6 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	CHRYSENE	3.8 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	FLUORANTHENE	4.6 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	FLUORENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	NAPHTHALENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	PHENANTHRENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	0.5	C032C82601	EPA 8270-M	U	PYRENE	7.2 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	2-METHYLNAPHTHALENE	1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	ANTHRACENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(A)PYRENE	5.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	8.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	CHRYSENE	3.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	FLUORANTHENE	4.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	FLUORENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	NAPHTHALENE	0.75 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	PHENANTHRENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	PYRENE	6.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	2-METHYLNAPHTHALENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	ACENAPHTHENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	ACENAPHTHYLENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	ANTHRACENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.6 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(A)PYRENE	5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	CHRYSENE	4.4 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	FLUORENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	NAPHTHALENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	PHENANTHRENE	55 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	2	C032C82701	EPA 8270-M	U	PYRENE	8.1 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	ANTHRACENE	0.48 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	BENZO(A)PYRENE	10 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.3 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.3 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	CHRYSENE	5.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.68 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	FLUORANTHENE	10 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	NAPHTHALENE	0.53 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-16	SB	REG	4	C032C82801	EPA 8270-M	U	PYRENE	14 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	BENZ(A)ANTHRACENE	3 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	BENZO(A)PYRENE	3 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.9 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	CHRYSENE	6.7 UG/KG			000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	PHENANTHRENE	11 UG/KG			000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0	C032C82901	EPA 8270-M	U	PYRENE	11 UG/KG			000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-17	SB	REG	0.5	C032C83001	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	2	C032C83101	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-17	SB	REG	4	C032C83201	EPA 8270-M	U	PYRENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	BENZO(A)PYRENE	1.3 UG/KG	J	J	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	FD	0.5	C032C83501	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/20/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	BENZO(A)PYRENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.4 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	CHRYSENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0	C032C83301	EPA 8270-M	U	PYRENE	5.2 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	0.5	C032C83401	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	2	C032C83601	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-18	SB	REG	4	C032C83701	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/20/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	ACENAPHTHENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	ACENAPHTHYLENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	BENZ(A)ANTHRACENE	18 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	BENZO(A)PYRENE	32 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	42 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	46 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	CHRYSENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	FLUORANTHENE	35 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	FLUORENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	44 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	NAPHTHALENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	PHENANTHRENE	13 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0	C032C83801	EPA 8270-M	U	PYRENE	39 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	BENZO(A)PYRENE	6.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	9.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	CHRYSENE	5.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	FLUORANTHENE	8.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	PHENANTHRENE	3.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	0.5	C032C83901	EPA 8270-M	U	PYRENE	11 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	BENZO(A)PYRENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.3 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	CHRYSENE	2.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	FLUORANTHENE	6.5 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	PHENANTHRENE	4.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	2	C032C84001	EPA 8270-M	U	PYRENE	7.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-19	SB	REG	4	C032C84101	EPA 8270-M	U	PYRENE	3.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	BENZO(A)PYRENE	46 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	45 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	46 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	CHRYSENE	51 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.5 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	FLUORANTHENE	54 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	FLUORENE	1.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	49 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	NAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	PHENANTHRENE	29 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0	C032C76301	EPA 8270-M	U	PYRENE	58 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	BENZO(A)PYRENE	4.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	CHRYSENE	3.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	FLUORANTHENE	5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	PHENANTHRENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	0.5	C032C76401	EPA 8270-M	U	PYRENE	6.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	BENZO(A)PYRENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	CHRYSENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	FLUORANTHENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	PHENANTHRENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	2	C032C76501	EPA 8270-M	U	PYRENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-2	SB	REG	4	C032C76601	EPA 8270-M	U	PYRENE	4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.4 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	BENZO(A)PYRENE	15 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	CHRYSENE	8.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	FLUORANTHENE	18 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	FD	4	C032C84601	EPA 8270-M	U	PYRENE	24 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	ACENAPHTHYLENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	ANTHRACENE	4.9 UG/KG	J	J	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	31 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	10 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	CHRYSENE	23 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	FLUORANTHENE	35 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	26 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0	C032C84201	EPA 8270-M	U	PYRENE	37 UG/KG			000 REG	5/13/2002	5/16/2002	5/17/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	BENZO(A)PYRENE	24 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	34 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.2 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	CHRYSENE	16 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	FLUORANTHENE	27 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	PHENANTHRENE	9.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	0.5	C032C84301	EPA 8270-M	U	PYRENE	37 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	ACENAPHTHENE	1.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	ACENAPHTHYLENE	8.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	BENZ(A)ANTHRACENE	41 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	BENZO(A)PYRENE	73 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	71 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	81 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	22 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	CHRYSENE	49 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.1 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	FLUORANTHENE	110 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	FLUORENE	2.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	78 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	NAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	PHENANTHRENE	54 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	2	C032C84401	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	BENZ(A)ANTHRACENE	7 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	18 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	CHRYSENE	8.3 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	16 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-20	SB	REG	4	C032C84501	EPA 8270-M	U	PYRENE	22 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0	C032C84701	EPA 8270-M	U	PYRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	BENZ(A)ANTHRACENE	25 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	0.5	C032C84801	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	BENZ(A)ANTHRACENE	25 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	2	C032C84901	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	ACENAPHTHYLENE	65 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	ANTHRACENE	52 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	BENZ(A)ANTHRACENE	86 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	BENZO(A)PYRENE	94 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	60 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	66 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	41 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	CHRYSENE	81 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	FLUORANTHENE	210 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	FLUORENE	51 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	68 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	PHENANTHRENE	270 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-21	SB	REG	4	C032C85001	EPA 8270-M	U	PYRENE	270 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0	C032C85101	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.65 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	0.5	C032C85201	EPA 8270-M	U	PYRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-22	SB	REG	2	C032C85301	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-22	SB	REG	4	C032C85401	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.2 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.4 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	CHRYSENE	0.38 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	FLUORANTHENE	0.51 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	FD	0.5	C032C85701	EPA 8270-M	U	PYRENE	0.66 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.97 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	BENZO(A)PYRENE	2.1 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	CHRYSENE	1.6 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.65 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.6 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	NAPHTHALENE	0.46 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	PHENANTHRENE	0.49 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0	C032C85501	EPA 8270-M	U	PYRENE	1.5 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	BENZO(A)PYRENE	0.46 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.2 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.48 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	CHRYSENE	0.52 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	FLUORANTHENE	0.52 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.98 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	0.5	C032C85601	EPA 8270-M	U	PYRENE	0.68 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	BENZO(A)PYRENE	1.6 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	CHRYSENE	1.8 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	PHENANTHRENE	0.86 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	2	C032C85801	EPA 8270-M	U	PYRENE	3.4 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.33 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.41 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-23	SB	REG	4	C032C85901	EPA 8270-M	U	PYRENE	0.51 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	ANTHRACENE	0.96 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	CHRYSENE	4.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	FLUORANTHENE	6.9 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	PHENANTHRENE	2.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0	C032C86001	EPA 8270-M	U	PYRENE	5.7 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.56 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.78 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.48 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	CHRYSENE	1.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	FLUORANTHENE	0.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	0.5	C032C86101	EPA 8270-M	U	PYRENE	0.65 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	ANTHRACENE	0.46 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	BENZO(A)PYRENE	7.9 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.3 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	CHRYSENE	13 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	FLUORANTHENE	8.2 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	PHENANTHRENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	2	C032C86201	EPA 8270-M	U	PYRENE	7.4 UG/KG		J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-24	SB	REG	4	C032C86301	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	ACENAPHTHYLENE	2.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	BENZ(A)ANTHRACENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	BENZO(A)PYRENE	68 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	48 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	81 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	37 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	CHRYSENE	32 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	FLUORANTHENE	72 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	74 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	PHENANTHRENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	FD	4	C032C86801	EPA 8270-M	U	PYRENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	ACENAPHTHENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	ACENAPHTHYLENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	ANTHRACENE	4.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	BENZ(A)ANTHRACENE	41 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	BENZO(A)PYRENE	72 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	65 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	99 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	48 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	CHRYSENE	54 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	FLUORANTHENE	87 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	FLUORENE	1.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	91 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	NAPHTHALENE	4.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	PHENANTHRENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0	C032C86401	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	ANTHRACENE	3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	CHRYSENE	14 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	FLUORANTHENE	26 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	FLUORENE	5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	NAPHTHALENE	14 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	PHENANTHRENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	0.5	C032C86501	EPA 8270-M	U	PYRENE	38 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	ACENAPHTHENE	1.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	BENZ(A)ANTHRACENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	BENZO(A)PYRENE	42 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	42 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	CHRYSENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	FLUORANTHENE	65 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	41 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	NAPHTHALENE	2.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	PHENANTHRENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	2	C032C86601	EPA 8270-M	U	PYRENE	86 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	BENZO(A)PYRENE	55 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	38 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	60 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	CHRYSENE	29 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	FLUORANTHENE	65 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	NAPHTHALENE	4.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	PHENANTHRENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-25	SB	REG	4	C032C86701	EPA 8270-M	U	PYRENE	97 UG/KG			000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.65 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	BENZO(A)PYRENE	1.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.59 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	CHRYSENE	1.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.27 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	FLUORANTHENE	0.95 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	PHENANTHRENE	0.75 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0	C032C86901	EPA 8270-M	U	PYRENE	1.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	0.5	C032C87001	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	NAPHTHALENE	0.37 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	2	C032C87101	EPA 8270-M	U	PYRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	ACENAPHTHENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	ACENAPHTHYLENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	ANTHRACENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	BENZO(A)PYRENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	CHRYSENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	FLUORANTHENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	FLUORENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	NAPHTHALENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	PHENANTHRENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-26	SB	REG	4	C032C87201	EPA 8270-M	U	PYRENE	6.3 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.37 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	ANTHRACENE	0.96 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	BENZO(A)PYRENE	6.6 UG/KG		J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	CHRYSENE	4.8 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	NAPHTHALENE	0.34 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	PHENANTHRENE	3.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0	C032C87301	EPA 8270-M	U	PYRENE	2.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.37 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	0.5	C032C87401	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.58 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.55 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	UJ	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	2	C032C87501	EPA 8270-M	U	PYRENE	0.41 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	ACENAPHTHYLENE	6.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	ANTHRACENE	6.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	BENZO(A)PYRENE	3.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	CHRYSENE	2.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	FLUORANTHENE	3.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	FLUORENE	6.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	NAPHTHALENE	0.59 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	PHENANTHRENE	0.44 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-27	SB	REG	4	C032C87601	EPA 8270-M	U	PYRENE	5.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	FD	0.5	C032C87901	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	BENZO(A)PYRENE	1.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	FLUORANTHENE	3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	PHENANTHRENE	2.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0	C032C87701	EPA 8270-M	U	PYRENE	3.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	0.5	C032C87801	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-28	SB	REG	2	C032C88001	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	BENZO(A)PYRENE	3.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	CHRYSENE	2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	PHENANTHRENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-28	SB	REG	4	C032C88101	EPA 8270-M	U	PYRENE	4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	BENZO(A)PYRENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	CHRYSENE	30 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	FLUORANTHENE	32 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	PHENANTHRENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0	C032C88201	EPA 8270-M	U	PYRENE	41 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	BENZO(A)PYRENE	2.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	FLUORANTHENE	2.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	0.5	C032C88301	EPA 8270-M	U	PYRENE	3.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	BENZO(A)PYRENE	7.2 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	CHRYSENE	5.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	FLUORANTHENE	7.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	PHENANTHRENE	6.6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	2	C032C88401	EPA 8270-M	U	PYRENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	BENZO(A)PYRENE	8.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	CHRYSENE	6.4 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	FLUORANTHENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	PHENANTHRENE	3.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-29	SB	REG	4	C032C88501	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	BENZ(A)ANTHRACENE	29 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	BENZO(A)PYRENE	23 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	31 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	FD	0.5	C032C76901	EPA 8270-M	U	PYRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	ACENAPHTHYLENE	25 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZ(A)ANTHRACENE	57 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(A)PYRENE	66 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	57 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	56 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	42 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	CHRYSENE	67 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	FLUORANTHENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	FLUORENE	27 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	66 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	PHENANTHRENE	39 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	PYRENE	89 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	ACENAPHTHENE	4.1 UG/KG	J	R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	ANTHRACENE	9.8 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZ(A)ANTHRACENE	36 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(A)PYRENE	61 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	59 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	47 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	52 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	CHRYSENE	59 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	FLUORANTHENE	64 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	FLUORENE	3.9 UG/KG	J	R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	41 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	R	RA0 REG	5/13/2002	5/20/2002	5/23/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	PHENANTHRENE	39 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0	C032C76701	EPA 8270-M	U	PYRENE	76 UG/KG		R	RA0 REG	5/13/2002	5/20/2002	5/23/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	0.5	C032C76801	EPA 8270-M	U	PYRENE	5.3 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	31 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	2	C032C77001	EPA 8270-M	U	PYRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	BENZ(A)ANTHRACENE	33 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	34 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-3	SB	REG	4	C032C77101	EPA 8270-M	U	PYRENE	6 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	BENZ(A)ANTHRACENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	18 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	FLUORANTHENE	29 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	PHENANTHRENE	9 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	FD	4	C032C89001	EPA 8270-M	U	PYRENE	42 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	BENZO(A)PYRENE	29 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	35 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	CHRYSENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	FLUORANTHENE	37 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	33 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	PHENANTHRENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0	C032C88601	EPA 8270-M	U	PYRENE	53 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	BENZO(A)PYRENE	33 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	23 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	37 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	CHRYSENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	FLUORANTHENE	35 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	35 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	PHENANTHRENE	6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	0.5	C032C88701	EPA 8270-M	U	PYRENE	55 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	FLUORANTHENE	2.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	2	C032C88801	EPA 8270-M	U	PYRENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	BENZO(A)PYRENE	8.6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	8.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	CHRYSENE	7.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	FLUORANTHENE	8.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.1 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	PHENANTHRENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-30	SB	REG	4	C032C88901	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	BENZO(A)PYRENE	7.3 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.8 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	CHRYSENE	6 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	FLUORANTHENE	8.8 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0	C032C89101	EPA 8270-M	U	PYRENE	11 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	ACENAPHTHENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	ACENAPHTHYLENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	ANTHRACENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	BENZO(A)PYRENE	3.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	CHRYSENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	FLUORANTHENE	4.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	FLUORENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	NAPHTHALENE	6.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	PHENANTHRENE	6.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	0.5	C032C89201	EPA 8270-M	U	PYRENE	5.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	BENZO(A)PYRENE	3.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.1 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	CHRYSENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	FLUORANTHENE	4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	2	C032C89301	EPA 8270-M	U	PYRENE	5.6 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	BENZO(A)PYRENE	9.7 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.9 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	12 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	CHRYSENE	6.2 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	FLUORANTHENE	13 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.6 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-31	SB	REG	4	C032C89401	EPA 8270-M	U	PYRENE	16 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/15/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	BENZ(A)ANTHRACENE	29 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	BENZO(A)PYRENE	46 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	44 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	57 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	37 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	CHRYSENE	53 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	FLUORANTHENE	51 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	FLUORENE	1.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	42 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	NAPHTHALENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	PHENANTHRENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0	C032C89501	EPA 8270-M	U	PYRENE	62 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	CHRYSENE	23 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	PHENANTHRENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	0.5	C032C89601	EPA 8270-M	U	PYRENE	41 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	BENZO(A)PYRENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	CHRYSENE	2.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	FLUORANTHENE	4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	PHENANTHRENE	1.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	2	C032C89701	EPA 8270-M	U	PYRENE	5.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	ACENAPHTHENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	ACENAPHTHYLENE	7.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	ANTHRACENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	BENZ(A)ANTHRACENE	73 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	BENZO(A)PYRENE	150 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	98 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	71 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	CHRYSENE	89 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	FLUORANTHENE	180 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	NAPHTHALENE	10 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	PHENANTHRENE	33 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-32	SB	REG	4	C032C89801	EPA 8270-M	U	PYRENE	320 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	BENZ(A)ANTHRACENE	310 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	BENZO(A)PYRENE	500 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	330 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	450 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	300 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	CHRYSENE	310 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	FLUORANTHENE	940 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	360 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	PHENANTHRENE	410 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	FD	0.5	C032C90101	EPA 8270-M	U	PYRENE	120 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	ACENAPHTHENE	2.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	ACENAPHTHYLENE	9 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	ANTHRACENE	8.2 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	BENZ(A)ANTHRACENE	74 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	BENZO(A)PYRENE	140 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	160 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	79 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	CHRYSENE	90 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	17 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	FLUORANTHENE	180 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	PHENANTHRENE	26 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0	C032C89901	EPA 8270-M	U	PYRENE	230 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	ACENAPHTHENE	9.3 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	ACENAPHTHYLENE	18 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	BENZ(A)ANTHRACENE	150 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	BENZO(A)PYRENE	280 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	190 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	290 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	160 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	CHRYSENE	170 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	FLUORANTHENE	410 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	220 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	PHENANTHRENE	160 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
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32EDC-5-33	SB	REG	0.5	C032C90001	EPA 8270-M	U	PYRENE	520 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	ANTHRACENE	60 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	BENZ(A)ANTHRACENE	350 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	BENZO(A)PYRENE	420 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	260 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	350 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	280 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	CHRYSENE	400 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	56 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	FLUORANTHENE	670 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	290 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	PHENANTHRENE	330 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	2	C032C90201	EPA 8270-M	U	PYRENE	960 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.6 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	ACENAPHTHENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	ACENAPHTHYLENE	37 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	ANTHRACENE	66 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	BENZ(A)ANTHRACENE	760 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	BENZO(A)PYRENE	1200 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	650 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1000 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	410 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	CHRYSENE	870 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	FLUORANTHENE	1900 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	FLUORENE	6.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	800 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	NAPHTHALENE	36 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	PHENANTHRENE	130 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-33	SB	REG	4	C032C90301	EPA 8270-M	U	PYRENE	200 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	2-METHYLNAPHTHALENE	7 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	32 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	31 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	CHRYSENE	52 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.1 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	FLUORANTHENE	30 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	FLUORENE	2.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	NAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	PHENANTHRENE	19 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0	C032C90401	EPA 8270-M	U	PYRENE	33 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	2-METHYLNAPHTHALENE	8.1 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	ACENAPHTHENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	ACENAPHTHYLENE	120 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	ANTHRACENE	88 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZ(A)ANTHRACENE	1700 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(A)PYRENE	3100 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2200 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2400 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1800 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	CHRYSENE	2100 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	220 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	FLUORANTHENE	4500 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	FLUORENE	6.3 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2400 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	NAPHTHALENE	56 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	PHENANTHRENE	650 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	PYRENE	5500 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	2-METHYLNAPHTHALENE	120 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	ACENAPHTHENE	120 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	ACENAPHTHYLENE	110 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	ANTHRACENE	95 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZ(A)ANTHRACENE	1700 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(A)PYRENE	3000 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2200 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2400 UG/KG	D		DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1700 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	CHRYSENE	2200 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	200 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	FLUORANTHENE	4900 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	FLUORENE	120 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2300 UG/KG	D		DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	NAPHTHALENE	54 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	PHENANTHRENE	630 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	0.5	C032C90501	EPA 8270-M	U	PYRENE	7000 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	27 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	CHRYSENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	FLUORANTHENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	PHENANTHRENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	2	C032C90601	EPA 8270-M	U	PYRENE	33 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	BENZO(A)PYRENE	44 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	32 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	47 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	22 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	CHRYSENE	25 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	FLUORANTHENE	61 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	FLUORENE	6 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	41 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	PHENANTHRENE	19 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-34	SB	REG	4	C032C90701	EPA 8270-M	U	PYRENE	89 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	FD	4	C032C91201	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	CHRYSENE	3.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	FLUORANTHENE	2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0	C032C90801	EPA 8270-M	U	PYRENE	3.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	0.5	C032C90901	EPA 8270-M	U	PYRENE	2.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	2	C032C91001	EPA 8270-M	U	PYRENE	2.8 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-35	SB	REG	4	C032C91101	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	ACENAPHTHENE	1.8 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.8 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	BENZO(A)PYRENE	6.9 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.6 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	CHRYSENE	9.7 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	FLUORANTHENE	22 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	FLUORENE	2.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	PHENANTHRENE	22 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0	C032C91301	EPA 8270-M	U	PYRENE	19 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	0.5	C032C91401	EPA 8270-M	U	PYRENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.72 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	2	C032C91501	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	BENZO(A)PYRENE	3.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	FLUORANTHENE	2.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-36	SB	REG	4	C032C91601	EPA 8270-M	U	PYRENE	4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	ACENAPHTHENE	2.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	BENZO(A)PYRENE	3.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	CHRYSENE	5.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	FLUORANTHENE	16 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	FLUORENE	2.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	PHENANTHRENE	24 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0	C032C91701	EPA 8270-M	U	PYRENE	17 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	BENZ(A)ANTHRACENE	2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	CHRYSENE	2.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	0.5	C032C91801	EPA 8270-M	U	PYRENE	6.8 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG	J	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	2	C032C91901	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG	J	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-37	SB	REG	4	C032C92001	EPA 8270-M	U	PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.92 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	BENZO(A)PYRENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	CHRYSENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	PHENANTHRENE	0.86 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	FD	0.5	C032C92301	EPA 8270-M	U	PYRENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.61 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	ANTHRACENE	1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	BENZO(A)PYRENE	5.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.2 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.3 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	CHRYSENE	5.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	NAPHTHALENE	0.36 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	PHENANTHRENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0	C032C92101	EPA 8270-M	U	PYRENE	5.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	BENZO(A)PYRENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	CHRYSENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	PHENANTHRENE	0.57 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	0.5	C032C92201	EPA 8270-M	U	PYRENE	2.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	BENZO(A)PYRENE	0.75 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.66 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.65 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.88 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	CHRYSENE	1.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	FLUORANTHENE	0.96 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	2	C032C92401	EPA 8270-M	U	PYRENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	BENZO(A)PYRENE	0.53 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.86 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	FLUORANTHENE	0.36 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.58 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-38	SB	REG	4	C032C92501	EPA 8270-M	U	PYRENE	0.48 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.46 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	BENZO(A)PYRENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	CHRYSENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	PHENANTHRENE	2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0	C032C92601	EPA 8270-M	U	PYRENE	5.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	BENZO(A)PYRENE	7.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	CHRYSENE	4.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	FLUORANTHENE	8.4 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.3 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	NAPHTHALENE	0.48 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	PHENANTHRENE	1.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-39	SB	REG	0.5	C032C92701	EPA 8270-M	U	PYRENE	13 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	ACENAPHTHYLENE	9.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZ(A)ANTHRACENE	150 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(A)PYRENE	240 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	140 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	170 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	CHRYSENE	180 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	25 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	FLUORANTHENE	230 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	210 UG/KG		R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	NAPHTHALENE	3.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	PHENANTHRENE	5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	PYRENE	360 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.86 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	ACENAPHTHENE	10 UG/KG	U	R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	ACENAPHTHYLENE	12 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	ANTHRACENE	2.9 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZ(A)ANTHRACENE	170 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(A)PYRENE	250 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	150 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	190 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	CHRYSENE	200 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	28 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	FLUORANTHENE	230 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	FLUORENE	10 UG/KG	U	R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	230 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	NAPHTHALENE	3.1 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	PHENANTHRENE	6.6 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	2	C032C92801	EPA 8270-M	U	PYRENE	360 UG/KG			DL1 REG	5/14/2002	5/15/2002	6/3/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	2-METHYLNAPHTHALENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	ANTHRACENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	CHRYSENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	FLUORANTHENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	FLUORENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	PHENANTHRENE	11 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-39	SB	REG	4	C032C92901	EPA 8270-M	U	PYRENE	0.76 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	BENZO(A)PYRENE	33 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	37 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	CHRYSENE	18 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	FLUORANTHENE	37 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	26 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	FD	4	C032C93401	EPA 8270-M	U	PYRENE	50 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.4 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.3 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	CHRYSENE	8.2 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	FLUORANTHENE	10 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0	C032C93001	EPA 8270-M	U	PYRENE	17 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	BENZO(A)PYRENE	44 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	31 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	57 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	CHRYSENE	22 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	FLUORANTHENE	35 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	40 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	0.5	C032C93101	EPA 8270-M	U	PYRENE	71 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	BENZO(A)PYRENE	9.2 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	9.9 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	CHRYSENE	4.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	FLUORANTHENE	7.1 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	2	C032C93201	EPA 8270-M	U	PYRENE	12 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	BENZ(A)ANTHRACENE	17 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	BENZO(A)PYRENE	36 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	24 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	39 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	18 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	CHRYSENE	21 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	FLUORANTHENE	45 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-40	SB	REG	4	C032C93301	EPA 8270-M	U	PYRENE	59 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	ACENAPHTHYLENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	BENZO(A)PYRENE	45 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	35 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	41 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	41 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	CHRYSENE	40 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	FLUORANTHENE	44 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	42 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	PHENANTHRENE	18 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0	C032C93501	EPA 8270-M	U	PYRENE	54 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.98 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	ACENAPHTHENE	1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	ACENAPHTHYLENE	3.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	BENZ(A)ANTHRACENE	34 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	BENZO(A)PYRENE	70 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	49 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	78 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	55 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	CHRYSENE	42 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.3 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	FLUORANTHENE	63 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	72 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	NAPHTHALENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	PHENANTHRENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	0.5	C032C93601	EPA 8270-M	U	PYRENE	100 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	ACENAPHTHYLENE	13 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	ANTHRACENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	BENZ(A)ANTHRACENE	76 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	82 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	95 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	CHRYSENE	87 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	FLUORANTHENE	190 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	FLUORENE	9.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	NAPHTHALENE	6.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	PHENANTHRENE	140 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	2	C032C93701	EPA 8270-M	U	PYRENE	250 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.44 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	FLUORANTHENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	NAPHTHALENE	1.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	PHENANTHRENE	6.5 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-41	SB	REG	4	C032C93801	EPA 8270-M	U	PYRENE	28 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	BENZ(A)ANTHRACENE	18 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	32 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	CHRYSENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	FLUORANTHENE	34 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	NAPHTHALENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	PHENANTHRENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0	C032C93901	EPA 8270-M	U	PYRENE	43 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	BENZO(A)PYRENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	16 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	CHRYSENE	14 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	FLUORANTHENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	NAPHTHALENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	PHENANTHRENE	7.4 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	0.5	C032C94001	EPA 8270-M	U	PYRENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	ACENAPHTHENE	14 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	ACENAPHTHYLENE	100 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	ANTHRACENE	150 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZ(A)ANTHRACENE	530 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(A)PYRENE	860 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	600 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	770 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	510 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	CHRYSENE	620 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	64 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	FLUORANTHENE	2200 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	FLUORENE	52 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	730 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	NAPHTHALENE	26 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	PHENANTHRENE	1800 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	PYRENE	2400 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	2-METHYLNAPHTHALENE	53 UG/KG	U	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	ACENAPHTHENE	13 UG/KG	JD	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	ACENAPHTHYLENE	85 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	ANTHRACENE	160 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZ(A)ANTHRACENE	500 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(A)PYRENE	770 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	550 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	610 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	510 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	CHRYSENE	570 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	57 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	FLUORANTHENE	2100 UG/KG	D		DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	FLUORENE	50 UG/KG	JD	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	600 UG/KG	D	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	NAPHTHALENE	24 UG/KG	JD	R	DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	PHENANTHRENE	1800 UG/KG	D		DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	2	C032C94101	EPA 8270-M	U	PYRENE	2600 UG/KG	D		DL1 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.1 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	CHRYSENE	6.3 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	PHENANTHRENE	2.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-42	SB	REG	4	C032C94201	EPA 8270-M	U	PYRENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	2-METHYLNAPHTHALENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	ACENAPHTHENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	ACENAPHTHYLENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	ANTHRACENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	15 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	10 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	CHRYSENE	13 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	FLUORANTHENE	18 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	FLUORENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	21 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	NAPHTHALENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	PHENANTHRENE	12 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	FD	0.5	C032C94501	EPA 8270-M	U	PYRENE	23 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	ACENAPHTHENE	1.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	ACENAPHTHYLENE	8.3 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	ANTHRACENE	7.6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	BENZ(A)ANTHRACENE	62 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	94 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	83 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	CHRYSENE	70 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	FLUORANTHENE	120 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	FLUORENE	2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	NAPHTHALENE	4.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	PHENANTHRENE	38 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	0	C032C94301	EPA 8270-M	U	PYRENE	200 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	ACENAPHTHENE	52 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	ACENAPHTHYLENE	44 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	ANTHRACENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	BENZ(A)ANTHRACENE	260 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	BENZO(A)PYRENE	310 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	200 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	260 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	CHRYSENE	320 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	34 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	FLUORANTHENE	760 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	FLUORENE	29 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	190 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	NAPHTHALENE	6.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	PHENANTHRENE	590 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	0.5	C032C94401	EPA 8270-M	U	PYRENE	1000 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	2-METHYLNAPHTHALENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	ACENAPHTHENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	ACENAPHTHYLENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	ANTHRACENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	15 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	CHRYSENE	13 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	FLUORANTHENE	10 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	FLUORENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	11 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	NAPHTHALENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	PHENANTHRENE	100 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	2	C032C94601	EPA 8270-M	U	PYRENE	12 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	ACENAPHTHENE	1.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	ACENAPHTHYLENE	3.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	ANTHRACENE	14 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	BENZ(A)ANTHRACENE	68 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	BENZO(A)PYRENE	75 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	67 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	53 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	62 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	CHRYSENE	75 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	10 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	FLUORANTHENE	140 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	57 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	NAPHTHALENE	4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	PHENANTHRENE	30 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-43	SB	REG	4	C032C94701	EPA 8270-M	U	PYRENE	150 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	2-METHYLNAPHTHALENE	10 UG/KG	JB	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	ACENAPHTHENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	CHRYSENE	27 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	FLUORANTHENE	9.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	FLUORENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	NAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	PHENANTHRENE	19 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0	C032C94801	EPA 8270-M	U	PYRENE	17 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	2-METHYLNAPHTHALENE	8.5 UG/KG	JB	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	ACENAPHTHENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	BENZ(A)ANTHRACENE	10 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	BENZO(A)PYRENE	19 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	31 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	CHRYSENE	37 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	FLUORANTHENE	18 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	FLUORENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	20 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	NAPHTHALENE	4.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	PHENANTHRENE	13 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	0.5	C032C94901	EPA 8270-M	U	PYRENE	27 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	2-METHYLNAPHTHALENE	18 UG/KG	JB	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	ACENAPHTHENE	28 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	ACENAPHTHYLENE	28 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	BENZO(A)PYRENE	16 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	23 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	CHRYSENE	32 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	28 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	FLUORANTHENE	9.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	FLUORENE	28 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	NAPHTHALENE	6.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	PHENANTHRENE	16 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	2	C032C95001	EPA 8270-M	U	PYRENE	22 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	2-METHYLNAPHTHALENE	14 UG/KG	B		000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	ACENAPHTHENE	1.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	ACENAPHTHYLENE	31 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	ANTHRACENE	22 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	BENZ(A)ANTHRACENE	120 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	BENZO(A)PYRENE	170 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	94 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	150 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	CHRYSENE	170 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	40 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	FLUORANTHENE	110 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	FLUORENE	3.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	130 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	NAPHTHALENE	16 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	PHENANTHRENE	88 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-44	SB	REG	4	C032C95101	EPA 8270-M	U	PYRENE	250 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-45	SB	FD	4	C032C95601	EPA 8270-M	U	PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	CHRYSENE	2.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	FLUORANTHENE	3.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	J	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0	C032C95201	EPA 8270-M	U	PYRENE	4.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	ACENAPHTHYLENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	ANTHRACENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	BENZO(A)PYRENE	6.7 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	CHRYSENE	4.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.4 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	FLUORANTHENE	7.9 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.5 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	NAPHTHALENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	PHENANTHRENE	6.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	0.5	C032C95301	EPA 8270-M	U	PYRENE	12 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	BENZO(A)PYRENE	5.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	CHRYSENE	6.1 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	FLUORANTHENE	9.4 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	PHENANTHRENE	7.2 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	2	C032C95401	EPA 8270-M	U	PYRENE	16 UG/KG			000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-45	SB	REG	4	C032C95501	EPA 8270-M	U	PYRENE	6.1 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/23/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	ACENAPHTHENE	1.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	BENZ(A)ANTHRACENE	15 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	BENZO(A)PYRENE	16 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	16 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	10 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	CHRYSENE	18 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	FLUORANTHENE	24 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	FLUORENE	1.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.6 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	PHENANTHRENE	18 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0	C032C95701	EPA 8270-M	U	PYRENE	22 UG/KG			000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	BENZO(A)PYRENE	2.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	CHRYSENE	1.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	FLUORANTHENE	3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	PHENANTHRENE	1.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	0.5	C032C95801	EPA 8270-M	U	PYRENE	3.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	BENZO(A)PYRENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	2	C032C95901	EPA 8270-M	U	PYRENE	2.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	BENZO(A)PYRENE	2.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	CHRYSENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	FLUORANTHENE	3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	PHENANTHRENE	6.2 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-46	SB	REG	4	C032C96001	EPA 8270-M	U	PYRENE	5.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.66 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	BENZO(A)PYRENE	1.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	CHRYSENE	1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.37 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	FLUORANTHENE	1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	PHENANTHRENE	0.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0	C032C96101	EPA 8270-M	U	PYRENE	1.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	BENZO(A)PYRENE	4.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	CHRYSENE	1.8 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.66 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	FLUORANTHENE	2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	PHENANTHRENE	0.56 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	0.5	C032C96201	EPA 8270-M	U	PYRENE	4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	BENZO(A)PYRENE	2.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	CHRYSENE	1.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.39 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	PHENANTHRENE	1.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	2	C032C96301	EPA 8270-M	U	PYRENE	4.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	BENZO(A)PYRENE	0.69 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.74 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.45 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	FLUORANTHENE	0.59 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.81 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-47	SB	REG	4	C032C96401	EPA 8270-M	U	PYRENE	0.81 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	ACENAPHTHYLENE	4.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	BENZO(A)PYRENE	16 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	21 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.8 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	CHRYSENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	FLUORANTHENE	33 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	15 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	PHENANTHRENE	31 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	FD	0.5	C032C96701	EPA 8270-M	U	PYRENE	39 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	2-METHYLNAPHTHALENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	ACENAPHTHENE	15 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	ACENAPHTHYLENE	50 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	ANTHRACENE	52 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	BENZ(A)ANTHRACENE	130 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	BENZO(A)PYRENE	150 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	160 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	54 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	CHRYSENE	140 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	FLUORANTHENE	380 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	FLUORENE	25 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	NAPHTHALENE	36 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	PHENANTHRENE	430 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0	C032C96501	EPA 8270-M	U	PYRENE	410 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.3 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	CHRYSENE	6.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	FLUORANTHENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	PHENANTHRENE	4.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	0.5	C032C96601	EPA 8270-M	U	PYRENE	9.9 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	CHRYSENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	FLUORANTHENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	PHENANTHRENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	2	C032C96801	EPA 8270-M	U	PYRENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.86 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-48	SB	REG	4	C032C96901	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.33 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	BENZO(A)PYRENE	19 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	18 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	CHRYSENE	18 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	FLUORANTHENE	38 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	NAPHTHALENE	0.68 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	PHENANTHRENE	13 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0	C032C97001	EPA 8270-M	U	PYRENE	47 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.31 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	ACENAPHTHYLENE	3.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	BENZO(A)PYRENE	24 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	16 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	18 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	CHRYSENE	19 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	FLUORANTHENE	44 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	24 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	NAPHTHALENE	0.78 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	PHENANTHRENE	15 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	0.5	C032C97101	EPA 8270-M	U	PYRENE	57 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	ACENAPHTHENE	5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	ACENAPHTHYLENE	14 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	ANTHRACENE	15 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	BENZ(A)ANTHRACENE	69 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	BENZO(A)PYRENE	96 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	66 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	85 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	68 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	CHRYSENE	82 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.9 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	FLUORANTHENE	200 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	FLUORENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	85 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	NAPHTHALENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	PHENANTHRENE	71 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	2	C032C97201	EPA 8270-M	U	PYRENE	240 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	ACENAPHTHENE	54 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	ACENAPHTHYLENE	140 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	ANTHRACENE	200 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZ(A)ANTHRACENE	550 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(A)PYRENE	650 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	400 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	520 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	480 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	CHRYSENE	580 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	100 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	FLUORANTHENE	1900 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	FLUORENE	19 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	560 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	NAPHTHALENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	PHENANTHRENE	920 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	PYRENE	2200 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	2-METHYLNAPHTHALENE	57 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	ACENAPHTHENE	64 UG/KG	Q	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	ACENAPHTHYLENE	150 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	ANTHRACENE	220 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZ(A)ANTHRACENE	660 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(A)PYRENE	840 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	610 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	640 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	470 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	CHRYSENE	770 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	140 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	FLUORANTHENE	2000 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	FLUORENE	26 UG/KG	J	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	610 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	NAPHTHALENE	19 UG/KG	J	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	PHENANTHRENE	1000 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-49	SB	REG	4	C032C97301	EPA 8270-M	U	PYRENE	2200 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.67 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	ANTHRACENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(A)PYRENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	CHRYSENE	9.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	FLUORENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	PHENANTHRENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	PYRENE	3.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/21/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	2-METHYLNAPHTHALENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	ACENAPHTHENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	ACENAPHTHYLENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	ANTHRACENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(A)PYRENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	CHRYSENE	10 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	FLUORENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	NAPHTHALENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	PHENANTHRENE	54 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0	C032C77201	EPA 8270-M	U	PYRENE	4.2 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	BENZO(A)PYRENE	5.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.39 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	NAPHTHALENE	0.36 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	PHENANTHRENE	1.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	0.5	C032C77301	EPA 8270-M	U	PYRENE	8.6 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.51 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	ACENAPHTHENE	0.97 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	ACENAPHTHYLENE	9.5 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	ANTHRACENE	17 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	90 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	99 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	110 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	CHRYSENE	120 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	14 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	FLUORANTHENE	300 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	FLUORENE	2.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	100 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	NAPHTHALENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	PHENANTHRENE	91 UG/KG			000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	PYRENE	370 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	ACENAPHTHYLENE	13 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	ANTHRACENE	28 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZ(A)ANTHRACENE	130 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(A)PYRENE	170 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	140 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	84 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	110 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	CHRYSENE	160 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	21 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	FLUORANTHENE	350 UG/KG			DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	FLUORENE	4 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	96 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	NAPHTHALENE	3.8 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	PHENANTHRENE	94 UG/KG		R	DL1 REG	5/13/2002	5/14/2002	5/22/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-4A	SB	REG	2	C032C77401	EPA 8270-M	U	PYRENE	440 UG/KG			DL1 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	2-METHYLNAPHTHALENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	ACENAPHTHENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	ACENAPHTHYLENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	ANTHRACENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(A)PYRENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	CHRYSENE	6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	FLUORANTHENE	3.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	FLUORENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	NAPHTHALENE	12 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	PHENANTHRENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	PYRENE	6.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/22/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	2-METHYLNAPHTHALENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	ACENAPHTHENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	ACENAPHTHYLENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	ANTHRACENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZ(A)ANTHRACENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(A)PYRENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.6 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	FLUORANTHENE	3.7 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	FLUORENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	NAPHTHALENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	PHENANTHRENE	60 UG/KG	U	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-4A	SB	REG	4	C032C77501	EPA 8270-M	U	PYRENE	6.8 UG/KG	J	R	DL1 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.7 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	FD	4	C032C78001	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0	C032C77601	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	0.5	C032C77701	EPA 8270-M	U	PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	BENZO(A)PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	UJ	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	2	C032C77801	EPA 8270-M	U	PYRENE	5.9 UG/KG	U	U	000 REG	5/17/2002	5/18/2002	5/19/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.94 UG/KG	J	J	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	UJ	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-5	SB	REG	4	C032C77901	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/17/2002	5/22/2002	5/23/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	BENZO(A)PYRENE	23 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	CHRYSENE	15 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	FLUORANTHENE	32 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	NAPHTHALENE	3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	PHENANTHRENE	13 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	FD	4	C032C97801	EPA 8270-M	U	PYRENE	46 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	2-METHYLNAPHTHALENE	18 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	9.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.4 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	CHRYSENE	19 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	FLUORENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	NAPHTHALENE	44 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	PHENANTHRENE	9.6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0	C032C97401	EPA 8270-M	U	PYRENE	7.2 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	2-METHYLNAPHTHALENE	9.1 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	BENZ(A)ANTHRACENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	CHRYSENE	13 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	NAPHTHALENE	20 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	PHENANTHRENE	6.6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	0.5	C032C97501	EPA 8270-M	U	PYRENE	4.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	2-METHYLNAPHTHALENE	12 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.6 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	19 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	22 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.6 UG/KG	J	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	CHRYSENE	20 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.1 UG/KG	J	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	FLUORANTHENE	9.5 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	FLUORENE	1.8 UG/KG	J	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	NAPHTHALENE	28 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	PHENANTHRENE	8.9 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	PYRENE	15 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	2-METHYLNAPHTHALENE	8.6 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	22 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.5 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	CHRYSENE	16 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.5 UG/KG	J	J	RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	FLUORANTHENE	8.7 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	NAPHTHALENE	23 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	PHENANTHRENE	7.4 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	2	C032C97601	EPA 8270-M	U	PYRENE	18 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/21/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	ACENAPHTHENE	2.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	ANTHRACENE	6.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	BENZ(A)ANTHRACENE	33 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	BENZO(A)PYRENE	68 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	61 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	62 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	CHRYSENE	34 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	FLUORANTHENE	91 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	68 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	NAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	PHENANTHRENE	34 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-50	SB	REG	4	C032C97701	EPA 8270-M	U	PYRENE	110 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	2-METHYLNAPHTHALENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	ACENAPHTHENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	ANTHRACENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	CHRYSENE	19 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	FLUORANTHENE	14 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	FLUORENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	NAPHTHALENE	27 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	PHENANTHRENE	6.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0	C032C97901	EPA 8270-M	U	PYRENE	22 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	2-METHYLNAPHTHALENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	ACENAPHTHENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	ACENAPHTHYLENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	ANTHRACENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	BENZ(A)ANTHRACENE	30 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	BENZO(A)PYRENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	68 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	64 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	36 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	CHRYSENE	160 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	FLUORANTHENE	28 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	FLUORENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	NAPHTHALENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	PHENANTHRENE	57 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	0.5	C032C98001	EPA 8270-M	U	PYRENE	57 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	JB	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	ACENAPHTHYLENE	1.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	ANTHRACENE	1.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	BENZ(A)ANTHRACENE	18 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	BENZO(A)PYRENE	24 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	CHRYSENE	49 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.4 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	FLUORANTHENE	27 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	23 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	NAPHTHALENE	0.96 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	PHENANTHRENE	11 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	2	C032C98101	EPA 8270-M	U	PYRENE	47 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	JB	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	ACENAPHTHYLENE	4.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	ANTHRACENE	8.6 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	BENZO(A)PYRENE	46 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	35 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	37 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	CHRYSENE	30 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.1 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	FLUORANTHENE	55 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	36 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	NAPHTHALENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	PHENANTHRENE	34 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-51	SB	REG	4	C032C98201	EPA 8270-M	U	PYRENE	73 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.6 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	CHRYSENE	13 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	FLUORANTHENE	16 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0	C032C98301	EPA 8270-M	U	PYRENE	21 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	ACENAPHTHYLENE	3.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	BENZO(A)PYRENE	34 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	24 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	34 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	CHRYSENE	21 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	FLUORANTHENE	47 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	25 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	0.5	C032C98401	EPA 8270-M	U	PYRENE	64 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.1 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.1 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	CHRYSENE	10 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	FLUORANTHENE	17 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	2	C032C98501	EPA 8270-M	U	PYRENE	24 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	ACENAPHTHYLENE	3.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	BENZ(A)ANTHRACENE	35 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	BENZO(A)PYRENE	59 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	37 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	32 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	CHRYSENE	41 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	FLUORANTHENE	94 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	37 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	PHENANTHRENE	3.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-52	SB	REG	4	C032C98601	EPA 8270-M	U	PYRENE	130 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	18 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	CHRYSENE	15 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	FLUORANTHENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	NAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	PHENANTHRENE	9 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	FD	0.5	C032C98901	EPA 8270-M	U	PYRENE	28 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	ACENAPHTHYLENE	1.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	BENZO(A)PYRENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	23 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	FLUORANTHENE	23 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	21 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	NAPHTHALENE	1.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	PHENANTHRENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0	C032C98701	EPA 8270-M	U	PYRENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.4 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	ACENAPHTHENE	7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	ACENAPHTHYLENE	2.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	BENZO(A)PYRENE	34 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	33 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	CHRYSENE	22 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	FLUORANTHENE	65 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	32 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	PHENANTHRENE	51 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	0.5	C032C98801	EPA 8270-M	U	PYRENE	76 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	2-METHYLNAPHTHALENE	2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	ACENAPHTHENE	3.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	ACENAPHTHYLENE	23 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	ANTHRACENE	30 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZ(A)ANTHRACENE	120 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(A)PYRENE	170 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	CHRYSENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	FLUORANTHENE	280 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	FLUORENE	9.4 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	PHENANTHRENE	160 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	PYRENE	360 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.9 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	ACENAPHTHENE	3 UG/KG	JG	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	ACENAPHTHYLENE	26 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	ANTHRACENE	47 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZ(A)ANTHRACENE	120 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(A)PYRENE	180 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	82 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	CHRYSENE	150 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	FLUORANTHENE	320 UG/KG			DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	FLUORENE	11 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	92 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	PHENANTHRENE	170 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	2	C032C99001	EPA 8270-M	U	PYRENE	410 UG/KG			DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	ACENAPHTHENE	2.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	ACENAPHTHYLENE	6.9 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	ANTHRACENE	7.6 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	BENZ(A)ANTHRACENE	52 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	BENZO(A)PYRENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	71 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	75 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	CHRYSENE	67 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	FLUORANTHENE	120 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	NAPHTHALENE	6.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	PHENANTHRENE	38 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-53	SB	REG	4	C032C99101	EPA 8270-M	U	PYRENE	160 UG/KG			000 REG	5/14/2002	5/15/2002	5/16/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.35 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	BENZO(A)PYRENE	0.62 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.67 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.7 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.45 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	CHRYSENE	0.72 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.86 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	PHENANTHRENE	1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0	C032C99201	EPA 8270-M	U	PYRENE	1.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	BENZO(A)PYRENE	0.98 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.97 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	CHRYSENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.3 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	PHENANTHRENE	2.4 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	0.5	C032C99301	EPA 8270-M	U	PYRENE	3.9 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.41 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	FLUORANTHENE	0.52 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	FLUORENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	PHENANTHRENE	0.54 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	2	C032C99401	EPA 8270-M	U	PYRENE	0.53 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/25/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-54	SB	REG	4	C032C99501	EPA 8270-M	U	PYRENE	2.1 UG/KG	J	J	000 REG	5/21/2002	5/22/2002	5/22/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.47 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	BENZO(A)PYRENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.72 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	CHRYSENE	0.65 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	FLUORANTHENE	0.65 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	FD	4	C032C00001	EPA 8270-M	U	PYRENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	ACENAPHTHENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	ACENAPHTHYLENE	4.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	ANTHRACENE	10 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	BENZ(A)ANTHRACENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	BENZO(A)PYRENE	52 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	53 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	72 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	CHRYSENE	51 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	FLUORANTHENE	47 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	FLUORENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	NAPHTHALENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	PHENANTHRENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0	C032C99601	EPA 8270-M	U	PYRENE	59 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	ANTHRACENE	0.52 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	BENZO(A)PYRENE	4.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	CHRYSENE	3.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	PHENANTHRENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	0.5	C032C99701	EPA 8270-M	U	PYRENE	7.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.47 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	BENZO(A)PYRENE	0.99 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	CHRYSENE	0.74 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	FLUORANTHENE	0.72 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	2	C032C99801	EPA 8270-M	U	PYRENE	1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.37 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	BENZO(A)PYRENE	0.89 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.69 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.82 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	CHRYSENE	0.56 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	FLUORANTHENE	0.51 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-55	SB	REG	4	C032C99901	EPA 8270-M	U	PYRENE	0.89 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	BENZ(A)ANTHRACENE	15 UG/KG	B	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	CHRYSENE	18 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	FLUORANTHENE	25 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	PHENANTHRENE	8.5 UG/KG	B	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0	C032CA0101	EPA 8270-M	U	PYRENE	26 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG	B	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	17 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	CHRYSENE	32 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	FLUORANTHENE	27 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	PHENANTHRENE	5.1 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	0.5	C032CA0201	EPA 8270-M	U	PYRENE	35 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	ANTHRACENE	0.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.1 UG/KG	B	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	BENZO(A)PYRENE	9.3 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.5 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.2 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.3 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	CHRYSENE	9.5 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	FLUORANTHENE	12 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	7.3 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	PHENANTHRENE	4.8 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	2	C032CA0301	EPA 8270-M	U	PYRENE	13 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	JB	UJ	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	BENZO(A)PYRENE	3.3 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	JB	UJ	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-56	SB	REG	4	C032CA0401	EPA 8270-M	U	PYRENE	5.8 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	23 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	42 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	CHRYSENE	36 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	FLUORANTHENE	28 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	FLUORENE	1.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	32 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	PHENANTHRENE	23 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0	C032CA0501	EPA 8270-M	U	PYRENE	43 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	BENZO(A)PYRENE	2.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	0.5	C032CA0601	EPA 8270-M	U	PYRENE	3.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	8.4 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	CHRYSENE	6 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	FLUORANTHENE	4.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.5 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	PHENANTHRENE	3.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	2	C032CA0701	EPA 8270-M	U	PYRENE	6.7 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-57	SB	REG	4	C032CA0801	EPA 8270-M	U	PYRENE	2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.58 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	BENZO(A)PYRENE	1.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.95 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.72 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	CHRYSENE	0.68 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	FLUORANTHENE	0.86 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	FD	0.5	C032CA1101	EPA 8270-M	U	PYRENE	1.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	BENZO(A)PYRENE	0.44 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.61 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.61 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0	C032CA0901	EPA 8270-M	U	PYRENE	0.45 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.56 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	BENZO(A)PYRENE	1.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.69 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	CHRYSENE	0.68 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	FLUORANTHENE	0.93 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	0.5	C032CA1001	EPA 8270-M	U	PYRENE	1.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	2-METHYLNAPHTHALENE	31 UG/KG			000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	ANTHRACENE	0.46 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	BENZO(A)PYRENE	2.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	CHRYSENE	14 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	FLUORENE	3.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	NAPHTHALENE	31 UG/KG			000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	PHENANTHRENE	9.9 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	2	C032CA1201	EPA 8270-M	U	PYRENE	3.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.52 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	ANTHRACENE	1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	CHRYSENE	13 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	FLUORANTHENE	20 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	26 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	NAPHTHALENE	0.76 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	PHENANTHRENE	3.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-58	SB	REG	4	C032CA1301	EPA 8270-M	U	PYRENE	31 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/27/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.32 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	ANTHRACENE	0.76 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.1 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.9 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	CHRYSENE	7.6 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	NAPHTHALENE	0.36 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	PHENANTHRENE	5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0	C032CA1401	EPA 8270-M	U	PYRENE	14 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	ANTHRACENE	0.53 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	BENZO(A)PYRENE	2.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	CHRYSENE	2.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.53 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	FLUORANTHENE	6 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	NAPHTHALENE	0.33 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	PHENANTHRENE	5.1 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	0.5	C032CA1501	EPA 8270-M	U	PYRENE	7.4 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	BENZO(A)PYRENE	2.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.44 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	FLUORANTHENE	4.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	PHENANTHRENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	2	C032CA1601	EPA 8270-M	U	PYRENE	6.1 UG/KG			000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.84 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	BENZO(A)PYRENE	1.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.88 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	CHRYSENE	1.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.26 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	PHENANTHRENE	0.92 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-59	SB	REG	4	C032CA1701	EPA 8270-M	U	PYRENE	3.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.48 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/20/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-6	SB	REG	0	C032C78101	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/20/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.48 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	FLUORANTHENE	0.62 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	PHENANTHRENE	0.41 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	0.5	C032C78201	EPA 8270-M	U	PYRENE	0.7 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.58 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	FLUORANTHENE	0.53 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	2	C032C78301	EPA 8270-M	U	PYRENE	0.75 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	BENZO(A)PYRENE	0.5 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.81 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	FLUORANTHENE	0.37 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG	JB	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	UJ	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-6	SB	REG	4	C032C78401	EPA 8270-M	U	PYRENE	1.1 UG/KG	J	J	000 REG	5/17/2002	5/19/2002	5/21/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	ACENAPHTHYLENE	4.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	ANTHRACENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	BENZ(A)ANTHRACENE	38 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	BENZO(A)PYRENE	72 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	47 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	62 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	45 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	CHRYSENE	45 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	FLUORANTHENE	110 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	FLUORENE	3.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	57 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	NAPHTHALENE	6.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	PHENANTHRENE	61 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	FD	4	C032CA2201	EPA 8270-M	U	PYRENE	140 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	ACENAPHTHENE	3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	ACENAPHTHYLENE	6.4 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	ANTHRACENE	8.7 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	BENZ(A)ANTHRACENE	66 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	BENZO(A)PYRENE	91 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	78 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	66 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	85 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	CHRYSENE	96 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	FLUORANTHENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	FLUORENE	3.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	68 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	NAPHTHALENE	4.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	PHENANTHRENE	77 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0	C032CA1801	EPA 8270-M	U	PYRENE	170 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	ACENAPHTHYLENE	16 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	ANTHRACENE	23 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	BENZ(A)ANTHRACENE	100 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	BENZO(A)PYRENE	120 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	110 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	100 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	CHRYSENE	110 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	FLUORANTHENE	270 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	FLUORENE	4.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	NAPHTHALENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	PHENANTHRENE	140 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	0.5	C032CA1901	EPA 8270-M	U	PYRENE	370 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	ACENAPHTHENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	BENZO(A)PYRENE	28 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	25 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	31 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	CHRYSENE	36 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	FLUORANTHENE	76 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	FLUORENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	24 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	NAPHTHALENE	1.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	PHENANTHRENE	52 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	2	C032CA2001	EPA 8270-M	U	PYRENE	84 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	ACENAPHTHENE	4.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	ANTHRACENE	8.6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	BENZ(A)ANTHRACENE	41 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	BENZO(A)PYRENE	89 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	58 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	84 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	49 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	CHRYSENE	49 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.7 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	FLUORANTHENE	120 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	FLUORENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	76 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	PHENANTHRENE	50 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-60	SB	REG	4	C032CA2101	EPA 8270-M	U	PYRENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	2-METHYLNAPHTHALENE	4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	ACENAPHTHENE	26 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	ACENAPHTHYLENE	3.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	ANTHRACENE	52 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZ(A)ANTHRACENE	340 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(A)PYRENE	430 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	360 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	260 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	440 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	CHRYSENE	490 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	52 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	FLUORANTHENE	990 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	FLUORENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	300 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	NAPHTHALENE	7.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	PHENANTHRENE	610 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	PYRENE	1000 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	2-METHYLNAPHTHALENE	52 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	ACENAPHTHENE	25 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	ACENAPHTHYLENE	52 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	ANTHRACENE	61 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZ(A)ANTHRACENE	310 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(A)PYRENE	410 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	350 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	260 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	410 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	CHRYSENE	480 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	47 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	FLUORANTHENE	960 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	FLUORENE	22 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	290 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	NAPHTHALENE	52 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	PHENANTHRENE	590 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0	C032CA2301	EPA 8270-M	U	PYRENE	1000 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	ACENAPHTHYLENE	7.4 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	ANTHRACENE	16 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	BENZO(A)PYRENE	180 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	150 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	140 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	CHRYSENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	FLUORANTHENE	310 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	FLUORENE	6.6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	140 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	NAPHTHALENE	9 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	PHENANTHRENE	160 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	0.5	C032CA2401	EPA 8270-M	U	PYRENE	370 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	2-METHYLNAPHTHALENE	4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	ACENAPHTHENE	18 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	ANTHRACENE	38 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	BENZ(A)ANTHRACENE	240 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	BENZO(A)PYRENE	340 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	260 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	240 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	290 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	CHRYSENE	320 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	38 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	FLUORANTHENE	690 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	FLUORENE	19 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	260 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	NAPHTHALENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	PHENANTHRENE	410 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-61	SB	REG	2	C032CA2501	EPA 8270-M	U	PYRENE	710 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	BENZO(A)PYRENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	CHRYSENE	9.3 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0	C032CA2701	EPA 8270-M	U	PYRENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.4 UG/KG	J	R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	J	R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	ACENAPHTHYLENE	21 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	ANTHRACENE	28 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	82 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(A)PYRENE	110 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	81 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	110 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	76 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	CHRYSENE	100 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	FLUORANTHENE	220 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	FLUORENE	9 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	77 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	NAPHTHALENE	8.5 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	PHENANTHRENE	190 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	PYRENE	270 UG/KG		R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	J	J	RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	ANTHRACENE	6.5 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(A)PYRENE	29 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	19 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	CHRYSENE	27 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.6 UG/KG	J	J	RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	FLUORANTHENE	49 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	FLUORENE	3.1 UG/KG	J	J	RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	PHENANTHRENE	27 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	0.5	C032CA2801	EPA 8270-M	U	PYRENE	8.8 UG/KG			RA0 REG	5/16/2002	5/20/2002	5/23/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	2-METHYLNAPHTHALENE	7.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	ACENAPHTHENE	3.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	ACENAPHTHYLENE	3.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	ANTHRACENE	6.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	BENZ(A)ANTHRACENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	BENZO(A)PYRENE	40 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	30 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	CHRYSENE	39 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	FLUORANTHENE	73 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	FLUORENE	2.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	24 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	NAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	PHENANTHRENE	35 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	2	C032CA2901	EPA 8270-M	U	PYRENE	85 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	ACENAPHTHYLENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	ANTHRACENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	BENZO(A)PYRENE	9.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	CHRYSENE	9.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	FLUORANTHENE	9 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	FLUORENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	NAPHTHALENE	1.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	PHENANTHRENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-62	SB	REG	4	C032CA3001	EPA 8270-M	U	PYRENE	10 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	2-METHYLNAPHTHALENE	53 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	ACENAPHTHENE	53 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	ACENAPHTHYLENE	53 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	ANTHRACENE	53 UG/KG	U	UJ	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	BENZ(A)ANTHRACENE	15 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	19 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	CHRYSENE	22 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	FLUORANTHENE	31 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	FLUORENE	53 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	NAPHTHALENE	3.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	PHENANTHRENE	7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	FD	0.5	C032CA3301	EPA 8270-M	U	PYRENE	34 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	ACENAPHTHENE	1.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	ACENAPHTHYLENE	2.8 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	ANTHRACENE	4.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	BENZ(A)ANTHRACENE	32 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	BENZO(A)PYRENE	45 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	36 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	36 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	CHRYSENE	38 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	FLUORANTHENE	64 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	45 UG/KG		J	000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	PHENANTHRENE	19 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002
32EDC-5-63	SB	REG	0	C032CA3101	EPA 8270-M	U	PYRENE	70 UG/KG			000 REG	5/14/2002	5/15/2002	5/31/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	2-METHYLNAPHTHALENE	27 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	ACENAPHTHENE	27 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	BENZ(A)ANTHRACENE	17 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	BENZO(A)PYRENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	23 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	27 UG/KG			000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	CHRYSENE	23 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	27 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	FLUORENE	27 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	NAPHTHALENE	27 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	PHENANTHRENE	6.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	0.5	C032CA3201	EPA 8270-M	U	PYRENE	36 UG/KG			000 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.5 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	ACENAPHTHENE	6.7 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	ACENAPHTHYLENE	24 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	ANTHRACENE	25 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZ(A)ANTHRACENE	130 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(A)PYRENE	210 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	150 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	160 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	160 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	CHRYSENE	150 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	31 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	FLUORANTHENE	350 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	FLUORENE	9.8 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	170 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	NAPHTHALENE	11 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	PHENANTHRENE	180 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	PYRENE	430 UG/KG	E	R	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.5 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	ACENAPHTHENE	7.2 UG/KG	JG	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	ACENAPHTHYLENE	25 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	ANTHRACENE	27 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZ(A)ANTHRACENE	130 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(A)PYRENE	230 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	160 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	220 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	130 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	CHRYSENE	170 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	44 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	FLUORANTHENE	330 UG/KG			DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	FLUORENE	10 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	180 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	J	R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	PHENANTHRENE	180 UG/KG		R	DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	2	C032CA3401	EPA 8270-M	U	PYRENE	390 UG/KG			DL1 REG	5/14/2002	5/15/2002	5/22/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.62 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	ACENAPHTHENE	1.6 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	ACENAPHTHYLENE	4.2 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	ANTHRACENE	3.7 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	BENZ(A)ANTHRACENE	35 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	BENZO(A)PYRENE	68 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	58 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	69 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	52 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	CHRYSENE	45 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.1 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	FLUORANTHENE	96 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	72 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	NAPHTHALENE	4.1 UG/KG	J	J	000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	PHENANTHRENE	26 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-63	SB	REG	4	C032CA3501	EPA 8270-M	U	PYRENE	120 UG/KG			000 REG	5/14/2002	5/15/2002	5/17/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	BENZO(A)PYRENE	6.3 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.2 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	CHRYSENE	4.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	FLUORANTHENE	7.9 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.8 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	PHENANTHRENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0	C032CA3601	EPA 8270-M	U	PYRENE	10 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.7 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	CHRYSENE	7.8 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	PHENANTHRENE	3.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	0.5	C032CA3701	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	BENZ(A)ANTHRACENE	53 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	BENZO(A)PYRENE	90 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	52 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	66 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	50 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	CHRYSENE	65 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.3 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	FLUORANTHENE	75 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	67 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	NAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	PHENANTHRENE	8.5 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	2	C032CA3801	EPA 8270-M	U	PYRENE	98 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	CHRYSENE	4.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-64	SB	REG	4	C032CA3901	EPA 8270-M	U	PYRENE	10 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	BENZO(A)PYRENE	2.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	CHRYSENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	PHENANTHRENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	FD	4	C032CA4401	EPA 8270-M	U	PYRENE	3.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	ACENAPHTHYLENE	1.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	BENZO(A)PYRENE	37 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	46 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	19 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	FLUORANTHENE	33 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	42 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	PHENANTHRENE	8.7 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0	C032CA4001	EPA 8270-M	U	PYRENE	47 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	0.5	C032CA4101	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	BENZO(A)PYRENE	7.6 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.3 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	CHRYSENE	3.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.3 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	2	C032CA4201	EPA 8270-M	U	PYRENE	8.8 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	ACENAPHTHYLENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	ANTHRACENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	CHRYSENE	2.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	NAPHTHALENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	PHENANTHRENE	6.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-65	SB	REG	4	C032CA4301	EPA 8270-M	U	PYRENE	7.8 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	BENZO(A)PYRENE	33 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	34 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.8 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	FLUORANTHENE	29 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	32 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	NAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	PHENANTHRENE	4.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0	C032CA4501	EPA 8270-M	U	PYRENE	48 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.94 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	BENZO(A)PYRENE	3.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	CHRYSENE	1.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	PHENANTHRENE	0.44 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	0.5	C032CA4601	EPA 8270-M	U	PYRENE	2.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.9 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	BENZO(A)PYRENE	8.9 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.4 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	7.2 UG/KG	B	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	CHRYSENE	13 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	FLUORANTHENE	18 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.2 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	PHENANTHRENE	9.6 UG/KG		J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	2	C032CA4701	EPA 8270-M	U	PYRENE	20 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.2 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.2 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	CHRYSENE	2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.2 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	NAPHTHALENE	0.39 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	PHENANTHRENE	1.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-66	SB	REG	4	C032CA4801	EPA 8270-M	U	PYRENE	9.5 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	18 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	20 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	CHRYSENE	10 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0	C032CA4901	EPA 8270-M	U	PYRENE	24 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.8 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	BENZO(A)PYRENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	CHRYSENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	FLUORANTHENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	0.5	C032CA5001	EPA 8270-M	U	PYRENE	21 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.4 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	CHRYSENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	FLUORANTHENE	3.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	2	C032CA5101	EPA 8270-M	U	PYRENE	7.3 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-67	SB	REG	4	C032CA5201	EPA 8270-M	U	PYRENE	4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	31 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	CHRYSENE	15 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	FLUORANTHENE	22 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	PHENANTHRENE	4.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0	C032CA5401	EPA 8270-M	U	PYRENE	33 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	BENZO(A)PYRENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	0.5	C032CA5501	EPA 8270-M	U	PYRENE	3.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	CHRYSENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	2	C032CA5601	EPA 8270-M	U	PYRENE	5.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.66 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-68	SB	REG	4	C032CA5701	EPA 8270-M	U	PYRENE	6.1 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	BENZO(A)PYRENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	CHRYSENE	5.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	PHENANTHRENE	2.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0	C032CA5801	EPA 8270-M	U	PYRENE	5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	BENZO(A)PYRENE	5.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	CHRYSENE	4.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	FLUORANTHENE	4.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.2 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	PHENANTHRENE	2.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	0.5	C032CA5901	EPA 8270-M	U	PYRENE	4.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	BENZ(A)ANTHRACENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	BENZO(A)PYRENE	2.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	CHRYSENE	7.2 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	PHENANTHRENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	2	C032CA6001	EPA 8270-M	U	PYRENE	2.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	ACENAPHTHYLENE	3.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	BENZ(A)ANTHRACENE	25 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	BENZO(A)PYRENE	36 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	23 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	CHRYSENE	30 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	FLUORANTHENE	71 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	FLUORENE	1.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	PHENANTHRENE	30 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-69	SB	REG	4	C032CA6101	EPA 8270-M	U	PYRENE	85 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	ACENAPHTHYLENE	3.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	ANTHRACENE	6.9 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	BENZO(A)PYRENE	31 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	CHRYSENE	30 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	10 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	FLUORANTHENE	32 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	NAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	PHENANTHRENE	14 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0	C032C78501	EPA 8270-M	U	PYRENE	36 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	BENZO(A)PYRENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	CHRYSENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	29 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	0.5	C032C78601	EPA 8270-M	U	PYRENE	5.7 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	ACENAPHTHENE	46 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	ANTHRACENE	170 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZ(A)ANTHRACENE	880 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(A)PYRENE	640 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	680 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	330 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	490 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	CHRYSENE	830 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	150 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	FLUORANTHENE	1500 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	FLUORENE	65 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	400 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	NAPHTHALENE	2.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	PHENANTHRENE	850 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	PYRENE	1100 UG/KG	E	R	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZ(A)ANTHRACENE	830 UG/KG	D	J	DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(A)PYRENE	640 UG/KG	D	J	DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	740 UG/KG	D		DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	340 UG/KG	D		DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	580 UG/KG	D		DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	CHRYSENE	900 UG/KG	D	J	DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	FLUORANTHENE	1700 UG/KG	D	J	DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	350 UG/KG	D		DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	PHENANTHRENE	960 UG/KG	D	J	DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	2	C032C78701	EPA 8270-M	U	PYRENE	1100 UG/KG	D	J	DL1 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	ACENAPHTHYLENE	2.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	ANTHRACENE	5.1 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.4 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6.8 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	FLUORANTHENE	6.4 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.9 UG/KG			000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-7	SB	REG	4	C032C78801	EPA 8270-M	U	PYRENE	4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/14/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.93 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	ACENAPHTHENE	15 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	ACENAPHTHYLENE	13 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	ANTHRACENE	20 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZ(A)ANTHRACENE	120 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(A)PYRENE	180 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	120 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	CHRYSENE	130 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	22 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	FLUORANTHENE	360 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	FLUORENE	3.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	200 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	NAPHTHALENE	6 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	PHENANTHRENE	200 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	PYRENE	430 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.1 UG/KG	J	R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	ACENAPHTHENE	12 UG/KG	Q	R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG	J	R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	ANTHRACENE	16 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZ(A)ANTHRACENE	93 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(A)PYRENE	140 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	88 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	CHRYSENE	100 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	19 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	FLUORANTHENE	310 UG/KG			DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	FLUORENE	4.2 UG/KG	J	R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	160 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	NAPHTHALENE	4.6 UG/KG	J	R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	PHENANTHRENE	150 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	FD	4	C032CA6601	EPA 8270-M	U	PYRENE	380 UG/KG			DL1 REG	5/15/2002	5/16/2002	6/3/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.67 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	ACENAPHTHENE	10 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	ACENAPHTHYLENE	10 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	BENZO(A)PYRENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	43 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	CHRYSENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	FLUORANTHENE	22 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	FLUORENE	10 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	23 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	NAPHTHALENE	0.72 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	PHENANTHRENE	7.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-70	SB	REG	0	C032CA6201	EPA 8270-M	U	PYRENE	26 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	ANTHRACENE	0.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	BENZO(A)PYRENE	10 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.8 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.9 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	CHRYSENE	6.3 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	FLUORANTHENE	12 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	NAPHTHALENE	0.48 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	PHENANTHRENE	3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	0.5	C032CA6301	EPA 8270-M	U	PYRENE	17 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	2-METHYLNAPHTHALENE	11 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	ACENAPHTHYLENE	11 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	ANTHRACENE	11 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	BENZO(A)PYRENE	7.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	CHRYSENE	6.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	FLUORANTHENE	6.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	FLUORENE	11 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	NAPHTHALENE	11 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	PHENANTHRENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	2	C032CA6401	EPA 8270-M	U	PYRENE	8.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	ACENAPHTHYLENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	BENZ(A)ANTHRACENE	17 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	BENZO(A)PYRENE	30 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	38 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	20 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	CHRYSENE	19 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	FLUORANTHENE	47 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	40 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	NAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	PHENANTHRENE	17 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-70	SB	REG	4	C032CA6501	EPA 8270-M	U	PYRENE	59 UG/KG			000 REG	5/15/2002	5/16/2002	5/31/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	BENZO(A)PYRENE	31 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	31 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	25 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	CHRYSENE	33 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	FLUORANTHENE	48 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	NAPHTHALENE	2.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	PHENANTHRENE	19 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0	C032CA6701	EPA 8270-M	U	PYRENE	53 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	ACENAPHTHENE	39 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	ACENAPHTHYLENE	63 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	ANTHRACENE	210 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZ(A)ANTHRACENE	590 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(A)PYRENE	890 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	800 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	620 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	260 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	CHRYSENE	610 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	91 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	FLUORANTHENE	1600 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	FLUORENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	730 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	NAPHTHALENE	23 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	PHENANTHRENE	880 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	PYRENE	1600 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	2-METHYLNAPHTHALENE	26 UG/KG	U	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	ACENAPHTHENE	40 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	ACENAPHTHYLENE	35 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	ANTHRACENE	170 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZ(A)ANTHRACENE	510 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(A)PYRENE	740 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	480 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	600 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	510 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	CHRYSENE	600 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	63 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	FLUORANTHENE	1400 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	FLUORENE	23 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	540 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	NAPHTHALENE	25 UG/KG	JD	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	PHENANTHRENE	870 UG/KG	D	R	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	0.5	C032CA6801	EPA 8270-M	U	PYRENE	1900 UG/KG	D	J	DL1 REG	5/15/2002	5/16/2002	5/18/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	ACENAPHTHYLENE	1.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	BENZ(A)ANTHRACENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	25 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.4 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	CHRYSENE	16 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	FLUORANTHENE	33 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	30 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	PHENANTHRENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	2	C032CA6901	EPA 8270-M	U	PYRENE	41 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	BENZ(A)ANTHRACENE	3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	BENZO(A)PYRENE	4.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	PHENANTHRENE	2.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-71	SB	REG	4	C032CA7001	EPA 8270-M	U	PYRENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	CHRYSENE	12 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	FLUORANTHENE	14 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0	C032CA7101	EPA 8270-M	U	PYRENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	ACENAPHTHENE	7.4 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	ACENAPHTHYLENE	6.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	ANTHRACENE	7.5 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZ(A)ANTHRACENE	40 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(A)PYRENE	58 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	60 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	38 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	27 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	CHRYSENE	55 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.5 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	FLUORANTHENE	96 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	FLUORENE	4.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	NAPHTHALENE	2.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	PHENANTHRENE	45 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	PYRENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	ACENAPHTHENE	4.7 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	ACENAPHTHYLENE	3.8 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	ANTHRACENE	4.2 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(A)PYRENE	35 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	22 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	CHRYSENE	31 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.8 UG/KG	J	J	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	FLUORANTHENE	58 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	FLUORENE	3.1 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	20 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	PHENANTHRENE	41 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	0.5	C032CA7201	EPA 8270-M	U	PYRENE	9.8 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	ACENAPHTHYLENE	3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZ(A)ANTHRACENE	20 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(A)PYRENE	37 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	27 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	CHRYSENE	42 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	J	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	FLUORANTHENE	42 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	FLUORENE	2.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	NAPHTHALENE	1.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	PHENANTHRENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	PYRENE	68 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.4 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	ACENAPHTHENE	2.6 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	ACENAPHTHYLENE	3.1 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	ANTHRACENE	2.5 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZ(A)ANTHRACENE	19 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(A)PYRENE	34 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	22 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	CHRYSENE	36 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	J	J	RA0 REG	5/15/2002	5/20/2002	5/23/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	FLUORANTHENE	42 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	NAPHTHALENE	6.4 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	PHENANTHRENE	25 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	2	C032CA7301	EPA 8270-M	U	PYRENE	61 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	ACENAPHTHENE	4.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	ACENAPHTHYLENE	4.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	ANTHRACENE	13 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	BENZ(A)ANTHRACENE	38 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	BENZO(A)PYRENE	52 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	36 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	37 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	CHRYSENE	43 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	FLUORANTHENE	100 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	FLUORENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	16 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	NAPHTHALENE	1.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	PHENANTHRENE	55 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-72	SB	REG	4	C032CA7401	EPA 8270-M	U	PYRENE	17 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	BENZO(A)PYRENE	5.6 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	CHRYSENE	4.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	FLUORANTHENE	9.1 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	FD	0.5	C032CA7701	EPA 8270-M	U	PYRENE	13 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	2-METHYLNAPHTHALENE	1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	ACENAPHTHYLENE	15 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	ANTHRACENE	16 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZ(A)ANTHRACENE	81 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(A)PYRENE	120 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	88 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	73 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	89 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	CHRYSENE	86 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	FLUORANTHENE	180 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	FLUORENE	4.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	43 UG/KG		R	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	PHENANTHRENE	99 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	PYRENE	34 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	ACENAPHTHENE	4.5 UG/KG	J	R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	ACENAPHTHYLENE	9.6 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	ANTHRACENE	9.6 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZ(A)ANTHRACENE	54 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(A)PYRENE	86 UG/KG			RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	60 UG/KG			RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	79 UG/KG			RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	52 UG/KG			RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	CHRYSENE	61 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG			RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	FLUORANTHENE	130 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	FLUORENE	2.4 UG/KG	J	R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	60 UG/KG			RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	PHENANTHRENE	75 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0	C032CA7501	EPA 8270-M	U	PYRENE	190 UG/KG		R	RA0 REG	5/15/2002	5/22/2002	5/23/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.5 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	BENZO(A)PYRENE	6.7 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	CHRYSENE	5.8 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	FLUORANTHENE	10 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.7 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	PHENANTHRENE	4.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	0.5	C032CA7601	EPA 8270-M	U	PYRENE	1.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	ACENAPHTHYLENE	35 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	ANTHRACENE	35 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	BENZ(A)ANTHRACENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	BENZO(A)PYRENE	200 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	140 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	100 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	140 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	CHRYSENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	19 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	FLUORANTHENE	350 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	FLUORENE	13 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	68 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	NAPHTHALENE	3.9 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	PHENANTHRENE	310 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	2	C032CA7801	EPA 8270-M	U	PYRENE	510 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	2-METHYLNAPHTHALENE	52 UG/KG	B	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ACENAPHTHENE	62 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ACENAPHTHYLENE	600 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ANTHRACENE	540 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2000 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(A)PYRENE	2400 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1800 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1500 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1600 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	CHRYSENE	1800 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	370 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	FLUORANTHENE	4200 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	FLUORENE	490 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1600 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	NAPHTHALENE	100 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	PHENANTHRENE	4000 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	PYRENE	5200 UG/KG	E	R	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	2-METHYLNAPHTHALENE	55 UG/KG	JB	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ACENAPHTHENE	86 UG/KG	JG	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ACENAPHTHYLENE	900 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ANTHRACENE	880 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2700 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(A)PYRENE	3800 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2500 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2700 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2100 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	CHRYSENE	2900 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	620 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	FLUORANTHENE	7900 UG/KG	E	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	FLUORENE	640 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2400 UG/KG		J	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	NAPHTHALENE	120 UG/KG		R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	PHENANTHRENE	7800 UG/KG	E	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	PYRENE	9100 UG/KG	E	R	DL1 REG	5/15/2002	5/16/2002	5/22/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	2-METHYLNAPHTHALENE	75 UG/KG	JB	R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ACENAPHTHENE	94 UG/KG	J	R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ACENAPHTHYLENE	830 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	ANTHRACENE	870 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2700 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(A)PYRENE	3000 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2600 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2300 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2300 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	CHRYSENE	2800 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	300 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	FLUORANTHENE	7700 UG/KG			DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	FLUORENE	680 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2200 UG/KG		R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	NAPHTHALENE	110 UG/KG	J	R	DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	PHENANTHRENE	7500 UG/KG			DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-73	SB	REG	4	C032CA7901	EPA 8270-M	U	PYRENE	9700 UG/KG			DL2 REG	5/15/2002	5/16/2002	6/4/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.6 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	ACENAPHTHENE	8.5 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	ACENAPHTHYLENE	34 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	ANTHRACENE	22 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	BENZ(A)ANTHRACENE	170 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	BENZO(A)PYRENE	290 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	240 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	170 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	150 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	CHRYSENE	220 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	29 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	FLUORANTHENE	300 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	FLUORENE	8.7 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	100 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	NAPHTHALENE	9.6 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	PHENANTHRENE	110 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0	C032CA8001	EPA 8270-M	U	PYRENE	480 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	ACENAPHTHYLENE	40 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	ANTHRACENE	18 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZ(A)ANTHRACENE	79 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	90 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	85 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	88 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	CHRYSENE	92 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	FLUORANTHENE	230 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	FLUORENE	12 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	59 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	NAPHTHALENE	11 UG/KG			000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	PHENANTHRENE	280 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	PYRENE	40 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	ACENAPHTHENE	4.5 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	ACENAPHTHYLENE	15 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	ANTHRACENE	6.8 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZ(A)ANTHRACENE	38 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(A)PYRENE	68 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	48 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	58 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	39 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	CHRYSENE	49 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	FLUORANTHENE	98 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	FLUORENE	5.2 UG/KG	J	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	44 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	PHENANTHRENE	72 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	0.5	C032CA8101	EPA 8270-M	U	PYRENE	130 UG/KG		R	RA0 REG	5/15/2002	5/20/2002	5/23/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.8 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	ACENAPHTHYLENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	BENZO(A)PYRENE	39 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	38 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	25 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	CHRYSENE	42 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	FLUORANTHENE	39 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	FLUORENE	2.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	15 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	NAPHTHALENE	3.1 UG/KG	J	J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	UJ	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-74	SB	REG	2	C032CA8201	EPA 8270-M	U	PYRENE	63 UG/KG		J	000 REG	5/15/2002	5/16/2002	5/17/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.46 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	BENZ(A)ANTHRACENE	2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	BENZO(A)PYRENE	2.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	CHRYSENE	2.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.39 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	FLUORANTHENE	3.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	NAPHTHALENE	0.55 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	PHENANTHRENE	1.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-75	SB	FD	4	C032CA8801	EPA 8270-M	U	PYRENE	5.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.3 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	BENZO(A)PYRENE	21 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	16 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	21 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	CHRYSENE	20 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	FLUORANTHENE	31 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	PHENANTHRENE	16 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0	C032CA8401	EPA 8270-M	U	PYRENE	33 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	BENZO(A)PYRENE	3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	CHRYSENE	2.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.64 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	FLUORANTHENE	3.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	NAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	PHENANTHRENE	1.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	0.5	C032CA8501	EPA 8270-M	U	PYRENE	4.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.96 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	ACENAPHTHENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	ACENAPHTHYLENE	21 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	ANTHRACENE	19 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	BENZO(A)PYRENE	120 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	110 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	76 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	CHRYSENE	92 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	FLUORANTHENE	220 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	FLUORENE	5.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	100 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	NAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	PHENANTHRENE	110 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	2	C032CA8601	EPA 8270-M	U	PYRENE	270 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.57 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	CHRYSENE	2.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.32 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	FLUORANTHENE	6.1 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	NAPHTHALENE	0.77 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	PHENANTHRENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-75	SB	REG	4	C032CA8701	EPA 8270-M	U	PYRENE	6.9 UG/KG			000 REG	5/20/2002	5/21/2002	5/25/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0	C032CA8901	EPA 8270-M	U	PYRENE	2.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	CHRYSENE	4.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	FLUORANTHENE	4.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	0.5	C032CA9001	EPA 8270-M	U	PYRENE	6.3 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	BENZO(A)PYRENE	2.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	CHRYSENE	3.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	FLUORANTHENE	5.7 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	PHENANTHRENE	2.8 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	2	C032CA9101	EPA 8270-M	U	PYRENE	5.8 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	ACENAPHTHENE	2.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	ACENAPHTHYLENE	4.2 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	ANTHRACENE	11 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	BENZ(A)ANTHRACENE	55 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	BENZO(A)PYRENE	86 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	62 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	90 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	67 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	CHRYSENE	79 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.9 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	FLUORANTHENE	150 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	FLUORENE	1.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	71 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	NAPHTHALENE	8.9 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	PHENANTHRENE	56 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-76	SB	REG	4	C032CA9201	EPA 8270-M	U	PYRENE	190 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	BENZO(A)PYRENE	5.5 UG/KG			000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	CHRYSENE	2.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.8 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	NAPHTHALENE	0.49 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	PHENANTHRENE	1.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0	C032CA9301	EPA 8270-M	U	PYRENE	2.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	BENZ(A)ANTHRACENE	1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	CHRYSENE	1.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	PHENANTHRENE	0.77 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	0.5	C032CA9401	EPA 8270-M	U	PYRENE	3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/25/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	JB	UJ	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	JB	UJ	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	2	C032CA9501	EPA 8270-M	U	PYRENE	5.4 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.7 UG/KG	JB	UJ	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	BENZO(A)PYRENE	4 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	CHRYSENE	4.4 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	FLUORANTHENE	5.2 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	JB	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	PHENANTHRENE	4.5 UG/KG	JB	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-77	SB	REG	4	C032CA9601	EPA 8270-M	U	PYRENE	9.3 UG/KG	B		000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	BENZO(A)PYRENE	4.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.5 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	CHRYSENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	FLUORANTHENE	4.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	FD	0.5	C032CA9901	EPA 8270-M	U	PYRENE	6.7 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	2	C032CA0001	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	BENZ(A)ANTHRACENE	2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	BENZO(A)PYRENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.5 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	CHRYSENE	3.6 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	PHENANTHRENE	3.5 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0	C032CA9701	EPA 8270-M	U	PYRENE	6 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	0.5	C032CA9801	EPA 8270-M	U	PYRENE	2 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	ACENAPHTHENE	1.7 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.4 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	20 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.7 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	CHRYSENE	7.9 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	FLUORANTHENE	10 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	18 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	NAPHTHALENE	4.8 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	PHENANTHRENE	3.9 UG/KG	J	J	000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-78	SB	REG	4	C032CB0101	EPA 8270-M	U	PYRENE	26 UG/KG			000 REG	5/22/2002	5/23/2002	5/24/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	ACENAPHTHYLENE	1.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	ANTHRACENE	0.67 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.5 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	26 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	10 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	CHRYSENE	8.6 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	FLUORANTHENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	25 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	NAPHTHALENE	0.54 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	PHENANTHRENE	2.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0	C032CB0201	EPA 8270-M	U	PYRENE	20 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.98 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	BENZO(A)PYRENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	CHRYSENE	1.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.29 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	PHENANTHRENE	0.59 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	0.5	C032CB0301	EPA 8270-M	U	PYRENE	2.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.83 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	BENZO(A)PYRENE	1.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	CHRYSENE	0.96 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	PHENANTHRENE	0.42 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	2	C032CB0401	EPA 8270-M	U	PYRENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.86 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	BENZ(A)ANTHRACENE	34 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	BENZO(A)PYRENE	59 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	36 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	48 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	32 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	CHRYSENE	38 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	FLUORANTHENE	42 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	FLUORENE	6.5 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	52 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	NAPHTHALENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	PHENANTHRENE	3.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-79	SB	REG	4	C032CB0501	EPA 8270-M	U	PYRENE	65 UG/KG			000 REG	5/23/2002	5/24/2002	5/26/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.41 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	ACENAPHTHYLENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.59 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	BENZO(A)PYRENE	0.82 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	0.77 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	0.84 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	CHRYSENE	0.98 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	FLUORANTHENE	0.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	0.83 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	NAPHTHALENE	0.45 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	PHENANTHRENE	0.64 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	FD	0.5	C032C79101	EPA 8270-M	U	PYRENE	1.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	20 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	CHRYSENE	21 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	FLUORANTHENE	29 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	NAPHTHALENE	2.7 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	PHENANTHRENE	15 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0	C032C78901	EPA 8270-M	U	PYRENE	34 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.79 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.82 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	BENZO(A)PYRENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	CHRYSENE	1.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.24 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	NAPHTHALENE	0.56 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	PHENANTHRENE	1.1 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	0.5	C032C79001	EPA 8270-M	U	PYRENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	0.61 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	FLUORANTHENE	0.34 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	2	C032C79201	EPA 8270-M	U	PYRENE	0.56 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	ACENAPHTHENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	ACENAPHTHYLENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	ANTHRACENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.83 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	BENZO(A)PYRENE	2.3 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.8 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	CHRYSENE	1.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	FLUORENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	NAPHTHALENE	6.3 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	PHENANTHRENE	0.45 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-8	SB	REG	4	C032C79301	EPA 8270-M	U	PYRENE	4.4 UG/KG	J	J	000 REG	5/13/2002	5/14/2002	5/16/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-80	SB	FD	4	C032CB1001	EPA 8270-M	U	PYRENE	3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	BENZO(A)PYRENE	7 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.7 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.6 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	CHRYSENE	6 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	FLUORANTHENE	7.5 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6.1 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	PHENANTHRENE	1.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0	C032CB0601	EPA 8270-M	U	PYRENE	9.9 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	BENZO(A)PYRENE	3.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	CHRYSENE	2.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	FLUORANTHENE	4.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	0.5	C032CB0701	EPA 8270-M	U	PYRENE	5.9 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	FLUORANTHENE	2.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	2	C032CB0801	EPA 8270-M	U	PYRENE	3.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.5 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-80	SB	REG	4	C032CB0901	EPA 8270-M	U	PYRENE	4.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	ANTHRACENE	5.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.9 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	BENZO(A)PYRENE	9.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.5 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	FLUORENE	5.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	NAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	PHENANTHRENE	8.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0	C032CB1101	EPA 8270-M	U	PYRENE	20 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	ACENAPHTHENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	ACENAPHTHYLENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	ANTHRACENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	BENZO(A)PYRENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.5 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	CHRYSENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	FLUORANTHENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	FLUORENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	NAPHTHALENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	PHENANTHRENE	6.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	0.5	C032CB1201	EPA 8270-M	U	PYRENE	2.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	BENZO(A)PYRENE	9.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.4 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	CHRYSENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	PHENANTHRENE	4.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	2	C032CB1301	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.8 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	BENZO(A)PYRENE	15 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	10 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	CHRYSENE	9.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	FLUORANTHENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	PHENANTHRENE	4.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-81	SB	REG	4	C032CB1401	EPA 8270-M	U	PYRENE	29 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0	C032CB1501	EPA 8270-M	U	PYRENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	ACENAPHTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	ACENAPHTHYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.3 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	BENZO(A)PYRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.3 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	CHRYSENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	FLUORANTHENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	FLUORENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	NAPHTHALENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	0.5	C032CB1601	EPA 8270-M	U	PYRENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	BENZ(A)ANTHRACENE	22 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	BENZO(A)PYRENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	36 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	31 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	CHRYSENE	33 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	FLUORANTHENE	36 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	PHENANTHRENE	9.9 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	2	C032CB1701	EPA 8270-M	U	PYRENE	44 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	ANTHRACENE	2.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	BENZO(A)PYRENE	27 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.4 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	CHRYSENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	FLUORANTHENE	34 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	31 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	PHENANTHRENE	9.4 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-82	SB	REG	4	C032CB1801	EPA 8270-M	U	PYRENE	50 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	BENZO(A)PYRENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	CHRYSENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.33 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	PHENANTHRENE	0.58 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	FD	0.5	C032CB2101	EPA 8270-M	U	PYRENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	ANTHRACENE	0.71 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	13 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	10 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	CHRYSENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	FLUORANTHENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	10 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	NAPHTHALENE	0.51 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	PHENANTHRENE	4.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0	C032CB1901	EPA 8270-M	U	PYRENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	BENZO(A)PYRENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	CHRYSENE	2.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.39 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	FLUORANTHENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	PHENANTHRENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	0.5	C032CB2001	EPA 8270-M	U	PYRENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	BENZ(A)ANTHRACENE	0.88 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	BENZO(A)PYRENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	CHRYSENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.45 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	FLUORANTHENE	1.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	PHENANTHRENE	0.51 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	2	C032CB2201	EPA 8270-M	U	PYRENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	ACENAPHTHYLENE	1.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	ANTHRACENE	0.93 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	BENZO(A)PYRENE	6.4 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	4.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	4.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.96 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	FLUORANTHENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	4.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-83	SB	REG	4	C032CB2301	EPA 8270-M	U	PYRENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	ACENAPHTHENE	2.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	ACENAPHTHYLENE	4.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	ANTHRACENE	10 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	BENZ(A)ANTHRACENE	69 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	BENZO(A)PYRENE	140 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	89 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	CHRYSENE	89 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	FLUORANTHENE	170 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	FLUORENE	2.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	170 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	NAPHTHALENE	9.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	PHENANTHRENE	48 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0	C032CB2401	EPA 8270-M	U	PYRENE	220 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	ACENAPHTHYLENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	BENZ(A)ANTHRACENE	42 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	BENZO(A)PYRENE	96 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	69 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	51 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	CHRYSENE	51 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	FLUORANTHENE	92 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	110 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	PHENANTHRENE	20 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	0.5	C032CB2501	EPA 8270-M	U	PYRENE	140 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	ACENAPHTHYLENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.5 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	15 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.4 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	CHRYSENE	6.2 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	FLUORANTHENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	PHENANTHRENE	3.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	2	C032CB2601	EPA 8270-M	U	PYRENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	BENZ(A)ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	BENZO(A)PYRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	CHRYSENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	PHENANTHRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-84	SB	REG	4	C032CB2701	EPA 8270-M	U	PYRENE	6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	2-METHYLNAPHTHALENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	ACENAPHTHENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	ACENAPHTHYLENE	56 UG/KG	U	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	ANTHRACENE	56 UG/KG	U	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	BENZO(A)PYRENE	8.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	56 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	36 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	CHRYSENE	6.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	56 UG/KG	U	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	FLUORANTHENE	6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	FLUORENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	NAPHTHALENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	PHENANTHRENE	56 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	FD	4	C032CB3201	EPA 8270-M	U	PYRENE	8.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	ACENAPHTHENE	6.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	ACENAPHTHYLENE	19 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
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32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	ANTHRACENE	17 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	100 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(A)PYRENE	150 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	120 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	130 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	94 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	CHRYSENE	110 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	25 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	FLUORANTHENE	260 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	FLUORENE	4.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	130 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	NAPHTHALENE	8.4 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	PHENANTHRENE	130 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	PYRENE	320 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.1 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	ACENAPHTHENE	8.2 UG/KG	JQ	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	ACENAPHTHYLENE	24 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	ANTHRACENE	22 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(A)PYRENE	200 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	110 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	150 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	CHRYSENE	130 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	31 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	FLUORANTHENE	290 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	FLUORENE	6.1 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002

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Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	160 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	NAPHTHALENE	8.9 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	PHENANTHRENE	140 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0	C032CB2801	EPA 8270-M	U	PYRENE	350 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	ACENAPHTHENE	19 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	ACENAPHTHYLENE	40 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	ANTHRACENE	49 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZ(A)ANTHRACENE	190 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(A)PYRENE	290 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	210 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	250 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	190 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	CHRYSENE	190 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	49 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	FLUORANTHENE	530 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	FLUORENE	11 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	250 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	NAPHTHALENE	15 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	PHENANTHRENE	260 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	PYRENE	670 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	2-METHYLNAPHTHALENE	4 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	ACENAPHTHENE	23 UG/KG	JG	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	ACENAPHTHYLENE	49 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	ANTHRACENE	49 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZ(A)ANTHRACENE	220 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(A)PYRENE	390 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	220 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	320 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	240 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	CHRYSENE	250 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	67 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	FLUORANTHENE	540 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	FLUORENE	13 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	310 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	NAPHTHALENE	15 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	PHENANTHRENE	310 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	0.5	C032CB2901	EPA 8270-M	U	PYRENE	640 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	ACENAPHTHENE	11 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	ACENAPHTHYLENE	50 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	ANTHRACENE	51 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZ(A)ANTHRACENE	210 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(A)PYRENE	350 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	230 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	250 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	230 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	CHRYSENE	230 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	55 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	FLUORANTHENE	550 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	FLUORENE	8 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	260 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	NAPHTHALENE	15 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	PHENANTHRENE	210 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	PYRENE	720 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	2-METHYLNAPHTHALENE	4 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	ACENAPHTHENE	14 UG/KG	JQ	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	ACENAPHTHYLENE	57 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	ANTHRACENE	56 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZ(A)ANTHRACENE	280 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(A)PYRENE	470 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	270 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	380 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	280 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	CHRYSENE	310 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	69 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	FLUORANTHENE	590 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	FLUORENE	9.7 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	370 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	NAPHTHALENE	18 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	PHENANTHRENE	270 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	2	C032CB3001	EPA 8270-M	U	PYRENE	700 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	2-METHYLNAPHTHALENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	ACENAPHTHENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	ACENAPHTHYLENE	56 UG/KG	U	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	ANTHRACENE	56 UG/KG	U	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	16 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	90 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	11 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	CHRYSENE	13 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	FLUORANTHENE	28 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	FLUORENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	66 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	NAPHTHALENE	56 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	PHENANTHRENE	18 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-85	SB	REG	4	C032CB3101	EPA 8270-M	U	PYRENE	33 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	ACENAPHTHYLENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	BENZ(A)ANTHRACENE	7.2 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.9 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	CHRYSENE	8.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	NAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0	C032CB3301	EPA 8270-M	U	PYRENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	ACENAPHTHENE	32 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	ACENAPHTHYLENE	68 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	ANTHRACENE	92 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	BENZ(A)ANTHRACENE	310 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	BENZO(A)PYRENE	450 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	290 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	440 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	290 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	CHRYSENE	350 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	60 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	FLUORANTHENE	710 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	FLUORENE	23 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	330 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	NAPHTHALENE	22 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	PHENANTHRENE	700 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	0.5	C032CB3401	EPA 8270-M	U	PYRENE	980 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	2-METHYLNAPHTHALENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	ACENAPHTHENE	9.2 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	ACENAPHTHYLENE	16 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	ANTHRACENE	25 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	BENZ(A)ANTHRACENE	92 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	BENZO(A)PYRENE	150 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	130 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	95 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	CHRYSENE	110 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	FLUORANTHENE	230 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	FLUORENE	7.8 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	98 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	NAPHTHALENE	8.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	PHENANTHRENE	130 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	2	C032CB3501	EPA 8270-M	U	PYRENE	300 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	2-METHYLNAPHTHALENE	24 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	ACENAPHTHENE	93 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	ACENAPHTHYLENE	300 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	ANTHRACENE	480 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	BENZ(A)ANTHRACENE	1100 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	BENZO(A)PYRENE	1500 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1100 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1200 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	710 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	CHRYSENE	1200 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	190 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	FLUORANTHENE	2500 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	FLUORENE	160 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	990 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	NAPHTHALENE	85 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	PHENANTHRENE	2300 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	PYRENE	2800 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	FLUORANTHENE	2800 UG/KG	D		DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	PHENANTHRENE	2400 UG/KG	D	J	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-86	SB	REG	4	C032CB3601	EPA 8270-M	U	PYRENE	3300 UG/KG	D		DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	ACENAPHTHENE	4.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	ACENAPHTHYLENE	20 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	ANTHRACENE	33 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	BENZ(A)ANTHRACENE	160 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	BENZO(A)PYRENE	250 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	170 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	230 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	160 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	CHRYSENE	190 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	24 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	FLUORANTHENE	380 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	FLUORENE	9.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	220 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	NAPHTHALENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	PHENANTHRENE	190 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0	C032CB3701	EPA 8270-M	U	PYRENE	510 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	ACENAPHTHENE	6.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	ACENAPHTHYLENE	25 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	ANTHRACENE	42 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	BENZ(A)ANTHRACENE	190 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	BENZO(A)PYRENE	300 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	190 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	250 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	190 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	CHRYSENE	210 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	27 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	FLUORANTHENE	460 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	FLUORENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	250 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	NAPHTHALENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	PHENANTHRENE	230 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	0.5	C032CB3801	EPA 8270-M	U	PYRENE	600 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	ACENAPHTHENE	2.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	ACENAPHTHYLENE	9.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	ANTHRACENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	BENZ(A)ANTHRACENE	64 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	BENZO(A)PYRENE	110 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	65 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	94 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	67 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	CHRYSENE	73 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	9.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	FLUORANTHENE	150 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	FLUORENE	4.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	96 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	NAPHTHALENE	7.5 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	PHENANTHRENE	77 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	2	C032CB3901	EPA 8270-M	U	PYRENE	210 UG/KG			000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	BENZO(A)PYRENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	CHRYSENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	FLUORANTHENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	PHENANTHRENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-87	SB	REG	4	C032CB4001	EPA 8270-M	U	PYRENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	ACENAPHTHENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	ACENAPHTHYLENE	72 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	ANTHRACENE	79 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZ(A)ANTHRACENE	360 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(A)PYRENE	530 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	400 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	480 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	340 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	CHRYSENE	370 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	93 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	FLUORANTHENE	960 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	FLUORENE	24 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	490 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	NAPHTHALENE	17 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	PHENANTHRENE	420 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	PYRENE	1200 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	ACENAPHTHENE	20 UG/KG	JQ	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	ACENAPHTHYLENE	92 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	ANTHRACENE	93 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZ(A)ANTHRACENE	430 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(A)PYRENE	760 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	440 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	610 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	480 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	CHRYSENE	540 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	130 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	FLUORANTHENE	1100 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	FLUORENE	27 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	640 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	NAPHTHALENE	22 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	PHENANTHRENE	530 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	FD	0.5	C032CB4301	EPA 8270-M	U	PYRENE	1300 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	ACENAPHTHENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	ACENAPHTHYLENE	8.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	ANTHRACENE	11 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	BENZ(A)ANTHRACENE	55 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	BENZO(A)PYRENE	80 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	62 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	86 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	70 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	CHRYSENE	72 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	17 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	FLUORANTHENE	140 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	FLUORENE	3.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	83 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	NAPHTHALENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	PHENANTHRENE	63 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0	C032CB4101	EPA 8270-M	U	PYRENE	170 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	ACENAPHTHENE	15 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	ACENAPHTHYLENE	65 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	ANTHRACENE	69 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZ(A)ANTHRACENE	320 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(A)PYRENE	460 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	360 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	420 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	290 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	CHRYSENE	320 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	80 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	FLUORANTHENE	800 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	FLUORENE	27 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	430 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	NAPHTHALENE	20 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	PHENANTHRENE	440 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	PYRENE	980 UG/KG	E	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.5 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	ACENAPHTHENE	23 UG/KG	JQ	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	ACENAPHTHYLENE	100 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	ANTHRACENE	92 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZ(A)ANTHRACENE	430 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(A)PYRENE	720 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	440 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	560 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	450 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	CHRYSENE	500 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	110 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	FLUORANTHENE	1000 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	FLUORENE	34 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	510 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	NAPHTHALENE	26 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	PHENANTHRENE	630 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	0.5	C032CB4201	EPA 8270-M	U	PYRENE	1200 UG/KG		J	DL1 REG	5/16/2002	5/17/2002	5/22/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	ANTHRACENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	BENZO(A)PYRENE	16 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	9.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	13 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	CHRYSENE	12 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	FLUORANTHENE	30 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	NAPHTHALENE	0.84 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	PHENANTHRENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	2	C032CB4401	EPA 8270-M	U	PYRENE	38 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	R	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	ANTHRACENE	0.51 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	BENZ(A)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	BENZO(A)PYRENE	2.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	2.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	CHRYSENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	0.37 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	FLUORANTHENE	5.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	NAPHTHALENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	PHENANTHRENE	5.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-88	SB	REG	4	C032CB4501	EPA 8270-M	U	PYRENE	6.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	BENZ(A)ANTHRACENE	9 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	CHRYSENE	13 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	FLUORANTHENE	24 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	PHENANTHRENE	8.6 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0	C032CB4601	EPA 8270-M	U	PYRENE	34 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	BENZ(A)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	BENZO(A)PYRENE	9 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	7.2 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.6 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	CHRYSENE	7.2 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	FLUORANTHENE	13 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.9 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	PHENANTHRENE	3.8 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	0.5	C032CB4701	EPA 8270-M	U	PYRENE	19 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	BENZ(A)ANTHRACENE	11 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	15 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	28 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	CHRYSENE	17 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	FLUORANTHENE	34 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	PHENANTHRENE	18 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	2	C032CB4801	EPA 8270-M	U	PYRENE	46 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	2-METHYLNAPHTHALENE	35 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	ACENAPHTHENE	150 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	ACENAPHTHYLENE	250 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	ANTHRACENE	510 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZ(A)ANTHRACENE	1200 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(A)PYRENE	1600 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	970 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1200 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1000 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	CHRYSENE	1300 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	130 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	FLUORANTHENE	3500 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	FLUORENE	250 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1100 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	NAPHTHALENE	60 UG/KG			000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	PHENANTHRENE	3400 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	PYRENE	3800 UG/KG	E	R	000 REG	5/20/2002	5/21/2002	5/22/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	2-METHYLNAPHTHALENE	48 UG/KG	JD	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	ACENAPHTHENE	170 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	ACENAPHTHYLENE	290 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	ANTHRACENE	540 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZ(A)ANTHRACENE	1300 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(A)PYRENE	1700 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	1000 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1100 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	970 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	CHRYSENE	1300 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	160 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	FLUORANTHENE	3900 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	FLUORENE	290 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	1200 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	NAPHTHALENE	91 UG/KG	D	R	DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	PHENANTHRENE	4000 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002
32EDC-5-89	SB	REG	4	C032CB4901	EPA 8270-M	U	PYRENE	4600 UG/KG	D		DL1 REG	5/20/2002	5/21/2002	5/23/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	ACENAPHTHYLENE	21 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZ(A)ANTHRACENE	34 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(A)PYRENE	31 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	23 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	CHRYSENE	25 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	FLUORANTHENE	35 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	36 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	PYRENE	31 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.6 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	ACENAPHTHENE	1.9 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	ACENAPHTHYLENE	2.1 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	ANTHRACENE	3.3 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(A)PYRENE	19 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	CHRYSENE	27 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.2 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	FLUORANTHENE	29 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	FLUORENE	1.5 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	NAPHTHALENE	1.9 UG/KG	J	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0	C032C79401	EPA 8270-M	U	PYRENE	31 UG/KG		R	RA1 REG	5/13/2002	5/14/2002	5/17/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	BENZ(A)ANTHRACENE	26 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	BENZO(A)PYRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	CHRYSENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	FLUORANTHENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	0.5	C032C79501	EPA 8270-M	U	PYRENE	5.4 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	BENZO(A)PYRENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	CHRYSENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	FLUORANTHENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	26 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	2	C032C79601	EPA 8270-M	U	PYRENE	5.2 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG		J	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	29 UG/KG			000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-9	SB	REG	4	C032C79701	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	UJ	000 REG	5/13/2002	5/14/2002	5/15/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	2-METHYLNAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	ACENAPHTHENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	ANTHRACENE	6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	BENZ(A)ANTHRACENE	7 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	BENZO(A)PYRENE	20 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	16 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	19 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.4 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	CHRYSENE	8.8 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	FLUORANTHENE	12 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	FLUORENE	6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	NAPHTHALENE	6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	PHENANTHRENE	4.1 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	FD	4	C032CB5401	EPA 8270-M	U	PYRENE	30 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	ACENAPHTHYLENE	2.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	BENZ(A)ANTHRACENE	9 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	BENZO(A)PYRENE	18 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.6 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	CHRYSENE	11 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	FLUORANTHENE	17 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	9.9 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	NAPHTHALENE	5.6 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	PHENANTHRENE	6.9 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0	C032CB5001	EPA 8270-M	U	PYRENE	26 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	ACENAPHTHYLENE	6.5 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	ANTHRACENE	5.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	BENZO(A)PYRENE	38 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	22 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	36 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	CHRYSENE	33 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	FLUORANTHENE	61 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	PHENANTHRENE	29 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-90	SB	REG	0.5	C032CB5101	EPA 8270-M	U	PYRENE	89 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.4 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	ACENAPHTHYLENE	4.7 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	ANTHRACENE	2.4 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	BENZ(A)ANTHRACENE	10 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	BENZO(A)PYRENE	28 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	24 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	34 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	16 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	CHRYSENE	16 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.3 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	FLUORANTHENE	17 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	NAPHTHALENE	6.4 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	PHENANTHRENE	5.2 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	2	C032CB5201	EPA 8270-M	U	PYRENE	33 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	ACENAPHTHYLENE	2.8 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	BENZ(A)ANTHRACENE	12 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	BENZO(A)PYRENE	30 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	23 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	25 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	14 UG/KG			000 REG	5/23/2002	5/24/2002	5/25/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	CHRYSENE	14 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	FLUORANTHENE	23 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	15 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	NAPHTHALENE	6.2 UG/KG	U	UJ	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	PHENANTHRENE	7.8 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-90	SB	REG	4	C032CB5301	EPA 8270-M	U	PYRENE	49 UG/KG		J	000 REG	5/23/2002	5/24/2002	5/25/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	ACENAPHTHENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	ACENAPHTHYLENE	2.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.6 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	BENZO(A)PYRENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	19 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	CHRYSENE	8.8 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	FLUORANTHENE	8.4 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	21 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	NAPHTHALENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0	C032CB5501	EPA 8270-M	U	PYRENE	15 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	2-METHYLNAPHTHALENE	27 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	ACENAPHTHENE	27 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/29/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	ACENAPHTHYLENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	ANTHRACENE	27 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZ(A)ANTHRACENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG			000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	47 UG/KG			000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	CHRYSENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	13 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	FLUORANTHENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	FLUORENE	27 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	NAPHTHALENE	27 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	PHENANTHRENE	27 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	PYRENE	27 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/29/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	2-METHYLNAPHTHALENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	ACENAPHTHENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	ACENAPHTHYLENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	ANTHRACENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZ(A)ANTHRACENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	52 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	CHRYSENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	FLUORANTHENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	FLUORENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	NAPHTHALENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	PHENANTHRENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	0.5	C032CB5601	EPA 8270-M	U	PYRENE	54 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/18/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	ACENAPHTHYLENE	3.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	ANTHRACENE	5.4 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	BENZ(A)ANTHRACENE	3.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	6.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.3 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	CHRYSENE	4.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	FLUORANTHENE	3.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	NAPHTHALENE	0.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	PHENANTHRENE	5.4 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	2	C032CB5701	EPA 8270-M	U	PYRENE	6.1 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	ACENAPHTHENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	ACENAPHTHYLENE	6.1 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.7 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	BENZO(A)PYRENE	22 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	12 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	CHRYSENE	11 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	FLUORANTHENE	17 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	FLUORENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	13 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	NAPHTHALENE	1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	PHENANTHRENE	6.1 UG/KG	U	UJ	000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-91	SB	REG	4	C032CB5801	EPA 8270-M	U	PYRENE	41 UG/KG			000 REG	5/16/2002	5/17/2002	5/17/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	ACENAPHTHENE	8.2 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	ACENAPHTHYLENE	47 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	ANTHRACENE	31 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	BENZ(A)ANTHRACENE	530 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	BENZO(A)PYRENE	810 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	610 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	700 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	480 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	CHRYSENE	620 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	100 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	FLUORANTHENE	1300 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	FLUORENE	8.2 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	NAPHTHALENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	PHENANTHRENE	240 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	PYRENE	1900 UG/KG	E	R	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0	C032CB5901	EPA 8270-M	U	PYRENE	1500 UG/KG	D		DL1 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	BENZO(A)PYRENE	4.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	3.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.5 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	4.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	CHRYSENE	3.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	FLUORANTHENE	3.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	PHENANTHRENE	5.7 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	0.5	C032CB6001	EPA 8270-M	U	PYRENE	5.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.1 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	ACENAPHTHENE	5.1 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	ACENAPHTHYLENE	2.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	ANTHRACENE	5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	BENZO(A)PYRENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.6 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.3 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	CHRYSENE	16 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	FLUORANTHENE	20 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	FLUORENE	2.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	NAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	PHENANTHRENE	24 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	2	C032CB6101	EPA 8270-M	U	PYRENE	28 UG/KG			000 REG	5/31/2002	6/1/2002	6/4/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	ACENAPHTHYLENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	ANTHRACENE	4.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	BENZ(A)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	BENZO(A)PYRENE	2.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	2.4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	16 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	1.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	CHRYSENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	FLUORANTHENE	2.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	FLUORENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	NAPHTHALENE	5.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	PHENANTHRENE	1.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-92	SB	REG	4	C032CB6201	EPA 8270-M	U	PYRENE	4.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.81 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	ACENAPHTHYLENE	5.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	ANTHRACENE	6.1 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	BENZ(A)ANTHRACENE	43 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	BENZO(A)PYRENE	61 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	61 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	53 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	38 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	CHRYSENE	50 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	FLUORANTHENE	63 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	FLUORENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	54 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	NAPHTHALENE	2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	PHENANTHRENE	41 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	FD	0.5	C032CB6501	EPA 8270-M	U	PYRENE	79 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	ACENAPHTHENE	5.2 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	ACENAPHTHYLENE	2.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	ANTHRACENE	5.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	BENZ(A)ANTHRACENE	21 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	BENZO(A)PYRENE	29 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	23 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	CHRYSENE	29 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7.3 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	FLUORANTHENE	44 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	22 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	NAPHTHALENE	1.5 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	PHENANTHRENE	34 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0	C032CB6301	EPA 8270-M	U	PYRENE	51 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.85 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	ACENAPHTHENE	0.98 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	ACENAPHTHYLENE	3.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	ANTHRACENE	3.2 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	BENZ(A)ANTHRACENE	39 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	BENZO(A)PYRENE	92 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	73 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	110 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	66 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	CHRYSENE	53 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	16 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	FLUORANTHENE	83 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	FLUORENE	5.4 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	98 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	NAPHTHALENE	4.4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	PHENANTHRENE	21 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	0.5	C032CB6401	EPA 8270-M	U	PYRENE	110 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	ACENAPHTHENE	3.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	ACENAPHTHYLENE	4 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/25/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	ANTHRACENE	14 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZ(A)ANTHRACENE	57 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(A)PYRENE	80 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	75 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	44 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	65 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	CHRYSENE	71 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	FLUORANTHENE	96 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	FLUORENE	5.1 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	45 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	NAPHTHALENE	2.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	PHENANTHRENE	46 UG/KG			000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	PYRENE	98 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/25/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	2-METHYLNAPHTHALENE	53 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	ACENAPHTHENE	53 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	ACENAPHTHYLENE	53 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	ANTHRACENE	9.6 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZ(A)ANTHRACENE	55 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(A)PYRENE	59 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	60 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	44 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	41 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	CHRYSENE	60 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	15 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	FLUORANTHENE	72 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	FLUORENE	53 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	42 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	NAPHTHALENE	53 UG/KG	U	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	PHENANTHRENE	42 UG/KG	J	R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	2	C032CB6601	EPA 8270-M	U	PYRENE	73 UG/KG		R	DL1 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.43 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	ACENAPHTHYLENE	1.6 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	ANTHRACENE	1.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	BENZO(A)PYRENE	37 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	28 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	CHRYSENE	14 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.9 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	FLUORANTHENE	28 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	32 UG/KG			000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	NAPHTHALENE	1.8 UG/KG	J	J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	PHENANTHRENE	9.6 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-93	SB	REG	4	C032CB6701	EPA 8270-M	U	PYRENE	63 UG/KG		J	000 REG	5/16/2002	5/17/2002	5/19/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	ACENAPHTHENE	2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	ACENAPHTHYLENE	5.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	BENZ(A)ANTHRACENE	28 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	BENZO(A)PYRENE	30 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	29 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	23 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	CHRYSENE	34 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.2 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	FLUORANTHENE	55 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	FLUORENE	1.9 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	24 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	PHENANTHRENE	31 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0	C032CB6801	EPA 8270-M	U	PYRENE	57 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	ACENAPHTHENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	ACENAPHTHYLENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	ANTHRACENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	BENZ(A)ANTHRACENE	8 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	BENZO(A)PYRENE	15 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	12 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	18 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	8.8 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	CHRYSENE	11 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	1.8 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	FLUORANTHENE	14 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	NAPHTHALENE	2.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-94	SB	REG	0.5	C032CB6901	EPA 8270-M	U	PYRENE	19 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	2-METHYLNAPHTHALENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	ACENAPHTHYLENE	2.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	ANTHRACENE	3.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	BENZ(A)ANTHRACENE	23 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	BENZO(A)PYRENE	40 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	30 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	40 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	CHRYSENE	36 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4.6 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	FLUORANTHENE	47 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	36 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	NAPHTHALENE	180 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	PHENANTHRENE	48 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	2	C032CB7001	EPA 8270-M	U	PYRENE	59 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	ACENAPHTHYLENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	BENZ(A)ANTHRACENE	6.9 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	BENZO(A)PYRENE	12 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	8.7 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	6.9 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	CHRYSENE	8.2 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	FLUORANTHENE	15 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	12 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	PHENANTHRENE	5.3 UG/KG	J	J	000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-94	SB	REG	4	C032CB7101	EPA 8270-M	U	PYRENE	19 UG/KG			000 REG	5/28/2002	5/29/2002	5/30/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	ACENAPHTHENE	6.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	ACENAPHTHYLENE	2.2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	ANTHRACENE	1.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	BENZ(A)ANTHRACENE	13 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	BENZO(A)PYRENE	25 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	29 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	23 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	CHRYSENE	15 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	3.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	FLUORANTHENE	34 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	FLUORENE	6.4 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	NAPHTHALENE	1.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	PHENANTHRENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	FD	4	C032CB7601	EPA 8270-M	U	PYRENE	45 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	ACENAPHTHENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	ACENAPHTHYLENE	3.8 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	ANTHRACENE	4.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	BENZ(A)ANTHRACENE	35 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	BENZO(A)PYRENE	57 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	50 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	57 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	CHRYSENE	41 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	FLUORANTHENE	91 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	FLUORENE	5.5 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	32 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	NAPHTHALENE	2.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	PHENANTHRENE	27 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0	C032CB7201	EPA 8270-M	U	PYRENE	120 UG/KG			000 REG	5/31/2002	6/1/2002	6/2/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	BENZ(A)ANTHRACENE	8.7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	BENZO(A)PYRENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	11 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	21 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	15 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	CHRYSENE	10 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.5 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	FLUORANTHENE	23 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	PHENANTHRENE	6.6 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	0.5	C032CB7301	EPA 8270-M	U	PYRENE	25 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	ACENAPHTHENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	ACENAPHTHYLENE	1.7 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	ANTHRACENE	2 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	BENZ(A)ANTHRACENE	16 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	BENZO(A)PYRENE	23 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	25 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	24 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	CHRYSENE	19 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	FLUORANTHENE	36 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	FLUORENE	5.6 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	17 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	NAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	PHENANTHRENE	14 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	2	C032CB7401	EPA 8270-M	U	PYRENE	37 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	2-METHYLNAPHTHALENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	ACENAPHTHENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	ACENAPHTHYLENE	3.6 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	ANTHRACENE	3.1 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	BENZ(A)ANTHRACENE	24 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	BENZO(A)PYRENE	47 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	32 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	55 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	46 UG/KG		J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	CHRYSENE	27 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	7 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	FLUORANTHENE	61 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	FLUORENE	6.2 UG/KG	U	U	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	37 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	NAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	PHENANTHRENE	21 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-95	SB	REG	4	C032CB7501	EPA 8270-M	U	PYRENE	82 UG/KG			000 REG	5/31/2002	6/1/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.2 UG/KG	J	J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	ACENAPHTHENE	9.3 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	ACENAPHTHYLENE	69 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	ANTHRACENE	45 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZ(A)ANTHRACENE	340 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(A)PYRENE	480 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	410 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	430 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	310 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	CHRYSENE	370 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	76 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	FLUORANTHENE	910 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	FLUORENE	6.5 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	420 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	NAPHTHALENE	20 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	PHENANTHRENE	320 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	PYRENE	1100 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	2-METHYLNAPHTHALENE	3 UG/KG	J	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	ACENAPHTHENE	52 UG/KG	U	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	ACENAPHTHYLENE	66 UG/KG		R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	ANTHRACENE	45 UG/KG	J	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZ(A)ANTHRACENE	340 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(A)PYRENE	440 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	350 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	280 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	370 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	CHRYSENE	370 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	53 UG/KG		R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	FLUORANTHENE	1100 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	FLUORENE	13 UG/KG	J	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	370 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	NAPHTHALENE	20 UG/KG	J	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	PHENANTHRENE	300 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0	C032CB7701	EPA 8270-M	U	PYRENE	1400 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	2-METHYLNAPHTHALENE	130 UG/KG			000 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	ACENAPHTHENE	260 UG/KG			000 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	ACENAPHTHYLENE	4200 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	FLUORENE	1100 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	NAPHTHALENE	470 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	2-METHYLNAPHTHALENE	2700 UG/KG	U	R	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	ACENAPHTHENE	2700 UG/KG	U	R	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	ACENAPHTHYLENE	4100 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002

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Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	ANTHRACENE	4300 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	BENZ(A)ANTHRACENE	26000 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	BENZO(A)PYRENE	35000 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	26000 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	24000 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	27000 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	CHRYSENE	29000 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	4000 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	FLUORANTHENE	58000 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	FLUORENE	1200 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	20000 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	NAPHTHALENE	460 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	PHENANTHRENE	29000 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	0.5	C032CB7801	EPA 8270-M	U	PYRENE	72000 UG/KG		J	DL1 REG	5/31/2002	6/3/2002	6/19/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	2-METHYLNAPHTHALENE	4.3 UG/KG	J	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	ACENAPHTHENE	13 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	ACENAPHTHYLENE	78 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	ANTHRACENE	89 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZ(A)ANTHRACENE	430 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(A)PYRENE	570 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	400 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	460 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	400 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	CHRYSENE	480 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	94 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	FLUORANTHENE	1100 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	FLUORENE	25 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	590 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	NAPHTHALENE	16 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	PHENANTHRENE	520 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	PYRENE	1300 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.9 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	ACENAPHTHENE	12 UG/KG	JQ	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	ACENAPHTHYLENE	77 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	ANTHRACENE	74 UG/KG		R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZ(A)ANTHRACENE	400 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(A)PYRENE	500 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	390 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	330 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	400 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	CHRYSENE	430 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	61 UG/KG		R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	FLUORANTHENE	1300 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	FLUORENE	26 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	420 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	NAPHTHALENE	18 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	PHENANTHRENE	510 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	2	C032CB7901	EPA 8270-M	U	PYRENE	1600 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	2-METHYLNAPHTHALENE	16 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	ACENAPHTHENE	20 UG/KG		J	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	ACENAPHTHYLENE	260 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	ANTHRACENE	180 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZ(A)ANTHRACENE	620 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(A)PYRENE	890 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	690 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	700 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	560 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	CHRYSENE	670 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	120 UG/KG			000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	FLUORANTHENE	2000 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	FLUORENE	75 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	770 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	NAPHTHALENE	95 UG/KG		R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	PHENANTHRENE	1400 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	PYRENE	2300 UG/KG	E	R	000 REG	5/31/2002	6/3/2002	6/3/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	2-METHYLNAPHTHALENE	12 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	ACENAPHTHENE	120 UG/KG	U	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	ACENAPHTHYLENE	210 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	ANTHRACENE	130 UG/KG		R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZ(A)ANTHRACENE	490 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(A)PYRENE	700 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	540 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	480 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	510 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	CHRYSENE	560 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	74 UG/KG	J	R	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	FLUORANTHENE	1800 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	FLUORENE	60 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	620 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	NAPHTHALENE	92 UG/KG	J	J	DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	PHENANTHRENE	1100 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-96	SB	REG	4	C032CB8001	EPA 8270-M	U	PYRENE	2200 UG/KG			DL1 REG	5/31/2002	6/3/2002	6/5/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	2-METHYLNAPHTHALENE	1 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	ACENAPHTHENE	3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	ACENAPHTHYLENE	13 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	ANTHRACENE	10 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	BENZ(A)ANTHRACENE	56 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	BENZO(A)PYRENE	52 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	56 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	63 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	47 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	CHRYSENE	62 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	11 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	FLUORANTHENE	140 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	FLUORENE	3.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	47 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	PHENANTHRENE	71 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0	C032CB8101	EPA 8270-M	U	PYRENE	180 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.8 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	ACENAPHTHENE	3.3 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	ACENAPHTHYLENE	16 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	ANTHRACENE	17 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	BENZ(A)ANTHRACENE	82 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	BENZO(A)PYRENE	120 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	87 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	100 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	73 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/4/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	CHRYSENE	89 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	15 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	FLUORANTHENE	240 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	FLUORENE	5.2 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	74 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	NAPHTHALENE	5.4 UG/KG	U	U	000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	PHENANTHRENE	110 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	0.5	C032CB8201	EPA 8270-M	U	PYRENE	280 UG/KG			000 REG	5/30/2002	5/31/2002	6/4/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	2-METHYLNAPHTHALENE	3.9 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	ACENAPHTHENE	3.7 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	ACENAPHTHYLENE	18 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	ANTHRACENE	20 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	BENZO(A)PYRENE	160 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	120 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	82 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	CHRYSENE	130 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	21 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	FLUORANTHENE	320 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	FLUORENE	5.9 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	100 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	NAPHTHALENE	9.2 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	PHENANTHRENE	95 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	2	C032CB8301	EPA 8270-M	U	PYRENE	360 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.6 UG/KG	J	J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	ACENAPHTHENE	32 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	ACENAPHTHYLENE	54 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	ANTHRACENE	120 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	BENZ(A)ANTHRACENE	480 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	BENZO(A)PYRENE	670 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	BENZO(B)FLUORANTHENE	460 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	460 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	BENZO(K)FLUORANTHENE	450 UG/KG		J	000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	CHRYSENE	570 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	98 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	FLUORANTHENE	920 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	FLUORENE	40 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	350 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	NAPHTHALENE	20 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	PHENANTHRENE	520 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-97	SB	REG	4	C032CB8401	EPA 8270-M	U	PYRENE	1300 UG/KG			000 REG	5/30/2002	5/31/2002	6/7/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	ACENAPHTHENE	5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	ACENAPHTHYLENE	24 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	ANTHRACENE	27 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZ(A)ANTHRACENE	110 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(A)PYRENE	150 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	130 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	140 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	93 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	CHRYSENE	120 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	25 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	FLUORANTHENE	330 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002

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Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	FLUORENE	8.2 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	NAPHTHALENE	4.8 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	PHENANTHRENE	170 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	PYRENE	390 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.7 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	ACENAPHTHENE	5.4 UG/KG	JQ	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	ACENAPHTHYLENE	29 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	ANTHRACENE	46 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZ(A)ANTHRACENE	87 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(A)PYRENE	190 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(B)FLUORANTHENE	160 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	92 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	BENZO(K)FLUORANTHENE	70 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	CHRYSENE	220 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	17 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	FLUORANTHENE	390 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	FLUORENE	10 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	120 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	NAPHTHALENE	7.5 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	PHENANTHRENE	190 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	FD	0.5	C032CB8701	EPA 8270-M	U	PYRENE	480 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	ACENAPHTHENE	3.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	ACENAPHTHYLENE	36 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	ANTHRACENE	31 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZ(A)ANTHRACENE	150 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(A)PYRENE	230 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	160 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	210 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	140 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	CHRYSENE	160 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	39 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	FLUORANTHENE	390 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	FLUORENE	9.2 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	180 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	NAPHTHALENE	5.5 UG/KG			000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	PHENANTHRENE	180 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	PYRENE	500 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	2-METHYLNAPHTHALENE	2.2 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	ACENAPHTHENE	6.3 UG/KG	JQ	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	ACENAPHTHYLENE	50 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	ANTHRACENE	65 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZ(A)ANTHRACENE	130 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(A)PYRENE	330 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(B)FLUORANTHENE	230 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	180 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	BENZO(K)FLUORANTHENE	120 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	CHRYSENE	320 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	30 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	FLUORANTHENE	570 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	FLUORENE	14 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	210 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	NAPHTHALENE	9.4 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	PHENANTHRENE	230 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0	C032CB8501	EPA 8270-M	U	PYRENE	720 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.88 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	ACENAPHTHENE	3.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	ACENAPHTHYLENE	19 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	ANTHRACENE	21 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZ(A)ANTHRACENE	95 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(A)PYRENE	130 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	100 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	120 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	83 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	CHRYSENE	100 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	21 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	FLUORANTHENE	260 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	FLUORENE	5.7 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	99 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	NAPHTHALENE	3.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	PHENANTHRENE	130 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	PYRENE	310 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	2-METHYLNAPHTHALENE	1.3 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	ACENAPHTHENE	3.8 UG/KG	JQ	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	ACENAPHTHYLENE	23 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	ANTHRACENE	38 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZ(A)ANTHRACENE	68 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(A)PYRENE	140 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(B)FLUORANTHENE	120 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	93 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	BENZO(K)FLUORANTHENE	63 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	CHRYSENE	160 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	15 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	FLUORANTHENE	330 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	FLUORENE	7.6 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	100 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	PHENANTHRENE	130 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	0.5	C032CB8601	EPA 8270-M	U	PYRENE	400 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.79 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	ACENAPHTHENE	2.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	ACENAPHTHYLENE	17 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	ANTHRACENE	17 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZ(A)ANTHRACENE	77 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(A)PYRENE	110 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	91 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	99 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	64 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	CHRYSENE	82 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	18 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	FLUORANTHENE	220 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	FLUORENE	4.5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	85 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	NAPHTHALENE	2.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	PHENANTHRENE	110 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	PYRENE	270 UG/KG	E	R	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.93 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

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Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	ACENAPHTHENE	2.3 UG/KG	JQ	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	ACENAPHTHYLENE	18 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	ANTHRACENE	29 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZ(A)ANTHRACENE	52 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(A)PYRENE	120 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(B)FLUORANTHENE	91 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	73 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	BENZO(K)FLUORANTHENE	64 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	CHRYSENE	130 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	17 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	FLUORANTHENE	230 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	FLUORENE	5.5 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	80 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	NAPHTHALENE	3.9 UG/KG	J	R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	PHENANTHRENE	99 UG/KG		R	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	2	C032CB8801	EPA 8270-M	U	PYRENE	290 UG/KG		J	DL1 REG	5/29/2002	5/30/2002	6/8/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.65 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	ACENAPHTHENE	1.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	ACENAPHTHYLENE	6 UG/KG	U	UJ	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	ANTHRACENE	1.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	BENZ(A)ANTHRACENE	5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	BENZO(A)PYRENE	6.2 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	BENZO(B)FLUORANTHENE	9.3 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	7.7 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.6 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	CHRYSENE	13 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	FLUORANTHENE	15 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	FLUORENE	1.3 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	NAPHTHALENE	0.58 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	PHENANTHRENE	14 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-98	SB	REG	4	C032CB8901	EPA 8270-M	U	PYRENE	15 UG/KG		J	000 REG	5/29/2002	5/30/2002	6/2/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	2-METHYLNAPHTHALENE	0.9 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	ACENAPHTHENE	8.2 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	ACENAPHTHYLENE	7.5 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	ANTHRACENE	6.2 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	BENZ(A)ANTHRACENE	36 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	BENZO(A)PYRENE	44 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	BENZO(B)FLUORANTHENE	33 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	40 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	BENZO(K)FLUORANTHENE	34 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	CHRYSENE	42 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	6.7 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	FLUORANTHENE	100 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	FLUORENE	4.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	28 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	NAPHTHALENE	2.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	PHENANTHRENE	100 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0	C032CB9001	EPA 8270-M	U	PYRENE	130 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	ACENAPHTHENE	5.7 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	ACENAPHTHYLENE	2 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	ANTHRACENE	1.4 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	BENZ(A)ANTHRACENE	9.6 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	BENZO(A)PYRENE	14 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	BENZO(B)FLUORANTHENE	10 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	13 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	BENZO(K)FLUORANTHENE	9.5 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	CHRYSENE	10 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	2.1 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	FLUORANTHENE	24 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	FLUORENE	5.7 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	8.5 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	NAPHTHALENE	5.7 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	PHENANTHRENE	16 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	0.5	C032CB9101	EPA 8270-M	U	PYRENE	31 UG/KG			000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	ACENAPHTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	ACENAPHTHYLENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	BENZO(A)PYRENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	CHRYSENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	FLUORANTHENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	FLUORENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002

ANALYTICAL RESULTS --- CTO: C032

Data retrieved from BEIDMS on 06-Aug-02 at 8:11 AM

Facility: ALAMEDA

Site: EDC5 TRANSFER PARCEL EDC-5

Station ID	Sample Information			Container ID	Method Code	Filter Code	Analyte Name	Results	Qualifiers		Result Type	Date Information		
	Matrix	Type	Top Depth						Lab	Val		Collect	Prepare	Analyze
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	NAPHTHALENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	PHENANTHRENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	2	C032CB9201	EPA 8270-M	U	PYRENE	5.8 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/30/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	2-METHYLNAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	ACENAPHTHENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	ACENAPHTHYLENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	BENZ(A)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	BENZO(A)PYRENE	1.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	BENZO(B)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	BENZO(G,H,I)PERYLENE	1.7 UG/KG	J	J	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	BENZO(K)FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	CHRYSENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	DIBENZ(A,H)ANTHRACENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	FLUORANTHENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	FLUORENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	INDENO(1,2,3-CD)PYRENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	NAPHTHALENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	PHENANTHRENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002
32EDC-5-99	SB	REG	4	C032CB9301	EPA 8270-M	U	PYRENE	5.9 UG/KG	U	U	000 REG	5/29/2002	5/30/2002	5/31/2002

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ALAMEDA POINT
SSIC NO. 5090.3.A

FOLDER 4 OF 5

ATTACHMENT D2

BORING LOGS

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BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-1

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,423.7 E 1,477,957.6	9.4 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz.)**	**HOLE DIAMETER**
▽ 7.8 ft / 1.6ft ▼	n.a.	Tim Mote / Cathie Stumpenhaus - RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C759 (0.0 - 0.5)		n.a.	n.r.		0		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, poorly graded, dry, (FILL).	FID Background = 0.00 ppm
C032C760 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
					2			
C032C761 (2.0 - 4.0)					3			
		n.a.	n.r.		4			
					5			
C032C762 (4.0 - 8.0)				3.4	6		**Clayey sand (SC)**: Light olive brown [2.5Y 5/6], (FILL).	
					7			
				1.4	8		at 7.8 ft.: medium gray, with shell fragments.	
							TOTAL DEPTH = 8.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-1

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:30:01 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-2

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 473,718.3 E 1,477,957.3	7.0 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.5 ft / 2.5ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C763 (0.0 - 0.5)		n.a.	n. r.				**Silty Sand (SM)**: Very dark grayish brown [2.5Y 3/2], with organic material. (TOPSOIL).	FID Background = 0.90 ppm
C032C764 (0.5 - 2.0)				6.0	1		**Sand (SP)**: Light olive brown [2.5Y 5/4], medium grained sand, rounded, poorly graded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C765 (2.0 - 4.0)					2			
					3		at 3.0 ft.: moist.	
		n.a.	n. r.		4		at 4.5 ft.: wet.	
					5			
C032C766 (4.0 - 8.0)				1.0	6		**Sand (SW)**: Very dark gray [5Y 3/1], (FILL).	
					7		at 7.0 ft.: thin shell layer.	
				-1.0	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-2

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:06:52 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-3

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,009.2 E 1,477,957.6	6.1 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz.)**	**HOLE DIAMETER**
▽ 4.5 ft / 1.6ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C767 (0.0 - 0.5)		n.a.	n. r.				**Organic Soil (OL/OH)**: Dark brown, (TOPSOIL).	FID Background = 0.20 ppm
				5.1	1		**Sand (SP)**: Light olive brown [2.5Y 5/6], fine to medium grained sand, rounded, dry, grains have various mineralogies. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C769 (0.5 - 2.0) C032C768 (0.5 - 2.0)					2			
C032C770 (2.0 - 4.0)					3			
		n.a.	n. r.		4		at 4.5 ft.: wet.	
					5			
C032C771 (4.0 - 8.0)					6		at 6.0 ft.: Dark reddish gray [10R 4/1].	
					7		at 7.3 ft.: intercalated shells.	
				-1.9	8		**Clay (CL)**: at 7.9 ft.: Dark gray.	
							TOTAL DEPTH = 8.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-3

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:06:58 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-4A

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,300.3 E 1,477,956.9	7.0 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 0.0ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C772 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Light olive brown [2.5Y 5/4], rounded, dry to moist, (FILL).	FID Background = 0.50 ppm
C032C773 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
					2			
C032C774 (2.0 - 4.0)					3			
		n.a.	n. r.		4		at 4.0 ft.: medium grained sand.	
					5		at 5.5 ft.: shells intercalated.	
C032C775 (4.0 - 8.0)					6		at 6.5 ft.: Dark reddish gray [10R 4/1].	
					7		at 7.0 ft.: wet.	
				-1.0	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-4A

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:07:03 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-5

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,390.0 E 1,478,248.6	6.3 ft	9.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ 6.0 ft / 0.3ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
					0		**Concrete**.	FID Background = 0.00 ppm
					1			Hole backfilled with cement-bentonite grout after completion.
C032C776 (0.0 - 0.5)		n.a.	n. r.	4.8	2		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, trace clay, poorly graded, trace of sea shells, trace of geo-fabric. (FILL).	
C032C777 (0.5 - 2.0)					3			
		n.a.	n. r.		4			
C032C778 (2.0 - 4.0)					5			
					6		at 6.0 ft.: wet.	
		n.a.	n. r.		7			
C032C780 (4.0 - 8.0) C032C779 (4.0 - 8.0)					8			
					9			
				-3.2			**TOTAL DEPTH = 9.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 2/29/24 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-5

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:10:09 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-6

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,681.1 E 1,478,248.7	7.2 ft	8.7 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 1.2ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.5	0		**Concrete**.	FID Background = 0.00 ppm
C032C781 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded. moist. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C782 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C783 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C784 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1], trace sea shells.	
					8			
				-1.5			**TOTAL DEPTH = 8.7 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-6

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:07:13 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-7

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,414.4 E 1,478,244.0	8.9 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.5 ft / 3.4ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C785 (0.0 - 0.5)		n.a.	n. r.	8.4	0		**Organic Soil (OL/OH)**: Dark olive brown [2.5Y 3/3], (TOPSOIL).	PID Background = 0.20 ppm
C032C786 (0.5 - 2.0)					1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, poorly graded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
					2			
C032C787 (2.0 - 4.0)					3			
		n.a.	n. r.		4			
					5		at 5.5 ft.: wet, 6-inch clay rich segment.	
C032C788 (4.0 - 8.0)					6			
					7			
				0.9	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 3/31/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-7

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:07:18 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-8

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,718.1 E 1,478,278.7	7.4 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 3.5 ft / 3.9ft ▼	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C789 (0.0 - 0.5)		n.a.	n. r.				**Organic Soil (OL/OH)**: Dark reddish brown [2.5YR 3/4], grass. (TOPSOIL).	FID Background = 0.00 ppm
C032C791 (0.5 - 2.0) C032C790 (0.5 - 2.0)				6.4	1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, occasional pebbles. (FILL).	Hole backfilled with cement-bentonite grout after completion.
					2			
				4.9			**Clayey Sand (SC)**: wet, (FILL).	
C032C792 (2.0 - 4.0)				4.6	3		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, occasional pebbles. (FILL). at 3.5 ft.: wet.	
		n.a.	n. r.		4			
					5			
C032C793 (4.0 - 8.0)					6			
					7		at 7.0 ft.: Dark reddish gray [10R 4/1], coarse grained sand.	
				-0.6	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-8

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:07:24 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-9

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,009.5 E 1,478,247.0	8.4 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / 3.4ft	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C794 (0.0 - 0.5)		n.a.	n. r.	7.9	0		**Organic Soil (OL/OH)**: Dark brown, grass with rootlets. (TOPSOIL).	PID Background = 1.00 ppm
C032C795 (0.5 - 2.0)					1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, grains have various mineralogies. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C796 (2.0 - 4.0)					2			
					3			
		n.a.	n. r.		4			
					5		at 5.0 ft.: wet.	
C032C797 (4.0 - 8.0)					6			
					7			
				0.4	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-9

Report form: CTO-032 ALAMEDA BORING LOG Time: 12:35:43 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-10

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 474,300.1 E 1,478,248.6	7.5 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.2 ft / 3.3ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus - RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C798 (0.0 - 0.5)		n.a.	n.r.	7.0	0		**Roadbase**: gravel, cement fragments and soil.	FID Background = 0.50 ppm
C032C799 (0.5 - 2.0)					1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium to coarse grained sand, rounded, dry to moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C800 (2.0 - 4.0)					2			
					3		at 3.0 ft.: clay. at 3.3 ft.: Dark reddish gray [10R 4/1].	
		n.a.	n.r.		4		at 4.2 ft.: wet.	
					5			
C032C802 (4.0 - 8.0) C032C801 (4.0 - 8.0)					6			
					7			
				-0.6	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-10

Report form: CTO-032 ALAMEDA BORING LOG Time: 12:35:25 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-11

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 471,390.1 E 1,478,539.7	6.8 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 0.8ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.8	1		**Concrete**.	FID Background = 0.00 ppm
C032C803 (0.0 - 0.5)		n.a.	n.r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist to wet, with shell fragments. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C804 (0.5 - 2.0)					2			
		n.a.	n.r.		3			
C032C805 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6		at 6.0 ft.: wet.	
C032C806 (4.0 - 8.0)					7			
					8		at 8.0 ft.: Dark greenish gray [5GY 4/1].	
				-2.2	9			
							TOTAL DEPTH = 9.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 6/2/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-11

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:08 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-12

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 471,681.1 E 1,478,539.7	8.2 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C807 (0.0 - 0.5)		n.a.	n.r.	7.2	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace shell fragments. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C808 (0.5 - 2.0)					2			
		n.a.	n.r.		3			
C032C809 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6		at 6.0 ft.: wet.	
C032C810 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.8	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-12

Report form: CTO-032 ALAMEDA BORING LOG Time: 12:35:31 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-13A

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Geoprobe 5400	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,426.7 E 1,478,540.5	9.2 ft	8.7 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.2 ft / 3.0ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.5	0		Concrete.	FID Background = 1.00 ppm
C032C811 (0.0 - 0.5)		n.a.	n. r.		1		Sand (SP): Light olive brown [2.5Y 5/6], medium grained sand, rounded, poorly graded, dry to moist, various mineralogies. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C813 (0.5 - 2.0) C032C812 (0.5 - 2.0)					2			
					3			
C032C814 (2.0 - 4.0)					4			
		n.a.	n. r.		5			
					6		at 6.0 ft.: cement clasts and cobbles. at 6.2 ft.: moist to wet.	
C032C815 (4.0 - 8.0)					7			
					8			
				0.5			TOTAL DEPTH = 8.7 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-13A

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:21 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-14

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,718.1 E 1,478,539.7	7.6 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz.)**	**HOLE DIAMETER**
▽ 5.0 ft / 2.6ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C816 (0.0 - 0.5)		n.a.	n. r.	7.1	0		**Silty Clay (CL)**: Dark olive brown [2.5Y 3/3], moist, low plasticity, (FILL).	
C032C817 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/3], fine grained sand, poorly graded, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C818 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5		at 5.0 ft.: wet.	
C032C819 (4.0 - 8.0)					6			
					7		at 6.5 ft.: with gravel up to 1 inch in diameter. at 7.0 ft.: Dark gray [2.5Y 4/1].	
				-0.4	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-14

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:26 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-15

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,009.1 E 1,478,539.8	8.1 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.1ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C820 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Olive brown [2.5Y 4/3], fine grained sand, moist, trace of medium gravel up to 1 inch in diameter, subangular. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C821 (0.5 - 2.0)					1			
		n.a.	n. r.		2			
C032C822 (2.0 - 4.0)					3		at 3.0 ft.: moist to wet.	
					4			
		n.a.	n. r.		5			
C032C824 (4.0 - 8.0) C032C823 (4.0 - 8.0)					6		at 6.0 ft.: wet.	
					7			
				0.1	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
Exp. 12/31/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-15

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:32 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-16

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,300.1 E 1,478,539.6	7.4 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 1.4ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C825 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032C826 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C827 (2.0 - 4.0)					3			
					4		at 4.0 ft.: trace of sea shells.	
		n.a.	n. r.		5			
C032C828 (4.0 - 8.0)					6		at 6.0 ft.: Olive [5Y 4/4], wet.	
					7			
				-0.6	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 3/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-16

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:37 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-17

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,390.0 E 1,478,830.7	6.8 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ 6.0 ft / 0.8ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C829 (0.0 - 0.5)		n.a.	n. r.	5.8	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, some sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C830 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C831 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C832 (4.0 - 8.0)					7			
					8		at 8.0 ft.: Dark greenish gray [5GY 4/1].	
				-2.2	9			
							TOTAL DEPTH = 9.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 4/24/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-17

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:43 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-18

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,681.1 E 1,478,830.6	7.6 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 1.6ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C833 (0.0 - 0.5)		n.a.	n. r.	6.6	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C835 (0.5 - 2.0) C032C834 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C836 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C837 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-1.4	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-18

Report form: CTO-032 ALAMEDA BORING LOG Time: 12:35:37 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-19

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-13-02	05-13-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,718.1 E 1,478,830.7	7.2 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 1.2ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C838 (0.0 - 0.5)		n.a.	n. r.	6.7	0		**Silty Clay (CL)**: Dark olive brown [2.5Y 3/3], moist, low plasticity, (FILL).	
C032C839 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/3], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C840 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5			
C032C841 (4.0 - 8.0)					6		at 6.0 ft.: wet.	
					7		at 7.0 ft.: Dark gray [2.5Y 4/1].	
				-0.8	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 4/24/07 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-19

Report form: CTO-032 ALAMEDA BORING LOG Time: 1:21:55 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-20

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,003.1 E 1,478,830.8	8.2 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.2ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C842 (0.0 - 0.5)		n.a.	n. r.				**Silty Clay (CL)**: Olive brown [2.5Y 4/4], dry, trace of fine to medium grained sand. (FILL).	
C032C843 (0.5 - 2.0)				7.0	1		**Sand (SP)**: Olive brown [2.5Y 4/3], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C844 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5		at 5.0 ft.: trace of sea shells.	
C032C845 (4.0 - 8.0)					6		at 6.0 ft.: Yellowish brown [10YR 5/8], wet, thin lenses of medium to coarse grained sand.	
					7			
				0.2	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
Exp 2/28/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-20

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:18 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-21

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-13-02	05-13-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,300.2 E 1,478,830.7	5.0 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.5 ft / -0.5ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C847 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032C848 (0.5 - 2.0)					1		at 0.8 ft.: trace of Yellowish red [5YR 4/6] medium to coarse gravels.	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C849 (2.0 - 4.0)					3		at 2.5 ft.: thin lens of Reddish yellow [7.5YR 6/8] coarse gravel.	
					4		at 4.0 ft.: Dark greenish gray [5GY 4/1].	
		n.a.	n. r.		5		at 5.0 ft.: Olive [5Y 4/4].	
C032C850 (4.0 - 8.0)					6		at 5.5 ft.: wet.	
					7			
				-3.0	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-21

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:24 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-22

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,390.1 E 1,479,121.7	7.6 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 1.6ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	PID Background = 0.00 ppm
C032C851 (0.0 - 0.5)		n.a.	n. r.	6.6	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C852 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C853 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C854 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				1.1	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-22

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:30 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-23

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-17-02	05-17-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,681.1 E 1,479,121.7	8.4 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 2.4ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C855 (0.0 - 0.5)		n.a.	n. r.	7.4	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C857 (0.5 - 2.0) / C032C856 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C858 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C859 (4.0 - 8.0)					7			
					8			
				-0.6	9			
							TOTAL DEPTH = 9.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-23

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:36 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-24

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,972.2 E 1,479,055.8	8.5 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.5ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.0			**Concrete**.	FID Background = 0.00 ppm
C032C860 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C861 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C862 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C863 (4.0 - 8.0)					7			
					8		at 8.0 ft.: Dark greenish gray [5GY 4/1].	
				0.0			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-24

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:42 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-25

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,009.1 E 1,479,121.5	6.9 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 4.0 ft / 2.9ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C864 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of angular gravel up to 1.5 inches in diameter. (FILL).	FID Background = 0.00 ppm
C032C865 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C866 (2.0 - 4.0)					3			
					4		at 4.0 ft.: wet.	
		n.a.	n. r.		5		at 5.0 ft.: trace of sea shells.	
C032C868 (4.0 - 8.0) C032C867 (4.0 - 8.0)					6			
					7		at 7.0 ft.: Dark greenish gray [5G 4/1].	
				-1.2	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · C.G. No. 4451 Exp 7/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-25

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:47 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-26

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,393.0 E 1,479,411.5	7.3 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 1.3ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.3	1		**Concrete**.	PID Background = 0.00 ppm
C032C869 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C870 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C871 (2.0 - 4.0)					4		at 4.0 ft.: trace of sea shells.	
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C872 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-1.8	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUST · No. 4451 · Exp 3/31/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-26

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:52 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-27

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,681.1 E 1,479,412.7	7.9 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 1.9ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C873 (0.0 - 0.5)		n a	n. r.	6.9	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C874 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C875 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
							at 6.5 ft.: Dark greenish gray [5GY 4/1].	
C032C876 (4.0 - 8.0)					7			
					8			
				-1.1	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-27

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:08:58 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-28

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,972.1 E 1,479,412.6	6.7 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 0.7ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C877 (0.0 - 0.5)		n.a.	n. r.	5.7	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C879 (0.5 - 2.0) C032C878 (0.5 - 2.0)		n.a.	n. r.		2			
C032C880 (2.0 - 4.0)		n.a.	n. r.		3			
C032C881 (4.0 - 8.0)					4		at 6.0 ft.: wet. at 6.5 ft.: Dark greenish gray [5GY 4/1]	
					5			
					6			
					7			
					8			
				-2.3	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 3/31/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-28

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:09:04 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-29

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,441.8 E 1,479,413.4	8.7 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.7ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C882 (0.0 - 0.5)		n.a.	n. r.	8.2	0		**Silty Sand (SM)**: Dark brown [7.5YR 3/4], poorly graded, dry, with clay. (FILL).	FID Background = 0.00 ppm
					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032C883 (0.5 - 2.0)								Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C884 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5			
C032C885 (4.0 - 8.0)					6		at 6.0 ft.: wet.	
					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
				0.7	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-29

Report form: CTO-032 ALAMEDA BORING LOG Time: 4:09:10 PM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-30

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,718.1 E 1,479,412.6	5.8 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 4.8 ft / 1.0ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C886 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of gravel up to 1.5 inches in diameter, trace of sea shells. (FILL).	PID Background = 0.00 ppm
C032C887 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C888 (2.0 - 4.0)					3			
					4			
				1.0				
		n.a.	n. r.	0.8	5		**Sandy Clay (CL)**: Light olive brown [2.5Y 5/4], fine grained sand, wet, (FILL).	
C032C890 (4.0 - 8.0) C032C889 (4.0 - 8.0)					6		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, moist to wet, (FILL).	
					7			
				-2.2	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 3/29/14 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-30

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:33:46 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-31

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,015.0 E 1,479,414.6	5.2 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / -0.8ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				4.7	0		**Concrete**.	PID Background = 0.00 ppm
C032C891 (0.0 - 0.5)		n.a.	n. r.	4.2	1		**Silty Clay (CL)**: Dark olive brown [2.5Y 3/3], moist, low plasticity, soft. (FILL).	
C032C892 (0.5 - 2.0)					2		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of angular gravel up to 1 inch in diameter. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032C893 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C894 (4.0 - 8.0)				-1.0			**Clay (CL)**: Olive [5Y 5/4], moist to wet, low plasticity, soft, with fine grained sand (FILL).	
				-1.3	7		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist to wet, (FILL). at 7.0 ft.: wet.	
					8			
				-3.3			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 8/23/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-31

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:30:05 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-32

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,297.4 E 1,479,412.1	5.4 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / 0.4ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C895 (0.0 - 0.5)		n.a.	n. r.				**Organic Soil (OL/OH)**: grass with rootlets. (TOPSOIL).	FID Background = 1.60 ppm
				4.4	1		**Sand (SW)**: Light olive brown [2.5Y 5/3], fine to medium grained sand, rounded, well graded, dry, polymictic grains. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C896 (0.5 - 2.0)		n.a.	n. r.		2			
		n.a.	n. r.					
C032C897 (2.0 - 4.0)					3		at 3.0 ft.: moist.	
					4		at 4.0 ft.: slight Clay increase.	
		n.a.	n. r.	0.2	5		at 5.0 ft.: wet.	
C032C898 (4.0 - 8.0)					6		**Sand (SP)**: Dark gray [2.5Y 4/1], rounded, poorly graded, polymictic grains (Olivine, Quartz, Magnetite). (BAY SEDIMENT).	
				-2.6	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-32

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:31:55 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-33

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,588.8 E 1,479,414.7	4.5 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.0 ft / 0.5ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C899 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Light olive brown [2.5Y 5/3], medium grained sand, rounded, poorly graded, (FILL).	FID Background = 1.80 ppm
C032C901 (0.5 - 2.0)				3.5	1		**Clayey Sand (SC)**: Light olive brown [2.5Y 5/3], medium grained sand, rounded, polymictic grains. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C900 (0.5 - 2.0)		n.a.	n. r.		2			
		n.a.	n. r.					
C032C902 (2.0 - 4.0)					3			
					4		at 4.0 ft.: wet, fat Clay.	
				0.0			**Sand (SP)**: Dark gray [2.5Y 4/1], rounded, poorly graded, polymictic grains. (FILL).	
		n.a.	n. r.		5			
C032C903 (4.0 - 8.0)					6			
				-2.5	7		**Clay (CL)**: Very dark gray [10YR 3/1], wet, (BAY MUD).	
				-3.0			**Sand (SP)**: Dark gray [2.5Y 4/1], rounded, poorly graded, polymictic grains. (BAY SEDIMENT).	
				-3.5	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 5/31/24 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-33

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:32:02 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-34

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-15-02	05-15-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,830.2 E 1,479,411.3	4.2 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 4.8 ft / -0.6ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				3.7	0		**Asphalt**.	FID Background = 0.4 ppm
C032C904 (0.0 - 0.5)		n.a.	n. r.		1		(FILL).	
				2.8			**Sand (SW)**: Very dark gray [2.5Y 3/1], rounded, well graded, moist, polymictic grains, shell fragments. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C905 (0.5 - 2.0)		n a	n. r.		2			
		n.a.	n. r.		3			
C032C906 (2.0 - 4.0)					4			
					5		at 4.8 ft.: wet.	
		n.a.	n. r.					
				-1.8	6		**Clay (CL)**: Very dark gray [5Y 3/1], bay mud. (BAY MUD).	
C032C907 (4.0 - 8.0)					7			
				-3.6	8		**Sand (SP)**: Dark gray. (BAY SEDIMENT).	
				-4.3			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUST
No. 4451
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-34

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:32:09 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-35

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,390.0 E 1,479,703.7	7.7 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 1.7ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C908 (0.0 - 0.5)		n.a.	n. r.	6.7	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, trace clay, poorly graded, with sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C909 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C910 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C912 (4.0 - 8.0) C032C911 (4.0 - 8.0)					7		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-1.3	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 5-4-2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-35

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:30:29 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-36

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,676.9 E 1,479,707.2	8.5 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 2.5ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.00 ppm
C032C913 (0.0 - 0.5)		n.a.	n. r.	7.5	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C914 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C915 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C916 (4.0 - 8.0)					7			
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				-0.5	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 3/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-36

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:30:35 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-37

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,972.2 E 1,479,637.8	8.1 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 2.1ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	PID Background = 0.00 ppm
C032C917 (0.0 - 0.5)		n.a.	n. r.	7.1	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C918 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C919 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C920 (4.0 - 8.0)					7			
					8		at 8.0 ft.: Dark greenish gray [5GY 4/1].	
				-0.9	9		**TOTAL DEPTH = 9.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-37

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:30:41 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-38

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 472,253.2 E 1,479,703.3	8.7 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 1.7ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C921 (0.0 - 0.5)		n.a.	n. r.	8.2	0		**Asphalt**: Over cement	PID Background = 0.00 ppm
C032C923 (0.5 - 2.0) C032C922 (0.5 - 2.0)		n.a.			1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of coarse gravel and sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C924 (2.0 - 4.0)		n.a.			2			
C032C925 (4.0 - 8.0)		n.a.			3			
					4			
					5			
					6			
					7		at 7.0 ft.: wet.	
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				0.2			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-38

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:30:47 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-39

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,427.2 E 1,479,703.6	10.1 ft	8.3 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 3.1ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C926 (0.0 - 0.5)		n.a.	n. r.	9.8	0		**Asphalt**.	PID Background = 0.00 ppm
				9.3			**Sand with Clay and Gravel (CL)**: Strong brown [7.5YR 4/6], well graded, moist, (FILL).	
C032C927 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C928 (2.0 - 4.0)					3			
					4			
					5			
		n.a.	n. r.		6			
C032C929 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
				1.8	8			
							TOTAL DEPTH = 8.3 FEET	

REGISTERED GEOLOGIST
CATHIE L STUMPENHAUST
No. 4451
Exp. 2/29/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-39

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:30:53 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-40

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,710.9 E 1,479,694.9	4.9 ft	8.3 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / -0.1ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C930 (0.0 - 0.5)		n.a.	n. r.	4.7	0		**Asphalt.**	FID Background = 0.00 ppm
				4.2			**Sand with Clay and Gravel (CL)**: Yellowish brown [10YR 5/8], well graded, moist, (FILL).	
C032C931 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL)	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C932 (2.0 - 4.0)					3			
				1.1				
				0.9	4		**Sand with Clay and Gravel (SP)**: poorly graded, moist to wet, (FILL).	
							Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist to wet, (FILL).	
					5		at 5.0 ft.: wet, trace of wood and sea shells.	NOTE: Wood chunks removed from sample
		n.a.	n. r.					
C032C934 (4.0 - 8.0) C032C933 (4.0 - 8.0)					6			
					7			
					8			
				-3.3			**TOTAL DEPTH = 8.3 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
Exp. 2/29/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-40

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:32:34 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-41

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,009.1 E 1,479,693.7	6.8 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C935 (0.0 - 0.5)		n.a.	n. r.	6.3	0		**Silty Sand (SM)**: Dark olive brown [2.5Y 3/3], poorly graded, dry, (FILL).	PID Background – 0.00 ppm
C032C936 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of coarse gravel up to 1/2 inch in diameter. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C937 (2.0 - 4.0)					3		at 3.0 ft.: trace of clay and sea shells, no gravel.	
					4			
		n.a.	n. r.		5		at 5.0 ft.: Olive [5Y 4/4].	
C032C938 (4.0 - 8.0)					6			
					7			
				-1.2	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-41

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:07:03 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-42

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,300.2 E 1,479,703.6	5.9 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 5.0 ft / 0.9ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C939 (0.0 - 0.5)		n.a.	n. r.	5.8	0		**Organic Soil (OL/OH)**: Dark brown. (TOPSOIL).	PID Background – 3.2 ppm
							Sand (SP): Light olive brown [2.5Y 5/3], fine grained sand, rounded, dry, slight organic rootlets intermixed. (FILL).	
C032C940 (0.5 - 2.0)		n.a.	n. r.		1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032C941 (2.0 - 4.0)					3			
					4		at 3.7 ft.: distinct shell horizon. (FILL).	
							at 4.5 ft.: moist.	
		n.a.	n. r.		5		at 5.0 ft.: wet.	
C032C942 (4.0 - 8.0)					6			
				-0.6			**Clayey Sand (SC)**: Dark gray [2.5Y 4/1], wet, 1 inch Clay unit at contact. (FILL).	
				-2.1	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-42

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:07:10 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-43

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,598.4 E 1,479,702.2	6.8 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.2 ft / 2.6ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C943 (0.0 - 0.5)		n.a.	n. r.		1		**Organic Soil (OL/OH)**: grass with rootlets. (TOPSOIL).	FID Background = 2.6 ppm
C032C945 (0.5 - 2.0)				5.3				Hole backfilled with cement-bentonite grout after completion.
C032C944 (0.5 - 2.0)		n.a.	n. r.		2		**Sand (SP)**: Light olive brown [2.5Y 5/3], medium grained sand, rounded, poorly graded, dry, (FILL).	
		n.a.	n. r.					
C032C946 (2.0 - 4.0)					3			
					4		at 4.2 ft.: wet.	
		n.a.	n. r.		5		at 4.5 ft.: Dark gray [2.5Y 4/1] and Light olive brown [2.5Y 5/3], thin 1 inch Clay horizons.	
C032C947 (4.0 - 8.0)					6			
					7			
				-1.2	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-43

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:07:16 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-44

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,857.0 E 1,479,703.6	6.3 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.8			**Asphalt**	FID Background = 0.6 ppm
C032C948 (0.0 - 0.5)		n.a.	n. r.		1		Clay, Sand, intermexed Asphalt, angular clasts. (RIPRAP).	
C032C949 (0.5 - 2.0)		n.a.	n. r.		2			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3		at 2.5 ft.: increase in Light olive brown sand.	
C032C950 (2.0 - 4.0)					4		at 4.0 ft.: angular coarse grains, pebbles.	
		n.a	n. r.		5			
C032C951 (4.0 - 8.0)					6			
					7			
					8			
				-2.2			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-44

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:21 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-45

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,390.2 E 1,479,994.7	7.1 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 1.1ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C952 (0.0 - 0.5)		n.a.	n. r.	6.6	0		**Concrete**.	FID Background = 0.0 ppm
C032C953 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C954 (2.0 - 4.0)		n.a.	n. r.		2			
C032C956 (4.0 - 8.0) / C032C955 (4.0 - 8.0)		n.a.	n. r.		3			
					4			
					5			
					6		at 6.0 ft.: wet.	
					7		at 6.5 ft.: Dark greenish gray [5GY 4/1].	
				-1.4	8		**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-45

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:44:41 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-46

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,669.5 E 1,479,993.9	8.2 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.0 ppm
C032C957 (0.0 - 0.5)		n.a.	n. r.	7.2	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C958 (0.5 2.0)					2			
		n.a.	n. r.		3			
C032C959 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C960 (4.0 - 8.0)					7		at 6.5 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.8	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-46

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:19:36 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-47

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,972.1 E 1,479,994.6	8.3 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.3ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.0 ppm
C032C961 (0.0 - 0.5)		n.a.	n. r.	7.3	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C962 (0.5 - 2.0)					2			
				5.8			**Clay (CL)**: Olive brown [2.5Y 4/4], soft, (FILL).	
		n.a.	n. r.	5.3	3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, (FILL).	
C032C963 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C964 (4.0 - 8.0)					7			
					8		at 8.0 ft.: Dark greenish gray [5GY 4/1].	
				-0.7	9			
							TOTAL DEPTH = 9.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-47

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:07:36 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-48

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,223.1 E 1,479,994.6	8.2 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.7			**Concrete**.	FID Background = 0.0 ppm
C032C965 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of coarse angular gravel up to 1.5 inch in diameter. (FILL)	Hole backfilled with cement-bentonite grout after completion.
C032C967 (0.5 - 2.0) C032C966 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C968 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032C969 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8		at 8.0 ft.: Dark greenish gray [5GY 4/1].	
				-0.3			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUSER · No. 4451 · Exp 4/24/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-48

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:07:42 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-49

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,425.2 E 1,480,016.8	7.8 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 5.0 ft / 2.8ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C970 (0.0 - 0.5)		n.a.	n. r.		0		**Silty Sand (SM)**: Light olive brown [2.5Y 5/4], fine grained sand, poorly graded, dry, trace of gravel up to 1 inch in diameter. (FILL).	FID Background = 0.0 ppm
C032C971 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.	5.8	2		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032C972 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5		at 5.0 ft.: wet.	
C032C973 (4.0 - 8.0)					6		at 6.0 ft.: trace of Clay.	
					7			
				-0.2	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 12/31/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-49

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:07:47 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-50

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,718.2 E 1,479,994.7	6.1 ft	8.3 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / 1.1ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C974 (0.0 - 0.5)		n.a.	n. r.	5.9	0		**Asphalt.**	FID Background = 0.0 ppm
C032C975 (0.5 - 2.0)					1		**Clayey Gravel with Sand (GC)**: Strong brown [7.5YR 4/6], well graded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.	3.6	2			
C032C976 (2.0 - 4.0)					3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
					4			
					5		at 5.0 ft.: wet, trace of coarse gravel up to 1.5 inch in diameter.	
		n.a.	n. r.		6			
C032C978 (4.0 - 8.0) C032C977 (4.0 - 8.0)					7		at 6.5 ft.: Dark gray [5Y 4/1].	
				-2.1	8			
							TOTAL DEPTH = 8.3 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUSEN · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-50

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:46:49 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-51

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-5	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,012.6 E 1,479,991.8	5.6 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C979 (0.0 - 0.5)		n.a.	n. r.	5.1	0		**Asphalt**.	FID Background = 1.0 ppm
					1		unconsolidated Gravels, Concrete, Asphalt, organics, Clays, angular clasts. (ROAD BASE).	
C032C980 (0.5 - 2.0)		n.a.	n. r.	3.6	2		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, polymictic. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032C981 (2.0 - 4.0)					4		at 4.0 ft.: moist.	
					5			
		n.a.	n. r.		6			
C032C982 (4.0 - 8.0)					7		at 7.0 ft.: Dark gray Sand with minor Clay.	
					8			
				-2.9			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUST
No. 4451
STATE OF CALIFORNIA
Exp. 2/29/04

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-51

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:25 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-52

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,300.2 E 1,479,994.7	6.7 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 4.8 ft / 1.9ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C983 (0.0 - 0.5)		n.a.	n. r.	6.2	0		**Organic Soil (OL/OH)**. (TOPSOIL).	FID Background = 3.5 ppm
C032C984 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2		at 1.5 ft.: moist.	
C032C985 (2.0 - 4.0)					3		at 2.0 ft.: 1/2 inch Clay layers, intercalated, Light brown.	
					4			
					5		at 4.8 ft.: wet.	
C032C986 (4.0 - 8.0)		n.a.	n. r.	1.5	6		**Clayey Sand (SC)**: Dark gray [2.5Y 4/1], medium grained sand, rounded, some fines, shell fragments. (BAY SEDIMENT).	
					7		at 7.0 ft.: 6 inch Clay unit, silty.	
				-1.3	8		at 8.0 ft.: increased organic odor.	
							TOTAL DEPTH = 8.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-52

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:31 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-53

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,590.1 E 1,480,000.9	7.5 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / 2.5ft	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032C987 (0.0 - 0.5)		n.a.	n. r.				**Organic Soil (OL/OH)**: grass with rootlets. (TOPSOIL).	FID Background = 1.6 ppm
				6.8	1		**Sand (SP)**: Light olive brown [2.5Y 5/6], fine to medium grained sand, rounded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C989 (0.5 - 2.0)								
C032C988 (0.5 - 2.0)		n.a.	n. r.		2			
		n.a.	n. r.					
C032C990 (2.0 - 4.0)				4.5	3		**Clayey Sand (SC)**: Strong brown [7.5YR 4/6], fine to medium grained sand, rounded, stiff, slight organics, increased Clay content with depth. (FILL).	
					4			
		n.a.	n. r.		5		at 5.0 ft.: wet.	
C032C991 (4.0 - 8.0)				1.5	6		**Clay (CL)**: Very dark gray [10YR 3/1], organic. (BAY MUD).	
					7			
				-0.3 -0.5	8		**Sand (SP)**: Dark gray [2.5Y 4/1], mafic sands. (BAY SEDIMENT).	
							TOTAL DEPTH = 8.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-53

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:52:14 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-54

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-21-02	05-21-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,390.2 E 1,480,285.7	7.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 1.5ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.0	0		**Concrete**.	FID Background = 0.0 ppm
C032C992 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C993 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C994 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C995 (4.0 - 8.0)					7		at 6.5 ft.: Dark greenish gray [5GY 4/1].	
				-1.0	8		**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-54

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:17 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-55

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,203.1 E 1,480,285.7	8.2 ft	8.7 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 2.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.5	1		Concrete.	FID Background = 0.0 ppm
C032C996 (0.0 - 0.5)		n.a.	n. r.				Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of gravel. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032C997 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032C998 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032C000 (4.0 - 8.0) C032C999 (4.0 - 8.0)					7		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.5			TOTAL DEPTH = 8.7 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 Exp. 3/24/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-55

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:23 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-56

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,442.2 E 1,480,279.1	9.1 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ Not Encountered	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.1	1		**Concrete**. Over aggregate base.	FID Background = 0.0 ppm
C032CA01 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA02 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA03 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CA04 (4.0 - 8.0)					7			
					8			
				0.1	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 5.31.04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-56

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:28 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-57

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,868.4 E 1,480,288.0	8.3 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.8	0		**Asphalt**: Over aggregate base.	FID Background = 0.0 ppm
C032CA05 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA06 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA07 (2.0 - 4.0)					4			
				3.8	5		**Clayey Sand (SC)**: Yellowish red [5YR 5/8], fine to medium grained sand, moist, (FILL).	
		n.a.	n. r.	2.8	6		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, moist to wet, (FILL).	
C032CA08 (4.0 - 8.0)					7			
					8			
				-0.2			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-57

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:34 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-58

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,136.1 E 1,480,285.6	8.3 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 1.3ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.3	1		**Concrete**: Over aggregate base.	FID Background = 0.0 ppm
C032CA09 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA11 (0.5 - 2.0) C032CA10 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA12 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CA13 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				-0.7	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUSER · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-58

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:39 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-59

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,442.1 E 1,480,300.7	9.8 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 2.8ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA14 (0.0 - 0.5)		n.a.	n. r.	9.6	0		**Topsoil.**	FID Background = 0.0 ppm
C032CA15 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CA16 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5			
C032CA17 (4.0 - 8.0)					6			
					7		at 7.0 ft.: wet.	
				1.8	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 2/21/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-59

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:45 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-60

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,728.7 E 1,480,282.6	6.6 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / -0.4ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA18 (0.0 - 0.5)		n.a.	n. r.		0		**Silty Sand (SM)**: Light olive brown [2.5Y 5/4], fine grained sand, poorly graded, dry, (FILL).	PID Background – 0.0 ppm
C032CA19 (0.5 - 2.0)				5.1	1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, (FILL).	
C032CA20 (2.0 - 4.0)					3			
				2.6	4		**Sandy Clay with Gravel (CL)**: Strong brown [7.5YR 4/6], well graded, moist, (FILL).	
		n.a.	n. r.	1.6	5		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist to wet, with sea shells. (FILL).	
C032CA22 (4.0 - 8.0) C032CA21 (4.0 - 8.0)					6			
					7		at 7.0 ft.: wet.	
				-1.4	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-60

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:08:52 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-61

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-15-02	05-15-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,994.1 E 1,480,285.6	6.4 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / -0.6ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA23 (0.0 - 0.5)		n.a.	n. r.		0		**Organic Soil (OL/OH)**: Very dark brown, rootlets. (TOPSOIL).	FID Background = 0.8 ppm
C032CA24 (0.5 - 2.0)		n.a.	n. r.	4.9	1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, polymictic. (FILL).	
C032CA25 (2.0 - 4.0)					3			
					4			
				1.9	5		**Clay (CL)**: Very dark gray [5Y 3/1], dry, shell fragments. (BAY MUD).	
		n.a.	n. r.		6			
					7		at 7.0 ft.: wet.	
				-1.4 / -1.6	8		**Sand (SP)**: Dark gray [5Y 4/1], (BAY SEDIMENT).	

TOTAL DEPTH = 8.0 FEET

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUER · No. 4451 · 4/21/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-61

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:55:59 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-62

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,301.3 E 1,480,283.4	6.3 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / 1.3ft	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA27 (0.0 - 0.5)		n.a.	n. r.	5.8	0		**Organic Soil (OL/OH)**: grass with rootlets. (TOPSOIL).	FID Background – 1.5 ppm
C032CA28 (0.5 - 2.0)		n.a.	n. r.		1		**Clayey Sand (SC)**: Olive brown [2.5Y 4/4], medium grained sand, subrounded, moist, polymictic. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.	3.8	2			
C032CA29 (2.0 - 4.0)					3		**Clay (CL)**: Dark grayish brown [2.5Y 4/2], stiff, with minor Sand, shell fragments. (FILL).	
					4			
		n.a.	n. r.	1.3	5		**Sand (SP)**: Dark gray [5Y 4/1], wet, polymictic. (FILL).	
C032CA30 (4.0 - 8.0)					6			
					7			
				-1.2			**Clay (CL)**: Very dark gray [5Y 3/1], clean, fine, laminated. (BAY MUD).	
				-1.7	8			

TOTAL DEPTH = 8.0 FEET

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 3/21/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-62

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:04 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-63

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-14-02	05-14-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,591.0 E 1,480,285.6	6.6 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 4.4 ft / 2.2ft	n.a.	Tim Mote / Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA31 (0.0 - 0.5)		n.a.	n. r.				Organics, cobbles (cement), pebbles, light olive sand, stiff clay, mixture of colors Light olive brown [2.5Y 5/6] to Strong brown [2.5Y 3/R]. (CONSTRUCTION FILL).	FID Background = 1.2 ppm
C032CA33 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
C032CA32 (0.5 - 2.0)		n.a.	n. r.					
		n.a	n. r.		2			
C032CA34 (2.0 - 4.0)					3			
				3.2			**Sand (SP)**: Light olive brown [2.5Y 5/6], rounded, poorly graded, dry, (FILL).	
					4			
				2.2			**Clay (CL)**: Dark gray [5Y 4/1], wet, (FILL).	
				1.8	5		**Sand (SP)**: Light olive brown [2.5Y 5/6], rounded, poorly graded, (FILL).	
		n.a.	n. r.	1.4			**Clay (CL)**: Very dark gray [5Y 3/1], (BAY MUD).	
C032CA35 (4.0 - 8.0)					6			
					7			
				-1.2				
				-1.4	8		**Sand (SP)**: Dark gray [2.5Y 4/1], (BAY SEDIMENT).	

TOTAL DEPTH = 8.0 FEET

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-63

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:38 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-64

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,099.1 E 1,480,576.7	6.4 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 0.4ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	PID Background = 0.0 ppm
C032CA36 (0.0 - 0.5)		n.a.	n. r.	5.4	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of clay. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA37 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA38 (2.0 - 4.0)					4			
					5		at 5.0 ft.: Dark greenish gray [5GY 4/1].	
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032CA39 (4.0 - 8.0)				-0.6	7		**Clay (CL)**: Black [7.5YR 2.5/1], soft, wet, (BAY MUD).	
					8			
				-2.6	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-64

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:15 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-65

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,390.5 E 1,480,575.1	7.3 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.5 ft / 0.8ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.0 ppm
C032CA40 (0.0 - 0.5)		n.a.	n. r.	6.3	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA41 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA42 (2.0 - 4.0)					4			
					5		at 5.0 ft.: Dark greenish gray [5GY 4/1].	
		n.a.	n. r.		6			
							at 6.5 ft.: wet.	
C032CA44 (4.0 - 8.0) C032CA43 (4.0 - 8.0)					7			
					8			
				-1.7	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUST · No. 4451 · 5/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-65

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:02:01 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-66

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,680.6 E 1,480,579.1	8.2 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.0 ppm
C032CA45 (0.0 - 0.5)		n.a.	n. r.	7.2	1		Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA46 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA47 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CA48 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				-0.8	9			
							TOTAL DEPTH = 9.0 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-66

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:27 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-67

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,982.1 E 1,480,577.8	8.4 ft	8.7 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 1.4ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.8	0		**Concrete**.	FID Background = 0.0 ppm
C032CA49 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist to wet, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA50 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA51 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CA52 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				-0.1 -0.3			**Clay (CH)**: Black [7.5YR 2.5/1], wet, high plasticity, (BAY MUD).	
							TOTAL DEPTH = 8.7 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-67

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:04:46 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-68

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,202.6 E 1,480,577.2	8.0 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.0ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.0	1		**Concrete**: Over aggregate base.	PID Background = 0.0 ppm
C032CA54 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of sea shells. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA55 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA56 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CA57 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				-1.0	9		**TOTAL DEPTH = 9.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-68

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:40 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-69

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 472,555.0 E 1,480,642.2	8.0 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 2.0ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA58 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of fine gravel. (FILL).	FID Background = 0.0 ppm
C032CA59 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CA60 (2.0 - 4.0)					3			
					4			
		n.a.	n.r.		5		at 5.0 ft.: trace of sea shells.	
C032CA61 (4.0 - 8.0)					6		at 6.0 ft.: wet.	
					7			
				0.0	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-69

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:45 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-70

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,847.5 E 1,480,577.1	9.9 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA62 (0.0 - 0.5)		n.a.	n. r.		0		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	FID Background = 0.0 ppm
C032CA63 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CA64 (2.0 - 4.0)					3			
				5.9	4		**Gravel with Sand (GP)**: Dark yellowish brown [10YR 4/6], poorly graded, moist to wet, gravel to 1/2 inch in diameter, trace of clay. (FILL).	
				5.1			**Sand (SP)**: Olive [5Y 4/4], fine grained sand, poorly graded, moist to wet, (FILL).	
		n.a.	n. r.		5			
C032CA66 (4.0 - 8.0) C032CA65 (4.0 - 8.0)					6			
					7			
				1.9	8		**TOTAL DEPTH = 8.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-70

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:51 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-71

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,152.6 E 1,480,577.4	8.4 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.8 ft / 0.6ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA67 (0.0 - 0.5)		n.a.	n. r.				**Organic Soil (OL/OH)**: (TOPSOIL).	FID Background = 2.2 ppm
				7.6	1		**Sand (SW)**: Light olive brown [2.5Y 5/6], fine to medium grained sand, rounded, polymictic. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA68 (0.5 - 2.0)		n.a.	n. r.					
		n.a.	n. r.		2			
C032CA69 (2.0 - 4.0)				5.4	3		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, (FILL).	
					4			
		n.a	n. r.		5		at 4.8 ft.: Strong brown [7.5YR 5/8], coarse grained lense approximately 0.1 foot.	
C032CA70 (4.0 - 8.0)					6			
					7			
				0.4	8		at 7.5 ft.: Dark gray [5Y 4/1]. at 7.8 ft.: wet.	
							TOTAL DEPTH = 8.0 FEET	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-71

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:09:57 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-72

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,426.8 E 1,480,613.0	9.5 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 3.5ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				9.0			**Asphalt**.	FID Background = 1.4 ppm
C032CA71 (0.0 - 0.5)		n.a.	n. r.	8.5	1		**Fill** (ROAD BASE).	
C032CA72 (0.5 - 2.0)		n.a	n. r.		2		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3		at 2.5 ft.: Strong brown [7.5YR 5/8], interbedded layer of coarse fraction.	
C032CA73 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032CA74 (4.0 - 8.0)					7			
					8			
				1.0			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-72

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:16:45 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-73

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-15-02	05-15-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,717.7 E 1,480,579.2	5.9 ft	8.3 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz.)**	**HOLE DIAMETER**
▽ 3.0 ft / 2.9ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CA75 (0.0 - 0.5)		n.a.	n. r.	5.7	0		**Asphalt.**	FID Background = 0.0 ppm
					1		**Gravel with Sand (GW)**: Light olive brown [2.5Y 5/4], well graded, moist, (FILL).	
C032CA77 (0.5 - 2.0) C032CA76 (0.5 - 2.0)				4.4	2		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.					
C032CA78 (2.0 - 4.0)				2.9	3		**Clayey Sand (SC)**: Olive brown [2.5Y 4/4], fine to coarse grained sand, wet, trace of gravel up to 1 inch in diameter. (FILL).	
					4			
				1.4	5		**Sand (SP)**: Dark greenish gray [5G 4/1], fine grained sand, poorly graded, moist to wet, trace of rounded gravel up to 1.5 inch in diameter. (FILL). at 5.0 ft.: brick.	
		n.a.	n. r.					
C032CA79 (4.0 - 8.0)					6			
					7			
				-2.3	8		**TOTAL DEPTH = 8.3 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-73

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:10 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-74

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-15-02	05-15-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,008.9 E 1,480,576.8	5.7 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.0 ft / 1.7ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.2			**Asphalt**.	FID Background = 0.8 ppm
C032CA80 (0.0 - 0.5)		n.a.	n. r.	4.7	1		**Organic Soil (OL/OH)**: Very dark brown [10YR 2/2], clay, rich, twigs. (TOPSOIL).	
C032CA81 (0.5 - 2.0)		n.a.	n. r.		2		**Sand (SP)**: Dark gray [5Y 4/1], medium grained sand, rounded, dry, polymictic. (FILL). at 2.0 ft.: moist.	Hole backfilled with cement-bentonite grout after completion.
C032CA82 (2.0 - 4.0)		n.a.	n. r.		3			
					4		at 4.0 ft.: wet.	
		n.a.	n. r.	1.2	5		**Clay (CL)**: Very dark gray [5Y 3/1], wet, slight sand intermixed near contacts. (BAY MUD).	
					6			
					7			
				-1.8	8		**Sand (SP)**: Very dark gray [5Y 3/1], (BAY SEDIMENT).	
				-2.8			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · No. 4451 · Exp. 4/21/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-74

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:08:30 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-75

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,260.1 E 1,480,566.9	6.2 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / -0.8ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.7	0		**Topsoil**.	FID Background = 0.0 ppm
C032CA84 (0.0 - 0.5)		n.a.	n. r.		1		**Silty Clay (CL)**: Very dark brown [10YR 2/2], moist, low plasticity, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA85 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA86 (2.0 - 4.0)					4		at 4.5 ft.: trace of gravel.	
				1.2	5		**Sandy Clay (CL)**: Olive brown [2.5Y 4/4], fine grained sand, low plasticity, (FILL).	
		n.a.	n. r.		6			
C032CA88 (4.0 - 8.0) / C032CA87 (4.0 - 8.0)				-0.8	7		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, wet, (FILL).	
				-2.3	8		**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-75

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:22 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-76

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,591.7 E 1,480,576.5	8.4 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ Not Encountered	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# ELOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.9	0		**Topsoil**.	FID Background = 0.0 ppm
C032CA89 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of tree roots. (FILL).	
C032CA90 (0.5 - 2.0)					2			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032CA91 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CA92 (4.0 - 8.0)				2.4			**Sandy Clay (CL)**: Olive brown [2.5Y 4/4], moist, trace of gravel up to 1.5 inch in diameter. (FILL).	
				1.4	7		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, (FILL).	
					8			
				-0.1			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-76

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:27 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-77

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,053.6 E 1,480,867.8	8.1 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ 7.0 ft / 1.1ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#ELOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.1	1		**Concrete**. Over aggregate base	FID Background = 0.0 ppm
C032CA93 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA94 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA95 (2.0 - 4.0)				4.1	4		**Gravel with Clay and Sand (GC)**: Olive brown [2.5Y 4/4], poorly graded, gravels up to 1 inch in diameter. (FILL).	
					5			
		n.a.	n. r.		6			
C032CA96 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
				0.6	8		**Sand (SP)**: Dark greenish gray [5GY 4/1], (FILL).	
				-0.9	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-77

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:33 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-78

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-22-02	05-22-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,386.5 E 1,480,849.7	8.4 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.5 ft / 1.9ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete: Over aggregate base.	FID Background = 0.0 ppm
C032CA97 (0.0 - 0.5)		n.a.	n. r.	7.4	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CA99 (0.5 - 2.0) C032CA98 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CA00 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CB01 (4.0 - 8.0)					7		at 6.5 ft.: wet. at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.6	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-78

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:39 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-79

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,735.3 E 1,480,872.9	7.8 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ 6.0 ft / 1.8ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (#ELOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.3	0		**Concrete**: Over aggregate base.	FID Background = 0.0 ppm
C032CB02 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CB03 (0.5 - 2.0)					2			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032CB04 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032CB05 (4.0 - 8.0)					7		at 6.5 ft.: Dark greenish gray [5GY 4/1].	
				0.3	8		**Clay (CL)**: Black [N2], (BAY MUD).	
				-0.7			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · NO. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-79

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:46 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-80

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 471,972.2 E 1,480,867.6	8.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 2.5ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.0	0		**Concrete**: Over aggregate base.	FID Background = 0.0 ppm
C032CB06 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB07 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CB08 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032CB10 (4.0 - 8.0) / C032CB09 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.1			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-80

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:51 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-81

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,263.1 E 1,480,867.7	10.3 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.9 ft / 5.4ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB11 (0.0 - 0.5)		n.a.	n. r.	9.8	0		**Organic Soil (OL/OH)**: (TOPSOIL).	FID Background = 2.3 ppm
C032CB12 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, polymictic. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2		at 2.0 ft.: 0.6 foot occurence of cemented tar, cobble sized, dark brown globules, organic odor.	
C032CB13 (2.0 - 4.0)					3			
					4			
					5		at 4.5 ft.: moist. at 4.9 ft.: wet.	
		n.a.	n. r.		6			
C032CB14 (4.0 - 8.0)					7		at 6.5 ft.: 1 inch lense of Dark gray sand.	
				2.3	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 Exp. 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-81

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:10:58 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-82

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 472,572.2 E 1,480,868.5	9.2 ft	8.3 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 2.2ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB15 (0.0 - 0.5)		n.a.	n. r.	8.8	0		**Concrete**: Over aggregate base.	FID Background = 0.0 ppm
							Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, (FILL).	
C032CB16 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CB17 (2.0 - 4.0)					3			
					4			
					5			
		n.a.	n. r.		6			
C032CB18 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
							at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				1.2	8		**Clay (CL)**: Black [N2], wet, (BAY MUD).	
				0.8			**TOTAL DEPTH = 8.3 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-82

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:04 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-83

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,849.9 E 1,480,872.9	10.3 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 3.3ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB19 (0.0 - 0.5)		n.a.	n. r.	9.8	0		**Asphalt**.	FID Background = 0.0 ppm
					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB21 (0.5 - 2.0) C032CB20 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CB22 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CB23 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1].	
				1.8			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 6/9 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-83

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:11 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-84

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,112.1 E 1,480,872.9	9.0 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.0 ft / 5.0ft	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB24 (0.0 - 0.5)		n.a.	n. r.				**Organic Soil (OL/OH)**: fresh sod. (TOPSOIL).	FID Background = 2.0 ppm
				8.0	1		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, polymicct. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB25 (0.5 - 2.0)		n.a.	n. r.		2			
		n.a.	n. r.					
C032CB26 (2.0 - 4.0)					3			
					4		at 4.0 ft.: wet.	
		n.a.	n. r.		5			
C032CB27 (4.0 - 8.0)					6		at 5.8 ft.: 2 inch gray coarse sand lense.	
					7			
				1.5			**Clayey Sand (SC)**: Very dark gray [2.5Y 3/1], transition into bay mud. (BAY SEDIMENT).	
				1.0	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · CA · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-84

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:48 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-85

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,427.2 E 1,480,867.8	8.8 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.0 ft / 3.8ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB28 (0.0 - 0.5)		n.a.	n. r.	8.3	0		**Organic Soil (OL/OH)**: (TOPSOIL).	PID Background = 1.6 ppm
C032CB29 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/6], fine to medium grained sand, minor fines, dry, polymictic, rootlets. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CB30 (2.0 - 4.0)					3		at 2.5 ft.: 0.5 foot layer of fines. at 3.0 ft.: coarse grained sand.	
					4		at 3.8 ft.: fine to medium grained sand.	
		n.a.	n. r.	3.8	5		**Clay (CL)**: Dark gray [5Y 4/1], wet, some sand horizons, laminated clay, clean, organic odor. (BAY MUD).	
C032CB32 (4.0 - 8.0) C032CB31 (4.0 - 8.0)					6			
					7			
				0.8	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-85

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:24 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-86

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,603.0 E 1,480,852.4	6.9 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.2 ft / 2.7ft	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB33 (0.0 - 0.5)		n.a.	n. r.	6.4	0		**Organic Soil (OL/OH)**: rootlets. (TOPSOIL).	FID Background = 1.8 ppm
C032CB34 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/6], fine to medium grained sand, rounded, dry, polymictic. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2		at 1.8 ft.: intercalated Clay layers.	
C032CB35 (2.0 - 4.0)					3			
					4		at 4.2 ft.: wet.	
		n.a.	n. r.		5			
				1.4			**Clay (CL)**: Very dark gray [5Y 3/1], clean. (BAY MUD).	
C032CB36 (4.0 - 8.0)					6			
					7			
				-1.1	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-86

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:30 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-87

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,010.2 E 1,480,867.7	6.4 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.0 ft / 2.4ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB37 (0.0 - 0.5)		n.a.	n. r.	5.9	0		**Organic Soil (OL/OH)**. rootlets. (TOPSOIL).	FID Background = 1.2 ppm
C032CB38 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/6], fine to medium grained sand, rounded, polymictic. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n.r.		2		at 1.5 ft.: moist.	
C032CB39 (2.0 - 4.0)					3			
					4		at 4.0 ft.: wet.	
		n.a.	n. r.		5			
C032CB40 (4.0 - 8.0)					6			
					7		at 6.5 ft.: Dark gray [5Y 4/1].	
				-1.6	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
5-4-2/29/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-87

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:37 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-88

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,301.4 E 1,480,863.3	5.2 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB41 (0.0 - 0.5)		n.a.	n. r.	4.7	0		**Organic Soil (OL/OH)**: (TOPSOIL).	FID Background = 1.4 ppm
C032CB43 (0.5 - 2.0) / C032CB42 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/3], fine grained sand, dense, rootlets. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.	3.2	2		**Clayey Sand (SC)**: Olive brown [2.5Y 4/4], subrounded, moist, shell fragments, polymictic. (FILL).	
C032CB44 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5			
C032CB45 (4.0 - 8.0)					6			
				-1.3	7		**Clay (CL)**: Very dark gray [5Y 3/1], clean. (BAY MUD).	
				-2.3			**Sand (SP)**: Dark gray [5Y 4/1], moist, (BAY SEDIMENT).	
				-2.8	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-88

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:15:58 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-89

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-20-02	05-20-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 474,579.3 E 1,480,868.1	7.0 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 0.0ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB46 (0.0 - 0.5)		n.a.	n. r.	6.8	0		**Topsoil.**	FID Background = 0.0 ppm
							Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of gravel, trace of tree roots. (FILL).	
C032CB47 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CB48 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5			
				1.5			**Clayey Gravel with Sand (GC)**: poorly graded, gravel up to 1.5 inch in diameter. (FILL).	
C032CB49 (4.0 - 8.0)					6			
				0.5			**Clayey Sand (SC)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, wet, (FILL).	
					7			
				-1.1	8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4461 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-89

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:50 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-90

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 471,707.8 E 1,481,159.6	8.6 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.6ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.6	1		**Concrete**.	FID Background = 0.0 ppm
C032CB50 (0.0 - 0.5)		n.a.	n. r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB51 (0.5 - 2.0)					2			
				5.6	3		**Clay (CL)**: Olive brown [2.5Y 4/4], soft, moist to wet, with fine grained sand. (FILL).	
		n.a.	n. r.	5.1			**Sand (SP)**: Olive brown [2.5Y 4/4], poorly graded, moist to wet, (FILL).	
C032CB52 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
							at 6.5 ft.: Dark greenish gray [5GY 4/1].	
C032CB54 (4.0 - 8.0) C032CB53 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8			
				-0.4	9		**TOTAL DEPTH = 9.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-90

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:11:56 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-91

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-3	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,019.0 E 1,481,146.6	9.3 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 3.3ft ▼	n.a.	Tim Mote	Cathie Stumpenhaus RG 4451	Vertical	1.75 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.3	1		**Concrete**.	PID Background = 3.2 ppm
C032CB55 (0.0 - 0.5)		n.a.	n. r.	8.1			2 inch wet layer of coarse pebbles associated with pre-core. (ROAD BASE).	Hole backfilled with cement-bentonite grout after completion.
C032CB56 (0.5 - 2.0)		n.a.	n. r.		2		**Sand (SP)**: Light olive brown [2.5Y 5/6], medium grained sand, rounded, dry, polymictic, with minor clay lenses. (FILL).	
		n.a.	n. r.		3			
C032CB57 (2.0 - 4.0)					4			
					5		at 4.5 ft.: moist. at 5.0 ft.: 1 inch Dark gray Clay lense.	
		n.a.	n. r.		6		at 6.0 ft.: wet.	
C032CB58 (4.0 - 8.0)					7			
				1.8	8		**Clay (CL)**: Very dark gray [5Y 3/1], wet, organic odor. (BAY MUD).	
				0.3	9			

TOTAL DEPTH = 9.0 FEET

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-91

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:54 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-92

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-31-02	05-31-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,250.0 E 1,481,160.0	8.7 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.7ft	n.a.	Stephen Quayle	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.2	0		**Asphalt**: Over base rock.	
C032CB59 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB60 (0.5 - 2.0)				7.2	2		**Sandy Clay (CL)**: Dark olive gray [5Y 3/2], fine grained sand, moist, trace fine gravel. no hydrocarbon odor (FILL).	
		n.a.	n. r.	6.2	3		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	
C032CB61 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CB62 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8			
				0.2			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-92

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:12:09 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-93

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-16-02	05-16-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,554.4 E 1,481,153.1	8.2 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB63 (0.0 - 0.5)		n.a.	n. r.	7.9	0		**Topsoil.**	FID Background = 0.0 ppm
							Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, dry, trace of gravel. (FILL).	
C032CD65 (0.5 - 2.0) C032CB64 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CB66 (2.0 - 4.0)					3			
					4			
				3.7			**Clay (CL)**: Dark gray [N4], soft, moist to wet, medium plasticity, (FILL).	
		n.a.	n. r.	3.2	5		**Sand (SP)**: Olive brown [2.5Y 4/4], poorly graded, moist to wet, (FILL).	
C032CB67 (4.0 - 8.0)					6			
				1.2	7		**Clay (CH)**: Black [N2], wet, (BAY MUD).	
				0.2	8		**TOTAL DEPTH = 8.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-93

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:12:16 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-94

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 472,845.0 E 1,481,144.4	8.7 ft	8.3 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB68 (0.0 - 0.5)		n.a.	n. r.	8.5	0		**Topsoil.**	FID Background = 0.0 ppm
C032CB69 (0.5 - 2.0)					1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of roots, trace of clay. (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		2			
C032CB70 (2.0 - 4.0)					3			
					4			
		n.a.	n. r.		5		at 5.5 ft.: with medium to coarse grained sand, trace of fine gravel up to 1 inch in diameter.	
C032CB71 (4.0 - 8.0)					6			
					7			
				0.5	8		**TOTAL DEPTH = 8.3 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-94

Report form: CTO-032 ALAMEDA BORING LOG Time: 10:20:02 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-95

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,156.3 E 1,481,156.3	7.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 5.0 ft / 2.5ft	n.a.	Eric Johansen / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.0	0		**Topsoil**: Silty Sand.	FID Background = 0.0 ppm
C032CB72 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Strong brown [7.5YR 4/6], fine grained sand, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB73 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CB74 (2.0 - 4.0)					4			
					5		at 5.0 ft.: wet.	
		n.a.	n. r.		6		at 6.0 ft.: Very dark gray [5Y 3/1].	
C032CB76 (4.0 - 8.0) C032CB75 (4.0 - 8.0)					7			
				0.0	8		**Clay (CL)**: Dark olive gray [5Y 3/2], wet, low plasticity, (BAY MUD).	
				-1.1			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-95

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:12:26 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-96

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,451.0 E 1,481,158.9	7.6 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 0.6ft ▼	n.a.	Eric Johansen	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB77 (0.0 - 0.5)		n.a.	n. r.	7.1	1		**Concrete**.	FID Background = 0.0 ppm
C032CB78 (0.5 - 2.0)					2		**Sand (SP)**: Brown [10YR 4/3], fine grained sand, moist, (FILL).	Surface - Concrete - Hand auger to 5 feet.
		n.a.	n. r.		3			Hole backfilled with cement-bentonite grout after completion.
C032CB79 (2.0 - 4.0)				3.6	4		**Silty Sand (SM)**: Reddish brown [5YR 4/3], fine grained sand, moist, (FILL).	
					5		at 5.0 ft.: Dark grayish brown [2.5Y 4/2].	
		n.a.	n. r.	1.6	6		**Sand (SP)**: Dark gray [5Y 4/1], fine grained sand, (FILL).	
C032CB80 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
				0.1	8		**Clay (CL)**: Very dark gray [5Y 3/1], wet, low plasticity, (BAY MUD).	
				-0.9			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-96

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:12:01 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-97

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-30-02	05-30-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 473,661.3 E 1,481,148.8	7.7 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 0.7ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.2	0		**Topsoil.**	FID Background = 0.0 ppm
C032CB81 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of clay, trace of fine gravel. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB82 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CB83 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CB84 (4.0 - 8.0)					7		at 7.0 ft.: wet.	
					8			
				-0.9			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUSEN · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-97

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:12:38 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-98

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct-Push	n.a.	N 473,966.9 E 1,481,155.0	6.6 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / -0.5ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.1	0		**Topsoil**.	FID Background = 0.0 ppm
C032CB85 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace of sea shells, trace of gravel up to 0.5 inch in diameter. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB87 (0.5 - 2.0) C032CB86 (0.5 2.0)					2			
		n.a.	n. r.		3			
C032CB88 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CB89 (4.0 8.0)					7		at 6.5 ft.: Dark greenish gray [5GY 4/1]. at 7.0 ft.: wet.	
				-1.0	8		**Clay (CL)**: Dark greenish gray [5GY 4/1], wet, (BAY MUD).	
				-2.0			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-98

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:12:45 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-99

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct-Push	n.a.	N 474,272.0 E 1,481,152.5	5.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz.)**	**HOLE DIAMETER**
▽ 7.0 ft / -1.5ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.0	0		**Topsoil**.	FID Background = 0.0 ppm
C032CB90 (0.0 - 0.5)		n.a.	n. r.		1		**Clayey Gravel with Sand (GC)**: Reddish yellow [5YR 6/8], poorly graded, moist, (FILL).	
C032CB91 (0.5 - 2.0)					2			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.	3.0	3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CB92 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CB93 (4.0 - 8.0)								
				-1.5	7		**Clay (CL)**: Dark greenish gray [5GY 4/1], wet, (BAY MUD).	
				-3.0	8			
							TOTAL DEPTH = 8.5 FEET	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUST
No. 4451
Exp. 2/29/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-99

Report form: CTO-032 ALAMEDA BORING LOG Time: 9:12:50 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-100

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 471,681.8 E 1,481,445.6	9.0 ft	9.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 3.0ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
							Concrete.	FID Background = 0.0 ppm
C032CB94 (0.0 - 0.5)		n.a.	n. r.	8.0	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CB95 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CB96 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
C032CB98 (4.0 - 8.0) C032CB97 (4.0 - 8.0)					7			
				1.0	8		**Clay (CL)**: Black [7.5YR 2.5/1], saturated, (BAY MUD).	
				0.0	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-100

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:06:27 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-101

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 472,031.8 E 1,481,449.4	9.8 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ not encountered	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CB99 (0.0 - 0.5)		n.a.	n.r.	9.3	0		**Topsoil**: and road base.	PID Background = 0.0 ppm
C032CB00 (0.5 - 2.0)					1		**Sandy clay (CL)**: Olive brown [2.5Y 4/4], fine grained sand, trace fine gravel, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC01 (2.0 - 4.0)		n.a.	n.r.		2			
					3			
					4			
					5			
C032CC02 (4.0 - 8.0)		n.a.	n. r.		6			
					7			
					8			
				1.3			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-101

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:06:33 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-102

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,283.3 E 1,481,475.9	9.2 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ Not Encountered	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC03 (0.0 - 0.5)		n.a.	n.r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace shell fragments. (FILL).	FID Background = 0.0 ppm
C032CC04 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n a	n r		2			
C032CC05 (2.0 - 4.0)					3			
					4			
					4.4 5		**Sandy clay (CL)**: Strong brown [7.5YR 5/8], trace fine gravel, dry, (FILL).	
		n.a.	n.r.					
C032CC06 (4.0 - 8.0)					6			
					2.8 7		**Sand (SP)**: Olive brown [2.5Y 4/4], poorly graded, moist, (FILL).	
					1.6		**Clay (CL)**: Dark greenish gray [5GY 4/1], wet, (BAY MUD).	
					1.2 8		**TOTAL DEPTH = 8.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-102

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:06:38 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-103

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,555.2 E 1,481,453.5	9.2 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 2.5 ft / 6.7ft	n.a.	Stephen Quayle / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC07 (0.0 - 0.5)		n.a.	n.r.	8.7	0		**Organic Soil (OL)**: dry, low plasticity, no hydrocarbon odor (TOPSOIL).	FID Background = 2.57 ppm
C032CC09 (0.5 - 2.0) C032CC08 (0.5 - 2.0)		n.a.	n.r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC10 (2.0 - 4.0)		n.a.	n.r.		2		at 2.5 ft.: Dark greenish gray [5GY 4/1] with Light olive brown [2.5Y 5/4] mottling, trace fine gravel, wet.	
C032CC11 (4.0 - 8.0)				1.2	3			
					4			
					5			
					6			
					7			
					8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-103

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:06:44 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-104

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,814.6 E 1,481,472.4	9.4 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.5 ft / 2.9ft ▼	n.a.	Eric Johansen / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.9	0		**Silt (ML)**: (TOPSOIL).	FID Background = 0.0 ppm
C032CC12 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/3], fine grained sand, poorly graded, moist, (FILL). minor shell fragments	Hole backfilled with cement-bentonite grout after completion.
C032CC13 (0.5 - 2.0)				7.4	2		**Silty sand (SM)**: Very dark grayish brown [2.5Y 3/2], fine grained sand, minor fine gravel, moist, (FILL).	
C032CC14 (2.0 - 4.0)		n.a.	n. r.		3			
					4			
				4.4	5		**Clayey sand (SC)**: Olive brown [2.5Y 4/3], fine grained sand, moist, (FILL).	
C032CC15 (4.0 - 8.0)		n.a.	n.r.		6			
				2.9	7		**Clayey Sand (SC)**: Dark gray [N4], saturated, (BAY MUD).	
					8			
				0.9			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 4/24/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-104

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:10:31 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-105

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 473,148.5 E 1,481,451.2	8.1 ft	10.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.1ft ▼	n.a.	Eric Johansen	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
		n.a.	n.r.		1		**Silty gravel (GM)**: fine gravel, (ROADBASE).	FID Background = 0.0 ppm
				6.6				Hole backfilled with cement-bentonite grout after completion.
C032CC16 (0.0 - 0.5)		n.a.	n. r.		2		**Sand (SP)**: Yellowish brown [10YR 5/6], fine grained sand, moist, (FILL).	
C032CC17 (0.5 - 2.0)					3			
							at 3.6 ft.: Very dark grayish brown [2.5Y 3/2].	
C032CC18 (2.0 - 4.0)		n.a.	n. r.		4			
					5		at 5.0 ft.: Very dark gray [N3].	
					6			
		n.a.	n. r.		7		at 7.0 ft.: saturated.	
C032CC20 (4.0 - 8.0) C032CC19 (4.0 - 8.0)					8			
					9			
				-1.4			**Clay (CL)**: Very dark gray [5Y 3/1], saturated, low plasticity, (BAY MUD).	
				-1.9	10		**TOTAL DEPTH = 10.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-105

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:10:59 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-106

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,432.9 E 1,481,451.3	8.7 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 5.0 ft / 3.7ft	n.a.	Eric Johansen / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.9	0		**Silt with sand (ML)**: Very dark grayish brown [2.5Y 3/2], moist, with roots. (TOPSOIL).	FID Background = 0.0 ppm
C032CC21 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Light yellowish brown [2.5Y 6/4], fine grained sand, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC22 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CC23 (2.0 - 4.0)					4			
					5		at 5.0 ft.: saturated.	
		n.a.	n.r.		6			
C032CC24 (4.0 8.0)					7			
				1.7			**Clayey sand (SC)**: Very dark gray [5Y 3/1], fine grained sand, saturated, low plasticity, (BAY MUD).	
				0.2	8		**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · Exp. 6/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-106

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:02 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-107

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-30-02	05-30-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,712.6 E 1,481,439.3	6.8 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ not encountered	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC25 (0.0 - 0.5)		n.a.	n.r.		0		**Clay (CL)**: Dark brown [7.5YR 3/2], trace fine grained sand, hard, moist, trace roots. (FILL).	FID Background = 0.0 ppm
C032CC26 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n a	n.r.		2			
C032CC27 (2.0 - 4.0)					3			
					4			
		n.a.	n.r.		5		at 5.0 ft.: some fine and coarse gravel.	Poor recovery due to gravel and roots.
C032CC28 (4.0 - 8.0)					6			
					7			
				-1.2	8		**TOTAL DEPTH = 8.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-107

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:08 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-108

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 474,038.2 E 1,481,462.2	5.5 ft	8.7 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / -1.5ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.3	0		**Asphalt**: over road base.	PID Background = 0.0 ppm
C032CC29 (0.0 - 0.5)		n.a.	n. r.	4.9	1		**Clayey gravel with sand (GC)**: Reddish yellow [7.5YR 6/8], poorly graded, moist, (FILL)	Hole backfilled with cement-bentonite grout after completion.
C032CC31 (0.5 - 2.0) C032CC30 (0.5 - 2.0)					2			
		n.a.	n. r.	2.7	3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CC32 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6			
C032CC33 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
					8			
				-3.1			**TOTAL DEPTH = 8.7 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-108

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:12 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-109

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 474,305.5 E 1,481,456.7	4.6 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ not encountered	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				4.4	0		**Asphalt**: over road base.	FID Background – 0.0 ppm
C032CC34 (0.0 - 0.5)		n.a.	n. r.	4.1	1		**Clayey gravel with sand (GC)**: Reddish yellow [7.5YR 6/8], poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC35 (0.5 - 2.0)					2			
		n.a.	n. r.	1.8	3		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, moist, (FILL).	
C032CC36 (2.0 - 4.0)					4			
		n.a.	n.r.		5			
					6			
C032CC37 (4.0 8.0)					7		at 7.5 ft.: trace clay.	
				-3.9	8		**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-109

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:18 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-110

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-23-02	05-23-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 471,973.2 E 1,481,736.3	8.6 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 1.6ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.1			**Asphalt**: over road base.	FID Background = 0.0 ppm
C032CC38 (0.0 - 0.5)		n.a.	n. r.	7.6	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, trace clay, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC39 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CC40 (2.0 - 4.0)					4			
					5		at 5.0 ft.: Dark greenish gray [5GY 4/1], with shell fragments.	
		n.a.	n.r.		6			
C032CC42 (4.0 - 8.0) C032CC41 (4.0 - 8.0)					7		at 7.0 ft.: saturated.	
					8			
				-0.4	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-110

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:25 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-111

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,263.3 E 1,481,736.7	9.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ not encountered	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				9.3	0		**Asphalt**: over road base.	FID Background = 0.0 ppm
C032CC43 (0.0 - 0.5)		n.a.	n. r.	9.0	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC44 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CC45 (2.0 - 4.0)					4			
					5		at 5.0 ft.: Dark greenish gray [5GY 4/1], trace clay.	
		n.a.	n.r.		6			
C032CC46 (4.0 - 8.0)					7			
					8			
				1.0			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST
DANIEL L STUMPENHAUS
No. 4451
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-111

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:30 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-112

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,561.9 E 1,481,739.6	9.8 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz.)**	**HOLE DIAMETER**
▽ 6.5 ft / 3.3ft	n.a.	Stephen Quayle / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				9.6	0		**Concrete**: over road base.	FID Background = 3.10 ppm
C032CC47 (0.0 - 0.5)		n.a.	n. r.	9.3	1		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC48 (0.5 - 2.0)					2			
		n.a.	n. r.	6.8	3		**Sand (SW)**: Olive [5Y 5/3], fine to coarse grained sand, some fine gravel, moist, thin interbedded clay layers. no hydrocarbon odor (FILL).	
C032CC49 (2.0 - 4.0)					4			
		n.a.	n.r.	4.8	5		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	
C032CC50 (4.0 - 8.0)					6		at 6.5 ft.: wet.	
					7		at 7.0 ft.: Dark greenish gray [5GY 4/1].	
					8			
				1.3			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-112

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:36 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-113

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,871.2 E 1,481,742.1	8.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.5 ft / 1.0ft	n.a.	Stephen Quayle / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.3			**Asphalt**: over road base.	FID Background = 3.45 ppm
C032CC51 (0.0 - 0.5)		n.a.	n. r.	8.0			**Sand (SW)**: Olive [5Y 5/3], fine to coarse grained sand, some fine gravel, moist, no hydrocarbon odor (FILL).	
				7.5	1		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, thin interbedded clay layers up to 1-inch thick. no hydrocarbon odor (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC53 (0.5 - 2.0) C032CC52 (0.5 - 2.0)					2			
		n.a.	n. r.		3		at 3.0 ft.: Dark greenish gray [5GY 4/1], trace shells.	
C032CC54 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6		at 5.5 ft.: no interbedded clay layers. moderate hydrocarbon odor.	
C032CC55 (4.0 - 8.0)					7			
				1.0	8		**Sandy silt (MH)**: Dark greenish gray [5GY 4/1], fine grained sand, wet, no hydrocarbon odor (BAY MUD).	
				0.0			**TOTAL DEPTH = 8.5 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-113

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:42 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-114

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,136.1 E 1,481,740.6	8.6 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.5 ft / 1.1ft	n.a.	Eric Johansen / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.1	0		**Gravel (GP)**: Dark yellowish brown [10YR 4/4], poorly graded, (ROADBASE).	FID Background = 0.0 ppm
C032CC56 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Light olive brown [2.5Y 5/3], fine grained sand, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC57 (0.5 - 2.0)				6.6	2		**Silty sand with gravel (SM)**: Strong brown [7.5YR 4/6], fine grained sand, moist, (FILL).	
		n.a.	n. r.		3			
C032CC58 (2.0 - 4.0)				5.1	4		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, (FILL).	
					5			
		n.a.	n.r.		6			
C032CC59 (4.0 - 8.0)					7		at 7.5 ft.: wet.	
				0.1	8			
							TOTAL DEPTH = 8.5 FEET	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-114

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:49 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-115

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,427.2 E 1,481,780.7	8.4 ft	11.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.5 ft / 0.9ft	n.a.	Eric Johansen / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
		n.a.	n.r.	7.9	0		Silt (ML): Very dark grayish brown [2.5Y 3/2], with roots. (TOPSOIL).	FID Background = 0.0 ppm
		n.a.	n.r.		1		Silty gravel (GM): Light olive brown [2.5Y 5/4], fine grained sand, fine and coarse gravel, moist, (CONSTRUCTION FILL).	Hole backfilled with cement-bentonite grout after completion.
					2			
					3			
					4			
C032CC60 (0.0 - 0.5)		n.a.	n. r.	3.9	5		Sand (SP): Yellowish brown [10YR 5/6], fine grained sand, minor fine gravel, moist, (FILL).	
C032CC61 (0.5 - 2.0)					6			
					7			
		n.a.	n.r.	0.9	8		Clay (CL): Very dark gray [10YR 3/1], saturated, low plasticity, (BAY MUD).	
				-0.1	9		Sand (SP): Very dark gray [10YR 3/1], fine grained sand, saturated, organic laminations. (BAY SEDIMENT).	
					10			
				-2.6	11		TOTAL DEPTH = 11.0 FEET	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-115

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:07:55 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-116

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-30-02	05-30-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 473,718.9 E 1,481,726.9	7.1 ft	8.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 0.1ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC65 (0.0 - 0.5)		n.a.	n.r.	7.0	0		**Topsoil.**	PID Background = 0.0 ppm
							Sand (SP): Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace shell fragments. (FILL).	
C032CC66 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n.r.		2			
C032CC67 (2.0 - 4.0)					3			
					4			
		n.a.	n.r.		5			
C032CC68 (4.0 - 8.0)					6			
					7		at 7.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
				-0.9	8		**TOTAL DEPTH = 8.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-116

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:01 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-117

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 474,003.4 E 1,481,735.3	6.8 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / -0.2ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.3	0		**Topsoil.**	FID Background = 0.0 ppm
C032CC69 (0.0 - 0.5)		n.a.	n. r.		1		**Clayey gravel with sand (GC)**: Reddish yellow [7.5YR 6/8], poorly graded, moist, (CONSTRUCTION FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC70 (0.5 - 2.0)				4.6	2			
		n.a.	n. r.		3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CC71 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6			
C032CC72 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
				-1.2	8		**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 3/24/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-117

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:05 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-118

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 474,340.2 E 1,481,740.5	5.5 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 8.0 ft / -2.5ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				5.0	0		**Topsoil**.	FID Background = 0.0 ppm
C032CC73 (0.0 - 0.5)		n.a.	n. r.		1		**Clay with sand (CL)**: Olive brown [2.5Y 4/4], fine grained sand, trace fine and coarse gravel, hard, dry, (FILL).	
C032CC75 (0.5 - 2.0) C032CC74 (0.5 - 2.0)				3.7	2		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032CC76 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6			
C032CC77 (4.0 - 8.0)					7			
				-2.5	8		**Clayey gravel with sand (GC)**: wet.	
				-3.0			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-118

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:11 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-119

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 471,981.8 E 1,482,033.0	8.2 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 2.2ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC78 (0.0 - 0.5)		n.a.	n.r.				**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	FID Background = 0.0 ppm
C032CC79 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n.r.		2			
C032CC80 (2.0 - 4.0)					3			
					4		at 4.0 ft.: Dark reddish brown [2.5YR 2.5/4]. at 4.3 ft.: Dark greenish gray [5GY 4/1].	
		n.a.	n.r.		5			
C032CC81 (4.0 - 8.0)					6		at 6.0 ft.: saturated.	
					1.4 7		**Clay (CH)**: Dark greenish gray [5GY 4/1], soft, wet, (BAY MUD).	
					0.2 8		**TOTAL DEPTH = 8.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 3/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-119

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:20 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-120

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 472,272.8 E 1,482,031.5	8.9 ft	8.0 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ Not Encountered	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC82 (0.0 - 0.5)		n.a.	n.r.		0		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	FID Background = 0.0 ppm
C032CC83 (0.5 - 2.0)					1			Hole backfilled with cement-bentonite grout after completion.
		n a	n.r.		2			
C032CC84 (2.0 - 4.0)					3			
					4.9 4		**Sandy clay (CL)**: Olive brown [2.5Y 4/4], fine grained sand, soft, moist, trace wood fragments. (FILL).	
		n.a.	n.r.		5			
					3.4 6		**Clay (CH)**: Dark greenish gray [5GY 4/1], very soft, wet, (BAY MUD).	
C032CC86 (4.0 - 8.0) C032CC85 (4.0 - 8.0)					7			
					0.9 8		**TOTAL DEPTH = 8.0 FEET**	

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SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-120

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:26 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-121

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 472,503.7 E 1,482,030.9	7.6 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 1.6ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.1	0		**Concrete**: over road base.	FID Background = 0.0 ppm
C032CC87 (0.0 - 0.5)		n.a.	n. r.	6.6	1		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, moist, trace shell fragments. (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC88 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CC89 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6		at 6.0 ft.: saturated.	
C032CC90 (4.0 - 8.0)				0.6	7		**Clay (CH)**: Dark greenish gray [5GY 4/1], soft, wet, (BAY MUD).	
					8			
				-1.4	9			

TOTAL DEPTH = 9.0 FEET

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-121

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:32 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-122

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-31-02	05-31-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 472,845.3 E 1,482,031.6	8.3 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 4.0 ft / 4.3ft ▼	n.a.	Stephen Quayle	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.8			**Asphalt**: over road base.	FID Background = 2.76 ppm
C032CC91 (0.0 - 0.5)		n.a.	n. r.	7.3	1		**Sand (SW)**: Olive [5Y 5/3], fine to coarse grained sand, some fine gravel, moist, no hydrocarbon odor (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CC92 (0.5 - 2.0)				6.6	2		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	
		n.a.	n. r.		3			
C032CC93 (2.0 - 4.0)					4		at 4.0 ft.: wet.	
					5		at 4.5 ft.: 2 inch thick layer fine gravel.	
		n.a.	n. r.		6			
C032CC94 (4.0 - 8.0)					7		at 6.5 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.7	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
Exp. 2/29/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-122

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:39 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-123

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,125.4 E 1,482,029.1	8.8 ft	8.3 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.0 ft / 1.8ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC95 (0.0 - 0.5)		n.a.	n. r.	8.5	0		**Topsoil**.	FID Background = 0.0 ppm
					1		**Sandy clay (CL)**: Olive brown [2.5Y 4/4], fine grained sand, hard, dry, (FILL).	
C032CC97 (0.5 - 2.0) C032CC96 (0.5 - 2.0)					2			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.	6.0	3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, trace shell fragments. (FILL).	
C032CC98 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6			
C032CC99 (4.0 - 8.0)				2.3	7		**Clay (CL)**: Dark greenish gray [5GY 4/1], saturated, (BAY MUD).	
				0.5	8			

TOTAL DEPTH = 8.3 FEET

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 6/9.21/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-123

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:45 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-124

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-2	Alameda Point	05-31-02	05-31-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,427.0 E 1,482,051.8	6.8 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ Not Encountered	n.a.	Eric Johansen / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CC00 (0.0 - 0.5)		n.a.	n.r.	6.3	0		**Silty sand (SM)**: Dark brown [10YR 3/3], fine grained sand, minor fine gravel, moist, (TOPSOIL).	FID Background = 0.0 ppm
C032CD01 (0.5 - 2.0)					1		**Sand (SP)**: Pale brown [10YR 6/3], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n.r.		2			
C032CD02 (2.0 - 4.0)					3			
					4			
					5			
		n.a.	n.r.		6			
C032CD03 (4.0 - 8.0)					7			
				-0.7	8		**Clay (CL)**: (BAY MUD).	
				-1.7			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · No. 4451 · 5/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-124

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:08:51 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-125

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-30-02	05-30-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 473,713.9 E 1,482,031.5	7.6 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ Not Encountered	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.1	0		**Topsoil**.	FID Background = 0.0 ppm
C032CD04 (0.0 - 0.5)		n.a.			1		**Clayey sand (SC)**: Olive brown [2.5Y 4/4], trace fine and coarse gravel, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD05 (0.5 - 2.0)				5.1	2			
		n.a.	n. r.		3		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CD06 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CD08 (4.0 - 8.0) C032CD07 (4.0 - 8.0)					7			
				-0.9	8			
							TOTAL DEPTH = 8.5 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUSER · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-125

Report form: CTO-032 ALAMEDA BORING LOG Time: 8:11:15 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-126

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-30-02	05-30-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 474,009.8 E 1,482,074.2	7.4 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 0.4ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.9	0		Topsoil.	FID Background = 0.0 ppm
C032CD09 (0.0 - 0.5)		n.a.	n. r.		1		Sandy clay (CL): Olive brown [2.5Y 4/4], fine grained sand, moist, trace roots and shell fragments. (FILL).	
C032CD10 (0.5 - 2.0)					2			Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032CD11 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CD12 (4.0 - 8.0)					7		at 7.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
					8			
				-1.1			TOTAL DEPTH = 8.5 FEET	

REGISTERED GEOLOGIST
CATHIE L. STUMPENHAUS
No. 4451
Exp. 4/27/04
STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-126

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:01 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-127

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-29-02	05-29-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 474,302.6 E 1,482,007.1	6.6 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.5 ft / -0.9ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CD13 (0.0 - 0.5)		n.a.	n. r.	6.1	0		**Topsoil**.	FID Background = 0.0 ppm
C032CD14 (0.5 - 2.0)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD15 (2.0 - 4.0)		n.a.	n. r.		2			
C032CD16 (4.0 - 8.0)					3			
					4			
					5			
					6			
					7		at 7.5 ft.: Dark greenish gray [5GY 4/1], saturated.	
				-1.9	8			
							TOTAL DEPTH = 8.5 FEET	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-127

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:06 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-128

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 470,786.2 E 1,482,322.2	8.7 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ 6.0 ft / 2.7ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.2			**Concrete**: over road base.	FID Background = 0.0 ppm
C032CD17 (0.0 - 0.5)		n.a.	n. r.	7.7	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD19 (0.5 - 2.0) C032CD18 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CD20 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
C032CD21 (4.0 - 8.0)					7			
					8		at 8.0 ft.: Very dark grayish brown [10YR 3/2].	
				-0.3	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4461 · 5/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-128

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:12 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-129

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 471,102.9 E 1,482,340.0	8.3 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ Not Encountered ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.8	0		**Topsoil**.	FID Background = 0.0 ppm
C032CD22 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD23 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CD24 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.	2.8	6		**Clay (CH)**: Dark greenish gray [5GY 4/1], very soft, wet, (BAY MUD).	
C032CD25 (4.0 - 8.0)					7			
					8			
				-0.2			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-129

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:18 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-130

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 471,390.1 E 1,482,322.6	9.9 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY / REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 6.0 ft / 3.9ft	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				9.6	0		**Concrete**: over road base.	FID Background = 0.0 ppm
				9.4				
C032CD26 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD27 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CD28 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
C032CD30 (4.0 - 8.0) C032CD29 (4.0 - 8.0)					7			
				1.9	8		**Clay (CH)**: Dark greenish gray [5GY 4/1], soft, wet, (BAY MUD).	
				1.4			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 3/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-130

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:23 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-131

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-24-02	05-24-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 471,649.3 E 1,482,321.5	9.2 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 6.0 ft / 3.2ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				8.7			**Concrete**: over road base.	
C032CD31 (0.0 - 0.5)		n.a.	n. r.	8.2	1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD32 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CD33 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6		at 6.0 ft.: Dark greenish gray [5GY 4/1], saturated.	
C032CD34 (4.0 - 8.0)				2.2	7		**Clay (CH)**: Dark greenish gray [5GY 4/1], very soft, wet, (BAY MUD).	
				0.2	8			
					9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L STUMPENHAUS · No. 4451 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-131

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:30 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-132

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 472,554.1 E 1,482,322.7	7.9 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 7.0 ft / 0.9ft ▼	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.4	0		**Concrete**: over road base.	FID Background – 0.0 ppm
C032CD35 (0.0 - 0.5)		n.a.	n. r.	6.9	1		**Sandy clay** Dark greenish gray [5GY 4/1], fine grained sand, dry, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD36 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
				4.4			**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CD37 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6			
C032CD38 (4.0 - 8.0)				0.9	7		**Clay (CH)**: Black [N2], saturated, (BAY MUD).	
					8			
				-1.2	9		**TOTAL DEPTH = 9.0 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 3/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-132

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:36 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-133

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-31-02	05-31-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 472,832.7 E 1,482,322.1	8.2 ft	8.5 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz)	HOLE DIAMETER
▽ 5.5 ft / 2.7ft ▼	n.a.	Stephen Quayle	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
C032CD39 (0.0 - 0.5)		n.a.	n. r.	8.0	0		**Asphalt**: over road base.	FID Background = 2.77 ppm
				7.7	1		**Sand (SW)**: Olive [5Y 5/3], fine to coarse grained sand, some fine gravel, moist, no hydrocarbon odor (FILL).	
C032CD40 (0.5 - 2.0)				6.7	2		**Sand (SP)**: Light olive brown [2.5Y 5/4], fine grained sand, moist, no hydrocarbon odor (FILL).	Hole backfilled with cement-bentonite grout after completion.
		n.a.	n. r.		3			
C032CD42 (2.0 - 4.0) C032CD41 (2.0 - 4.0)					4			
					5		at 5.5 ft.: wet.	
		n.a.	n.r.		6			
C032CD43 (4.0 - 8.0)					7		at 6.5 ft.: Dark greenish gray [5GY 4/1].	
					8			
				-0.3			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 12/29/14 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-133

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:42 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-134

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,140.9 E 1,482,326.1	8.3 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.5 ft / 0.8ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				7.8	0		**Topsoil**.	PID Background = 0.0 ppm
C032CD44 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD45 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CD46 (2.0 - 4.0)				4.3	4		**Clay (CL)**: Dark reddish brown [2.5YR 3/4], with fine grained sand, moist, (FILL).	
					5			
		n.a.	n.r.		6		at 6.0 ft.: Light olive brown [2.5Y 5/3] with dark red staining.	
C032CD47 (4.0 - 8.0)					7			
				0.8	8		**Sand (SP)**: Dark greenish gray [5GY 4/1], fine grained sand, poorly graded, saturated, with shell fragments. (FILL).	
				-0.2			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUST · C.E.G. No. 4451 · 2/24/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-134

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:09:49 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-135

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-28-02	05-28-02

DRILLING METHOD	HAMMER WEIGHT / FALL	SITE LOCATION or MAP DESCRIPTION	ELEVATION	TOTAL DEPTH
Direct Push	n.a.	N 473,376.8 E 1,482,330.3	7.4 ft	9.0 ft

DEPTH / ELEVATION TO WATER	TOC ELEVATION	LOGGED BY	REVIEWED BY	ANGLE (from Horiz.)	HOLE DIAMETER
▽ 7.5 ft / -0.1ft	n.a.	Karl Brunkhorst	Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.9	0		**Concrete**: over road base.	FID Background = 0.0 ppm
C032CD48 (0.0 - 0.5)		n.a.	n. r.	6.4	1		**Clay with sand (CL)**: Olive brown [2.5Y 4/4], fine grained sand, hard, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD49 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
				3.9			**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, poorly graded, moist, (FILL).	
C032CD50 (2.0 - 4.0)					4			
					5			
		n.a.	n. r.		6			
C032CD52 (4.0 - 8.0) C032CD51 (4.0 - 8.0)					7			
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1], saturated.	
				-1.6	9			

TOTAL DEPTH = 9.0 FEET

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 · 4/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-135

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:28:34 AM

BORING LOG

PROJECT	JOB NUMBER	SHEET NUMBER	HOLE NUMBER
CLEAN 3	23818-032	1 of 1	32EDC-5-136

DRILLING COMPANY	DRILLING RIG	SITE	BEGUN	FINISHED
Precision Drilling, Inc.	Precision XD-1	Alameda Point	05-30-02	05-30-02
DRILLING METHOD	**HAMMER WEIGHT / FALL**	**SITE LOCATION or MAP DESCRIPTION**	**ELEVATION**	**TOTAL DEPTH**
Direct Push	n.a.	N 473,718.1 E 1,482,322.7	6.9 ft	8.5 ft
DEPTH / ELEVATION TO WATER	**TOC ELEVATION**	**LOGGED BY** / **REVIEWED BY**	**ANGLE (from Horiz)**	**HOLE DIAMETER**
▽ 7.5 ft / -0.6ft ▼	n.a.	Karl Brunkhorst / Cathie Stumpenhaus - RG 4451	Vertical	2.5 in

SAMPLE ID	SAMPLER ADVANCE	BLOW COUNTS (# BLOWS/6")	PID READING (PPM)	ELEVATION IN FEET	DEPTH IN FEET	GRAPHICS SYMBOL	DESCRIPTION and CLASSIFICATION	NOTES
				6.4	0		**Topsoil**.	FID Background = 0.0 ppm
C032CD53 (0.0 - 0.5)		n.a.	n. r.		1		**Sand (SP)**: Olive brown [2.5Y 4/4], fine grained sand, trace clay, poorly graded, moist, (FILL).	Hole backfilled with cement-bentonite grout after completion.
C032CD54 (0.5 - 2.0)					2			
		n.a.	n. r.		3			
C032CD55 (2.0 - 4.0)					4			
					5			
		n.a.	n.r.		6			
C032CD57 (4.0 - 8.0) C032CD56 (4.0 - 8.0)					7			
					8		at 7.5 ft.: Dark greenish gray [5GY 4/1], saturated.	
				-1.6			**TOTAL DEPTH = 8.5 FEET**	

REGISTERED GEOLOGIST · CATHIE L. STUMPENHAUS · No. 4451 Exp. 2/29/04 · STATE OF CALIFORNIA

SEE EXPLANATION FOR SYMBOLS AND ABBREVIATIONS	WELL / BORING LOCATION	HOLE NUMBER
	Alameda Point, Alameda, CA	32EDC-5-136

Report form: CTO-032 ALAMEDA BORING LOG Time: 11:10:00 AM

ATTACHMENT D3

CHAIN-OF-CUSTODY FORMS

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CLEAN

CHAIN-OF-CUSTODY RECORD

20195

Site Name: EDC-5 ALAMEDA
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. STAVER
Signature(s):

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 SOUTH 13TH ST. KELSO, WA 98626
Field Logbook/Page Number: FL-032 EDC-5-01 pg 21, 24

Pay Items/ Analyses Required: PAH U.S. EPA 8270C SIM; PAH BY SIM; 2.25; 2.26

Preservation (4°C): COOL

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C759	5-13-02/0935	EB65 EDC-501	SOIL	1		01	0"-6"
C032C760	5-13-02/0947	32EDC-501	SOIL	1		01	6"-24"
C032C761	5-13-02/0950	32EDC-501	SOIL	1		01	24"-48"
C032C762	5-13-02/1002	32EDC-501	SOIL	1		01	48"-96"
C032C763	5-13-02/1144	32EDC-502	SOIL	1		01	0"-6"
C032C764	5-13-02/1146	32EDC-502	SOIL	1		01	6"-24"
C032C765	5-13-02/1150	32EDC-502	SOIL	1		01	24-48"
C032C766	5-13-02/1152	32EDC-502	SOIL	1		01	48-96" MS/MSD
C032CR03 DS	5-13-02/1154 1220	FBC	WATER	2		01/02	Rinsate
C032CR04 DS	5-13-02/1225	FBC	WATER	2		01/02	Rinsate

Per Columbia

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-13-02	1900	SHIP TO LAB
		5-14-02	1000	

Comments/Instructions: Follow BEI SOW FOR LAB ANALYSIS. CALL J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7920 3333 3929
Total No. of Containers: 12
Total No. of Coolers Shipped: 1
Lab Temp:
Cooler Temp:

C032CF02
C032CR03
C032CR04
C032CR05

T = 1.7

SDG - K2203083

MAR-18 2002 8:38AM HP LASERJET 3200

CLEAN

CHAIN-OF-CUSTODY RECORD

20197

Site Name: EDC-5 ALAMEDA
CTO Number: 032
Site Contact/Supervisor: J JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. SWIFT FRESNO CA 93722
Field Logbook/Page Number: FL-032-EDC-5-01 pg 22, 25

Preservation (4°C): COOL

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C785	5-13-02/1017	32EDC-507	SOIL	1		01	0"-6"
C032C786	5-13-02/1022	32EDC-507	SOIL	1		01	6"-24"
C032C787	5-13-02/1025	32EDC-507	SOIL	1		01	24"-48"
C032C788	5-13-02/1036	32EDC-507	SOIL	1		01	48"-96"
C032C767	5-13-02/1319	32EDC-503	SOIL	1		01	0"-6"
C032C768	5-13-02/1323	32EDC-503	SOIL	1		01	6"-24"
C032C769	5-13-02/1325	32EDC-503	SOIL	1		01	6"-24" FD
C032C770	5-13-02/1328	32EDC-503	SOIL	1		01	24"-48"
C032C771	5-13-02/1333	32EDC-503	SOIL	1		01	48"-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-13-02	1900	SHIP TO LAB
		5-14-02	0945	

Comments/Instructions: Follow BNI SOW for LAB ANALYSIS. CONTACT J. JORDAN WITH QUESTIONS.

Method of Shipment: FEDEX
Airbill No.: 7904 1631 2098
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Name:
Cooler Temp.:

CØ32CFØ2
CØ32CRØ3
CØ32CRØ4
CØ32CRØ5

T = 2
SDG = 38345

MAY 14 2002 8:38AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20196

Site Name: EDC-5 ALAMEDA
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s):

Analytical Laboratory Name: STL WEST SACRAMENTO
Analytical Laboratory Address: 880 RIVERSIDE PARKWAY W. SACRAMENTO, CA 95605-1500
Field Logbook/Page Number: FL-032-EDC-5-01, pg 22, 23, 26

Pay Items/ Analyses Required

Preservation (4°C)

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C789	5-13-02/1100	32EDC-508	SOIL	1		01	0"-6"
C032C790	5-13-02/1104	32EDC-508	SOIL	1		01	6"-24"
C032C791	5-13-02/1106	32EDC-508	SOIL	1		01	6"-24" FD
C032C792	5-13-02/1110	32EDC-508	SOIL	1		01	24"-48"
C032C793	5-13-02/1118	32EDC-508	SOIL	1		01	48"-96"
C032C772	5-13-02/1402	32EDC-504A	SOIL	1		01	0"-6"
C032C773	5-13-02/1407	32EDC-504A	SOIL	1		01	6"-24"
C032C774	5-13-02/1409	32EDC-504A	SOIL	1		01	24"-48"
C032C775	5-13-02/1413	32EDC-504A	SOIL	1		01	48"-96"
C032CR030	5-13-02/1720		WATER	2		01/02	

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER/BECHTEL	FEDEX	5-13-02	1930	SHIP TO LAB
		5-14-02	1000	

Comments/Instructions: FOLLOW BNI SOW FOR LAB ANALYSIS. CALL J. JORDAN W/ QUESTIONS.

Method of Shipment: FEDEX
Airbill No.: 7927-2611-6218
Total No. of Containers: 9
Total No. of Coolers Shipped: 1

C032CF02
C032CR03
C032CR04
C032CR05

T=5°C
SDG-G2E140187

MAY 14 2002 8:40AM HP LASERJET 3200

CLEAN

CHAIN-OF-CUSTODY RECORD

20208

Site Name: EDC-5 ALAMEDA
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. SWIFT FRESNO, CA 93722
Field Logbook/Page Number: FL-032-EDC-5-01 pg 28

Pay Items/ Analyses Required

7125 PAH-USEPA 8270C SIM

Preservation (4°C)

TAT (in days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C794	5-13-02 / 1507	32EDC-509	SOIL	1		01	0"-6"
C032C795	5-13-02 / 1508	32EDC-509	SOIL	1		01	6"-24"
C032C796	5-13-02 / 1511	32EDC-509	SOIL	1		01	24"-48"
C032C797	5-13-02 / 1518	32EDC-509	SOIL	1		01	48"-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-13-02	1900	SHIP TO LAB
		5-14-02	0945	

Comments/Instructions: Follow BNI SOW for analysis. 2 Day prelim results, 14 day report. CONTACT J. JORDAN w/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 790411631298
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab Std. Cooler Temp.:

C032CF02
C032CR03
C032CR04
C032CR05

T=2
JDG - 38345

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20209

Site Name: EDC-5 ALAMEDA
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T. H. / K. B.

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 SOUTH 13TH AVE. KELSO, WA 98626
Field Logbook/Page Number: FL-032-EDC-5-01 pg 27, 29

Pay Items/ Analyses Required: 7325 PAH-US EPA 8270C; 8270C; Preservation (4°C); COOL

TAT (in days): (2) 7 14 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C798	5-13-02/1435	32EDC-510	SOIL	1		01	0"-6"
C032C799	5-13-02/1437	32EDC-510	SOIL	1		01	6"-24"
C032C800	5-13-02/1439	32EDC-510	SOIL	1		01	24"-48"
C032C801	5-13-02/1446	32EDC-510	SOIL	1		01	48"-96" MS/MSD
C032C802	5-13-02/1448	32EDC-510	SOIL	1		01	48"-96" FD
C032C811	5-13-02/1548	32EDC-513A	SOIL	1		01	0"-6"
C032C812	5-13-02/1550	32EDC-513A	SOIL	1		01	6"-24"
C032C813	5-13-02/1551	32EDC-513A	SOIL	1		01	6"-24" FD
C032C814	5-13-02/1556	32EDC-513A	SOIL	1		01	24"-48"
C032C815	5-13-02/1601	32EDC-513A	SOIL	1		01	48"-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER/BEI	FEDEX	5-13-02	1900	SHIP TO LAB
		5-14-02	1000	

Comments/Instructions: FOLLOW BEI SOW FOR LAB ANALYSIS. CALL J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7920 3333 3929
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032FD2
C032CR03
C032CR04

T = 1.7

SDG - K2203083

MAY 14 2002 8:38AM HP LASERJET 3200

V *

CLEAN

CHAIN-OF-CUSTODY RECORD

20193

Site Name: EDC-5
CTO Number: 032 J. Jordan
Site Contact/Supervisor: ~~E. Schroeder~~

Sampler(s): R. Prince
Signature(s):
5/13/02

Pay Items/ Analyses Required: 025 PAH to SIM; None; Preservation (4°C); TAT (in days): 2 7 14 30

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4303 West Swift, Fresno, CA 93722
Field Logbook/Page Number: FI-032-EDC5-02
pgs 1, 2, 23, 26

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C816	5-13-02 1140	32EDC-514	Soil	1		01	0 to 6"
C032C817	5-13-02 1140	32EDC-514		1		01	6 to 24"
C032C818	5-13-02 1150	32EDC-514		1		01	24" to 48"
C032C819	5-13-02 1900	32EDC-514		1		01	48" to 96"
C032C847	5-13-02 1500	32EDC-521		1		01	0 to 6"
C032C848	5-13-02 1500	32EDC-521		1		01	6" to 24"
C032C849	5-13-02 1510	32EDC-521		1		01	24" to 48"
C032C850	5-13-02 1520	32EDC-521		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser / BEI	5/13/02	1810	SHIP TO LAB
T. Hauser / BEI	FEDEX	5/13/02	1900	SHIP TO LAB
		5/14/02	0945	

Comments/Instructions: Follow SOW/SOW for Lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7904 1631 2097
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab Sign:
Cooler Temp:

Carl Brinkhorst
R. Prince

C032CF02
C032CR03
C032CR04
C032CR05

T=2
SDG- 38345

DECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20207

Site Name: EDC-5
CTO Number: 032 J Jordan
Site Contact/Supervisor: ~~E Johnson~~ 5/13/02

Sampler(s): R Perrin
Signature(s):

Analytical Laboratory Name: STL West Sacramento
Analytical Laboratory Address: 880 Riverside Pky, West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-02
~~pgs~~ 1, 2, 24, 27

Pay Items/ Analyses Required: 1,25 PAH to SIM; Preservation (4°C); TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CY20	5-13-02 1340	32 EDC-515	Soil	1		01	0 to 6" MS/MSD
C032C Y21	5-13-02 1340	32 EDL-515		1		01	6" to 24"
C032C Y22	5-13-02 1345	32 EDC-515		1		01	24" to 48"
C032C Y23	5-13-02 1355	32 EDL-515		1		01	48" to 96" ~~MS/MSD~~
C032C Y24	5-13-02 1355	32 EDL-516		1		01	48" to 96" FD
C032C Y25	5-13-02 1535	32 EDC-511		1		01	0 to 6"
C032C Y26	5-13-02 1535	32 EDC-511		1		02	6" to 24"
C032C Y27	5-13-02 1550	32 EDC-511		1		03	24" to 48"
C032C Y28	5-13-02 1600	32 EDC-516		1		01	48" to 96"

Per STL CA

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. HAUSER / BEI	5/13/02	1810	SHIP TO LAB
T. HAUSER / BEI	FEDEX	5/13/02	1900	SHIP TO LAB
		5/14/02	1000	

Comments/Instructions: Follow BNI SOW for Lab analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7918-3730-8995
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Seals:
Cooler Temp.:

C032CF02
C032CR03
C032CR04
C032CR05

T = 3°C

SDG-G2E140187

MAY 14 2002 8:40AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20206

Site Name: EDC-5
CTO Number: 032 J. Jordan
Site Contact/Supervisor: ~~R. Schmucker~~

Sampler(s): R Price
Signature(s):
5/13/02

Analytical Laboratory Name: Columbia Analytical
Analytical Laboratory Address: 1317 S. 13th Ave, Kelso WA 98626
Field Logbook/Page Number: FL-032-EDC5-02
~~PEI~~ 1, 2, 22, 25

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | ~~28~~

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CF82	5-13-02 1050	32EDC-519	Soil	1		01	0 to 6"
C032CR83	5-13-02 1050	32EDC-519		1		01	6" to 24"
C032CR84	5-13-02 1100	32EDC-519		1		01	24" to 48"
C032CR85	5-13-02 1100	32EDC-519		1		01	48" to 96"
C032C842	5-13-02 1425	32EDC-520		1		01	0 to 6"
C032C843	5-13-02 1425	32EDC-520		1		01	6" to 24"
C032C844	5-13-02 1425	32EDC-520		1		01	24" to 48"
C032C845	5-13-02 1430	32EDC-520		1		01	48" to 96" (MS/MSD)
C032C846	5-13-02 1430	32EDC-520		1		01	48" to 96" FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser / BEI	5/13/02	1810	SHIP TO LAB
T. Hauser / BEI	FEDEX	5-13-02	1900	SHIP TO LAB
		5-14-02	1000	

Comments/Instructions: Follow BNI/SOW for Lab analysis. Call J. Jordan w/ questions

Method of Shipment: FedEx
Airbill No.: 7905-2460-8039
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF82
C032CR83
C032CR84
C032CR85

T = 2.8
SDG - K2203082

MS/MSD on Sample C032C121. per Columbia

MAY 14 2002 8:39AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20215

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Printz
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave. Kelso, WA 98626
Field Logbook/Page Number: EL-032-EDC5-02
pgs 28, 31

Pay Items/ Analyses Required: PAH by SIM; 5/14/02

Preservation (4°C): ICE

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032 CY64	5-14-02 0945	32EDC-525	Soil	1		01	0-6"
C032 CY65	5-14-02 0945	32EDC-525		1		01	6"-24"
C032 CY66	5-14-02 0955	32EDC-525		1		01	24"-48"
C032 CY67	5-14-02 1000	32EDC-525		1		01	48"-96" ~~(MS/MSD)~~
C032 CY68	5-14-02 1000	32EDC-525		1		01	48"-96" FD
C032C YY6	5-14-02 1239	32EDC-530		1		01	0-to 6"
C032C YY7	5-14-02 1230	32EDC-530		1		01	6 to 24
C032C YY8	5-14-02 1240	32EDC-530		1		01	24 to 48
C032C YY9	5-14-02 1250	32EDC-530		1		01	48" to 96"
C032C YY0	5-14-02 1250	32EDC-530		1		01	48" to 96" FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] B/C	T. HAUSER BEI	5/14/02	1645	SHIP TO LAB
T. HAUSER / BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	1000	

Comments/Instructions: Follow DNI SOW for Lab analysis. Call J. Jordan for questions.

Method of Shipment: Fed Exp
Airbill No.: 7904 1790 0395
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab use: Cooler Temp.:

C032CF02
C032CR06

T = 1.2
SDG - K2203131

MAY 15 2002 8:26AM HP LASERJET 3200

V-T

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

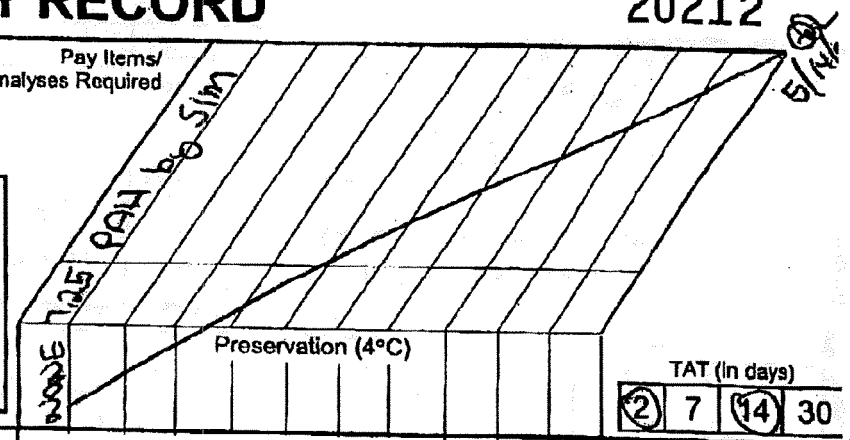
20212

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Prijina
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4303 W. Swift, Fresno, CA 93722
Field Logbook/Page Number: FL-032-EDC5-02
pgs 29, 32

Pay Items/ Analyses Required



Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032 CV91	5-14-02 1025	32EDC-531	Soil	1		01	0 to 6"
C032 CV92	5-14-02 1025	32EDC-531		1		01	6" to 24"
C032 CV93	5-14-02 1040	32EDC-531		1		01	24" to 48"
C032C V94	5-14-02 1050	32EDC-531		1		01	48 to 96"
C032C 930	5-14-02 1315	32EDC-540		1		01	0 to 6"
C032C 931	5-14-02 1315	32EDC-540		1		01	6" to 24"
C032C932	5-14-02 1330	32EDC-540		1		01	24" to 48"
C032C 933	5-14-02 1340	32EDC-540		1		01	48" to 96"
C032C 934	5-14-02 1340	32EDC-540		1		01	48" to 96" FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/14/02	1640	SHIP TO LAB
T. Hauser BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	0945	

Comments/Instructions: Follow BN1/SOW for Lab analysis. Call J. Jordan for questions.

Method of Shipment: F. Exp
Airbill No.: 790234174952
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Cooler Temp.:

C032CF02
C032CR06

T=1

506-38357

MAY 15 2002 8:25AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20213

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: S. Jordan

Sampler(s): R. Prince
Signature(s):

Analytical Laboratory Name: STL West Sacramento
Analytical Laboratory Address: 5464 Riverside Pkwy, West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-02
pgs 30, 33

Pay Items/ Analyses Required: 8260 / 8270 PAH LL SIM / Preservation (4°C)

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
* C032C935	5-14-02 1100	32EDC-541	Soil	1		01	0 to 6"
* C032C936	5-14-02 1100	32EDC-541		1		01	6" to 24"
* C032C937	5-14-02 1120	32EDC-541		1		01	24" to 48"
* C032C938	5-14-02 1130	32EDC-541		1		01	48" to 96"
* C032C926	5-14-02 1410	32EDC-539		1		01	0 to 6"
* C032C927	5-14-02 1410	32EDC-539		1		01	6" to 24"
* C032C928	5-14-02 1430	32EDC-539		1		01	24" to 48"
* C032C929	5-14-02 1440	32EDC-539		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[illegible] BC	T. Hauser/BEI	5/14/02	1645	SHIP TO LAB
T. Hauser BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	1015	

Comments/Instructions: Follow BNI/SOW for Lab analysis. Call S. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 791838832221
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

CØ32CFØ2
CØ32CRØ6

T=4°C
SDG-G2E150192

MAY 15 2002 8:25AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20214

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Peters
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave Kelso, WA 98626
Field Logbook/Page Number: EI-032-EDC5-02
pgs. 34

Pay Items/ Analyses Required

Preservation (4°C)

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CF02	5-14-02 1450	32EDC-529	Soil	1		01	0 to 6"
C032CF03	5-14-02 1450	32EDC-529		1		01	6" to 24"
C032CF04	5-14-02 1505	32EDC-529		1		01	24" to 48"
C032CF05	5-14-02 1510	32EDC-529		1		01	48" to 96"
C032CR06	5-14-02 1555	FQC	Water	2		01 02	Rinsate

TAT (in days): (2) 7 (14) 30

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/14/02	1645	SHIP TO LAB
T. Hauser BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	1000	

Comments/Instructions: Follow SAP/SOW for Lab analysis. Call J. Jordan for questions.

Method of Shipment: Fed Ex
Airbill No.: 7904 1790 0355
Total No. of Containers: 6
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CF02
C032CR06

T = 1.2

506 - K2205131

MAY 15 2002 8:25AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20151

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 WEST SWIFT FRESNO, CA 93722
Field Logbook/Page Number: FL-032-EDC5-01, pg 31, 34

Pay Items/ Analyses Required

Preservation (4°C)

TAT (In days): 2 | 7 | (14) | 30

Sample ID No. (6 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C899	5-14-02/0954	32 EDC-533	SOIL	1		01	0-6"
C032C900	5-14-02/0956	32 EDC-533	SOIL	1		01	6"-24"
C032C901	5-14-02/0957	32 EDC-533	SOIL	1		01	6"-24" FD
C032C902	5-14-02/1002	32 EDC-533	SOIL	1		01	24"-48" MS/MSD
C032C903	5-14-02/1010	32 EDC-533	SOIL	1		01	48"-96"
C032C983	5-14-02/1311	32 EDC-552	SOIL	1		01	0-6"
C032C984	5-14-02/1314	32 EDC-552	SOIL	1		01	6-24"
C032C985	5-14-02/1321	32 EDC-552	SOIL	1		01	24-48"
C032C986	5-14-02/1319	32 EDC-552	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	0945	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS, CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7920 3417 4952
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Rec'd:
Cooler Temp:

C032CF02
C032CR06

T = 1

SDG - 38357

MAY 15 2002 8:25AM HP LASERJET 3200

20149

CHAIN-OF-CUSTODY RECORD

BECHTEL **CLEAN**

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 SOUTH 13TH AVE KELSO, WA 98626
Field Logbook/Page Number: FL-032-EDC5-01, pg 30, 33

Preservation (4°C): NONE

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
32EDC							~~0-6"~~
C032C895	5-14-02/0858	32 EDC-532	SOIL	1		01	~~6"-24"~~ 0"-6"
C032C896	5-14-02/0903	32 EDC-532	SOIL	1		01	6"-24"
C032C897	5-14-02/0915	32 EDC-532	SOIL	1		01	24"-48"
C032C898	5-14-02/0923	32 EDC-532	SOIL	1		01	48-96"
C032C939	5-14-02/1237	32 EDC-542	SOIL	1		01	0-6"
C032C940	5-14-02/1240	32 EDC-542	SOIL	1		01	6-24" MS/MSD
C032C941	5-14-02/1246	32 EDC-542	SOIL	1		01	24-48"
C032C942	5-14-02/1253	32 EDC-542	SOIL	1		01	48-96"

Per Columbia (

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEC	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	1000	

Comments/Instructions: FOLLOW BEC SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 790284176738
Total No. of Containers: 8
Total No. of Coolers Shipped: 1

CØ32CFØ2
CØ32CRØ6

T = -1.2
SDG - K2203131

MAY 15 2002 8:25AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20150

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER, K. BARNES
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: STL WEST SACRAMENTO
Analytical Laboratory Address: 880 RIVERSIDE PKWY W. SACRAMENTO, CA 95605-1500
Field Logbook/Page Number: FL-032-EDC5-01, Pg 32, 36

Preservation (4°C): None; 2.25 U.S. EPA 8270C SIM

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C943	5-14-02/1046	32 EDC-543	SOIL	1		01	0-6"
C032C944	5-14-02/1050	32 EDC-543	SOIL	1		01	6-24"
C032C945	5-14-02/1051	32 EDC-543	SOIL	1		01	6-24" FD
C032C946	5-14-02/1056	32 EDC 543	SOIL	1		01	24-48"
C032C947	5-14-02/1101	32 EDC-543	SOIL	1		01	48-96"
C032C987	5-14-02/1345	32 EDC-553	SOIL	1		01	0-6"
C032C988	5-14-02/1350	32 EDC-553	SOIL	1		01	6-24"
C032C989	5-14-02/1352	32 EDC-553	SOIL	1		01	6-24" FD
C032C990	5-14-02/1354	32 EDC-553	SOIL	1		01	24-48"
C032C991	5-14-02/1400	32 EDC-553	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	1015	

Comments/Instructions: FOLLOW BAH SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No: 818838883221
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab Seal
Cooler Temp

C032CR06
C032CF02

T=4°C
SDG - G2E150192

MAY 15 2002 8:24AM HP LASERJET 3200

V

20152

ECHELON **CLEAN**

CHAIN-OF-CUSTODY RECORD

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s):

Analytical Laboratory Name: ~~COLUMBIA~~ KB STL West Sacramento
Analytical Laboratory Address: ~~1317 SOUTH 13th Ave KELSO, WA 98626~~
Field Logbook/Page Number: FL-032-EDC5-01, pg 37
880 Riverside Pkwy W. Sacramento, CA 95605-1500

Pay Items/ Analyses Required

Preservation (4°C): NONE; 7.25 U.S. EPA

TAT (In days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA31	5-14-02/1456	32 EDC-563	SOIL	1		01	0-6"
C032CA32	5-14-02/1448	32 EDC-563	SOIL	1		01	6"-24"
C032CA33	5-14-02/1447	32 EDC-563	SOIL	1		01	6"-24" FD
C032CA34	5-14-02/1453	32 EDC-563	SOIL	1		01	24-48"
C032CA35	5-14-02/1459	32 EDC-563	SOIL	1		01	48"-96"
			WATER	2		02	

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-14-02	1900	SHIP TO LAB
		5-15-02	1015	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS CONTACT J.J W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 791838883221
Total No. of Containers: 5
Total No. of Coolers Shipped: 1

C032CF02
C032CR06

T = 4°C
SDG - G2E150192

MAY 15 2002 8:24AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20216

Site Name: EDC-5
CTO Number: 32
Site Contact/Supervisor: J. Jordan

Sampler(s): R Rivera
Signature(s):

Pay Items/ Analyses Required: 8270C SIM PAH-US EPA 1625

Analytical Laboratory Name: ~~Columbia ST~~ Columbia
Analytical Laboratory Address: 1317 S. 13th Ave Kelso, WA 98626
Field Logbook/Page Number: EL-032-EDC 5-02
~~95~~ 95 & 37

Preservation (4°C)

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
1 – C032C974	5-15-02 0950	32EDC-550	Soil	1		01	0 to 6"
2 – C032C975	5-15-02 0950	32EDC-550		1		01	6" to 24"
3 – C032C976	5-15-02 0915	32EDC-550		1		01	24" to 48" MS/MSD
4 – C032C977	5-15-02 0925	32EDC-550		1		01	48" to 96"
5 – C032C978	5-15-02 0925	32EDC-550		1		01	48" to 96" FD
6 – C032C A18	5-16-02 1040	32EDC-560		1		01	0 to 6"
7 – C032C A19	5-16-02 1040	32EDC-560		1		01	6" to 24"
8 – C032C A20	5-16-02 1100	32EDC-560		1		01	24" to 48"
9 – C032C A21	5-16-02 1110	32EDC-560		1		01	48" to 96"
10 – C032C A22	5-16-02 1110	32EDC-560		1		01	48" to 96" FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/16/02	1710	SHIP TO LAB
T. Hauser/BEI	FedEx	5-15-02	1730	SHIP TO LAB
		5-16-02	0900	

Comments/Instructions: Follow BNI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7920 3501 5707
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF02
C032CR08

T-
SDG-K2203176

HP LASERJET 3200
MAY 16 2002 8:39AM

CLEAN

CHAIN-OF-CUSTODY RECORD

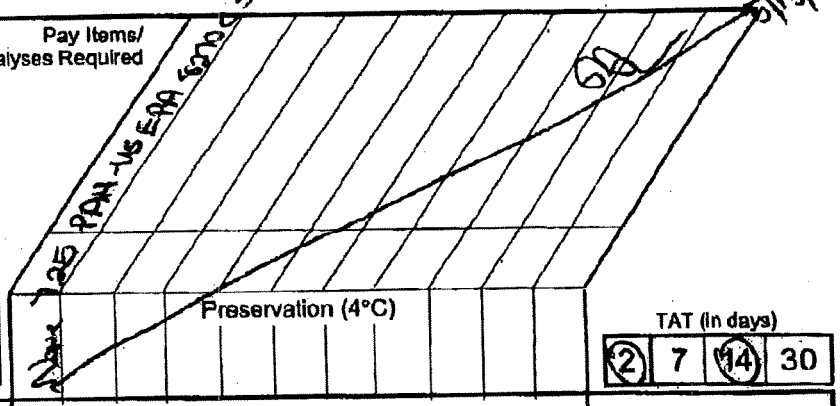
20220

Site Name: EDC - 5
CTO Number: 032
Site Contact/Supervisor: S. Jordan

Sampler(s): R. Irwin
Signature(s):

Analytical Laboratory Name: STL West Sacramento
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento, CA
Field Logbook/Page Number: EL-032-EDC5-02
pgs 36, 38, 39

Pay Items/ Analyses Required



TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C970	5-15-02 0955	32EDC-549	Soil	1		01	0" to 6"
C032C971	5-15-02 0955	32EDC-549		1		01	6" to 24"
C032C972	5-15-02 1010	32EDC-549		1		01	24" to 44" MS/MSD
C032C973	5-15-02 1020	32EDC-549		1		01	44" to 96"
C032CA14	5-15-02 1130	32EDC-559		1		01	0 to 6"
C032CA15	5-15-02 1130	32EDC-559		1		01	6" to 24"
C032CA16	5-15-02 1140	32EDC-559		1		01	24" to 44"
C032CA17	5-15-02 1145	32EDC-559		1		01	44" to 96"
C032CA79	5-15-02 1325	32EDC-573		1		01	48" to 96" MS/MSD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/15/02	1710	SHIP TO LAB
T. Hauser/BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	1030	

Comments/Instructions: Follow BOI/SOW for Lab Analysis
Call J. Jordan w/ questions.

Method of Shipment: FEDEX
Airbill No.: 7918 3945 5460
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Use
Cooler Temp.:

C032CF02
C032CR08

T = 3°C
GZE160199

CLEAN

CHAIN-OF-CUSTODY RECORD

20166

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: S Jordan

Sampler(s): R Pine
Signature(s):

Pay Items/ Analyses Required: PAH-43 EPA 1625 Mod; Preservation (4°C)

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. Swift Fresno CA
Field Logbook/Page Number: FL-032-EDC5-02
39

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CAF5	5-15-02 1305	32EDC-573	Soil	1		01	0 to 6"
C032CAF6	1305	32EDC-573		1		01	6" to 24" MS/MSD
C032CAF7	1305	32EDC-573		1		01	6" to 24" FD
C032CAF8	1310	32EDC-573		1		01	24" to 48"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/15/02	1710	SHIP TO LAB
T. Hauser/BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	1000	

Comments/Instructions: Follow BWI/SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7920-3501-4788
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CF02
C032CR08

T=1

SDG-38369

MAY 16 2002 8:36AM HP LASERJET 3200

HP LASERJET 3200 MAY 16 2002 8:38AM P.9

CLEAN

CHAIN-OF-CUSTODY RECORD

20217

Site Name: EDC-5
CTO Number: 32
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Pruett
Signature(s): [signature]

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave, Kelso, WA 98626
Field Logbook/Page Number: FL-032-EDC5-02
pgs. ~~39~~ 41

Pay Items/ Analyses Required: 25 PAH-USEPA 8270C SIM; 225 DAH by SIM

Preservation (4°C): None; None

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
~~C032CA75~~	5-16-02 1305	32EDC-573	Soil	1		01	~~0 to 6"~~
~~C032CA76~~	5-16-02 1305	32EDC-573		1		~~02~~	~~6" to 24"~~
~~C032CA77~~	5-16-02 1305	32EDC-573		1		~~03~~	~~6" to 24" MS/MSD~~
~~C032CA78~~	5-16-02 1310	32EDC-573		1		01	~~24" to 48"~~
~~C032CA79~~	5-16-02 1325	32EDC-573		1		01	~~48" to 96"~~
C032CA58	5-15-02 1425	32EDC-569	Soil	1		01	0" to 6"
C032CA59	5-15-02 1435	32EDC-569	↓	1		01	6" to 24"
C032CA60	5-15-02 1445	32EDC-569	↓	1		01	24" to 48" ms/msd
C032CA61	5-15-02 1450	32EDC-569	↓	1		01	48" to 96"
C032CR08	5-15-02 1613	FQC	Water	2			Rinsate

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] BEI	T. HAUSER / BEI	5/15/02	1710	SHIP TO LAB
T. HAUSER / BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	0900	

Comments/Instructions: Follow RMI/SOW for Lab Analysis. Call J. Jordan w/questions.

Method of Shipment:

Airbill No.: 790350615707

Total No. of Containers: 6

Total No. of Coolers Shipped:

C032CF02
C032CR08

T = 0.8
SDG - K2203174

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CLEAN

CHAIN-OF-CUSTODY RECORD

20219

Site Name: EDC - 5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Priem
Signature(s):

Analytical Laboratory Name: STL West Sacramento
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-02
40

Pay Items/ Analyses Required: 8260 PAH-4SA EPA 8270 SIM

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA62	5-15-02 1355	EDC - 570	Soil	1		01	0 to 6"
C032CA63	5-15-02 1765	32EDC - 570		1		01	6 to 24"
C032CA64	5-15-02 1480	32EDC - 570		1		01	24 to 48"
C032CA65	5-15-02 1410	32EDC - 570		1		01	48 to 96"
C032CA66	5-15-02 1410	32EDC - 570		1		01	48 to 96" FD
C032CA53	5-15-02 1525	32EDC-568		1		01	0 to 6"
C032CA54	5-15-02 1525	32EDC - 568		1		01	6" to 24"
C032CA55	5-15-02 1525	32EDC - 568		1		01	6" to 24"
C032C A51	5-15-02	32EDC - 567		1		01	24 to 48"
C032CA52	5-15-02	32EDC - 567		1		01	48 to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BL	T. HAUSER / BEI	5/15/02	1710	SHIP TO LAB
T. HAUSER / BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	1030	

Comments/Instructions: Follow BWI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7918 3945 5460
Total No. of Containers: 5
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF02
C032CR08

T = 3°C

SDG - G2E160199

MAY 16 2002 8:40AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20154

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T [signature] Kan Barnes

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 SOUTH 13TH AVE KELSO, WA 98626
Field Logbook/Page Number: FL-032-EDC5-01, pg 38, 41

Pay Items/ Analyses Required

Preservation (4°C): NONE

7.25 PAH-U.S. EPA 8270C SIM

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C904	5-15-02/0834	EDC-534	SOIL	1		01	0-6"
C032C905	5-15-02/0840	EDC-534	SOIL	1		01	6-24"
C032C906	5-15-02/0844	EDC-534	SOIL	1		01	24-48"
C032C907	5-15-02/0851	EDC-534	SOIL	1		01	48-96"
C032CA23	5-15-02/1049	~~EDC-A23~~ EDC-561	SOIL	1		01	0-6"
C032CA24	5-15-02/1055	EDC-561	SOIL	1		01	6-24"
C032CA25	5-15-02/1102	EDC-561	SOIL	1		01	24-48"
C032CA26	5-15-02/						

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	0900	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7980 3501 5707
Total No. of Containers: 7
Total No. of Coolers Shipped:
Lab SDG:
Cooler Temp:

C032CF02 T=
C032CR08
SDG-K2203176

MAY 16 2002 8:38AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

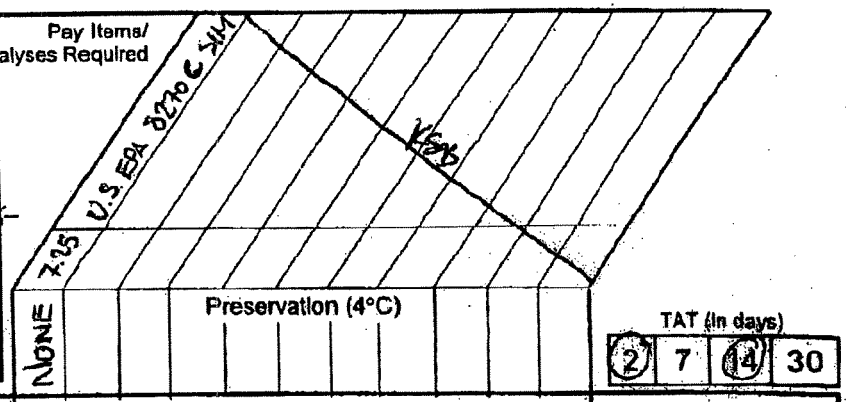
20155

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): [signature]

Analytical Laboratory Name: STL WEST SACRAMENTO
Analytical Laboratory Address: 880 RIVERSIDE PKWY WEST SACRAMENTO, CA 95605-1500
Field Logbook/Page Number: FL-032-EDC5-01, pp 39, 42

Pay Items/ Analyses Required



TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C948	5-15-02/0915	EDC-544	SOIL	1		01	0-6"
C032C949	5-15-02/0919	EDC-544	SOIL	1		01	6-24"
C032C950	5-15-02/0927	EDC-544	SOIL	1		01	24-48"
C032C951	5-15-02/0933	EDC-544	SOIL	1		01	48-96"
C032C979	5-15-02/1015	EDC-551	SOIL	1		01	0-6"
C032C980	5-15-02/1248	EDC-551	SOIL	1		01	6-24"
C032C981	5-15-02/1252	EDC-551	SOIL	1		01	24-48"
C032C982	5-15-02/1300	EDC-551	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER/BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	1030	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7901-1949-0532
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Cooler Temp.:

C032CF02
C032CR08

T=2
506-G2E160197

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20153

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T. H
K. Barnes

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 WEST SWIFT FRESNO, CA 93722
Field Logbook/Page Number: FL-032-EDC5-01, pg 40, 44

Pay Items/ Analyses Required

Preservation (4°C): None; 7.25 PAH-U.S. EPA 8270C SV; KSB

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA80	5-15-02/1010	EDC-574	SOIL	1		01	0-6"
C032CA81	5-15-02/1016	EDC-574	SOIL	1		01	6-24"
C032CA82	5-15-02/1022	EDC-574	SOIL	1		01	24-48"
C032CA83	5-15-02/	EDC-574	SOIL	1	A	01	48-96"
C032CA71	5-15-02/1345	EDC-572	SOIL	1		01	0-6"
C032CA72	5-15-02/1348	EDC-572	SOIL	1		01	6-24"
C032CA73	5-15-02/1351	EDC-572	SOIL	1		01	24-48"
C032CA74	5-15-02/1400	EDC-572	SOIL	1		01	48-96"
		KSB					

KSB

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-15-02	1730	SHIP TO LAB
		5-16-02	1000	

Comments/Instructions: FOLLOW BNI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7920-3501-4788
Total No. of Containers: 7
Total No. of Coolers Shipped: 1
Lab Signature:
Cooler Temp.:

C032CF02
C032CR08

T = 1

SDG-38369

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20156

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T H
KBa

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 SOUTH 13TH AVE KELSO, WA 98626
Field Logbook/Page Number: FL-032-EDC 5-01, pg 43

Pay Items/ Analyses Required

Preservation (4°C): NONE

PAH - U.S. EPA 8270C SIM 7.25

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA07	5-15-02 / 1420	EDC-571	SOIL	1		01	0-6"
C032CA08	5-15-02 / 1422	EDC-571	SOIL	1		01	6-24"
C032CA09	5-15-02 / 1428	EDC-571	SOIL	1		01	24-48"
C032CA10	5-15-02 / 1433	EDC-571	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer	Comments/Instructions:
T. HAUSER / BEI	FEDEX	5-15-02	1730	SHIP TO LAB	FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS
		5-16-02	0900		

Method of Shipment: FEDEX
Airbill No.: 790135015707
Total No. of Containers: 4
Total No. of Coolers Shipped:

C032CF02
C032CR08

T = 0.8

SDG - ~~K2203~~ K2203176

MAY 16 2002 8:38AM HP LASERJET 3200

65 *

CHAIN-OF-CUSTODY RECORD

20172

RECEIVED IN CONFIDENCE UNDER

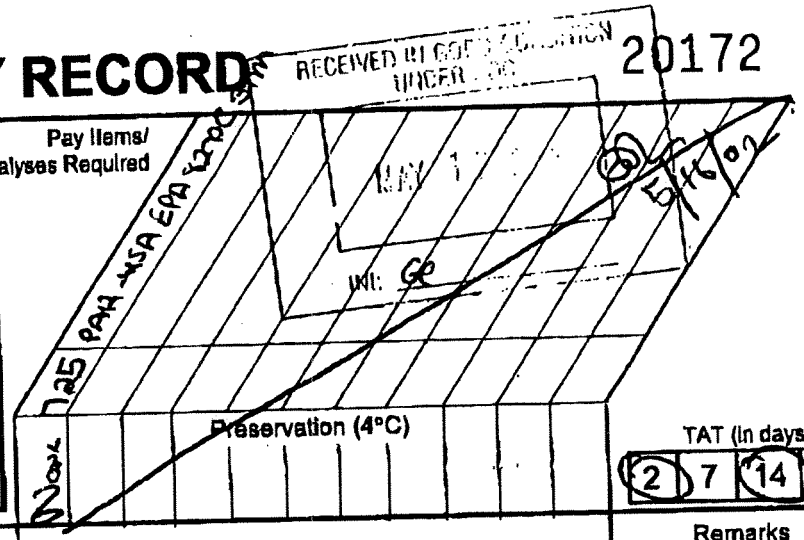
CLEAN

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Pinon
Signature(s):

Analytical Laboratory Name: STL West Sacramento
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-02
43, 45

Pay Items/ Analyses Required



Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C996	5-16-02 0940	32EDC - 555	Soil	1		01	0 to 6"
C032C997	5-16-02 0940	32EDC - 555		1		01	6 to 24"
C032C998	5-16-02 0945	32EDC - 555		1		01	24" to 48"
C032C999	5-16-02 0950	32EDC - 555		1		01	48" to 96" MS
C032C000	5-16-02 0950	32EDC - 555		1		01	48 to 96" FD
C032C-001	5-16-02 1010	32EDC - 53Y		1		01	0 to 6"
C032C-922	5-16-02 1010	32EDC - 53Y		1		01	6" to 24"
C032C-923	5-16-02 1012	32EDC - 53Y		1		01	6" to 24" FD
C032C-924	5-16-02 1020	32EDC - 53Y		1		01	24" to 48"
C032C-925	5-16-02 1025	32EDC - 53Y		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] B/C	T. HAUSER / BEI	5-16-02	1600	SHIP TO LAB
T. HAUSER / BEI	FEDEX	5-16-02	1600	SHIP TO LAB
	[signature] STL	5-17-02	1055	

Comments/Instructions: Follow ONI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 790527271021
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab SDG: GZE170196
Cooler Temp.: 2°/3°

C032CF02
C032CR09

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MAY-17-2002 FRI 02:20 PM STL Sacramento FAX NO. 916 372 1168 P. 05

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20170

Site Name: EOC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Purvis
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave. Kelso, WA 98621
Field Logbook/Page Number: FL-032-EOC5-02
944, 46

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): (2) 7 (4) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C965	5-16-02 0925	32 EOC - 548	S:l	1		01	0 to 6"
C032C966	5-16-02 0925	32 EOC - 548		1		01	6" to 24"
C032C967	5-16-02 0925	32 EOC - 548		1		01	6" to 24" FD
C032C968	5-16-02 0935	32 EOC - 548		1		01	24" to 47"
C032C969	5-16-02 0940	32 EOC - 548		1		01	47" to 96"
C032C A49	5-16-02 1110	32 EOC - 567		1		01	0 to 6"
C032C A50	5-16-02 1110	32 EOC - 567		1		01	6" to 24"
C032C A51	5-16-02 1115	32 EOC - 567		1		01	24" to 47"
C032C A52	5-16-02 1120	32 EOC - 567		1		01	47" to 96"
							~~47" to 96"~~

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser / BEI	5-16-02	1600	Ship to Lab
T. Hauser / BEI	FedEx	5-16-02	1600	Ship to Lab
		5-17-02	0945	

Comments/Instructions: Follow DQI/SOW for Lab Analysis. Call J. Jordan with questions.

Method of Shipment: Fed Ex
Airbill No.: 791Y 4050 2429
Total No. of Containers: 9
Total No. of Coolers Shipped: 1

COOLER SEALED
COOLER TAMPER

C032CFD2
C032CR09

T = 0.7
SDG - K2203212

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MAY 17 2002 8:37AM HP LASERJET 3200

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

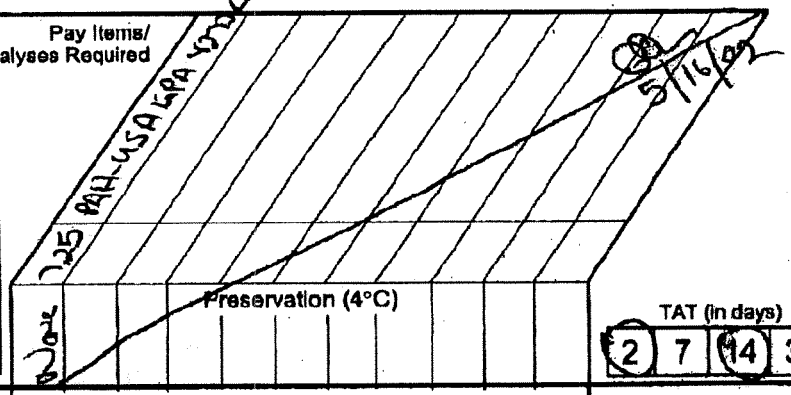
20173

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordon

Sampler(s): B. Furse
Signature(s):

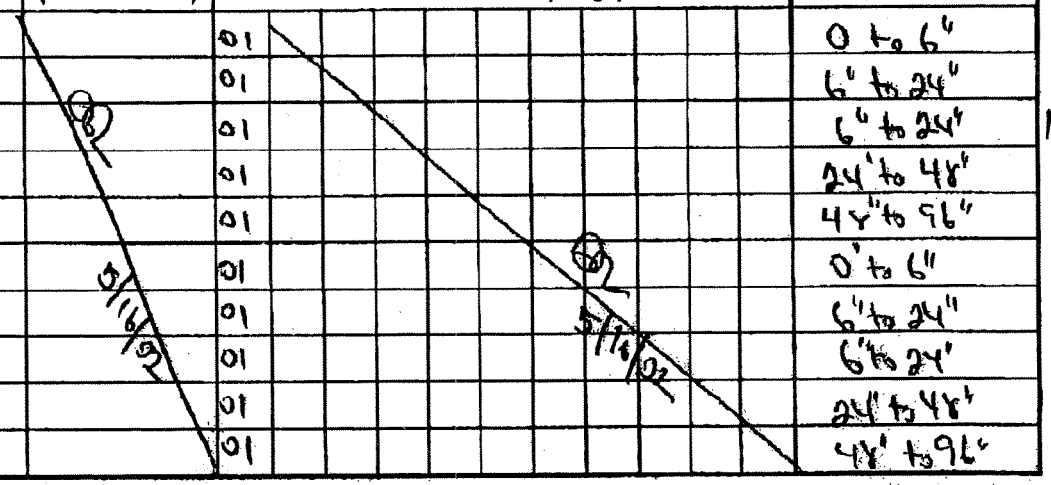
Analytical Laboratory Name: STL West Sacramento
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-02
PD 47, 49

Pay Items/ Analyses Required



TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB19	5-16-02 1245	32-EDC-5Y3	Soil	1		01	0 to 6"
C032CB20	5-16-02 1245	32-EDC-5Y3		1		01	6" to 24"
C032CB21	5-16-02 1245	32-EDC-5Y3		1		01	6" to 24" MD
C032CB23	5-16-02 1255	32-EDC-5Y3		1		01	24" to 48"
C032CB25	5-16-02 1300	32-EDC-5Y3		1		01	48" to 96"
C032CB63	5-16-02 1400	32-EDC-593		1		01	0" to 6"
C032CB64	5-16-02 1400	32-EDC-593		1		01	6" to 24"
C032CB65	5-16-02 1400	32-EDC-593		1		01	6" to 24" FD
C032CB66	5-16-02 1405	32-EDC-593		1		01	24" to 48"
C032CB67	5-16-02 1410	32-EDC-593		1		01	48" to 96"



Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/16/02	1600	SHIP TO LAB
T. Hauser/BEI	FEDEX	5-16-02	1600	SHIP TO LAB
		5-17-02	1055	

Comments/Instructions: Follow BNI/SOW for Lab Analysis. Call J. Jordon w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 790527270271
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab Seal:
Cooler Temp.:

CØ32CFØ2
CØ32CRØ9

T = 3
SDG - G2E170200

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BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

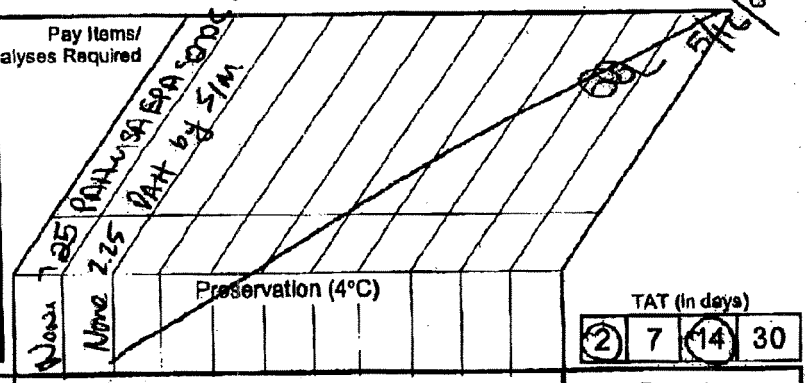
20171

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Pruim
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave. Kelso, Wa 98626
Field Logbook/Page Number: FL-032-EDC5-02
80 4Y,

Pay Items/ Analyses Required



TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB15	5-16-02 1315	32 EDC-5S2	Soil	1		01	0 to 6"
C032CB16	5-16-02 1315	32 EDC-5S2		1		01	6" to 24"
C032CB17	5-16-02 1320	32 EDC-5S2		1		01	24" to 48"
C032CB18	5-16-02 1325	32 EDC-5S2		1		01	48" to 96"
C032CR09	5-16-02 1530	FQC	Water	2		01 02	RM Safe

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
B/C	T. Hauser / BEI	5-16-02	1600	SHIP TO LAB
T. Hauser / BEI	FEDEX	5-16-02	1600	SHIP TO LAB
		5-17-02	0945	

Comments/Instructions: Follow LNI/SOW for Lab Analysis. Call J. Jordan w/ questions

Method of Shipment: FedEx
Airbill No.: 791Y4050 2429
Total No. of Containers:
Total No. of Coolers Shipped: 1
Lab Name:
Cooler Temp.:

C032CF02
C032CR09

T = 0.2
SDG-K2203212

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MAY 17 2002 8:38AM HP LASERJET 3200 P.14

CLEAN

CHAIN-OF-CUSTODY RECORD

20186

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T. Hauser
K. Barnes

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 WEST SWIFT FRESNO, CA 93722
Field Logbook/Page Number: FL-032-EDC5-01, pg 45; 48 A

Pay Items/ Analyses Required

Preservation (4°C)

NONE | 7.25 PAH's U.S. EPA 8270C SIM

TAT (in days): (2) 7 (14) 30

Sample ID No. (6 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA27	5-16-02 / 0836	EDC-562	SOIL	1		01	0-6"
C032CA28	5-16-02 / 0828	EDC-562	SOIL	1		01	6-24"
C032CA29	5-16-02 / 0836	EDC-562	SOIL	1		01	24-48"
C032CA30	5-16-02 / 0849	EDC-562	SOIL	1		01	48-96"
C032CB33	5-16-02 / 1014	EDC-586	SOIL	1		01	0-6"
C032CB34	5-16-02 / 1019	EDC-586	SOIL	1		01	6-24"
C032CB35	5-16-02 / 1025	EDC-586	SOIL	1		01	24-48"
C032CB36	5-16-02 / 1029	EDC-586	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-16-02	1730	SHIP TO LAB
		5-17-02	0930	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT T. JORDAN W/ QUESTION

Method of Shipment: FEDEX
Airbill No.: 7905-2730-7000
Total No. of Containers: 4 8 A
Total No. of Coolers Shipped: 1
Lab SRC:
Cooler Temp.:

C032CF02
C032CR09

T = 1
506 - 38382

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MAY 17 2002 8:35AM HP LASERJET 3200 P.8

CLEAN

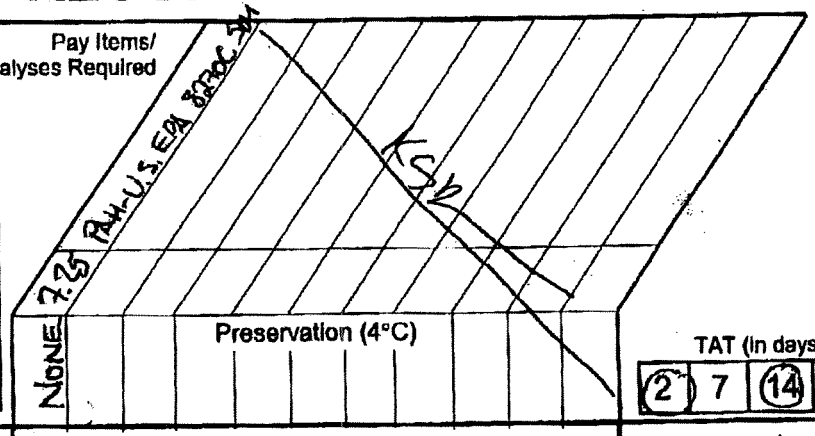
CHAIN-OF-CUSTODY RECORD

20157

Name: EDC-5
Number: 032
Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T=H
Kan Bar

Pay Items/ Analyses Required



TAT (In days): (2) 7 (14) 30

Analytical Laboratory Name: STL WEST SACRAMENTO
Analytical Laboratory Address: 880 RIVERSIDE PKWY WEST SACRAMENTO CA 95605-1500
Field Logbook/Page Number: FL-032-EDC5-01
Page 49; 46

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)	
032CB41	5-16-02/0910	EDC-588	SOIL	1		01	0-6"	
032CB42	5-16-02/0912	EDC-588	SOIL	1		01	6-24"	
032CB43	5-16-02/0914	EDC-588	SOIL	1		01	6-24"	FD
032CB44	5-16-02/0918	EDC-588	SOIL	1		01	24-48"	
032CB45	5-16-02/0922	EDC-588	SOIL	1		01	48-96"	
032CB28	5-16-02/1051	EDC-585	SOIL	1		01	0-6"	
032CB29	5-16-02/1056	EDC-585	SOIL	1		01	6-24"	
032CB30	5-16-02/1102	EDC-585	SOIL	1		01	24-48"	
032CB31	5-16-02/1107	EDC-585	SOIL	1		01	48-96"	
032CB32	5-16-02/1108	EDC-585	SOIL	1		01	48-96"	FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
HAUSER/BEI	FEDEX	5-16-02	1730	SHIP TO LAB
		5-17-02	1055	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7920-3586-0388
Total No. of Coolers Shipped: 1
Total No. of Containers: 10
Lab Use Only
Cooler Temp.:

C032CF02
C032CR09

T=3°
SDG - G2E170207

MAY 17 2002 8:34AM HP LASERJET 3200

20187

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T [signature]
Kam Bar [signature]

Pay Items/ Analyses Required: 3.25 DAH - 8270C SIM

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 SOUTH 13th AVE KELSO, WA 98626
Field Logbook/Page Number: FL-032-EDC5-01
Page 50 of 47

Preservation (4°C): NONE

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB37	5-16-02/0945	EDC-587	SOIL	1		01	0-6"
C032CB38	5-16-02/0948	EDC-587	SOIL	1		01	6-24"
C032CB39	5-16-02/0953	EDC-587	SOIL	1		01	24-48"
C032CB40	5-16-02/0959	EDC-587	SOIL	1		01	48-96"
C032CB24	5-16-02/1259	EDC-584	SOIL	1		01	0-6"
C032CB25	5-16-02/1302	EDC-584	SOIL	1		01	6-24"
C032CB26	5-16-02/1307	EDC-584	SOIL	1		01	24-48"
C032CB27	5-16-02/1315	EDC-584	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-16-02	1730	SHIP TO LAB
		5-17-02	0945	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN w/ QUESTIONS

Method of Shipment: FEDEX
Total No. of Coolers Shipped: 1
Airbill No.: 7918-4053-7011
Total No. of Containers: 8
Lab COC:
Cooler Temp:

C032CF02
C032CR09

T = 1.9
SDG: K2203213

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BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20183

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T. H / Ka Ba

Analytical Laboratory Name: ~~COLUMBIA N~~ APPL
Analytical Laboratory Address: ~~1317 SOUTH 13th AVE N KELSO, WA 98626~~
Field Logbook/Page Number: FL-032-EDC5-01, pg 48 FRESNO, CA 93722

Pay Items/ Analyses Required

Preservation (4°C): None; 7.25 DAY 8270C SIM

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB33	5-16-02 / 1016	EDC-586	SOIL	1		01	0-6"
C032CB34	5-16-02 / 1019	EDC-586	SOIL	1		01	6-24"
C032CB35	5-16-02 / 1025	EDC-586	SOIL	1		01	24-48"
C032CB36	5-16-02 / 1029	EDC-586	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-16-02	1730	SHIP TO LAB
		5-17-02	0930	

Comments/Instructions: FOLLOW BNI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7905-2730-7000
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab Seal:
Cooler Temp:

C032CF02
C032CR09

T = 1
SDG - 38382

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MAY 17 2002 8:35AM HP LASERJET 3200 P.7

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20185

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / K. BARNES
Signature(s): T-H
Ka Bar

Analytical Laboratory Name: COLUMBIA
Analytical Laboratory Address: 1317 South 13th Ave Kelso, WA 98626
Field Logbook/Page Number: FL-032-EDC5-03
Page 21

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB11	5-16-02 / 1359	EDC-581	Soil	1		01	0-6"
C032CB12	5-16-02 / 1353	EDC-581	Soil	1		01	6-24"
C032CB13	5-16-02 / 1359	EDC-581	Soil	1		01	24-48"
C032CB14	5-16-02 / 1405	EDC-581	Soil	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER / BEI	FEDEX	5-16-02	1730	SHIP TO LAB
		5-17-02	0945	

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN W. QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7918-4053-7011
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab Signature
Courier Signature

C032CF02
C032CR09

T = 1.9
SDG - K2203212

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MAY 17 2002 8:36AM HP LASERJET 3200 P.9

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20188

Site Name: EDC 5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HOUSER / K. BARNES
Signature(s): T. Houser
Ken Barnes

Pay Items/ Analyses Required

Analytical Laboratory Name: STL ~~WEST SACRAMENTO~~ NPPL
Analytical Laboratory Address: ~~880 RIVERSIDE PARKWAY WEST SACRAMENTO, CA 95605~~ 4500 4203 W. SWIFT FRESNO, CA 93722
Field Logbook/Page Number: FL-032-EDC5-03 page 22

Preservation (4°C): NONE

TAT (In days): (2) 7 (14) 30

Sample ID No. (6 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB55	5-16-02 / 1431	EDC-591	SOIL	1		01	0-6"
C032CB56	5-16-02 / 1434	EDC-591	SOIL	1		01	6-24"
C032CB57	5-16-02 / 1439	EDC-591	SOIL	1		01	24-48"
C032CB58	5-16-02 / 1445	EDC-591	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HOUSER / BEI	FEDEX	5-16-02	1730	SHIP TO LAB

Comments/Instructions: FOLLOW BEI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7905-2730-7000
Total No. of Containers: 4
Total No. of Coolers Shipped: 1

COC SEAL

C032CF02
C032CR09

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MAY 17 2002 8:35AM HP LASERJET 3200 P.6

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20225

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordon

Sampler(s): R. Pline
Signature(s): [signature]

Pay Items/ Analyses Required: 7.25 PAH - 8270C SIM

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy, West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-04
pg 21, 23

Preservation (4°C): None

TAT (in days): 2 7 14 30 (2 and 14 circled)

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C7Y1	6-17-02 0855	32EDC-506	Soil	1		01	0 to 6"
C032C7Y2	6-17-02 0855	32EDC-506	↓	1		01	6" to 24"
C032C7Y3	6-17-02 0900	32EDC-506		1		01	24" to 48"
C032C7Y4	6-17-02 0905	32EDC-506		1		01	48" to 96"
C032C803	6-17-02 1015	32EDC-511		1		01	0 to 6"
C032C804	6-17-02 1015	32EDC-511		1		01	6" to 24"
C032C805	6-17-02 1020	32EDC-511		1		01	24" to 48"
C032C806	6-17-02 1025	32EDC-511	↓	1		01	48" to 96"

RP 6/17/02

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
RP BC	T. HAUSER BEI	6/17/02	1630	Ship to lab
T. HAUSER BEI	FEDEX	6-17-02	1730	SHIP TO LAB
		6-18-02	0945	

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordon w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 7927-2703-3740
Total No. of Coolers Shipped: 1
Total No. of Containers: 8
Lab Use:
Cooler Temp:

C032CF02
C032CR10

T=1
SDG

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CLEAN

CHAIN-OF-CUSTODY RECORD

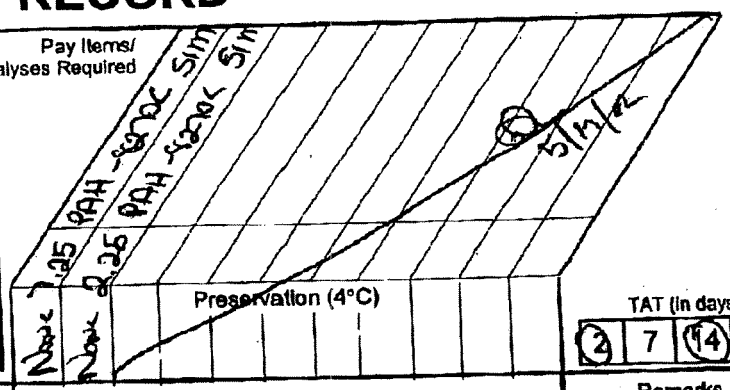
20204

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Primm
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave, Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-04
pg 22, 25

Pay Items/ Analyses Required



TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C776	5-17-02 0930	32EDC-505	Soil	1		01	0 to 6"
C032C777	5-17-02 0930	32EDC-505		1		01	6" to 24"
C032C778	5-17-02 0940	32EDC-505		1		01	24" to 48"
C032C779	5-17-02 0945	32EDC-505		1		01	48" to 96"
C032C780	5-17-02 0945	32EDC-505		1		01	48" to 96"
C032C789	5-17-02 1230	32EDC-517		1		01	0 to 6"
C032C850	5-17-02 1035	32EDC-517		1		01	6" to 24"
C032C851	5-17-02 1235	32EDC-517		1		01	24" to 48"
C032C852	5-17-02 1240	32EDC-517		1		01	48" to 96"
C032CR100	5-17-02 1250	EQC	H_2O	2		01 02	Rinsate

MS/MSD per Columbia FD

See next page

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
R. Primm BC	T. Hauser/BEI	5/17/02	1630	Ship to Lab
T. Hauser BEI	FEDEX	5-17-02	1730	SHIP TO LAB
		5-18-02	0945	

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7904-2257-0632
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab Receipt Cooler Temp.:

5/17/02

C032CF02
C032CR10

T=0.5
SDG-K2203248

MAY 20 2002 10:55AM HP LASERJET 3200

20168

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Hun
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. Swift Fresno CA
Field Logbook/Page Number: FL-032-EDC-01
~~pg~~ 24, 25

Pay Items/ Analyses Required: PAH-8270C SIM; 5 Metals

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C Y07	5-17-02 1040	32 EDC - 512	Soil	1		01	0 to 6"
C032C Y08	5-17-02 1040	32 EDC - 512		1		01	6" to 24"
C032C Y09	5-17-02 1050	32 EDC - 512		1		01	24" to 48"
C032C Y10	5-17-02 1055	32 EDC - 512		1		01	48" to 96"
C032C Y33	5-17-02 1305	32 EDC - 51Y		1		01	0 to 6"
C032C Y34	5-17-02 1305	32 EDC - 518		1		01	6" to 24"
C032C Y35	5-17-02 1305	32 EDC - 518		1		01	6" to 24" FD
C032C Y36	5-17-02 1315	32 EDC - 51Y		1		01	24" to 48"
C032C Y37	5-17-02 1320	32 EDC - 518		1		01	48" to 96"
C032C Y31	5-17-02 1235	32 EDC - 517		1		01	24" to 48"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser BEI	5/17/02	1630	Ship to lab
T. Hauser BEI	FedEx	5-17-02	1730	SHIP TO CAB
		5-18-02	1130	

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 7905-2814-1110
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Cooler Temp.:

T = 4
SDG-38393

C032CF02
C032CR1B

MAY 20 2002 10:57AM HP LASERJET 3200

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20203

Site Name: EDC-5
CTO Number: 030
Site Contact/Supervisor: J. Jordan

Sampler(s): R Hippe
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy, West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-04
pg 27

Preservation (4°C)

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CY55	5-17-02 1350	32EDC-523	Soil	1		01	0' to 6'
C032CY56	5-17-02 1350	32EDC-523	Soil	1		01	6" to 24"
C032CY57	5-17-02 1350	32EDC-523	Soil	1		01	6" to 24" FD
C032CY58	5-17-02 1355	32EDC-523	Soil	1		01	24" to 48"
C032CY59	5-17-02 1400	32EDC-523	Soil	1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/17/02	1630	Ship to Lab
T. Hauser BEI	FEDEX	5-17-02	1730	SHIP TO LAB
		5-18-02	0945	

Comments/Instructions: Follow BEI SOW for lab analysis. Call J Jordan w/ questions

Method of Shipment: Fed Ex
Airbill No.: 7927-2703-3740
Total No. of Containers: 5
Total No. of Coolers Shipped: 1
Lab Use: Cooler Temp.

T=1
SDG -

C032CFP2
C032CR1P

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20205

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Pierce/BEDC
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave, Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-04
pgs 27, 29

Pay Items/ Analyses Required: 7425 RAA - EDC Slim; Preservation (4°C); 5/20/02

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA49	5-20-02 0700	32EDC-571	Soil	1		01	0' to 6'
C032CA90	5-20-02 0900	32EDC-576		1		01	6" to 24"
C032CA91	5-20-02 0905	32EDC-576		1		01	24 to 48"
C032CA92	5-20-02 0910	32EDC-576		1		01	48 to 49"
C032CB41	5-20-02 0935	32EDC 579		1		01	0' to 6'
C032CB47	5-20-02 0930	32EDC-579		1		01	6" to 24"
C032CB48	5-20-02 0940	32EDC-579		1		01	24" to 48"
C032CB49	5-20-02 0950	32EDC-579		1		01	24" to 48" to 96"
							48" to 96"
5/20/02							

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEC	5/20/02	1630	Ship to Lab
T. Hauser/BEC	FedEx	5-20-02	1800	SHIP TO CAS

Comments/Instructions: Follow BEI SOW for Lab analysis. Call J. Jordan w/ questions

Method of Shipment: Fed Ex
Airbill No.: 7984 2411 7137
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab Signature:
Cooler Temp.:

C032CF02
C032CR011

MAY 21 2002 8:35AM HP LASERJET 3200

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20603

Blue to red

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): B. Gober
Signature(s):

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento
Field Logbook/Page Number: F1-032-EDC5-04 pgs 30, 32

Pay Items/ Analyses Required: 8270C SIM PAH; None 7.25

Preservation (4°C)

TAT (in days): 2 7 14 30 (14 circled)

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA44	5-20-02 1010	32EDC-575	Soil	1		01	0 to 6"
C032CA45	5-20-02 1010	32EDC-575		1		01	6" to 12" (6-24)
C032CA46	5-20-02 1030	32EDC-575		1		01	12 to 24' (24-48)
C032CA47	5-20-02 1035	32EDC-575		1		01	44 to 96"
C032CA48	5-20-02 1035	32EDC-575		1		01	44" to 96" FD
C032869	5-20-02 1325	32EDC-521		1		01	0' to 6'
C032870	5-20-02 1325	32EDC-521		1		01	6' to 24'
C032871	5-20-02	32EDC-526		1		01	24' to 44'
~~C032872~~	~~5-20~~	~~32EDC-521~~		1		01	~~44' to 96"~~
C032872	5-20-02 1345	32EDC-526		1		01	44' to 96'

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
	T. HAUSER/ BEI	5/20/02	1630	Ship to Lab
T. HAUSER/ BEI	FEDEX	5-20-02	1800	SHIP TO LAB
		5-21-02	0920	

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ question

Method of Shipment: Fed Exp
Airbill No.: 790424115295
Total No. of Coolers Shipped: 1
Total No. of Containers: 9
Lab SDG:
Cooler Temp:

C032CF02
C032CR011

T = 3
SDG - G2E210156

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BECHTEL CLEAN

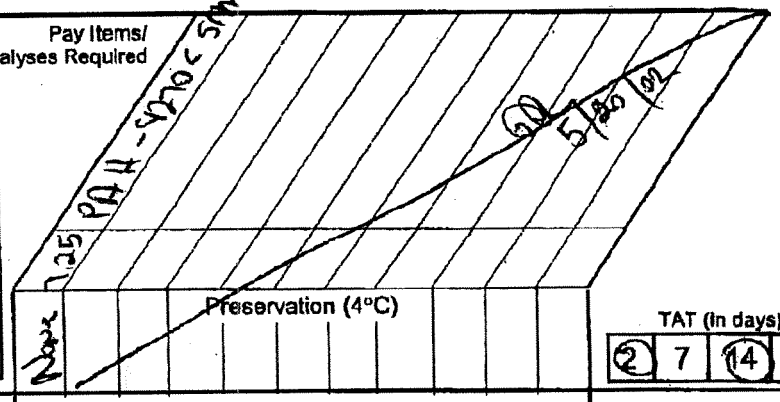
CHAIN-OF-CUSTODY RECORD

20602

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: T. Jordan

Sampler(s): B. Gaebe
Signature(s):

Pay Items/ Analyses Required



Analytical Laboratory Name: ~~PARI~~ Columbia
Analytical Laboratory Address: 1317 S. 13th St, Kelso, WA
Field Logbook/Page Number: FI-032-EDC5-04
pgs 31, 33

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C851	5-20-02 1300	32EDC-522	Sol	1		01	0 to 6"
C032C852	5-20-02 1300	32EDC-522		1		01	6 to 24"
C032C853	5-20-02 1305	32EDC-522		1		01	24 to 48"
C032C854	5-20-02 1310	32EDC-522		1		01	48" to 96"
C032C908	5-20-02 1415	32EDC-535		1		01	0 to 6"
C032C909	5-20-02 1415	32EDC-535		1		01	6" to 24"
C032C910	5-20-02 1425	32EDC-535		1		01	24" to 48"
C032C911	5-20-02 1430	32EDC-535		1		01	48" to 96"
C032C912	5-20-02 1430	32EDC-535		1		01	48" to 96" FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/20/02	1630	Ship to Lab
T. Hauser/BEI	FedEx	5-20-02	1800	SHIP TO LAB
		5-21-2	0915	

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call T. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7904 2411 1738
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CF02
C032CR011

T= 1.2
SDG-K2203271

MAY 21 2002 8:35AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20189

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): TL Priddy
Signature(s):

Analytical Laboratory Name: Columbia Analytical
Analytical Laboratory Address: 1317 S 13th Ave, Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-04
~~pgs~~ 34,

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | 3

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C913	5-20-02 1500	32EDC-536	Soil	1		01	0 to 6'
C032C914	5-20-02 1500	32EDC-536		1		01	6" to 24"
C032C915	5-21-02 1505	32EDC-536		1		01	24" to 48"
C032C911	5-21-02 1510	32EDC-536		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauser/BEI	5/20/02	1630	Ship to lab
T. Hauser/BEI	FEDEX	5-20-02	1800	SHIP TO LAB
		5-21-02	0915	

Comments/Instructions: Follow BEI SOW for Lab Analysis
Call J. Jordan w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 790424111738
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CR02
C032CR011

T = 1.2
SDG - K2203271

MAY 21 2002 8:36AM HP LASERJET 3200

Blue to Ed

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20604

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordon

Sampler(s): R. Priddy
Signature(s):

Pay Items/ Analyses Required: 8260 PAH - 8270C SIM

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy, West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-04
Q. 35

Preservation (4°C): None

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CF73	5-20-02 1530	32EDC-527	Soil	1	5/12/02	01	0 to 6"
C032CF74	5-20-02 1550	32EDC-524		1		01	6" to 24"
C032CF75	5-20-02 1535	32EDC-527		1		01	24" to 4ft
C032CF76	5-20-02 1540	32EDC-527		1		01	4ft" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
	T. Hauser/BEI	5/20/02	1630	Ship to Lab
T. Hauser/BEI	FedEx	5-20-02	1800	SHIP to LAB
		5/21/02	0920	

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordon w/ questions.

Method of Shipment: FedEx
Airbill No.: 7904 2411 5295
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab Seal:
Cooler Temp:

C.
C032CF02
C032CR011

T=3
500-G2E210158

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

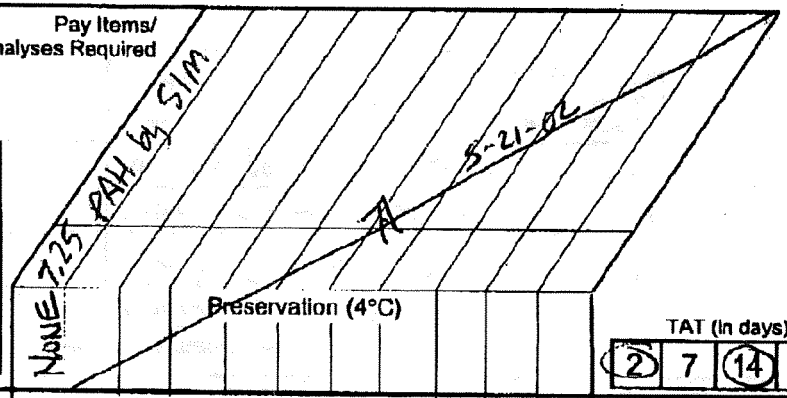
20622

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): B. GOBEL / T. HOUSEE
Signature(s):

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy, West SACRAMENTO
Field Logbook/Page Number: FL-032-EDC5-04, pg 36, 39

Pay Items/ Analyses Required



TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C992	5-21-02 / 0835	EDC-554	SOIL	1		01	0-6"
C032C993	5-21-02 / 0840	EDC-554	SOIL	1		01	6-24"
C032C994	5-21-02 / 0845	EDC-554	SOIL	1		01	24-48"
~~C032C995~~	~~5-21-02 / 0850~~	~~EDC-554~~	~~SOIL~~	~~1~~	~~A~~	~~01~~ 5-21-02	48-96"
C032C961	5-21-02 / 1020	EDC-547	SOIL	1		01	0-6"
C032C962	5-21-02 / 1025	EDC-547	SOIL	1		01	6-24"
C032C963	5-21-02 / 1050	EDC-547	SOIL	1		01	24-48"
C032C964	5-21-02 / 1055	EDC-547	SOIL	1		01	48-96"
					~~A~~ 5-21-02		

SDG # COC 20621

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HOUSEE / BEI	FEDEX	5-21-02	1730	SHIP TO LAB
		5-22-02	0935	

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. JORDAN w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 7904-2578-4920
Total No. of Coolers Shipped: 1
Total No. of Containers: 7
Lab SDG:
Cooler Temp.:

T = 2

C032CF02
C032CR12
C032CR13

SDG-G2E220159

MAY 21 2002 6:59PM HP LASERJET 3200

CLEAN

CHAIN-OF-CUSTODY RECORD

20619

Site Name: EDC-5
TO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / B. Gobe
Signature(s):

Analytical Laboratory Name: Columbia Analytical
Analytical Laboratory Address: 1317 S. 13th Ave Kelso, WA.
Field Logbook/Page Number: FL-032-EDCS-04, pg 37, 40

Pay Items/ Analyses Required: None; 7.25 PAH by SIM; Preservation (4°C); TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C 952	5-21-02/0935	EDC-545	SOIL	1		01	0-6"
C032C 953	5-21-02/0935	EDC-545	SOIL	1		01	6-24"
C032C 954	5-21-02/0940	EDC-545	SOIL	1		01	24-48"
C032C 955	5-21-02/0945	EDC-545	SOIL	1		01	48-96"
C032C 956	5-21-02/0945	EDC-545	SOIL	1		01	48-96" FD
C032C 917	5-21-02/1125	EDC-537	SOIL	1		01	0-6"
C032C 918	5-21-02/1125	EDC-537	SOIL	1		01	6-24"
C032C 919	5-21-02/1130	EDC-537	SOIL	1		01	24-48"
C032C 920	5-21-02/1135	EDC-537	SOIL	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. Hauser/BEI	FedEx	5-21-02	1730	SHIP TO LAB

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Ex.
Airbill No.: 7918-4365-6085
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Rec'd:
Cooler Temp:

C032CF02
C032CR12
C032CR13

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P.3

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20621

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / B. GOBER
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 9203 W. Swift. Fresno, Ca. 93722
Field Logbook/Page Number: FL-032-EDC5-04, pg 38, 41

Pay Items/ Analyses Required

Preservation (4°C): NONE | 7.25 | PAN by SIM | PD 5-21-02

TAT (in days): (2) | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C957	5-21-02/1010	EDC-546	SOIL	1		01	0-6"
C032C958	5-21-02/1010	EDC-546	SOIL	1		01	6-24"
C032C959	5-21-02/1015	EDC-546	SOIL	1		01	24-48"
C032C960	5-21-02/1020	EDC-546	SOIL	1		01	48-96"
C032C877	5-21-02/1255	EDC-528	SOIL	1		01	0-6"
C032C878	5-21-02/1255	EDC-528	SOIL	1		01	6-24"
C032C879	5-21-02/1255	EDC-528	SOIL	1		01	6-24" FD
C032C880	5-21-02/1300	EDC-528	SOIL	1		01	24-48"
C032C881	5-21-02/1305	EDC-528	SOIL	1		01	48-96"
C032C995	5-21-02/0850	EDC-554	SOIL	1		01	48-96

PD 5-21-02

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
T. HAUSER/BEI	FEDEX	5-21-02	1730	SHIP TO LAB
		5/22/2	0930	

Comments/Instructions:
Follow BEI SOW for lab analysis
Call J. Jordan w/ questions

Method of Shipment: FedEx
Airbill No.: 7904-2578-0903
Total No. of Coolers Shipped: 1
Total No. of Containers: 10
Lab Signature:
Cooler Temp.:

C032CF02
C032CR12
C032CR13

T = 1

SDG- 38422

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BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20605

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. JORDAN

Sampler(s): T. HAUSER / B. JOSEF
Signature(s):

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 RIVERSIDE PKWY, WEST SACRAMENTO
Field Logbook/Page Number: FL-032-EDC5-04, pg 42

Pay Items/ Analyses Required

Preservation (4°C)

NONE 7.25 PAH - 8270C SIM

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C 860	5-21-02 / 1325	EDC-524	SOIL	1		01	0-6"
C032C 861	5-21-02 / 1325	EDC-524	SOIL	1		01	6-24"
C032C 862	5-21-02 / 1330	EDC-524	SOIL	1		01	24-48"
C032C 863	5-21-02 / 1335	EDC-524	SOIL	1		01	48-96"

5-21-02

5-21-02

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer	Comments/Instructions:
T. HAUSER / BEI	FEDEX	5-21-02	1730	SHIP TO LAB	FOLLOW BNI SOW FOR ANALYSIS. CONTACT J. JORDAN W/ QUESTIONS

Method of Shipment: FEDEX
Airbill No.: 7904-2578-4920
Total No. of Coolers Shipped: 1
Total No. of Containers: 4
Lab Seal:
Cooler Temp.:

C032CF02
C032CR12
C032CR13

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MAY 21 2002 6:59PM HP LASERJET 3200 P.13

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20606

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Kivi / B. Gober
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave, Kelso, WA
Field Logbook/Page Number: FL-032-EDC-5-04
pgs 44, 46

Preservation (4°C)

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C A36	5-20-02 0930	32 EDC-564	Soil	1		01	0 to 6"
C032C A37	5-20-02 0930	32 EDC-564		1		01	6" to 24"
C032C A38	5-22-02 0925	32 EDC-564		1		01	24" to 48"
C032C A39	5-22-02 0930	32 EDC-564		1		01	48" to 96"
C032C A97	5-22-02 1110	32 EDC-578		1		01	0 to 6"
C032C A98	5-22-02 1110	32 EDC 578		1		01	6" to 24"
C032C A99	5-22-02 1110	32 EDC 578		1		01	6" to 24" FD
C032C B00	5-22-02 1115	32 EDC 578		1		01	24" to 48"
C032C B01	5-22-02 1120	32 EDC 578		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hawk	5/22/02	1600	Ship to Lab
T. Hawk BEI	Fed Exp	5/22/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7904 2145 8490
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Seal:
Cooler Temp.:

C032CF02
C032CR15
C032CR16 stet
C032CR14

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CLEAN

CHAIN-OF-CUSTODY RECORD

20627

e Name: EDC-5
O Number: 032
e Contact/Supervisor: J. Jordan

Sampler(s): P. Pavia / B. Gabor
Signature(s):

Pay Items/ Analyses Required

8260 PAH by SIM
Preservation (4°C)
TAT (in days): 2 | 7 | 14 | 30

alytical Laboratory Name: S.T.L
alytical Laboratory Address: 880 Riverside Pkwy W. Sacramento CA
eld Logbook/Page Number: FL-032-EDC-5-04
Pgs. 45, 47

ample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
32C A45	5-22-02 1045	32EDC-56	Soil	1		01	0 to 6"
32C A46	5-22-02 1040	32EDC-56		1		01	6" to 24"
32C A47	5-22-02 1050	32EDC-56		1		01	24" to 48"
32C A48	5-22-02 1055	32EDC-56		1		01	48" to 96"
32C A93	5-22-02 1150	32EDC 57		1		01	0 to 6"
32C A94	5-22-02 1150	32EDC 57		1		01	6" to 24
32C A95	5-22-02 1155	32EDC 57		1		01	24 to 47
032C A96	5-22-02 1200	32EDC 57		1		01	48 to 96

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hamer	5/22/02	1600	Ship to Lab
T. Hamer BEI	Fed Ex	5/22/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 791744841574
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab Use Only
Cooler Temp.:

C032CF02
C032CR15
C032CR16 4th
C032CR14

5/22/02

MAY 22 2002 6:51PM HP LASERJET 3200

P.6

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CLEAN

CHAIN-OF-CUSTODY RECORD

20630

MAY 22 2002 6:52PM HP LASERJET 3200

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. [illegible] / B. Gaber
Signature(s): [signatures]

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S 13th Ave., Kelso, WA
Field Logbook/Page Number: FL-032-EDC-5-04 pg 48, 50

Pay Items/ Analyses Required: 7235 PAH low Sim

Preservation (4°C): None

TAT (in days): 2 7 14 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA40	5-22-02 1310	32EDC-565	Soil	1		01	0 to 6"
C032CA41	1310	32EDC 565	↓	1		01	6" to 24"
C032CA42	1315	32EDC 565		1		01	24" to 48"
C032CA43	1320	32EDC 565		1		01	24" + 48"
C032CA44	1320	32EDC 565		1		01	48" to 96"
C032CA05	1435	32EDC-557		1		01	48" to 96" FD
C032CA06	1435	32EDC-557		1		01	0 to 6
C032CA07	1440	32EDC-557		1		01	6 to 24
C032CA08	1450	32EDC-557	↓	1		01	24 to 48
							48 to 96

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] BC	T. Hauer	5/22/02	1600	Ship to Lab
T. Hauer BEI	Fed Exp	5/22/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7904 2745 8490
Total No. of Coolers Shipped: 1
Total No. of Containers: 9
Lab Use:
Cooler Temp.:

C032CF02
C032CR15
C032CR16 4 stat
C032CR14

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P.10

CLEAN

CHAIN-OF-CUSTODY RECORD

20628

Site Name: EDC-5
TO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): T. Hauser / B. Cook
Signature(s):

Analytical Laboratory Name: S.T.L.
Analytical Laboratory Address: 880 Riverside Pkwy W. Sacramento CA
Field Logbook/Page Number: FL-032-EDC-5-04
49

Pay Items/ Analyses Required

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
032C A01	5-22-02 1355	32EDC-556	Soil	1		01	0 to 6"
032C A02	5-22-02 1355	32EDC-556		1		01	6" to 24"
032C A03	5-22-02 1400	32EDC-556		1		01	24" to 48"
032C A04	5-22-02 1405	32EDC-556		1		01	48" to 96"

Preservation (4°C)

TAT (In days): 2 | 7 | 14 | 30

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
B C	T. Hauser	5/22/02	1600	Ship to Lab
T. Hauser BEI	Fed Exp	5/22/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ question.

Method of Shipment: Fed Exp
Airbill No.: 848448115746
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab Storage:
Cooler Temp.:

C032CF02
C032CR15
C032CR16 4's

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BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20651

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R Rivera B Gober
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: S.T.L.
Analytical Laboratory Address: 880 Riverside Pkwy W Sacramento CA
Field Logbook/Page Number: EL-032-EDC5-05
pgs. 21,24

Preservation (4°C)

TAT (In days): 2 7 14 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB02	5-23-02 0925	32EDC-579	Soil	1		01	0 to 6"
C032CB03	5-23-02 0925	32EDC-579		1		01	6" to 24"
C032CB04	5-23-02 0930	32EDC-579		1		01	24" to 48"
C032CB05	5-23-02 0935	32EDC-579		1		01	48" to 96"
C032CB94	5-23-02 1025	32EDC-5100		1		01	0 to 6"
C032CB95	5-23-02 1025	32EDC-5100		1		01	6" to 24"
C032CB96	5-23-02 1030	32EDC-5100		1		01	24" to 48"
C032CB97	5-23-02 1035	32EDC-5100		1		01	48" to 96"
C032CB98	5-23-02 1035	32EDC-5100		1		01	FD @ 0925

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hawse BEI	5/23/02	1600	Ship to lab
T. Hawse BEI	FedEx	5/24/02	1730	Ship to lab

Comments/Instructions: Follow BEI SOW for Lab analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 791Y4598 8574
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Storage:
Cooler Temp.:

C032CF02
C032CR17

DECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20648

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): B. Austin / B. Baker
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave, Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-05
pgs. 22, 25

Preservation (4°C)

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB06	5-23-02 0910	32EDC-580	Soil	1		01	0 to 6"
C032CB07	5-23-02 0910	32EDC-540		1		01	6" to 24"
C032CB08	5-23-02 0915	32EDC-540		1		01	24" to 48"
C032CB09	5-23-02 0920	32EDC-580		1		01	48" to 96" FD
C032CB10	5-23-02 0920	32EDC-580		1		01	0 to 6"
C032CC38	5-23-02 1105	32EDC-5110		1		01	6" to 24"
C032CC39	5-23-02 1105	32EDC-5110		1		01	24" to 48"
C032CC40	5-23-02 1110	32EDC-5110		1		01	48" to 96"
C032CC41	5-23-02 1120	32EDC-5110		1		01	48" to 96" FD
C032CC42	5-23-02 1120	32EDC-5110		1		01	

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hawes	5-23-02	1600	Ship to Lab
T. Hawes	Fed Exp	5-23-02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7911 9035 0096
Total No. of Containers: 10
Total No. of Coolers Shipped: 1
Lab Temp.:
Cooler Temp.:

C032CF02
C032CR17

MAY 24 2002 8:46AM HP LASERJET 3200

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20629

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): J. Jordan, Bryan Gokey
Signature(s):

Pay Items/ Analyses Required: PAH by 8270 SIM, PAH by 8310 SIM, 5/23/02

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. Swift, Fresno, CA
Field Logbook/Page Number: FI-032-EDC5-05
~~pg~~ 23, 24

Preservation (4°C): None, Cool

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB50	5-23-02 0945	32 EDC-590	Soil	1		01	0 to 6"
C032CB51	5-23-02 0945	32 EDC-590		1		01	6 to 24"
C032CB52	5-23-02 0950	32 EDC-590		1		01	24 to 48"
C032CB53	5-23-02 0955	32 EDC-590		1		01	48" to 96"
C032CB54	5-23-02 0955	32 EDC-590		1		01	48" to 96" FD
C032CB99	5-23-02 1045	32 EDC-5101		1		01	0 to 6"
C032CB00	5-23-02 1045	32 EDC-5101		1		01	6" to 24"
C032CC01	5-23-02 1050	32 EDC-5101		1		01	24" to 48"
C032CC02	5-23-02 1055	32 EDC-5101		1		01	48" to 96"
C032CR17	5-23-02 1530	FQC	H2O	2		01, 02	Rinsate

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hawes	5/23/02	1600	Ship to Lab
T. Hawes BEI	Fed Exp	5/23/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7920 4012 0101
Total No. of Containers: 11
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CFD2
C032CR17

20649

CHAIN-OF-CUSTODY RECORD

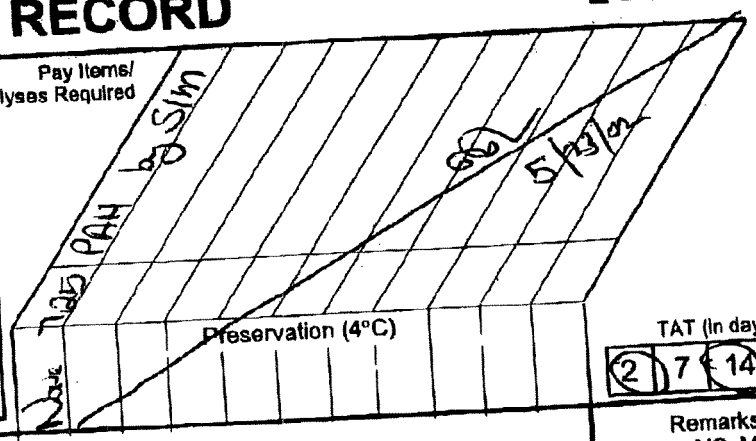
CLEAN

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Wilson, B. Golar
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave., Kelso WA
Field Logbook/Page Number: CL-032-EDC5-05
pgs 27

Pay Items/ Analyses Required



TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CA54	5-23-02 1320	32EDC-56X	Soil	1		01	0 to 6"
C032CA55	5-23-02 1330	32EDC-66X		1		01	6" to 24"
C032CA56	5-23-02 1325	32EDC-56X		1		01	24" to 48"
C032CA57	5-23-02 1330	32EDC-56X		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hawor BEI	5/23/02	1600	Ship to Lab
T. Hawor BEI	Fed Exp	5/23/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 791190350096
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CF02
C032CR17

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DECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20650

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: S Jordan

Sampler(s): R Pullin B Gober
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy W. Sacramento CA
Field Logbook/Page Number: FL-032-EDC 5-05
pg. 28

Preservation (4°C)

TAT (in days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C A09	5-23-02 1410	32 EDC - 55X	Soil	1		01	0 to 6"
C032C A10	5-23-02 1410	32 EDC - 55X		1		01	6" to 24"
C032C A11	5-23-02 1410	32 EDC - 55X		1		01	6" to 24" FD
C032C A12	5-23-02 1415	32 EDC - 55X		1		01	24" to 48"
C032C A13	5-23-02 1425	32 EDC - 55X		1		01	48" to 91"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hawes BEI	5/23/02	1600	Ship to lab.
T. Hawes BEI	FedEx	5/23/02	1730	Ship to lab.

Comments/Instructions: Follow BEI SOW for lab analysis. Call S. Jordan w/ questions

Method of Shipment: FedEx
Airbill No.: 791445988574
Total No. of Containers: 5
Total No. of Coolers Shipped: 1
Lab Seal:
Cooler Temp.:

C032CF02
C032CR17

CLEAN

CHAIN-OF-CUSTODY RECORD

20676

Site Name: EDC - 5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): L Pavia / B Baker
Signature(s):

Pay Items/ Analyses Required

Analytical Laboratory Name: S.T.L.
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento, CA
Field Logbook/Page Number: EL 032 EDC5-05
pg 29, 32

Preservation (4°C)

TAT (In days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC82	5-24-02 0840	32EDC-5120	Soil	1		01	0 to 6"
C032CC83	5-24-02 0840	32EDC-5120		1		01	6 to 12"
C032CC84	5-24-02 0845	32EDC-5120		1		01	12" to 24"
C032CC85	5-24-02 0850	32EDC-5120		1		01	48" to 96"
C032CC86	5-24-02 0850	32EDC-5120		1		01	48" to 96" FD
C032CD31	5-24-02 1110	32EDC-5131		1		01	0 to 6'
C032CD32	5-24-02 1110	32EDC-5131		1		01	6" to 24"
C032CD33	5-24-02 1115	32EDC-5131		1		01	24" to 48"
C032CD34	5-24-02 1120	32EDC-5131		1		01	48" to 96"

EB-1

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T Hamer	5-24-02	1530	Ship to Lab
T. Hamer BE1	Fed Exp	5-24-02	1730	Ship to Lab

Comments/Instructions: Follow BE1 SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp.
Airbill No.: 7918-4699-1350
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Spec.
Cooler Temp.:

C032CF02
C032CR18

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MAY 28 2002 9:21AM HP LASERJET 3200 P.12

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20674

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R Perone / B Gober
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave Kelso, WA
Field Logbook/Page Number: FL 032 EDC5-05
pgs. 30, 33

Pay Items/ Analyses Required

Preservation (4°C)

TAT (In days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC78	5-24-02 0930	32EDC-5119	Soil	1		01	0 to 6"
C032CC79	5-24-02 0935	32EDC-5119		1		01	6" to 24"
C032CC80	5-24-02 0935	32EDC-5119		1		01	24" to 48"
C032CC81	5-24-02 0940	32EDC-5119		1		01	48" to 96"
C032CD17	5-24-02 1250	32EDC-512X		1		01	0 to 6"
C032CD18	5-24-02 1250	32EDC-512X		1		01	6" to 24"
C032CD19	5-24-02 1250	32EDC-512X		1		01	6" to 24" F
C032CD20	5-24-02 1255	32EDC-512X		1		01	24" to 48"
C032CD21	5-24-02 1300	32EDC-512X		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Hauer	5/24/02	1530	Ship to Lab
T Hauer BEI	Fed Exp	5/24/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7920-4093-1030
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Use:
Cooler Temp:

C032CF02
C032CR18

CLEAN

CHAIN-OF-CUSTODY RECORD

20632

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): A Howie / B Gober
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 West Swift Fresno, CA
Field Logbook/Page Number: FL 032 EDC5 -05
Pg 31, 34

Pay Items/ Analyses Required

Preservation (4°C)

TAT (In days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CD26	5-24-02 1030	32EDC-5130	Soil	1		01	0 to 6'
C032CD27	5-24-02 1030	32EDC-5130		1		01	6" to 24"
C032CD28	5-24-02 1035	32EDC-5130		1		01	24" to 48"
C032CD29	5-24-02 1040	32EDC-5130		1		01	48" to 96"
C032CD30	5-24-02 1040	32EDC-5130		1		01	48" to 96" FD
C032CD22	5-24-02 1330	32EDC-5129		1		01	0 to 6"
C032CD23	5-24-02 1330	32EDC-5129		1		01	6" to 24"
C032CD24	5-24-02 1335	32EDC-5129		1		01	24" to 48"
C032CD25	5-24-02 1345	32EDC-5129		1		01	48" to 96"
C032CR18	5-24-02 1550	FBC	Water	2		01 01	RINSATE

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
A Howie BC	T. Hauser BEI	5/24/02	1530	Ship to Lab
T. Hauser BEI	FedEx	5/24/02	1730	Ship to lab

Comments/Instructions: Follow BEI SOW for Lab Analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 791847016194
Total No. of Containers: 9 11
Total No. of Coolers Shipped: 1
Lab Shpg
Cooler Temp

C032CF02
C032CR18

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CHAIN-OF-CUSTODY RECORD

20677

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Howe, B. Sadler
Signature(s):

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FI 032 EDC5-05
35

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC87	5-24-02 1420	32EDC-5121	Soil	1		01	0 to 6'
C032CC88	5-24-02 1420	32EDC-5121		1		01	6 to 24
C032CC89	5-24-02 1426	32EDC-5121		1		01	24" to 48'
C032CC90	5-24-02 1430	32EDC-5121	↓	1		01	48" to 91'

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	T. Howe BEI	5/24/02	1530	Ship to Lab
T. Howe BEI	F.O Exp	5/24/02	1730	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: F.O Exp
Airbill No.: 7918-4699-1350
Total No. of Containers: 4
Total No. of Coolers Shipped: 1
Lab Rec'd
Cooler Temp.

CØ32CFØ2
CØ32CR18

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20610

CHAIN-OF-CUSTODY RECORD

CLEAN

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): J. Jordan
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave. Kelso, WA
Field Logbook/Page Number: EL-032-EDC5-05
@ 36, 41

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB68	5-24-02 0915	32EDC-594	Soil	1		01	0 to 6"
C032CB69	5-24-02 0935	32EDC-594		1		01	6 to 24"
C032CB70	5-24-02 0945	32EDC-594		1		01	24" to 48"
C032CB71	5-24-02 0950	32EDC-594		1		01	48" to 96"
C032CC95	5-24-02 1355	32EDC-5123		1		01	0 to 6"
C032CC96	5-24-02 1355	32EDC-5123		1		01	6 to 24"
C032CC97	5-24-02 1355	32EDC-5123		1		01	~~24" to 48"~~ FD
C032CC98	5-24-02 1400	32EDC-5123		1		01	~~48" to 96"~~
C032CC99	5-24-02 1410	32EDC-5123	↓	1		01	48 to 96

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	S. Quade/Kleinfelder	5/24/02	1700	Ship to Lab
S. Quade/Kleinfelder	FedEx	5/24/02	1800	Ship to Lab

Comments/Instructions: Follow BEE SOW for lab analysis. Call J. Jordan w/ questions

Method of Shipment: FedEx
Airbill No.: 790411970391
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Receipt Temp:

C032CF62
C032CR19

MAY 29 2002 8:21AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

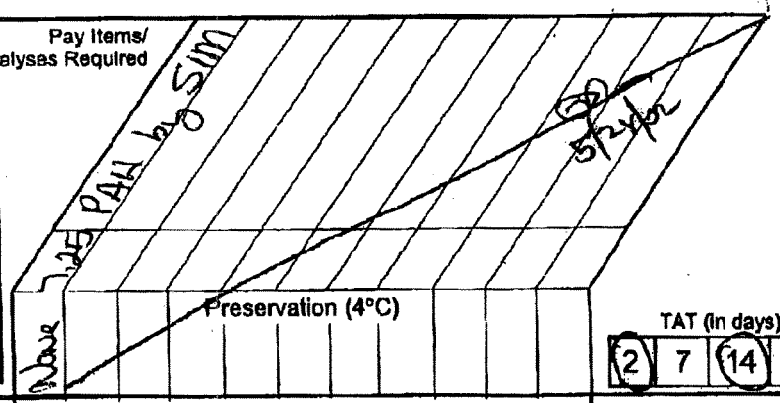
20611

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Pindic
Signature(s):

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-85
~~30~~, 40

Pay Items/ Analyses Required



TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C C03	5-24-02 1050	32EDC-5102	Soil	1		01	0 to 6"
C032C C04	5-24-02 1050	32EDC-5102		1		01	6" to 24"
C032C C05	5-24-02 1100	32EDC-5102		1		01	24" to 48"
C032C C06	5-24-02 1110	32EDC-5102		1		01	48" to 96"
C032C 035	5-24-02 1310	32EDC-5132		1		01	0 to 6"
C032C 036	5-24-02 1310	32EDC-5132		1		01	6" to 24"
C032C D37	5-24-02 1320	32EDC-5132		1		01	24" to 48"
C032C D38	5-24-02 1325	32EDC-5132		1		01	48 to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	S. Quayle/Kleinfelder	5/24/02	1700	Ship to Lab
S. Quayle/Kleinfelder	Fed Ex	5/24/02	1900	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions

Method of Shipment: Fed Ex
Airbill No.: 7911 4624 3137
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab Shipping Cooler Temp.:

C032CF02
C032CR19

MAY 29 2002 8:19AM HP LASERJET 3200

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

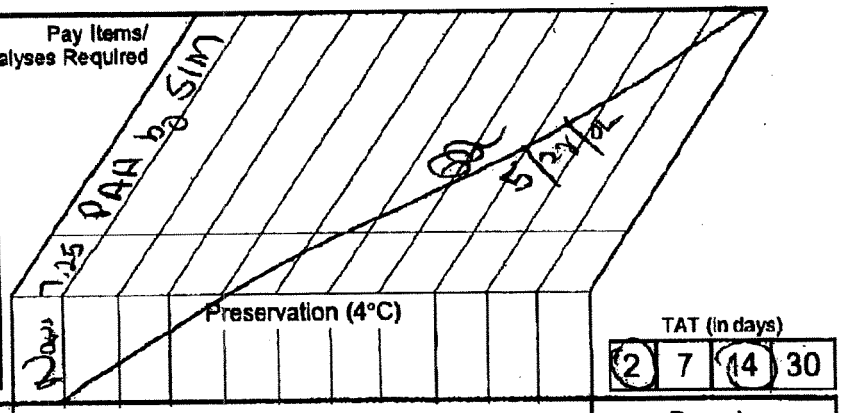
20613

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): [signature]
Signature(s): [signature]

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. Swift Fresno CA
Field Logbook/Page Number: FL-032-EDC5-05
~~39~~ 39, 42

Pay Items/ Analyses Required



TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C C43	5-24-02 1150	32EDC-5111	Soil	1		01	0 to 6"
C032C C44	5-24-02 1150	32EDC-5111		1		01	6" to 24"
C032C C45	5-24-02 1200	32EDC-5111		1		01	24" to 48"
C032C C41	5-24-02 1205	32EDC-5111		1		01	48" to 96"
C032C D44	5-24-02 1446	32EDC-5134		1		01	0 to 6"
C032C D45	5-24-02 1446	32EDC-5134		1		01	6" to 24"
C032C D41	5-24-02 1450	32EDC-5134		1		01	24" to 48"
C032C D47	5-24-02 1455	32EDC-5134		1		01	48" to 96"

5/24/02

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] / BC	Sample / Klein Cell	5/24/02	1700	Ship to Lab
[signature] / Klein Cell	Fed Express	5/24/02	1900	Ship to Lab

Comments/Instructions:
Follow BEI SOW for lab analysis.
Call J. Jordan with questions

Method of Shipment: Fed Exp
Airbill No.: 7905 3367 0220
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab Use: Cooler Temp.:

C032CF02
C032CR19

CLEAN

CHAIN-OF-CUSTODY RECORD

20609

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Irwin
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave Kelso, WA
Field Logbook/Page Number: EI-032-EDC5-05
043

Pay Items/ Analyses Required

Matrix / Preservation (4°C) / 1,2,5 PAH by SIM / 5/24/02

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C D48	5-24-02 1515	32EDC-5135	Soil	1	5/31/02	01	0 to 6"
C032C D49	5-24-02 1515	32EDC-5135		1		01	6" to 24"
C032C D50	5-24-02 1525	32EDC-5135		1		01	24 to 47
C032C D51	5-24-02 1530	32EDC-5135		1		01	47 to 91"
C032C D52	5-24-02 1530	32EDC-5135		1		01	47" to 96" FD

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] / BC	S. Sample / Kleinfelder	5/24/02	1700	Ship to lab
S. Sample / Kleinfelder	Fed Exp	5/27/02	1400	Ship to lab

Comments/Instructions: Follow BE/ SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 1930 4197 0391
Total No. of Containers: 5
Total No. of Coolers Shipped: 1
Lab Seal: Cooler Temp.:

C032CFD2
C032CR19

MAY 29 2002 8:21AM HP LASERJET 3200

p. 13

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20709

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): [illegible]
Signature(s): [illegible]

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy W. Sacramento, CA
Field Logbook/Page Number: FL-032-EDC5-05
pg 44, 47

Pay Items/ Analyses Required: 8325 PAH by SIM

Preservation (4°C)

TAT (in days): 2 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC73	5-29-02 0910	32EDC-5118	Soil	1		01	0 to 6"
C032CC74	5-29-02 0910	32EDC-5118	↓	1		01	6" to 24"
C032CC75	5-29-02 0910	32EDC-5118		1		01	6" to 24" FD
C032CC76	5-29-02 0915	32EDC-5118		1		01	24" to 48"
C032CC77	5-29-02 0925	32EDC-5118		1		01	48" to 96"
C032CC69	5-29-02 1135	32EDC-5117		1		01	0 to 6"
C032CC70	5-29-02 1135	32EDC-5117		1		01	6" to 24"
C032CC71	5-29-02 1140	32EDC-5117		1		01	24" to 48"
C032CC72	5-29-02 1145	32EDC-5117	↓	1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[illegible] BC	S. Quigley/Kleinfelder	5/29/02	1700	Ship to Lab
S. Quigley/Kleinfelder	Fed Exp	5/29/02	1900	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7920 4279 1880
Total No. of Coolers Shipped: 1
Total No. of Containers: 9
Lab SDG:
Cooler Temp:

C032CF02
C032CR20

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MAY 30 2002 8:17AM HP LASERJET 3200

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20708

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J Jordan

Sampler(s): B. Pauw
Signature(s): [signature]

Pay Items/ Analyses Required: 7.25 BAH to Slim

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S 13th Ave Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-05 pg 45,48

Preservation (4°C)

TAT (in days): 2 7 14 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C013	5-29-02 1000	32EDC-5127	Soil	1		01	0 to 6"
C032C014	5-29-02 1000	32EDC-5127	↓	1		01	6" to 24"
C032C015	5-29-02 1010	32EDC-5127		1		01	24" to 48"
C032C016	5-29-02 1015	32EDC-5127		1		01	48" to 96"
C032C029	5-29-02 1310	32EDC-5108		1		01	0" to 6"
C032C030	5-29-02 1330	32EDC-5108		1		01	6" to 24"
C032C031	5-29-02 1330	32EDC-5108		1		01	6" to 24" FD
C032C032	5-29-02 1335	32EDC-5108		1		01	24" to 48"
C032C033	5-29-02 1340	32EDC-5108	↓	1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
B. Pauw/BC	S. Quayle/Kleinfelder	5/29/02	1700	Ship to Lab
S. Quayle/Kleinfelder	Fed Exp	5/29/02	1800	Ship to lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 7918 4960 1349
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF02
C032CR20

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MAY 30 2002 8:16AM HP LASERJET 3200 P.8

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20711

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): L Pinn
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. Swift, Fresno, CA
Field Logbook/Page Number: FI -032 - EDC 5 - 05
~~46~~ 49

Pay Items/ Analyses Required: PAH by SIM; 2,3,7,8 TCDD; Preservation (4°C)

TAT (In days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C C34	5-29-02 1055	32EDC-5109	Soil	1		01	0 to 6"
C032C C35	5-29-02 1055	32EDC-5109		1		01	6" to 24"
C032C C36	5-29-02 1100	32EDC-5109		1		01	24" to 48"
C032C C37	5-29-02 1105	32EDC-5109		1		01	48" to 96"
C032C B90	~~5-29-02 1440~~ 5-29-02 1435	32EDC-599		1		01	0 to 6"
C032C B91	~~5-29-02 1440~~ 5-29-02 1435	32EDC-599		1		01	6" to 24"
C032C B92	~~5-29-02 1445~~ 5-29-02 1440	32EDC-599		1		01	24" to 48"
C032C B93	5-29-02 1445	32EDC-599		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	S Quayle/Kleinfelder	5/29/02	1700	Ship to Lab
S Quayle/Kleinfelder	Fed Exp	5/29/02	1400	Ship to lab

Comments/Instructions: Follow BE1 SOW for lab analysis
Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 791449499351
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp.:

C032CF02
C032CR20

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20710

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Piva
Signature(s):

Analytical Laboratory Name: S.T.L.
Analytical Laboratory Address: 880 Riverside Pkwy W. Sacramento, CA
Field Logbook/Page Number: FL-032-EDC5-05
~~PS~~ 50

Pay Items/ Analyses Required: 25 RAD Lab SVOC; 30; 5/29/02; Preservation (4°C); 3

TAT (In days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CB85	5-29-02 1515	32EDC-596	Soil	1		01	0 to 6"
C032CB86	5-29-02 1515	32EDC-597		1		01	6" to 24"
C032CB87	5-29-02 1515	32EDC-598		1		01	6" to 24" FD
C032CB88	5-29-02 1525	32EDC-599		1		01	24' to 48"
C032CB89	5-29-02 1530	32EDC-599		1		01	48" to 96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	S. Quayle/Kleinfelder	5/29/02	1700	Ship to Lab
S. Quayle/Kleinfelder	Fed Express	5/29/02	1700	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions

Method of Shipment: Fed Ex
Airbill No.: 792042791170
Total No. of Containers: 5
Total No. of Coolers Shipped: 1
Lab Signature:
Cooler Temp.:

C032CP02
C032CR20

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20722

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jorkov

Sampler(s): R. Pinon
Signature(s): [signature]

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy, West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-06 pg. 21, 24

Pay Items/Analyses Required: 7.25 PAH by SIM; 7.25 PAH by SIM

Preservation (4°C): None; None

TAT (in days): 2 7 14 30 (2 and 14 circled)

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C053	5-30-02 0925	32EDC-5136	Soil	1		01	0 to 6"
C032C054	5-30-02 0925	32EDC-5136	↓	1		01	6" to 24"
C032C055	5-30-02 0830	32EDC-5136		1		01	24" to 48"
C032C056	5-30-02 0840	32EDC-5136		1		01	48" to 96"
C032C057	5-30-02 0840	32EDC-5136		1		01	48" to 96" FD
C032C065	5-30-02 1040	32EDC-5116		1		01	0 to 6" MS/MSD
C032C066	5-30-02 1040	32EDC-5116		1		01	6" to 24"
C032C067	5-30-02 1045	32EDC-5116		1		01	24" to 48"
C032C068	5-30-02 1050	32EDC-5116	↓	1		01	48" to 96"
C032CR21	5-30-02 1430	FRC	Water	2		01 02	Rinsate

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
[signature] BC	Fed Express	5/30/02	1600	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jorkov w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7907 29057100
Total No. of Coolers Shipped: 1
Total No. of Containers: 11
Lab SDG:
Cooler Temp.:

C032CF02
C032CR21

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BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20721

Site Name: EDC - 5
CTO Number: 032
Site Contact/Supervisor: S. Jordan

Sampler(s): R Printz
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S 13th Ave Kelso, WA
Field Logbook/Page Number: FL - 032 - EDC5 - 06
pgs 22, 25

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | 14

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MS
C032CD09	5-30-02 0915	32EDC-5126	Soil	1		01	0 to 6"
C032CD10	5-30-02 0915	32EDC-5126		1		01	6" to 24"
C032CD11	5-30-02 0920	32EDC-5127		1		01	24" to 47"
C032CD12	5-30-02 0925	32EDC-5126		1		01	47" to 96"
C032CC25	5-30-02 1125	32EDC-5107		1		01	0 to 6"
C032CC26	5-30-02 1125	32EDC 5107		1		01	6 to 24"
C032CC27	5-30-02 1130	32EDC 5107		1		01	24" to 47
C032CC28	5-30-02 1135	32EDC 5107		1		01	47" to 9

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	FedEx	5/30/02	1600	Ship to lab
~~BC~~	~~FedEx~~	~~5/30/02~~	~~1600~~	~~Ship to lab~~
BC	FedEx	5/30/02		

Comments/Instructions: Follow BEI SOW for lab analysis
Call S. Jordan w/ questions

Method of Shipment: FedEx
Airbill No.: 7911 5055 9027
Total No. of Containers: 8
Total No. of Coolers Shipped: 1
Ice
Cooler Temp.

C032CF02
C032CR21

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MAY 31 2002 8:17AM HP LASERJET 3200 P.8

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

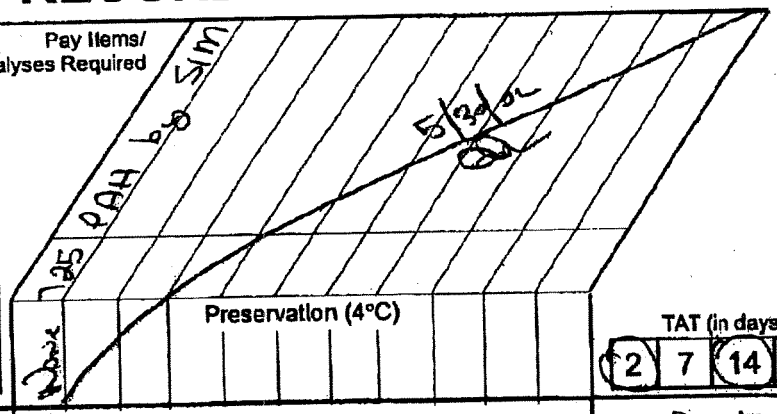
20720

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R Pitts
Signature(s):

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4203 W. Swift, Fresno CA 93722
Field Logbook/Page Number: FL-032-EDC5-06
pgs 23, 26

Pay Items/ Analyses Required



TAT (in days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CD04	5-30-02 1000	32EDC-5125	Soil	1		01	0 to 6"
C032CD05	5-30-02 1000	32EDC-5125		1		01	6" to 24"
C032CD06	5-30-02 1005	32EDC-5125		1		01	24" to 48"
C032CD07	5-30-02 1010	32EDC-5125		1		01	4'6" to 9'"
C032CD08	5-30-02 1010	32EDC-5125		1		01	4'6" to 9'" FD
C032CBS1	5-30-02 1210	32EDC-597		1		01	0 to 6"
C032CBS2	5-30-02 1210	32EDC-597		1		01	6" to 24"
C032CBS3	5-30-02 1215	32EDC-597		1		01	24" to 4'6"
C032CBS4	5-30-02 1220	32EDC-597		1		01	4'6" to 9'6"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
BC	S. Douglas/Kinetic Lab	5/30/02	1500	Ship to Lab
BC	Fed Ex	5/30/02	1600	Ship to Lab

Comments/Instructions: Follow BE1 SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: FEDEX
Airbill No.: 7904 3553 0786
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CFD2
C032CR21

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MAY 31 2002 8:15AM HP LASERJET 3200 P.3

CLEAN

CHAIN-OF-CUSTODY RECORD

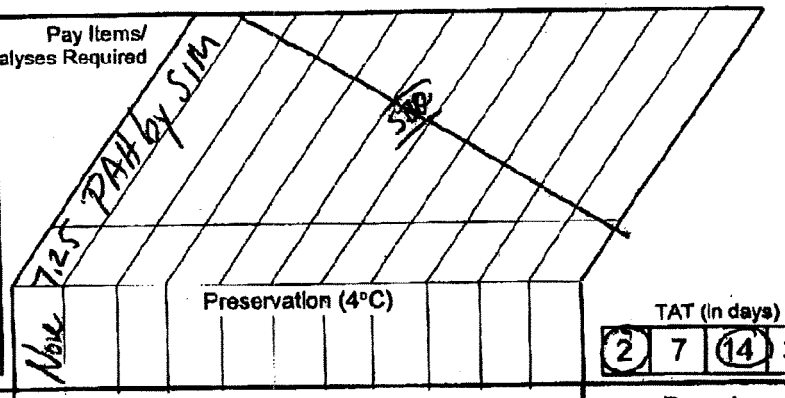
20179

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): S. Quyle
Signature(s): S. Quyle

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 South 13th Ave. Kelso, WA 98626
Field Logbook/Page Number: FL-032-EDC5-03; Page 23 and 26

Pay Items/ Analyses Required



TAT (in days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CD39	5-31-02/0840	32EDC-5133	Soil	1		01	0-6"
C032CD40	5-31-02/0845	32EDC-5133	Soil	1		01	6-24"
C032CD41	5-31-02/0850	32EDC-5133	Soil	1		01	~~6-24"~~ ~~SVOC~~ 24-48"
C032CD42	5-31-02/0855	32EDC-5133	Soil	1		01	24-48" FD
C032CD43	5-31-02/0900	32EDC-5133	Soil	1		01	48-96"
C032CC47	5-31-02/1050	32EDC-5112	Soil	1		01	0-6" MS/MSD
C032CC48	5-31-02/1055	32EDC-5112	Soil	1		01	6-24"
C032CC49	5-31-02/1100	32EDC-5112	Soil	1		01	24-48"
C032CC50	5-31-02/1105	32EDC-5112	Soil	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
S. Quyle/Kleinfelder	E. Johansen/BEI	5-31-02	1700	Ship to lab
E. Johansen/BEI	FedEx	5-31-02	1800	Ship to lab

Comments/Instructions: Follow BNI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: FedEx
Airbill No.: 7918 5177 3950
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF02
C032CR22

JUN 02 2002 10:01AM HP LASERJET 3200

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20660

JUN 02 2002 10:00AM HP LASERJET 3200

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): S. Quayle
Signature(s): [signature]

Analytical Laboratory Name: STL W. Sacramento
Analytical Laboratory Address: 880 Riverside Pkwy, W. Sacramento, CA 95605
Field Logbook/Page Number: FL-032-EDC5-03; Page: 24 and 27

Pay Items/ Analyses Required: 7.25 PAH by SIM

Preservation (4°C): None

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC91	5-31-02/0930	32EDC-5122	Soil	1		01	0-6"
C032CC92	5-31-02/0935	32EDC-5122	Soil	1		01	6-24"
C032CC93	5-31-02/0940	32EDC-5122	Soil	1		01	24-48"
C032CC94	5-31-02/0945	32EDC-5122	Soil	1		01	48-96" MS/MSD
C032CC07	5-31-02/1120	32EDC-5103	Soil	1		01	0-6"
C032CC08	5-31-02/1125	32EDC-5103	Soil	1		01	6-24"
C032CC09	5-31-02/1130	32EDC-5103	Soil	1		01	6-24" FD
C032CC10	5-31-02/1135	32EDC-5103	Soil	1		01	24-48"
C032CC11	5-31-02/1140	32EDC-5103	Soil	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
S. Quayle/Kleinfelder	E. Johansen/BEI	5-31-02	1700	Ship to lab
E. Johansen/BEI	Fed Ex	5-31-02	1800	Ship to lab

Comments/Instructions: Follow BNI SOW for lab analysis. Call J. Jordan w/ questions

Method of Shipment: FedEx

Airbill No.: 7904-3728-6350

Total No. of Containers: 9

Total No. of Coolers Shipped: 1

Lab SDG:

Cooler Temp:

C∅32CF∅2
C∅32CR22

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CLEAN

CHAIN-OF-CUSTODY RECORD

20661

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): S. Quayle
Signature(s): [signature]

Analytical Laboratory Name: APPL
Analytical Laboratory Address: 4703 West Swift, Fresno, CA 93722
Field Logbook/Page Number: FL-032-EDC5-03; Page: 25 and 28

Pay Items/ Analyses Required

Preservation (4°C)

TAT (in days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC51	5-31-02/1005	32EDC-5113	Soil	1		01	0-6"
C032CC52	5-31-02/1010	32EDC-5113	Soil	1		01	6-24" MS/MSD
C032CC53	5-31-02/1015	32EDC-5113	Soil	1		01	6-24" FD
C032CC54	5-31-02/1020	32EDC-5113	Soil	1		01	24-48"
C032CC55	5-31-02/1025	32EDC-5113	Soil	1		01	48-96"
C032CB59	5-31-02/1315	32EDC-592	Soil	1		01	0-6"
C032CB60	5-31-02/1320	32EDC-592	Soil	1		01	6-24"
C032CB61	5-31-02/1325	32EDC-592	Soil	1		01	24-48"
C032CB62	5-31-02/1330	32EDC-592	Soil	1		01	48-96"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
S. Quayle/Kleinfelder	E. Johansen/BEI	5-31-02	1700	Ship to lab
E. Johansen/BEI	Fed Ex	5-31-02	1800	Ship to lab

Comments/Instructions:
Follow BAT SOW for lab analysis.
Call J. Jordan w/ questions.

Method of Shipment: Fed Ex
Airbill No.: 7905 3640 8173
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Use Only
Cooler Temp.:

C032CF02
C032CR22

JUN 02 2002 9:59AM HP LASERJET 3200

20718

CHAIN-OF-CUSTODY RECORD

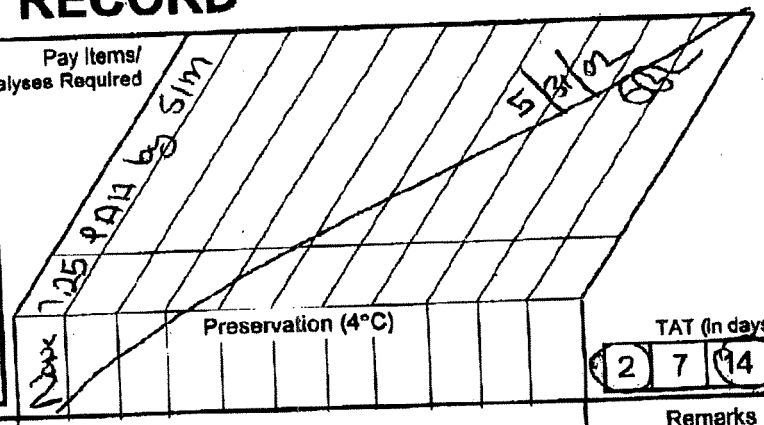
CLEAN

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R Pitzer
Signature(s):

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th St Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-06
~~pg~~ 27, 32, 33

Pay Items/ Analyses Required



TAT (In days): 2 | 7 | 14 | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C C12	5-31-02 0842	32EDC-5104	Soil	1		01	0 to 6"
C032C C13	5-31-02 0842	32EDC-5104		1		01	6" to 24"
C032C C14	5-31-02 0855	32EDC-5104		1		01	24" to 48"
C032C C15	5-31-02 0902	32EDC-5104		1		01	48 to 96"
C032C C16	5-31-02 1104	32EDC-5105		1		01	0 to 6"
C032C C17	5-31-02 1104 1104	32EDC-5105		1		01	6" to 24"
C032C C18	5-31-02 1120	32EDC-5105		1		01	24" to 48"
C032C C19	5-31-02 1128	32EDC-5105		1		01	48" to 96"
C032C C20	5-31-02 1138	32EDC-5105		1		01	48" to 96"

FD 5/31

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
R Pitzer BC	E. Johansen/BEI	5/31/02	1700	Ship to Lab
E. Johansen/BEI	Fed Express	5/31/02	1900	Ship to Lab

Comments/Instructions:
Follow BEI SOW for lap analysis.
Call J. Jordan w/ questions

Method of Shipment: Fed Exp
Airbill No.: 7918 5177 3950
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF02
C032CR22

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JUN 02 2002 10:01AM HP LASERJET 3200

P.10

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20719

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Pinon
Signature(s): [signature]

Pay Items/ Analyses Required: [illegible]25 PAH by SIM (Preservation: None)

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-06 pg 28, 29, 34

Preservation (4°C)

TAT (in days): 2 | 7 | (14) | 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C B77	5-31-02 0918	32EDC-596	Soil	1		01	0 to 6"
C032C B78	5-31-02 0938	32EDC-596	↓	1		01	6" to 24"
C032C B79	5-31-02 0948	32EDC-596	↓	1		01	24" to 48"
C032C B80	5-31-02 0958	32EDC-596	↓	1		01	48" to 96"
C032C C56	5-31-02 1318	32EDC-5114	↓	1		01	0 to 6"
C032C C57	5-31-02 1318	32EDC-5114	↓	1		01	6" to 24"
C032C C58	5-31-02 1328	32EDC-5114	↓	1		01	24" to 48"
C032C C59	5-31-02 1334	32EDC-5114	↓	1		01	48" to 96"

5/31/02

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
R. Pinon / BL	E. Johansen / BEI	5-31-02	1700	Ship to Lab
E. Johansen / BEI	Fed Exp	5-31-02	1800	Ship to Lab

Comments/Instructions: Follow BEI SOW for lap analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Ex

Airbill No.: 7904-3728-6350

Total No. of Containers: 8

Total No. of Coolers Shipped: 1

Lab SDG:

Cooler Temp.:

C032CF02
C032CR22

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CLEAN

CHAIN-OF-CUSTODY RECORD

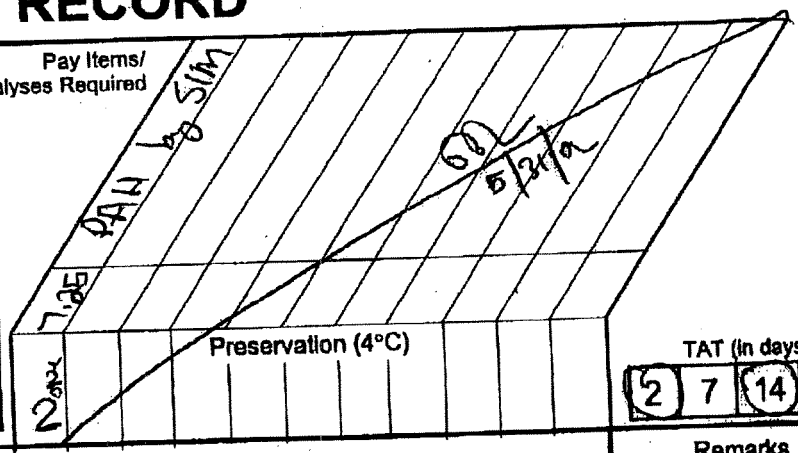
20723

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R Prince
Signature(s):

Analytical Laboratory Name: A.R.L.
Analytical Laboratory Address: 4203 W. Swift Fresno Ca 93722
Field Logbook/Page Number: FL-032-EDC5-01
pg 30, 31

Pay Items/ Analyses Required



Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032C B72	5-31-02 1026	32EDC-595	Soil	1		01	0-6"
C032C B73	5-31-02 1026	32EDC-595		1		01	6"-24"
C032C B74	5-31-02 1034	32EDC-596		1		01	24"-48"
C032C B75	5-31-02 1042	32EDC-595		1		01	4'-9½"
C032C B76	5-31-02 1042	32EDC-596		1		01	4'-9'6" FD
C032C C00	5-31-02 1358	32EDC-5124		1		01	0-6"
C032C D01	5-31-02 1358	32EDC-5124		1		01	6"-24"
C032C D02	5-31-02 1406	32EDC-5124		1		01	24"-48"
C032C D03	5-31-02 1414	32EDC-5124	↓	1		01	4'-9'6"

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
R. Prince/BC	E. Johansen/BEI	5/31/02	1700	Ship to Lab
E. Johansen/BEI	Fed Exp	5/31/02	1900	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7905 3640 8173
Total No. of Containers: 9
Total No. of Coolers Shipped: 1
Lab Signature:
Cooler Temp:

C032CFD2
C032CR22

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JUN 02 2002 9:59AM HP LASERJET 3200 P.3

BECHTEL CLEAN

CHAIN-OF-CUSTODY RECORD

20652

JUN 02 2002 10:01AM HP LASERJET 3200

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Prince
Signature(s): [signature]

Analytical Laboratory Name: Columbia
Analytical Laboratory Address: 1317 S. 13th Ave Kelso, WA
Field Logbook/Page Number: FL-032-EDC5-06 pg 37

Pay Items/ Analyses Required: 7.25 PAH low SIM (2 oz)

Preservation (4°C)

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC60	5-31-02 1440	32EDC-5115	Soil	1	[initials] 5/31/02	01	0 to 6"
C032CC61	5-31-02 1452	32EDC-5115	↓	1		01	6" to 24"

[initials] 5/31/02

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
R. Prince BC	E. Johansen /BEI	5/31/02	1700	Ship to Lab
E. Johansen /BEI	Fed Express	5/31/02	1800	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions.

Method of Shipment: Fed Exp
Airbill No.: 7918 5177 3950
Total No. of Containers: 2
Total No. of Coolers Shipped: 1
Lab SDG:
Cooler Temp:

C032CF02
C032CR22

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P.8

BECHTEL **CLEAN**

CHAIN-OF-CUSTODY RECORD

20631

Site Name: EDC-5
CTO Number: 032
Site Contact/Supervisor: J. Jordan

Sampler(s): R. Penn
Signature(s):

Analytical Laboratory Name: STL
Analytical Laboratory Address: 880 Riverside Pkwy West Sacramento CA
Field Logbook/Page Number: FL-032-EDC5-01
pgs 37, 39

Pay Items/ Analyses Required: 8260 RAH to SIM; 8270 RAH to SIM; 5/31/02

Preservation (4°C): 2 drops; None

TAT (in days): (2) 7 (14) 30

Sample ID No. (8 digit)	Date/Time Collected	Station Description	Sample Matrix	Number of Containers	Archive (Container No.)	Container Nos. (2 digit)	Remarks (e.g., MS, MSD)
C032CC21	5-31-02 1600	32 EDC-5101	Soil	1		01	0 to 6" MS/MSD
C032CC22	5-31-02 1605	32 EDC-5106		1		01	6" to 24"
C032CC23	5-31-02 1610	32 EDC-5106		1		01	24 to 48"
C032CC24	5-31-02 1225	32 EDC-5106		1		01	4' to 96"
032CR22	5-31-02 1650	FQC	Water	2		02	RINSATE

Relinquished By/Company	Received By/Company	Date	Time	Reason for Transfer
R. Penn / BC	E. Johansen / BEI	5/31/02	1700	Ship to Lab
E. Johansen / BEI	Fed Express	5/31/02	1900	Ship to Lab

Comments/Instructions: Follow BEI SOW for lab analysis. Call J. Jordan w/ questions

Method of Shipment: Fed Exp
Airbill No.: 7904-3728-6350
Total No. of Containers: 6
Total No. of Coolers Shipped: 1
Lab Signature:
Cooler Temp.:

C032CF02
C032CR22

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ATTACHMENT D4

DATA QUALITY AND VALIDATION (INCLUDES DATA VALIDATION CASE NARRATIVES)

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ACRONYMS/ABBREVIATIONS

BEI	Bechtel Environmental, Inc.
BNI	Bechtel National, Inc.
CLEAN	Comprehensive Long-Term Environmental Action Navy
CLP	(U.S. EPA) Contract Laboratory Program
DQO	data quality objective
EDC	economic development conveyance
FED	federal agency disposal
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
MS	matrix spike
MSD	matrix spike duplicate
NEESA	Naval Energy and Environmental Support Activity
PAH	polynuclear aromatic hydrocarbon
PARCC	precision, accuracy, representativeness, completeness, and comparability
PBC	public benefit conveyance
QC	quality control
RPD	relative percent difference
SOW	statement of work
SWDIV	Southwest Division Naval Facilities Engineering Command
U.S. EPA	United States Environmental Protection Agency

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Attachment D4

DATA QUALITY AND VALIDATION

This attachment presents an evaluation of the quality of laboratory data generated during the 2002 PAH assessment at Transfer Parcels Economic Development Conveyance (EDC)-3, -5, -12, -17, -21, Federal Agency Disposal (FED)-1A, and Public Benefit Conveyance (PBC)-1A, and -3. The topics discussed in this attachment include field and laboratory quality control (QC) samples, data verification and validation, and an evaluation of the analytical data based on precision, accuracy, representativeness, completeness, and comparability (PARCC) parameters. These areas were evaluated to assure that data obtained from the sample analyses were adequate to meet established data quality objectives (DQOs) presented in the draft final Work Plan (BEI 2002).

D4.1 FIELD QUALITY CONTROL

Field QC samples were collected and analyzed during the PAH assessment to evaluate the consistency and performance of the sampling program. Field QC samples for this project included field duplicate, source blank, and rinsate samples.

D4.1.1 Duplicate Samples

Field duplicate samples consisted of two soil samples (a primary and a duplicate) collected from the same location at the same depth and time, using the same sampling techniques and analyzed using the same analytical methods. The purpose of field duplicate samples is typically to evaluate the precision of the overall sample collection and analysis process. With soil samples, this is often of limited use due to the variability and heterogeneity of the soil. Approximately one duplicate sample was collected for every ten soil samples. Table D4-1 shows the number of duplicate samples collected at each of the eight transfer parcels.

Analysis of field duplicates provides a quantitative measure of the overall sampling and analysis process as the sum of contributions from sample heterogeneity, the precision of the sampling process, and the analytical method. This can be quantified by calculating the relative percent difference (RPD) for each analysis as follows:

$$\text{RPD} = \frac{|C_1 - C_2|}{(C_1 - C_2)/2} \times 100$$

where

C_1 = concentration of chemical constituent in primary sample
C_2 = concentration of chemical constituent in duplicate sample

The average RPDs for each of the selected transfer parcels are shown in Table D4-2. The relatively high RPDs were expected and are likely a result of the heterogeneity of the fill material.

D4.1.2 Source Blank Samples

Source blanks are samples for source water (distilled water) used for rinsate samples. Source blank analysis tests for potential sample contamination resulting from the final rinsewater used in the decontamination process by reporting contaminants of concern in the source water at levels above detection limits. Section D4.1.3 describes the use of source water for rinsate samples.

Two source blank samples were collected during the 2002 PAH assessment at selected transfer parcels within Alameda Point as follows: an initial source blank sample (C032CF01) was collected on April 27, 2002, and a second (C032CF02) was collected on May 13, 2002. Table D4-3 shows the analytical results for all source blank samples. All source blank samples were analyzed only for PAHs. While a few analytes were detected in source blank samples, these analytes were detected at estimated concentrations below the reporting limit. The source water was therefore verified to be contaminant-free.

D4.1.3 Rinsate Samples

Rinsate samples were collected using soil sampling equipment that was decontaminated between uses. To collect an equipment rinsate sample, contaminant-free source water was passed through or over a piece of decontaminated field sampling equipment. At least one rinsate sample was collected per day for a total of 21 rinsate samples.

Analytes reported in the rinsate samples are presented in Table D4-4. Detectable concentrations of PAHs were reported in ten equipment rinsate samples. However, all of the PAHs in these samples were reported at estimated concentrations (i.e., they were above the reporting limit but still present at reasonably low concentrations). The highest concentration of a PAH reported in a rinsate blank was 0.19 micrograms per liter.

Naphthalene was the PAH most commonly reported in the rinsate samples (seven samples) followed by 2-methylnaphthalene (six samples) and phenanthrene (four samples). Four other PAHs were reported in only one sample (benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and fluoranthene). Frequency of reporting for each analyte in the rinsate samples is shown in Table D4-5. These low levels of both the qualified and nonqualified concentrations in rinsate samples confirm that no significant contamination was introduced as a result of decontamination procedures. Affected analytical results in the associated field samples have been qualified accordingly. Additional information on the equipment rinsate blanks is provided in the data validation case narratives (see Section D4.6 of this attachment).

D4.2 LABORATORY QUALITY CONTROL

Laboratory QC samples are used to:

- assess data quality in terms of precision and accuracy; and
- verify that procedures, such as sample handling, storage, and preparation, are not introducing variables into the analysis chain that could render the validity of samples questionable.

QC samples are regularly prepared in the laboratory to assure that all phases of the sampling process are monitored. The types of laboratory QC samples prepared during the analyses of soil and water are discussed below.

D4.2.1 Method Blanks

One method blank was analyzed per batch of samples (no more than 20 samples). The method blank was processed following the same preparatory and analytical procedures as the field-collected samples. These QC samples were used to detect the presence and magnitude of any contaminant or other anomaly resulting from sample preparation and analytical procedures.

D4.2.2 Laboratory Control Samples/Duplicates

A minimum of one laboratory control sample (LCS) was prepared and analyzed with each batch of samples (which did not exceed 20 samples). The LCS/laboratory control sample duplicate (LCSD) samples were prepared by spiking a known amount of certain analytes of interest for each analytical method into American Society for Testing and Materials type II water (for aqueous matrices) or into clean sand (for soil matrices). The LCS/LCSD samples were then processed using the same procedures as the field-collected samples. The recovery percentiles of the spiked compounds were used to determine whether the laboratory processes were within acceptable performance limits for the analytical methods. This provided an indication of the accuracy and acceptability of each method. LCS/LCSD samples were analyzed as part of the data validation process. Any anomalous occurrences are discussed in the case narratives (see Section D4.6 of this attachment).

D4.2.3 Matrix Spikes/Matrix Spike Duplicates

At least one matrix spike (MS)/matrix spike duplicate (MSD) pair was prepared and analyzed for every 20 samples. The MS/MSD samples were prepared by spiking a known amount of certain analytes of interest for each method into a sample of each matrix. The spiked sample pairs were then processed using the same procedures as the unspiked field-collected samples. Recovery percentiles of the spiked compounds were used as an indication of the accuracy and appropriateness of the methods for each matrix. MS/MSD samples were analyzed as part of the data validation process. Any anomalous occurrences are discussed in the case narratives (see Section D4.6 of this attachment).

D4.2.4 Surrogates

Surrogate compounds (i.e., compounds with chemical properties and behavior similar to those of the compounds of interest) were added to each sample analyzed for PAHs. Recovery percentiles of these spiked surrogate compounds were used to assess the accuracy of laboratory procedures. Surrogate samples were analyzed as part of the data validation process. Any anomalous occurrences are discussed in the case narratives (see Section D4.6 of this attachment).

D4.3 DATA VERIFICATION AND VALIDATION

The purpose of data verification and validation is to assure that the data collected during the 2002 PAH assessment meet the DQOs outlined in the draft final Work Plan (BEI 2002).

D4.3.1 Data Verification

All data collected were subjected to the data verification process, which includes proofreading and editing data reports to assure that data correctly represent the analytical measurement. Verification identifies nontechnical errors in the data package that can be corrected (e.g., typographical errors) and assures that data reported on hard copy exactly match data reported on electronic deliverables. Data verification also assures that the sample identifiers on hard copy laboratory reports match those on the chain-of-custody records. All data collected were verified.

D4.3.2 Data Validation

Data validation is a systematic process used to interpret, define, and document analytical data quality and determine whether the data quality is sufficient to support the intended uses of the data. Validation of a data package includes a reconstruction of sample preparation and analysis activities from the raw data and reconciliation of the raw data with the reduced results, identification of data anomalies, and qualification of data to identify data usability limitations.

Data validation for the 2002 PAH assessment was performed by an independent subcontractor (Laboratory Data Consultants, Inc.). All collected data reported by fixed-base analytical laboratories (Columbia Analytical Services, Inc., Agriculture and Priority Pollutant Laboratory, and Severn-Trent Laboratories) were validated in accordance with Naval Facilities Engineering Service Center (formerly Naval Energy and Environmental Support Activity) guidelines (NEESA 1990), the Contract Technical Specification (BNI 1998), and Southwest Division Naval Facilities Engineering Command Environmental Work Instruction No. 1 (SWDIV 2001). Approximately 90 percent of the data was validated using Level III validation criteria. The remaining 10 percent was validated using Level IV criteria, as specified in the draft final Work Plan (BEI 2002) for the 2002 PAH assessment.

Data were further evaluated by project personnel to determine suitability and usability for purposes of the PAH Field Activity Summary. The results of this internal review are summarized below in Sections D4.4 and D4.5.

D4.3.3 Data Validation Qualifiers

Analytical data were qualified on the basis of data validation reviews. For chemical data, qualifiers (U, U, UJ, or R) were assigned in accordance with the applicable United States Environmental Protection Agency (U.S. EPA) Guidelines for Data Validation (U.S. EPA 1994, 1999). Individual validation data flags are presented in the data validation case narratives (see Section D4.6 of this attachment).

Data assigned an "R" (rejected) qualifier were deemed unusable and not used for any purpose (including, but not limited to, risk assessment, data interpretation, tables, or figures). Data may be rejected because of noncompliance with method requirements during the course of validation. Data may also be qualified as unusable in dilutions and reanalysis by the validators in order to produce only one complete set of data for a given sample, and eliminate redundancy. The intent of the latter classification is to guide data users in choosing the best set of sample analytical results when reanalyses and/or dilutions exist.

Data were rejected due to calibration issues and low recovery in matrix spike samples. Individual laboratory data flags are presented in the data validation reports (Section D4.6.).

D4.4 EVALUATION OF ANALYTICAL DATA

Data quality was assessed against the established DQOs of the draft final Work Plan (BEI 2002). Evaluation of the validated data sets compared the data objective with the actual data results using PARCC parameters.

Precision, accuracy, and completeness goals for the major chemical analyses performed on site samples were those specified in the U.S. EPA Contract Laboratory Program (CLP) Statement of Work (SOW). For procedures not specified in the CLP SOW, the criteria specified in U.S. EPA Method SW-846 applied.

D4.4.1 Precision and Accuracy

QC data were assessed through the use of blanks, duplicates, spikes, and surrogates. Review of these data provided information concerning the precision and accuracy measurements conducted by the laboratories.

D4.4.1.1 LABORATORY METHOD BLANKS

At least one of the target analyte PAH compounds were reported in 11 of the 97 method blanks that were analyzed in association with the 2002 sampling event. All affected analytical results have been qualified accordingly during data validation using U.S. EPA guidelines. Additional information about the laboratory method blanks is provided in the data validation case narratives (see Section D4.6 of this attachment).

D4.4.1.2 SOURCE BLANKS

As shown in Table D4-3, five PAHs were detected below the reporting limits in source water collected during field activities. Additional information about the source blanks is provided in the data validation case narratives (see Section D4.6 of this attachment).

D4.4.1.3 EQUIPMENT RINSATE BLANKS

As shown in Table D4-4, seven of the target PAH compounds were detected at concentrations below the reporting limits in 10 of the rinsate blanks collected during 2002 field activities. Additional information about the equipment rinsate blanks is provided in the data validation case narratives (see Section D4.6 of this attachment).

D4.4.1.4 LABORATORY CONTROL SAMPLES/DUPLICATES

Most LCS/LCSDs analyzed by the laboratories were within control limits. On the basis of these samples, the overall precision and accuracy of the laboratories are considered acceptable. LCS/LCSDs that were not within control limits are discussed in the data validation case narratives (see Section D4.6 of this attachment).

D4.4.1.5 MATRIX SPIKES/MATRIX SPIKE DUPLICATES

Most MS/MSD samples prepared and results analyzed by the laboratories were within control limits. MS/MSDs that were not within control limits are discussed in the data validation case narratives (see Section D4.6 of this attachment). The overall precision and accuracy of the laboratory are considered acceptable.

D4.4.1.6 SURROGATES

Most surrogate compounds prepared and analyzed by the laboratories were within control limits. Surrogates that were not within control limits are discussed in the data validation case narratives (see Section D4.6 of this attachment). The overall precision and accuracy of the laboratory are considered acceptable.

D4.4.2 Representativeness

Representativeness is the reliability with which a measurement or measurement system reflects the true conditions under investigation (U.S. EPA 1989). Representativeness is influenced by the number and location of the sampling points, sampling timing and frequency of monitoring efforts, and field and laboratory sampling procedures (U.S. EPA 1989).

The representativeness of data was assured through the use of established field and laboratory procedures and their consistent application. All samples collected are considered representative of transfer parcel conditions at Alameda Point.

D4.4.3 Completeness

Data completeness is a measure of the amount of valid data obtained from the field program compared with the amount that was expected to be obtained under planned conditions. Data are considered valid if they have not been rejected (were not R-qualified either from data validation or internal data review). Percent completeness is therefore expressed by the following equation:

$$C = \frac{(\text{number of valid results}) \times 100}{\text{total number of requested results}}$$

Based on internal review, the completeness of the sample set submitted for analysis for each transfer parcel included in the PAH assessment was:

- 100 percent (no rejected samples) for Transfer Parcels EDC-12, EDC-17, PBC-1A and PBC-3

- 93 percent for Transfer Parcel EDC-3 (6 out of 88 samples rejected) and Transfer Parcel EDC-21 (3 out of 43 samples rejected)
- 99 percent for Transfer Parcel EDC-5 (2 out of 540 samples rejected) and Transfer Parcel FED-1A (4 out of 316 samples rejected)

These values are within the completeness goals as stated in the DQO section of the draft final Work Plan (BEI 2002).

D4.4.4 Comparability

Comparability evaluates whether the reported data are comparable to similar data reported by other organizations. Three separate laboratories were used; all three analyzed the samples using the method specified in the draft final Work Plan (BEI 2002). All units of measurement were consistent and appropriate for the matrices sampled. The comparability of the laboratory results was determined to be acceptable.

D4.5 DATA QUALITY AND VALIDATION SUMMARY

There were no significant problems noted for the analysis of PAHs at selected Transfer Parcels with a few exceptions. Due to recovery values that fell below the acceptance limits of the method, results not above reporting limits for 12 analytes in 15 samples were qualified as unusable. No other data were qualified as unusable.

D4.6 DATA VALIDATION CASE NARRATIVES

Data validation case narratives are presented separately on this compact disk.

D4.7 REFERENCES

Bechtel Environmental, Inc. 2002. Draft Final Work Plan for PAH Background Determination and PAH-Specific Site Inspections for Alameda Point, Alameda, California. June.

Bechtel National, Inc. 1998. CLEAN Program Technical Specification for Analytical Laboratory Services, Contract Technical Specification, 22214-TS-002, Revision 5, March 25 (or latest revision in effect at the time of analysis).

BEI. *See* Bechtel Environmental, Inc.

BNI. *See* Bechtel National, Inc.

Naval Energy and Environmental Support Activity. 1990. Quality Assurance in Environmental Analysis. Prepared for by the Analytical Support Group

NEESA. *See* Naval Energy and Environmental Support Activity.

Southwest Division Naval Facilities Engineering Command. 2001. Environmental Work Instruction No. 1. November 28.

SWDIV. *See* Southwest Division Naval Facilities Engineering Command.

United States Environmental Protection Agency. 1989. U.S. EPA Region 9 Guidance for Preparing Quality Assurance Project Plans for Superfund Remedial Projects. 9QA-03-89. September.

———. 1999. Laboratory Data Validation Functional Guidelines for Evaluating Organics Analysis. Hazardous Site Evaluation Division. Prepared by U.S. EPA Data Review Work Group. February.

U.S. EPA. *See* United States Environmental Protection Agency.

TABLES

Table D4-1
Number of Duplicate Samples Collected at Selected Transfer Parcels

Transfer Parcel	Number of Duplicate Samples Collected
EDC-3	8
EDC-5	53
EDC-12	13
EDC-17	4
EDC-21	4
FED-1A	32
PBC-1A	4
PBC-3	1

Acronyms/Abbreviations:
EDC – economic development conveyance
FED – federal agency
PBC – public benefit conveyance

Table D4-2
Average Relative Percent Differences for
Field Duplicate Samples for Transfer Parcels

Transfer Parcel	Average Relative Percent Difference
EDC-3	108
EDC-5	70
EDC-12	94
EDC-17	107
EDC-21	61
FED-1A	87
PBC-1A	30
PBC-3	96

Acronyms/Abbreviations:
EDC – economic development conveyance
FED – federal agency
PBC – public benefit conveyance

Table D4-3
Source Blank Sample Results
(reported in micrograms per liter)

Analyte	SAMPLE ID, SAMPLE DATE, AND RESULT	
	C032CF01 4/27/02	C032F02 5/13/2002
acenaphthene	0.02 U	0.02 U
acenaphthylene	0.02 U	0.02 U
anthracene	0.02 U	0.02 U
benz(a)anthracene	0.02 U	0.02 U
benzo(a)pyrene	0.02 U	0.02 U
benzo(b)fluoranthene	0.02 U	0.02 U
benzo(g,h,i)perylene	0.02 U	0.02 U
benzo(k)fluoranthene	**0.0016 J***	0.02 U
chrysene	**0.0017 J***	0.02 U
dibenz(a,h)anthracene	**0.0025 J***	0.02 U
fluoranthene	0.02 U	0.02 U
fluorene	0.02 U	0.02 U
indeno(1,2,3-cd)pyrene	**0.0029 J***	0.02 U
2-methylnaphthalene	0.02 U	0.02 U
naphthalene	0.02 U	**0.0042 J***
phenanthrene	0.02 U	0.02 U
pyrene	0.02 U	0.02 U

Note:
* number in bold is detected concentration

Review Qualifiers:
J – indicates an estimated value
U – indicates analyte was analyzed for but not detected at or above the stated limit; the reporting limit is listed here

Table D4-4
Rinsate Sample Results
(reported in micrograms per liter)

ANALYTE	SAMPLE ID/SAMPLING DATE																				
	C032CR01	C032CR03	C032CR04	C032CR05	C032CR06	C032CR08	C032CR09	C032CR10	C032CR11	C032CR12	C032CR13	C032CR14	C032CR15	C032CR16	C032CR17	C032CR18	C032CR19	C032CR20	C032CR21	C032CR22	C032CR23
	4/27/2002	5/13/2002	5/13/2002	5/13/2002	5/14/2002	5/15/2002	5/16/2002	5/17/2002	5/20/2002	5/21/2002	5/21/2002	5/22/2002	5/22/2002	5/22/2002	5/23/2002	5/24/2002	5/28/2002	5/29/2002	5/30/2002	5/31/2002	6/2/2002
ACENAPHTHENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
ACENAPHTHYLENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
ANTHRACENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
BENZ(A)ANTHRACENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
BENZO(B)FLUORANTHENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
BENZO(K)FLUORANTHENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**0.019 J**[a]	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
BENZO(G,H,I)PERYLENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
BENZO(A)PYRENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
CHRYSENE	**0.0013 J**[a]	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
DIBENZ(A,H)ANTHRACENE	**0.0018 J**[a]	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
FLUORANTHENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	**0.0033 J**[a]	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
FLUORENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
INDENO(1,2,3-CD)PYRENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
2-METHYLNAPHTHALENE	**0.0035 J**[a]	**0.003 J**[a]	0.02 U	0.02 U	**0.0031 J**[a]	0.02 U	**0.0033 J**[a]	**0.0032 J**[a]	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	**0.0043 J**[a]	0.048 U	0.052 U	0.048 U	0.25 U
NAPHTHALENE	0.02 U	**0.0058 J**[a]	**0.0047 J**[a]	**0.0036 J**[a]	**0.0074 J**[a]	**0.007 J**[a]	**0.0047 J**[a]	**0.0054 J**[a]	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
PHENANTHRENE	**0.0056 J**[a]	**0.0036 J**[a]	0.02 U	**0.0086 J**[a]	0.02 U	**0.0034 J**[a]	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U
PYRENE	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.02 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.047 U	0.048 U	0.052 U	0.048 U	0.25 U

Note:
[a] numbers shown in bold are detected concentrations

Review Qualifiers
J - indicates an estimated value
U - indicates analyte was analyzed for but not detected at or above the stated limit; the reporting limit is listed here

Table D4-5
Frequency of Reporting for Analytes in Rinsate Samples

Analyte	Number of Times Analyte Was Reported in a Rinsate Sample
acenaphthene	0
acenaphthylene	0
anthracene	0
benz(a)anthracene	0
benzo(b)fluoranthene	0
benzo(k)fluoranthene	1
benzo(g,h,i)perylene	0
benzo(a)pyrene	0
chrysene	1
dibenz(a,h)anthracene	1
fluoranthene	1
fluorene	0
indeno(1,2,3-cd)pyrene	0
2-methylnaphthalene	6
naphthalene	7
phenanthrene	4
pyrene	0

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Bechtel Environmental
1230 Columbia Street, Suite 400
San Diego, CA 92101
Attn: Mr James Jordan

June 11, 2002

Project Name : NAS Alameda Point
Project # : CTO 032

On June 4, 2002 the following data packages were received by Laboratory Data Consultants, Inc. from Bechtel Environmental. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 8542:

SDG #	Fraction
K2202668, K2202671, K2203082, K2203083, K2203084, K2203131, K2203133, K2203174, K2203176, K2203212, K2203213, K2203248, K2203249	Polynuclear Aromatic Hydrocarbons

The above SDGs were reviewed using Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- NFESC Special Publication SP-2056-ENV, Navy Installation Restoration Chemical Data Quality Manual, Naval Facilities Engineering Command, September 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

The data validators did utilize their professional judgement when evaluating the data to achieve the most complete and accurate assessment of the data. The data packages were reviewed according to the above stated validation procedures.

For GC/MS polynuclear aromatic hydrocarbon analyses, the primary findings consisted of:

a) Continuing calibration factors exceeded acceptance criteria in SDG K2202671. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Matrix spike/matrix spike duplicate analyses were not performed for all batches in SDGs K2203082 and K2203083.

c) Matrix spike/matrix spike duplicate percent recoveries and relative percent differences exceeded acceptance criteria for dibenzo(a,h)anthracene in SDGs K2202668 and K2202671, for naphthalene in SDG K2203131 and benzo(a)anthracene, benzo(b)fluoranthene and benzo(k)fluoranthene in SDGs K2203212 and K2203213 and for several compounds in SDG K2203176. Since the laboratory met the protocol requirement, this finding should be considered advisory.

d) Laboratory control sample relative percent differences exceeded acceptance criteria for benzo(g,h,i)perylene in SDGs KK2202668, K2202671 for phenanthrene and fluoranthene in SDG K2203248 and several compounds in SDG K2203174.

e) Internal standard areas exceeded acceptance criteria for samples C032C031 and C032C005 in SDG K2202671, for sample C032C327 in SDG K2203133
and for samples C032C362, C032C375, C032C377 and C032C432 in SDG K2203249. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Chrysene was detected in the method blanks in SDG K2203084. Since the laboratory met the protocol requirement, this finding should be considered advisory.

g) Phenanthrene was reported above the calibration range for sample C032C009 in SDG K2202668, 2-methylnaphthalene for sample C032C005 in SDG K2202671, phenanthrene, fluoranthene and pyrene in SDG K2203133, fluoranthene and pyrene for sample C032CA68, pyrene for sample C032CA23 and several compounds for sample C032C905 in SDG K2203176. Since the laboratory met the protocol requirement, this finding should be considered advisory.

h) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

In general, the data for all analyses appear usable with the limitations noted in the Data Validation Reports. Data validation flags were noted on the Laboratory Form 1s and included with each validation report.

Sincerely,

Richard M. Amano
President/Principal Chemist

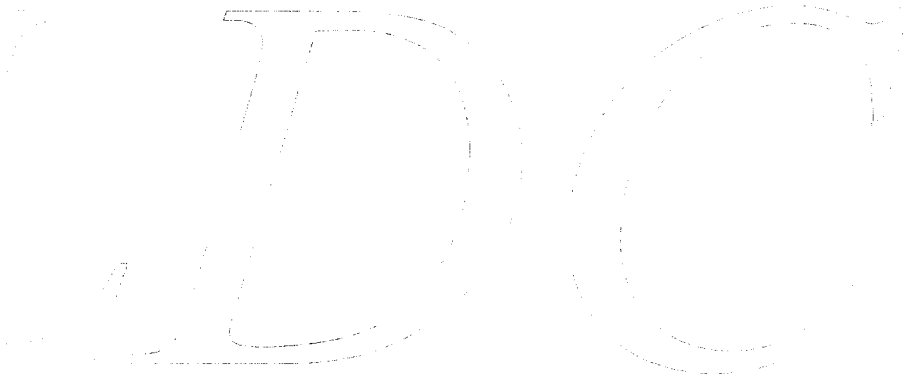
LDC #8542 (Bechtel Environmental-San Diego / Alameda Point, CTO 32)

LDC	SDG#	DATE REC'D	DATE DUE	PAHs (8270-SIM)																													
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2202668	6-4-02	6-18-02	0	20																												
B	K2202671	6-4-02	6-18-02	2	23																												
C	K2203082	6-4-02	6-18-02	0	22																												
D	K2203083	6-4-02	6-18-02	0	23																												
E	K2203084	6-4-02	6-18-02	10	0																												
F	K2203131	6-4-02	6-18-02	0	22																												
G	K2203133	6-4-02	6-18-02	0	22																												
H	K2203174	6-4-02	6-18-02	0	21																												
I	K2203176	6-4-02	6-18-02	0	28																												
J	K2203212	6-4-02	6-18-02	0	22																												
K	K2203213	6-4-02	6-18-02	0	20																												
L	K2203248	6-4-02	6-18-02	0	26																												
M	K2203249	6-4-02	6-18-02	0	27																												
Total	B			12	276	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Level IV validation (all other cells are Level III validation)

Alameda Point, CTO 32
Data Validation Reports
LDC# 8542

Polynuclear Aromatic Hydrocarbons



Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: April 27, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2202668

Sample Identification

C032C036
C032C023
C032C024
C032C025
C032C026
C032C009
C032C009DL
C032C010
C032C011
C032C012
C032C013
C032C015
C032C016
C032C017
C032C027
C032C028
C032C029
C032C030
C032C030MS
C032C030MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CF01 (from SDG #K2202671) was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF01	4/27/02	Chrysene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	0.0017 ug/Kg 0.0016 ug/Kg 0.0029 ug/Kg 0.0025 ug/Kg	All samples in SDG K2202668

Sample C032CR01 (from SDG #K2202671) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR01	4/27/02	Chrysene Dibenz(a,h)anthracene 2-Methylnaphthalene Phenanthrene	0.0013 ug/Kg 0.0018 ug/Kg 0.0035 ug/Kg 0.0056 ug/Kg	All samples in SDG K2202668

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C02[illegible]MS/MSD (C032C009 C032C009DL)	Dibenz(a,h)anthracene	-	58 (61-144)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0202872-3/4 (C032C009 C032C009DL KWG0202872-5)	Benzo(g,h,i)perylene	45 (57-129)	49 (57-129)	-	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C009	Phenanthrene	Sample result exceeded calibration range	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C009	Phenanthrene	R	A
C032C009DL	All TCL compounds except Phenanthrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C010 and C032C011, samples C032C036 and C032C035 (from SDG #K2202671) and samples C032C013 and C032C022 (from SDG #K2202671) were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C010	C032C011	
Phenanthrene	3.2	6.1	62
Anthracene	6.2U	2.0	200
Fluoranthene	6.2U	1.7	200
Pyrene	6.2U	2.3	200
Chrysene	5.8	4.6	23
Benzo(b)fluoranthene	3.1	2.4	25
Indeno(1,2,3-cd)pyrene	1.1	0.73	40
Dibenz(a,h)anthracene	2.1	5.6U	200
Benzo(g,h,i)perylene	6.5	4.3	41

Compound	Concentration (ug/Kg)		RPD
	C032C036	C032C035	
Indeno(1,2,3-cd)pyrene	5.9U	0.78	200

Compound	Concentration (ug/Kg)		RPD
	C032C013	C032C022	
Naphthalene	5.8U	2.2	200
2-Methylnaphthalene	22	26	17
Phenanthrene	63	86	31
Fluoranthene	3.8	4.4	15
Pyrene	6.6	8.6	26
Benzo(a)anthracene	2.4	3.1	25
Chrysene	19	22	15
Benzo(b)fluoranthene	6.4	9.7	41
Benzo(a)pyrene	3.7	5.7U	200
Indeno(1,2,3-cd)pyrene	1.6	5.7U	200
Dibenz(a,h)anthracene	3.0	3.3	10
Benzo(g,h,i)perylene	8.0	5.9	30

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2202668

SDG	Sample	Compound	Flag	A or P	Reason
K2202668	C032C009 C032C009DL	Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
K2202668	C032C009 C032C009DL	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K2202668	C032C009	Phenanthrene	J (all detects)	A	Compound quantitation and CRQLs
K2202668	C032C009	Phenanthrene	R	A	Overall assessment of data
K2202668	C032C009DL	All TCL compounds except Phenanthrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2202668

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2202668

No Sample Data Qualified in this SDG

LDC Report# 8542B2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: April 27, 2002

LDC Report Date: June 12, 2002

Matrix: Soil/Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2202671

Sample Identification

C032CF01	C032C003
C032CR01	C032C004
C032C018	C032C014
C032C019	C032C020MS
C032C020	C032C020MSD
C032C021	
C032C031	
C032C031DL	
C032C032	
C032C033	
C032C034	
C032C035	
C032C022	
C032C005	
C032C005DL	
C032C006	
C032C007	
C032C008	
C032C001	
C032C002	

Introduction

This data review covers 23 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/1/02	indeno(1,2,3-cd)pyrene	34	C032C031DL C032C033 C032C034 C032C006 C032C014	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CF01 was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF01	4/27/02	Chrysene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	0.0017 ug/L 0.0016 ug/L 0.0029 ug/L 0.0025 ug/L	All soil samples in SDG K2202671

Sample C032CR01 was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR01	4/27/02	Chrysene Dibenz(a,h)anthracene 2-Methylnaphthalene Phenanthrene	0.0013 ug/L 0.0018 ug/L 0.0035 ug/L 0.0056 ug/L	All soil samples in SDG K2202671

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C020MS/MSD (All soil samples in SDG K2202671)	Dibenz(a,h)anthracene	-	58 (61-144)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0202872-3/4 (All soil samples in SDG K2202671)	Benzo(g,h,i)perylene	45 (57-129)	49 (57-129)	-	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C031	Perylene-d12	33978 (35975-143900)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C005	Perylene-d12	44880 (46652-186606)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C005	2-Methylnaphthalene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C031	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A
C032C031DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A
C032C005	2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A

Sample	Compound	Flag	A or P
C032C005DL	All TCL compounds except 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C022 and C032C013 (from SDG #K220668), samples C032C032 and C032C033 and samples C032C035 and C032C036 (from SDG #K220668) were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C032	C032C033	
Fluorene	2.5	1.6	44
Phenanthrene	11	6.6	50
Fluoranthene	4.9	3.3	39
Pyrene	7.1	4.8	39
Benzo(a)anthracene	2.7	2.2	20
Chrysene	21	12	54
Benzo(b)fluoranthene	9.6	5.4	56
Benzo(a)pyrene	6.4	4.0	46
Indeno(1,2,3-cd)pyrene	3.3	4.2	24
Dibenz(a,h)anthracene	6.6	6.2	6
Benzo(g,h,i)perylene	28	27	4

Compound	Concentration (ug/Kg)		RPD
	C032C036	C032C035	

Compound	Concentration (ug/Kg)		RPD
	C032C036	C032C035	
Indeno(1,2,3-cd)pyrene	5.9U	0.78	200

Compound	Concentration (ug/Kg)		RPD
	C032C013	C032C022	
Naphthalene	5.8U	2.2	200
2-Methylnaphthalene	22	26	17
Phenanthrene	63	86	31
Fluoranthene	3.8	4.4	15
Pyrene	6.6	8.6	26
Benzo(a)anthracene	2.4	3.1	25
Chrysene	19	22	15
Benzo(b)fluoranthene	6.4	9.7	41
Benzo(a)pyrene	3.7	5.7U	200
Indeno(1,2,3-cd)pyrene	1.6	5.7U	200
Dibenz(a,h)anthracene	3.0	3.3	10
Benzo(g,h,i)perylene	8.0	5.9	30

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2202671

SDG	Sample	Compound	Flag	A or P	Reason
K2202671	C032C031DL C032C033 C032C034 C032C006 C032C014	Indeno(1,2,3-cd)pyrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
K2202671	C032C018 C032C019 C032C020 C032C021 C032C031 C032C031DL C032C032 C032C033 C032C034 C032C035 C032C022 C032C005 C032C005DL C032C006 C032C007 C032C008 C032C001 C032C002 C032C003 C032C004 C032C014	Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
K2202671	C032C018 C032C019 C032C020 C032C021 C032C031 C032C031DL C032C032 C032C033 C032C034 C032C035 C032C022 C032C005 C032C005DL C032C006 C032C007 C032C008 C032C001 C032C002 C032C003 C032C004 C032C014	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
K2202671	C032C031 C032C005	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
K2202671	C032C005	2-Methylnaphthalene	J (all detects)	A	Compound quantitation and CRQLs
K2202671	C032C031	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene	R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
		Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R		
K2202671	C032C031DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data
K2202671	C032C005	2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A	Overall assessment of data
K2202671	C032C005DL	All TCL compounds except 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2202671

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2202671

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 13, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203082

Sample Identification

C032C838	C032C121MS
C032C839	C032C121MSD
C032C840	
C032C841	
C032C842	
C032C843	
C032C844	
C032C845	
C032C846	
C032C037	
C032C038	
C032C039	
C032C040	
C032C045	
C032C046	
C032C047	
C032C048	
C032C049	
C032C120	
C032C121	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CF02 (from SDG #K2203084) was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF02	5/13/02	Naphthalene	0.0042 ug/L	All samples in SDG K2203082

Sample C032CR05 (from SDG #K2203084), samples C032CR03 (from SDG #K2203084) and sample C032CR04 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR05	5/13/02	Naphthalene Phenanthrene Chrysene	0.0036 ug/L 0.0086 ug/L 0.0023 ug/L	All samples in SDG K2203082
C032CR03	5/13/02	Naphthalene Phenanthrene 2-Methylnaphthalene	0.0058 ug/L 0.0036 ug/L 0.0030 ug/L	All samples in SDG K2203082
C032CR04	5/13/02	Naphthalene	0.0047 ug/L	All samples in SDG K2203082

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C842 C032C038	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C845 and C032C846 and samples C032C046 and C032C047 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C845	C032C846	
Phenanthrene	5.2	6.1	16
Fluoranthene	17	18	6
Pyrene	22	24	9
Benzo(a)anthracene	7.0	7.4	6
Chrysene	8.3	8.6	4
Benzo(b)fluoranthene	13	14	7
Benzo(k)fluoranthene	4.5	4.3	4
Benzo(a)pyrene	14	15	7
Indeno(1,2,3-cd)pyrene	16	17	6
Benzo(g,h,i)perylene	18	19	5

Compound	Concentration (ug/Kg)		RPD
	C032C046	C032C047	
Indeno(1,2,3-cd)pyrene	0.63	5.8U	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203082

SDG	Sample	Compound	Flag	A or P	Reason
K2203082	C032C842 C032C038	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203082

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203082

No Sample Data Qualified in this SDG

LDC Report# 8542D2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 13, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203083

Sample Identification

C032C122	C032C766
C032C123	C032C766MS
C032C124	C032C766MSD
C032C798	
C032C799	
C032C800	
C032C801	
C032C802	
C032C811	
C032C812	
C032C813	
C032C814	
C032C815	
C032C759	
C032C760	
C032C761	
C032C762	
C032C763	
C032C764	
C032C765	

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CF02 (from SDG #K2203084) was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF02	5/13/02	Naphthalene	0.0042 ug/L	All samples in SDG K2203083

Samples C032CR05, C032CR03 and C032CR04 (from SDG #K2203084) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR05	5/13/02	Naphthalene Phenanthrene Chrysene	0.0036 ug/L 0.0086 ug/L 0.0023 ug/L	All samples in SDG K2203083
C032CR03	5/13/02	Naphthalene 2-Methylnaphthalene Phenanthrene	0.0058 ug/L 0.0030 ug/L 0.0036 ug/L	All samples in SDG K2203083
C032CR04	5/13/02	Naphthalene	0.0047 ug/L	All samples in SDG K2203083

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG K2203083	All TCL compounds	More than twenty samples associated to a matrix spike sample.	No more than twenty samples to be associated to a matrix spike sample.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C801 and C032C802, samples C032C812 and C032C813 and samples C032C123 and C032C124 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C123	C032C124	
Indeno(1,2,3-cd)pyrene	0.65	5.9U	200

Compound	Concentration (ug/Kg)		RPD
	C032C801	C032C802	
Naphthalene	3.0	3.3	10
Acenaphthylene	2.0	2.1	5
Acenaphthene	6.1U	6.5	200
Fluorene	6.1U	3.0	200
Phenanthrene	23	48	70
Anthracene	3.9	7.6	64
Fluoranthene	90	83	8
Pyrene	130	130	0
Benzo(a)anthracene	33	32	3
Chrysene	43	39	10
Benzo(b)fluoranthene	50	42	17
Benzo(k)fluoranthene	39	35	11
Benzo(a)pyrene	75	64	16
Indeno(1,2,3-cd)pyrene	69	54	24
Dibenz(a,h)anthracene	5.9	4.1	14
Benzo(g,h,i)perylene	83	65	24

Compound	Concentration (ug/Kg)		RPD
	C032C812	C032C813	
Phenanthrene	3.3	3.6	9
Fluoranthene	6.0	6.7	11
Pyrene	9.7	12	21
Benzo(a)anthracene	3.8	4.5	17
Chrysene	4.3	5.1	17
Benzo(b)fluoranthene	2.3	2.9	23
Benzo(k)fluoranthene	2.9	3.5	19
Benzo(a)pyrene	3.6	4.3	18
Indeno(1,2,3-cd)pyrene	2.5	2.6	4
Benzo(g,h,i)perylene	2.8	2.9	3

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203083

SDG	Sample	Compound	Flag	A or P	Reason
K2203083	C032C122 C032C123 C032C124 C032C798 C032C799 C032C800 C032C801 C032C802 C032C811 C032C812 C032C813 C032C814 C032C815 C032C759 C032C760 C032C761 C032C762 C032C763 C032C764 C032C765 C032C766	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203083

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203083

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 13 through May 17, 2002

LDC Report Date: June 7, 2002

Matrix: Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203084

Sample Identification

C032CR05
C032CF02
C032CR03
C032CR04
C032CR06
C032CR08
C032CR09
C032CR10
C032CR10MS
C032CR10MSD

Introduction

This data review covers 10 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG0203486-4	5/20/02	Chrysene	0.0013 ug/L	All samples in SDG K2203084

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032CR05	Chrysene	0.0023 ug/L	0.020U ug/L
C032CR06	Chrysene	0.0015 ug/L	0.020U ug/L
C032CR08	Chrysene	0.0019 ug/L	0.020U ug/L
C032CR09	Chrysene	0.0017 ug/L	0.020U ug/L

Samples C032CR05, C032CR03, C032CR04, C032CR06, C032CR08, C032CR09 and C032CR10 were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR05	5/13/02	Naphthalene Phenanthrene Acenaphthylene	0.0036 ug/L 0.0086 ug/L 0.0023 ug/L	No associated samples in this SDG
C032CR03	5/13/02	Naphthalene Phenanthrene 2-Methylnaphthalene	0.0058 ug/L 0.0036 ug/L 0.0030 ug/L	No associated samples in this SDG
C032CR04	5/13/02	Naphthalene	0.0047 ug/L	No associated samples in this SDG
C032CR06	5/14/02	Naphthalene Chrysene 2-Methylnaphthalene	0.0074 ug/L 0.0015 ug/L 0.0031 ug/L	No associated samples in this SDG
C032CR10	5/15/02	Hexachlorobenzene Phenanthrene Chrysene Fluoranthene	0.0070 ug/L 0.0034 ug/L 0.0019 ug/L 0.0033 ug/L	No associated samples in this SDG

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/16/02	Naphthalene Chrysene 2-Methylnaphthalene	0.0047 ug/L 0.0017 ug/L 0.0033 ug/L	No associated samples in this SDG
C032CR10	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	No associated samples in this SDG

Sample C032CF02 was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF02	5/13/02	Naphthalene	0.0042 ug/L	No associated samples in this SDG

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203084

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203084

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2203084	C032CR05	Chrysene	0.020U ug/L	A
K2203084	C032CR06	Chrysene	0.020U ug/L	A
K2203084	C032CR08	Chrysene	0.020U ug/L	A
K2203084	C032CR09	Chrysene	0.020U ug/L	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203084

No Sample Data Qualified in this SDG

LDC Report# 8542F2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 14, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203131

Sample Identification

C032C864	C032C940MS
C032C865	C032C940MSD
C032C866	
C032C867	
C032C868	
C032C886	
C032C887	
C032C888	
C032C889	
C032C890	
C032C882	
C032C883	
C032C884	
C032C885	
C032C895	
C032C896	
C032C897	
C032C898	
C032C939	
C032C940	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR06 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR06	5/14/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0074 ug/L 0.0031 ug/L 0.0015 ug/L	All samples in SDG K2203131

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C940MS/MSD (All samples in SDG K2203131)	Naphthalene	-	-	86 (≤40)	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C867 and C032C868 and samples C032C889 and C032C890 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C867	C032C868	
Naphthalene	4.1	5.1	22
Acenaphthylene	2.5	2.8	11
Phenanthrene	22	20	10
Anthracene	4.4	3.5	23
Fluoranthene	65	72	10
Pyrene	97	110	13
Benzo(a)anthracene	24	25	4
Chrysene	29	32	10

Compound	Concentration (ug/Kg)		RPD
	C032C867	C032C868	
Benzo(b)fluoranthene	38	48	23
Benzo(k)fluoranthene	27	37	31
Benzo(a)pyrene	55	68	21
Indeno(1,2,3-cd)pyrene	54	74	31
Dibenz(a,h)anthracene	4.6	4.9	6
Benzo(g,h,i)perylene	60	81	30

Compound	Concentration (ug/Kg)		RPD
	C032C889	C032C890	
Phenanthrene	3.9	9.0	79
Anthracene	6.0U	2.1	200
Fluoranthene	8.9	29	106
Pyrene	15	42	95
Benzo(a)anthracene	4.5	15	108
Chrysene	7.7	20	89
Benzo(b)fluoranthene	5.8	14	83
Benzo(k)fluoranthene	4.0	12	100
Benzo(a)pyrene	8.6	22	88
Indeno(1,2,3-cd)pyrene	7.1	17	82
Dibenz(a,h)anthracene	6.0U	2.4	200
Benzo(g,h,i)perylene	8.8	18	69

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203131

SDG	Sample	Compound	Flag	A or P	Reason
K2203131	C032C864 C032C865 C032C866 C032C867 C032C868 C032C886 C032C887 C032C888 C032C889 C032C890 C032C882 C032C883 C032C884 C032C885 C032C895 C032C896 C032C897 C032C898 C032C939 C032C940	Naphthalene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (RPD)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203131

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203131

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 14, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203133

Sample Identification

C032C941	C032C251MS
C032C941DL	C032C251MSD
C032C942	
C032C191	
C032C192	
C032C193	
C032C194	
C032C248	
C032C249	
C032C250	
C032C251	
C032C327	
C032C327DL	
C032C328	
C032C329	
C032C330	
C032C345	
C032C346	
C032C347	
C032C348	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR06 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR06	5/14/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0074 ug/L 0.0031 ug/L 0.0015 ug/L	All samples in SDG K2203133

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C327	Perylene-d12	47154 (50247-200988)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C94-	Phenanthrene Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C941	Phenanthrene Fluoranthene Pyrene	R R R	A

Sample	Compound	Flag	A or P
C032C941DL	All TCL compounds except Phenanthrene Fluoranthene Pyrene	R	A
C032C327	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A
C032C327DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203133

SDG	Sample	Compound	Flag	A or P	Reason
K2203133	C032C327	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
K2203133	C032C941	Phenanthrene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203133	C032C941	Phenanthrene Fluoranthene Pyrene	R R R	A	Overall assessment of data
K2203133	C032C941DL	All TCL compounds except Phenanthrene Fluoranthene Pyrene	R	A	Overall assessment of data
K2203133	C032C327	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A	Overall assessment of data
K2203133	C032C327DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203133

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203133

No Sample Data Qualified in this SDG

LDC Report# 8542H2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 15, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203174

Sample Identification

C032C243
C032C244
C032C245
C032C246
C032C247
C032C151
C032C152
C032C153
C032C154
C032C076
C032C077
C032C078
C032C079
C032C080
C032CA58
C032CA59
C032CA60
C032CA61
C032CA67
C032CA60MS
C032CA60MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR08 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR08	5/15/02	Naphthalene Phenanthrene Fluoranthene Chrysene	0.0070 ug/L 0.0034 ug/L 0.0033 ug/L 0.0019 ug/L	All samples in SDG K2203174

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0203421-3/4 (All samples in SDG K2203174)	Fluorene Phenanthrene Pyrene Benzo(a)anthracene Chrysene	- 62 (63-115) - - -	52 (57-117) 55 (63-115) 58 (62-128) 59 (63-128) 61 (66-128)	- - - - -	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C244 and C032C245 and samples C032C079 and C032C080 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C244	C032C245	
Benzo(g h,i)perylene	3.0	3.8	24

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203174

SDG	Sample	Compound	Flag	A or P	Reason
K2203174	C032C243 C032C244 C032C245 C032C246 C032C247 C032C151 C032C152 C032C153 C032C154 C032C076 C032C077 C032C078 C032C079 C032C080 C032CA58 C032CA59 C032CA60 C032CA61 C032CA67	Fluorene Phenanthrene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203174

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203174

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 15, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203176

Sample Identification

C032CA68	C032CA23
C032CA68DL	C032CA23DL
C032CA69	C032CA24
C032CA70	C032CA25
C032C974	C032C976MS
C032C975	C032C976MSD
C032C976	C032C976REMS
C032C976RE	C032C976REMSD
C032C977	
C032C978	
C032CA18	
C032CA19	
C032CA20	
C032CA21	
C032CA22	
C032C904	
C032C905	
C032C905DL	
C032C906	
C032C907	

Introduction

This data review covers 28 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR08 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR08	5/15/02	Naphthalene Phenanthrene Fluoranthene Chrysene	0.0070 ug/L 0.0034 ug/L 0.0033 ug/L 0.0019 ug/L	All samples in SDG K2203176

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C976MS/MSD	Naphthalene	-	-	41 (≤40)	J (all detects)	A
(C032CA68	2-Methylnaphthalene	-	-	48 (≤40)	UJ (all non-detects)	
C032CA68DL	Acenaphthylene	-	-	50 (≤40)		
C032CA69	Acenaphthene	-	-	49 (≤40)		
C032CA70	Fluorene	-	-	48 (≤40)		
C032C974	Phenanthrene	-	-	45 (≤40)		
C032C975	Anthracene	-	-	47 (≤40)		
C032C976	Fluoranthene	-	-	43 (≤40)		
C032C977	Pyrene	-	-	41 (≤40)		
C032C978	Benzo(a)anthracene	55 (64-145)	-	44 (≤40)		
C032CA18	Chrysene	49 (54-128)	-	42 (≤40)		
C032CA19	Benzo(b)fluoranthene	52 (64-138)	-	-		
C032CA20	Benzo(k)fluoranthene	53 (62-130)	-	45 (≤40)		
C032CA21	Benzo(a)pyrene	-	-	41 (≤40)		
C032CA22	Dibenz(a,h)anthracene	55 (61-144)	-	45 (≤40)		
C032C904						
C032C905						
C032C905DL						
C032C906						
C032C907						
C032CA23						
C032CA23DL						
C032CA24						
C032CA25)						

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CA68	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A
C032C905	Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CA23	Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CA68	Fluoranthene Pyrene	R R	A
C032CA68DL	All TCL compounds except Fluoranthene Pyrene	R	A

Sample	Compound	Flag	A or P
C032C905	Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R R R R R R	A
C032C905DL	All TCL compounds except Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A
C032CA23	Pyrene	R	A
C032CA23DL	All TCL compounds except Pyrene	R	A
C032C976	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C977 and C032C978 and samples C032CA21 and C032CA22 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C977	C032C978	
Naphthalene	3.6	3.0	18
Acenaphthylene	5.2	5.9U	200
Acenaphthene	2.3	5.9U	200
Phenanthrene	34	13	89
Anthracene	6.5	1.8	113

Compound	Concentration (ug/Kg)		RPD
	C032C977	C032C978	
Fluoranthene	91	32	96
Pyrene	110	46	82
Benzo(a)anthracene	33	12	93
Chrysene	34	15	78
Benzo(b)fluoranthene	61	17	113
Benzo(k)fluoranthene	16	13	21
Benzo(a)pyrene	68	23	99
Indeno(1,2,3-cd)pyrene	68	17	120
Dibenz(a,h)anthracene	5.8	1.9	101
Benzo(g,h,i)perylene	62	19	106

Compound	Concentration (ug/Kg)		RPD
	C032CA21	C032CA22	
Naphthalene	6.2	6.5	5
Acenaphthylene	5.4	4.8	12
Acenaphthene	4.7	5.1	8
Fluorene	2.1	3.8	58
Phenanthrene	50	61	20
Anthracene	8.6	11	24
Fluoranthene	120	110	9
Pyrene	150	140	7

Compound	Concentration (ug/Kg)		RPD
	C032CA21	C032CA22	
Benzo(a)anthracene	41	38	8
Chrysene	49	45	8
Benzo(b)fluoranthene	58	47	21
Benzo(k)fluoranthene	49	45	8
Benzo(a)pyrene	89	72	21
Indeno(1,2,3-cd)pyrene	76	57	29
Dibenz(a,h)anthracene	6.7	5.7	16
Benzo(g,h,i)perylene	84	62	30

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203176

SDG	Sample	Compound	Flag	A or P	Reason
K2203176	C032CA68 C032CA68DL C032CA69 C032CA70 C032C974 C032C975 C032C976 C032C977 C032C978 C032CA18 C032CA19 C032CA20 C032CA21 C032CA22 C032C904 C032C905 C032C905DL C032C906 C032C907 C032CA23 C032CA23DL C032CA24 C032CA25	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
K2203176	C032CA68	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203176	C032C905	Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203176	C032CA23	Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203176	C032CA68	Fluoranthene Pyrene	R R	A	Overall assessment of data
K2203176	C032CA68DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
K2203176	C032C905	Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R R R R R R	A	Overall assessment of data
K2203176	C032C905DL	All TCL compounds except Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A	Overall assessment of data
K2203176	C032CA23	Pyrene	R	A	Overall assessment of data
K2203176	C032CA23DL	All TCL compounds except Pyrene	R	A	Overall assessment of data
K2203176	C032C976	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203176

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203176

No Sample Data Qualified in this SDG

LDC Report# 8542J2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 16, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203212

Sample Identification

C032CB15	C032C149MS
C032CB16	C032C149MSD
C032CB17	
C032CB18	
C032C965	
C032C966	
C032C967	
C032C968	
C032C969	
C032CA49	
C032CA50	
C032CA51	
C032CA52	
C032CB11	
C032CB12	
C032CB13	
C032CB14	
C032C147	
C032C148	
C032C149	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR09 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/163/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0047 ug/L 0.0033 ug/L 0.0017 ug/L	All samples in SDG K2203212

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C149MS/MSD (All samples in SDG K2203212)	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene	- - -	62 (64-145) 62 (64-138) 61 (62-130)	- - -	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C966 and C032C967 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions

Compound	Concentration (ug/Kg)		RPD
	C032C966	C032C967	
Acenaphthylene	5.3U	4.2	200
Fluorene	5.3U	1.9	200
Phenanthrene	4.3	31	151
Anthracene	5.3U	5.6	200
Fluoranthene	8.5	33	118
Pyrene	9.9	39	119
Benzo(a)anthracene	4.6	14	101
Chrysene	6.1	17	94

Compound	Concentration (ug/Kg)		RPD
	C032C966	C032C967	
Benzo(b)fluoranthene	8.3	21	87
Benzo(k)fluoranthene	2.3	6.8	99
Benzo(a)pyrene	5.5	16	98
Indeno(1,2,3-cd)pyrene	5.4	15	94
Dibenz(a,h)anthracene	5.3U	2.1	200
Benzo(g,h,i)perylene	4.9	13	90

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203212

SDG	Sample	Compound	Flag	A or P	Reason
K2203212	C032CB15 C032CB16 C032CB17 C032CB18 C032C965 C032C966 C032C967 C032C968 C032C969 C032CA49 C032CA50 C032CA51 C032CA52 C032CB11 C032CB12 C032CB13 C032CB14 C032C147 C032C148 C032C149	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203212

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203212

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 16, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203213

Sample Identification

C032C150
C032C279
C032C280
C032C281
C032C282
C032CB37
C032CB38
C032CB39
C032CB40
C032CB24
C032CB25
C032CB26
C032CB27
C032C318
C032C319
C032C320
C032C321
C032C322
C032C279MS
C032C279MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR09 was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/16/02	Naphthalene Chrysene 2-Methylnaphthalene	0.0047 ug/L 0.0017 ug/L 0.0033 ug/L	All samples in SDG K2203213

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C279MS/MSD (All samples in SDG K2203213)	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene	- 60 (64-138) 59 (62-130)	63 (64-145) 61 (64-138) 57 (62-130)	- - -	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C321 and C032C322 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203213

SDG	Sample	Compound	Flag	A or P	Reason
K2203213	C032C150 C032C279 C032C280 C032C281 C032C282 C032CB37 C032CB38 C032CB39 C032CB40 C032CB24 C032CB25 C032CB26 C032CB27 C032C318 C032C319 C032C320 C032C321 C032C322	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203213

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203213

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 17, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203248

Sample Identification

C032C340	C032C779
C032C341	C032C780
C032C342	C032C778MS
C032C343	C032C778MSD
C032C344	C032C780MS
C032C235	C032C780MSD
C032C236	
C032C237	
C032C238	
C032C142	
C032C143	
C032C144	
C032C145	
C032C146	
C032C107	
C032C108	
C032C109	
C032C776	
C032C777	
C032C778	

Introduction

This data review covers 26 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR10 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR10	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	All samples in SDG K2203248

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
KWG0203471-3/4 (C032C340	Phenanthrene	-	60 (63-115)	-	J (all detects) UJ (all non-detects)	P
C032C341 C032C342 C032C343 C032C344 C032C235 C032C236 C032C237 C032C238 C032C142 C032C143 C032C144 C032C145 C032C146 C032C107 C032C108 C032C109 C032C776 C032C777 C032C778 KWG0203470-5)	Fluoranthene	-	53 (54-132)	-	J (all detects) UJ (all non-detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C343 and C032C344, samples C032C145 and C032C146 and samples C032C779 and C032C780 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C779	C032C780	
Indeno(1,2,3-cd)pyrene	0.94	1.3	32
Benzo(g,h,i)perylene	6.0U	1.7	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203248

SDG	Sample	Compound	Flag	A or P	Reason
K2203248	C032C340	Phenanthrene	J (all detects)	A	Laboratory control samples (%R)
	C032C341		UJ (all non-detects)		
	C032C342	Fluoranthene	J (all detects)		
	C032C343		UJ (all non-detects)		
	C032C344				
	C032C235				
	C032C236				
	C032C237				
	C032C238				
	C032C142				
	C032C143				
	C032C144				
	C032C145				
	C032C146				
	C032C107				
	C032C108				
	C032C109				
	C032C776				
	C032C777				
	C032C778				

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203248

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203248

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 17, 2002

LDC Report Date: June 7, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203249

Sample Identification

C032C829	C032C432DL
C032C830	C032C433
C032C832	C032C434
C032C362	C032C435
C032C362DL	C032C436
C032C363	C032C435MS
C032C364	C032C435MSD
C032C365	
C032C375	
C032C375DL	
C032C376	
C032C377	
C032C377DL	
C032C378	
C032C401	
C032C402	
C032C403	
C032C404	
C032C405	
C032C432	

Introduction

This data review covers 27 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR10 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR10	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	All samples in SDG K2203249

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C362	Chrysene-d12 Perylene-d12	81902 (88311-353244) 68903 (75482-301928)	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C375	Chrysene-d12 Perylene-d12	69397 (88311-353244) 56727 (75482-301928)	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C377	Chrysene-d12 Perylene-d12	73428 (88311-353244) 59407 (75482-301928)	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C432	Chrysene-d12 Perylene-d12	69376 (88311-353244) 55892 (75482-301928)	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C362	Chrysene Benzo(b)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene	R R R R R	A
C032C362DL	All TCL compounds except Chrysene Benzo(b)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene	R	A
C032C375	Benzo(a)anthracene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R R	A
C032C375DL	All TCL compounds except Benzo(a)anthracene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A
C032C377	Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R	A
C032C377DL	All TCL compounds except Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A
C032C432	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene	R R R R	A

Sample	Compound	Flag	A or P
C032C432DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C402 and C032C403 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C402	C032C403	
Indeno(1,2,3-cd)pyrene	0.69	0.86	22
Benzo(g,h,i)perylene	5.3U	1.5	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203249

SDG	Sample	Compound	Flag	A or P	Reason
K2203249	C032C362 C032C375 C032C377 C032C432	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
K2203249	C032C362	Chrysene Benzo(b)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene	R R R R R	A	Overall assessment of data
K2203249	C032C362DL	All TCL compounds except Chrysene Benzo(b)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene Benzo(k)fluoranthene	R	A	Overall assessment of data
K2203249	C032C375	Benzo(a)anthracene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R R	A	Overall assessment of data
K2203249	C032C375DL	All TCL compounds except Benzo(a)anthracene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A	Overall assessment of data
K2203249	C032C377	Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R	A	Overall assessment of data
K2203249	C032C377DL	All TCL compounds except Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A	Overall assessment of data
K2203249	C032C432	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene	R R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
K2203249	C032C432DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203249

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203249

No Sample Data Qualified in this SDG

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Bechtel Environmental
1230 Columbia Street, Suite 400
San Diego, CA 92101
Attn: Mr. James Jordan

June 18, 2002

Project Name : NAS Alameda Point
Project # : CTO 032

On June 4, 2002 the following data packages were received by Laboratory Data Consultants, Inc. from Bechtel Environmental. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 8544:

SDG #	Fraction
G2E140179, G2E140187, G2E170196, G2E180154, G2E180162, G2E180164, G2E210156, G2E210158, G2E220159, G2E220164, G2E220168, G2E230183, G2E230185, G2E230192, 38345, 38357, 38369, 38393, 38435	Polynuclear Aromatic Hydrocarbons

The above SDGs were reviewed using Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- NFESC Special Publication SP-2056-ENV, Navy Installation Restoration Chemical Data Quality Manual, Naval Facilities Engineering Command, September 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

The data validators did utilize their professional judgement when evaluating the data to achieve the most complete and accurate assessment of the data. The data packages were reviewed according to the above stated validation procedures.

Alameda Point, CTO 32
Data Validation Reports
LDC# 8544

Polynuclear Aromatic Hydrocarbons

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 13, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E140179

Sample Identification

C032C041
C032C042
C032C043
C032C043DL
C032C044
C032C050
C032C050DL
C032C051
C032C052
C032C052DL
C032C053
C032C085
C032C086
C032C087
C032C087DL
C032C088
C032C155
C032C155DL
C032C156
C032C157
C032C158
C032C159
C032C041DLMS
C032C041DLMSD
C032C041DL

Introduction

This data review covers 25 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/21/02	Phenanthrene	27.3	C032C041 C032C043 C032C050 C032C052 C032C087 C032C155 C032C158	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR05, C032CR03 and C032CR04 (from SDG #K2203084) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR05	5/13/02	Naphthalene Phenanthrene Chrysene	0.0036 ug/Kg 0.0086 ug/Kg 0.0023 ug/Kg	All samples in SDG G2E140179
C032CR03	5/13/02	Naphthalene Phenanthrene 2-Methylnaphthalene	0.0058 ug/L 0.0036 ug/L 0.0030 ug/L	All samples in SDG G2E140179
C032CR04	5/13/02	Naphthalene	0.0047 ug/L	All samples in SDG G2E140179

Sample C032CF02 (from SDG #K2203084) was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF02	5/13/02	Naphthalene	0.042 ug/L	All samples in SDG G2E140179

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since the samples were diluted out, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C052DL	Perylene-d12	179299 (185058-740230)	Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C087DL	Phenanthrene-d10 Chrysene-d12 Perylene-d12	291033 (298651-1194606) 201439 (219601-878404) 164877 (185058-740230)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C043DL C032C050DL C032C052DL C032C087DL C032C155DL C032C041DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C156 and C032C157 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C156	C032C157	
Benzo(a)anthracene	0.46	0.83	57
Benzo(b)fluoranthene	0.63	0.90	35
Benzo(k)fluoranthene	0.43	1.1	88
Benzo(g,h,i)perylene	0.68	0.75	10

Compound	Concentration (ug/Kg)		RPD
	C032C156	C032C157	
Benzo(a)pyrene	0.54	0.82	41
Chrysene	0.45	1.2	91
Fluoranthene	0.71	1.6	77
Indeno(1,2,3-cd)pyrene	0.74	0.56	28
Phenanthrene	0.43	0.81	61
Pyrene	0.74	2.0	92

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E140179

SDG	Sample	Compound	Flag	A or P	Reason
G2E140179	C032C041 C032C043 C032C050 C032C052 C032C087 C032C155 C032C158	Phenanthrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E140179	C032C052DL	Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E140179	C032C087DL	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E140179	C032C043DL C032C050DL C032C052DL C032C087DL C032C155DL C032C041DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E140179

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E140179

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 13, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E140187

Sample Identification

C032C820
C032C821
C032C822
C032C823
C032C824
C032C825
C032C825DL
C032C826
C032C826DL
C032C827
C032C827DL
C032C828
C032C789
C032C790
C032C791
C032C792
C032C793
C032C772
C032C772DL
C032C773
C032C774
C032C774DL
C032C775
C032C775DL
C032C820MS
C032C820MSD

Introduction

This data review covers 26 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/21/02	Phenanthrene	27.3	C032C825 C032C826 C032C827 C032C772 C032C774DL C032C775	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR05, C032CR03 and C032CR04 (from SDG #K2203084) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR05	5/13/02	Naphthalene Phenanthrene Chrysene	0.0036 ug/Kg 0.0086 ug/Kg 0.0023 ug/Kg	All samples in SDG G2E140187
C032CR03	5/13/02	Naphthalene Phenanthrene 2-Methylnaphthalene	0.0058 ug/L 0.0036 ug/L 0.0030 ug/L	All samples in SDG G2E140187
C032CR04	5/13/02	Naphthalene	0.0047 ug/L	All samples in SDG G2E140187

Sample C032CF02 (from SDG #K2203084) was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF02	5/13/02	Naphthalene	0.042 ug/L	All samples in SDG G2E140187

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C828	Phenanthrene-d10	274644 (280833-1123332)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C774	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C774	Fluoranthene Pyrene	R R	A
C032C774DL	All TCL compounds except Fluoranthene Pyrene	R	A
C032C825DL C032C826DL C032C827DL C032C772DL C032C775DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C823 and C032C824 and samples C032C790 and C032C791 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C823	C032C824	
Benzo(a)anthracene	1.5	2.0	29
Benzo(b)fluoranthene	1.9	2.8	38
Benzo(k)fluoranthene	1.9	2.7	35

Compound	Concentration (ug/Kg)		RPD
	C032C823	C032C824	
Benzo(g,h,i)perylene	2.3	4.3	61
Benzo(a)pyrene	2.6	3.7	35
Chrysene	2.2	2.7	20
Dibenz(a,h)anthracene	6.0U	0.30	200
Fluoranthene	3.2	4.2	27
Indeno(1,2,3-cd)pyrene	2.1	4.0	62
Naphthalene	6.0U	0.37	200
Phenanthrene	1.2	0.72	50
Pyrene	8.7	10	14

Compound	Concentration (ug/Kg)		RPD
	C032C790	C032C791	
Benzo(a)anthracene	0.82	0.59	33
Benzo(b)fluoranthene	1.2	0.77	44
Benzo(k)fluoranthene	1.4	1.1	24
Benzo(g,h,i)perylene	1.3	0.84	43
Benzo(a)pyrene	1.1	0.82	29
Chrysene	1.4	0.98	35
Dibenz(a,h)anthracene	0.24	6.2U	200
Fluoranthene	1.6	0.90	56
Indeno(1,2,3-cd)pyrene	1.1	0.83	28

Compound	Concentration (ug/Kg)		RPD
	C032C790	C032C791	
2-Methylnaphthalene	0.79	0.41	63
Naphthalene	0.56	0.45	22
Phenanthrene	1.1	0.64	53
Pyrene	1.8	1.4	25

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E140187

SDG	Sample	Compound	Flag	A or P	Reason
G2E140187	C032C825 C032C826 C032C827 C032C772 C032C774DL C032C775	Phenanthrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E140187	C032C828	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E140187	C032C774	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E140187	C032C774	Fluoranthene Pyrene	R R	A	Overall assessment of data
G2E140187	C032C774DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data
G2E140187	C032C825DL C032C826DL C032C827DL C032C772DL C032C775DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E140187

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E140187

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 16, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E170196

Sample Identification

C032C996
C032C997
C032C998
C032C999
C032C000
C032C921
C032C922
C032C923
C032C924
C032C925
C032C922MS
C032C922MSD

Introduction

This data review covers 12 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/19/02	Benzo(b)fluoranthene	29.7	All samples in SDG G2E170196	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR09 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/16/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0047 ug/L 0.0033 ug/L 0.0017 ug/L	All samples in SDG G2E170196

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C999 and C032C000 and samples C032C922 and C032C923 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C999	C032C000	
Benzo(a)anthracene	0.37	0.47	24
Benzo(b)fluoranthene	0.69	0.72	4
Benzo(k)fluoranthene	0.82	1.1	29
Benzo(g,h,i)perylene	1.2	1.5	22
Benzo(a)pyrene	0.89	1.1	21
Chrysene	0.56	0.65	15
Fluoranthene	0.51	0.65	24
Indeno(1 2,3-cd)pyrene	1.0	1.2	18
Pyrene	0.89	1.1	21

Compound	Concentration (ug/Kg)		RPD
	C032C922	C032C923	
Benzo(a)anthracene	1.1	0.92	18
Benzo(b)fluoranthene	1.5	1.3	14
Benzo(k)fluoranthene	1.9	1.8	5
Benzo(g,h,i)perylene	5.3U	1.7	200
Benzo(a)pyrene	1.9	1.8	5
Chrysene	1.7	1.5	12
Fluoranthene	1.7	1.8	6
Indeno(1,2,3-cd)pyrene	1.4	1.5	7
Phenanthrene	0.57	0.86	41
Pyrene	2.2	2.0	10

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E170196

SDG	Sample	Compound	Flag	A or P	Reason
G2E170196	C032C996 C032C997 C032C998 C032C999 C032C000 C032C921 C032C922 C032C923 C032C924 C032C925	Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E170196

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E170196

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 17, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E180154

Sample Identification

C032C314
C032C315
C032C316
C032C317
C032C204
C032C205
C032C206
C032C207
C032C110
C032C357
C032C358
C032C359
C032C360
C032C361
C032C379
C032C361MS
C032C361MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR10 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR10	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	All samples in SDG G2E180154

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C358 and C032C359 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C358	C032C359	
Benzo(a)anthracene	1.6	1.2	29
Benzo(b)fluoranthene	3.5	2.0	54
Benzo(k)fluoranthene	1.6	1.9	17
Benzo(g,h,i)perylene	5.8	2.9	67
Benzo(a)pyrene	3.2	2.2	37
Chrysene	4.8	3.2	40
Dibenz(a,h)anthracene	1.2	0.82	38
Fluoranthene	1.5	1.7	12
Indeno(1,2,3-cd)pyrene	2.0	5.2U	200
2-Methylnaphthalene	0.58	5.2U	200
Naphthalene	0.44	0.34	26
Phenanthrene	2.6	1.6	48

Compound	Concentration (ug/Kg)		RPD
	C032C358	C032C359	
Pyrene	2.2	2.1	5

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E180154

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E180154

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E180154

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 17, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E180162

Sample Identification

C032C855
C032C856
C032C857
C032C858
C032C859
C032C380
C032C381
C032C382
C032C383
C032C440
C032C855MS
C032C855MSD

Introduction

This data review covers 12 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR10 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR10	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	All samples in SDG G2E180162

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C856 and C032C857 and samples C032C380 and C032C381 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C856	C032C857	
Benzo(k)fluoranthene	0.48	0.40	18
Benzo(g,h,i)perylene	2.2	1.2	59
Benzo(a)pyrene	0.46	5.4U	200
Chrysene	0.52	0.38	31
Fluoranthene	0.52	0.51	2
Indeno(1,2,3-cd)pyrene	0.98	5.4U	200
Pyrene	0.68	0.66	3

Compound	Concentration (ug/Kg)		RPD
	C032C380	C032C381	
Anthracene	5.3U	1.3	200
Benzo(a)anthracene	3.6	3.5	3
Benzo(b)fluoranthene	6.7	4.8	33

Compound	Concentration (ug/Kg)		RPD
	C032C380	C032C381	
Benzo(k)fluoranthene	7.3	5.4	30
Benzo(g,h,i)perylene	7.3	5.0	37
Benzo(a)pyrene	7.8	6.5	18
Chrysene	14	13	7
Dibenz(a,h)anthracene	2.3	2.6	12
Fluoranthene	6.1	6.0	2
Indeno(1,2,3-cd)pyrene	5.9	4.5	27
2-Methylnaphthalene	0.32	0.38	17
Naphthalene	0.68	0.53	25
Phenanthrene	21	18	15
Pyrene	12	10	18

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E180162

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E180162

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E180162

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 17, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E180164

Sample Identification

C032C781
C032C782
C032C783
C032C784
C032C803
C032C804
C032C805
C032C806
C032C397
C032C398
C032C399
C032C400
C032C437
C032C438
C032C439
C032C437MS
C032C437MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/20/02	Phenanthrene	28.1	All samples in SDG G2E180164	J (all detects) UJ (all non-detects)	A
	Benzo(a)anthracene	27.6		J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were greater than or equal to 0.05

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2140572MB	5/19/02	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	0.35 ug/Kg 1.1 ug/Kg 0.72 ug/Kg 0.73 ug/Kg 0.49 ug/Kg 0.33 ug/Kg 0.50 ug/Kg	All samples in SDG G2E180164

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C782	Benzo(k)fluoranthene Chrysene	0.38 ug/Kg 0.43 ug/Kg	5.5U ug/Kg 5.5U ug/Kg
C032C783	Benzo(k)fluoranthene	0.36 ug/Kg	5.8U ug/Kg
C032C784	Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene	0.44 ug/Kg 0.65 ug/Kg	6.1U ug/Kg 6.1U ug/Kg
C032C803	Benzo(k)fluoranthene Chrysene 2-Methylnaphthalene	0.60 ug/Kg 0.67 ug/Kg 0.71 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C397 (20x)	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene	22 ug/Kg 19 ug/Kg 84 ug/Kg 30 ug/Kg	100U ug/Kg 100U ug/Kg 100U ug/Kg 100U ug/Kg
C032C398	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene 2-Methylnaphthalene	1.2 ug/Kg 0.81 ug/Kg 3.1 ug/Kg 0.43 ug/Kg	5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg
C032C399 (5x)	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene	3.8 ug/Kg 2.5 ug/Kg 12 ug/Kg	26U ug/Kg 26U ug/Kg 26U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C400	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene	0.65 ug/Kg 0.44 ug/Kg 1.0 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C437	Benzo(b)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	4.4 ug/Kg 0.41 ug/Kg 1.4 ug/Kg	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg
C032C438	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	1.7 ug/Kg 2.8 ug/Kg 2.4 ug/Kg 0.56 ug/Kg 0.95 ug/Kg	5.5U ug/Kg 5.5U ug/Kg 5.5U ug/Kg 5.5U ug/Kg 5.5U ug/Kg
C032C439	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene 2-Methylnaphthalene	1.1 ug/Kg 1.7 ug/Kg 2.4 ug/Kg 3.0 ug/Kg 0.42 ug/Kg	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg

Sample C032CR10 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR10	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	All samples in SDG G2E180164

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032C399 and C032C397 . Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C437MS/MSD (All samples in SDG G2E180164)	Pyrene	29 (30-150)	22 (30-150)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E180164

SDG	Sample	Compound	Flag	A or P	Reason
G2E180164	C032C781 C032C782 C032C783 C032C784 C032C803 C032C804 C032C805 C032C806 C032C397 C032C398 C032C399 C032C400 C032C437 C032C438 C032C439	Phenanthrene Benzo(a)anthracene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E180164	C032C781 C032C782 C032C783 C032C784 C032C803 C032C804 C032C805 C032C806 C032C397 C032C398 C032C399 C032C400 C032C437 C032C438 C032C439	Pyrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E180164

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E180164	C032C782	Benzo(k)fluoranthene Chrysene	5.5U ug/Kg 5.5U ug/Kg	A
G2E180164	C032C783	Benzo(k)fluoranthene	5.8U ug/Kg	A
G2E180164	C032C784	Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene	6.1U ug/Kg 6.1U ug/Kg	A
G2E180164	C032C803	Benzo(k)fluoranthene Chrysene 2-Methylnaphthalene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E180164	C032C397 (20x)	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene	100U ug/Kg 100U ug/Kg 100U ug/Kg 100U ug/Kg	A
G2E180164	C032C398	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene 2-Methylnaphthalene	5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg	A
G2E180164	C032C399 (5x)	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene	26U ug/Kg 26U ug/Kg 26U ug/Kg	A
G2E180164	C032C400	Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E180164	C032C437	Benzo(b)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A
G2E180164	C032C438	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.5U ug/Kg 5.5U ug/Kg 5.5U ug/Kg 5.5U ug/Kg 5.5U ug/Kg	A
G2E180164	C032C439	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene 2-Methylnaphthalene	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E180164

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20, 2002

LDC Report Date: June 10, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E210156

Sample Identification

C032C876
C032CA84
C032CA85
C032CA86
C032CA87
C032CA88
C032C869
C032C870
C032C871
C032C872
C032C869MS
C032C869MSD

Introduction

This data review covers 12 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR011 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CA87 and C032CA88 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CA87	C032CA88	
Benzo(a)anthracene	2.3	2.0	14
Benzo(b)fluoranthene	1.9	1.5	23
Benzo(k)fluoranthene	2.4	1.9	23
Benzo(g,h,i)perylene	3.2	2.3	33
Benzo(a)pyrene	3.2	2.4	29
Chrysene	2.6	2.1	21
Dibenz(a,h)anthracene	0.32	0.39	20
Fluoranthene	6.1	3.7	49
Indeno(1,2,3-cd)pyrene	3.5	2.4	37
2-Methylnaphthalene	0.57	0.46	21
Naphthalene	0.77	0.55	33
Phenanthrene	2.5	1.7	38
Pyrene	6.9	5.1	30

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E210156

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E210156

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E210156

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20, 2002

LDC Report Date: June 14, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E210158

Sample Identification

C032C482
C032C483
C032C484
C032C393
C032C394
C032C395
C032C396
C032C467
C032C468
C032C469
C032C470
C032C471
C032C873
C032C874
C032C875
C032C482MS
C032C482MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/22/02	Indeno(1,2,3-cd)pyrene	26.4	C032C482 C032C483	J (all detects) UJ (all non-detects)	A
	Dibenz(a,h)anthracene	27.1	C032C484 C032C393 C032C394 C032C395 C032C396 C032C467 C032C468 C032C469 C032C482MS C032C482MSD 2141458MB	J (all detects) UJ (all non-detects)	
5/23/02	Benzo(k)fluoranthene	25.43261	C032C470 C032C471	J (all detects) UJ (all non-detects)	A
	Dibenz(a,h)anthracene	26.92641	C032C873 C032C874 C032C875	J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR011 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas were outside the QC limits of -50% to +100% of the associated continuing calibration.

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
All samples in SDG G2E210158	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02. 2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard. 3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C468 and C032C469 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C468	C032C469	
Benzo(a)pyrene	5.2U	0.43	200
Chrysene	5.2U	0.38	200
Fluoranthene	5.2U	0.31	200
Phenanthrene	0.46	0.47	2

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E210158

SDG	Sample	Compound	Flag	A or P	Reason
G2E210158	C032C482 C032C483 C032C484 C032C393 C032C394 C032C395 C032C396 C032C467 C032C468 C032C469	Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E210158	C032C470 C032C471 C032C873 C032C874 C032C875	Benzo(k)fluoranthene Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E210158	C032C482 C032C483 C032C484 C032C393 C032C394 C032C395 C032C396 C032C467 C032C468 C032C469 C032C470 C032C471 C032C873 C032C874 C032C875	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E210158

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E210158

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 21, 2002

LDC Report Date: June 14, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E220159

Sample Identification

C032C059
C032C060
C032C061
C032C062
C032C160
C032C161
C032C162
C032C163
C032C992
C032C993
C032C994
C032C961
C032C962
C032C963
C032C964
C032C060MS
C032C060MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR012 and C032CR13 (from SDG #38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas were outside the QC limits of -50% to +100% of the associated continuing calibration.

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
All samples in SDG G2E220159	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02. 2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard. 3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E220159

SDG	Sample	Compound	Flag	A or P	Reason
G2E220159	C032C059 C032C060 C032C061 C032C062 C032C160 C032C161 C032C162 C032C163 C032C992 C032C993 C032C994 C032C961 C032C962 C032C963 C032C964	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E220159

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E220159

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 21, 2002

LDC Report Date: June 14, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E220164

Sample Identification

C032C164
C032C165
C032C166
C032C167
C032C168
C032C860
C032C861
C032C862
C032C863
C032C374
C032C165MS
C032C165MSD

Introduction

This data review covers 12 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR12 and C032CR12 (from SDG #38470) were identified as blanks. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas were outside the QC limits of -50% to +100% of the associated continuing calibration.

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
All samples in SDG G2E220164	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02. 2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard. 3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C167 and C032C168 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C167	C032C168	
Benzo(a)anthracene	2.6	1.7	42
Benzo(b)fluoranthene	1.2	1.3	8
Benzo(k)fluoranthene	2.1	0.92	78
Chrysene	9.9	5.5	57
Fluoranthene	0.81	0.64	23
2-Methylnaphthalene	0.40	5.8U	200
Phenanthrene	2.0	1.0	67
Pyrene	2.7	1.6	51

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E220164

SDG	Sample	Compound	Flag	A or P	Reason
G2E220164	C032C164 C032C165 C032C166 C032C167 C032C168 C032C860 C032C861 C032C862 C032C863 C032C374	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E220164

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E220164

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 21, 2002

LDC Report Date: June 12, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E220168

Sample Identification

C032C349
C032C350
C032C351
C032C352
C032C384
C032C385
C032C386
C032C387
C032C441
C032C442
C032C443
C032C444
C032C371
C032C372
C032C373
C032C350MS
C032C350MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR12 and C032CR12 (from SDG #38470) were identified as blanks. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C350MS/MSD (All samples in SDG 38393)	Anthracene	-	-	36 (≤30)	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
2142630MB	Perylene-d12	386050 (449733-1798932)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C349	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	604401 (791815-3167260) 297575 (343500-1373998) 508834 (874306-3497222) 465684 (729498-2917992) 305953 (449733-1798932)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C352	Phenanthrene-d10	869277 (874306-349822)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032C384	Phenanthrene-d10	802043 (874306-349822)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032C385	Acenaphthene-d10 Perylene-d12	332505 (343500-1373998) 439034 (449733-1798932)	Acenaphthylene Acenaphthene Fluorene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C386	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	546042 (791815-3167260) 266338 (343500-1373998) 511572 (874306-349822) 469911 (729498-2917992) 282046 (449733-1798932)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C387	Acenaphthene-d10 Phenanthrene-d10 Perylene-d12	281622 (343500-1373998) 842439 (874306-349822) 433646 (449733-1798932)	Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Pyrene	J (all detects) UJ (all non-detects)	P
C032C441	Phenanthrene-d10	801728 (874306-3497222)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C442	Phenanthrene-d10 Chrysene-d12 Perylene-d12	728942 (874306-3497222) 627677 (729498-2917992) 392706 (449733-1798932)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C444	Chrysene-d12 Perylene-d12	712187 (729498-2917992) 449639 (449733-1798932)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C371	Phenanthrene-d10 Chrysene-d12	802234 (874306-3497222) 728115 (729498-2917992)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P
C032C373	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12	781329 (791815-3167260) 275825 (343500-1373998) 795503 (874306-349822) 674634 (729498-2917992)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E220168

SDG	Sample	Compound	Flag	A or P	Reason
G2E220168	C032C349 C032C350 C032C351 C032C352 C032C384 C032C385 C032C386 C032C387 C032C441 C032C442 C032C443 C032C444 C032C371 C032C372 C032C373	Anthracene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (RPD)
G2E220168	C032C349 C032C386	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E220168	C032C352 C032C384 C032C441	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E220168	C032C385	Acenaphthylene Acenaphthene Fluorene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E220168	C032C387	Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
G2E220168	C032C442	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E220168	C032C444	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E220168	C032C371	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E220168	C032C373	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E220168

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E220168

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 22, 2002

LDC Report Date: June 11, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E230183

Sample Identification

C032C252
C032C253
C032C254
C032C255
C032C256
C032C253MS
C032C253MSD

Introduction

This data review covers 7 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/25/02	Benzo(g,h,i)perylene	28.4	All samples in SDG G2E230183	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2143513MB	5/23/02	Benzo(g,h,i)perylene	3.7 ug/Kg	All samples in SDG G2E230183

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C252	Benzo(g,h,i)perylene	8.7 ug/Kg	8.7U ug/Kg
C032C253	Benzo(g,h,i)perylene	8.0 ug/Kg	8.0U ug/Kg
C032C254	Benzo(g,h,i)perylene	6.5 ug/Kg	6.5U ug/Kg
C032C255	Benzo(g,h,i)perylene	6.5 ug/Kg	6.5U ug/Kg
C032C256	Benzo(g,h,i)perylene	3.9 ug/Kg	5.9U ug/Kg

Samples C032CR14, C032CR15 and C032CR16 (from SDG #38470) were identified as blanks No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C253MS/MSD (All samples in SDG G2E230183)	Phenanthrene	11 (30-150)	21 (30-150)	-	J (all detects) UJ (all non-detects)	A
	Fluoranthene	19 (30-150)	-	-	J (all detects) UJ (all non-detects)	
C032C253MS/MSD (All samples in SDG G2E230183)	Pyrene	0 (30-150)	13 (30-150)	-	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C255 and C032C256 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C255	C032C256	
Indeno(1,2,3-cd)pyrene	7.3	4.9	39
2-Methylnaphthalene	0.59	0.46	25
Naphthalene	0.91	5.9U	200
Phenanthrene	2.3	1.1	71
Acenaphthene	4.8	2.0	82
Anthracene	1.2	0.47	87
Benzo(a)anthracene	3.3	1.4	81
Benzo(b)fluoranthene	7.1	3.9	58
Benzo(k)fluoranthene	6.7	3.9	53
Benzo(g,h,i)perylene	6.5	4.4	38
Benzo(a)pyrene	8.4	3.4	85
Chrysene	4.3	2.0	73
Dibenz(a,h)anthracene	1.5	5.9U	200
Fluoranthene	7.0	3.3	72
Pyrene	13	7.1	59

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E230183

SDG	Sample	Compound	Flag	A or P	Reason
G2E230183	C032C252 C032C253 C032C254 C032C255 C032C256	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E230183	C032C252 C032C253 C032C254 C032C255 C032C256	Phenanthrene Fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E230183	C032C252 C032C253 C032C254 C032C255 C032C256	Pyrene	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E230183

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E230183	C032C252	Benzo(g,h,i)perylene	8.7U ug/Kg	A
G2E230183	C032C253	Benzo(g,h,i)perylene	8.0U ug/Kg	A
G2E230183	C032C254	Benzo(g,h,i)perylene	6.5U ug/Kg	A
G2E230183	C032C255	Benzo(g,h,i)perylene	6.5U ug/Kg	A
G2E230183	C032C256	Benzo(g,h,i)perylene	5.9U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E230183

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 22, 2002

LDC Report Date: June 11, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E230185

Sample Identification

C032CA95
C032CA96
C032CA01
C032CA02
C032CA03
C032CA04
C032C261
C032C262
C032C263
C032C264
C032C264DL
C032C221
C032C222
C032C223
C032C224
C032C225
C032C221MS
C032C221MSD

Introduction

This data review covers 18 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/25/02	Benzo(g,h,i)perylene	28.4	C032C263 C032C264DL	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2143516MB	5/23/02	Benzo(a)anthracene	0.68 ug/Kg	All samples in SDG G2E230185
		Benzo(b)fluoranthene	0.66 ug/Kg	
		Benzo(k)fluoranthene	1.3 ug/Kg	
		Benzo(g,h,i)perylene	1.1 ug/Kg	
		Benzo(a)pyrene	0.63 ug/Kg	
		Chrysene	0.54 ug/Kg	
		Fluoranthene	0.57 ug/Kg	
		Indeno(1,2,3-cd)pyrene	0.92 ug/Kg	
		2-Methylnaphthalene	0.34 ug/Kg	
		Naphthalene	0.32 ug/Kg	
		Phenanthrene	0.52 ug/Kg	
		Pyrene	0.56 ug/Kg	
		Dibenz(a,h)anthracene	0.77 ug/Kg	

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032CA95	Benzo(a)anthracene	1.30 ug/Kg	5.4U ug/Kg
	Benzo(b)fluoranthene	2.0 ug/Kg	5.4U ug/Kg
	Benzo(k)fluoranthene	1.7 ug/Kg	5.4U ug/Kg
	Benzo(g,h,i)perylene	4.5 ug/Kg	5.4U ug/Kg
	Benzo(a)pyrene	2.4 ug/Kg	5.4U ug/Kg
	Chrysene	2.5 ug/Kg	5.4U ug/Kg
	Fluoranthene	1.8 ug/Kg	5.4U ug/Kg
	Indeno(1,2,3-cd)pyrene	2.8 ug/Kg	5.4U ug/Kg
	2-Methylnaphthalene	0.49 ug/Kg	5.4U ug/Kg
	Naphthalene	0.46 ug/Kg	5.4U ug/Kg
	Phenanthrene	1.9 ug/Kg	5.4U ug/Kg
	Pyrene	2.8 ug/Kg	5.4U ug/Kg
	Dibenz(a,h)anthracene	0.60 ug/Kg	5.4U ug/Kg
C032CA96	Benzo(a)anthracene	3.3 ug/Kg	5.7U ug/Kg
	Benzo(b)fluoranthene	3.0 ug/Kg	5.7U ug/Kg
	Benzo(k)fluoranthene	3.3 ug/Kg	5.7U ug/Kg
	Benzo(g,h,i)perylene	3.8 ug/Kg	5.7U ug/Kg
	Indeno(1,2,3-cd)pyrene	3.6 ug/Kg	5.7U ug/Kg
	2-Methylnaphthalene	0.63 ug/Kg	5.7U ug/Kg
	Naphthalene	0.64 ug/Kg	5.7U ug/Kg
	Dibenz(a,h)anthracene	0.71 ug/Kg	5.7U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032CA01	2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	0.43 ug/Kg 0.53 ug/Kg 2.6 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032CA02	Naphthalene Dibenz(a,h)anthracene	0.51 ug/Kg 4.6 ug/Kg	5.3U ug/Kg 5.3U ug/Kg
C032CA03	2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	0.40 ug/Kg 0.42 ug/Kg 1.9 ug/Kg	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg
C032CA04	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	1.5 ug/Kg 2.1 ug/Kg 2.4 ug/Kg 4.1 ug/Kg 2.0 ug/Kg 2.4 ug/Kg 3.5 ug/Kg 0.44 ug/Kg 3.8 ug/Kg	5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg
C032C262	2-Methylnaphthalene	0.86 ug/Kg	5.5U ug/Kg
C032C263	2-Methylnaphthalene (200x)	200 ug/Kg	1100U ug/Kg
C032C264DL	2-Methylnaphthalene (100x)	52 ug/Kg	570U ug/Kg
C032C221	2-Methylnaphthalene	0.62 ug/Kg	5.3U ug/Kg
C032C222	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Phenanthrene	1.9 ug/Kg 3.3 ug/Kg 3.0 ug/Kg 2.3 ug/Kg 1.7 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C223	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Phenanthrene	1.7 ug/Kg 2.8 ug/Kg 2.3 ug/Kg 2.1 ug/Kg 1.4 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C224	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Fluoranthene Phenanthrene Dibenz(a,h)anthracene	1.2 ug/Kg 2.5 ug/Kg 1.9 ug/Kg 1.5 ug/Kg 2.7 ug/Kg 0.71 ug/Kg 2.8 ug/Kg	5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C225	2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	0.70 ug/Kg 0.61 ug/Kg 2.9 ug/Kg	6.4U ug/Kg 6.4U ug/Kg 6.4U ug/Kg

Samples C032CR14, C032CR15 and C032CR16 (from SDG #38470) were identified as blanks. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C221MS/MSD (All samples in SDG G2E230165)	Phenanthrene	0 (30-150)	1.7 (30-150)	-	J (all detects) R (all non-detects)	A
	Benzo(a)anthracene	0 (30-150)	0 (30-150)	-	J (all detects) R (all non-detects)	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C264	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenz(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C264	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenz(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R R	A

Sample	Compound	Flag	A or P
C032C264DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenz(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C222 and C032C223 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C222	C032C223	
Benzo(a)anthracene	1.9	1.7	11
Benzo(b)fluoranthene	3.3	2.8	16
Benzo(k)fluoranthene	3.0	2.3	26
Benzo(g,h,i)perylene	37	21	55
Benzo(a)pyrene	3.9	3.4	14
Chrysene	2.3	2.1	9
Dibenz(a,h)anthracene	10	4.3	80
Fluoranthene	4.3	3.4	23
Indeno(1,2,3-cd)pyrene	29	15	64
Phenanthrene	1.7	1.4	19

Compound	Concentration (ug/Kg)		RPD
	C032C222	C032C223	
Pyrene	5.5	4.6	18

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E230185

SDG	Sample	Compound	Flag	A or P	Reason
G2E230185	C032C263 C032C264DL	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E230185	C032CA95 C032CA96 C032CA01 C032CA02 C032CA03 C032CA04 C032C261 C032C262 C032C263 C032C264 C032C264DL C032C221 C032C222 C032C223 C032C224 C032C225	Phenanthrene Benzo(a)anthracene	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E230185	C032C264	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenz(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E230185	C032C264	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenz(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
G2E230185	C032C264DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Dibenz(a,h)anthracene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E230185

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E230185	C032CA95	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Naphthalene Phenanthrene Pyrene Dibenz(a,h)anthracene	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A
G2E230185	C032CA96	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg	A
G2E230185	C032CA01	2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230185	C032CA02	Naphthalene Dibenz(a,h)anthracene	5.3U ug/Kg 5.3U ug/Kg	A
G2E230185	C032CA03	2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E230185	C032CA04	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg 5.8U ug/Kg	A
G2E230185	C032C262	2-Methylnaphthalene	5.5U ug/Kg	A
G2E230185	C032C263	2-Methylnaphthalene (200x)	1100U ug/Kg	A
G2E230185	C032C264DL	2-Methylnaphthalene (100x)	570U ug/Kg	A
G2E230185	C032C221	2-Methylnaphthalene	5.3U ug/Kg	A
G2E230185	C032C222	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Phenanthrene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230185	C032C223	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Phenanthrene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230185	C032C224	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Fluoranthene Phenanthrene Dibenz(a,h)anthracene	5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg 5.6U ug/Kg	A
G2E230185	C032C225	2-Methylnaphthalene Naphthalene Dibenz(a,h)anthracene	6.4U ug/Kg 6.4U ug/Kg 6.4U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E230185

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 22, 2002

LDC Report Date: June 11, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E230192

Sample Identification

C032C445
C032C446
C032C448
C032C449
C032C447
C032C415
C032C416
C032C417
C032C418
C032CA45
C032CA46
C032CA47
C032CA48
C032CA93
C032CA94
C032C415MS
C032C415MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/24/02	Phenanthrene	26.1	All samples in SDG G2E230192	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2143522MB	5/23/02	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	1.7 ug/Kg 0.71 ug/Kg 0.83 ug/Kg 0.56 ug/Kg 0.49 ug/Kg	All samples in SDG G2E230192

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C445	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	7.1 ug/Kg 0.62 ug/Kg 1.3 ug/Kg	7.1U ug/Kg 5.4U ug/Kg 5.4U ug/Kg
C032C446	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	0.92 ug/Kg 0.99 ug/Kg 0.89 ug/Kg 0.36 ug/Kg 0.32 ug/Kg	5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg
C032C448	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	2.5 ug/Kg 2.3 ug/Kg 1.9 ug/Kg 0.34 ug/Kg 0.54 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C447	2-Methylnaphthalene Dibenz(a,h)anthracene	0.41 ug/Kg 0.43 ug/Kg	5.9U ug/Kg 5.9U ug/Kg
C032C415	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	7.0 ug/Kg 1.3 ug/Kg 1.7 ug/Kg	7.0U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C416	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	3.7 ug/Kg 0.79 ug/Kg 1.9 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C417	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	3.2 ug/Kg 0.49 ug/Kg 1.3 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032C418	Benzo(k)fluoranthene Dibenz(a,h)anthracene	4.6 ug/Kg 1.3 ug/Kg	5.9U ug/Kg 5.9U ug/Kg
C032CA45	2-Methylnaphthalene	0.88 ug/Kg	5.5U ug/Kg
C032CA46	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	1.9 ug/Kg 3.2 ug/Kg 2.6 ug/Kg 0.37 ug/Kg	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg
C032CA47	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	7.2 ug/Kg 0.32 ug/Kg 1.8 ug/Kg	7.2U ug/Kg 5.4U ug/Kg 5.4U ug/Kg
C032CA48	Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	2.5 ug/Kg 3.9 ug/Kg 0.45 ug/Kg 0.33 ug/Kg	6.2U ug/Kg 6.2U ug/Kg 6.2U ug/Kg 6.2U ug/Kg
C032CA93	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	1.9 ug/Kg 0.41 ug/Kg 1.1 ug/Kg	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg
C032CA94	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	1.9 ug/Kg 1.7 ug/Kg 1.6 ug/Kg 0.53 ug/Kg	5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg

Samples C032CR14, C032CR15 and C032CR16 (from SDG #38470) were identified as blanks. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C449 and C032C447 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C449	C032C447	
Benzo(a)pyrene	1.9	3.1	48
Dibenz(a,h)anthracene	6.0U	0.43	200

Compound	Concentration (ug/Kg)		RPD
	C032C449	C032C447	
2-Methylnaphthalene	6.0U	0.41	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E230192

SDG	Sample	Compound	Flag	A or P	Reason
G2E230192	C032C445 C032C446 C032C448 C032C449 C032C447 C032C415 C032C416 C032C417 C032C418 C032CA45 C032CA46 C032CA47 C032CA48 C032CA93 C032CA94	Phenanthrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E230192

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E230192	C032C445	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	7.1U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A
G2E230192	C032C446	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg 5.2U ug/Kg	A
G2E230192	C032C448	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230192	C032C447	2-Methylnaphthalene Dibenz(a,h)anthracene	5.9U ug/Kg 5.9U ug/Kg	A
G2E230192	C032C415	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	7.0U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230192	C032C416	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E230192	C032C417	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230192	C032C418	Benzo(k)fluoranthene Dibenz(a,h)anthracene	5.9U ug/Kg 5.9U ug/Kg	A
G2E230192	C032CA45	2-Methylnaphthalene	5.5U ug/Kg	A
G2E230192	C032CA46	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A
G2E230192	C032CA47	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	7.2U ug/Kg 5.4U ug/Kg 5.4U ug/Kg	A
G2E230192	C032CA48	Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene 2-Methylnaphthalene Dibenz(a,h)anthracene	6.2U ug/Kg 6.2U ug/Kg 6.2U ug/Kg 6.2U ug/Kg	A
G2E230192	C032CA93	Benzo(k)fluoranthene 2-Methylnaphthalene Dibenz(a,h)anthracene	5.3U ug/Kg 5.3U ug/Kg 5.3U ug/Kg	A
G2E230192	C032CA94	Benzo(k)fluoranthene Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg 5.7U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E230192

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 13, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38345

Sample Identification

C032C785
C032C786
C032C787
C032C787DL
C032C788
C032C767
C032C767RE
C032C768
C032C769
C032C770
C032C771
C032C816
C032C817
C032C818
C032C819
C032C847
C032C848
C032C849
C032C850
C032C794
C032C794RE
C032C795
C032C796
C032C797
C032C848MS
C032C848MSD

Introduction

This data review covers 26 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR05, C032CR03 and C032CR04 (from SDG #K2203084) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR05	5/13/02	Naphthalene Phenanthrene Chrysene	0.0036 ug/L 0.0086 ug/L 0.0023 ug/L	All samples in SDG 38345
C032CR03	5/13/02	Naphthalene Phenanthrene 2-Methylnaphthalene	0.0058 ug/L 0.0036 ug/L 0.0030 ug/L	All samples in SDG 38345
C032CR04	5/13/02	Naphthalene	0.0047 ug/L	All samples in SDG 38345

Sample C032CF02 (from SDG #K2203084) was identified as a field source blank. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Field Source Blank ID	Sampling Date	Compound	Concentration	Associated Samples
C032CF02	5/13/02	Naphthalene	0.0042 ug/L	All samples in SDG 38345

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C767RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P
C032C785 C032C786 C032C787 C032C787DL C032C788 C032C767 C032C768 C032C769 C032C770 C032C771 C032C816 C032C817 C032C818 C032C819 C032C847 C032C848 C032C849 C032C850 C032C794 C032C794RE C032C795 C032C796 C032C797	All TCL compounds	More than twenty samples associated to a matrix spike sample.	No more than twenty samples to be associated to a matrix spike sample.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C848MS/MSD	Anthracene	-	-	39.8 (≤30)	J (all detects)	A
(C032C785	Benzo(a)anthracene	-	-	31.6 (≤30)	UJ (all non-detects)	
C032C786	Benzo(a)pyrene	-	138 (31-135)	35.3 (≤30)		
C032C787	Chrysene	-	155 (45-143)	47.6 (≤30)		
C032C787DL	Fluoranthene	-	199 (37-135)	67.6 (≤30)		
C032C788	Phenanthrene	-	-	41.3 (≤30)		
C032C767	Pyrene	-	244 (37-146)	68.4 (≤30)		
C032C768 C032C769 C032C770 C032C771 C032C816 C032C817 C032C818 C032C819 C032C847 C032C848 C032C849 C032C850 C032C794 C032C794RE C032C795 C032C796 C032C797)						

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C787	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C787	Benzo(a)anthracene	R	A
	Benzo(a)pyrene	R	
	Benzo(b)fluoranthene	R	
	Benzo(k)fluoranthene	R	
	Benzo(g,h,i)perylene	R	
	Chrysene	R	
	Fluoranthene	R	
	Indeno(1,2,3-cd)pyrene	R	
	Phenanthrene	R	
	Pyrene	R	
C032C767RE C032C794RE	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C768 and C032C769 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C768	C032C769	
Benzo(a)anthracene	27.0	29.0	7
Indeno(1,2,3-cd)pyrene	30.0	31.0	3
Benzo(a)pyrene	5.3U	23.0	200

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Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38345

SDG	Sample	Compound	Flag	A or P	Reason
38345	C032C785 C032C786 C032C787 C032C787DL C032C788 C032C767 C032C767RE C032C768 C032C769 C032C770 C032C771 C032C816 C032C817 C032C818 C032C819 C032C847 C032C848 C032C849 C032C850 C032C794 C032C794RE C032C795 C032C796 C032C797	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38345	C032C785 C032C786 C032C787 C032C787DL C032C788 C032C767 C032C768 C032C769 C032C770 C032C771 C032C816 C032C817 C032C818 C032C819 C032C847 C032C848 C032C849 C032C850 C032C794 C032C794RE C032C795 C032C796 C032C797	Anthracene Benzo(a)anthracene Benzo(a)pyrene Chrysene Fluoranthene Phenanthrene Pyrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)

SDG	Sample	Compound	Flag	A or P	Reason
38345	C032C787	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
38345	C032C787	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R	A	Overall assessment of data
38345	C032C767RE C032C794RE	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38345

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38345

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 14, 2002

LDC Report Date: June 11, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38357

Sample Identification

C032C891
C032C892
C032C893
C032C894
C032C930
C032C931
C032C932
C032C933
C032C934
C032C899
C032C900
C032C901
C032C902
C032C903
C032C983
C032C984
C032C985
C032C986
C032C902MS
C032C902MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR06 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR06	5/14/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0074 ug/L 0.0031 ug/L 0.0015 ug/L	All samples in SDG 38357

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C902MS/MSD (All samples in SDG 38357)	Acenaphthylene	137 (37-135)	-	-	J (all detects)	A
C032C902MS/MSD (All samples in SDG 38357)	Benzo(a)anthracene	-	-	65.8 (≤30)	J (all detects)	A
	Benzo(a)pyrene	-	-	62.3 (≤30)	UJ (all non-detects)	
	Benzo(b)fluoranthene	-	-	58.9 (≤30)		
	Benzo(g,h,i)perylene	-	-	50.6 (≤30)		
	Benzo(k)fluoranthene	-	-	64.0 (≤30)		
	Chrysene	-	-	70.0 (≤30)		
	Fluoranthene	-	-	94.9 (≤30)		
	Indeno(1,2,3-cd)pyrene	-	-	55.5 (≤30)		
	Phenanthrene	-	-	103.6 (≤30)		
	Pyrene	-	-	86.9 (≤30)		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
020515ALCS	2-Methylnaphthalene Naphthalene	23.3 (40-135) 24.2 (40-135)	All samples in SDG 38357	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C933 and C032C934 and samples C032C900 and C032C901 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C933	C032C934	
Anthracene	2.2	1.7	26
Benzo(a)anthracene	17.0	14.0	19
Benzo(a)pyrene	36.0	33.0	9
Benzo(b)fluoranthene	24.0	22.0	9
Benzo(g,h,i)perylene	39.0	37.0	5
Benzo(k)fluoranthene	18.0	16.0	12
Chrysene	21.0	18.0	15
Dibenz(a,h)anthracene	3.8	3.6	5
Fluoranthene	45.0	37.0	20
Indeno(1,2,3-cd)pyrene	28.0	26.0	7
Pyrene	59.0	50.0	16

Compound	Concentration (ug/Kg)		RPD
	C032C900	C032C901	
Acenaphthene	9.3	5.8U	200
Acenaphthylene	18.0	5.8U	200
Benzo(a)anthracene	150.0	310.0	70
Benzo(a)pyrene	280.0	500.0	56
Benzo(b)fluoranthene	190.0	330.0	54

Compound	Concentration (ug/Kg)		RPD
	C032C900	C032C901	
Benzo(g,h,i)perylene	290.0	450.0	43
Benzo(k)fluoranthene	160.0	300.0	61
Chrysene	170.0	310.0	58
Fluoranthene	410.0	940.0	78
Indeno(1,2,3-cd)pyrene	220.0	360.0	48
Phenanthrene	160.0	410.0	88
Pyrene	520.0	120.0	125

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38357

SDG	Sample	Compound	Flag	A or P	Reason
38357	C032C891 C032C892 C032C893 C032C894 C032C930 C032C931 C032C932 C032C933 C032C934 C032C899 C032C900 C032C901 C032C902 C032C903 C032C983 C032C984 C032C985 C032C986	Acenaphthylene	J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)
38357	C032C891 C032C892 C032C893 C032C894 C032C930 C032C931 C032C932 C032C933 C032C934 C032C899 C032C900 C032C901 C032C902 C032C903 C032C983 C032C984 C032C985 C032C986	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (RPD)
38357	C032C891 C032C892 C032C893 C032C894 C032C930 C032C931 C032C932 C032C933 C032C934 C032C899 C032C900 C032C901 C032C902 C032C903 C032C983 C032C984 C032C985 C032C986	2-Methylnaphthalene Naphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38357

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38357

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 15, 2002

LDC Report Date: June 11, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38369

Sample Identification

C032C186	C032CA74
C032C186RE	C032CA75
C032C187	C032CA75RE
C032C187RE	C032CA76
C032C188	C032CA77
C032C189	C032CA78
C032C190	C032CA76MS
C032C081	C032CA76MSD
C032C082	
C032C083	
C032C084	
C032CA80	
C032CA81	
C032CA81RE	
C032CA82	
C032CA71	
C032CA72	
C032CA72RE	
C032CA73	
C032CA73RE	

Introduction

This data review covers 28 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990.

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR08 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR08	5/15/02	Naphthalene Phenanthrene Fluoranthene Chrysene	0.0070 ug/L 0.0034 ug/L 0.0033 ug/L 0.0019 ug/L	All samples in SDG 38369

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032C18[illegible]	2-Fluorobiphenyl Nitrobenzene-d5 Terphenyl-d14	41.0 (54-125) 36.8 (49-121) 40.4 (57-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C186RE C032C187RE C032CA81RE C032CA72R[illegible] C032CA73RE C032CA75RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CA76MS/MSD	Acenaphthylene	-	-	34.5 (≤30)	J (all detects)	A
(C032C186	Benzo(a)anthracene	237 (41-143)	-	75.5 (≤30)	UJ (all non-detects)	
C032C187	Benzo(a)pyrene	257 (31-135)	-	90.6 (≤30)		
C032C188	Benzo(b)fluoranthene	178 (27-135)	-	62.2 (≤30)		
C032C189	Benzo(g,h,i)perylene	174 (25-159)	-	61.4 (≤30)		
C032C190	Benzo(k)fluoranthene	209 (53-117)	-	71.8 (≤30)		
C032C081	Chrysene	261 (45-143)	-	86.4 (≤30)		
C032C082	Fluoranthene	236 (37-135)	-	77.9 (≤30)		
C032C083	Indeno(1,2,3-cd)pyrene	-	-	50.8 (≤30)		
C032C084	Phenanthrene	-	-	36.3 (≤30)		
C032CA80	Pyrene	376 (37-146)	-	107.2 (≤30)		
C032CA81						
C032CA82						
C032CA71						
C032CA72						
C032CA73						
C032CA74						
C032CA75						
C032CA76						
C032CA77						
C032CA78)						

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CA72	Perylene-d12	245014 (246935-987738)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CA73	Perylene-d12	225196 (246935-987738)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CA75	Perylene-d12	227040 (246935-987738)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CA78	Perylene-d12	243068 (246935-987738)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C186RE C032C187 C032CA81RE	All TCL compounds	R	A

Sample	Compound	Flag	A or P
C032CA72 C032CA73 C032CA75	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A
C032CA72RE C032CA73RE C032CA75RE	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C189 and C032C190 and samples C032CA76 and C032CA77 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CA76	C032CA77	
Benzo(a)anthracene	5.5	4.1	29
Benzo(a)pyrene	6.7	5.6	18
Benzo(b)fluoranthene	5.3	4.1	26
Benzo(g,h,i)perylene	3.8	3.2	17
Benzo(k)fluoranthene	5.2	4.2	21
Chrysene	5.8	4.4	27
Fluoranthene	10.0	9.1	9
Indeno(1,2,3-cd)pyrene	2.7	2.0	30
Phenanthrene	4.4	5.5U	200

Compound	Concentration (ug/Kg)		RPD
	C032CA76	C032CA77	
Pyrene	1.9	13.0	149

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38369

SDG	Sample	Compound	Flag	A or P	Reason
38369	C032C187	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate recovery (%R)
38369	C032C186RE C032C187RE C032CA81RE C032CA72RE C032CA73RE C032CA75RE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38369	C032C186 C032C187 C032C188 C032C189 C032C190 C032C081 C032C082 C032C083 C032C084 C032CA80 C032CA81 C032CA82 C032CA71 C032CA72 C032CA73 C032CA74 C032CA75 C032CA76 C032CA77 C032CA78	Acenaphthylene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
38369	C032CA72 C032CA73 C032CA75	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
38369	C032CA78	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
38369	C032C186RE C032C187 C032CA81RE	All TCL compounds	R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
38369	C032CA72 C032CA73 C032CA75	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A	Overall assessment of data
38369	C032CA72RE C032CA73RE C032CA75RE	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38369

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38369

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 17, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38393

Sample Identification

C032C274
C032C275
C032C276
C032C277
C032C278
C032C177
C032C177DL
C032C178
C032C179
C032C180
C032C181
C032C807
C032C808
C032C809
C032C810
C032C833
C032C834
C032C835
C032C836
C032C837
C032C831
C032C807MS
C032C807MSD

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR10 (from SDG #K2203084) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR010	5/17/02	Naphthalene 2-Methylnaphthalene	0.0054 ug/L 0.0032 ug/L	All samples in SDG 38393

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032C177 and C032C177DL. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C831	Perylene-d12	154090 (179490-717962)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C177DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C277 and C032C278, samples C032C178 and C032C179 and samples C032C834 and C032C835 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C178	C032C179	
Chrysene	1.6	1.7	6
Phenanthrene	1.8	1.9	5
Pyrene	1.8	5.2U	200
Anthracene	5.2U	2.9	200
Benzo(a)pyrene	5.2U	3.3	200
Benzo(b)fluoranthene	5.2U	3.1	200
Benzo(g,h,i)perylene	5.2U	5.4	200
Benzo(k)fluoranthene	5.2U	2.7	200
Dibenz(a,h)anthracene	5.2U	5.3	200
Indeno(1,2,3-cd)pyrene	5.2U	5.7	200

Compound	Concentration (ug/Kg)		RPD
	C032C834	C032C835	
Benzo(a)pyrene	5.4U	1.3	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38393

SDG	Sample	Compound	Flag	A or P	Reason
38393	C032C831	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
38393	C032C177DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38393

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38393

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 22, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38435

Sample Identification

C032C410
C032C411
C032C412
C032C413
C032C414
C032C454
C032C455
C032C456
C032C457
C032C458
C032C226
C032C227
C032C228
C032C229
C032C292
C032C293
C032C294
C032C295
C032C412MS
C032C412MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR14, C032CR15 and C032CR16 (from SDG #38470) were identified as blanks. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
020523ALCS	Acenaphthylene	36.7 (37-135)	All samples in SDG 38435	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C413 and C032C414 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C413	C032C414	
Benzo(a)pyrene	1.8	5.9U	200
Benzo(g,h,i)perylene	1.5	5.9U	200
Fluoranthene	1.8	2.0	10
Pyrene	2.5	2.1	17
Chrysene	5.8U	1.8	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38435

SDG	Sample	Compound	Flag	A or P	Reason
38435	C032C410 C032C411 C032C412 C032C413 C032C414 C032C454 C032C455 C032C456 C032C457 C032C458 C032C226 C032C227 C032C228 C032C229 C032C292 C032C293 C032C294 C032C295	Acenaphthylene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38435

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38435

No Sample Data Qualified in this SDG

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760 634-0439

Bechtel Environmental
1230 Columbia Street, Suite 400
San Diego, CA 92101
Attn: Mr James Jordan

June 18, 2002

Project Name : NAS Alameda Point
Project # : CTO 032

On June 11, 2002 the following data packages were received by Laboratory Data Consultants, Inc. from Bechtel Environmental. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 8589:

SDG #	Fraction
K2203270, K2203271, K2203301, K2203302, K2203340, K2203342, K2203374, K2203375, K2203407, K2203408, G2E150186, G2E160197, G2E170200, G2E170207, G2E250150, 38382, 38406, 38422, 38451, 38461, 38470, 38473	Polynuclear Aromatic Hydrocarbons

The above SDGs were reviewed using Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- NFESC Special Publication SP-2056-ENV, Navy Installation Restoration Chemical Data Quality Manual, Naval Facilities Engineering Command, September 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

The data validators did utilize their professional judgement when evaluating the data to achieve the most complete and accurate assessment of the data. The data packages were reviewed according to the above stated validation procedures.

For GC/MS polynuclear aromatic hydrocarbon analyses, the primary findings consisted of:

a) Continuing calibration factors exceeded acceptance criteria in SDGs G3E150186, G2E170207, G2E170200 and G2E160197. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Matrix spike/matrix spike duplicate sample analyses were not performed for all batches in SDGs G2E160197, 38473, 38461, 38451 and 38382.

c) Matrix spike/matrix spike duplicate percent recoveries and relative percent differences exceeded acceptance criteria for several compounds in SDGs G2E170207, 38382 and 38451, benzo(b)fluoranthene and pyrene in SDG G2E170200, chrysene in SDG G2E250150 and dibenz(a,h)anthracene in SDG K2203301. The associated nondetect results for acenaphthylene, dibenz(a,h)anthracene and anthracene in SDG G2E170207 and fluoranthene and pyrene in SDG 38451 were qualified as unusable. Since the laboratory met the protocol requirement, this finding should be considered advisory.

d) Laboratory control sample percent recoveries exceeded acceptance criteria for acenaphthylene in SDG 38406 and 2-methylnaphthalene and naphthalene in SDG 38451.

e) Surrogate percent recoveries exceeded acceptance criteria for samples C032CD47 and C032CD47RE in SDG 38473, sample C032CC02 in SDG 38451 and sample C032CA28 in SDG 38382. The associated nondetect results for sample C032CC02 in SDG 38451 were qualified as unusable. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Internal standard areas exceeded acceptance criteria for sample C032C287DL in SDG G2E150186, sample C032CB66DL in SDG G2E170200, samples C032C239DL and C032CB56DL in SDG 38382, sample C032C460 in SDG 38406, sample C032C702 in SDG G2E250150, C032C199 in SDG K2203375 and several samples in SDG 38461. The associated nondetect results for sample C032C199 were qualified as unusable in SDG K2203375. Since the laboratory met the protocol requirement, this finding should be considered advisory.

g) Internal standard areas exceeded acceptance criteria for samples C032C703 and C032C704 in SDG G2E250150, sample C032C241 in SDG 38382 and several samples in SDGs G2E150186, G2E170207 and G2E170200.

h) Several volatile contaminants were detected in the method blanks. Since the laboratory met the protocol requirement, this finding should be considered advisory.

i) Phenanthrene in SDG 38473, several compounds in SDGs K2203375, K2203271, K2203407, G2E170207 and 38382 were reported above the calibration range. Since the laboratory met the protocol requirement, this finding should be considered advisory.

j) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

In general, the data for all analyses appear usable with the limitations noted in the Data Validation Reports. Data validation flags were noted on the Laboratory Form 1s and included with each validation report.

Sincerely,

Richard M. Amano
President/Principal Chemist

1 Week TAT

LDC #8589 (Bechtel Environmental-San Diego / Alameda Point, CTO 32)

LDC	SDG#	DATE REC'D	DATE DUE	PAHs (8270-SIM)																													
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2203270	6-11-02	6-18-02	0	21																												
B	K2203271	6-11-02	6-18-02	0	23																												
C	K2203301	6-11-02	6-18-02	0	22																												
D	K2203302	6-11-02	6-18-02	0	22																												
E	K2203340	6-11-02	6-18-02	0	18																												
F	K2203342	6-11-02	6-18-02	0	20																												
G	K2203374	6-11-02	6-18-02	0	20																												
H	K2203375	6-11-02	6-18-02	0	23																												
I	K2203407	6-11-02	6-18-02	0	22																												
J	K2203408	6-11-02	6-18-02	0	21																												
K	G2E150186	6-11-02	6-18-02	0	26																												
L	G2E160197	6-11-02	6-18-02	0	16																												
M	G2E170200	6-11-02	6-18-02	0	19																												
N	G2E170207	6-11-02	6-18-02	0	22																												
O	G2E250150	6-11-02	6-18-02	0	12																												
P	38382	6-11-02	6-18-02	0	27																												
Q	38406	6-11-02	6-18-02	0	22																												
R	38422	6-11-02	6-18-02	0	21																												
S	38451	6-11-02	6-18-02	0	21																												
T	38461	6-11-02	6-18-02	0	27																												
U	38470	6-11-02	6-18-02	8	0																												
V	38473	6-11-02	6-18-02	0	25																												
otal	B			8	450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Level IV validation (all other cells are Level III validation)

Alameda Point, CTO 32
Data Validation Reports
LDC# 8589

Polynuclear Aromatic Hydrocarbons

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203270

Sample Identification

C032C428
C032C429
C032C430
C032C431
C032C476
C032C477
C032C478
C032C479
C032C480
C032C067
C032C068
C032C069
C032C070
C032C071
C032C138
C032C139
C032C140
C032C141
C032C916
C032C916MS
C032C916MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR011 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C479 and C032C480 and samples C032C068 and C032C069 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203270

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203270

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203270

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203271

Sample Identification

C032CA89	C032C915
C032CA90	C032C915MS
C032CA91	C032C915MSD
C032CA92	
C032CB46	
C032CB47	
C032CB48	
C032CB49	
C032CB49DL	
C032C851	
C032C852	
C032C853	
C032C854	
C032C908	
C032C909	
C032C910	
C032C911	
C032C912	
C032C913	
C032C914	

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR011 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CB49	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(a)pyrene Benzo(g,h,i)perylene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CB49	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(a)pyrene Benzo(g,h,i)perylene	R R R R R R R	A
C032CB49DL	All TCL compounds except Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(a)pyrene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C911 and C032C912 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203271

SDG	Sample	Compound	Flag	A or P	Reason
K2203271	C032CB49	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(a)pyrene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203271	C032CB49	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(a)pyrene Benzo(g,h,i)perylene	R R R R R R R	A	Overall assessment of data
K2203271	C032CB49DL	All TCL compounds except Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(a)pyrene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203271

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203271

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 21, 2002

LDC Report Date: June 14, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203301

Sample Identification

C032C054
C032C055
C032C056
C032C057
C032C058
C032C089
C032C090
C032C091
C032C092
C032C093
C032C952
C032C953
C032C954
C032C955
C032C956
C032C917
C032C918
C032C919
C032C920
C032C129
C032C129MS
C032C129MSD

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
KWG020308-5	5/22/02	Indeno(1,2,3-cd)pyrene	0.60 ug/Kg	All samples in SDG K2203301

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C057	Indeno(1,2,3-cd)pyrene	1.7 ug/Kg	5.9U ug/Kg
C032C952	Indeno(1,2,3-cd)pyrene	1.8 ug/Kg	5.7U ug/Kg
C032C919	Indeno(1,2,3-cd)pyrene	1.4 ug/Kg	5.6U ug/Kg
C032C920	Indeno(1,2,3-cd)pyrene	1.6 ug/Kg	6.1U ug/Kg
C032C129	Indeno(1,2,3-cd)pyrene	1.8 ug/Kg	5.3U ug/Kg

Samples C032CR12 and C032CR13 (from SDG #38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C129MS/MSD (All samples in SDG K2203301)	Dibenz(a,h)anthracene	-	59 (61-144)	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C057 and C032C058, samples C032C090 and C032C091 and samples C032C955 and C032C956 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C057	C032C058	
Indeno(1,2,3-cd)pyrene	1.7	5.9U	200
Benzo(g,h,i)perylene	2.2	5.9U	200

Compound	Concentration (ug/Kg)		RPD
	C032C057	C032C058	
Pyrene	5.9U	2.6	200

Compound	Concentration (ug/Kg)		RPD
	C032C090	C032C091	
Phenanthrene	6.2	8.4	30
Fluoranthene	27	35	26
Pyrene	35	38	8
Benzo(a)anthracene	19	22	15
Chrysene	28	30	7
Benzo(b)fluoranthene	35	37	6
Benzo(k)fluoranthene	27	26	4
Benzo(a)pyrene	26	27	4
Indeno(1,2,3-cd)pyrene	25	28	11
Dibenz(a,h)anthracene	5.4	4.9	10
Benzo(g,h,i)perylene	21	29	32

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203301

SDG	Sample	Compound	Flag	A or P	Reason
K2203301	C032C054 C032C055 C032C056 C032C057 C032C058 C032C089 C032C090 C032C091 C032C092 C032C093 C032C952 C032C953 C032C954 C032C955 C032C956 C032C917 C032C918 C032C919 C032C920 C032C129	Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203301

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
K2203301	C032C057	Indeno(1,2,3-cd)pyrene	5.9U ug/Kg	A
K2203301	C032C952	Indeno(1,2,3-cd)pyrene	5.7U ug/Kg	A
K2203301	C032C919	Indeno(1,2,3-cd)pyrene	5.6U ug/Kg	A
K2203301	C032C920	Indeno(1,2,3-cd)pyrene	6.1U ug/Kg	A
K2203301	C032C129	Indeno(1,2,3-cd)pyrene	5.3U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203301

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 21, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203302

Sample Identification

C032C130	C032C409MS
C032C131	C032C409MSD
C032C132	
C032C485	
C032C486	
C032C487	
C032C488	
C032C353	
C032C354	
C032C355	
C032C356	
C032C366	
C032C367	
C032C368	
C032C369	
C032C370	
C032C406	
C032C407	
C032C408	
C032C409	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR12 and C032CR13 (from SDG 38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C369 and C032C370 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203302

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203302

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203302

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 22, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203340

Sample Identification

C032C450
C032C451
C032C452
C032C453
C032C494
C032C495
C032C496
C032C497
C032C195
C032C196
C032C197
C032C198
C032C257
C032C258
C032C259
C032C260
C032C260MS
C032C260MSD

Introduction

This data review covers 18 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR014, C032CR015 and C032CR016 (from SDG 38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203340

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203340

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203340

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20 through May 22, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203342

Sample Identification

C032CA36
C032CA37
C032CA38
C032CA39
C032CA97
C032CA98
C032CA99
C032CA00
C032CBC1
C032CA40
C032CA41
C032CA42
C032CA43
C032CA44
C032CA05
C032CA06
C032CA07
C032CA08
C032CA08MS
C032CA08MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0 05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR14, C032CR15, C032CR16 and C032CR011 (from SDG 38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CA98 and C032CA99 and samples C032CA43 and C032CA44 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CA98	C032CA99	
Fluoranthene	1.7	4.9	97
Pyrene	2.0	6.7	74
Benzo(a)anthracene	5.4U	2.9	200
Chrysene	5.4U	3.6	200
Benzo(b)fluoranthene	5.4U	3.6	200
Benzo(k)fluoranthene	5.4U	2.9	200
Benzo(a)pyrene	5.4U	4.9	200
Indeno(1,2,3-cd)pyrene	1.7	4.8	95
Benzo(g,h,i)perylene	2.3	5.5	82

Compound	Concentration (ug/Kg)		RPD
	C032CA43	C032CA44	
Fluoranthene	5.7	2.5	85
Pyrene	7.8	3.7	71
Benzo(a)anthracene	2.1	6.2U	200
Chrysene	2.6	6.2U	200
Benzo(b)fluoranthene	3.6	1.9	62
Benzo(k)fluoranthene	2.8	6.2U	200
Benzo(a)pyrene	5.4	2.7	67

Compound	Concentration (ug/Kg)		RPD
	C032CA43	C032CA44	
Indeno(1,2,3-cd)pyrene	5.4	2.6	70
Benzo(g,h,i)perylene	5.7	3.0	62

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203342

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203342

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203342

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 23, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203374

Sample Identification

C032CA54
C032CA55
C032CA56
C032CA57
C032C463
C032C464
C032C465
C032C466
C032CB06
C032CB07
C032CB08
C032CB09
C032CB10
C032CC38
C032CC39
C032CC40
C032CC41
C032CC42
C032CA54MS
C032CA54MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR17 (from SDG 38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CB09 and C032CB10 and samples C032CC41 and C032CC42 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CB09	C032CB10	
Fluoranthene	2.1	6.0U	200
Pyrene	4.1	3.0	31
Benzo(b)fluoranthene	1.6	6.0U	200
Indeno(1,2,3-cd)pyrene	2.2	1.9	15
Benzo(g,h,i)perylene	2.5	2.1	17

Compound	Concentration (ug/Kg)		RPD
	C032CC41	C032CC42	
Naphthalene	7.2	7.3	
Acenaphthylene	4.0	3.6	10
Fluorene	1.6	2.0	22
Phenanthrene	14	13	7
Anthracene	5.2	5.6	7
Fluoranthene	59	58	2
Pyrene	110	120	9
Benzo(a)anthracene	29	27	7
Chrysene	39	37	5
Benzo(b)fluoranthene	46	45	2
Benzo(k)fluoranthene	38	38	0

Compound	Concentration (ug/Kg)		RPD
	C032CC41	C032CC42	
Benzo(a)pyrene	68	64	6
Indeno(1,2,3-cd)pyrene	70	65	7
Dibenz(a,h)anthracene	5.8	6.0	3
Benzo(g,h,i)perylene	77	77	0

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203374

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203374

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203374

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 23, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): K2203375

Sample Identification

C032C265	C032C304
C032C266	C032C304MS
C032C267	C032C304MSD
C032C268	
C032C269	
C032C199	
C032C199DL	
C032C200	
C032C201	
C032C202	
C032C202DL	
C032C203	
C032C331	
C032C332	
C032C333	
C032C334	
C032C335	
C032C301	
C032C302	
C032C303	

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR17 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for sample C032C199DL . Since the sample was diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C199	Chrysene-d12	13789 (100514-402056)	Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	A
C032C199	Perylene-d12	939 (59836-239342)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) R (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C199	Phenanthrene Fluoranthene Pyrene Chrysene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032C202	Benzo(b)fluoranthene Benzo(a)pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C199	All TCL compounds except Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Anthracene	R	A
C032C199DL	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Anthracene	R R R R R R	A
C032C202	Benzo(b)fluoranthene Benzo(a)pyrene	R R	A

Sample	Compound	Flag	A or P
C032C202DL	All TCL compounds except Benzo(b)fluoranthene Benzo(a)pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C266 and C032C267, samples C032C200 and C032C201 and samples C032C332 and C032C333 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C200	C032C201	
Naphthalene	3.7	2.6	35
2-Methylnaphthalene	3.8	3.2	17
Acenaphthene	5.5	3.2	53
Fluorene	3.8	2.5	41
Phenanthrene	43	25	53
Anthracene	9.8	5.3	60
Fluoranthene	170	110	43
Pyrene	160	110	37
Benzo(a)anthracene	140	110	24
Chrysene	180	130	32
Benzo(b)fluoranthene	300	240	22
Benzo(k)fluoranthene	110	79	33
Benzo(a)pyrene	250	200	22

Compound	Concentration (ug/Kg)		RPD
	C032C200	C032C201	
Indeno(1,2,3-cd)pyrene	210	170	21
Dibenz(a,h)anthracene	39	33	17
Benzo(g,h,i)perylene	150	130	14

Compound	Concentration (ug/Kg)		RPD
	C032C332	C032C333	
Fluoranthene	4.5	6.0U	200
Pyrene	6.5	6.0U	200
Benzo(a)anthracene	2.3	6.0U	200
Chrysene	2.2	6.0U	200
Benzo(b)fluoranthene	3.9	6.0U	200
Benzo(a)pyrene	4.1	6.0U	200
Indeno(1,2,3-cd)pyrene	3.8	6.0U	200
Benzo(g,h,i)perylene	3.3	6.0U	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203375

SDG	Sample	Compound	Flag	A or P	Reason
K2203375	C032C199	Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
K2203375	C032C199	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) R (all non-detects)	A	Internal standards (area)
K2203375	C032C199	Phenanthrene Fluoranthene Pyrene Chrysene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203375	C032C202	Benzo(b)fluoranthene Benzo(a)pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203375	C032C199	All TCL compounds except Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Anthracene	R	A	Overall assessment of data
K2203375	C032C199DL	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Anthracene	R R R R R R	A	Overall assessment of data
K2203375	C032C202	Benzo(b)fluoranthene Benzo(a)pyrene	R R	A	Overall assessment of data
K2203375	C032C202DL	All TCL compounds except Benzo(b)fluoranthene Benzo(a)pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203375

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203375

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 24, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): K2203407

Sample Identification

C032CC78	C032C698MS
C032CC79	C032C698MSD
C032CC80	
C032CC81	
C032CD17	
C032CD18	
C032CD19	
C032CD20	
C032CD21	
C032C270	
C032C271	
C032C272	
C032C273	
C032C169	
C032C169DL	
C032C170	
C032C171	
C032C172	
C032C697	
C032C698	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR18 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR18	5/24/02	Phenanthrene Benzo(k)fluoranthene	0.019 ug/L 0.019 ug/L	All samples in SDG K2203407

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C169	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C169	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A
C032C169DL	All TCL compounds except Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CD18 and C032CD19 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CD18	C032CD19	
Acenaphthene	1.7	5.8U	200
Acenaphthylene	2.1	5.8U	200
Fluorene	3.2	5.8U	200
Phenanthrene	53	10	136
Anthracene	8.0	2.3	111
Fluoranthene	92	22	123
Pyrene	94	27	111
Benzo(a)anthracene	49	11	127
Chrysene	56	12	129
Benzo(b)fluoranthene	76	14	138
Benzo(k)fluoranthene	24	3.8	145
Benzo(a)pyrene	71	14	134
Indeno(1,2,3-cd)pyrene	44	8.4	136
Dibenz(a,h)anthracene	6.4	5.8U	200
Benzo(g,h,i)perylene	34	6.4	37

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203407

SDG	Sample	Compound	Flag	A or P	Reason
K2203407	C032C169	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203407	C032C169	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A	Overall assessment of data
K2203407	C032C169DL	All TCL compounds except Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203407

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203407

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 24, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203408

Sample Identification

C032C699
C032C700
C032C674
C032C675
C032C676
C032C677
C032C678
C032C652
C032C653
C032C654
C032C655
C032C656
C032C670
C032C671
C032C672
C032C673
C032C680
C032C681
C032C682
C032C682MS
C032C682MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR18 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR18	5/24/02	Phenanthrene Benzo(k)fluoranthene	0.019 ug/L 0.019 ug/L	All samples in SDG K2203271

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C677 and C032C678 and samples C032C655 and C032C656 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203408

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203408

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203408

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 14, 2002

LDC Report Date: June 16, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E150186

Sample Identification

C032C217
C032C217DL
C032C218
C032C218DL
C032C219
C032C219DL
C032C220
C032C287
C032C287DL
C032C288
C032C289
C032C290
C032C291
C032C323
C032C323DL
C032C324
C032C324DL
C032C325
C032C326
C032C283
C032C283DL
C032C284
C032C285
C032C286
C032C220MS
C032C220MSD

Introduction

This data review covers 26 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/17/02	Benzo(g,h,i)perylene	25.1	C032C217DL C032C218DL C032C219DL C032C287DL C032C290 C032C323DL C032C324DL C032C325 C032C283DL C032C285	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR06 (from SDG K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR06	5/14/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0074 ug/L 0.0031 ug/L 0.0015 ug/L	All samples in SDG G2E150186

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C287DL	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12	157836 (163869-654276) 88897 (99537-398148) 106239 (135474-541896) 84370 (93453-373814)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	A
C032C285	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12	157829 (163869-654276) 96516 (99537-398148) 124122 (135474-541896) 92853 (93453-373814)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C217 C032C218 C032C219 C032C287 C032C323 C032C283	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02. 2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard. 3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C324	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02. 2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C217 C032C218 C032C219 C032C287 C032C323 C032C283	The 100 ng/ml standard in the initial calibration on 5/21/02 was analyzed after these samples.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C217DL C032C218DL C032C219DL C032C287DL C032C323DL C032C324DL C032C283DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C288 and C032C289 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C288	C032C289	
Benzo(a)anthracene	5.6U	0.47	200
Benzo(b)fluoranthene	5.6U	0.63	200
Benzo(k)fluoranthene	0.53	0.65	20
Benzo(g,h,i)perylene	1.4	0.75	60
Benzo(a)pyrene	0.46	0.70	41
Chrysene	0.62	1.2	64
Dibenz(a,h)anthracene	0.47	5.6U	200
Fluoranthene	0.52	0.54	4
Indeno(1,2,3-cd)pyrene	0.75	5.6U	200

Compound	Concentration (ug/Kg)		RPD
	C032C288	C032C289	
Phenanthrene	0.39	0.58	39
Pyrene	0.70	1.0	35

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E150186

SDG	Sample	Compound	Flag	A or P	Reason
G2E150186	C032C217DL C032C218DL C032C219DL C032C287DL C032C290 C032C323DL C032C324DL C032C325 C032C283DL C032C285	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E150186	C032C287DL	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E150186	C032C285	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E150186	C032C217 C032C218 C032C219 C032C287 C032C323 C032C324 C032C283	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards
G2E150186	C032C217DL C032C218DL C032C219DL C032C287DL C032C323DL C032C324DL C032C283DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E150186

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E150186

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 15, 2002

LDC Report Date: June 17, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E160197

Sample Identification

C032C948
C032C949
C032C950
C032C951
C032C979
C032C980
C032C981
C032C982
C032C213
C032C214
C032C215
C032C216
C032C116
C032C117
C032C118
C032C119

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/12/02	Benzo(b)fluoranthene	25.2	C032C948 C032C949 C032C950 C032C951 C032C979 C032C980 C032C981 C032C982 C032C214 C032C215 C032C216 C032C116 C032C117 2136469MB	J (all detects) UJ (all non-detects)	A
5/19/02	Benzo(b)fluoranthene	29.7	C032C213	J (all detects) UJ (all non-detects)	A
5/17/02	Naphthalene	29.9	C032C118 C032C119 2136474MB	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2136469MB	5/16/02	2-Methylnaphthalene	0.33 ug/Kg	C032C948 C032C949 C032C950 C032C951 C032C979 C032C980 C032C981 C032C982 C032C213 C032C214 C032C215 C032C216 C032C116 C032C117

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C98[illegible]	2-Methylnaphthalene	0.55 ug/Kg	5.6U ug/Kg
C032C982	2-Methylnaphthalene	0.41 ug/Kg	5.9U ug/Kg
C032C213	2-Methylnaphthalene (20X)	27 ug/Kg	100U ug/Kg
C032C214	2-Methylnaphthalene	0.33 ug/Kg	5.4U ug/Kg
C032C116	2-Methylnaphthalene	0.74 ug/Kg	5.7U ug/Kg

Sample C032CR08 (from SDG K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR08	5/15/02	Naphthalene Phenanthrene Chrysene Fluoranthene	0.0070 ug/L 0.0034 ug/L 0.0019 ug/L 0.0033 ug/L	All samples in SDG G2E160197

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG G2E160197	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E160197

SDG	Sample	Compound	Flag	A or P	Reason
G2E160197	C032C948 C032C949 C032C950 C032C951 C032C979 C032C980 C032C981 C032C982 C032C213 C032C214 C032C215 C032C216 C032C116 C032C117	Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E160197	C032C118 C032C119	Naphthalene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E160197	C032C948 C032C949 C032C950 C032C951 C032C979 C032C980 C032C981 C032C982 C032C213 C032C214 C032C215 C032C216 C032C116 C032C117 C032C118 C032C119	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E160197

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E160197	C032C981	2-Methylnaphthalene	5.6U ug/Kg	A
G2E160197	C032C982	2-Methylnaphthalene	5.9U ug/Kg	A
G2E160197	C032C213	2-Methylnaphthalene (20X)	100U ug/Kg	A
G2E160197	C032C214	2-Methylnaphthalene	5.4U ug/Kg	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E160197	C032C116	2-Methylnaphthalene	5.7U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E160197

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 16, 2002

LDC Report Date: June 16, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E170200

Sample Identification

C032C208
C032C208DL
C032C209
C032C210
C032C211
C032C212
C032CB19
C032CB20
C032CB21
C032CB22
C032CB23
C032CB63
C032CB64
C032CB65
C032CB66
C032CB66DL
C032CB67
C032C210MS
C032C210MSD

Introduction

This data review covers 19 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/25/02	Benzo(g,h,i)perylene	28.4	C032C208 C032CB66	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0 05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR09 (from SDG K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/16/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0047 ug/L 0.0033 ug/L 0.0017 ug/L	All samples in SDG G2E170200

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032C208DL and C032CB66DL. Since the samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C210MS/MSD (All samples in SDG G2E170200)	Pyrene	-	-	32 (≤30)	J (all detects) UJ (all non-detects)	A
	Benzo(b)fluoranthene	-	-	32 (≤30)	J (all detects) UJ (all non-detects)	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB63	Phenanthrene-d10 Chrysene-d12 Perylene-d12	289748 (69560-278238) 162193 (38918-155670) 119360 (32269-129076)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
C032CB64	Phenanthrene-d10 Chrysene-d12 Perylene-d12	347506 (69560-278238) 186831 (38918-155670) 143385 (32269-129076)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
C032CB65	Phenanthrene-d10 Chrysene-d12 Perylene-d12	348702 (69560-278238) 162996 (38918-155670) 133874 (32269-129076)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB66DL	Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12	263724 (63946-255786) 356216 (69560-278238) 159751 (38918-155670)	Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CB67	Phenanthrene-d10 Chrysene-d12	285424 (69560-278238) 162514 (38918-155670)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C208DL C032CB66DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C211 and C032C212, samples C032CB20 and C032CB21, and samples C032CB64 and C032CB65 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C211	C032C212	
Chrysene	0.46	0.68	39
Pyrene	0.47	1.0	72
Benzo(a)anthracene	5.9U	0.52	200
Benzo(b)fluoranthene	5.9U	0.64	200
Benzo(k)fluoranthene	5.9U	0.66	200
Benzo(g,h,i)peryiene	5.9U	0.80	200
Benzo(a)pyrene	5.9U	0.71	200
Fluoranthene	5.9U	0.72	200
Indeno(1,2,3-cd)pyrene	5.9U	0.64	200

Compound	Concentration (ug/Kg)		RPD
	C032CB20	C032CB21	
Anthracene	5.2U	1.4	200
Benzo(a)anthracene	1.2	1.3	8
Benzo(b)fluoranthene	2.0	2.6	26
Benzo(k)fluoranthene	1.3	1.7	27
Benzo(g,h,i)perylene	2.3	4.8	70
Benzo(a)pyrene	2.0	2.0	0
Chrysene	2.9	1.5	64

Compound	Concentration (ug/Kg)		RPD
	C032CB20	C032CB21	
Dibenz(a,h)anthracene	0.39	0.33	17
Fluoranthene	2.0	1.5	29
Indeno(1,2,3-cd)pyrene	1.8	3.1	53
Phenanthrene	1.1	0.58	62
Pyrene	3.1	1.9	48

Compound	Concentration (ug/Kg)		RPD
	C032CB64	C032CB65	
Acenaphthene	0.98	5.4U	200
Acenaphthylene	3.9	5.1	27
Anthracene	3.2	6.1	62
Benzo(a)anthracene	39	43	10
Benzo(b)fluoranthene	73	61	18
Benzo(k)fluoranthene	66	38	54
Benzo(g,h,i)perylene	110	53	70
Benzo(a)pyrene	92	61	40
Chrysene	53	50	48
Dibenz(a,h)anthracene	16	11	37
Fluoranthene	83	63	27
Indeno(1,2,3-cd)pyrene	98	54	58
2-Methylnaphthalene	0.85	0.81	5

Compound	Concentration (ug/Kg)		RPD
	C032CB64	C032CB65	
Naphthalene	4.4	2.0	75
Phenanthrene	21	41	64
Pyrene	110	79	33
Fluorene	5.4U	2.4	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E170200

SDG	Sample	Compound	Flag	A or P	Reason
G2E170200	C032C208 C032CB66	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E170200	C032C208 C032C208DL C032C209 C032C210 C032C211 C032C212 C032CB19 C032CB20 C032CB21 C032CB22 C032CB23 C032CB63 C032CB64 C032CB65 C032CB66 C032CB66DL C032CB67	Pyrene Benzo(b)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (RPD)
G2E170200	C032CB63 C032CB64 C032CB65	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E170200	C032CB66DL	Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards (area)
G2E170200	C032CB67	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E170200	C032C208DL C032CB66DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E170200

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E170200

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 16, 2002

LDC Report Date: June 16, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E170207

Sample Identification

C032CB41	C032CB30MS
C032CB42	C032CB30MSD
C032CB42DL	
C032CB43	
C032CB43DL	
C032CB44	
C032CB45	
C032CB28	
C032CB28DL	
C032CB29	
C032CB29DL	
C032CB30	
C032CB30DL	
C032CB31	
C032CB32	
C032C111	
C032C112	
C032C113	
C032C114	
C032C115	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/22/02	Dibenz(a,h)anthracene	26.65321	C032CB42DL C032CB43DL C032CB28DL C032CB29DL C032CB30DL	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR09 (from SDG K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/16/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0047 ug/L 0.0033 ug/L 0.0017 ug/L	All samples in SDG G2E170207

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CB30MS/MSD (All samples in SDG G2E170207)	Naphthalene 2-Methylnaphthalene Acenaphthene Fluorene	29 (30-150) - - -	146 (30-150) 101 (30-150) 290 (30-150) 291 (30-150)	82 (≤30) 40 (≤30) 112 (≤30) 109 (≤30)	J (all detects) UJ (all non-detects)	A
C032CB30MS/MSD (All samples in SDG G2E170207)	Acenaphthylene Dibenz(a,h)anthracene Anthracene	0 (30-150) 0 (30-150) 0.0 (30-150)	343 (30-150) 316 (30-150) 875 (30-150)	- - -	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
2138181MB	Chrysene-d12	213992 (51016-204066)	Benzo(a)anthracene Chrysene	J (all detects) J (all detects)	P
C032CB41	Chrysene-d12 Perylene-d12	234443 (51016-204066) 214935 (47760-191040)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
C032CB44	Chrysene-d12 Perylene-d12	217110 (51016-204066) 197201 (47760-191040)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032CB42DL C032CB43DL C032CB28DL C032CB29DL C032CB30DL	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02. 2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard. 3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CB42DL C032CB43DL	The 100 ng/ml standard in the initial calibration on 5/21/02 was analyzed after these samples.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CB42 C032CB43	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CB29 C032CB30	Benzo(a)pyrene Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A

Sample	Compound	Finding	Criteria	Flag	A or P
C032CB28	Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CB29 C032CB30	Benzo(a)pyrene Fluoranthene Pyrene	R R R	A
C032CB29DL C032CB30DL	All TCL compounds except Benzo(a)pyrene Fluoranthene Pyrene	R	A
C032CB42 C032CB43	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R	A

Sample	Compound	Flag	A or P
C032CB42DL C032CB43DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A
C032CB28	Pyrene	R	A
C032CB28DL	All TCL compounds except Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CB42 and C032CB43, samples C032CB42DL and C032CB43DL, samples C032CB31 and C032CB32, and samples C032C112 and C032C113 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CB42	C032CB43	
Acenaphthene	15	14	7
Acenaphthylene	65	72	10
Anthracene	69	79	13
Benzo(a)anthracene	320	360	12
Benzo(b)fluoranthene	360	400	10
Benzo(k)fluoranthene	290	340	15
Benzo(g,h,i)perylene	420	480	13
Benzo(a)pyrene	460	530	14

Compound	Concentration (ug/Kg)		RPD
	C032CB42	C032CB43	
Chrysene	320	370	4
Dibenz(a,h)anthracene	80	93	5
Fluoranthene	800	960	8
Fluorene	27	24	2
Indeno(1,2,3-cd)pyrene	430	490	13
2-Methylnaphthalene	4.8	4.2	13
Naphthalene	20	17	16
Phenanthrene	440	420	5
Pyrene	980	1200	20

Compound	Concentration (ug/Kg)		RPD
	C032CB42DL	C032CB43DL	
Acenaphthene	23	20	14
Acenaphthylene	100	92	8
Anthracene	92	93	1
Benzo(a)anthracene	430	430	0
Benzo(b)fluoranthene	440	440	0
Benzo(k)fluoranthene	450	480	5
Benzo(g,h,i)perylene	560	610	8
Benzo(a)pyrene	720	760	5
Chrysene	500	540	8

Compound	Concentration (ug/Kg)		RPD
	C032CB42DL	C032CB43DL	
Dibenz(a,h)anthracene	110	130	17
Fluoranthene	1000	1100	10
Fluorene	34	27	23
Indeno(1,2,3-cd)pyrene	510	640	23
2-Methylnaphthalene	6.5	5.1	24
Naphthalene	26	22	17
Phenanthrene	630	530	17
Pyrene	1200	1300	8

Compound	Concentration (ug/Kg)		RPD
	C032CB31	C032CB32	
Benzo(a)anthracene	9.4	3.9	83
Benzo(b)fluoranthene	16	56U	200
Benzo(k)fluoranthene	11	5.8	62
Benzo(g,h,i)perylene	90	36	86
Benzo(a)pyrene	17	8.9	62
Chrysene	13	6.7	64
Dibenz(a,h)anthracene	18	56U	200
Fluoranthene	28	6.0	129
Indeno(1,2,3-cd)pyrene	66	12	138
Phenanthrene	18	56U	200

Compound	Concentration (ug/Kg)		RPD
	C032CB31	C032CB32	
Pyrene	33	8.1	121

Compound	Concentration (ug/Kg)		RPD
	C032C112	C032C113	
Benzo(a)anthracene	44	61	32
Benzo(b)fluoranthene	28	31	10
Benzo(k)fluoranthene	16	16	0
Benzo(g,h,i)perylene	18	28	43
Benzo(a)pyrene	33	33	0
Chrysene	120	160	29
Fluoranthene	14	16	13
Phenanthrene	4.6	5.1	10
Pyrene	62	83	29
Naphthalene	53U	3.4	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E170207

SDG	Sample	Compound	Flag	A or P	Reason
G2E170207	C032CB42DL C032CB43DL C032CB28DL C032CB29DL C032CB30DL	Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E170207	C032CB41 C032CB42 C032CB42DL C032CB43 C032CB43DL C032CB44 C032CB45 C032CB28 C032CB28DL C032CB29 C032CB29DL C032CB30 C032CB30DL C032CB31 C032CB32 C032C111 C032C112 C032C113 C032C114 C032C115	Naphthalene 2-Methylnaphthalene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
G2E170207	C032CB41 C032CB42 C032CB42DL C032CB43 C032CB43DL C032CB44 C032CB45 C032CB28 C032CB28DL C032CB29 C032CB29DL C032CB30 C032CB30DL C032CB31 C032CB32 C032C111 C032C112 C032C113 C032C114 C032C115	Acenaphthylene Dibenz(a,h)anthracene Anthracene	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)

SDG	Sample	Compound	Flag	A or P	Reason
G2E170207	C032CB41 C032CB44	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E170207	C032CB42DL C032CB43DL C032CB28DL C032CB29DL C032CB30DL	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards
G2E170207	C032CB42 C032CB43	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E170207	C032CB29 C032CB30	Benzo(a)pyrene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E170207	C032CB28	Pyrene	J (all detects)	A	Compound quantitation and CRQLs
G2E170207	C032CB29 C032CB30	Benzo(a)pyrene Fluoranthene Pyrene	R R R	A	Overall assessment of data
G2E170207	C032CB29DL C032CB30DL	All TCL compounds except Benzo(a)pyrene Fluoranthene Pyrene	R	A	Overall assessment of data
G2E170207	C032CB42 C032CB43	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
G2E170207	C032CB42DL C032CB43DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A	Overall assessment of data
G2E170207	C032CB28	Pyrene	R	A	Overall assessment of data
G2E170207	C032CB28DL	All TCL compounds except Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E170207

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E170207

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 24, 2002

LDC Report Date: June 16, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E250150

Sample Identification

C032C307
C032C308
C032C309
C032C310
C032C311
C032C312
C032C313
C032C702
C032C703
C032C704
C032C702MS
C032C702MSD

Introduction

This data review covers 12 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2145134MB	5/25/02	Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	0.45 ug/Kg 0.61 ug/Kg 0.34 ug/Kg	All samples in SDG G2E250150

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032C307	Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene	0.93 ug/Kg 1.0 ug/Kg	6.0U ug/Kg 6.0U ug/Kg
C032C311	Benzo(g,h,i)perylene	0.43 ug/Kg	6.0U ug/Kg
C032C313	Benzo(g,h,i)perylene	0.46 ug/Kg	6.2U ug/Kg

Sample C032CR18 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR18	5/24/02	Phenanthrene Benzo(k)fluoranthene	0.019 ug/L 0.019 ug/L	All samples in SDG G2E250150

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C702MS/MSD (All samples in SDG G2E250150)	Chrysene	-	-	42 (≤30)	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C702	Perylene-d12	99076 (111123-444494)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C703	Perylene-d12	110879 (111123-444494)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C704	Perylene-d12	79651 (111123-444494)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C310 and C032C311 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C310	C032C311	
Benzo(a)pyrene	1.1	1.4	24
Pyrene	0.45	0.85	61
Benzo(k)fluoranthene	6.2U	0.38	200
Benzo(g,h,i)perylene	6.2U	0.43	200
Fluoranthene	6.2U	0.46	200

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 16, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38382

Sample Identification

C032CA27	C032CB55
C032CA28	C032CB56
C032CA28RE	C032CB56DL
C032CA29	C032CB57
C032CA30	C032CB58
C032CB33	C032C184MS
C032CB34	C032C184MSD
C032CB35	
C032CB36	
C032CB36DL	
C032C182	
C032C183	
C032C184	
C032C185	
C032C239	
C032C239DL	
C032C239DLRE	
C032C240	
C032C241	
C032C242	

Introduction

This data review covers 27 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR09 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR09	5/16/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0047 ug/L 0.0033 ug/L 0.0017 ug/L	All samples in SDG 38382

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032CA28	2-Fluorobiphenyl Nitrobenzene-d5 Terphenyl-d14	30.7 (54-125) 35.3 (49-121) 33.5 (57-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CA28RE C032C[illegible]39DLRE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C184MS/MSD	2-Methylnaphthalene	-	145 (40-135)	32.8 (≤30)	J (all detects)	A
(C032CA27	Acenaphthene	-	-	33.7 (≤30)	UJ (all non-detects)	
C032CA28	Anthracene	-	-	30.2 (≤30)		
C032CA29	Fluorene	-	-	38.5 (≤30)		
C032CA30	Naphthalene	-	136 (40-135)	30.8 (≤30)		
C032CB33	Phenanthrene	-	-	44.0 (≤30)		
C032CB34						
C032CB35						
C032CB36						
C032CB36DL						
C032C182						
C032C183						
C032C184						
C032C185						
C032C239						
C032C239DL						
C032C240						
C032C241						
C032C242						
C032CB55						
C032CB56						
C032CB56DL						
C032CB57						
C032CB58)						

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C239DL	Naphthalene-d8 Perylene-d12	346166 (359770-1439078) 278938 (292611-1170446)	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C241	Naphthalene-d8 Perylene-d12	342649 (359770-1439078) 267975 (292611-1170446)	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032CB56DL	Perylene-d12	240442 (292611-1170446)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CB36	Fluoranthene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CB36	Fluoranthene Phenanthrene Pyrene	R R R	A
C032CA28 C032C239DL C032C239DLRE C032CB56DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38382

SDG	Sample	Compound	Flag	A or P	Reason
38382	C032CA28	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate recovery (%R)
38382	C032CA28RE C032C239DLRE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38382	C032CA27 C032CA28 C032CA29 C032CA30 C032CB33 C032CB34 C032CB35 C032CB36 C032CB36DL C032C182 C032C183 C032C184 C032C185 C032C239 C032C239DL C032C240 C032C241 C032C242 C032CB55 C032CB56 C032CB56DL C032CB57 C032CB58	2-Methylnaphthalene Acenaphthene Anthracene Fluorene Naphthalene Phenanthrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
38382	C032C239DL	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
38382	C032C241	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
38382	C032CB56DL	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
38382	C032CB36	Fluoranthene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
38382	C032CB36	Fluoranthene Phenanthrene Pyrene	R R R	A	Overall assessment of data
38382	C032CA28 C032C239DL C032C239DLRE C032CB56DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38382

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38382

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38406

Sample Identification

C032C103	C032C105MS
C032C104	C032C105MSD
C032C105	
C032C106	
C032C063	
C032C064	
C032C065	
C032C066	
C032C066RE	
C032C459	
C032C459DL	
C032C460	
C032C460DL	
C032C461	
C032C462	
C032C472	
C032C472DL	
C032C473	
C032C474	
C032C475	

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0 05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR011 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
020523ALCS	Acenaphthylene	36.7 (37-135)	C032C066RE 020523ABLK	J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C460	Naphthalene-d8 Acenaphthene-d10	1691350 (351412-1405646) 944433 (217813-871250)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C066RE C032C459DL C032C460DL C032C472DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38406

SDG	Sample	Compound	Flag	A or P	Reason
38406	C032C066RE	Acenaphthylene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
38406	C032C460	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards (area)
38406	C032C066RE C032C459DL C032C460DL C032C472DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38406

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38406

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 21, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38422

Sample Identification

C032C957
C032C958
C032C959
C032C960
C032C877
C032C878
C032C879
C032C880
C032C881
C032C995
C032C094
C032C094DL
C032C095
C032C096
C032C097
C032C125
C032C126
C032C127
C032C128
C032C960MS
C032C960MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR12 and C032CR13 (from SDG 38470) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032C094 and C032C094DL . Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C094DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C878 and C032C879 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38422

SDG	Sample	Compound	Flag	A or P	Reason
38422	C032C094DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38422

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38422

No Sample Data Qualified in this SDG

LDC Report# 8589S2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 23, 2002

LDC Report Date: June 14, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38451

Sample Identification

C032C423
C032C424
C032C425
C032C426
C032C427
C032C389
C032C390
C032C391
C032C392
C032CB50
C032CB51
C032CB52
C032CB53
C032CB54
C032CB99
C032CB00
C032CC01
C032CC02
C032CC02RE
C032C425MS
C032C4[illegible]MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR17 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032CC02	2-Fluorobiphenyl Nitrobenzene-d5 Terphenyl-d14	4.5 (54-125) 4.1 (49-121) 6.0 (57-126)	All TCL compounds	J (all detects) R (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CC02RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C425MS/MSD (C032C423 C032C424 C032C425 C032C426 C032C427 C032C389 C032C390 C032C391 C032C392 C032CB50 C032CB51 C032CB52 C032CB53 C032CB54 C032CB99 C032CB00 C032CC01 C032CC02)	2-Methylnaphthalene Anthracene Benzo(a)anthracene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene	- - - - - - -	- - 30.9 (41-143) 23.0 (25-159) 24.1 (45-143) - 13.2 (44-135)	42.0 (≤30) 36.0 (≤30) - 32.6 (≤30) - 30.7 (≤30) 35.5 (≤30)	J (all detects) UJ (all non-detects)	A
C032C425MS/MSD (C032C423 C032C424 C032C425 C032C426 C032C427 C032C389 C032C390 C032C391 C032C392 C032CB50 C032CB51 C032CB52 C032CB53 C032CB54 C032CB99 C032CB00 C032CC01 C032CC02)	Fluoranthene Pyrene	0 (37-135) 0 (37-146)	0 (37-135) 0 (37-146)	37.6 (≤30) 35.5 (≤30)	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
020524ALCS	2-Methylnaphthalene	31.9 (40-135)	C032C423 C032C424	J (all detects) UJ (all non-detects)	P
	Naphthalene	26.1 (40-135)	C032C425 C032C426 C032C427 C032C389 C032C390 C032C391 C032C392 C032CB50 C032CB51 C032CB52 C032CB53 C032CB54 C032CB99 C032CB00 C032CC01 C032CC02 020524ABLK	J (all detects) UJ (all non-detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CC02	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C424 and C032C425, samples C032C391 and C032C392 and samples C032CB53 and C032CB54 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C424	C032C425	
Acenaphthylene	3.6	6.3	54
Anthracene	6.4	15.0	80
Benzo(a)anthracene	17.0	52.0	101
Benzo(a)pyrene	25.0	57.0	78
Benzo(b)fluoranthene	27.0	59.0	74
Benzo(g,h,i)perylene	27.0	46.0	52
Benzo(k)fluoranthene	20.0	46.0	79
Chrysene	21.0	62.0	99
Fluoranthene	20.0	140.0	150
Indeno(1,2,3-cd)pyrene	17.0	34.0	67
Phenanthrene	5.5	52.0	162
Pyrene	28.0	140.0	133
Acenaphthe	5.2U	2.5	200
Dibenz(a,h)anthracene	5.2U	2.4	200

Compound	Concentration (ug/Kg)		RPD
	C032C391	C032C392	
Benzo(a)anthracene	1.9	5.7U	200
Benzo(a)pyrene	2.6	1.8	36
Benzo(b)fluoranthene	2.0	5.7U	200
Benzo(g,h,i)perylene	2.5	2.3	8
Chrysene	2.2	5.7U	200
Fluoranthene	3.3	5.7U	200
Indeno(1,2,3-cd)pyrene	1.5	5.7U	200
Phenanthrene	2.1	5.7U	200
Pyrene	4.9	2.7	58

Compound	Concentration (ug/Kg)		RPD
	C032CB53	C032CB54	
Acenaphthylene	2.8	2.4	15
Anthracene	1.9	6.0U	200
Benzo(a)anthracene	12.0	7.0	53
Benzo(a)pyrene	30.0	20.0	40
Benzo(b)fluoranthene	23.0	16.0	24
Benzo(g,h,i)perylene	25.0	19.0	27
Benzo(k)fluoranthene	14.0	9.4	39
Chrysene	14.0	8.8	46
Fluoranthene	23.0	12.0	63

Compound	Concentration (ug/Kg)		RPD
	C032CB53	C032CB54	
Indeno(1,2,3-cd)pyrene	15.0	12.0	22
Phenanthrene	7.8	4.1	61
Pyrene	49.0	30.0	48

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38451

SDG	Sample	Compound	Flag	A or P	Reason
38451	C032CC02	All TCL compounds	J (all detects) R (all non-detects)	A	Surrogate recovery (%R)
38451	C032CC02RE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38451	C032C423 C032C424 C032C425 C032C426 C032C427 C032C389 C032C390 C032C391 C032C392 C032CB50 C032CB51 C032CB52 C032CB53 C032CB54 C032CB99 C032CB00 C032CC01 C032CC02	2-Methylnaphthalene Anthracene Benzo(a)anthracene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
38451	C032C423 C032C424 C032C425 C032C426 C032C427 C032C389 C032C390 C032C391 C032C392 C032CB50 C032CB51 C032CB52 C032CB53 C032CB54 C032CB99 C032CB00 C032CC01 C032CC02	Fluoranthene Pyrene	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)

SDG	Sample	Compound	Flag	A or P	Reason
38451	C032C423 C032C424 C032C425 C032C426 C032C427 C032C389 C032C390 C032C391 C032C392 C032CB50 C032CB51 C032CB52 C032CB53 C032CB54 C032CB99 C032CB00 C032CC01 C032CC02	2-Methylnaphthalene Naphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)
38451	C032CC02	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38451

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38451

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 24, 2002

LDC Report Date: June 17, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38461

Sample Identification

C032C661
C032C662
C032C663
C032C664
C032C664RE
C032C665
C032C666
C032C666RE
C032C667
C032C668
C032C669
C032CD26
C032CD27
C032CD28
C032CD28RE
C032CD29
C032CD30
C032CD30RE
C032CD22
C032CD23
C032CD23RE
C032CD24
C032CD24RE
C032CD25
C032CD25RE
C032C662MS
C032C662MSD

Introduction

This data review covers 27 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

In the case where %RSD was greater than 15.0%, the laboratory used a calibration curve to evaluate the compound. All coefficients of determination (r^2) were greater than or equal to 0.990 .

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR18 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR18	5/24/02	Phenanthrene Benzo(k)fluoranthene	0.019 ug/L 0.019 ug/L	All samples in SDG 38461

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C664RE C032C666RE C032CD23RE C032CD25RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CD28	Perylene-d12	398085 (462392-1849568)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CD30	Perylene-d12	448933 (462392-1849568)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CD23	Perylene-d12	262435 (462392-1849568)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CD24	Perylene-d12	337802 (462392-1849568)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CD25	Perylene-d12	372509 (462392-1849568)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CD28RE	Perylene-d12	400892 (449953-1799812)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CD30RE	Perylene-d12	446247 (449953-1799812)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CD24RE	Perylene-d12	325852 (449953-1799812)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C664RE C032C666RE C032CD28RE C032CD30RE C032CD23 C032CD24 C032CD25RE	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C666 and C032C667, samples C032C666RE and C032C667, samples C032CD29 and C032CD30 and samples C032CD29 and C032CD30RE were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C666	C032C667	
Benzo(a)anthracene	2.7	25.0	161
Benzo(a)pyrene	3.7	27.0	152
Benzo(b)fluoranthene	3.3	25.0	153
Benzo(g,h,i)perylene	2.3	12.0	136
Indeno(1,2,3-cd)pyrene	3.3	26.0	155
Chrysene	3.4	29.0	158
Fluoranthene	3.4	31.0	160
Indeno(1,2,3-cd)pyrene	1.9	9.6	134
Phenanthrene	1.6	14.0	159
Pyrene	4.8	43.0	160
Anthracene	5.9U	2.1	200
Dibenz(a,h)anthracene	5.9U	4.2	200

Compound	Concentration (ug/Kg)		RPD
	C032C666RE	C032C667	
Benzo(a)anthracene	5.9U	25.0	200
Benzo(a)pyrene	2.6	27.0	165
Benzo(b)fluoranthene	2.3	25.0	166

Compound	Concentration (ug/Kg)		RPD
	C032C666RE	C032C667	
Benzo(g,h,i)perylene	2.3	12.0	136
Indeno(1,2,3-cd)pyrene	1.7	26.0	175
Chrysene	2.2	29.0	172
Fluoranthene	2.4	31.0	171
Indeno(1,2,3-cd)pyrene	1.6	9.6	143
Phenanthrene	5.9U	14.0	200
Pyrene	3.2	43.0	172
Anthracene	5.9U	2.1	200
Dibenz(a,h)anthracene	5.9U	4.2	200

Compound	Concentration (ug/Kg)		RPD
	C032CD29	C032CD30	
Benzo(a)anthracene	5.3	4.2	23
Benzo(a)pyrene	17.0	13.0	27
Benzo(b)fluoranthene	17.0	13.0	27
Benzo(g,h,i)perylene	12.0	10.0	18
Benzo(k)fluoranthene	7.8	6.3	21
Chrysene	7.8	6.0	26
Dibenz(a,h)anthracene	1.8	5.8U	200
Fluoranthene	9.6	7.8	21
Indeno(1,2,3-cd)pyrene	6.7	5.5	20

Compound	Concentration (ug/Kg)		RPD
	C032CD29	C032CD30	
Phenanthrene	2.7	2.1	25
Pyrene	33.0	32.0	3

Compound	Concentration (ug/Kg)		RPD
	C032CD29	C032CD30RE	
Benzo(a)anthracene	5.3	4.9	8
Benzo(a)pyrene	17.0	14.0	19
Benzo(b)fluoranthene	17.0	13.0	27
Benzo(g,h,i)perylene	12.0	12.0	0
Benzo(k)fluoranthene	7.8	9.4	19
Chrysene	7.8	6.4	20
Dibenz(a,h)anthracene	1.8	5.8U	200
Fluoranthene	9.6	10.0	4
Indeno(1,2,3-cd)pyrene	6.7	6.9	3
Phenanthrene	2.7	2.6	4
Pyrene	33.0	31.0	6
Anthracene	5.6U	1.9	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38461

SDG	Sample	Compound	Flag	A or P	Reason
38461	C032C664RE C032C666RE C032CD23RE C032CD25RE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38461	C032CD28 C032CD30 C032CD23 C032CD24 C032CD25 C032CD28RE C032CD30RE C032CD24RE	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
38461	C032C664RE C032C666RE C032CD28RE C032CD30RE C032CD23 C032CD24 C032CD25RE	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38461

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38461

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20 through May 24, 2002

LDC Report Date: June 13, 2002

Matrix: Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38470

Sample Identification

C032CR011
C032CR12
C032CR13
C032CR16
C032CR15
C032CR17
C032CR14
C032CR18

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
020524ABLK	5/24/02	Anthracene Benzo(g,h,i)perylene Fluoranthene Phenanthrene Pyrene	0.062 ug/L 0.02 ug/L 0.045 ug/L 0.041 ug/L 0.038 ug/L	All samples in SDG 38461

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032CR18	Phenanthrene	0.019 ug/L	0.25U ug/L

Sample C032CR011, C032CR12, C032CR13, C032CR16, C032CR15, C032CR17, C032CR14 and C032CR18 were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR18	5/24/02	Phenanthrene Benzo(k)fluoranthene	0.019 ug/L 0.019 ug/L	No associated samples in this SDG

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38470

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38470

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
38470	C032CR18	Phenanthrene	0.25U ug/L	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38470

No Sample Data Qualified in this SDG

LDC Report# 8589V2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28, 2002

LDC Report Date: June 13, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38473

Sample Identification

C032CC43	C032C738
C032CC44	C032C739
C032CC45	C032C732
C032CC46	C032C740MS
C032CD44	C032C740MSD
C032CD45	
C032CD46	
C032CD47	
C032CD47DL	
C032CD47RE	
C032C733	
C032C734	
C032C735	
C032C740	
C032C719	
C032C719DL	
C032C720	
C032C721	
C032C736	
C032C737	

Introduction

This data review covers 25 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38498

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38498

No Sample Data Qualified in this SDG

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032CD47	2-Fluorobiphenyl Nitrobenzene-d5 Terphenyl-d14	41.6 (54-125) 35.7 (49-121) 44.4 (57-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A
C032CD47RE	2-Fluorobiphenyl Nitrobenzene-d5 Terphenyl-d14	51.6 (54-125) 41.0 (49-121) 52.9 (57-126)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD47RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD47	Phenanthrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CD47	Phenanthrene	R	A
C032CD47RE C032C719DL	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C735 and C032C740 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C735	C032C740	
Benzo(a)anthracene	3.5	4.3	20
Benzo(a)pyrene	7.9	9.4	17
Benzo(b)fluoranthene	5.8	6.6	13
Benzo(g,h,i)perylene	8.6	9.4	9
Benzo(k)fluoranthene	4.3	4.9	13
Chrysene	4.0	4.9	20
Fluoranthene	8.8	10.0	13
Indeno(1,2,3-cd)pyrene	5.5	6.0	9
Phenanthrene	2.6	3.9	40
Pyrene	14.0	16.0	13

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38473

SDG	Sample	Compound	Flag	A or P	Reason
38473	C032CD47 C032CD47RE	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate recovery (%R)
38473	C032CD47RE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38473	C032CD47	Phenanthrene	J (all detects)	A	Compound quantitation and CRQLs
38473	C032CD47	Phenanthrene	R	A	Overall assessment of data
38473	C032CD47RE C032C719DL	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38473

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38473

No Sample Data Qualified in this SDG

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Bechtel Environmental
1230 Columbia Street, Suite 400
San Diego, CA 92101
Attn: Mr. James Jordan

June 24, 2002

Project Name : NAS Alameda Point
Project # : CTO 032

On June 19, 2002 the following data packages were received by Laboratory Data Consultants, Inc. from Bechtel Environmental. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 8638:

SDG #	Fraction
K2203434, K2203435, K2203471, K2203472, K2203504 K2203505, K2203553, K2203554, G2E150192, G2E160199, G2E240204, 38521, 38509 38488 38498	Polynuclear Aromatic Hydrocarbons

The above SDGs were reviewed using Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- NFESC Special Publication SP-2056-ENV, Navy Installation Restoration Chemical Data Quality Manual, Naval Facilities Engineering Command, September 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

The data validators did utilize their professional judgement when evaluating the data to achieve the most complete and accurate assessment of the data. The data packages were reviewed according to the above stated validation procedures.

For GC/MS polynuclear aromatic hydrocarbon analyses, the primary findings consisted of:

a) Continuing calibration factors exceeded acceptance criteria in SDGs G2E160199 and G2E150192. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Matrix spike/matrix spike duplicate sample analyses were not performed for all batches in SDGs G2E150192, 38498, 38488 and 38521.

c) Matrix spike/matrix spike duplicate percent recoveries and relative percent differences exceeded acceptance criteria for several compounds in SDGs 38521, K2203471 and K2203504, benzo(K)fluoranthene and benzo(a)pyrene in SDG 38498, benzo(k) fluoranthene in SDG 38509 and dibenz(a,h)anthracene, 2-methylnaphthalene and acenaphthene in SDG G2E160199. The associated nondetect results for benzo(a)pyrene in SDG 38498, 2-methylnaphthalene and acenaphthene in SDG G2E160199. and benzo(g,h,i)perylene, fluoranthene, phenanthrene and pyrene in SDG 38521 were qualified as unusable. Since the laboratory met the protocol requirement, this finding should be considered advisory.

d) Surrogate percent recoveries exceeded acceptance criteria for sample C032C607 in SDG 38488, sample C032C741 in SDG 38521 and sample C032CC32 in SDG K2203472. The associated nondetect results for sample C032C741 in SDG 38521 and C032CC32 in SDG K2203472 were qualified as unusable. Since the laboratory met the protocol requirement, this finding should be considered advisory.

e) Internal standard areas exceeded acceptance criteria for sample C032C605 in SDG 38488, sample C032CA66DL in SDG G2E160199 and C032C928 in SDG G2E150192. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Internal standard areas exceeded acceptance criteria for several samples in SDGs G2E240204, G2E160199 and G2E150192.

g) 2-Methylnaphthalene in SDG 38488, pyrene in SDG 38509, pyrene and fluoranthene in SDGs G2E150192, K2203505 and K2203455, phenanthrene and chrysene in SDGs K2203553, fluoranthene and pyrene in SDG K2203435 and several compounds in SDGs K2203472 and G2E160199 were reported above the calibration range. Since the laboratory met the protocol requirement, this finding should be considered advisory.

h) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

i) 2-Methylnaphthalene was detected in the method blanks. Since the laboratory met the protocol requirement, this finding should be considered advisory.

In general, the data for all analyses appear usable with the limitations noted in the Data Validation Reports. Data validation flags were noted on the Laboratory Form 1s and included with each validation report.

Sincerely,

Richard M. Amano
President/Principal Chemist

R1 (Added N & O)

LDC #8638 (Bechtel Environmental-San Diego / Alameda Point, CTO 32)

LDC	SDG#	DATE REC'D	DATE DUE	PAHs (8270-SIM)																													
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	K2203434	6-19-02	6-26-02	0	20																												
B	K2203435	6-19-02	6-26-02	0	23																												
C	K2203471	6-19-02	6-26-02	0	18																												
D	K2203472	6-19-02	6-26-02	0	23																												
E	K2203504	6-19-02	6-26-02	0	16																												
F	K2203505	6-19-02	6-26-02	0	17																												
G	K2203553	6-19-02	6-26-02	0	17																												
H	K2203554	6-19-02	6-26-02	0	13																												
I	G2E150192	6-19-02	6-26-02	0	28																												
J	G2E160199	6-19-02	6-26-02	0	22																												
K	G2E240204	6-19-02	6-26-02	0	17																												
L	38521	6-19-02	6-26-02	1	14																												
M	38509	6-19-02	6-26-02	0	21																												
N	38488	6-19-02	6-26-02	0	23																												
O	38498	6-19-02	6-26-02	0	22																												
Total	B			1	294	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Level IV validation (all other cells are Level III validation)

NAS Alameda Point, CTO 32
Data Validation Reports
LDC# 8638

Polynuclear Aromatic Hydrocarbons

LDC Report# 8638A2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203434

Sample Identification

C032C617
C032C618
C032C619
C032C620
C032C639
C032C640
C032C641
C032C642
C032C648
C032C649
C032C650
C032C651
C032C626
C032C627
C032C628
C032C629
C032CD51
C032CD52
C032CD51MS
C032CD51MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203434

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203434

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203434

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203435

Sample Identification

C032C710	C032CD50
C032C711	C032CD50MS
C032C712	C032CD50MSD
C032C713	
C032C723	
C032C724	
C032C725	
C032C726	
C032CB68	
C032CB69	
C032CB70	
C032CB71	
C032CC95	
C032CC96	
C032CC97	
C032CC98	
C032CC99	
C032CD48	
C032CD48DL	
C032CD49	

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD48	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CD48	Fluoranthene Pyrene	R R	A
C032CD48DL	All TCL compounds except Fluoranthene Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC96 and C032CC97 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC96	C032CC97	
Phenanthrene	3.9	10	88
Fluoranthene	7.1	13	59
Pyrene	8.7	13	40
Benzo(a)anthracene	4.7	6.6	34
Chrysene	5.2	7.6	38
Benzo(b)fluoranthene	3.6	4.8	29
Benzo(k)fluoranthene	3.6	5.3	38

Compound	Concentration (ug/Kg)		RPD
	C032CC96	C032CC97	
Benzo(a)pyrene	5.1	5.9	14
Indeno(1,2,3-cd)pyrene	3.6	3.9	8
Benzo(g,h,i)perylene	4.5	4.3	4

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203435

SDG	Sample	Compound	Flag	A or P	Reason
K2203435	C032CD48	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203435	C032CD48	Fluoranthene Pyrene	R R	A	Overall assessment of data
K2203435	C032CD48DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203435

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203435

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 29, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203471

Sample Identification

C032C546
C032C547
C032C548
C032C549
C032C550
C032C538
C032C539
C032C540
C032C541
C032C551
C032C552
C032C553
C032C498
C032C499
C032C500
C032C501
C032C550MS
C032C550MSD

Introduction

This data review covers 18 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C550MS/MSD (All samples in SDG K2203471)	Phenanthrene Fluoranthene Benzo(a)anthracene Chrysene	403 (10-192) 373 (28-166) 171 (64-145) 192 (54-128)	- - - -	118 (≤40) 67 (≤40) 41 (≤40) 41 (≤40)	J (all detects) UJ (all non-detects)	A
C032C550MS/MSD (All samples in SDG K2203471)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	170 (64-138) 154 (62-130) 191 (57-149) 158 (52-156) 143 (40-127)	- - - - -	- - - - -	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C547 and C032C548 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C547	C032C548	
Naphthalene	6.7	6.0	11
2-Methylnaphthalene	7.6	6.9	10
Acenaphthylene	2.0	1.7	16
Acenaphthene	1.5	5.3U	200
Fluorene	1.9	1.8	5
Phenanthrene	21	24	13
Anthracene	5.1	5.3	4
Fluoranthene	33	33	0
Pyrene	40	37	8
Benzo(a)anthracene	22	20	10
Chrysene	40	35	13
Benzo(b)fluoranthene	35	30	15
Benzo(k)fluoranthene	21	18	15

Compound	Concentration (ug/Kg)		RPD
	C032C547	C032C548	
Benzo(a)pyrene	33	28	16
Indeno(1,2,3-cd)pyrene	31	27	14
Dibenz(a,h)anthracene	8.6	7.1	19
Benzo(g,h,i)perylene	41	35	16

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203471

SDG	Sample	Compound	Flag	A or P	Reason
K2203471	C032C546 C032C547 C032C548 C032C549 C032C550 C032C538 C032C539 C032C540 C032C541 C032C551 C032C552 C032C553 C032C498 C032C499 C032C500 C032C501	Phenanthrene Fluoranthene Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
K2203471	C032C546 C032C547 C032C548 C032C549 C032C550 C032C538 C032C539 C032C540 C032C541 C032C551 C032C552 C032C553 C032C498 C032C499 C032C500 C032C501	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203471

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203471

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 29, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203472

Sample Identification

C032CD13	C032C603MS
C032CD14	C032C603MSD
C032CD15	C032CD14DL
C032CD16	
C032CC29	
C032CC30	
C032CC31	
C032CC32	
C032CC32DL	
C032CC33	
C032CC33DL	
C032C591	
C032C592	
C032C593	
C032C594	
C032C599	
C032C600	
C032C601	
C032C602	
C032C603	

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032CC32	Fluoranthene-d10	4 (55-130)	All TCL compounds	J (all detects) R (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD14	Fluoranthene Pyrene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Sample	Compound	Finding	Criteria	Flag	A or P
C032CC32	All TCL compounds except Dibenz(a,h)anthracene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
C032CC33	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CD14	Fluoranthene Pyrene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	R R R R R	A
C032CD14DL	All TCL compounds except Fluoranthene Pyrene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	R	A
C032CC32	All TCL compounds	R	A

Sample	Compound	Flag	A or P
C032CC33	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R R R R R R R	A
C032CC33DL	All TCL compounds except Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC30 and C032CC31 and samples C032C600 and C032C601 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC30	C032CC31	
Acenaphthylene	2.4	5.9U	200
Phenanthrene	8.9	5.8	42
Anthracene	2.2	5.9U	200
Fluoranthene	29	18	47
Pyrene	42	26	47
Benzo(a)anthracene	14	8.6	48
Chrysene	15	9.4	46
Benzo(b)fluoranthene	22	10	75

Compound	Concentration (ug/Kg)		RPD
	C032CC30	C032CC31	
Benzo(k)fluoranthene	6.8	3.6	61
Benzo(a)pyrene	21	14	40
Indeno(1,2,3-cd)pyrene	17	11	43
Benzo(g,h,i)perylene	19	12	45

Compound	Concentration (ug/Kg)		RPD
	C032C600	C032C601	
Phenanthrene	3.1	11	112
Fluoranthene	6.0	3.9	42
Pyrene	6.8	8.3	20
Benzo(a)anthracene	8.7	5.8	40
Chrysene	13	22	51
Benzo(b)fluoranthene	12	4.9	84
Benzo(k)fluoranthene	11	5.5U	200
Benzo(a)pyrene	15	2.9	135
Indeno(1,2,3-cd)pyrene	11	1.7	146
Dibenz(a,h)anthracene	3.8	2.7	34
Benzo(g,h,i)perylene	20	15	29
2-Methylnaphthalene	5.5U	3.0	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203472

SDG	Sample	Compound	Flag	A or P	Reason
K2203472	C032CC32	All TCL compounds	J (all detects) R (all non-detects)	A	Surrogate recovery (%R)
K2203472	C032CD14	Fluoranthene Pyrene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203472	C032CC32	All TCL compounds except Dibenz(a,h)anthracene	J (all detects)	A	Compound quantitation and CRQLs
K2203472	C032CC33	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203472	C032CD14	Fluoranthene Pyrene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	R R R R R	A	Overall assessment of data
K2203472	C032CD14DL	All TCL compounds except Fluoranthene Pyrene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	R	A	Overall assessment of data
K2203472	C032CC32	All TCL compounds	R	A	Overall assessment of data
K2203472	C032CC33	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R R R R R R R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
K2203472	C032CC33DL	All TCL compounds except Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203472

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203472

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 30, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203504

Sample Identification

C032C502
C032C503
C032C504
C032C505
C032C506
C032C507
C032C508
C032C509
C032C510
C032C524
C032C525
C032C526
C032C527
C032CC28
C032CC28MS
C032CC28MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CC28MS\MSD (All samples in SDG K2203504)	Phenanthrene	-	-	58 (≤40)	J (all detects) UJ (all non-detects)	A
	Fluoranthene	-	219 (28-166)	90 (≤40)		
	Pyrene	-	194 (28-162)	77 (≤40)		
	Benzo(a)anthracene	-	175 (64-145)	65 (≤40)		
	Chrysene	-	167 (54-128)	69 (≤40)		
	Benzo(b)fluoranthene	-	186 (64-138)	67 (≤40)		
	Benzo(k)fluoranthene	-	135 (65-130)	45 (≤40)		
	Benzo(a)pyrene	-	189 (57-149)	67 (≤40)		
	Indeno(1,2,3-cd)pyrene	-	-	54 (≤40)		
	Benzo(g,h,i)perylene	-	-	46 (≤40)		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C507 and C032C508 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C507	C032C508	
Phenanthrene	1.8	6.2U	200
Fluoranthene	4.1	3.2	25
Pyrene	5.2	4.2	21
Benzo(a)anthracene	1.6	6.2U	200
Chrysene	4.0	2.5	46
Benzo(b)fluoranthene	3.6	2.6	32
Benzo(k)fluoranthene	2.2	6.2U	200
Benzo(a)pyrene	3.6	2.5	36
Indeno(1,2,3-cd)pyrene	3.9	3.0	26
Dibenz(a,h)anthracene	1.8	6.2U	200
Benzo(g,h,i)perylene	13	8.9	37

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203504

SDG	Sample	Compound	Flag	A or P	Reason
K2203504	C032C502 C032C503 C032C504 C032C505 C032C506 C032C507 C032C508 C032C509 C032C510 C032C524 C032C525 C032C526 C032C527 C032CC28	Phenanthrene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203504

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203504

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 30, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203505

Sample Identification

C032C560
C032C561
C032C562
C032C573
C032C574
C032C575
C032C576
C032CD09
C032CD10
C032CD11
C032CD11DL
C032CD12
C032CC25
C032CC26
C032CC27
C032CC27MS
C032CC27MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD11	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CD11	Fluoranthene Pyrene	R R	A
C032CD11DL	All TCL compounds except Fluoranthene Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203505

SDG	Sample	Compound	Flag	A or P	Reason
K2203505	C032CD11	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203505	C032CD11	Fluoranthene Pyrene	R R	A	Overall assessment of data
K2203505	C032CD11DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203505

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203505

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 31, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203553

Sample Identification

C032C533
C032C533DL
C032C534
C032C535
C032C536
C032C537
C032CD39
C032CD40
C032CD41
C032CD42
C032CD43
C032CC47
C032CC48
C032CC49
C032CC50
C032CC50MS
C032CC50MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C533	Phenanthrene Chrysene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C533	Phenanthrene Chrysene	R R	A
C032C533DL	All TCL compounds except Phenanthrene Chrysene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C536 and C032C537 and samples C032CD41 and C032CD42 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C536	C032C537	
Phenanthrene	2.4	1.8	29
Pyrene	2.3	5.6U	200
Chrysene	3.0	5.6U	200
Indeno(1,2,3-cd)pyrene	0.74	5.6U	200

Compound	Concentration (ug/Kg)		RPD
	C032CD41	C032CD42	
Fluoranthene	1.8	1.5	18
Pyrene	2.9	2.2	27

Compound	Concentration (ug/Kg)		RPD
	C032CD41	C032CD42	
Benzo(a)anthracene	1.6	5.3U	200
Chrysene	3.7	3.2	14
Benzo(b)fluoranthene	2.1	1.8	15
Indeno(1,2,3-cd)pyrene	1.6	1.3	21
Benzo(g,h,i)perylene	2.3	2.4	4

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203553

SDG	Sample	Compound	Flag	A or P	Reason
K2203553	C032C533	Phenanthrene Chrysene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
K2203553	C032C533	Phenanthrene Chrysene	R R	A	Overall assessment of data
K2203553	C032C533DL	All TCL compounds except Phenanthrene Chrysene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203553

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203553

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 31, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Columbia Analytical Services, Inc.

Sample Delivery Group (SDG): K2203554

Sample Identification

C032CC12
C032CC13
C032CC14
C032CC15
C032CC16
C032CC17
C032CC18
C032CC19
C032CC20
C032CC60
C032CC61
C032CC61MS
C032CC61MSD

Introduction

This data review covers 13 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC19 and C032CC20 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC19	C032CC20	
Naphthalene	10	7.1	34
Acenaphthylene	21	19	10
Acenaphthene	5.7	4.2	30
Fluorene	5.7	6.3	10
Phenanthrene	140	150	7
Anthracene	29	29	0
Fluoranthene	450	350	25
Pyrene	530	420	23
Benzo(a)anthracene	180	150	18
Chrysene	220	170	26
Benzo(b)fluoranthene	310	240	25
Benzo(k)fluoranthene	92	69	29
Benzo(a)pyrene	290	230	23
Indeno(1,2,3-cd)pyrene	320	240	29
Dibenz(a,h)anthracene	32	24	29
Benzo(g,h,i)perylene	300	230	26

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG K2203554

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG K2203554

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG K2203554

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 14, 2002

LDC Report Date: June 24, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E150192

Sample Identification

C032C943	C032CA31
C032C944	C032CA32
C032C945	C032CA33
C032C946	C032CA34
C032C947	C032CA34DL
C032C987	C032CA35
C032C988	C032C945MS
C032C989	C032C945MSD
C032C990	
C032C990DL	
C032C991	
C032C935	
C032C936	
C032C937	
C032C938	
C032C926	
C032C927	
C032C928	
C032C928DL	
C032C929	

Introduction

This data review covers 28 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/21/02	Phenanthrene	27.3	C032C929 C032CA32	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
5/17/02	Benzo(g,h,i)perylene	25.1	C032C944 C032C945 C032C946 C032CA33 C032C945MS C032C945MSD	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR06 (from SDG #K2202671) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR06	5/14/02	Naphthalene 2-Methylnaphthalene Chrysene	0.0074 ug/L 0.0031 ug/L 0.0015 ug/L	All samples in SDG G2E150192

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C943 C032C944 C032C945 C032C946 C032C947 C032C987 C032C988 C032C989 C032C990 C032C990DL C032C991 C032C935 C032C936 C032C937 C032C938 C032C926 C032C927 C032C928 C032C928DL C032C929 C032CA31 C032CA32	All TCL compounds	More than twenty samples associated to a matrix spike sample.	No more than twenty samples to be associated to a matrix spike sample.	None	P

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C928	Chrysene-d12 Perylene-d12	424632 (76084-304338) 407260 (66364-265458)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CA31	Chrysene-d12 Perylene-d12	322266 (76084-304338) 288399 (66364-265458)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
C032CA33	Phenanthrene-d10	134296 (135474-541896)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032CA34DL	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CA34DL	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CA34DL	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CA34DL	4.) The 100 ng/mL standard of the initial calibration was analyzed after the samples.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C990 C032CA34	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A
C032C928	Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C990 C032CA34	Fluoranthene Pyrene	R R	A
C032C990DL C032CA34DL	All TCL compounds except Fluoranthene Pyrene	R	A
C032C928	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R R R R	A

Sample	Compound	Flag	A or P
C032C928DL	All TCL compounds except Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C944 and C032C945, samples C032C988 and C032C989 and samples C032CA32 and C032CA33 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C944	C032C945	
Acenaphthylene	44	52U	200
Anthracene	130	52U	200
Benzo(a)anthracene	260	7.4	151
Benzo(b)fluoranthene	200	15	172
Benzo(k)fluoranthene	260	10	185
Benzo(g,h,i)perylene	180	26	150
Benzo(a)pyrene	310	12	185
Chrysene	320	13	184
Dibenz(a,h)anthracene	34	52U	200
Fluoranthene	760	18	91
Fluorene	29	52U	200

Compound	Concentration (ug/Kg)		RPD
	C032C944	C032C945	
Indeno(1,2,3-cd)pyrene	190	21	160
2-Methylnaphthalene	4.7	52U	200
Naphthalene	6.8	52U	200
Phenanthrene	590	12	192
Pyrene	1000	23	191

Compound	Concentration (ug/Kg)		RPD
	C032CA32	C032CA33	
Anthracene	2.7	53U	200
Benzo(a)anthracene	17	15	12
Benzo(b)fluoranthene	23	19	19
Benzo(k)fluoranthene	27	20	30
Benzo(g,h,i)perylene	26	21	21
Benzo(a)pyrene	31	21	38
Chrysene	23	22	4
Fluoranthene	31	31	0
Indeno(1,2,3-cd)pyrene	17	17	0
Phenanthrene	6.2	7.0	12
Pyrene	36	34	6
Dibenz(a,h)anthracene	27U	5.2	200
Naphthalene	27U	3.8	200

Compound	Concentration (ug/Kg)		RPD
	C032C988	C032C989	
Acenaphthene	7.0	5.2U	200
Acenaphthylene	2.9	1.8	47
Anthracene	3.8	1.4	92
Benzo(a)anthracene	20	11	58
Benzo(b)fluoranthene	27	17	45
Benzo(k)fluoranthene	25	18	33
Benzo(g,h,i)perylene	33	21	44
Benzo(a)pyrene	34	22	43
Chrysene	22	15	38
Dibenz(a,h)anthracene	5.1	3.5	37
Fluoranthene	65	22	49
Fluorene	1.9	5.2U	200
Indeno(1,2,3-cd)pyrene	32	20	46
2-Methylnaphthalene	1.4	1.1	24
Naphthalene	5.1	1.7	100
Phenanthrene	51	9.0	140
Pyrene	76	28	92

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Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E150192

SDG	Sample	Compound	Flag	A or P	Reason
G2E150192	C032C929 C032CA32	Phenanthrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E150192	C032C944 C032C945 C032C946 C032CA33	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E150192	C032C943 C032C944 C032C945 C032C946 C032C947 C032C987 C032C988 C032C989 C032C990 C032C990DL C032C991 C032C935 C032C936 C032C937 C032C938 C032C926 C032C927 C032C928 C032C928DL C032C929 C032CA31 C032CA32	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
G2E150192	C032C928	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards (area)
G2E150192	C032CA31	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E150192	C032CA33	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
G2E150192	C032C990 C032CA34	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E150192	C032C928	Pyrene	J (all detects)	A	Compound quantitation and CRQLs
G2E150192	C032C990 C032CA34	Fluoranthene Pyrene	R R	A	Overall assessment of data
G2E150192	032C990DL C032CA34DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data
G2E150192	C032C928	Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R R R R	A	Overall assessment of data
G2E150192	C032C928DL	All TCL compounds except Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E150192

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E150192

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 15, 2002

LDC Report Date: June 24, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E160199

Sample Identification

C032C970
C032C971
C032C972
C032C973
C032C973DL
C032CA14
C032CA15
C032CA16
C032CA17
C032CA79
C032CA79DL1
C032CA79DL2
C032CA62
C032CA63
C032CA64
C032CA65
C032CA66
C032CA66DL
C032C972MS
C032C972MSD
C032CA79MS
C032CA79MSD

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/17/02 (S1SK103)	Benzo(b)fluoranthene	25.2	C032CA79 C032CA79MS C032CA79MSD 2136469MB	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
5/17/02 (S3SK105)	Naphthalene	29.9	C032C970 C032C971 C032C972 C032C973 C032CA14 C032CA15 C032CA16 C032CA17 C032C972MS C032C972MSD 2136474MB	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2136469MB	5/16/02	2-Methylnaphthalene	0.33 ug/Kg	C032CA79 C032CA79DL1 C032CA79DL2

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032CA79DL2	2-Methylnaphthalene (50x)	75 ug/Kg	290U ug/Kg

Sample C032CR08 (from SDG #K2203084) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR08	5/15/02	Naphthalene Phenanthrene Fluoranthene Chrysene	0.0070 ug/L 0.0034 ug/L 0.0033 ug/L 0.0019 ug/L	All samples in SDG G2E160199

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CA79MS/MSD (C032CA79 C032CA79DL1 C032CA79DL2)	2-Methylnaphthalene Acenaphthene	0 (30-150) 0 (30-150)	0 (30-150) 0 (30-150)	- -	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A
C032C972MS/MSD (C032C970 C032C971 C032C972 C032C973 C032C973DL C032CA14 C032CA15 C032CA16 C032CA17 C032CA62 C032CA63 C032CA64 C032CA65 C032CA66 C032CA66DL)	Dibenz(a,h)anthracene	154 (30-150)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CA63	Perylene-d12	272617 (66364-265458)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
C032CA66DL	Chrysene-d12	392215 (93646-374582)	Benzo(a)anthracene Chrysene	J (all detects) J (all detects)	A

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C973DL C032CA79DL1 C032CA62 C032CA64	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C973DL C032CA79DL1 C032CA62 C032CA64	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C973DL C032CA79DL1 C032CA62 C032CA64	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

Sample	Finding	Associated Compound	Flag	A or P
C032C973DL C032CA79DL1 C032CA62 C032CA64	4.) The 100 ng/mL standard of the initial calibration was analyzed after the samples.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C973	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CA79	All TCL compounds except Acenaphthene 2-Methylnaphthalene Naphthalene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
C032CA79DL1	Fluoranthene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A
C032CA66	Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C973	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R	A
C032C973DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A
C032CA79	All TCL compounds except Acenaphthene 2-Methylnaphthalene Naphthalene	R	A
C032CA79DL1	Acenaphthene 2-Methylnaphthalene Naphthalene Fluoranthene Phenanthrene Pyrene	R R R R R R	A
C032CA79DL2	All TCL compounds except Fluoranthene Phenanthrene Pyrene	R	A
C032CA66	Fluoranthene Pyrene	R R	A

Sample	Compound	Flag	A or P
C032CA66DL	All TCL compounds except Fluoranthene Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CA65 and C032CA66 and samples C032CA65 and C032CA66DL were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CA65	C032CA66	
Acenaphthene	5.7U	15	200
Acenaphthylene	2.8	13	129
Anthracene	2.1	20	152
Benzo(a)anthracene	17	120	150
Benzo(b)fluoranthene	20	120	143
Benzo(k)fluoranthene	20	120	143
Benzo(g,h,i)perylene	38	180	130
Benzo(a)pyrene	30	180	143
Chrysene	19	130	149
Dibenz(a,h)anthracene	4.1	22	137
Fluoranthene	47	360	154
Fluorene	5.7U	3.8	200
Indeno(1,2,3-cd)pyrene	40	200	133

Compound	Concentration (ug/Kg)		RPD
	C032CA65	C032CA66	
2-Methylnaphthalene	5.7U	0.93	200
Naphthalene	1.1	6.0	138
Phenanthrene	17	200	169
Pyrene	59	430	152

Compound	Concentration (ug/Kg)		RPD
	C032CA65	C032CA66DL	
Acenaphthene	5.7U	12	200
Acenaphthylene	2.8	11	119
Anthracene	2.1	16	154
Benzo(a)anthracene	17	93	138
Benzo(b)fluoranthene	20	100	133
Benzo(k)fluoranthene	20	88	126
Benzo(g,h,i)perylene	38	140	115
Benzo(a)pyrene	30	140	129
Chrysene	19	100	136
Dibenz(a,h)anthracene	4.1	19	129
Fluoranthene	47	310	147
Fluorene	5.7U	4.2	200
Indeno(1,2,3-cd)pyrene	40	160	120
2-Methylnaphthalene	5.7U	1.1	200

Compound	Concentration (ug/Kg)		RPD
	C032CA65	C032CA66DL	
Naphthalene	1.1	4.6	123
Phenanthrene	17	150	159
Pyrene	59	380	146

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E160199

SDG	Sample	Compound	Flag	A or P	Reason
G2E160199	C032CA79	Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E160199	C032C970 C032C971 C032C972 C032C973 C032CA14 C032CA15 C032CA16 C032CA17	Naphthalene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E160199	C032CA79 C032CA79DL1 C032CA79DL2	2-Methylnaphthalene Acenaphthene	J (all detects) R (all non-detects) J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E160199	C032C970 C032C971 C032C972 C032C973 C032C973DL C032CA14 C032CA15 C032CA16 C032CA17 C032CA62 C032CA63 C032CA64 C032CA65 C032CA66 C032CA66DL	Dibenz(a,h)anthracene	J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E160199	C032CA63	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E160199	C032CA66DL	Benzo(a)anthracene Chrysene	J (all detects) J (all detects)	A	Internal standards (area)
G2E160199	C032C973DL C032CA79DL1 C032CA62 C032CA64	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

SDG	Sample	Compound	Flag	A or P	Reason
G2E160199	C032C973	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E160199	C032CA79	All TCL compounds except Acenaphthene 2-Methylnaphthalene Naphthalene	J (all detects)	A	Compound quantitation and CRQLs
G2E160199	C032CA79DL1	Fluoranthene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E160199	C032CA66	Phenanthrene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E160199	C032C973	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R	A	Overall assessment of data
G2E160199	C032C973DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Chrysene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A	Overall assessment of data
G2E160199	C032CA79	All TCL compounds except Acenaphthene 2-Methylnaphthalene Naphthalene	R	A	Overall assessment of data
G2E160199	C032CA79DL1	Acenaphthene 2-Methylnaphthalene Naphthalene Fluoranthene Phenanthrene Pyrene	R R R R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
G2E160199	C032CA79DL2	All TCL compounds except Fluoranthene Phenanthrene Pyrene	R	A	Overall assessment of data
G2E160199	C032CA66	Fluoranthene Pyrene	R R	A	Overall assessment of data
G2E160199	C032CA66DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E160199

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E160199	C032CA79DL2	2-Methylnaphthalene (50x)	290U ug/Kg	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E160199

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 23, 2002

LDC Report Date: June 24, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E240204

Sample Identification

C032CB02
C032CB03
C032CB04
C032CB05
C032CB94
C032CB95
C032CB96
C032CB97
C032CB98
C032CA09
C032CA10
C032CA11
C032CA12
C032CA13
C032C230
C032CB04MS
C032CB04MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR17 (from SDG #38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB94	Phenanthrene-d10 Chrysene-d12 Perylene-d12	704800 (821455-3285820) 567770 (637401-2549604) 382843 (382944-1531778)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB95	Phenanthrene-d10 Chrysene-d12 Perylene-d12	763088 (821455-3285820) 582706 (637401-2549604) 378568 (382944-1531778)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032CA12	Chrysene-d12	589516 (637401-2549604)	Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P
C032CA13	Chrysene-d12	620262 (637401-2549604)	Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P
C032C230	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	742221 (743946-2975784) 303333 (348961-1395846) 698197 (821455-3285820) 330495 (637401-2549604) 134985 (382944-1531778)	All TCL compounds	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Flag	A or P
C032CA12 C032C230	Benzo(b)fluoranthene Benzo(k)fluoranthene	Due to lack of resolution between the peaks of these compounds, results were estimated.	J (all detects) J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CB97 and C032CB98 and samples C032CA10 and C032CA11 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CB97	C032CB98	
Benzo(a)anthracene	4.8	6.3	27
Benzo(b)fluoranthene	6.7	10	40
Benzo(k)fluoranthene	7.2	11	42
Benzo(g,h,i)perylene	13	19	38
Benzo(a)pyrene	11	18	48
Chrysene	4.5	5.6	22
Dibenz(a,h)anthracene	1.2	1.8	40
Fluoranthene	4.5	6.5	36
Indeno(1,2,3-cd)pyrene	13	20	42
2-Methylnaphthalene	0.46	0.45	2
Naphthalene	0.79	1.2	41
Phenanthrene	1.3	1.9	38
Pyrene	11	24	74
Acenaphthylene	6.4U	1.4	200
Anthracene	6.4U	0.62	200

Compound	Concentration (ug/Kg)		RPD
	C032CA10	C032CA11	
Benzo(a)anthracene	0.56	0.58	3
Benzo(b)fluoranthene	0.90	0.95	5
Benzo(k)fluoranthene	0.69	0.72	4
Benzo(g,h,i)perylene	1.9	2.0	5
Benzo(a)pyrene	1.2	1.3	8
Chrysene	0.68	0.68	0
Fluoranthene	0.93	0.86	8
Indeno(1,2,3-cd)pyrene	1.7	1.9	11
Pyrene	1.6	1.5	6

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E240204

SDG	Sample	Compound	Flag	A or P	Reason
G2E240204	C032CB94 C032CB95	Benzo(a)anthracene Chrysene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E240204	C032CA12 C032CA13	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E240204	C032C230	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E240204	C032CA12 C032C230	Benzo(b)fluoranthene Benzo(k)fluoranthene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E240204

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E240204

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: June 2, 2002

LDC Report Date: June 20, 2002

Matrix: Soil/Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38521

Sample Identification

C032C754
C032C755
C032C749
C032C745
C032C746
C032C748
C032C747
C032C741
C032C741RE
C032C742
C032C743
C032CR023
C032C746MS
C032C746MSD
C032C746MSRE

Introduction

This data review covers 14 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR023 was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032C741	2-Fluorobiphenyl Nitrobenzene-d5 Terphenyl-d14	0.1 (54-125) 0.3 (49-121) 0.4 (57-126)	All TCL compounds	J (all detects) R (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C741RE	All TCL compounds	No MSD associated with these samples.	MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C746MS/MSD	2-Methylnaphthalene	22.2 (40-135)	-	113.9 (≤30)	J (all detects)	A
(C032C754	Acenaphthene	24.2 (39-135)	-	99.6 (≤30)	UJ (all non-detects)	
C032C755	Acenaphthylene	21.1 (37-135)	-	105.3 (≤30)		
C032C749	Anthracene	23.4 (35-175)	-	107.3 (≤30)		
C032C745	Benzo(a)anthracene	16.6 (41-143)	-	72.1 (≤30)		
C032C746	Benzo(a)pyrene	1.4 (31-135)	-	64.9 (≤30)		
C032C748	Benzo(b)fluoranthene	1.1 (27-135)	-	71.2 (≤30)		
C032C747	Benzo(k)fluoranthene	9.7 (53-117)	-	77.8 (≤30)		
C032C744	Chrysene	10.1 (45-143)	-	69.8 (≤30)		
C032C742	Dibenz(a,h)anthracene	19.9 (40-135)	-	98.9 (≤30)		
C032C743)	Fluorene	21.5 (38-149)	-	112.0 (≤30)		
	Indeno(1,2,3-cd)pyrene	0.1 (25-170)	-	76.7 (≤30)		
	Naphthalene	22.6 (40-135)	-	110.3 (≤30)		

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C746MS/MSD (C032C754 C032C755 C032C749 C032C745 C032C746 C032C748 C032C747 C032C741 C032C742 C032C743)	Benzo(g,h,i)perylene Fluoranthene Phenanthrene Pyrene	0 (25-159) 0 (37-135) 0 (44-135) 0 (37-146)	- - - -	71.7 (≤30) 172.4 (≤30) 80.8 (≤30) 58.2 (≤30)	J (all detects) R (all non-detects)	A
C032C746MSRE (C032C741RE)	Benzo(a)pyrene Benzo(k)fluoranthene Fluoranthene Pyrene	148 (31-135) 157 (53-117) 170 (37-135) 249 (37-146)	- - - -	- - - -	J (all detects) J (all detects) J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C741	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C746 and C032C748 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C746	C032C748	
2-Methylnaphthalene	1.1	5.8U	200
Acenaphthene	4.5	1.6	95
Acenaphthylene	9.3	3.8	84
Anthracene	8.1	2.6	103
Benzo(a)anthracene	57.0	24.0	81
Benzo(a)pyrene	90.0	40.0	77
Benzo(b)fluoranthene	70.0	32.0	74
Benzo(g,h,i)perylene	96.0	45.0	72
Benzo(k)fluoranthene	60.0	27.0	76
Chrysene	70.0	29.0	83
Dibenz(a,h)anthracene	12.0	6.0	67

Compound	Concentration (ug/Kg)		RPD
	C032C746	C032C748	
Fluoranthene	150.0	67.0	76
Fluorene	3.5	5.8U	200
Indeno(1,2,3-cd)pyrene	68.0	32.0	72
Naphthalene	4.7	1.6	98
Phenanthrene	80.0	31.0	88
Pyrene	190.0	79.0	82

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38521

SDG	Sample	Compound	Flag	A or P	Reason
38521	C032C741	All TCL compounds	J (all detects) R (all non-detects)	A	Surrogate recovery (%R)
38521	C032C741RE	All TCL compounds	None	P	Matrix spike duplicates
38521	C032C754 C032C755 C032C749 C032C745 C032C746 C032C748 C032C747 C032C741 C032C742 C032C743	2-Methylnaphthalene Acenaphthene Acenaphthylene Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Dibenz(a,h)anthracene Fluorene Indeno(1,2,3-cd)pyrene Naphthalene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
38521	C032C754 C032C755 C032C749 C032C745 C032C746 C032C748 C032C747 C032C741 C032C742 C032C743	Benzo(g,h,i)perylene Fluoranthene Phenanthrene Pyrene	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
38521	C032C741RE	Benzo(a)pyrene Benzo(k)fluoranthene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike analysis (%R)
38521	C032C741	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38521

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38521

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 31, 2002

LDC Report Date: June 19, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38509

Sample Identification

C032CC51
C032CC52
C032CC53
C032CC54
C032CC55
C032CB59
C032CB59DL
C032CB60
C032CB61
C032CB62
C032CB72
C032CB73
C032CB74
C032CB75
C032CB76
C032CC00
C032CD01
C032CD02
C032CD03
C032CC52MS
C032CC52MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CC52MS/MSD (All samples in SDG 38509)	Benzo(k)fluoranthene	124 (53-117)	-	-	J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CB59	Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CB59	Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC52 and C032CC53 and samples C032CB75 and C032CB76 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC52	C032CC53	
Benzo(a)pyrene	1.9	6.0U	200
Benzo(k)fluoranthene	1.8	6.0U	200
Indeno(1,2,3-cd)pyrene	1.5	6.0U	200
Pyrene	2.2	6.0U	200

Compound	Concentration (ug/Kg)		RPD
	C032CB75	C032CB76	
Acenaphthylene	3.6	2.2	48

Compound	Concentration (ug/Kg)		RPD
	C032CB75	C032CB76	
Anthracene	3.1	1.6	64
Benzo(a)anthracene	24.0	13.0	59
Benzo(a)pyrene	47.0	25.0	61
Benzo(b)fluoranthene	32.0	17.0	61
Benzo(g,h,i)perylene	55.0	29.0	62
Benzo(k)fluoranthene	46.0	23.0	67
Chrysene	27.0	15.0	57
Dibenz(a,h)anthracene	7.0	3.5	67
Fluoranthene	61.0	34.0	57
Indeno(1,2,3-cd)pyrene	37.0	19.0	64
Naphthalene	2.9	1.1	90
Phenanthrene	21.0	11.0	62
Pyrene	82.0	45.0	58

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38509

SDG	Sample	Compound	Flag	A or P	Reason
38509	C032CC51 C032CC52 C032CC53 C032CC54 C032CC55 C032CB59 C032CB59DL C032CB60 C032CB61 C032CB62 C032CB72 C032CB73 C032CB74 C032CB75 C032CB76 C032CC00 C032CD01 C032CD02 C032CD03	Benzo(k)fluoranthene	J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)
38509	C032CB59	Pyrene	J (all detects)	A	Compound quantitation and CRQLs
38509	C032CB59	Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38509

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38509

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 29, 2002

LDC Report Date: June 20, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38488

Sample Identification

C032CC34	C032C616RE
C032CC35	C032CB93MS
C032CC36	C032CB93MSD
C032CC37	
C032CB90	
C032CB91	
C032CB92	
C032CB93	
C032C604	
C032C605	
C032C605DL1	
C032C605DL2	
C032C606	
C032C607	
C032C607RE	
C032C613	
C032C614	
C032C615	
C032C616	
C032C616DL	

Introduction

This data review covers 23 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
C032C607	2-Fluorobiphenyl Nitrobenzene-d5	42.8 (54-125) 39.9 (49-121)	All TCL compounds	J (all detects) UJ (all non-detects)	A

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C607RE C032C616RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C605	Perylene-d12	409883 (497768-1991070)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C616	2-Methylnaphthalene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C605	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R	A
C032C605DL1	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Sample	Compound	Flag	A or P
C032C605DL2 C032C607 C032C616RE	All TCL compounds	R	A
C032C616	2-Methylnaphthalene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38488

SDG	Sample	Compound	Flag	A or P	Reason
38488	C032C607	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate recovery (%R)
38488	C032C607RE C032C616RE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38488	C032C605	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
38488	C032C616	2-Methylnaphthalene	J (all detects)	A	Compound quantitation and CRQLs
38488	C032C605	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R	A	Overall assessment of data
38488	C032C605DL1	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data
38488	C032C605DL2 C032C607 C032C616RE	All TCL compounds	R	A	Overall assessment of data
38488	C032C616	2-Methylnaphthalene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG 38488

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG 38488

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 30, 2002

LDC Report Date: June 20, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: APPL, Inc.

Sample Delivery Group (SDG): 38498

Sample Identification

C032C577
C032C578
C032C579
C032C580
C032C581
C032C586
C032C587
C032C588
C032C588RE
C032C589
C032C590
C032CD04
C032CD05
C032CD06
C032CD07
C032CD08
C032CB81
C032CB82
C032CB83
C032CB84
C032C5[illegible]8MS
C032C57[illegible]8MSD

Introduction

This data review covers 22 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C588RE	All TCL compounds	No MS/MSD associated with these samples.	MS/MSD required.	None	P

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C578MS/MSD (C032C577 C032C578 C032C579 C032C580 C032C581 C032C586 C032C587 C032C588 C032C589 C032C590 C032CD04 C032CD05 C032CD06 C032CD07 C032CD08 C032CB81 C032CB82 C032CB83 C032CB84)	Benzo(a)pyrene	0 (31-135)	-	148.4 (≤30)	J (all detects) R (all non-detects)	A

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C578MS/MSD (C032C577 C032C578 C032C579 C032C580 C032C581 C032C586 C032C587 C032C588 C032C589 C032C590 C032CD04 C032CD05 C032CD06 C032CD07 C032CD08 C032CB81 C032CB82 C032CB83 C032CB84)	Benzo(k)fluoranthene	127 (53-117)	-	37.0 (≤30)	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C588RE	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C580 and C032C581, samples C032C589 and C032C590 and samples C032CD07 and C032CD08 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C580	C032C581	
2-Methylnaphthalene	8.1	4.2	63
Acenaphthene	27.0	16.0	51
Acenaphthylene	38.0	30.0	23
Anthracene	27.0	19.0	35
Benzo(a)anthracene	210.0	110.0	62
Benzo(a)pyrene	310.0	160.0	64
Benzo(b)fluoranthene	230.0	120.0	63
Benzo(g,h,i)perylene	300.0	140.0	73
Benzo(k)fluoranthene	190.0	98.0	64
Chrysene	270.0	130.0	70
Dibenz(a,h)anthracene	38.0	20.0	62

Compound	Concentration (ug/Kg)		RPD
	C032C580	C032C581	
Fluoranthene	670.0	360.0	60
Fluorene	25.0	17.0	38
Indeno(1,2,3-cd)pyrene	220.0	100.0	75
Naphthalene	46.0	25.0	59
Phenanthrene	510.0	330.0	43
Pyrene	790.0	390.0	68

Compound	Concentration (ug/Kg)		RPD
	C032C589	C032C590	
2-Methylnaphthalene	2.0	4.5	73
Acenaphthene	7.7	98.0	171
Acenaphthylene	7.4	60.0	156
Anthracene	26.0	180.0	150
Benzo(a)anthracene	93.0	400.0	124
Benzo(a)pyrene	110.0	520.0	130
Benzo(b)fluoranthene	71.0	310.0	125
Benzo(g,h,i)perylene	73.0	350.0	131
Benzo(k)fluoranthene	64.0	320.0	133
Chrysene	110.0	450.0	121
Dibenz(a,h)anthracene	15.0	59.0	119
Fluoranthene	150.0	1100.0	152

Compound	Concentration (ug/Kg)		RPD
	C032C589	C032C590	
Fluorene	9.0	84.0	61
Indeno(1,2,3-cd)pyrene	54.0	260.0	31
Phenanthrene	110.0	1100.0	64
Pyrene	250.0	1400.0	39

Compound	Concentration (ug/Kg)		RPD
	C032CD07	C032CD08	
2-Methylnaphthalene	3.7	3.4	8
Acenaphthene	6.5	4.0	48
Acenaphthylene	57.0	51.0	11
Anthracene	26.0	24.0	8
Benzo(a)anthracene	230.0	210.0	9
Benzo(a)pyrene	410.0	380.0	8
Benzo(b)fluoranthene	260.0	240.0	8
Benzo(g,h,i)perylene	360.0	340.0	6
Benzo(k)fluoranthene	240.0	230.0	4
Chrysene	280.0	250.0	11
Dibenz(a,h)anthracene	50.0	47.0	6
Fluoranthene	530.0	440.0	19
Fluorene	14.0	7.4	62
Indeno(1,2,3-cd)pyrene	250.0	240.0	4

Compound	Concentration (ug/Kg)		RPD
	C032CD07	C032CD08	
Phenanthrene	250.0	140.0	56
Pyrene	700.0	580.0	19

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG 38498

SDG	Sample	Compound	Flag	A or P	Reason
38498	C032C588RE	All TCL compounds	None	P	Matrix spike/Matrix spike duplicates
38498	C032C577 C032C578 C032C579 C032C580 C032C581 C032C586 C032C587 C032C588 C032C589 C032C590 C032CD04 C032CD05 C032CD06 C032CD07 C032CD08 C032CB81 C032CB82 C032CB83 C032CB84	Benzo(a)pyrene	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
38498	C032C577 C032C578 C032C579 C032C580 C032C581 C032C586 C032C587 C032C588 C032C589 C032C590 C032CD04 C032CD05 C032CD06 C032CD07 C032CD08 C032CB81 C032CB82 C032CB83 C032CB84	Benzo(k)fluoranthene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
38498	C032C588RE	All TCL compounds	R	A	Overall assessment of data

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Bechtel Environmental
1230 Columbia Street, Suite 400
San Diego, CA 92101
Attn: Mr James Jordan

July 2, 2002

Project Name : NAS Alameda Point
Project # : CTO 032

On June 26 and June 27, 2002 the following data packages were received by Laboratory Data Consultants, Inc. from Bechtel Environmental. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 8663:

SDG #	Fraction
G2E210154, G2E240197, G2E240210, G2E250151, G2E250152, G2E290164, G2E290159, G2E290161, G2E290166, G2E300175, G2E300183, G2E300186, G2F010144, G2E310177, G2E310188, G2F010139	Polynuclear Aromatic Hydrocarbons

The above SDGs were reviewed using Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- NFESC Special Publication SP-2056-ENV, Navy Installation Restoration Chemical Data Quality Manual, Naval Facilities Engineering Command, September 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996

The data validators did utilize their professional judgement when evaluating the data to achieve the most complete and accurate assessment of the data. The data packages were reviewed according to the above stated validation procedures.

For GC/MS polynuclear aromatic hydrocarbon analyses, the primary findings consisted of:

a) Analysis holding times were exceeded for samples C032CR19RE and C032CR20RE in SDG G2E290166. Since the laboratory met the protocol requirement, this finding should be considered advisory.

b) Continuing calibration factors exceeded acceptance criteria in SDGs G2E210154, G2E240210, G2E250152,, G2E290159, G2E300183 and G2E300186. Since the laboratory met the protocol requirement, this finding should be considered advisory.

c) Continuing calibration factors exceeded acceptance criteria in SDGs G2E290164, G2E290166, G2E300175, G2E300183, G2E310177 and G2F010139.

d) Matrix spike/matrix spike duplicate sample analyses were not performed for all batches in SDG G2E300175.

e) Matrix spike/matrix spike duplicate percent recoveries and relative percent differences exceeded acceptance criteria for several compounds in SDGs G2E240210, G2E290164, G2E290159, G2E300175, G2E300183 and G2E310177. The associated nondetect results for dibenz(a,h)anthracene in SDG G2E300175, phenanthrene, fluoranthene, benzo(g,h,i)perylene and pyrene in SDG G2E290164 and benzo(a)anthracene, chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene and indeno(1,2,3-cd)pyrene in SDG G2E300183 were qualified as unusable. Since the laboratory met the protocol requirement, this finding should be considered advisory.

f) Laboratory control sample percent recoveries for chrysene and relative percent differences for indeno(1,2,3-cd)pyrene and dibenz(a,h)anthracene exceeded acceptance criteria in SDG G2E290166.

g) Internal standard areas exceeded acceptance criteria for several samples in SDG G2E210154, G2E240197, G2E240210, G2E250151, G2E250152, G2E290164, G2E290159, G2E290161, G2E300175, G2E300183, G2E300186, G2E310177, G2E310188 and G2F010139.

h) Internal standard areas exceeded acceptance criteria for several samples in SDGs G2E240210, G2E300175, G2E300183, G2E300186, G2E310177 and G2F010139. Since the laboratory met the protocol requirement, this finding should be considered advisory.

i) Naphthalene was detected in the method blanks. Since the laboratory met the protocol requirement, this finding should be considered advisory.

j) Several compounds in SDGs G2E250151, G2E290164, G2E300175 G2E300183, G2E310177 and G2F010139 were reported above the calibration range in several samples . Since the laboratory met the protocol requirement, this finding should be considered advisory.

k) Data was qualified as unusable in dilutions by the validators in order to yield only one complete set of data for a given sample and eliminate redundant data.

In general, the data for all analyses appear usable with the limitations noted in the Data Validation Reports. Data validation flags were noted on the Laboratory Form 1s and included with each validation report.

Sincerely,

Richard M. Amano
President/Principal Chemist

Attachment 1

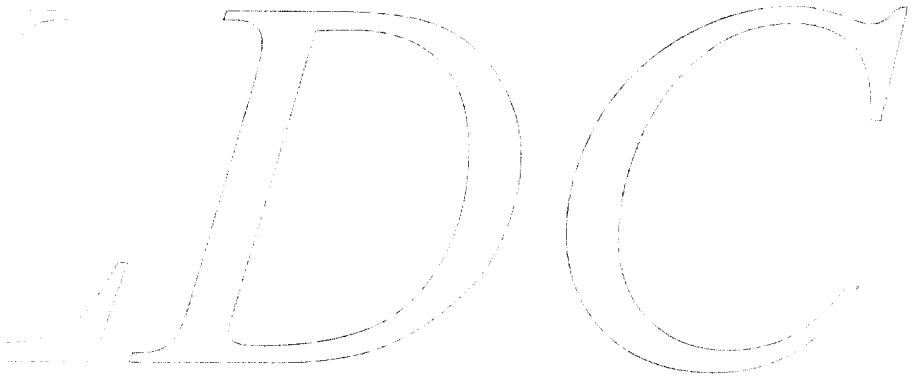
LDC #8663 (Bechtel Environmental-San Diego / Alameda Point, CTO 32)

LDC	SDG#	DATE REC'D	DATE DUE	PAHs (8270-SIM)																													
Matrix	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	G2E210154	6-26-02	7-3-02	0	17																												
B	G2E240197	6-26-02	7-3-02	0	11																												
C	G2E240210	6-26-02	7-3-02	0	16																												
D	G2E250151	6-26-02	7-3-02	0	20																												
E	G2E250152	6-26-02	7-3-02	0	17																												
F	G2E290164	6-26-02	7-3-02	0	10																												
G	G2E290159	6-26-02	7-3-02	0	17																												
H	G2E290161	6-26-02	7-3-02	0	17																												
I	G2E290166	6-26-02	7-3-02	8	0																												
J	G2E300175	6-26-02	7-3-02	0	18																												
K	G2E300183	6-26-02	7-3-02	0	24																												
L	G2E300186	6-26-02	7-3-02	0	5																												
M	G2F010144	6-26-02	7-3-02	0	16																												
N	G2E310177	6-26-02	7-3-02	0	21																												
O	G2E310188	6-26-02	7-3-02	0	17																												
P	G2F010139	6-27-02	7-3-02	0	18																												
Total	B			8	244	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Shaded cells indicate Level IV validation (all other cells are Level III validation)

Alameda Point, CTO 32
Data Validation Reports
LDC# 8663

Polynuclear Aromatic Hydrocarbons



Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 20, 2002

LDC Report Date: June 27, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E210154

Sample Identification

C032C072
C032C073
C032C074
C032C075
C032C098
C032C099
C032C100
C032C101
C032C102
C032C133
C032C134
C032C135
C032C136
C032C137
C032C481
C032C072MS
C032C072MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/23/02	Benzo(k)fluoranthene Dibenz(a,h)anthracene	25.43261 26.92641	C032C072 C032C073 C032C074 C032C075 C032C098 C032C099 C032C100 C032C101 C032C102 C032C133 C032C072MS C032C072MSD 2141451MB	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
6/29/02	Indeno(1,2,3-cd)pyrene	25.3	C032C136 C032C481	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR011 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for sample C032C137. Since this sample was diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C481	Perylene-d12	79705 (123203-492812)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C072 C032C073 C032C074 C032C075 C032C098 C032C099 C032C100 C032C101 C032C102 C032C133 C032C134 C032C135 C032C072MS C032C072MSD 2141451MB	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/21/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C072 C032C073 C032C074 C032C075 C032C098 C032C099 C032C100 C032C101 C032C102 C032C133 C032C134 C032C135 C032C072MS C032C072MSD 2141451MB	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/21/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P

Sample	Finding	Associated Compound	Flag	A or P
C032C072 C032C073 C032C074 C032C075 C032C098 C032C099 C032C100 C032C101 C032C102 C032C133 C032C134 C032C135 C032C072MS C032C072MSD 2141451MB	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C101 and C032C102 and samples C032C134 and C032C135 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C101	C032C102	
Benzo(a)anthracene	1.1	0.52	72
Benzo(b)fluoranthene	1.4	5.7U	200
Benzo(k)fluoranthene	0.77	5.7U	200
Benzo(a)pyrene	1.0	5.7U	200
Chrysene	1.8	5.7U	200
Fluoranthene	3.4	5.7U	200
Phenanthrene	2.1	5.7U	200
Pyrene	3.9	5.7U	200

Compound	Concentration (ug/Kg)		RPD
	C032C134	C032C135	
Benzo(a)anthracene	1.3	1.5	14
Benzo(b)fluoranthene	1.3	1.2	8
Benzo(k)fluoranthene	0.96	0.93	3
Benzo(g,h,i)perylene	1.4	1.1	24
Benzo(a)pyrene	1.3	1.2	8
Chrysene	1.5	1.8	18
Dibenz(a,h)anthracene	5.5U	0.29	5.5U
Fluoranthene	1.8	1.1	48
Indeno(1,2,3-cd)pyrene	1.5	1.2	22
2-Methylnaphthalene	0.32	0.34	6

Compound	Concentration (ug/Kg)		RPD
	C032C134	C032C135	
Naphthalene	5.5U	0.36	200
Phenanthrene	0.65	0.64	2
Pyrene	2.0	1.3	42

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E210154

SDG	Sample	Compound	Flag	A or P	Reason
G2E210154	C032C072 C032C073 C032C074 C032C075 C032C098 C032C099 C032C100 C032C101 C032C102 C032C133	Benzo(k)fluoranthene Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E210154	C032C136 C032C481	Indeno(1,2,3-cd)pyrene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E210154	C032C481	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E210154	C032C072 C032C073 C032C074 C032C075 C032C098 C032C099 C032C100 C032C101 C032C102 C032C133 C032C134 C032C135	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E210154

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E210154

No Sample Data Qualified in this SDG

LDC Report# 8663B2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 23, 2002

LDC Report Date: July 1, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E240197

Sample Identification

C032C336
C032C337
C032C338
C032C339
C032C296
C032C297
C032C298
C032C299
C032C300
C032C336MS
C032C336MSD

Introduction

This data review covers 11 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/28/02	2-Methylnaphthalene	29.5	2144489MB	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR17 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C336 C032C337 C032C338 C032C339 C032C296 C032C297 C032C299 C032C300 C032C336MS C032C336MSD	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/31/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P

Sample	Finding	Associated Compound	Flag	A or P
C032C336 C032C337 C032C338 C032C339 C032C296 C032C297 C032C299 C032C300 C032C336MS C032C336MSD	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/31/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C336 C032C337 C032C338 C032C339 C032C296 C032C297 C032C299 C032C300 C032C336MS C032C336MSD	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C299 and C032C300 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C299	C032C300	
Benzo(a)anthracene	0.45	5.9U	200
Benzo(g,h,i)perylene	0.59	5.9U	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E240197

SDG	Sample	Compound	Flag	A or P	Reason
G2E240197	C032C336 C032C337 C032C338 C032C339 C032C296 C032C297 C032C299 C032C300	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E240197

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E240197

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 23, 2002

LDC Report Date: June 28, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E240210

Sample Identification

C032C231
C032C232
C032C233
C032C234
C032C173
C032C174
C032C175
C032C176
C032C489
C032C490
C032C491
C032C492
C032C493
C032C388
C032C490MS
C032C490MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/27/02	Dibenz(a,h)anthracene	27.1	C032C231 C032C232 C032C233 C032C234 C032C173 C032C174 C032C176 C032C489 C032C490 C032C491 C032C493 C032C388 C032C490MS C032C490MSD 2144490MB	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR17 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C490MS/MSD (All samples in SDG G2E240210)	Phenanthrene	384 (30-150)	657 (30-150)	47 (≤30)	J (all detects) UJ (all non-detects)	A
	Anthracene	189 (30-150)	281 (30-150)	36 (≤30)		
	Fluoranthene	430 (30-150)	887 (30-150)	56 (≤30)		
	Pyrene	331 (30-150)	675 (30-150)	50 (≤30)		
	Benzo(a)anthracene	274 (30-150)	635 (30-150)	61 (≤30)		
	Chrysene	284 (30-150)	596 (30-150)	51 (≤30)		
	Benzo(b)fluoranthene	201 (30-150)	397 (30-150)	49 (≤30)		
	Benzo(k)fluoranthene	-	348 (30-150)	58 (≤30)		
	Benzo(a)pyrene	183 (30-150)	392 (30-150)	54 (≤30)		
	Indeno(1,2,3-cd)pyrene	-	295 (30-150)	58 (≤30)		
	Benzo(g,h,i)perylene	-	192 (30-150)	32 (≤30)		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C173	Naphthalene-d8	234596 (611030-2444122)	All TCL compounds	J (all detects) UJ (all non-detects)	P
	Acenaphthene-d10	144035 (350340-1401360)			
	Phenanthrene-d10	203617 (516104-2064418)			
	Chrysene-d12	120266 (343717-1374868)			
	Perylene-d12	61685 (233031-932126)			
C032C175	Naphthalene-d8	76933 (115302-461208)	Naphthalene	J (all detects) UJ (all non-detects)	A
	Acenaphthene-d10	50219 (56939-227754)	2-Methylnaphthalene		
	Perylene-d12	44731 (59629-238516)	Acenaphthylene		
			Acenaphthene		
			Benzo(b)fluoranthene		
			Benzo(k)fluoranthene		
			Benzo(a)pyrene		
			Indeno(1,2,3-cd)pyrene		
			Dibenz(a,h)anthracene		
			Benzo(g,h,i)perylene		
C032C175	Acenaphthene-d10	189372 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C492	Acenaphthene-d10	186309 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A
C032C492	Naphthalene-d8 Acenaphthene-d10 Perylene-d12	81289 (115302-461208) 56738 (56939-227754) 52700 (59629-238516)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C233 and C032C234 and samples C032C490 and C032C491 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C490	C032C491	
Acenaphthene	1.5	4.6	102
Acenaphthylene	5.4U	2.0	200

Compound	Concentration (ug/Kg)		RPD
	C032C490	C032C491	
Anthracene	6.0	20	108
Benzo(a)anthracene	36	63	54
Benzo(b)fluoranthene	26	55	72
Benzo(k)fluoranthene	27	48	56
Benzo(g,h,i)perylene	26	38	38
Benzo(a)pyrene	28	65	80
Chrysene	45	100	76
Dibenz(a,h)anthracene	14	21	40
Fluoranthene	43	110	88
Fluorene	1.5	4.8	105
Indeno(1,2,3-cd)pyrene	18	37	69
2-Methylnaphthalene	1.2	1.7	34
Naphthalene	0.79	1.5	62
Phenanthrene	16	56	111
Pyrene	49	99	68

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E240210

SDG	Sample	Compound	Flag	A or P	Reason
G2E240210	C032C231 C032C232 C032C233 C032C234 C032C173 C032C174 C032C176 C032C489 C032C490 C032C491 C032C493 C032C388	Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E240210	C032C231 C032C232 C032C233 C032C234 C032C173 C032C174 C032C175 C032C176 C032C489 C032C490 C032C491 C032C492 C032C493 C032C388	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
G2E240210	C032C173	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E240210	C032C175 C032C492	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E240210	C032C175 C032C492	Fluorene	J (all detects) UJ (all non-detects)	A	Internal standards (area)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E240210

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E240210

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 24, 2002

LDC Report Date: June 27, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E250151

Sample Identification

C032CC82
C032CC82DL
C032CC83
C032CC84
C032CC85
C032CC86
C032CC86DL
C032CD31
C032CD32
C032CD33
C032CD34
C032CD34DL
C032CC87
C032CC88
C032CC89
C032CC90
C032C305
C032C306
C032CC88MS
C032CC88MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Sample C032CR18 (from SDG 38470) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR18	5/24/02	Phenanthrene Benzo(k)fluoranthene	0.019 ug/L 0.019 ug/L	All samples in SDG G2E250151

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032CC82DL and C032CC84. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
2145136MB	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	176108 (242847-971388) 102042 (125060-500242) 150971 (187416-749666) 126036 (138638-554554) 112607 (127185-508740)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CC83	Naphthalene-d8 Acenaphthene-d10 Perylene-d12	197693 (242847-971388) 117059 (125060-500242) 1858527 (187416-749666)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032CC82	Naphthalene-d8	221787 (242847-971388)	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P
C032CC88	Naphthalene-d8 Acenaphthene-d10	214800 (242847-971388) 118197 (125060-500242)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CC82	Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CC86	Benzo(k)fluoranthene Benzo(a)pyrene Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects)	A

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD34	Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CC82	Naphthalene 2-Methylnaphthalene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	R R R R R R R R	A
C032CC82DL	All TCL compounds except Naphthalene 2-Methylnaphthalene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	R	A
C032CC86	Benzo(k)fluoranthene Benzo(a)pyrene Fluoranthene Pyrene	R R R R	A

Sample	Compound	Flag	A or P
C032CC86DL	All TCL compounds except Benzo(k)fluoranthene Benzo(a)pyrene Fluoranthene Pyrene	R	A
C032CD34	Pyrene	R	A
C032CD34DL	All TCL compounds except Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC85 and C032CC86 and samples C032CC85 and C032CC86DL were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC85	C032CC86	
Acenaphthene	4.8	7.4	43
Acenaphthylene	7.4	11	39
Anthracene	17	25	38
Benzo(a)anthracene	150	270	57
Benzo(b)fluoranthene	190	270	35
Benzo(k)fluoranthene	130	290	76
Benzo(g,h,i)perylene	140	210	40
Benzo(a)pyrene	190	320	51
Chrysene	150	270	57
Dibenz(a,h)anthracene	35	54	43

Compound	Concentration (ug/Kg)		RPD
	C032CC85	C032CC86	
Fluoranthene	200	340	52
Fluorene	3.8	5.1	29
Indeno(1 2,3-cd)pyrene	150	230	42
2-Methylnaphthalene	2.6	3.3	24
Naphthalene	8.2	12	38
Phenanthrene	57	79	32
Pyrene	240	370	43

Compound	Concentration (ug/Kg)		RPD
	C032CC85	C032CC86DL	
Acenaphthene	4.8	8.3	53
Acenaphthylene	7.4	14	62
Anthracene	17	31	58
Benzo(a)anthracene	150	280	60
Benzo(b)fluoranthene	190	320	51
Benzo(k)fluoranthene	130	300	79
Benzo(g,h,i)perylene	140	300	73
Benzo(a)pyrene	190	350	59
Chrysene	150	290	64
Dibenz(a h)anthracene	35	53	41
Fluoranthene	200	400	67

Compound	Concentration (ug/Kg)		RPD
	C032CC85	C032CC86DL	
Fluorene	3.8	3.8	0
Indeno(1,2,3-cd)pyrene	150	300	67
2-Methylnaphthalene	2.6	9.9	117
Naphthalene	8.2	22	91
Phenanthrene	57	100	55
Pyrene	240	460	63

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E250151

SDG	Sample	Compound	Flag	A or P	Reason
G2E250151	C032CC83	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E250151	C032CC82	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E250151	C032CC88	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E250151	C032CC82	Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E250151	C032CC86	Benzo(k)fluoranthene Benzo(a)pyrene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E250151	C032CD34	Pyrene	J (all detects)	A	Compound quantitation and CRQLs
G2E250151	C032CC82	Naphthalene 2-Methylnaphthalene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	R R R R R R R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
G2E250151	C032CC82DL	All TCL compounds except Naphthalene 2-Methylnaphthalene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Pyrene	R	A	Overall assessment of data
G2E250151	C032CC86	Benzo(k)fluoranthene Benzo(a)pyrene Fluoranthene Pyrene	R R R R	A	Overall assessment of data
G2E250151	C032CC86DL	All TCL compounds except Benzo(k)fluoranthene Benzo(a)pyrene Fluoranthene Pyrene	R	A	Overall assessment of data
G2E250151	C032CD34	Pyrene	R	A	Overall assessment of data
G2E250151	C032CD34DL	All TCL compounds except Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E250151

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E250151

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 25, 2002

LDC Report Date: June 27, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E250152

Sample Identification

C032C683
C032C684
C032C685
C032C686
C032C657
C032C658
C032C659
C032C660
C032C679
C032C705
C032C706
C032C707
C032C708
C032C709
C032C701
C032C686MS
C032C686MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
5/29/02	Benzo(b)fluoranthene	27.4	C032C686 C032C658 C032C659 C032C660 C032C705 C032C706 C032C707 C032C708 C032C709 C032C701 C032C686MS C032C686MSD	J (all detects) UJ (all non-detects)	A

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C683	Perylene-d12	42284 (43041-172164)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C684	Perylene-d12	31761 (43041-172164)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C657	Perylene-d12	34037 (43041-172164)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C679	Perylene-d12	34447 (43041-172164)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C685	Perylene-d12	33694 (43041-172164)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C706 and C032C707 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E250152

SDG	Sample	Compound	Flag	A or P	Reason
G2E250152	C032C686 C032C658 C032C659 C032C660 C032C705 C032C706 C032C707 C032C708 C032C709 C032C701	Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E250152	C032C683 C032C684 C032C685 C032C657 C032C679	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E250152

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E250152

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28, 2002

LDC Report Date: June 28, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E290164

Sample Identification

C032CC05
C032CC06
C032CD35
C032CD35DL
C032CD36
C032CD36DL
C032CD37
C032CD38
C032CC05MS
C032CC05MSD

Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Benzo(a)pyrene	49.8	C032CD36DL	J (all detects) UJ (all non-detects)	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Chrysene Benzo(b)fluoranthene	37.4 28.2	C032CD36DL	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR19 and C032CR19RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR19	5/28/02	2-Methylnaphthalene Naphthalene	4.3 ng/L 13 ng/L	All samples in SDG G2E290164
C032CR19RE	5/28/02	2-Methylnaphthalene Naphthalene	3.8 ng/L 9.4 ng/L	All samples in SDG G2E290164

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032CD35DL and C032CD36DL. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CC05MS/MSD (All samples in SDG G2E290164)	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Dibenz(a,h)anthracene Benzo(k)fluoranthene	- 13 (30-150) 10 (30-150) 26 (30-150) -	29 (30-150) 9.4 (30-150) - - -	- - 53 (≤30) 58 (≤30)	J (all detects) UJ (all non-detects)	A
C032CC05MS/MSD (All samples in SDG G2E290164)	Phenanthrene Fluoranthene Pyrene Benzo(g,h,i)perylene	1.6 (30-150) 0.0 (30-150) 0.0 (30-150) 0.0 (30-150)	0.0 (30-150) 0.0 (30-150) 0.0 (30-150) 14 (30-150)	- - - -	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CD35DL	Perylene-d12	286981 (62691-250766)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032CC05 C032CC06 C032CD35 C032CD37 C032CD38 C032CC05MS C032CC05MSD 2149512MB	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/31/02 and 6/4/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CC05 C032CC06 C032CD35 C032CD37 C032CD38 C032CC05MS C032CC05MSD 2149512MB	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/31/02 and 6/4/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CC05 C032CC06 C032CD35 C032CD37 C032CD38 C032CC05MS C032CC05MSD 2149512MB	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD35	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CD36	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CD35	All TCL compounds except Acenaphthylene	R	A
C032CD35DL	Acenaphthylene	R	A
C032CD36	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E290164

SDG	Sample	Compound	Flag	A or P	Reason
G2E290164	C032CD36DL	Benzo(a)pyrene Chrysene Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D)
G2E290164	C032CC05 C032CC06 C032CD35 C032CD35DL C032CD36 C032CD36DL C032CD37 C032CD38	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Dibenz(a,h)anthracene Benzo(k)fluoranthene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
G2E290164	C032CC05 C032CC06 C032CD35 C032CD35DL C032CD36 C032CD36DL C032CD37 C032CD38	Phenanthrene Fluoranthene Pyrene Benzo(g,h,i)perylene	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E290164	C032CD35DL	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E290164	C032CC05 C032CC06 C032CD35 C032CD37 C032CD38	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards
G2E290164	C032CD35	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E290164	C032CD36	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E290164	C032CD35	All TCL compounds except Acenaphthylene	R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
G2E290164	C032CD35DL	Acenaphthylene	R	A	Overall assessment of data
G2E290164	C032CD36	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E290164

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E290164

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28, 2002

LDC Report Date: June 27, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E290159

Sample Identification

C032C644
C032C645
C032C646
C032C647
C032C630
C032C631
C032C632
C032C633
C032C634
C032C635
C032C636
C032C637
C032C638
C032C621
C032C622
C032C645MS
C032C645MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/2/02	Naphthalene	26.1	C032C646 C032C636	J (all detects) UJ (all non-detects)	A
	Acenaphthene	27.1		J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were greater than or equal to 0.05

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR19 and C032CR19RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR19	5/28/02	2-Methylnaphthalene Naphthalene	4.3 ng/L 13 ng/L	All samples in SDG G2E290159
C032CR19RE	5/28/02	2-Methylnaphthalene Naphthalene	3.8 ng/L 9.4 ng/L	All samples in SDG G2E290159

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C645MS (All samples in SDG G2E290159)	Benzo(g,h,i)perylene	21 (30-150)	-	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas were outside the QC limits of -50% to +100% of the associated continuing calibration.

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C644 C032C645 C032C647 C032C634 C032C637 C032C638 C032C645MS 2149510MB	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/31/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C644 C032C645 C032C647 C032C634 C032C637 C032C638 C032C645MS 2149510MB	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/31/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C644 C032C645 C032C647 C032C634 C032C637 C032C638 C032C645MS 2149510MB	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C644 and C032C645, samples C032C633 and C032C634 and samples C032C622 and C032C623 (from SDG G2E290161) were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C644	C032C645	
Acenaphthene	1.1	1.3	17
Acenaphthylene	1.1	5.3U	200
Anthracene	2.6	2.1	21
Benzo(a)anthracene	2.5	2.4	4
Benzo(b)fluoranthene	6.8	5.3U	200
Benzo(k)fluoranthene	2.2	5.3U	200
Benzo(g,h,i)perylene	16	21	27
Benzo(a)pyrene	6.4	6.2	3
Chrysene	8.8	6.7	27
Dibenz(a,h)anthracene	2.3	5.3U	200
Fluoranthene	6.3	1.9	107

Compound	Concentration (ug/Kg)		RPD
	C032C644	C032C645	
2-Methylnaphthalene	2.0	1.2	50
Naphthalene	2.6	0.96	92
Phenanthrene	5.9	1.7	110
Pyrene	8.4	3.6	80
Fluorene	5.3U	1.2	200

Compound	Concentration (ug/Kg)		RPD
	C032C633	C032C634	
Acenaphthene	57	89	44
Acenaphthylene	89	41	74
Anthracene	390	15	185
Benzo(a)anthracene	76	27	95
Benzo(b)fluoranthene	63	28	77
Benzo(k)fluoranthene	55	39	34
Benzo(g,h,i)perylene	78	24	106
Benzo(a)pyrene	77	23	108
Chrysene	93	34	93
Fluoranthene	220	140	44
Fluorene	66	43	42
Dibenzofuran	82	22	115
2-Methylnaphthalene	760	130	142

Compound	Concentration (ug/Kg)		RPD
	C032C633	C032C634	
Naphthalene	830	110	153
Phenanthrene	370	140	90
Pyrene	310	150	70

Compound	Concentration (ug/Kg)		RPD
	C032C622	C032C623	
Anthracene	110U	0.68	200
Benzo(a)anthracene	110U	0.80	200
Benzo(b)fluoranthene	110U	3.8	200
2,4-Dinitrophenol	110U	2.5	200
Benzo(g,h,i)perylene	24	19	23
Benzo(a)pyrene	110U	3.5	200
Chrysene	110U	1.4	200
Dibenz(a,h)anthracene	4.8	2.7	56
Fluoranthene	110U	1.4	200
Indeno(1,2,3-cd)pyrene	110U	5.8	200
2-Methylnaphthalene	110U	0.49	200
Naphthalene	110U	0.37	200
Phenanthrene	110U	0.85	200
Pyrene	110U	1.9	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E290159

SDG	Sample	Compound	Flag	A or P	Reason
G2E290159	C032C646 C032C636	Naphthalene Acenaphthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E290159	C032C644 C032C645 C032C646 C032C647 C032C630 C032C631 C032C632 C032C633 C032C634 C032C635 C032C636 C032C637 C032C638 C032C621 C032C622	Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E290159	C032C644 C032C645 C032C647 C032C634 C032C637 C032C638	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E290159

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E290159

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28, 2002

LDC Report Date: June 28, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E290161

Sample Identification

C032C623
C032C624
C032C625
C032C643
C032C714
C032C715
C032C716
C032C717
C032C718
C032C727
C032C728
C032C729
C032C731
C032CC03
C032CC04
C032C624MS
C032C624MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR19 and C032CR19RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR19	5/28/02	2-Methylnaphthalene Naphthalene	4.3 ng/L 13 ng/L	All samples in SDG G2E290161
C032CR19RE	5/28/02	2-Methylnaphthalene Naphthalene	3.8 ng/L 9.4 ng/L	All samples in SDG G2E290161

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C624	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	282896 (308090-1232362) 187643 (193414-773656) 233364 (247466-989866) 217707 (230153-920614) 198255 (203526-814102)	All TCL compounds	J (all detects) UJ (all non-detects)	A
C032C715	Naphthalene-d8 Perylene-d12	282275 (308090-1232362) 191244 (203526-814102)	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C717	Naphthalene-d8	263239 (308090-1232362)	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P
C032C728	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Perylene-d12	252163 (308090-1232362) 184952 (193414-773656) 238514 (247466-989866) 191672 (203526-814102)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C729	Naphthalene-d8 Perylene-d12	276970 (308090-1232362) 230209 (203526-814102)	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C625 C032C717 C032C718 C032C727 C032C731 C032CC03 C032CC04 2149511MB	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 5/31/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C625 C032C717 C032C718 C032C727 C032C731 C032CC03 C032CC04 2149511MB	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 5/31/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C625 C032C717 C032C718 C032C727 C032C731 C032CC03 C032CC04 2149511MB	3.) Area counts of all internal standards of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C625 C032C717 C032C718 C032C727 C032C731 C032CC03 C032CC04 2149511MB	4.) The 100 ng/mL standard of the initial calibration was analyzed after the samples.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C623 and C032C622 (from SDG G2E290159), samples C032C717 and C032C718 and samples C032C728 and C032C729 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C622	C032C623	
Anthracene	110U	0.68	200
Benzo(a)anthracene	110U	0.80	200
Benzo(b)fluoranthene	110U	3.8	200
2,4-Dinitrophenol	110U	2.5	200
Benzo(g,h,i)perylene	24	19	23
Benzo(a)pyrene	110U	3.5	200
Chrysene	110U	1.4	200
Dibenz(a,h)anthracene	4.8	2.7	56
Fluoranthene	110U	1.4	200
Indeno(1,2,3-cd)pyrene	110U	5.8	200
2-Methylnaphthalene	110U	0.49	200

Compound	Concentration (ug/Kg)		RPD
	C032C622	C032C623	
Naphthalene	110U	0.37	200
Phenanthrene	110U	0.85	200
Pyrene	110U	1.9	200

Compound	Concentration (ug/Kg)		RPD
	C032C717	C032C718	
Benzo(a)anthracene	2.5	1.4	56
Benzo(b)fluoranthene	1.7	1.1	43
Benzo(k)fluoranthene	3.1	1.7	58
Benzo(g,h,i)perylene	3.9	3.3	17
Benzo(a)pyrene	4.2	2.3	58
Chrysene	2.4	1.1	74
Fluoranthene	3.3	1.9	54
Indeno(1,2,3-cd)pyrene	3.5	0.97	113
Naphthalene	0.42	6.1U	200
Phenanthrene	1.5	1.2	22
Pyrene	4.4	2.6	51

Compound	Concentration (ug/Kg)		RPD
	C032C728	C032C729	
Acenaphthylene	46	45	2
Anthracene	41	44	7

Compound	Concentration (ug/Kg)		RPD
	C032C728	C032C729	
Benzo(a)anthracene	120	110	9
Benzo(b)fluoranthene	170	110	43
Benzo(k)fluoranthene	120	170	34
Benzo(g,h,i)perylene	110	110	0
Benzo(a)pyrene	110	110	0
Chrysene	170	170	0
Dibenz(a,h)anthracene	34	33	3
Fluoranthene	110	130	17
Fluorene	5.1	4.6	10
Indeno(1,2,3-cd)pyrene	92	93	1
2-Methylnaphthalene	13	13	0
Naphthalene	20	19	5
Phenanthrene	57	85	39
Pyrene	220	250	14

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E290161

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E290161

SDG	Sample	Compound	Flag	A or P	Reason
G2E290161	C032C624	All TCL compounds	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E290161	C032C715 C032C729	Naphthalene 2-Methylnaphthalene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E290161	C032C717	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E290161	C032C728	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E290161	C032C625 C032C717 C032C718 C032C727 C032C731 C032CC03 C032CC04	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E290161

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 28 through May 31, 2002

LDC Report Date: June 27, 2002

Matrix: Water

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E290166

Sample Identification

C032CR19
C032CR19RE
C032CR20
C032CR20RE
C032CR21
C032CR21RE
C032CR22
C032CR22RE

Introduction

This data review covers 8 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
C032CR19RE	All TCL compounds	9	7	J (all detects) UJ (all non-detects)	A
C032CR20RE	All TCL compounds	8	7	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Benzo(a)pyrene	49.8	C032CR19RE C032CR20RE C032CR21RE C032CR22RE 2158347MB	J (all detects) UJ (all non-detects)	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Chrysene Benzo(b)fluoranthene	37.4 28.2	C032CR19RE C032CR20RE C032CR21RE C032CR22RE 2158347MB	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
2152124MB	6/1/02	Benzo(a)pyrene Fluoranthene Indeno(1,2,3-cd)pyrene Naphthalene Pyrene	51 ng/L 13 ng/L 40 ng/L 3.3 ng/L 20 ng/L	C032CR19 C032CR20 C032CR21 C032CR22
2158347MB	6/6/02	Naphthalene	1.9 ng/L	C032CR19RE C032CR20RE C032CR21RE C032CR22RE

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
C032CR19	Naphthalene	13 ng/L	47U ng/L
C032CR20	Naphthalene	6.0 ng/L	48U ng/L
C032CR21	Naphthalene	15 ng/L	52U ng/L
C032CR22	Naphthalene	4.7 ng/L	48U ng/L
C032CR19RE	Naphthalene	9.4 ng/L	50U ng/L
C032CR20RE	Naphthalene	3.3 ng/L	50U ng/L
C032CR21RE	Naphthalene	2.7 ng/L	50U ng/L
C032CR22RE	Naphthalene	5.9 ng/L	50U ng/L

Samples C032CR19, C032CR19RE, C032CR20, C032CR20RE, C032CR21, C032CR21RE, C032CR22 and C032CR22RE were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR19	5/28/02	Naphthalene 2-Methylnaphthalene	13 ng/L 4.3 ng/L	No associated samples in this SDG
C032CR19RE	5/28/02	Naphthalene 2-Methylnaphthalene	9.4 ng/L 3.8 ng/L	No associated samples in this SDG
C032CR20	5/29/02	Naphthalene	6.0 ng/L	No associated samples in this SDG
C032CR20RE	5/29/02	Naphthalene	3.3 ng/L	No associated samples in this SDG
C032CR21	5/30/02	Naphthalene	15 ng/L	No associated samples in this SDG
C032CR21RE	5/30/02	Naphthalene	2.7 ng/L	No associated samples in this SDG
C032CR22	5/31/02	Naphthalene	4.7 ng/L	No associated samples in this SDG

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR22RE	5/31/02	Naphthalene 2-Methylnaphthalene	5.9 ng/L 3.2 ng/L	No associated samples in this SDG

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
2158347LCS/D (C032CR19RE C032CR20RE C032CR21RE C032CR22RE 2158347MB)	Chrysene	-	150 (30-140)		J (all detects)	P
2158347LCS/D (C032CR19RE C032CR20RE C032CR21RE C032CR22RE 2158347MB)	Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	- -	- -	32 (≤30) 54 (≤30)	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CR19RE C032CR20RE C032CR21RE C032CR22RE	All TCL compounds	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E290166

SDG	Sample	Compound	Flag	A or P	Reason
G2E290166	C032CR19RE C032CR20RE	All TCL compounds	J (all detects) UJ (all non-detects)	A	Technical holding times
G2E290166	C032CR19RE C032CR20RE C032CR21RE C032CR22RE	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D)
G2E290166	C032CR19RE C032CR20RE C032CR21RE C032CR22RE	Chrysene	J (all detects)	P	Laboratory control samples (%R)
G2E290166	C032CR19RE C032CR20RE C032CR21RE C032CR22RE	Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD)
G2E290166	C032CR19RE C032CR20RE C032CR21RE C032CR22RE	All TCL compounds	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E290166

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E290166	C032CR19	Naphthalene	47U ng/L	A
G2E290166	C032CR20	Naphthalene	48U ng/L	A
G2E290166	C032CR21	Naphthalene	52U ng/L	A
G2E290166	C032CR22	Naphthalene	48U ng/L	A
G2E290166	C032CR19RE	Naphthalene	50U ng/L	A
G2E290166	C032CR20RE	Naphthalene	50U ng/L	A
G2E290166	C032CR21RE	Naphthalene	50U ng/L	A

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P
G2E290166	C032CR22RE	Naphthalene	50U ng/L	A

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E290166

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 29, 2002

LDC Report Date: June 29, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E300175

Sample Identification

C032C564
C032C564DL
C032C565
C032C566
C032C567
C032C596
C032C597
C032C598
C032C608
C032C609
C032C610
C032C611
C032C612
C032C542
C032C543
C032C544
C032C564MS
C032C564MSD

Introduction

This data review covers 18 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Benzo(a)pyrene	49.8	C032C564DL	J (all detects) UJ (all non-detects)	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Chrysene	37.4	C032C564DL	J (all detects) UJ (all non-detects)	P
	Benzo(b)fluoranthene	28.2		J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR20 and C032CR20RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR20	5/29/02	Naphthalene	6.0 ng/L	All samples in SDG G2E290159
C032CR20RE	5/29/02	Naphthalene	3.3 ng/L	All samples in SDG G2E290159

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Recalculated results confirm the reported results with the following exceptions:

Spike ID (Associated Samples)	Compound	Reported (RPD)	Recalculated (RPD)	Flag	A or P
C032C564MS/MSD (All samples in SDG G2E300175)	Phenanthrene Dibenz(a,h)anthracene	0 0	34 35	None None	P

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032C564MS/MSD (All samples in SDG G2E300175)	Naphthalene 2-Methylnaphthalene Acenaphthene Fluorene Phenanthrene Anthracene	- - - - - -	- - - - - 28 (30-150)	38 (≤30) 57 (≤30) 39 (≤30) 50 (≤30) 34 (≤30) 43 (≤30)	J (all detects) UJ (all non-detects)	A
C032C564MS/MSD (All samples in SDG G2E300175)	Dibenz(a,h)anthracene	41 (30-150)	0.0 (30-150)	35 (≤30)	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C564DL	Phenanthrene-d10	501734 (109487-437948)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects)	A
2150505MB	Phenanthrene-d10 Chrysene-d12 Perylene-d12 Acenaphthene-d10	68048 (69233-276932) 49511 (57283-229134) 44853 (51102-204410) 181151 (193414-773656)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	A
C032C564	Perylene-d12	34109 (51102-204410)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C565	Perylene-d12	30201 (51102-204410)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C566	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	83308 (89304 -357216) 51606 (54456-217826) 68689 (69233-276932) 40363 (57283-229134) 23427 (51102-204410)	All TCL compounds except Fluorene	J (all detects) UJ (all non-detects)	A
C032C567	Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	51125 (54456-217826) 61980 (69233-276932) 53733 (57283-229134) 48551 (51102-204410)	Acenaphthylene Acenaphthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C567	Acenaphthene-d10	234006 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C596	Perylene-d12 Acenaphthene-d10	48549 (51102-204410) 201539 (261442-1045770)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	A
C032C597	Acenaphthene-d10	174408 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A
C032C598	Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	53685 (54456-217826) 64925 (69233-276932) 53244 (57283-229134) 44488 (51102-204410)	Acenaphthylene Acenaphthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C598	Acenaphthene-d10	208156 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A
C032C608	Chrysene-d12 Perylene-d12	55344 (57283-229134) 46864 (51102-204410)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032C609	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	68109 (89304 -357216) 41557 (54456-217826) 54305 (69233-276932) 41715 (57283-229134) 37965 (51102-204410)	All TCL compounds except Fluorene	J (all detects) UJ (all non-detects)	A
C032C610	Chrysene-d12 Perylene-d12 Acenaphthene-d10	56579 (57283-229134) 50260 (51102-204410) 226571 (261442-1045770)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C611	Acenaphthene-d10	260837 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A
C032C612	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	72829 (89304 -357216) 47883 (54456-217826) 59596 (69233-276932) 45896 (57283-229134) 40533 (51102-204410)	All TCL compounds except Fluorene	J (all detects) UJ (all non-detects)	A
C032C612	Acenaphthene-d10	200247 (261442-1045770)	Fluorene	J (all detects) UJ (all non-detects)	A
C032C542	Chrysene-d12 Perylene-d12 Acenaphthene-d10	51593 (57283-229134) 30626 (51102-204410) 236602 (261442-1045770)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	A
C032C543	Perylene-d12	36074 (51102-204410)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A

Several problems related to the initial calibration and continuing calibration internal standards were identified.

Sample	Finding	Associated Compound	Flag	A or P
C032C544	1.) Area counts of all internal standards, surrogates and target compounds in the midpoint standard were >2x the area counts in the other initial calibration standards analyzed 6/4/02.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C544	2.) Area counts of all internal standards, surrogates and target compounds in the continuing calibration were >2x the area counts in the initial calibration standards analyzed 6/4/02 except the midpoint standard.	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C544	3.) Area counts of the continuing calibration were >2x the area counts in all samples and method blanks as applicable.	All TCL compounds	J (all detects) UJ (all non-detects)	P

The laboratory indicated that the area counts were extremely high for all internal standards, surrogates and target compounds in the midpoint standard of the initial calibration and continuing calibration standards because the standard solution used to prepare these standards has concentrated.

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032C564	Benzo(b)fluoranthene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032C564	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A

Sample	Compound	Flag	A or P
C032C564DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C611 and C032C612 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C611	C032C612	
Anthracene	6.0U	0.69	200
Benzo(a)anthracene	2.9	4.0	32
Benzo(b)fluoranthene	8.9	8.4	6
Benzo(k)fluoranthene	4.6	8.0	54
Benzo(g,h,i)perylene	10	9.1	9
Benzo(a)pyrene	7.7	8.4	9
Chrysene	3.3	4.6	33
Dibenz(a,h)anthracene	1.1	0.81	30
Fluoranthene	4.9	4.3	13
Fluorene	6.0U	2.0	200
Indeno(1,2,3-cd)pyrene	8.1	7.5	8
2-Methylnaphthalene	0.68	0.61	11

Compound	Concentration (ug/Kg)		RPD
	C032C611	C032C612	
Naphthalene	0.73	0.77	5
Phenanthrene	1.3	1.3	0
Pyrene	15	35	80

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Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E300175

SDG	Sample	Compound	Flag	A or P	Reason
G2E300175	C032C564DL	Benzo(a)pyrene Chrysene Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D)
G2E300175	C032C564 C032C564DL C032C565 C032C566 C032C567 C032C596 C032C597 C032C598 C032C608 C032C609 C032C610 C032C611 C032C612 C032C542 C032C543 C032C544	Phenanthrene Dibenz(a,h)anthracene	None None	P	Matrix spike/Matrix spike duplicates
G2E300175	C032C564 C032C564DL C032C565 C032C566 C032C567 C032C596 C032C597 C032C598 C032C608 C032C609 C032C610 C032C611 C032C612 C032C542 C032C543 C032C544	Naphthalene 2-Methylnaphthalene Acenaphthene Fluorene Phenanthrene Anthracene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
G2E300175	C032C564 C032C564DL C032C565 C032C566 C032C567 C032C596 C032C597 C032C598 C032C608 C032C609 C032C610 C032C611 C032C612 C032C542 C032C543 C032C544	Dibenz(a,h)anthracene	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)

SDG	Sample	Compound	Flag	A or P	Reason
G2E300175	C032C564DL	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards (area)
G2E300175	C032C564 C032C565 C032C543	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E300175	C032C566 C032C609 C032C612	All TCL compounds except Fluorene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E300175	C032C567 C032C598	Acenaphthylene Acenaphthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E300175	C032C567 C032C597 C032C598 C032C611 C032C612	Fluorene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E300175	C032C596	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E300175	C032C608	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
G2E300175	C032C610 C032C542	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2E300175	C032C544	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards
G2E300175	C032C564	Benzo(b)fluoranthene	J (all detects)	A	Compound quantitation and CRQLs
G2E300175	C032C564	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R R R R R R	A	Overall assessment of data
G2E300175	C032C564DL	All TCL compounds except Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	R	A	Overall assessment of data

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Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E300175

No Sample Data Qualified in this SDG

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Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E300175

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 29, 2002

LDC Report Date: July 1, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E300183

Sample Identification

C032CC73	C032CB89
C032CC73DL	C032C595
C032CC74	C032CC71MS
C032CC74DL	C032CC71MSD
C032CC75	
C032CC76	
C032CC77	
C032CC69	
C032CC70	
C032CC71	
C032CC72	
C032CC72DL	
C032CB85	
C032CB85DL	
C032CB86	
C032CB86DL	
C032CB87	
C032CB87DL	
C032CB88	
C032CB88DL	

Introduction

This data review covers 24 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/7/02	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	-37.4 28.2 49.8	C032CC74DL C032CC72DL C032CB85DL C032CB86DL C032CB87DL C032CB88DL	J (all detects) UJ (all non-detects)	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/2/02	Naphthalene	26.1	C032CC73 C032CB89	J (all detects) UJ (all non-detects)	A
	Benzo(b)fluoranthene	27.1	C032C595	J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR20 and C032CR20RE (both from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR20	5/29/02	Naphthalene	6.0 ng/L	All samples in SDG G2E300183
C032CR20RE	5/29/02	Naphthalene	3.3 ng/L	All samples in SDG G2E300183

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable.

Recalculated results confirm the reported results with the following exceptions:

Spike ID (Associated Samples)	Compound	Reported (RPD)	Recalculated (RPD)	Flag	A or P
C032CC71MS/MSD (All samples in SDG G2E300183)	Fluoranthene	0	128	None	P
	Pyrene	0	134	None	
	Benzo(a)anthracene	0	106	None	
	Chrysene	0	98	None	
	Benzo(b)fluoranthene	0	85	None	
	Benzo(k)fluoranthene	0	71	None	
	Benzo(a)pyrene	0	88	None	
	Indeno(1,2,3-cd)pyrene	0	52	None	
	Benzo(g,h,i)perylene	0	54	None	

Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CC71MS/MSD (All samples in SDG G2E300183)	Acenaphthylene	-	-	31 (≤30)	J (all detects)	A
	Fluorene	-	-	42 (≤30)	UJ (all non-detects)	
	Phenanthrene	8.9 (30-150)	604 (30-150)	151 (≤30)		
	Anthracene	55 (30-150)	195 (30-150)	100 (≤30)		
	Fluoranthene	-	-	128 (≤30)		
	Pyrene	-	-	134 (≤30)		
	Benzo(a)pyrene	-	-	88 (≤30)		
	Dibenz(a,h)anthracene	-	-	39 (≤30)		
	Benzo(g,h,i)perylene	-	-	54 (≤30)		
C032CC71MS/MSD (All samples in SDG G2E300183)	Benzo(a)anthracene	0.0 (30-150)	241 (30-150)	106 (≤30)	J (all detects)	A
	Chrysene	0.0 (30-150)	226 (30-150)	98 (≤30)	R (all non-detects)	
	Benzo(b)fluoranthene	0.0 (30-150)	-	85 (≤30)		
	Benzo(k)fluoranthene	0.0 (30-150)	-	71 (≤30)		
	Indeno(1,2,3-cd)pyrene	0.0 (30-150)	-	52 (≤30)		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
2150509MB	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	284737 (300930-1203718) 186128 (210618-842472) 252067 (347898-1391590) 174818 (313168-1252674) 156932 (299806-1199224)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032CC76	Phenanthrene-d10 Chrysene-d12 Perylene-d12	345543 (347898-1391590) 296639 (313168-1252674) 282659 (299806-1199224)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032CC77	Phenanthrene-d10 Chrysene-d12 Perylene-d12	326480 (347898-1391590) 238038 (313168-1252674) 219657 (299806-1199224)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032CC69	Phenanthrene-d10	344482 (347898-1391590)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032CC70	Perylene-d12	285109 (299806-1199224)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032CB86	Perylene-d12	298240 (299806-1199224)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A
C032CB88	Phenanthrene-d10	325973 (347898-1391590)	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CC73	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	333714 (487363-1949452) 202373 (304225-1216900) 285084 (435362-1741448) 305795 (410269-1641076) 270210 (399481-1597924)	All TCL compounds	J (all detects) UJ (all non-detects)	A
C032CB89	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10	433575 (487363-1949452) 242867 (304225-1216900) 371895 (435362-1741448)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032C595	Perylene-d12	248583 (399481-1597924)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects, UJ (all non-detects)	P
C032CB86DL	Chrysene-d12 Perylene-d12	535037 (96632-386528) 540311 (98934-395736)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CB88DL	Chrysene-d12 Perylene-d12	430385 (96632-386528) 397306 (98934-395736)	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CC73 C032CB86 C032CB88	Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects)	A
C032CC74	Fluoranthene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A
C032CC72 C032CB85 C032CB87	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CC73	All TCL compounds except Acenaphthene Fluorene	R	A
C032CC73DL	Acenaphthene Fluorene	R R	A
C032CC74	Fluoranthene Phenanthrene Pyrene	R R R	A
C032CC74DL	All TCL compounds except Fluoranthene Phenanthrene Pyrene	R	A

Sample	Compound	Flag	A or P
C032CC72 C032CB85 C032CB87	Fluoranthene Pyrene	R R	A
C032CC72DL C032CB85DL C032CB87DL	All TCL compounds except Fluoranthene Pyrene	R	A
C032CB86 C032CB88	Pyrene	R	A
C032CB86DL C032CB88DL	All TCL compounds except Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC74 and C032CC75, samples C032CC74DL and C032CC75, samples C032CB86 and C032CB87, and samples C032CB86DL and C032CB87DL were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC74	C032CC75	
Acenaphthene	8.1	5.4U	200
Acenaphthylene	27	5.4U	200
Anthracene	30	5.4U	200
Benzo(a)anthracene	140	3.2	191
Benzo(b)fluoranthene	150	4.9	187
Benzo(k)fluoranthene	110	3.4	188
Benzo(g,h,i)perylene	160	7.9	181
Benzo(a)pyrene	180	5.8	188
Chrysene	130	3.6	189

Compound	Concentration (ug/Kg)		RPD
	C032CC74	C032CC75	
Dibenz(a,h)anthracene	28	0.92	187
Fluoranthene	680	7.2	196
Fluorene	4.3	5.4U	200
Indeno(1,2,3-cd)pyrene	130	5.1	185
2-Methylnaphthalene	0.82	5.4U	200
Naphthalene	6.2	5.1	200
Phenanthrene	280	5.4U	197
Pyrene	780	5.4U	195

Compound	Concentration (ug/Kg)		RPD
	C032CC74DL	C032CC75	
Acenaphthene	8.5	5.4U	200
Acenaphthylene	28	5.4U	200
Anthracene	54	5.4U	200
Benzo(a)anthracene	100	3.2	188
Benzo(b)fluoranthene	170	4.9	189
Benzo(k)fluoranthene	110	3.4	188
Benzo(g,h,i)perylene	80	7.9	164
Benzo(a)pyrene	220	5.8	190
Chrysene	220	3.6	194
Dibenz(a,h)anthracene	13	0.92	174

Compound	Concentration (ug/Kg)		RPD
	C032CC74DL	C032CC75	
Fluoranthene	740	7.2	196
Indeno(1,2,3-cd)pyrene	99	5.1	180
Naphthalene	8.0	5.4U	200
Phenanthrene	280	1.8	197
Pyrene	850	1.0	195

Compound	Concentration (ug/Kg)		RPD
	C032CB86	C032CB87	
Acenaphthene	3.1	5.0	47
Acenaphthylene	19	24	23
Anthracene	21	27	25
Benzo(a)anthracene	95	110	15
Benzo(b)fluoranthene	100	130	26
Benzo(k)fluoranthene	83	93	11
Benzo(g,h,i)perylene	120	140	15
Benzo(a)pyrene	130	150	14
Chrysene	100	120	18
Dibenz(a,h)anthracene	21	25	17
Fluoranthene	260	330	24
Fluorene	5.7	8.2	36
Indeno(1,2,3-cd)pyrene	99	120	19

Compound	Concentration (ug/Kg)		RPD
	C032CB86	C032CB87	
2-Methylnaphthalene	0.88	1.5	52
Naphthalene	3.6	4.8	29
Phenanthrene	130	170	27
Pyrene	310	390	23

Compound	Concentration (ug/Kg)		RPD
	C032CB86DL	C032CB87DL	
Acenaphthene	3.8	5.4	35
Acenaphthylene	23	29	23
Anthracene	38	46	19
Benzo(a)anthracene	68	87	24
Benzo(b)fluoranthene	120	160	29
Benzo(k)fluoranthene	63	70	10
Benzo(g,h,i)perylene	93	92	1
Benzo(a)pyrene	140	190	30
Chrysene	160	220	32
Dibenz(a,h)anthracene	15	17	12
Fluoranthene	330	390	17
Fluorene	7.6	10	27
Indeno(1,2,3-cd)pyrene	100	120	18
2-Methylnaphthalene	1.3	1.7	27

Compound	Concentration (ug/Kg)		RPD
	C032CB86DL	C032CB87DL	
Naphthalene	5.8	7.5	26
Phenanthrene	130	190	38
Pyrene	400	480	18

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E300183

SDG	Sample	Compound	Flag	A or P	Reason
G2E300183	C032CC74DL C032CC72DL C032CB85DL C032CB86DL C032CB87DL C032CB88DL	Chrysene Benzo(b)fluoranthene Benzo(a)pyrene	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D)
G2E300183	C032CC73 C032CB89 C032C595	Naphthalene Benzo(b)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E300183	C032CC73 C032CC73DL C032CC74 C032CC74DL C032CC75 C032CC76 C032CC77 C032CC69 C032CC70 C032CC71 C032CC72 C032CC72DL C032CB85 C032CB85DL C032CB86 C032CB86DL C032CB87 C032CB87DL C032CB88 C032CB88DL C032CB89 C032C595	Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Benzo(g,h,i)perylene	None None None None None None None None None	P	Matrix spike/Matrix spike duplicates (RPD recalculation)

SDG	Sample	Compound	Flag	A or P	Reason
G2E300183	C032CC73 C032CC73DL C032CC74 C032CC74DL C032CC75 C032CC76 C032CC77 C032CC69 C032CC70 C032CC71 C032CC72 C032CC72DL C032CB85 C032CB85DL C032CB86 C032CB86DL C032CB87 C032CB87DL C032CB88 C032CB88DL C032CB89 C032C595	Acenaphthylene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
G2E300183	C032CC73 C032CC73DL C032CC74 C032CC74DL C032CC75 C032CC76 C032CC77 C032CC69 C032CC70 C032CC71 C032CC72 C032CC72DL C032CB85 C032CB85DL C032CB86 C032CB86DL C032CB87 C032CB87DL C032CB88 C032CB88DL C032CB89 C032C595	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Indeno(1,2,3-cd)pyrene	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicates (%R)(RPD)
G2E300183	C032CC76 C032CC77	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
G2E300183	C032CC69	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E300183	C032CC70 C032C595	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P	Internal standards
G2E300183	C032CB86	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	A	Internal standards
G2E300183	C032CB88	Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	A	Internal standards
G2E300183	C032CC73	All TCL compounds	J (all detects) UJ (all non-detects)	A	Internal standards
G2E300183	C032CB89	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards
G2E300183	C032CB86DL C032CB88DL	Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards
G2E300183	C032CC73 C032CB86 C032CB88	Pyrene	J (all detects)	A	Compound quantitation and CRQLs
G2E300183	C032CC74	Fluoranthene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs

SDG	Sample	Compound	Flag	A or P	Reason
G2E300183	C032CC72 C032CB85 C032CB87	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E300183	C032CC73	All TCL compounds except Acenaphthene Fluorene	R	A	Overall assessment of data
G2E300183	C032CC73DL	Acenaphthene Fluorene	R R	A	Overall assessment of data
G2E300183	C032CC74	Fluoranthene Phenanthrene Pyrene	R R R	A	Overall assessment of data
G2E300183	C032CC74DL	All TCL compounds except Fluoranthene Phenanthrene Pyrene	R	A	Overall assessment of data
G2E300183	C032CC72 C032CB85 C032CB87	Fluoranthene Pyrene	R R	A	Overall assessment of data
G2E300183	C032CC72DL C032CB85DL C032CB87DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data
G2E300183	C032CB86 C032CB88	Pyrene	R	A	Overall assessment of data
G2E300183	C032CB86DL C032CB88DL	All TCL compounds except Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E300183

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E300183

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E300183

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 29, 2002

LDC Report Date: July 2, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E300186

Sample Identification

C032C545
C032C555
C032C556
C032C555MS
C032C555MSD

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/2/02	Naphthalene	26.1	C032C545	J (all detects) UJ (all non-detects)	A
	Benzo(b)fluoranthene	27.1		J (all detects) UJ (all non-detects)	

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR20 and C032CR20RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR20	5/29/02	Naphthalene	6.0 ng/L	All samples in SDG G2E300186
C032CR20RE	5/29/02	Naphthalene	3.3 ng/L	All samples in SDG G2E300186

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032C555 and C032C556 . Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were not within QC limits. Since the samples were diluted out, no data were qualified.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
2150511MB	Phenanthrene-d10 Chrysene-d12 Perylene-d12	327136 (347898-1391590) 241363 (313169-1252674) 217410 (299806-1199224)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) UJ (all non-detects)	P
C032C545	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Chrysene-d12	404761 (487363-1949452) 250236 (304225-1216900) 383821 (435362-1741450) 377455 (410269-1641076) 377136 (399481-1597924)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C555	Phenanthrene-d10 Chrysene-d12	268980 (64628-258512) 322233 (72396-289584)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032C556	Phenanthrene-d10 Chrysene-d12 Perylene-d12	282802 (64628-258512) 371142 (72396-289584) 306113 (62691-250766)	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E300186

SDG	Sample	Compound	Flag	A or P	Reason
G2E300186	C032C545	Naphthalene Benzo(b)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D)
G2E300186	C032C545	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E300186	C032C555	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards (area)
G2E300186	C032C556	Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E300186

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E300186

No Sample Data Qualified in this SDG

LDC Report# 8663M2

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 31, 2002

LDC Report Date: July 1, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level IV

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2F010144

Sample Identification

C032CC91
C032CC92
C032CC93
C032CC94
C032CC07
C032CC08
C032CC09
C032CC10
C032CC11
C032C528
C032C529
C032C530
C032C531
C032C532
C032CC94MS
C032CC94MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR22 and C032CR22RE (both from SDG G2E290166) was identified as a rinsate. No polynuclear aromatic hydrocarbon contaminants were found in this blank with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C023CR22	5/31/02	Naphthalene	4.7 ng/L	All samples in SDG G2F010144
C023CR22RE	5/31/02	2-Methylnaphthalene Naphthalene	3.2 ng/L 5.9 ng/L	All samples in SDG G2F010144

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032CC93 and C032CC08. Since the samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CC08 and C032CC09 and samples C032C529 and C032C530 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CC08	C032CC09	
Acenaphthene	15	5.4U	200
Acenaphthylene	53U	6.4	200
Anthracene	45	6.9	147
Benzo(a)anthracene	600	39	176
Benzo(b)fluoranthene	660	48	173
Benzo(k)fluoranthene	650	49	172
Benzo(g,h,i)perylene	270	51	136
Benzo(a)pyrene	650	68	162
Chrysene	750	50	175
Dibenz(a,h)anthracene	120	9.8	170

Compound	Concentration (ug/Kg)		RPD
	C032CC08	C032CC09	
Fluoranthene	930	96	163
Fluorene	53U	1.6	200
Indeno(1,2,3-cd)pyrene	420	62	148
2-Methylnaphthalene	6.8	1.3	136
Naphthalene	8.6	3.9	75
Phenanthrene	210	25	157
Pyrene	960	120	156

Compound	Concentration (ug/Kg)		RPD
	C032C529	C032C530	
Benzo(b)fluoranthene	0.54	5.2U	200
Benzo(g,h,i)perylene	0.60	0.42	35
Benzo(a)pyrene	0.43	0.43	0
Chrysene	0.42	5.2U	200
Fluoranthene	0.43	0.47	9
Indeno(1,2,3-cd)pyrene	0.64	5.2U	200
Pyrene	0.82	0.63	26
Phenanthrene	5.2U	0.36	200

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2F010144

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2F010144

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2F010144

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 30, 2002

LDC Report Date: June 28, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E310177

Sample Identification

C032CD53
C032CD53DL
C032CD54
C032CD54DL
C032CD55
C032CD56
C032CD57
C032CC65
C032CC66
C032CC67
C032CC68
C032C568
C032C569
C032C570
C032C571
C032C572
C032C582
C032CC65MS
C032CC65MSD
C032C570MS
C032C570MSD

Introduction

This data review covers 21 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/3/02	Fluoranthene	23.4	C032CD53DL C032CD54DL	None	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/3/02	Pyrene	25.9	C032CD53DL C032CD54DL	J (all detects) UJ (all non-detects)	P

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR21 and C032CR21RE (from SDG G2E310177) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR21	5/30/02	Naphthalene	15 ug/L	All samples in SDG G2E310177
C032CR21RE	5/30/02	Naphthalene	2.7 ug/L	All samples in SDG G2E310177

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for samples C032C568, C032C571 and C032C582 . Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
C032CC65MS/MSD (All samples in SDG G2E310177)	Phenanthrene	-	-	42 (≤30)	J (all detects) UJ (all non-detects)	A
C032CC65MS/MSD (All samples in SDG G2E310177)	Fluoranthene Pyrene	- -	159 (30-150) 189 (30-150)	- -	J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C570	Perylene-d12	391926 (96337-385348)	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P
C032CD53DL	Chrysene-d12	90275 (22230-88922)	Benzo(a)anthracene Chrysene	J (all detects) J (all detects)	A
C032CD54DL	Chrysene-d12	90442 (22230-88922)	Benzo(a)anthracene Chrysene	J (all detects) J (all detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CD53 C032CD54	Fluoranthene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CD53 C032CD54	Fluoranthene Pyrene	R R	A
C032CD53DL C032CD54DL	All TCL compounds except Fluoranthene Pyrene	R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032CD56 and C032CD57 and samples C032C569 and C032C570 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032CD56	C032CD57	
Acenaphthylene	2.4	1.1	74
Anthracene	3.3	0.95	111

Compound	Concentration (ug/Kg)		RPD
	C032CD56	C032CD57	
Benzo(a)anthracene	23	11	71
Benzo(b)fluoranthene	35	15	80
Benzo(k)fluoranthene	28	13	73
Benzo(g,h,i)perylene	37	16	79
Benzo(a)pyrene	39	17	79
Chrysene	29	13	76
Dibenz(a,h)anthracene	6.1	2.7	77
Fluoranthene	49	23	72
Fluorene	1.3	5.4U	200
Indeno(1,2,3-cd)pyrene	42	17	85
2-Methylnaphthalene	9.5	5.4U	200
Naphthalene	9.3	0.75	170
Phenanthrene	19	5.8	106
Pyrene	56	26	73

Compound	Concentration (ug/Kg)		RPD
	C032C569	C032C570	
Acenaphthylene	1.1	1.0	10
Anthracene	1.2	1.0	18
Benzo(a)anthracene	5.9	4.9	18
Benzo(b)fluoranthene	12	9.4	24

Compound	Concentration (ug/Kg)		RPD
	C032C569	C032C570	
Benzo(k)fluoranthene	5.0	6.5	26
Benzo(g,h,i)perylene	9.1	8.3	9
Benzo(a)pyrene	8.8	8.2	7
Chrysene	21	15	33
Dibenz(a,h)anthracene	3.5	3.6	3
Fluoranthene	11	8.7	23
Fluorene	1.2	5.3U	500
Indeno(1,2,3-cd)pyrene	73.6	7.2	6
2-Methylnaphthalene	2.1	135	33
Naphthalene	1.1	0.93	17
Phenanthrene	8.1	6.3	25
Pyrene	18	15	18

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E310177

SDG	Sample	Compound	Flag	A or P	Reason
G2E310177	C032CD53DL C032CD54DL	Fluoranthene	None	P	Continuing calibration (%D)
G2E310177	C032CD53DL C032CD54DL	Pyrene	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D)
G2E310177	C032CD53 C032CD53DL C032CD54 C032CD54DL C032CD55 C032CD56 C032CD57 C032CC65 C032CC66 C032CC67 C032CC68 C032C568 C032C569 C032C570 C032C571 C032C572 C032C582	Phenanthrene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicates (RPD)
G2E310177	C032CD53 C032CD53DL C032CD54 C032CD54DL C032CD55 C032CD56 C032CD57 C032CC65 C032CC66 C032CC67 C032CC68 C032C568 C032C569 C032C570 C032C571 C032C572 C032C582	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicates (%R)
G2E310177	C032C570	Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Internal standards (area)
G2E310177	C032CD53DL C032CD54DL	Benzo(a)anthracene Chrysene	J (all detects) J (all detects)	A	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
G2E310177	C032CD53 C032CD54	Fluoranthene Pyrene	J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2E310177	C032CD53 C032CD54	Fluoranthene Pyrene	R R	A	Overall assessment of data
G2E310177	C032CD53DL C032CD54DL	All TCL compounds except Fluoranthene Pyrene	R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E310177

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E310177

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 30, 2002

LDC Report Date: June 27, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2E310188

Sample Identification

C032C583
C032C584
C032C511
C032C512
C032C513
C032C514
C032C515
C032C516
C032C517
C032C518
C032C519
C032C520
C032C521
C032C522
C032C523
C032C512MS
C032C512MSD

Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) .

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR21 and C032CR21RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR21	5/30/02	Naphthalene	15 ng/L	All samples in SDG G2E310188
C032CR21RE	5/30/02	Naphthalene	2.7 ng/L	All samples in SDG G2E310188

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032C583	Naphthalene-d8 Phenanthrene-d10	2830 (34091-136364) 2977 (31642-126570)	Naphthalene 2-Methylnaphthalene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032C511	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	4036 (34091-136364) 2025 (14960-59838) 4364 (31642-126570) 3627 (24856-99426) 2656 (23410-93640)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C515	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Perylene-d12	4890 (34091-136364) 2573 (14960-59838) 5882 (31642-126570) 4576 (23410-93640)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	P
C032C516	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	3086 (34091-136364) 1697 (14960-59838) 3872 (31642-126570) 3343 (24856-99426) 2805 (23410-93640)	All TCL compounds	J (all detects) UJ (all non-detects)	P
C032C517	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12 Perylene-d12	2466 (34091-136364) 1621 (14960-59838) 3399 (31642-126570) 3166 (24856-99426) 2523 (23410-93640)	All TCL compounds	J (all detects) UJ (all non-detects)	P

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

Samples C032C518 and C032C519 were identified as field duplicates. No polynuclear aromatic hydrocarbons were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD
	C032C518	C032C519	
Benzo(a)anthracene	0.38	5.6U	200
Benzo(k)fluoranthene	0.40	0.41	2
Benzo(g,h,i)perylene	1.9	1.5	23
Benzo(a)pyrene	0.54	5.6U	200
Chrysene	0.62	0.62	0
Fluoranthene	0.72	0.37	64
Indeno(1,2,3-cd)pyrene	0.79	5.6U	200
2-Methylnaphthalene	0.43	5.6U	200
Naphthalene	0.37	0.38	3
Phenanthrene	0.39	5.6U	200
Pyrene	1.0	0.85	16

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2E310188

SDG	Sample	Compound	Flag	A or P	Reason
G2E310188	C032C583	Naphthalene 2-Methylnaphthalene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E310188	C032C511 C032C516 C032C517	All TCL compounds	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2E310188	C032C515	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene Fluorene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2E310188

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2E310188

No Sample Data Qualified in this SDG

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Alameda Point, CTO 32

Collection Date: May 31, 2002

LDC Report Date: June 28, 2002

Matrix: Soil

Parameters: Polynuclear Aromatic Hydrocarbons

Validation Level: Level III

Laboratory: Severn Trent Laboratories

Sample Delivery Group (SDG): G2F010139

Sample Identification

C032CB77
C032CB77DL
C032CB78*
C032CB78DL
C032CB79
C032CB79DL
C032CB80
C032CB80DL
C032CC56
C032CC57
C032CC58
C032CC59
C032CC21
C032CC22
C032CC23
C032CC24
C032CC21MS
C032CC21MSD

*Indicates sample was analyzed for Acenaphthene, Acenaphthylene, Fluorene, 2-Methylnaphthalene and Naphthalene only

Introduction

This data review covers 18 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per a modification of EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Polynuclear Aromatic Hydrocarbons.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (October 1999) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Raw data were not reviewed for this SDG. The review was based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs)

For the purposes of technical evaluation, all compounds were evaluated against the 30.0% (%RSD) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria.

Average relative response factors (RRF) for all target compounds and system performance check compounds (SPCCs) were greater than or equal to 0.05 as required.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/3/02	Fluoranthene	23.4	C032CB77 C032CB78* C032CB79 C032CB80 C032CC56 C032CC57 C032CC58 C032CC59 C032CC21 C032CC22 C032CC23 C032CC24 C032CC21MS C032CC21MSD 2152127MB	None	P

For the purposes of technical evaluation, all compounds were evaluated against the 25.0% (%D) National Functional Guideline criteria. Unless noted above, all compounds were within the validation criteria with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
6/3/02	Pyrene	25.9	C032CB77 C032CB78* C032CB79 C032CB80 C032CC56 C032CC57 C032CC58 C032CC59 C032CC21 C032CC22 C032CC23 C032CC24 C032CC21MS C032CC21MSD 2152127MB	J (all detects) UJ (all non-detects)	P

All of the continuing calibration RRF values were greater than or equal to 0 05 .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polynuclear aromatic hydrocarbon contaminants were found in the method blanks.

Samples C032CR22 and C032CR22RE (from SDG G2E290166) were identified as rinsates. No polynuclear aromatic hydrocarbon contaminants were found in these blanks with the following exceptions:

Rinsate ID	Sampling Date	Compound	Concentration	Associated Samples
C032CR22	5/31/02	Naphthalene	4.7 ng/L	All samples in SDG G2F010139
C032CR22RE	5/31/02	2-Methylnaphthalene Naphthalene	3.2 ng/L 5.9 ng/L	All samples in SDG G2F010139

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. Surrogate recoveries (%R) were not within QC limits for several samples. Since these samples were diluted out, no data were qualified.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB79	Naphthalene-d8 Acenaphthene-d10	54266 (63396-253592) 27613 (28750-115000)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	A

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB80	Naphthalene-d8 Acenaphthene-d10	53057 (63396-253592) 24920 (28750-115000)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	A
C032CC56	Naphthalene-d8 Acenaphthene-d10	46850 (63396-253592) 24004 (28750-115000)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	P
C032CC57	Naphthalene-d8 Acenaphthene-d10	51588 (63396-253592) 24056 (28750-115000)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	P
C032CC58	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10	41122 (63396-253592) 20306 (28750-115000) 50007 (53844-215378)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P
C032CC59	Naphthalene-d8 Acenaphthene-d10	52659 (63396-253592) 27127 (28750-115000)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	P
C032CC21	Naphthalene-d8 Acenaphthene-d10	55620 (63396-253592) 27586 (28750-115000)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	A
C032CC22	Naphthalene-d8	61321 (63396-253592)	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects)	P
C032CC23	Naphthalene-d8	56202 (63396-253592)	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects)	P
C032CC24	Naphthalene-d8	59702 (63396-253592)	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects)	P

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
C032CB78DL	Naphthalene-d8 Acenaphthene-d10 Phenanthrene-d10 Chrysene-d12	371033 (68308-273234) 303134 (57016-228062) 389061 (78967-315868) 392896 (97378-389510)	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

XI. Target Compound Identifications

Raw data were not reviewed for this SDG.

XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
C032CB77 C032CB79 C032CB80	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A
C032CB78*	Acenaphthylene Fluorene Naphthalene	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects) J (all detects)	A

Raw data were not reviewed for this SDG.

XIII. Tentatively Identified Compounds (TICs)

Raw data were not reviewed for this SDG.

XIV. System Performance

Raw data were not reviewed for this SDG.

XV. Overall Assessment

The overall assessment of data was acceptable. In the case where more than one result was reported for an individual sample, the least technically acceptable results were rejected as follows:

Sample	Compound	Flag	A or P
C032CB77	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R	A
C032CB77DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A
C032CB78*	Acenaphthylene Fluorene Naphthalene	R R R	A
C032CB78DL	Acenaphthene 2-Methylnaphthalene	R R	A
C032CB79	All TCL compounds except Anthracene Dibenz(a,h)anthracene	R	A
C032CB79DL	Anthracene Dibenz(a,h)anthracene	R R	A
C032CB80	All TCL compounds except Acenaphthene Anthracene Dibenz(a,h)anthracene	R	A
C032CB80DL	Acenaphthene Anthracene Dibenz(a,h)anthracene	R R R	A

Data flags have been summarized at the end of the report.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Data Qualification Summary - SDG G2F010139

SDG	Sample	Compound	Flag	A or P	Reason
G2F010139	C032CB77 C032CB78* C032CB79 C032CB80 C032CC56 C032CC57 C032CC58 C032CC59 C032CC21 C032CC22 C032CC23 C032CC24	Fluoranthene	None	P	Continuing calibration (%D)
G2F010139	C032CB77 C032CB78* C032CB79 C032CB80 C032CC56 C032CC57 C032CC58 C032CC59 C032CC21 C032CC22 C032CC23 C032CC24	Pyrene	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D)
G2F010139	C032CB79 C032CB80 C032CC21	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	A	Internal standards (area)
G2F010139	C032CC56 C032CC57 C032CC59	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2F010139	C032CC58	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene	J (all detects) UJ (all non-detects)	P	Internal standards (area)
G2F010139	C032CC22 C032CC23 C032CC24	Naphthalene 2-Methylnaphthalene	J (all detects) UJ (all non-detects)	P	Internal standards (area)

SDG	Sample	Compound	Flag	A or P	Reason
G2F010139	C032CB78DL	Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Fluorene Phenanthrene Anthracene Fluoranthene Pyrene Benzo(a)anthracene Chrysene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Internal standards (area)
G2F010139	C032CB77 C032CB79 C032CB80	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2F010139	C032CB78*	Acenaphthylene Fluorene Naphthalene	J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs
G2F010139	C032CB77	Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R R R R R R R R R R	A	Overall assessment of data
G2F010139	C032CB77DL	All TCL compounds except Benzo(a)anthracene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(g,h,i)perylene Benzo(a)pyrene Chrysene Fluoranthene Indeno(1,2,3-cd)pyrene Phenanthrene Pyrene	R	A	Overall assessment of data
G2F010139	C032CB78*	Acenaphthylene Fluorene Naphthalene	R R R	A	Overall assessment of data
G2F010139	C032CB78DL	Acenaphthene 2-Methylnaphthalene	R R	A	Overall assessment of data

SDG	Sample	Compound	Flag	A or P	Reason
G2F010139	C032CB79	All TCL compounds except Anthracene Dibenz(a,h)anthracene	R	A	Overall assessment of data
G2F010139	C032CB79DL	Anthracene Dibenz(a,h)anthracene	R R	A	Overall assessment of data
G2F010139	C032CB80	All TCL compounds except Acenaphthene Anthracene Dibenz(a,h)anthracene	R	A	Overall assessment of data
G2F010139	C032CB80DL	Acenaphthene Anthracene Dibenz(a,h)anthracene	R R R	A	Overall assessment of data

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Laboratory Blank Data Qualification Summary - SDG G2F010139

No Sample Data Qualified in this SDG

Alameda Point, CTO 32
Polynuclear Aromatic Hydrocarbons - Field Blank Data Qualification Summary - SDG G2F010139

No Sample Data Qualified in this SDG

Appendix E
2010 Field Methodology

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E5 Disposition of Investigation-Derived Waste

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Acronyms and Abbreviations

AOC	area of concern
bgs	below ground surface
CLEAN	Comprehensive Long-term Environmental Action Navy
COC	chain-of-custody
EDC	Economic Development Conveyance
FED	Federal Agency
FWBZ	first water bearing zone
HCl	Hydrochloric Acid
HNO_3	Nitric Acid
IDW	investigation-derived waste
OVM	Organic Vapor Monitor
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PID	photoionization detector
PPE	personal protective equipment
PVC	polyvinyl chloride
SAP	Sampling and Analysis Plan
SI	Site Inspection
SIM	selected ion monitoring
SOP	standard operating procedure
SVOC	semivolatile organic compound
SWDIV	Southwest Division Naval Facilities Engineering Command
TPH	total petroleum hydrocarbon
TPH-e	total extractable petroleum hydrocarbon
TPH-p	total purgeable petroleum hydrocarbon
USA	Underground Service Alert
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

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APPENDIX E

2010 Field Methodology

This appendix presents the procedures and protocols followed by CH2M HILL and its subcontractors during the expanded site inspection (SI) field activities at Alameda Point Transfer Parcels FED-1A, FED-2B, and FED-2C.

E1 Scope of Field Activities

Field activities for the expanded SI were conducted from March 10 through May 7, 2010. All field activities were performed under the direction of a California Professional Geologist and in accordance with the final Work Plan for the SI at Transfer Parcels FED-1A, FED-2B, and FED-2C. This Work Plan included a Sampling and Analysis Plan (SAP) (Field Sampling Plan and Quality Assurance Project Plan), a Data Management Plan, and an Investigation-Derived Waste (IDW) Management Plan as separate attachments (CH2M HILL, 2010). Various SI activities were conducted to investigate soil and groundwater and to collect samples. The following SI activities conducted at Parcels FED-1A, FED-2B, and FED-2C are discussed in subsequent sections of this appendix:

- Use of standard operating procedures (SOPs)
- Planning and notification
- Surveying
- Utility clearance and geophysical surveying
- Field instrumentation and calibration
- Soil sampling
- Discrete groundwater sampling
- Concrete sampling
- Equipment decontamination
- Borehole abandonment
- Field documentation
- Deviations from the work plan
- Demobilization
- IDW management and disposal

E2 Standard Operating Procedures

Field activities were conducted in accordance with the following Comprehensive Long-Term Environmental Action Navy (CLEAN) Program SOPs. These SOPs were included in the Final Work Plan for the SI at Transfer Parcels FED-1A, FED-2B, and FED-2C (CH2M HILL, 2010):

- SOP 1, Soil Sampling
- SOP 2, Homogenization of Soil, Sediment or Concrete Samples
- SOP 3, Soil Sampling for VOCs Using the EnCore® Sampler

- SOP 4, Direct-Push Sample Collection
- SOP 5, Logging of Soil Borings
- SOP 6, Soil Boring Drilling and Abandonment
- SOP 7, Discrete Direct-Push Groundwater Sample Collection
- SOP 8, VOC Sampling--Water
- SOP 9, Calibration and Measurement with Field Instruments
- SOP 10, Volatiles Monitoring by OVM/PID
- SOP 11, Decontamination of Personnel and Equipment
- SOP 12, Decontamination of Drilling Rigs and Equipment
- SOP 13, Preparing Field Log Books
- SOP 14, Water-Level Measurements
- SOP 15, Disposal of Waste Fluids and Solids
- SOP 16, Chain-of-Custody
- SOP 17, Packaging and Shipping Procedures for Low-Concentration Samples
- SOP 18, Equipment Blank and Field Blank Preparation
- SOP 19, Civil Surveying
- SOP 20, Concrete Core Sampling

E3 Planning and Notification

The SI field process for Transfer Parcels FED-1A, FED-2B, and FED-2C was developed in meetings with the regulatory agencies, Restoration Advisory Board, and the Navy. Additionally, Underground Service Alert (USA) of northern California was notified before intrusive activities were initiated at the site.

In addition, orientation meetings were conducted with subcontractors before beginning fieldwork. These meetings included visual inspections of subcontractor tools and equipment to verify that they were in good working order. Visual inspections were conducted to assure that no equipment leaked oil, grease, or hydraulic fluid, and that the requisite health and safety equipment was present.

E4 Surveying

On March 10 and 11, April 29, and May 7, 2010, land surveying activities were conducted by a CH2M HILL subcontractor (Geometrix of San Francisco, California) at each soil boring location. Surveying was conducted in accordance with SOP 19, Civil Surveying. The locations were surveyed to the California State Plane Coordinate System North American Datum of 1983 for horizontal control and to the National Geodetic Vertical Datum (NGVD) of 1988 for vertical control relative to mean sea level. The estimated horizontal accuracy for location of all points is ± 0.2 foot. The estimated vertical accuracy for ground surface is ± 0.3 foot. The survey data is presented in Attachment E1, Survey Data.

E5 Utility Clearance and Geophysical Survey

To assure that proposed borings were not located on top of subsurface obstructions or buried utilities, USA was consulted in conjunction with the CH2M HILL geophysical

subcontractor (Northern California Geophysical Consultants, Inc., of Petaluma, California). The geophysical subcontractor used ground-penetrating radar and electromagnetic line-locating methods to evaluate boring locations for the presence of underground utilities or obstructions. The geophysical clearance at Transfer Parcels FED-1A, FED-2B, and FED-2C was conducted on March 10, 11, 12, 15, 16, 17, and 18, and on April 1 and 5, 2010, before initiating subsurface investigation activities.

To clear an area within a 10-foot radius of each subsurface sampling location, the following steps were taken:

- USA was notified and meetings were scheduled with interested utility companies that were potentially affected by planned drilling activities.
- The utility companies and the geophysical subcontractor marked subsurface utility lines in the immediate vicinity of each proposed sampling location with color-coded survey paint. When a potential obstruction was detected, a new borehole location was marked by the geophysical subcontractor, and the old location was abandoned.
- After pavement was cored (if applicable), a hand auger was advanced downward to approximately 4 to 5 feet below ground surface (bgs) to confirm underground utility clearance. No utilities were encountered during these hand auguring activities.

Utility Clearance and Geophysical Survey documentation can be found in Attachment E2, Utility Clearance Maps.

E6 Field Instrumentation and Calibration

For health and safety purposes, the borehole and the worker's breathing zone were monitored during intrusive activities (i.e., soil boring advancement) using a photoionization detector (PID). The PID was calibrated daily prior to use in accordance with CLEAN Program SOP 9, Calibration and Measurement with Field Instruments.

E7 Soil Sampling

Between March 22 and May 5, 2010, 145 soil borings were advanced using direct-push technology. Detailed soil sampling procedures are included in SOP 1, Soil Sampling, and in SOP 4, Direct-Push Sample Collection.

The direct-push sampling method used a hydraulic hammer and the weight of the sampling vehicle to advance the sampling tool into the soil. The 2.5-inch-outside-diameter sampler was advanced to the desired depth, and soil samples were collected in 2-foot-long-by-11/16-inch-diameter acetate sleeves. A retractable piston inside the split-barrel sampler prevented soil from filling the sleeves until the desired sampling depth was reached. This method is further described in SOP 6, Soil Boring Drilling and Abandonment.

Soil samples were collected for polycyclic aromatic hydrocarbon (PAH) analysis at depths of 0 to 0.5 foot, 0.5 to 2 feet, 2 to 4 feet, and 4 to 8 feet bgs below surficial asphalt or concrete at each applicable location. Prior to sample collection, each sampling interval was field homogenized as described in SOP 2: Homogenization of Soil, Sediment, or Concrete

Samples. The samples for PAH analysis were analyzed using USEPA Method 8270C with selected ion monitoring (SIM). The PAH sampling, homogenization, and analysis followed the Alameda Point PAH collection guidelines as outlined in the Draft Final Work Plan for PAH Background Determination and PAH-specific SIs for Alameda Point (BEI, 2002).

The remaining soil samples were collected from three depths: one surface sample was collected from 0 to 0.5 feet bgs, and two subsurface samples were collected from between 0.5 foot bgs to 8 feet bgs. Subsurface samples were collected at specific depths where soil stain was observed or at 4 feet bgs and 8 feet bgs, if no staining was observed or if field screening did not suggest contamination at a specific depth. In addition, if groundwater was encountered at a depth shallower than 8 feet bgs, then the deepest soil sample was collected just above the groundwater interface. Soil samples were analyzed for one or more of the following:

- Volatile organic compounds (VOCs) using USEPA Method 8260B/624
- Pesticides using USEPA Method 8081A
- Polychlorinated biphenyl (PCBs) using USEPA Method 8082
- Metals using USEPA Method 6010B/7470A Title 22
- Hexavalent Chromium using USEPA Method SW7196
- Dioxins/furans using USEPA Method 8290
- Explosives using USEPA Method 8330
- PAHs using USEPA Method 8270Sim
- Semivolatile organic compounds (SVOCs) using USEPA Method 8270C
- Total petroleum hydrocarbon, extractable (TPH-e) using U.S. EPA Method 8015B-E
- Total petroleum hydrocarbon, purgeable (TPH-p) using USEPA Method 8015B-P

See Table E-1 for analytes analyzed per investigation area (tables located at the end of this report).

Samples requiring VOC analysis were collected immediately from the acetate sampling sleeves using a disposable T-handle sampling device, in accordance with USEPA Method 5035 and SOP 3, Soil Sampling for VOCs Using the EnCore® Sampler. The disposable T-handle was used to transfer the 5-gram soil into preserved Hydrochloric Acid (HCL) and Deionized Water preserved VOA vials for shipment to the analytical laboratory.

The samples to be analyzed for pesticides, PCBs, metals, hexavalent chromium, dioxins/furans, explosives, SVOCs, TPH-e, and TPH-p were transferred to laboratory-supplied glass jars. All samples for chemical analysis were placed in an ice-filled cooler for transport to a laboratory following chain-of-custody (COC) protocol. The boreholes were backfilled completely with bentonite/cement mixture as outlined in SOP 6, Soil Boring Drilling and Abandonment.

Remaining soil not submitted for analysis was used to log the soil under the direction of a California-Professional Geologist in accordance with the Unified Soil Classification System and SOP 5, Logging of Soil Borings. The geologist identified fill/native material contact when it was encountered. Soil boring descriptions included lithology, color, relative density or consistency, moisture, grain size, texture, and other noticeable features. In addition, visual indications of contamination were noted in the field logbook or on boring logs. Geologic borehole logs for boring locations will be presented in Attachment E3, Field Forms.

E8 Discrete Groundwater Sampling

Between March 26 and May 5, 2010, 38 discrete groundwater sampling locations were sampled in accordance with SOP 7, Discrete Direct-Push Groundwater Sample Collection.

Before sampling, water levels were measured in all wells using an electronic water level meter according to SOP 14, Water-Level Measurements. Free-floating product was not observed during any of the water level measurement or discrete groundwater sampling.

Discrete groundwater sampling was performed using a truck-mounted hydraulic/percussion drive-point rig. The hydraulic/percussion drive point was used to set temporary wells, which were sampled and removed immediately thereafter.

At discrete groundwater sampling locations, groundwater samples were collected from the first water bearing zone (FWBZ), at 2 to 7 feet bgs (at the groundwater table), and from 10 to 15 feet (deeper in the FWBZ). For the discrete groundwater sample to be collected from 10 to 15 feet bgs, the hydraulic/percussion drive-point rig was advanced in the primary borehole from which soil samples were collected. For the discrete groundwater sample to be collected from 2 to 7 feet bgs, the rig was advanced into an adjacent borehole (the hand auger hole) to minimize infiltration from the shallower screened interval. A 5-3/4-foot polyvinyl chloride (PVC) temporary well casing with 0.010-inch slotted well screen and blank PVC casing was inserted into each borehole to create a temporary well.

Samples were collected from the PVC casing by using a small-diameter (0.75-inch) bladder pump. To minimize volatilization, the samples were transferred at a low-flow rate directly into pre-cleaned laboratory-supplied sample containers.

Discrete groundwater samples were analyzed for one or more of the following:

- VOCs using USEPA Method 8260B/624
- Pesticides using USEPA Method 8081A
- PCBs using USEPA Method 8082
- Metals using USEPA Method 6010B/7470A Title 22
- Dioxins/furans using USEPA Method 8290
- PAHs using USEPA Method 8270Sim
- SVOCs using USEPA Method 8270C
- TPH-e using USEPA Method 8015B-E
- TPH-p using USEPA Method 8015B-P

See Table E-1 for analytes analyzed per investigation area.

Groundwater to be analyzed for VOCs was collected first and preserved with HCl in accordance with SOP 8, VOC Sampling—Water. Groundwater to be analyzed for metals was pumped through a 0.45-micron filter and into pre-cleaned laboratory-supplied containers and preserved with Nitric Acid (HNO_3). For the remaining analyses, groundwater was pumped directly into pre-cleaned laboratory-supplied containers with appropriate preservative.

All samples for chemical analysis were placed in an ice-filled cooler for transport to a laboratory following COC protocol. The boreholes were backfilled completely with

bentonite/cement mixture as outlined in SOP 6, Soil Boring Drilling and Abandonment. Purge water was disposed of according to SOP 15, Disposal of Waste Fluids and Solids.

E9 Concrete Sampling

On April 7, 2010, approximately 3,000 gallons of rainwater was removed from Building 100 by Dillard of Clayton, California. Rain occurred onsite following the initial removal of rainwater from Building 100. Therefore, on April 13, 2010, an additional 1,600 gallons of rainwater was removed from Building 100 and was pumped into Banker Tanks as IDW and held onsite pending results waste profiling for IDW disposal. IDW was disposed of as described in Section E-16.

On April 13, 2010, 6 composite concrete chip samples were collected and submitted for laboratory analysis after compositing samples collected from an approximate 1.5-meter grid pattern across the surface of the floor of Building 100 in Transfer Parcel FED-1A. Samples were collected using a roto-hammer drill with a diamond drill bit. The 6 concrete samples were composited from 45 locations according to SOP 2, Homogenation of Soil, Sediment or Concrete Samples. Concrete samples were analyzed for PCBs only. In addition, the sub-samples for each area were submitted to the laboratory and were held pending analysis of the composite sample. If PCBs were detected in a composite sample above the screening criteria, the sub-samples associated with the respective composite sample were to be analyzed as well. All samples for chemical analysis were placed in an ice-filled cooler for transport to the laboratory following COC protocol.

E10 WD-259 Trench Clean Out

On March 31, 2010, theWD-259 trench was cleaned in preparation for subsurface soil and groundwater sampling. Dillard of Clayton, California, removed 3,000 gallons of water from the trench bottom. Remaining sludge and sediment was then shoveled into three 55-gallon drums, the trench was pressure washed, and 300 additional gallons of water were removed. Water was relocated into Baker Tanks and all IDW was disposed of as described in Section E16.

Following the trench cleanout, the trench was inspected for cracks and signs of possible leakage to the subsurface. Based on the inspections, one boring location was placed along the interior of the trench for collection of soil and groundwater samples as described in Sections E7 and E8, respectively.

E11 Equipment Decontamination

Decontamination of non-disposable sampling equipment was performed according to SOP 12, Decontamination of Drilling Rigs and Equipment. Sampling equipment was cleaned and decontaminated as follows:

- Large equipment pieces such as hollow-stem augers were decontaminated using a high-pressure hot-water washer capable of delivering water at a minimum temperature of 180 degrees Fahrenheit.

- Smaller pieces, such as stainless steel sleeves, were decontaminated between samples as follows:
  - Washed in low- or non-phosphate detergent (e.g., Alconox® or Liqui-NO_x® solutions made as directed by the manufacturer)
  - Rinsed with potable water
  - Rinsed with deionized or distilled water

E12 Borehole Abandonment

All direct-push borings were abandoned after sample collection. The boreholes were backfilled completely with a neat cement grout, which is an approved sealing material, as outlined in SOP 6, Soil Boring Drilling and Abandonment.

E13 Field Documentation

The documentation and sample custody methods that were used for this SI are described in SOP 13, Preparing Field Log Books; SOP 16, Chain-of-Custody; and SOP 17, Packaging and Shipment Procedures for Low-Concentration Samples. These SOPs address field logbooks, sample labels, custody seals, and COC forms.

E13.1 Field Logbooks and Records

Controlled, prepaginated, and permanently bound logbooks were used to record field observations and measurements, thus providing a permanent record of daily field activities. The logbooks contain various forms for this purpose, including daily field reports, sampling records, rinsate/trip blank logs, boring logs, discrete groundwater sampling records, and photo documentation.

Boring logs were prepared for each boring and monitoring well and were reviewed by a Professional Geologist. Borings were logged in accordance with the Unified Soil Classification System and CLEAN Program SOP 5, Logging of Soil Borings.

Logbook entries were written in indelible ink. Corrections consisted of line-out delineations that were initialed and dated by the person making the correction. All entries were signed and dated, and the remaining spaces on each page were crossed out. Other forms used to record field safety- and health-related data were not bound into field logbooks but were instead maintained in project files and folders. Logbook procedures are described in CLEAN Program SOP13, Preparing Field Log Books.

E13.2 Photographs

Photographs were generally taken at each boring location and are used to provide backup documentation for sampling procedures and soil appearance. Photographs were described in the field logbook in accordance with all Naval Facilities Engineering Command-Southwest rules regarding photographs. The photographs are included in Attachment E4, Photographs; they depict boring locations, soil cores, and general field activities.

E13.3 Sample Labeling

Sample labels were attached to each sample container at the time of sampling. The self-adhesive labels were made of waterproof plastic and were filled out using indelible ink. Errors made on the sample label were corrected by drawing a single line through the error (initialed) and entering the correct information. Sample labels clearly indicated the project name and number, sampling location identifier, sample identification number, sampling date and time (using 24-hour notation), analysis to be performed, sample preservation, and the field sampler's initials (not preprinted) as described in SOP 16, Chain-of-Custody.

All soil and groundwater samples collected to support this SI were identified by a unique sample identification number that consisted of the direct-push sample location followed by a unique and random five-digit number. Numbers beginning with "5" signified field duplicates. For example, DP01-53010 represents a field duplicate taken at direct-push location 1.

All sampling locations were identified by a unique sampling location identifier describing attributes of the location. These attributes were the site location, transfer parcel, area of concern (AOC), and direct-push sample location. For example, AP1AA1-DPO4 represents Alameda Point, Transfer Parcel FED-1A, AOC 1, direct-push location 4.

E13.4 Chain of Custody Records

COC protocols defined in SOP 16, Chain-of-Custody, were followed during the sampling program. COC records accompanied the samples from the field to the laboratory. The records were maintained from the time of sample collection to the time of submittal to the delivery service.

COC records were signed as relinquished or received each time the sample changed possession. The signed COC form was sealed in a zip-lock bag and taped to the inside of the cooler lid. Signed custody seals were then attached over the lid/cooler seal to prevent tampering with the samples during shipment to the laboratory. COC documentation is presented in Attachment E3, Field Forms.

E13.5 Custody Seals

After samples were collected, custody seals were placed on sample containers, including volatile organic analysis vials. Custody seals were used to detect tampering between sample collection and analysis. The seal was placed so that breaking the seal would be required to open the sample container. In addition, two or more custody seals were placed on the outside of the shipping container or cooler prior to shipment by an overnight carrier. Each custody seal affixed to sample containers and sample coolers was signed and dated by the field sampler. Custody seals are described in SOP 16, Chain-of-Custody.

E13.6 Sample Storage and Transport

Upon collection, samples were preserved in accordance with procedures described in U.S. EPA SW-846 (USEPA, 2000). Field and quality control samples were maintained at approximately 4ºC until shipment to the laboratory. Samples were prepared for shipment according to the procedures specified in the applicable SOPs. Samples were packed for shipment using the following procedures:

1. A sample label was attached to each container and was covered with packaging tape or placed inside a zip-lock bag to prevent moisture damage.
2. A custody seal was placed over the container lid/jar seal to prevent tampering before sample analysis.
3. All glass containers were wrapped in bubble wrap and were sealed in zip-lock bags.
4. Coolers were packed with samples, and ice was used to fill all possible void space. All contents were double bagged to prevent leakage during shipment.
5. The completed COC forms were placed inside a sealed zip-lock bag and were taped to the inside of each cooler lid.
6. The cooler seal was covered with two custody seals—one in front, and one in back. The custody seals were then covered with clear packaging tape to prevent accidental breaks.
7. The closed cooler was secured with filament-style strapping tape to assure that contents did not spill during sample shipment (by Federal Express) to the analytical laboratory.

E14 Deviations from the Work Plan

Several deviations from the Draft Final Work Plan (CH2M HILL, 2010) were made during the field investigation as a result of field conditions. Table E-1 contains deviations that occurred regarding specific soil or groundwater samples. Table E-2 contains a summary of general deviations from the work plan.

E15 Demobilization

Demobilization consisted of CH2M HILL and the subcontractors cleaning up work areas after sampling activities were completed. The work areas were left in a condition similar to that existing before the boring and sampling activities occurred.

E16 Investigation-Derived Waste Management and Disposal

The sampling techniques at Transfer Parcels FED-1A, FED-2B, and FED-2C generated wastes that included asphalt and concrete cores, soil cuttings from soil borings, disposable personal protective equipment (PPE), and decontamination water.

Solid IDW (e.g., soil, asphalt/concrete cores, and PPE) was placed in separate covered, portable roll-off bins lined with plastic sheeting. Sludge IDW generated from the trench clean-out at WD-259 was placed into 55-gallon drums. Mixing regular trash and nonhazardous construction debris with potentially contaminated IDW was avoided. Liquid IDW (purge and decontamination water) was placed in temporary holding containers and was transferred into a Baker tank. Uncontaminated PPE and sampling equipment, as well as non-hazardous construction debris (asphalt and concrete cores), were containerized in separate portable roll-off bins.

Each waste container was clearly marked to indicate the waste source; however, these labels were not used for shipping or disposal purposes. Before disposal or shipment offsite, containers were labeled by the waste disposal subcontractor using the appropriate Department of Transportation identification and classification information. The Site Safety and Health Officer maintains the following information at the field trainer: an inventory or the container identification number; contents; generator's name, address, and phone number; generation date; and Contract Task Order number.

Containers of liquid IDW were stored within secondary containment structures and were managed as potentially hazardous material in accordance with Title 22 *California Code of Regulations*, Division 4.5, Chapter 10. IDW containers were inspected weekly, and inspection reports and results of the inspections were recorded in the field logbooks for IDWs.

The waste management contractor—Dillard of Clayton, California—collected IDW samples for analyses and waste profiling. It was concluded that the IDW generated during this investigation was not classified as listed wastes under Title 40 Code of Federal Regulations 261.31 – 261.33. Following waste profiling, liquid IDW was transferred by Dillard to the InStrat, Inc. facility for treatment and disposal of nonhazardous liquids in Rio Vista, California, on July 8, 2010. Soil IDW (soil and PPE) was transferred to Dilllard to the Cleanharbors – Buttonwillow, LLC facility for non-hazardous waste in Buttonwillow, California, on July 23, 2010. Sludge IDW was transferred to Dilllard to the Cleanharbors – Buttonwillow, LLC facility for non-hazardous waste in Buttonwillow, California, on August 9, 2010. All manifests were signed, copied, and filed by the Navy's Care Taker Site Office, Environmental Compliance Manager Caretaker Site Office for Alameda Point. Waste manifests are included in Attachment E5, Disposition of Investigation-Derived Waste.

E17 References

Bechtel Environmental, Inc. (BEI). 2002. Draft Final Work Plan for PAH Background Determination and PAH-specific SIs for Alameda Point.

CH2M HILL. 2010. Final Expanded Site Inspection Work Plan for Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California. March 12.

United States Environmental Protection Agency (USEPA). 2000. Test Methods for Evaluating Solid Wastes Physical/Chemical Methods, Fourth Edition, Update IVB. SW-846. November.

TABLES

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1A259-DP01	31-Mar-10	SB	0 - 0.5									X	None
Parcel 23	AP1A259-DP01	31-Mar-10	SB	1.75 - 2.25									X	None
Parcel 23	AP1A259-DP01	01-Apr-10	GW	5 - 7									X	None
Parcel 23	AP1A259-DP01	01-Apr-10	GW	13 - 15									X	None
Parcel 23	AP1A259-DP02	01-Apr-10	GW	5 - 7									X	None
Parcel 23	AP1A259-DP02	01-Apr-10	GW	13 - 15									X	None
Parcel 23	AP1A259-DP03	31-Mar-10	GW	5 - 7									X	None
Parcel 23	AP1A259-DP03	31-Mar-10	GW	13 - 15									X	None
Parcel 23	AP1A259-DP03	31-Mar-10	SB	0 - 0.5									X	None
Parcel 23	AP1A259-DP03	31-Mar-10	SB	2.25 - 2.75									X	None
Parcel 23	AP1A259-DP04	31-Mar-10	GW	5 - 7									X	None
Parcel 23	AP1A259-DP04	31-Mar-10	GW	13 - 15									X	None
Parcel 23	AP1A259-DP04	31-Mar-10	SB	0 - 0.5									X	None
Parcel 23	AP1A259-DP04	31-Mar-10	SB	1.25 - 1.75									X	None
Parcel 23	AP1AAPS-DP01	06-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP01	06-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP01	06-Apr-10	SB	0 - 0.5				X						None
Parcel 23	AP1AAPS-DP01	06-Apr-10	SB	0 - 0.75			X					X	X	None
Parcel 23	AP1AAPS-DP01	06-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP01	06-Apr-10	SB	0.75 - 1.25			X					X	X	None
Parcel 23	AP1AAPS-DP01	06-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP01	06-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP02	06-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP02	06-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP02	06-Apr-10	SB	0 - 0				X						None
Parcel 23	AP1AAPS-DP02	06-Apr-10	SB	0 - 0.75			X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP02	06-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP02	06-Apr-10	SB	0.75 - 1.25			X					X	X	None
Parcel 23	AP1AAPS-DP02	06-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP02	06-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP03	02-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP03	02-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP03	02-Apr-10	SB	0 - 0				X						None
Parcel 23	AP1AAPS-DP03	02-Apr-10	SB	0 - 0.5			X					X	X	None
Parcel 23	AP1AAPS-DP03	02-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP03	02-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP03	02-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP04	12-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP04	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP04	12-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP04	12-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP04	12-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP04	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP05	09-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP05	09-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP05	09-Apr-10	SB	0 - 0.5				X						None
Parcel 23	AP1AAPS-DP05	09-Apr-10	SB	0 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP05	09-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP05	09-Apr-10	SB	2 - 3			X					X	X	None
Parcel 23	AP1AAPS-DP05	09-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP05	09-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP06	12-Apr-10	SB	0 - 0.5			X	X				X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP06	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP06	12-Apr-10	SB	1 - 1.5			X					X	X	None
Parcel 23	AP1AAPS-DP06	12-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP06	12-Apr-10	SB	2 - 2.5			X					X	X	None
Parcel 23	AP1AAPS-DP06	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP06	13-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP06	13-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP07	12-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP07	12-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP07	12-Apr-10	SB	0 - 0.5				X						None
Parcel 23	AP1AAPS-DP07	12-Apr-10	SB	0 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP07	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP07	12-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP07	12-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP07	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP08	12-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP08	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP08	12-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP08	12-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP08	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP09	12-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP09	12-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP09	12-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP09	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP09	12-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP09	12-Apr-10	SB	2 - 4				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP09	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP10	06-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP10	06-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP10	06-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP10	06-Apr-10	SB	2 - 2.5			X					X	X	None
Parcel 23	AP1AAPS-DP10	06-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP11	06-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP11	06-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP11	06-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP11	06-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP11	06-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP11	07-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP11	07-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP12	07-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP12	07-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	0 - 0.5				X						None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	0 - 0.75			X					X	X	None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	3.5 - 4			X					X		None
Parcel 23	AP1AAPS-DP12	07-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP13	01-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP13	01-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP13	01-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP13	01-Apr-10	SB	3.5 - 4			X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP13	01-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP13	02-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP13	02-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP14	01-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP14	01-Apr-10	SB	0.5 - 2			X	X				X	X	None
Parcel 23	AP1AAPS-DP14	01-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP14	01-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP15	01-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP15	01-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP15	01-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP15	01-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP16	31-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP16	31-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP16	31-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP16	31-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP17	31-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP17	31-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP17	31-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP17	31-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP17	01-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP17	01-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP18	31-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP18	31-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP18	31-Mar-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP18	31-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP18	31-Mar-10	SB	4 - 8				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP19	02-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP19	02-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP19	02-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP19	02-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP19	02-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP19	05-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP19	05-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP20	05-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP20	05-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP20	05-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP20	05-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP20	05-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP20	05-Apr-10	SB	5 - 5.5			X					X	X	None
Parcel 23	AP1AAPS-DP21	02-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP21	02-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP21	02-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP21	02-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP21	02-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP21	05-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP21	05-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP22	02-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP22	02-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP22	02-Apr-10	SB	0 - 0.5				X						None
Parcel 23	AP1AAPS-DP22	02-Apr-10	SB	0 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP22	02-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP22	02-Apr-10	SB	1.75 - 2.25			X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP22	02-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP22	02-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP23	05-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP23	05-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP23	05-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP23	05-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP23	05-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP24	02-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP24	02-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP24	02-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP24	02-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP24	02-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP24	02-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP24	02-Apr-10	SB	7.5 - 8			X					X	X	None
Parcel 23	AP1AAPS-DP25	05-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP25	05-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP25	05-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP25	05-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP25	05-Apr-10	SB	5.5 - 6			X					X	X	None
Parcel 23	AP1AAPS-DP26	05-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP26	05-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP26	05-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP26	05-Apr-10	SB	3 - 3.5			X					X	X	None
Parcel 23	AP1AAPS-DP26	05-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP27	05-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP27	05-Apr-10	SB	0.5 - 2				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP27	05-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP27	05-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP27	05-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP27	05-Apr-10	SB	5.5 - 6			X					X	X	None
Parcel 23	AP1AAPS-DP28	05-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP28	05-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP28	05-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP28	05-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP28	05-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP28	06-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AAPS-DP28	06-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AAPS-DP30	30-Apr-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP30	30-Apr-10	GW	13 - 15				X				X	X	None
Parcel 23	AP1AAPS-DP30	30-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP30	30-Apr-10	SB	0.5 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP30	30-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP30	30-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP30	30-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP31	30-Apr-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP31	30-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP31	30-Apr-10	SB	0.5 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP31	30-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP31	30-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP31	30-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP80	04-May-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP80	04-May-10	GW	13 - 15				X				X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP80	04-May-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP80	04-May-10	SB	0.5 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP80	04-May-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP80	04-May-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP80	04-May-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP81	04-May-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP81	04-May-10	GW	13 - 15				X				X	X	None
Parcel 23	AP1AAPS-DP81	04-May-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP81	04-May-10	SB	0.5 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP81	04-May-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP81	04-May-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP81	04-May-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP82	04-May-10	SB	0.5 - 1			X					X	X	None
Parcel 23	AP1AAPS-DP82	05-May-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP82	05-May-10	GW	13 - 15				X				X	X	None
Parcel 23	AP1AAPS-DP82	05-May-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP82	05-May-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP82	05-May-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP82	05-May-10	SB	4 - 8				X						None
Parcel 23	AP1AAPS-DP83	05-May-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP83	05-May-10	GW	13 - 15				X				X	X	None
Parcel 23	AP1AAPS-DP83	05-May-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP83	05-May-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP83	05-May-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP83	05-May-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AAPS-DP83	05-May-10	SB	4 - 8				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AAPS-DP84	05-May-10	GW	5 - 7				X				X	X	None
Parcel 23	AP1AAPS-DP84	05-May-10	GW	13 - 15				X				X	X	None
Parcel 23	AP1AAPS-DP84	05-May-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AAPS-DP84	05-May-10	SB	0.5 - 2				X						None
Parcel 23	AP1AAPS-DP84	05-May-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AAPS-DP84	05-May-10	SB	2 - 4				X						None
Parcel 23	AP1AAPS-DP84	05-May-10	SB	4 - 8				X						None
Parcel 23	AP1AB100-CC01	13-Apr-10	CO	999 - 999					X					None
Parcel 23	AP1AB100-CC02	13-Apr-10	CO	999 - 999					X					None
Parcel 23	AP1AB100-CC03	13-Apr-10	CO	999 - 999					X					None
Parcel 23	AP1AB100-CC04	13-Apr-10	CO	999 - 999					X					None
Parcel 23	AP1AB100-CC05	13-Apr-10	CO	999 - 999					X					None
Parcel 23	AP1AFTA-DP01	08-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP01	08-Apr-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP02	08-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP02	08-Apr-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP03	08-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP03	08-Apr-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP04	08-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP04	08-Apr-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP05	09-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP05	09-Apr-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP06	07-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP06	07-Apr-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP07	07-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP07	07-Apr-10	SB	3.5 - 4	X		X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AFTA-DP08	09-Apr-10	SB	0 - 0.5			X					X	X	None
Parcel 23	AP1AFTA-DP08	09-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23	AP1AFTA-DP08	13-Apr-10	SB	0 - 0.5	X									None
Parcel 23	AP1AFTA-DP08	13-Apr-10	SB	3.5 - 4	X									None
Parcel 23	AP1AFTA-DP09	07-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP09	07-Apr-10	SB	0.5 - 1.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP10	07-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP10	07-Apr-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP11	06-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP11	06-Apr-10	SB	2 - 2.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP12	06-Apr-10	SB	0 - 0.5	X		X					X	X	Proposed sampling location relocated.
Parcel 23	AP1AFTA-DP13	06-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP14	08-Apr-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP15	30-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP15	30-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP16	30-Mar-10	SB	0 - 0.5	X		X					X		None
Parcel 23	AP1AFTA-DP16	30-Mar-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP16	08-Apr-10	SB	0 - 0.5								X	X	None
Parcel 23	AP1AFTA-DP17	30-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP17	30-Mar-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP18	30-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP18	30-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP18	30-Mar-10	SB	4.5 - 5	X		X					X	X	None
Parcel 23	AP1AFTA-DP19	30-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP19	30-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP19	30-Mar-10	SB	5.5 - 6	X		X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AFTA-DP20	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP20	25-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP20	25-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP21	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP21	25-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP21	25-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP22	24-Mar-10	SB	0 - 0.5	X		X					X		None
Parcel 23	AP1AFTA-DP22	24-Mar-10	SB	3.5 - 4	X		X					X		None
Parcel 23	AP1AFTA-DP22	24-Mar-10	SB	7.5 - 8	X		X					X		None
Parcel 23	AP1AFTA-DP23	24-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP23	24-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP23	24-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP24	24-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP24	24-Mar-10	SB	2 - 2.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP24	24-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP25	24-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP25	24-Mar-10	SB	3.5 - 4	X		X					X	X	None
Parcel 23	AP1AFTA-DP25	24-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP26	24-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP26	24-Mar-10	SB	1.5 - 2.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP26	24-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP27	24-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP27	24-Mar-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP27	24-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP28	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP28	25-Mar-10	SB	3.5 - 4	X		X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AFTA-DP28	25-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP29	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP29	25-Mar-10	SB	1.2 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP29	25-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP30	05-Apr-10	SB	0 - 0.5	X		X					X	X	Proposed sampling location relocated.
Parcel 23	AP1AFTA-DP31	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP31	25-Mar-10	SB	2 - 2.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP31	25-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP32	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP32	25-Mar-10	SB	1.5 - 2	X		X					X	X	None
Parcel 23	AP1AFTA-DP32	25-Mar-10	SB	7.5 - 8	X		X					X	X	None
Parcel 23	AP1AFTA-DP33	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP33	25-Mar-10	SB	1.75 - 2.25	X		X					X	X	None
Parcel 23	AP1AFTA-DP34	25-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP34	25-Mar-10	SB	1.75 - 2.25	X		X					X	X	None
Parcel 23	AP1AFTA-DP35	26-Mar-10	SB	0 - 0.5	X		X					X	X	None
Parcel 23	AP1AFTA-DP35	26-Mar-10	SB	3.5 - 4	X		X					X		None
Parcel 23	AP1AFTA-DP35	07-Apr-10	SB	3.5 - 4								X	X	None
Parcel 23	AP1AIR33-DP01	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP01	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP01	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP01	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP02	24-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP02	24-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP02	24-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP02	24-Mar-10	SB	4 - 8				X						None

TABLE E-1
Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AIR33-DP03	24-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP03	24-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP03	24-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP03	24-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP04	24-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP04	24-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP04	24-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP04	24-Mar-10	SB	4 - 6				X						None
Parcel 23	AP1AIR33-DP05	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP05	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP05	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP05	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP06	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP06	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP06	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP06	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP07	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP07	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP07	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP07	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP08	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP08	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP08	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP08	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP09	22-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP09	22-Mar-10	SB	0.5 - 2				X						None

TABLE E-1
Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AIR33-DP09	22-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP09	22-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP10	22-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP10	22-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP10	22-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP10	22-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP11	22-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP11	22-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP11	22-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP11	22-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP12	22-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP12	22-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP12	22-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP12	22-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP13	22-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP13	22-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP13	22-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP13	22-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP14	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP14	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP14	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP14	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP15	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP15	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP15	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP15	23-Mar-10	SB	4 - 8				X						None

TABLE E-1
Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AIR33-DP16	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP16	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP16	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP16	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP17	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP17	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP17	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP17	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP18	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP18	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP18	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP18	23-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP19	23-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP19	23-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP19	23-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP19	24-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AIR33-DP20	24-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AIR33-DP20	24-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AIR33-DP20	24-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AIR33-DP20	24-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AMSA-DP01	09-Apr-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP01	09-Apr-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP01	09-Apr-10	SB	7.5 - 8		X								None
Parcel 23	AP1AMSA-DP02	09-Apr-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP02	09-Apr-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP02	09-Apr-10	SB	7.5 - 8		X								None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AMSA-DP03	09-Apr-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP03	09-Apr-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP03	09-Apr-10	SB	7.5 - 8		X								None
Parcel 23	AP1AMSA-DP04	09-Apr-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP04	09-Apr-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP04	09-Apr-10	SB	7.5 - 8		X								None
Parcel 23	AP1AMSA-DP05	26-Mar-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP05	26-Mar-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP06	26-Mar-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP06	26-Mar-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP06	26-Mar-10	SB	5.5 - 6		X								None
Parcel 23	AP1AMSA-DP07	26-Mar-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP07	26-Mar-10	SB	2 - 2.5		X								None
Parcel 23	AP1AMSA-DP08	09-Apr-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP08	09-Apr-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP08	09-Apr-10	SB	7.5 - 8		X								None
Parcel 23	AP1AMSA-DP09	09-Apr-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP09	09-Apr-10	SB	3.5 - 4		X								None
Parcel 23	AP1AMSA-DP09	09-Apr-10	SB	7.5 - 8		X								None
Parcel 23	AP1AMSA-DP10	26-Mar-10	SB	0 - 0.5		X								None
Parcel 23	AP1AMSA-DP10	26-Mar-10	SB	2 - 2.5		X								None
Parcel 23	AP1AW407A-DP01	29-Mar-10	SB	0 - 0.5			X							None
Parcel 23	AP1AW407A-DP01	29-Mar-10	SB	2 - 2.5			X							None
Parcel 23	AP1AW407A-DP02	29-Mar-10	SB	0 - 0.5			X							None
Parcel 23	AP1AW407A-DP02	29-Mar-10	SB	2 - 2.5			X							None
Parcel 23	AP1AW407B-DP01	02-Apr-10	SB	0 - 0.5			X							Proposed sampling location relocated.

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AW407B-DP01	02-Apr-10	SB	1.25 - 1.75			X							Proposed sampling location relocated.
Parcel 23	AP1AW407B-DP02	28-Apr-10	SB	0 - 0.5			X							Proposed sampling location relocated.
Parcel 23	AP1AW407B-DP02	28-Apr-10	SB	2 - 2.5			X							Proposed sampling location relocated.
Parcel 23	AP1AW483A-DP01	30-Mar-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW483A-DP01	30-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW483A-DP01	30-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW483A-DP01	30-Mar-10	SB	3.5 - 4			X		X			X	X	None
Parcel 23	AP1AW483A-DP01	30-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW483A-DP02	30-Mar-10	GW	5 - 7			X	X	X			X	X	None
Parcel 23	AP1AW483A-DP02	30-Mar-10	GW	13 - 15			X	X	X			X	X	None
Parcel 23	AP1AW483A-DP02	30-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AW483A-DP02	30-Mar-10	SB	0 - 1			X		X			X	X	None
Parcel 23	AP1AW483A-DP02	30-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW483A-DP02	30-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW483A-DP02	30-Mar-10	SB	3.5 - 4.5			X		X			X	X	None
Parcel 23	AP1AW483A-DP02	30-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW483B-DP01	31-Mar-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW483B-DP01	31-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW483B-DP01	31-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW483B-DP01	31-Mar-10	SB	3 - 3.5			X		X			X	X	None
Parcel 23	AP1AW483B-DP01	31-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW483B-DP02	31-Mar-10	GW	5 - 7			X	X	X			X	X	None
Parcel 23	AP1AW483B-DP02	31-Mar-10	GW	13 - 15			X	X	X			X	X	None
Parcel 23	AP1AW483B-DP02	31-Mar-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW483B-DP02	31-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW483B-DP02	31-Mar-10	SB	2 - 4				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AW483B-DP02	31-Mar-10	SB	3.25 - 3.75			X		X			X	X	None
Parcel 23	AP1AW483B-DP02	31-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW485B-DP01	12-Apr-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW485B-DP01	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW485B-DP01	12-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AW485B-DP01	12-Apr-10	SB	2.5 - 3			X		X			X	X	None
Parcel 23	AP1AW485B-DP01	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AW485B-DP02	12-Apr-10	GW	5 - 7			X	X	X			X	X	None
Parcel 23	AP1AW485B-DP02	12-Apr-10	GW	13 - 15			X	X	X			X	X	None
Parcel 23	AP1AW485B-DP02	12-Apr-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW485B-DP02	12-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW485B-DP02	12-Apr-10	SB	1.5 - 2			X		X			X	X	None
Parcel 23	AP1AW485B-DP02	12-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AW485B-DP02	12-Apr-10	SB	2.5 - 3			X		X			X	X	None
Parcel 23	AP1AW485B-DP02	12-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AW488-DP01	29-Mar-10	SB	0 - 0.5			X							None
Parcel 23	AP1AW488-DP01	29-Mar-10	SB	1.5 - 2			X							None
Parcel 23	AP1AW488-DP02	29-Mar-10	SB	0 - 0.5			X							None
Parcel 23	AP1AW488-DP02	29-Mar-10	SB	2.25 - 2.75			X							None
Parcel 23	AP1AW495A-DP01	26-Mar-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW495A-DP01	26-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW495A-DP01	26-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW495A-DP01	26-Mar-10	SB	3.5 - 4			X		X			X	X	None
Parcel 23	AP1AW495A-DP01	26-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW495A-DP01	26-Mar-10	SB	7.5 - 8			X		X			X	X	None
Parcel 23	AP1AW495A-DP02	26-Mar-10	SB	0 - 0.5			X	X	X			X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AW495A-DP02	26-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW495A-DP02	26-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW495A-DP02	26-Mar-10	SB	3.5 - 4			X		X			X	X	None
Parcel 23	AP1AW495A-DP02	26-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW495A-DP02	29-Mar-10	GW	5 - 7			X	X	X			X	X	None
Parcel 23	AP1AW495A-DP02	29-Mar-10	GW	13 - 15			X	X	X			X	X	None
Parcel 23	AP1AW495B-DP01	26-Mar-10	SB	0 - 0.5				X						None
Parcel 23	AP1AW495B-DP01	26-Mar-10	SB	0 - 1			X		X			X	X	None
Parcel 23	AP1AW495B-DP01	26-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW495B-DP01	26-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW495B-DP01	26-Mar-10	SB	2.5 - 3			X		X			X	X	None
Parcel 23	AP1AW495B-DP01	26-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW495B-DP02	25-Mar-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 23	AP1AW495B-DP02	25-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW495B-DP02	25-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW495B-DP02	25-Mar-10	SB	2.5 - 3			X		X			X	X	None
Parcel 23	AP1AW495B-DP02	25-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW495B-DP02	25-Mar-10	SB	7.5 - 8			X		X			X	X	None
Parcel 23	AP1AW495B-DP02	29-Mar-10	GW	5 - 7			X	X	X			X	X	None
Parcel 23	AP1AW495B-DP02	29-Mar-10	GW	13 - 15			X	X	X			X	X	None
Parcel 23	AP1AW496-DP01	09-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AW496-DP01	09-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AW496-DP01	09-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW496-DP01	09-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW496-DP01	09-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AW496-DP01	09-Apr-10	SB	3.5 - 4			X					X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AW496-DP01	09-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AW496-DP02	09-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW496-DP02	09-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW496-DP02	09-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AW496-DP02	09-Apr-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AW496-DP02	09-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AW499-DP01	01-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW499-DP01	01-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW499-DP01	01-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AW499-DP01	01-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AW499-DP02	01-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AW499-DP02	01-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AW499-DP02	01-Apr-10	SB	0 - 0.5				X				X	X	None
Parcel 23	AP1AW499-DP02	01-Apr-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW499-DP02	01-Apr-10	SB	1.75 - 2.25								X	X	None
Parcel 23	AP1AW499-DP02	01-Apr-10	SB	2 - 4				X						None
Parcel 23	AP1AW499-DP02	01-Apr-10	SB	4 - 8				X						None
Parcel 23	AP1AW599A-DP01	29-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW599A-DP01	29-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW599A-DP01	29-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW599A-DP01	29-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW599A-DP01	29-Mar-10	SB	4.25 - 4.75			X					X	X	None
Parcel 23	AP1AW599A-DP02	30-Mar-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AW599A-DP02	30-Mar-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AW599A-DP02	30-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW599A-DP02	30-Mar-10	SB	0.5 - 2				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23	AP1AW599A-DP02	30-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW599A-DP02	30-Mar-10	SB	3.75 - 4.25			X					X	X	None
Parcel 23	AP1AW599A-DP02	30-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW599B-DP01	29-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW599B-DP01	29-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW599B-DP01	29-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW599B-DP01	29-Mar-10	SB	3.5 - 4			X					X	X	None
Parcel 23	AP1AW599B-DP01	29-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW599B-DP02	29-Mar-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23	AP1AW599B-DP02	29-Mar-10	SB	0.5 - 2				X						None
Parcel 23	AP1AW599B-DP02	29-Mar-10	SB	2 - 4				X						None
Parcel 23	AP1AW599B-DP02	29-Mar-10	SB	4 - 8				X						None
Parcel 23	AP1AW599B-DP02	29-Mar-10	SB	4.75 - 5.25			X					X	X	None
Parcel 23	AP1AW599B-DP02	30-Mar-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AW599B-DP02	30-Mar-10	GW	13 - 15			X	X				X	X	None
Parcel 23	AP1AW599B-DP02	06-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23	AP1AW599B-DP02	06-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 23	FED-1A-001	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23	FED-1A-002	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23	FED-1A-003	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23	FED-1A-004	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23	FED-1A-005	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23	FED-2B-001	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23	FED-2B-002	23-Apr-10	SB	3.5 - 4							X			None
Parcel 23E	AP2CAPS-DP01	13-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 23E	AP2CAPS-DP01	13-Apr-10	GW	13 - 15			X	X				X	X	None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 23E	AP2CAPS-DP01	13-Apr-10	SB	0 - 0.5			X	X				X	X	None
Parcel 23E	AP2CAPS-DP01	13-Apr-10	SB	0.5 - 2				X						None
Parcel 23E	AP2CAPS-DP01	13-Apr-10	SB	1.5 - 2			X					X	X	None
Parcel 23E	AP2CAPS-DP01	13-Apr-10	SB	2 - 4				X						None
Parcel 23E	AP2CAPS-DP01	13-Apr-10	SB	4 - 8				X						None
Parcel 5	AP1AA1-DP01	07-Apr-10	SB	0 - 0.5					X					None
Parcel 5	AP1AA1-DP01	07-Apr-10	SB	3.5 - 4					X					None
Parcel 5	AP1AA1-DP01	07-Apr-10	SB	5 - 5.5					X					None
Parcel 5	AP1AA1-DP02	07-Apr-10	SB	0 - 0.5					X					None
Parcel 5	AP1AA1-DP02	07-Apr-10	SB	3.3 - 3.8					X					None
Parcel 5	AP1AA1-DP03	07-Apr-10	SB	0 - 0.5					X					None
Parcel 5	AP1AA1-DP03	07-Apr-10	SB	3.5 - 4					X					None
Parcel 5	AP1AA1-DP04	07-Apr-10	SB	0 - 0.5					X					None
Parcel 5	AP1AA1-DP04	07-Apr-10	SB	3.5 - 4					X					None
Parcel 5	AP1AA1-DP05	07-Apr-10	SB	0 - 0.5					X					None
Parcel 5	AP1AA1-DP05	07-Apr-10	SB	3.1 - 3.6					X					None
Parcel 5	AP1AA1-DP06	08-Apr-10	SB	0 - 0.5					X	X				None
Parcel 5	AP1AA1-DP06	08-Apr-10	SB	2.5 - 3					X	X				None
Parcel 5	AP1AA1-DP07	08-Apr-10	SB	0 - 0.5					X	X				None
Parcel 5	AP1AA1-DP07	08-Apr-10	SB	3.5 - 4					X	X				None
Parcel 5	AP1AA1-DP08	08-Apr-10	SB	0 - 0.5					X	X				None
Parcel 5	AP1AA1-DP08	08-Apr-10	SB	2.1 - 2.6					X	X				None
Parcel 5	AP1AA1-DP09	08-Apr-10	SB	0 - 0.5					X	X				None
Parcel 5	AP1AA1-DP09	08-Apr-10	SB	1.75 - 2.25					X	X				None
Parcel 5	AP1AW467B-DP01	08-Apr-10	SB	0 - 0.5			X	X	X			X	X	None
Parcel 5	AP1AW467B-DP01	08-Apr-10	SB	0.5 - 2				X						None

TABLE E-1

Field Activities Summary Table and Deviations from Work Plan

Parcel	Location	Sample Date	Matrix	Depth (ft bgs)	Dioxins and Furans (8290)	Explosives (8330A)	Metals (6010B/7470A/7471A)	PAH (8270C/8270C)	PCB (8082A)	Pesticides (8081A)	Radionuclides (HASL300)	TPH (8015B)	VOCs (8260B)	Deviations from Work Plan
Parcel 5	AP1AW467B-DP01	08-Apr-10	SB	2 - 4				X						None
Parcel 5	AP1AW467B-DP01	08-Apr-10	SB	2.5 - 3			X		X			X	X	None
Parcel 5	AP1AW467B-DP01	08-Apr-10	SB	4 - 8				X						None
Parcel 5	AP1AW467B-DP02	08-Apr-10	GW	5 - 7			X	X				X	X	None
Parcel 5	AP1AW467B-DP02	08-Apr-10	GW	13 - 15			X	X				X	X	None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	0 - 0.5				X						None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	0 - 1					X			X	X	None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	0.5 - 2				X						None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	2 - 4				X						None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	2.5 - 3					X			X	X	None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	4 - 8				X						None
Parcel 5	AP1AW467B-DP02	08-Apr-10	SB	4.75 - 5.25					X			X	X	None
Parcel 5	AP1AW467B-DP02	23-Apr-10	GW	5 - 7					X					None
Parcel 5	AP1AW467B-DP02	23-Apr-10	GW	13 - 15					X					None

TABLE E-2
Reasons for Deviations from Work Plan

Sections of Work Plan	Work Plan Requirement	Modification During Field Work	Reason for Modification
3.4 WP and SAP Worksheet #10c	Soil and discrete groundwater samples were shown on Figure 12 (WP)	Soil and discrete groundwater sampling location were moved	Proposed locations were marked in the field by a licensed surveyor. Following the surveying, a Geophysical subcontractor was used along with utility maps to confirm that the proposed locations were clear of utilities. As a result of the utility clearance procedures, some soil and discrete groundwater sampling location were relocated.

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Attachment E1
Survey Data

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The NGS Data Sheet

```
DATABASE =  ,PROGRAM = datasheet, VERSION = 7.85
1        National Geodetic Survey,   Retrieval Date = JUNE 30, 2010
 HT1894
***********************************************************************
 HT1894  DESIGNATION -  MAIN
 HT1894  PID         -  HT1894
 HT1894  STATE/COUNTY-  CA/ALAMEDA
 HT1894  USGS QUAD   -  OAKLAND WEST (1993)
 HT1894
 HT1894                        *CURRENT SURVEY CONTROL
 HT1894  ______________________________________________________________________
 HT1894* NAD 83(1992)-  37 47 00.09428(N)    122 17 29.30797(W)     ADJUSTED
 HT1894* NAVD 88     -         2.36   (+/-2cm)       7.7    (feet)  VERTCON
 HT1894  ______________________________________________________________________
 HT1894  EPOCH DATE  -        1991.35
 HT1894  LAPLACE CORR-           1.42  (seconds)                     DEFLEC09
 HT1894  GEOID HEIGHT-         -32.43  (meters)                      GEOID09
 HT1894  HORZ ORDER  -  FIRST
 HT1894  VERT ORDER  -  FIRST     CLASS I (See Below)
 HT1894
 HT1894.The horizontal coordinates were established by classical geodetic
methods
 HT1894.and adjusted by the National Geodetic Survey in March 1994.
 HT1894.The horizontal coordinates are valid at the epoch date displayed
above.
 HT1894.The epoch date for horizontal control is a decimal equivalence
 HT1894.of Year/Month/Day.
 HT1894
 HT1894.The NAVD 88 height was computed by applying the VERTCON shift value
to
 HT1894.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 HT1894.The vertical order pertains to the NGVD 29 superseded value.
 HT1894
 HT1894.The Laplace correction was computed from DEFLEC09 derived
deflections.
 HT1894
 HT1894.The geoid height was determined by GEOID09.
 HT1894
 HT1894;                    North         East     Units Scale Factor
Converg.
 HT1894;SPC CA 3     -   643,938.812 1,842,209.419   MT  0.99992934   -1 05
48.5
 HT1894;SPC CA 3     - 2,112,655.92  6,043,982.07   sFT  0.99992934   -1 05
48.5
 HT1894;UTM  10      - 4,182,015.104   562,389.605   MT  0.99964794   +0 26
02.8
 HT1894
 HT1894!             -  Elev Factor  x  Scale Factor =   Combined Factor
 HT1894!SPC CA 3     -   1.00000472  x   0.99992934  =   0.99993406
 HT1894!UTM  10      -   1.00000472  x   0.99964794  =   0.99965266
 HT1894
 HT1894:                Primary Azimuth Mark                     Grid Az
 HT1894:SPC CA 3     -  MAIN SING                                000 26 52.8
 HT1894:UTM  10      -  MAIN SING                                358 55 01.5
 HT1894
```

```
 HT1894|------------------------------------------------------------------------
|
 HT1894| PID    Reference Object                      Distance      Geod. Az
|
 HT1894|                                                            dddmmss.s
|
 HT1894| HT0880 MAIN ATL                             359.584 METERS 17925
|
 HT1894| HT1895 MAIN SING                            414.477 METERS 3592104.3
|
 HT1894|------------------------------------------------------------------------
|
 HT1894
 HT1894                           SUPERSEDED SURVEY CONTROL
 HT1894
 HT1894  NAD 83(1986)-  37 47 00.08882(N)    122 17 29.30526(W) AD(1984.00) 1
 HT1894  NAD 27      -  37 47 00.34828(N)    122 17 25.41112(W) AD(       ) 1
 HT1894  NGVD 29 (??/??/??)    1.534   (m)            5.03    (f) ADJUSTED    1
1
 HT1894
 HT1894.Superseded values are not recommended for survey control.
 HT1894.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HT1894.See file dsdata.txt to determine how the superseded data were
derived.
 HT1894
 HT1894_U.S. NATIONAL GRID SPATIAL ADDRESS: 10SEG6238982015(NAD 83)
 HT1894_MARKER: Z = SEE DESCRIPTION
 HT1894_SETTING: 0 = UNSPECIFIED SETTING
 HT1894_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
 HT1894
 HT1894  HISTORY     - Date     Condition        Report By
 HT1894  HISTORY     - 1947     MONUMENTED       CGS
 HT1894  HISTORY     - 1973     SEE DESCRIPTION  NGS
 HT1894
 HT1894                           STATION DESCRIPTION
 HT1894
 HT1894'DESCRIBED BY COAST AND GEODETIC SURVEY 1947 (SPH)
 HT1894'STATION IS LOCATED IN THE NORTH-WESTERN PART OF THE CITY OF
 HT1894'ALAMEDA, IN THE GROUND, 9-1/2 FEET WEST OF THE WEST EDGE
 HT1894'OF THE MAIN STREET PAVEMENT, AND 87 FEET NORTH OF THE NORTH
 HT1894'END OF A BUS STOP SHELTER.
 HT1894'
 HT1894'MARKED BY A STANDARD TRAVERSE STATION DISK, STAMPED MAIN 1947,
 HT1894'SET IN TOP OF A CONCRETE POST 6 INCHES SQUARE AT THE TOP, 6
 HT1894'BY 10 INCHES AT THE BOTTOM, AND 30 INCHES LONG.  THE MARK
 HT1894'IS ABOUT 10 INCHES BELOW THE SURFACE OF THE GROUND, AND IS
 HT1894'ACCESSIBLE THROUGH A SMALL MANHOLE COVERED WITH A CITY OF
 HT1894'OAKLAND IRON LID INSCRIBED WITH CITY MONUMENT.
 HT1894
 HT1894                           STATION RECOVERY (1973)
 HT1894
 HT1894'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1973 (LFS)
 HT1894'THE MARK WAS RECOVERED IN GOOD CONDITION AND THE 1947 DESCRIPTION
 HT1894'IS ADEQUATE.
 HT1894'
 HT1894'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN--AT ALAMEDA
1        National Geodetic Survey,   Retrieval Date = JUNE 30, 2010
```

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 HT1890
**********************************************************************
 HT1890  DESIGNATION -  ALAMEDA
 HT1890  PID         -  HT1890
 HT1890  STATE/COUNTY-  CA/ALAMEDA
 HT1890  USGS QUAD   -  OAKLAND WEST (1993)
 HT1890
 HT1890                        *CURRENT SURVEY CONTROL
 HT1890  ______________________________________________________________________
 HT1890* NAD 83(1992)-  37 46 20.71338(N)    122 17 17.25759(W)     ADJUSTED
 HT1890* NAVD 88     -         3.31   (+/-2cm)      10.9    (feet)  VERTCON
 HT1890  ______________________________________________________________________
 HT1890  EPOCH DATE  -        1991.35
 HT1890  LAPLACE CORR-           1.22  (seconds)                     DEFLEC09
 HT1890  GEOID HEIGHT-         -32.44  (meters)                      GEOID09
 HT1890  HORZ ORDER  -  FIRST
 HT1890  VERT ORDER  -  FIRST     CLASS I (See Below)
 HT1890
 HT1890.The horizontal coordinates were established by classical geodetic
methods
 HT1890.and adjusted by the National Geodetic Survey in March 1994.
 HT1890.The horizontal coordinates are valid at the epoch date displayed
above.
 HT1890.The epoch date for horizontal control is a decimal equivalence
 HT1890.of Year/Month/Day.
 HT1890
 HT1890.The NAVD 88 height was computed by applying the VERTCON shift value
to
 HT1890.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 HT1890.The vertical order pertains to the NGVD 29 superseded value.
 HT1890
 HT1890.The Laplace correction was computed from DEFLEC09 derived
deflections.
 HT1890
 HT1890.The geoid height was determined by GEOID09.
 HT1890
 HT1890;                    North         East     Units Scale Factor
Converg.
 HT1890;SPC CA 3     -   642,719.321 1,842,481.015   MT  0.99992925   -1 05
41.1
 HT1890;SPC CA 3     - 2,108,654.97  6,044,873.13   sFT  0.99992925   -1 05
41.1
 HT1890;UTM  10      - 4,180,803.645   562,693.598   MT  0.99964841   +0 26
09.8
 HT1890
 HT1890!             -  Elev Factor  x  Scale Factor =   Combined Factor
 HT1890!SPC CA 3     -   1.00000457  x   0.99992925  =   0.99993382
 HT1890!UTM  10      -   1.00000457  x   0.99964841  =   0.99965298
 HT1890
 HT1890:                Primary Azimuth Mark                    Grid Az
 HT1890:SPC CA 3     -  CENTRAL                                 024 39 04.4
 HT1890:UTM  10      -  CENTRAL                                 023 07 13.5
 HT1890
 HT1890|-----------------------------------------------------------------
|
 HT1890| PID    Reference Object                    Distance      Geod. Az
|
```

```
 HT1890|                                                              dddmmss.s
|
 HT1890| HT2920 CENTRAL                              APPROX. 3.9 KM 0233323.3
|
 HT1890| HT1889 ALAMEDA RM 1                         25.030 METERS 07508
|
 HT1890| HT2909 CENT FOURTH 1947                    199.037 METERS 11652
|
 HT1890| DB2748 ALAMEDA RM 3                         8.569 METERS 16514
|
 HT1890| DB2747 ALAMEDA RM 2                        20.832 METERS 31329
|
 HT1890|--------------------------------------------------------------------
|
 HT1890
 HT1890                          SUPERSEDED SURVEY CONTROL
 HT1890
 HT1890  NAD 83(1986)-  37 46 20.70797(N)    122 17 17.25512(W) AD(1984.00) 1
 HT1890  NAD 27      -  37 46 20.96500(N)    122 17 13.36200(W) AD(       ) 1
 HT1890  NGVD 29 (??/??/??)    2.490  (m)            8.17   (f) ADJUSTED    1
1
 HT1890
 HT1890.Superseded values are not recommended for survey control.
 HT1890.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HT1890.See file dsdata.txt to determine how the superseded data were
derived.
 HT1890
 HT1890_U.S. NATIONAL GRID SPATIAL ADDRESS: 10SEG6269380803(NAD 83)
 HT1890_MARKER: DO = NOT SPECIFIED OR SEE DESCRIPTION
 HT1890_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 HT1890
 HT1890  HISTORY     - Date     Condition        Report By
 HT1890  HISTORY     - 1947     MONUMENTED       CGS
 HT1890  HISTORY     - 1953     SEE DESCRIPTION  CGS
 HT1890  HISTORY     - 1957     SEE DESCRIPTION  CGS
 HT1890  HISTORY     - 1963     SEE DESCRIPTION  CGS
 HT1890  HISTORY     - 1965     SEE DESCRIPTION  CGS
 HT1890  HISTORY     - 1972     SEE DESCRIPTION  NM0030
 HT1890  HISTORY     - 1986     MARK NOT FOUND   USPSQD
 HT1890
 HT1890                          STATION DESCRIPTION
 HT1890
 HT1890'DESCRIBED BY COAST AND GEODETIC SURVEY 1947 (SPH)
 HT1890'THE STATION IS LOCATED 30 FEET SW OF INTERSECTION OF CENTRAL
 HT1890'AVENUE AND TAYLOR AVENUE, 12 FEET SE OF EXTENDED CENTER LINE OF
 HT1890'TAYLOR AVENUE AND 13 FEET SW OF SOUTHWEST CURB OF CENTRAL AVENUE.
 HT1890'IT IS A STANDARD TRIANGULATION DISK STAMPED ALAMEDA 1947 AND
 HT1890'PROJECTS 2 INCHES ABOVE THE SURFACE.
 HT1890'
 HT1890'REFERENCE MARK NO. 1 IS A STANDARD REFERENCE MARK DISK STAMPED
 HT1890'ALAMEDA NO 1 1947, AND IS 2 FEET NE OF EDGE OF CURB ON EAST SIDE
 HT1890'OF CENTRAL AVENUE, 2 FEET E OF TELEPHONE POLE, 5 FEET E OF CEMENT
 HT1890'STREET LAMPOST AND 25 FEET NE OF CENTER OF CENTRAL AVENUE.
 HT1890'
 HT1890'REFERENCE MARK NO. 2 IS A STANDARD REFERENCE MARK DISK STAMPED
 HT1890'ALAMEDA NO 2 1947, AND IS 2 FEET SW OF SOUTHWEST CURB OF CENTRAL
 HT1890'AVENUE, 32 FEET W OF EXTENDED CENTER LINE OF TAYLOR AVENUE AND
```

HT1890'THIRD STREET, 12 FEET NE OF TELEPHONE POLE AND 25 FEET SW OF
HT1890'CENTER OF CENTRAL AVENUE. IT PROJECTS 2 INCHES ABOVE THE
HT1890'SURFACE.
HT1890
HT1890   STATION RECOVERY (1953)
HT1890
HT1890'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1953 (FAR)
HT1890'THE STATION AND REFERENCE MARKS WERE RECOVERED IN GOOD CONDITION.
HT1890'THE DESCRIPTION SHOULD BE REVISED AS FOLLOWS--
HT1890'
HT1890'THE STATION IS 50 FEET SOUTHEAST OF INTERSECTION OF CENTRAL
HT1890'AVENUE AND THIRD STREET, 12 FEET SOUTHEAST OF EXTENDED CENTER
HT1890'LINE OF THIRD STREET AND 13 FEET SOUTHWEST OF SOUTHWEST CURB
HT1890'OF CENTRAL AVENUE. IT IS A STANDARD TRIANGULATION DISK STAMPED
HT1890'ALAMEDA 1947 AND PROJECTS 2 INCHES ABOVE THE SURFACE.
HT1890'
HT1890'REFERENCE MARK NO. 1 WAS RECOVERED AS DESCRIBED BY SPH, 1947.
HT1890'
HT1890'REFERENCE MARK NO. 2 IS A STANDARD REFERENCE MARK DISK STAMPED
HT1890'ALAMEDA NO. 2, 1947 AND IS 2 FEET SOUTHWEST OF SOUTHWEST CURB
HT1890'OF CENTRAL AVENUE, 32 FEET WEST OF EXTENDED CENTER LINE OF
HT1890'THIRD STREET, 12 FEET SOUTHEAST OF TELEPHONE POLE AND 25 FEET
HT1890'SOUTHWEST OF CENTER OF CENTRAL AVENUE. IT PROJECTS 2 INCHES
HT1890'ABOVE THE SURFACE.
HT1890
HT1890   STATION RECOVERY (1957)
HT1890
HT1890'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1957 (WTJ)
HT1890'RECOVERED AS DESCRIBED. R.M.-2 IS IN A SCHOOL PARKING AREA AND
HT1890'APPEARS TO HAVE BEEN HIT, DISTANCE OFF 0.05.
HT1890
HT1890   STATION RECOVERY (1963)
HT1890
HT1890'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1963 (PAW)
HT1890'THE STATION MARK AND REFERENCE MARKS NUMBER 1 AND 2 WERE RECOVERED
HT1890'IN GOOD CONDITION AND THE PREVIOUS DESCRIPTIONS ARE ADEQUATE.
HT1890
HT1890   STATION RECOVERY (1965)
HT1890
HT1890'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1965 (PAS)
HT1890'THE STATION AND REFERENCE MARKS WERE RECOVERED IN GOOD CONDITION
HT1890'AS DESCRIBED IN 1947 AND 1953.
HT1890
HT1890   STATION RECOVERY (1972)
HT1890
HT1890'RECOVERY NOTE BY CITY OF ALBUQUERQUE NEW MEXICO 1972
HT1890'THE STATION MARK AND R.M. 1 WERE RECOVERED AND FOUND IN GOOD
HT1890'CONDITION. R.M. 2 WAS NOT RECOVERED. R.M. 3 WAS ESTABLISHED BY
HT1890'CIT OF ALAMEDA ENGINEERING DEPARTMENT.
HT1890'
HT1890'R.M. 3 IS A STANDARD USC AND GS REFERENCE MARK DISK STAMPED
HT1890'ALAMEDA NO 3 1947, SET IN A 10-INCH DIAMETER CONCRETE POST
HT1890'APPROXIMATELY ONE FOOT BEHIND THE SIDEWALK, 12.8 FEET S OF THE
HT1890'SOUTH CURB LINE OF CENTRAL AVE. AND 33 FEET E OF EAST CURB LINE OF
HT1890'THIRD ST. SOUTH.
HT1890
HT1890   STATION RECOVERY (1986)

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 HT1890
 HT1890'RECOVERY NOTE BY US POWER SQUADRON 1986 (RJS)
 HT1890'MARK NOT FOUND.
1        National Geodetic Survey,   Retrieval Date = JUNE 30, 2010
 HT0880
**********************************************************************
 HT0880  DESIGNATION -  MAIN ATL
 HT0880  PID         -  HT0880
 HT0880  STATE/COUNTY-  CA/ALAMEDA
 HT0880  USGS QUAD   -  OAKLAND WEST (1993)
 HT0880
 HT0880                         *CURRENT SURVEY CONTROL
 HT0880  ______________________________________________________________________
 HT0880* NAD 83(1992)-  37 46 48.43188(N)    122 17 29.16046(W)     ADJUSTED
 HT0880* NAVD 88     -         2.862  (meters)       9.39   (feet)  ADJUSTED
 HT0880  ______________________________________________________________________
 HT0880  EPOCH DATE  -        1991.35
 HT0880  LAPLACE CORR-           1.35  (seconds)                    DEFLEC09
 HT0880  GEOID HEIGHT-         -32.43  (meters)                     GEOID09
 HT0880  DYNAMIC HT  -           2.861 (meters)       9.39  (feet)  COMP
 HT0880  MODELED GRAV-     979,974.9   (mgal)                       NAVD 88
 HT0880
 HT0880  HORZ ORDER  -  FIRST
 HT0880  VERT ORDER  -  FIRST     CLASS I
 HT0880
 HT0880.The horizontal coordinates were established by classical geodetic
methods
 HT0880.and adjusted by the National Geodetic Survey in March 1994.
 HT0880.The horizontal coordinates are valid at the epoch date displayed
above.
 HT0880.The epoch date for horizontal control is a decimal equivalence
 HT0880.of Year/Month/Day.
 HT0880
 HT0880.The orthometric height was determined by differential leveling and
 HT0880.adjusted in June 1991.
 HT0880
 HT0880.The Laplace correction was computed from DEFLEC09 derived
deflections.
 HT0880
 HT0880.The geoid height was determined by GEOID09.
 HT0880
 HT0880.The dynamic height is computed by dividing the NAVD 88
 HT0880.geopotential number by the normal gravity value computed on the
 HT0880.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
 HT0880.degrees latitude (g = 980.6199 gals.).
 HT0880
 HT0880.The modeled gravity was interpolated from observed gravity values.
 HT0880
 HT0880;                    North         East     Units Scale Factor
Converg.
 HT0880;SPC CA 3     -   643,579.268 1,842,206.145   MT  0.99992931   -1 05
48.4
 HT0880;SPC CA 3     - 2,111,476.32  6,043,971.33   sFT  0.99992931   -1 05
48.4
 HT0880;UTM  10      - 4,181,655.703   562,395.936   MT  0.99964795   +0 26
02.8
 HT0880
```

```
 HT0880!             -  Elev Factor  x  Scale Factor =   Combined Factor
 HT0880!SPC CA 3     -   1.00000464  x   0.99992931  =   0.99993395
 HT0880!UTM  10      -   1.00000464  x   0.99964795  =   0.99965259
 HT0880
 HT0880|---------------------------------------------------------------------
|
 HT0880| PID    Reference Object                     Distance      Geod. Az
|
 HT0880|                                                           dddmmss.s
|
 HT0880| HT2908 ATL THIRD 1947                     322.893 METERS 09138
|
 HT0880| HT1894 MAIN                               359.584 METERS 35925
|
 HT0880|---------------------------------------------------------------------
|
 HT0880
 HT0880                          SUPERSEDED SURVEY CONTROL
 HT0880
 HT0880  NAD 83(1986)-  37 46 48.42637(N)    122 17 29.15786(W) AD(1984.00) 1
 HT0880  NAD 27      -  37 46 48.68527(N)    122 17 25.26429(W) AD(       ) 1
 HT0880  NGVD 29 (10/21/93)    2.038  (m)            6.69   (f) ADJUSTED    1
1
 HT0880
 HT0880.Superseded values are not recommended for survey control.
 HT0880.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 HT0880.See file dsdata.txt to determine how the superseded data were
derived.
 HT0880
 HT0880_U.S. NATIONAL GRID SPATIAL ADDRESS: 10SEG6239581655(NAD 83)
 HT0880_MARKER: DE = TRAVERSE STATION DISK
 HT0880_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
 HT0880_SP_SET: CONCRETE POST
 HT0880_STAMPING: MAIN ATL 1947
 HT0880_MARK LOGO: CGS
 HT0880_MAGNETIC: N = NO MAGNETIC MATERIAL
 HT0880_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
 HT0880+STABILITY: POSITION/ELEVATION WELL
 HT0880_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
 HT0880+SATELLITE: SATELLITE OBSERVATIONS - July 10, 1993
 HT0880
 HT0880  HISTORY     - Date     Condition        Report By
 HT0880  HISTORY     - 1947     MONUMENTED       CGS
 HT0880  HISTORY     - 1970     SEE DESCRIPTION  NGS
 HT0880  HISTORY     - 1970     GOOD             NGS
 HT0880  HISTORY     - 1973     SEE DESCRIPTION  NGS
 HT0880  HISTORY     - 1986     GOOD             USPSQD
 HT0880  HISTORY     - 1987     GOOD             USPSQD
 HT0880  HISTORY     - 19880930 GOOD             NGS
 HT0880  HISTORY     - 19930710 GOOD             NOS
 HT0880
 HT0880                          STATION DESCRIPTION
 HT0880
 HT0880'DESCRIBED BY COAST AND GEODETIC SURVEY 1947 (SPH)
 HT0880'THE STATION IS LOCATED BELOW THE SURFACE OF THE GROUND IN THE
 HT0880'NORTHWEST CORNER OF THE INTERSECTION OF MAIN STREET AND ATLANTIC
 HT0880'AVENUE, 61 FEET NORTHWEST OF THE INTERSECTION OF THE CENTERLINES
```

HT0880'OF MAIN STREET AND ATLANTIC AVENUE, 10.5 FEET WEST OF THE EDGE
HT0880'OF THE PAVEMENT OF MAIN STREET, 7 FEET EAST OF NAVAL AIR STATION
HT0880'FENCELINE, AND 2.5 FEET NORTHEAST OF THE NORTHEAST CORNER
HT0880'OF AN ALAMEDA PUBLIC UTILITY BUILDING. THE DISK IS A STANDARD
HT0880'STATION DISK STAMPED MAIN ATL 1947 AND IS IN A 6 BY 6 CONCRETE
HT0880'POST 11 INCHES BELOW THE SURFACE OF THE GROUND. THE MARK
HT0880'IS COVERED BY A METAL LID MARKED CITY MONUMENT.
HT0880
HT0880   STATION RECOVERY (1970)
HT0880
HT0880'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1970 (LFS)
HT0880'THE STATION WAS RECOVERED IN GOOD CONDITION AND IS LOCATED
HT0880'ON THE NORTHWEST CORNER OF MAIN STREET AND ATLANTIC AVENUE.
HT0880'IT IS 60 FEET NORTH OF THE CENTERLINE OF THE AVENUE, 36.5 FEET
HT0880'WEST OF THE CENTERLINE OF THE STREET, 11.4 FEET EAST OF THE
HT0880'SOUTHEAST CORNER OF A SMALL BUREAU OF ELECTRICITY HOUSE,
HT0880'IN THE CENTER OF A 2-FOOT OPENING IN THE CURB ON THE WEST SIDE
HT0880'OF MAIN STREET, AND IS A C AND GS TRAVERSE STATION DISK STAMPED
HT0880'MAIN ATL 1947 SET IN THE TOP OF A CONCRETE POST 1.2 FEET BELOW
HT0880'THE ROAD SURFACE AND BENEATH AN 8-INCH CAST IRON COVER
HT0880'INSCRIBED CITY MONUMENT.
HT0880'
HT0880'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN--AT ALAMEDA
HT0880
HT0880   STATION RECOVERY (1970)
HT0880
HT0880'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1970
HT0880'AT ALAMEDA.
HT0880'AT ALAMEDA, AT THE NORTHWEST CORNER OF MAIN STREET AND ATLANTIC
HT0880'AVENUE, 60 FEET NORTH OF THE CENTERLINE OF THE AVENUE, 36.5 FEET
HT0880'WEST OF THE CENTERLINE OF THE STREET, 11.4 FEET EAST OF THE
HT0880'SOUTHEAST CORNER OF A SMALL BUREAU OF ELECTRICITY HOUSE, IN THE
HT0880'CENTER OF A 2-FOOT OPENING IN THE CURB ON THE WEST SIDE OF MAIN
HT0880'STREET, SET IN THE TOP OF A CONCRETE POST 1.2 FEET BELOW THE
HT0880'ROAD SURFACE, AND BENEATH AN 8-INCH CAST IRON COVER INSCRIBED
HT0880'CITY MONUMENT.
HT0880
HT0880   STATION RECOVERY (1973)
HT0880
HT0880'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1973 (LFS)
HT0880'THE MARK WAS RECOVERED IN GOOD CONDITION AND THE 1947 DESCRIPTION
HT0880'IS ADEQUATE.
HT0880'
HT0880'AIRLINE DISTANCE AND DIRECTION FROM NEAREST TOWN--AT ALAMEDA
HT0880
HT0880   STATION RECOVERY (1986)
HT0880
HT0880'RECOVERY NOTE BY US POWER SQUADRON 1986 (RJS)
HT0880'RECOVERED IN GOOD CONDITION.
HT0880
HT0880   STATION RECOVERY (1987)
HT0880
HT0880'RECOVERY NOTE BY US POWER SQUADRON 1987 (RAS)
HT0880'RECOVERED IN GOOD CONDITION.
HT0880
HT0880   STATION RECOVERY (1988)
HT0880

HT0880'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1988
HT0880'RECOVERED IN GOOD CONDITION WITH THE FOLLOWING EXCEPTION. DELETE--
11.4
HT0880'FEET EAST OF THE SOUTHEAST CORNER OF A SMALL BUREAU OF ELECTRICITY
HT0880'HOUSE.
HT0880
HT0880 STATION RECOVERY (1993)
HT0880
HT0880'RECOVERY NOTE BY NATIONAL OCEAN SERVICE 1993 (JC)
HT0880'RECOVERED AS DESCRIBED.

*** retrieval complete.
Elapsed Time = 00:00:08

Phone: 415-422-0527
Fax: 415-422-0577
Email: Lou@geometrixsurvey.com

GEOMETRIX
SURVEYING ENGINEERING INC.

To: Stephen Quayle **From:** Lou Clem

Date: 6/30/2010

Re: Alameda Navy Base borings

Stephen,

For the Alameda Navy base monitoring well location project, I used Trimble GPS with VRS network capabilities. This system uses several Trimble base stations to establish a correction for the GPS signals and sends them via cell phone connection to the receiver. This eliminates the need for a local base station. For quality control and future retracement purposes, 3 NGS points were used to perform a horizontal local site calibration: HT 1894, HT 1890, and HT 0880 which resulted in residuals of 0.04'. As an additional quality control measure, a point was measured with and without the site calibration and the results differed by 0.05'. The estimated accuracy is +/-0.2' horizontal. For vertical, HT 0880 was checked using the VRS value and it was substantially close. The datum is NAVD 1988. The estimated accuracy for the vertical is +/-0.3'. The NGS datasheets are attached for specific information about the monuments.

It was a pleasure working with you on this project.

Sincerely,

Lou Clem, PLS
Geometrix

CH2MHill #383512 2010

Legend
H= wood hub
MAG=magnetic nail
60D=60 penny nail
FD=found

The following points were field located based on client provided coordinates

Name	Code	Design Northing	Design Easting	Delta North	Delta East	Elev NAVD 88
1015	SET H MOVED 6 EAST 93 1AW407B-DP02	2112850.563	6037489.06	-0.036	-11.366	9.363
1016	SET MAG 7.0 OS 141 1AMSA-DP06	2111655.501	6035410.804	7.093	0.082	11.31
1020	SET NL 1751AAFTA-DP35	2110890.358	6037325.461	0.032	0.027	10.022
1021	SET H 121 1AIR33-DP15	2111312.497	6037337.221	0.111	-0.002	9.588
1022	SET H 120 1AIR33-DP-14	2111352.497	6037377.221	0.063	0.061	9.106
1023	SET H 119 1AIR33-DP13	2111392.497	6037337.221	0.055	0.019	9.039
1024	SET H 122 1AIR33-DP16	2111352.497	6037297.221	0.09	0.032	9.312
1025	SET MAG 116 1AIR33-DP10	2111349.261	6036907.993	0.011	-0.017	10.525
1026	SET MAG 117 1AIR33-DP11	2111309.261	6036867.993	-0.025	-0.009	10.891
1027	SET MAG 118 1AIR33-DP12	2111349.261	6036827.993	0.07	0.08	11.089
1028	SET MAG 115 1AIR33-DP09	2111389.261	6036867.993	0.015	0.011	10.591
1029	SET MAG 170 1AFTA-DP29	2111809.387	6036867.643	-0.033	0.05	10.572
1030	SET 112 1AIR33-DP06	2111812.017	6036451.708	-0.029	-0.015	13.297
1031	SET 113 1AIR33-07	2111772.017	6036411.708	0.022	0.019	13.2
1032	SET MAG 114 1AIR33-DP08	2111812.017	6036371.708	-0.022	0.004	13.245
1033	SET MAG 111 1AIR33-DP05	2111852.017	6036411.708	-0.043	0.004	13.337
1034	SET MAG 90 1AW599B-DP02	2111802.944	6036541.632	0.012	0.053	12.364
1035	SET MAG 91 1AW599B-DP01	2111820.948	6036595.57	0.016	-0.021	11.839
1036	SET MAG 97 1AW599A-DP01	2111675.481	6036359.891	0.034	0.063	11.644
1037	SET MAG 96 1AW599A-DP02	2111649.539	6036318.365	0.057	0.005	10.344
1038	SET MAG 172 1AFTA-DP30	2111812.778	6037332.244	-0.015	-0.029	9.338
1039	SET MAG 173 1AFTA-DP31	2111809.387	6037793.454	0.016	-0.009	9.705
1040	SET MAG 174 1AFTA-DP32	2111812.778	6038261.446	-0.035	0.014	8.226
1041	SET MAG 124 1AIR3-DP18	2111349.261	6037833.505	-0.025	0.012	8.702
1042	SET MAG 176 1-DP34	2111349.103	6037793.854	-0.026	0.012	9.072
1043	SET MAG 125 1AIR33-DP19	2111309.261	6037793.505	-0.018	0.023	8.719
1044	SET MAG 126 1AIR33-DP20	2111349.261	6037753.505	0.004	0.021	9.066
1045	SET MAG 123 1AIR33-DP17	2111389.261	6037793.505	-0.041	0.028	8.963
1046	SET MAG 169 1AFTA-DP28	2112267.205	6038261.446	-0.05	-0.01	9.119
1047	SET MAG 168 1AFTA-DP27	2112273.988	6037790.062	0.031	0.028	9.885
1048	SET MAG 167 1AFTA-DP26	2112273.988	6037332.244	-0.023	0.088	11.173
1049	SET MAG 166 1AFTA-DP25	2112270.596	6036867.643	-0.01	0.009	11.569
1050	SET MAG 164 1EFTA-DP23	2112740.353	6036400.46	0.038	-0.018	13.305
1051	SET MAG 163 1AFTA-DP22	2113226.66	6036850.414	0.015	0.023	15.465
1052	SET MAG 162 1AFTA-DP21	2113196.407	6036403.042	0.036	-0.033	15.061

1053	SET MAG 161 1AFTA-DP20	2113199.799	6035938.44	-0.002	0.032	14.85
1054	SET MAG 108 1AIR33-DP02	2112737.53	6035982.48	-0.022	-0.067	14.114
1055	SET MAG 107 1AIR33-DP	2112777.53	6035942.48	0.02	0.047	14.172
1056	SET MAG 110 1AIR33-DP04	2112737.53	6035902.48	0.014	-0.011	14.629
1057	SET MAG 109 1AIR33-DP03	2112697.53	6035942.48	0.062	0.001	14.38
1058	SET MAG 83 1AW495A-DP01	2112774.9	6036015.266	-0.04	0.001	14.182
1059	SET MAG 82 1AW495A-DP02	2112812.167	6035960.416	-0.065	-0.034	14.124
1060	SET MAG 85 1AW495B-DP01	2112657.022	6035784.634	-0.03	-0.025	13.361
1061	SET MAG 84 1AW495B-DP02	2112670.696	6035719.905	-0.03	-0.033	12.47
1062	SET MAG 80 1AW483B-DP02	2113571.835	6035455.494	-0.017	0.025	14.161
1063	SET MAG 81 1AW483B-DP01	2113600.047	6035531.794	-0.055	-0.037	13.57
1064	SET MAG 79 1AW483-DP01	2113474.136	6035297.679	-0.036	0.036	13.862
1065	SET MAG 78 1AW483-DP02	2113443.504	6035247.783	-0.034	-0.075	13.083
1066	SET MAG 159 1AFTA-DP18	2113664.4	6035938.44	0.018	-0.014	15.587
1067	SET MAG 160 1AFTA-DP19	2113661.008	6036406.433	-0.074	-0.035	17.035
1068	SET MAG 184 1A259-04	2112471.034	6037722.378	0.029	0.007	9.436
1069	SET MAG 183 1A259-03	2112515.445	6037778.589	0.019	0.014	10.317
1070	SET PAINT MK 95 1AW407A-DP01	2112776.92	6037501.757	-0.052	0.072	9.213
1071	SET MAG 94 1AW407A-DP02	2112784.539	6037456.048	0.021	-0.043	9.893
1072	SET H 92 1AW407B-DP01	2112855.642	6037547.466	-0.103	0.038	9.272
1073	SET MAG 89 1AW499-DP01	2113023.243	6037358.314	-0.005	-0.022	12.01
1074	SET H 140 1AMSA-DP07	2111773.734	6035163.078	0.056	-0.001	9.955
1075	SET H 137 1AMSA-DP09	2112919.469	6034521.241	0.044	0.042	10.972
1076	SET H 136 1AMSA-DP08	2113172.826	6034557.837	0.025	0.052	10.392
1077	SET H 155 1AFTA-DP14	2114122.218	6035477.231	0.025	0.029	11.086
1078	SET H 149 1AFTA-DP08	2114603.776	6035019.412	0.103	-0.046	7.458
1079	SET 60D 144 1AFTA-DP03	2115024.29	6035938.44	-0.095	0.011	11.485
1080	SET H 146 1AFTA-DP05	2115000.552	6036867.643	-0.019	0.092	11.952
1081	SET MAG 88 1AW499-DP02	2113004.438	6037285.633	-0.006	0.045	12.479
1082	SET MAG 165 1AFTA-DP24	2112741.98	6037328.852	0.004	-0.012	11.767
1083	SET PAINT 180 1AAPA-DP03	2112982.786	6038132.135	-0.006	-0.057	9.919
1084	SET PAINT 179 1AAPA-DP02	2114056.839	6038142.927	0.016	-0.03	10.114
1085	SET PAINT 178 1AAPA-DP01	2114579.533	6038215.489	-0.063	0	8.094
1086	SET MAG 148 1AFTA-DP07	2114942.9	6037732.411	-0.007	-0.023	9.869
1087	SET NAG 147 1AFTA-DP06	2114980.204	6037318.679	0.031	-0.01	11.228
1088	SET MAG 154 1AFTA-DP13	2114590.211	6037332.244	-0.027	-0.012	10.192
1089	SET 60D 153 1AFTA-DP12	2114590.211	6036867.643	-0.002	-0.018	10.814
1090	SET MAG 152 1AFTA-DP11	2114590.211	6036403.042	-0.021	0.033	11.947
1091	SET MAG 145 1AFTA-DP04	2115020.899	6036403.042	0.019	-0.017	13.176
1092	SET MAG 151 1AFTA-DP10	2114586.819	6035941.832	0.01	0.06	10.463
1093	SET MAG 150 1AFTA-DP09	2114600.384	6035473.84	-0.013	0.058	10.843
1094	SET MA 156 1AFTA-DP15	2114122.218	6035941.832	0.022	0.006	12.027
1095	SET MAG 157 1AFTA-DP16	2114118.827	6036406.433	0.036	-0.053	11.78
1096	SET MAG 158 1AFTA-DP17	2114122.218	6036864.251	-0.054	-0.031	10.553
1097	SET H 86 1AW488-DP02	2113915.781	6037329.571	-0.033	0.05	10.831
1098	SET MAG 87 1AW488-DP01	2113918.822	6037385.323	0.052	0.023	10.936
1099	SET MAG 143 1AFTA-DP02	2115051.42	6035480.622	0.075	-0.029	10.033

1100	SET MAG 142 1AFTA-DP01	2115051.42	6035012.63	0.028	-0.009	7.695
1101	SET MAG 77 AW485B-DP01	2115334.838	6035162.116	0.009	-0.013	10.719
1102	SET MAG 76 1AW485B-DP02	2115332.604	6035106.417	0.034	0.025	10.623
1103	SET H 75 1AW496-DP02	2115140.264	6034719.331	0.068	0.009	8.152
1104	SET MAG 74 1AW496-DP01	2115132.133	6034667.172	-0.028	0.012	7.93
1105	SET PAINT 106 1AA-DP09	2114920.75	6033822	0.019	-0.047	9.299
1106	SET PAINT 105 1AA1-DP08	2114927.25	6033434	0.028	0.034	9.786
1107	SET PAINT 104 1A1-DP07	2114932	6033226	0	-0.001	9.95
1108	SET PAINT 103 1AA1-DP06	2114928.5	6033036	0.071	-0.046	9.748
1109	SET PAINT 100 1A1-DP02	2114958.08	6032854.087	0.042	0.01	9.489
1110	SET PAINT 98 1AA1-DP05	2114957.75	6032831	0.031	-0.021	9.316
1111	SET PAINT 102 1AA1-DP04	2114956.289	6032811.104	0.006	-0.032	9.16
1112	SET PAINT 99 1AA1-DP01	2114979.571	6032830.805	-0.01	-0.039	9.357
1113	SET PAINT 101 1AA1-DP03	2114936.588	6032832.596	-0.003	-0.01	9.326
1114	SET PAINT 132 1AMSA-DP01	2113961.046	6034481.83	-0.052	0.097	12.24
1115	SET MAG 133 1AMSA-DP02	2113457.148	6034442.419	0	0.03	12.353
1116	SET 60D 135 1AMSA-DP03	2113428.998	6034870.31	0.051	-0.016	12.184
1117	SET MAG 134 1AMSA-DP04	2112958.88	6034400.193	0.041	-0.031	12.335
1118	SET H 138 1AMSA-DP10 00	2111917.303	6034464.94	-0.115	0.16	10.006
1119	SET MAG 139 1AMSA-DP05	2111692.097	6034875.941	0.053	0.011	11.378
1120	SET MAG 1861AW467B-DP01	2115324.012	6033724.893	0.047	-0.032	11.92
1121	SET MAG 185 1AW467-DP02	2115324.012	6033775.14	-0.037	0.036	11.875
1122	SET H 61 17A1-DP04	2108523.438	6042354.91	0	0.091	14.046
1123	SET 60D 62 17A1-DP05	2108523.1	6042391.469	-0.017	0.027	13.755
1124	SET 58 17A1-DP01	2108545.066	6042391.469	0.028	-0.052	13.524
1125	SET 60D 60 17A1-DP03	2108499.107	6042391.469	0.031	0.039	13.778
1126	SET 60D 131 17A1-DP07	2108551.063	6042443.175	0.02	0.058	13.634
1127	SET 60D 56 12A5-14	2108650.043	6042344.729	-0.038	0.047	13.515
1128	SET MAG 57 12A5-DP15	2108641.288	6042444.345	-0.005	0.026	13.151
1129	SET MAG 51 12A5-DP09	2108736.527	6042502.907	-0.064	-0.018	12.617
1130	SET MAG 50 12A5-DP08	2108745.282	6042403.291	0.036	-0.017	12.983
1131	SET MAG 49 12A5-DP07	2108754.036	6042303.675	0.027	0.005	13.634
1132	SET MAG 48 12A5-DP06	2108762.791	6042204.059	-0.012	-0.035	14.398
1133	SET MAG 47 12A5-DP05	2108771.546	6042104.443	0.07	-0.02	14.571
1134	SET MAG 46 12A5-DP04	2108780.3	6042004.827	0.001	-0.038	13.711
1135	SET MAG 45 12A5-DP03	2108789.055	6041905.211	-0.012	0.008	13.25
1136	SET MAG 44 12A5-DP02	2108797.809	6041805.595	0.047	-0.035	13.155
1137	SET MAG 43 12A5-DP01	2108806.564	6041705.979	-0.033	0.029	13.876
1138	SET MAG 52 12A5-DP10	2108685.061	6041946.264	-0.009	0.017	13.874
1139	SET MAG 53 12A5-DP11	2108676.307	6042045.88	0.043	0.075	14.165
1140	SET MAG 54 12A5-DP12	2108667.552	6042145.496	-0.027	-0.019	14.47
1141	SET MAG 55 12A5-DP13	2108658.798	6042245.113	0.031	0.01	13.902
1143	SET MAG 24 12A3-DP12	2108560.007	6043178.97	-0.031	0.047	11.879
1144	SET MAG 23 12A3-DP11	2108577.182	6043197.431	-0.024	0.036	11.665
1145	SET MAG 10 12A2-DP07	2109141.35	6042913.762	0.038	-0.015	13.516
1146	SET PAINT 11 12A2-DP06	2109164.103	6042888.025	0.048	-0.003	13.622
1147	SET MAG 3.0N FNC 6 12A2-DP02	2109142.356	6042829.848	-3.058	-0.026	13.768

1148	SET MAG 3 12A1-DP02	2110501.624	6042600.836	-0.042	0.018	12.863
1149	SET MAG 14 12A3-DP02	2108900.699	6043233.078	0.011	0.031	13.08
1150	SET MAG 15 12A3-DP03	2108881.029	6043254.153	0.011	0.008	13.074
1151	SET MAG 16 12A3-DP04	2108859.954	6043231.673	-0.022	-0.002	13.055
1152	SET H 7 12A2-DP03	2108994.832	6042730.094	-0.115	0.009	13.024
1154	SET MAG 8 12A2-DP04	2108996.237	6042779.269	0.005	-0.014	13.032
1155	SET MAG 4OS S 5 12A2-DP01	2109139.546	6042776.459	4.015	0.008	13.823
1156	SET MAG 6 12A2-DP02	2109142.356	6042829.848	0.059	-0.042	13.929
1157	SET PAINT 34 12A4-DP05	2109322.253	6041909.735	0.022	0.018	12.39
1158	SET PAINT 32 12A4-DP03	2109425.24	6041839.222	0.104	0.025	12.122
1159	SET MAG 35 12A4-DP06	2109346.543	6041636.383	-0.049	-0.111	12.898
1160	SET MAG 6.0OS W 12A4-DP0635	2109346.543	6041636.383	-0.057	5.956	12.939
1161	SET MAG 36 12A4-DP07	2109635.011	6041640.559	-0.002	-0.014	11.7
1167	SET PAINT 30 ADJUSTED12A4-DP01	2109645.34	6041940.494	-3.847	16.373	12.986
1168	SET PAINT 31 ADJUSTED 12A4-DP02	2109554.69	6041975.58	-10.73	-2.119	12.521
1169	SET PAINT 37 12A4-DP08	2109580.71	6041708.672	-0.058	0.029	12.425
1170	RESET MAG 35 12A4-DP06	2109346.543	6041636.383	-0.039	-0.073	9.965
1171	SET PAINT 40 12A4-DP11	2109478.627	6041793.26	-0.027	0.036	12.723
1172	SET PAINT 38 12A4-DP09	2109490.693	6041781.245	-0.022	0.02	12.794
1173	SET PAINT 39 12A4-DP10	2109482.112	6041766.216	-0.024	-0.001	12.703
1174	SET PAINT ADJUSTED 33 12A4-DP04	2109346.868	6042147.235	-20.871	4.646	13.157
1175	SET PAINT 33 12A4-DP04	2109346.868	6042147.235	0.041	0.191	13.314
1176	SET 60D 130 17A1-DP06	2108577.711	6042425.932	0.017	-0.009	13.725
1177	SET H 59 17A1-DP02	2108522.086	6042429.786	0.062	-0.028	13.963
1178	SET MAG 12 12A2-DP05	2109138.99	6042866.226	0.042	0.023	13.836
1179	SET MAG 66 17A2-DP04	2108368.739	6043863.417	-0.052	0.031	12.941
1180	SET MAG 63 17A2-DP01	2108387.535	6043864.61	-0.023	-0.03	12.934
1181	SET MAG 127 17APS-DP01	2108423.467	6043852.033	0.037	0.003	12.898
1182	SET MAG 65 17A2-DP03	2108345.808	6043834.541	-0.076	0.051	12.94
1183	SET MAG 67 17A2-DP05	2108342.41	6043892.294	0.087	-0.014	13.418
1184	SET MAG 68 17A2-DP06	2108372.136	6043918.622	-0.033	-0.005	13.478
1185	SET MAG 128 17APS-DP02	2108414.115	6043947.834	0.025	-0.007	13.456
1186	SET MAG 70 17A3-DP02	2108074.946	6043927.304	0.015	-0.029	13.705
1187	SET MAG 69 17A3-DP01	2108034.35	6043926.73	-0.009	0.011	13.43
1188	SET MAG 73 17A3-DP05	2108034.394	6043886.775	0.019	0.009	13.125
1189	SET MAG 72 17A3-DP04	2107994.623	6043926.546	-0.022	-0.065	12.983
1190	SET MAG 71 17A3-DP03	2108035.152	6043966.409	0.028	0.028	13.713
1191	SET MAG 129 17APS-DP03	2108405.015	6044044.898	0.039	0.086	14.316
1192	SET MAG 64 0S 4.0 17A2-DP02	2108367.04	6043819.253	0.006	-3.956	13.078
1193	SET MAG 21 12A3-DP09	2108576.997	6043160.019	0.008	0.047	11.66
1194	SET MAG 22 12A3-DP10	2108594.413	6043178.284	-0.024	-0.005	11.298
1195	SET MAG 28 12A3-DP16	2108664.662	6043050.43	0.005	0.021	12.122
1196	SET MAG ADJUSTED 28 12A3-DP16	2108664.662	6043050.43	0.071	15.071	12.209
1197	SET MAG 25 12A3-DP13	2108709.621	6043034.976	-0.079	-0.001	12.469
1198	SET MAG ADJUSTED 10.0 W 26 12A3-14	2108723.671	6042968.941	-0.022	10.033	12.85
1199	SET MAG 27 12A3-DP15	2108667.472	6042971.751	-0.078	0.035	12.728
1200	SET MAG 13 12A3-DP01	2108882.434	6043213.408	-0.043	0.001	13.346

1201	SET MAG 9 12A2-DP08	2109114.672	6042890.454	0.071	0	13.681
1202	SET MAG ADJUSTED 18 12A3-DP06	2108748.961	6043145.969	-21.109	15.847	12.753
1203	SET MAG 20 12A3-DP08	2108715.241	6043147.374	0.038	-0.019	12.551
1204	SET MAG 19 12A3-DP07	2108733.506	6043165.639	0.022	-0.055	12.385
1205	SET MAG ADJUSTED 17 12A3-DP05	2108730.696	6043127.704	10.027	7.023	12.694
1206	SET MAG ADJUSTED 7.0W 29 12A3-DP17	2108671.687	6043134.729	-0.056	7.085	12.131
1207	SET MAG 3381AAPS-DP28	2112246.33	6034707.38	-0.071	0.023	12.909
1208	SET MAG 336 1AAPS-DP27	2112258.45	6034925.545	0.015	0.019	13.183
1209	SET MAG 335 1AAPS-DP25	2112526.443	6034786.835	0.033	0.04	13.464
1210	SET MAG 337 1AAPS-DP26	2112569.538	6035084.456	0.015	0.011	12.833
1211	SET MAG 334 1AAPS-DP24	2112255.286	6035432.24	0.006	0.013	12.996
1212	SET MAG 330 1AAPS-DP20	2113540.699	6036492.192	-0.014	-0.005	16.562
1213	SET MAG 329 1AAPS-DP19	2113920.953	6036424.394	-0.001	0.014	14.262
1214	SET MAG 331 1AAPS-DP21	2112992.426	6037170.164	0.019	-0.062	13.726
1215	SET MAG 333 1AAPS-DP23	2111848.717	6037562.208	0.07	-0.004	10.339
1216	SET MAG 332 1APS-DP22	2112114.01	6038234.285	-0.012	-0.018	9.483
1217	SET MAG 328 2CAPS-DP01	2114913.563	6038460.963	0.041	-0.004	8.41
1218	SET PAINT 357 17APS-DP02	2108524.429	6042729.978	-0.018	-0.009	13.244
1219	FD PAINT 41 12A6-DP01 ADJUSTED	2108747.555	6042547.095	-2.584	10.538	12.651
1220	FD PAINT 42 12A6-DP02 ADJUSTED	2108746.151	6042563.253	-36.153	8.406	12.004
1221	SET H 359 17APS-DP04	2108197.927	6043094.784	-0.01	-0.057	12.211
1222	SET H 361 17APS-DP06 Modified 1:47:14 PM 3/29/2010	2107855.01	6043714.955	-0.119	-0.179	12.018
1223	SET MAG 362 17APS-DP07 ADJUSTED 5.00 TO S.	2107957.155	6043848.109	4.991	0.023	12.094
1226	SET MAG 356 17APS-DP01	2108411.339	6043434.054	0.021	0.007	12.817
1227	SET H 358 17APS-DP03	2108205.223	6043353.797	0.003	-0.04	12.822
1228	SET MAG 363 17APS-DP08	2108112.198	6044034.16	-0.013	-0.022	13.873
1229	SET H 360 17APS-DP05	2107714.559	6044012.272	0.057	-0.012	13.36
1230	SET MAG 354 12APS-DP06	2108887.746	6042335.356	-0.08	0.023	14.045
1231	SET MA 351 12APS-DP03	2109062.373	6042363.341	-0.026	0.028	13.551
1232	SET PAINT 350 12APS-DP02 ADJUSTED 6.0 TO E	2109234.762	6042474.162	-0.055	-5.972	13.204
1233	SET MAG 352 12APS-DP04	2109112.746	6041858.489	0.031	0.016	13.547
1234	SET MAG 353 12APS-DP05	2108916.85	6041777.892	-0.019	0.023	14.206
1237	SET PAINT 340 12APS-DP01 ADJUSTD 5.0 TO N.	2109430.658	6042496.55	-4.999	-0.014	13.137

Legend
BOR-boring hole (existing)
MAG=magnetic nail
60D=60 penny nail
FD=found

The following locations were measured after being added or moved to new locations by CH2MHill for variuos reasons

Name	Northing	Easting	Elevation NAVD 88	description

1240	2115324.812	6033741.504	4.598	SET MAG AW467B-DP01 MOVED
1241	2115324.645	6033755.503	4.633	SET MAG AW467B-DP02 MOVED
1242	2112990.61	6037310.822	7.238	SET MAG 1AW499-DP02 MOVED
1243	2113007.799	6037331.75	7.124	SET MAG 1AW499-DP01 MOVED
1250	2110459.566	6042468.631	11.655	FD BORIING AP12A1-DP04 NEW
1251	2110521.942	6042498.195	11.395	FD BORING AP12A1-DP01 NEW
1252	2110462.44	6042571.831	11.483	FD BORING AP12A1-DP03 NEW
1253	2108782.321	6042554.92	9.857	FD BORING AP12A6-DP02 NEW
1254	2108750.02	6042536.572	10.402	FD BORING AP12A6-DP01 NEW
1255	2112818.286	6037501.627	4.203	FD BORING AP407B-DP02 MOVED
1256	2112589.196	6037709.639	4.134	FD BORING AP1A259-DP01 NEW
1257	2112470.922	6037722.333	4.422	FD BORING AP1A259-DP04 OLD
1258	2112548.091	6037719.327	4.882	FD GRATE AP1A259-DP02 NEW
1259	2113959.707	6034483.463	5.095	FD BORING RAD-01
1260	2113721.618	6034376.263	3.275	FD SOIL RAD-02
1261	2113461.793	6034440.871	5.032	FD BORING RAD-03
1262	2113191.422	6034333.496	2.929	FD BORING RAD-04
1263	2112962.459	6034400.701	4.583	FD BORING RAD-05
1264	2111143.802	6038586.397	6.304	FD BORING RAD-06
1265	2110918.652	6038576.635	3.987	FD BORING RAD-07
1266	2111826.704	6037325.69	4.097	FD BORING 1AFTA-DP30 MOVED
1267	2114635.157	6036925.38	5.955	FD BORING 1AFTA-DP12 MOVED
1269	2109578.7	6041698.374	9.86	FD BORING AP12A4-DP08 MOVED
1270	2109347.274	6041633.658	10.211	FD BORING AP12A4-DP06 MOVED
1271	2108770.192	6043129.787	10.97	FD BORING AP12A3-DP06 MOVED
1272	2108732.445	6043168.882	10.659	FD BORING AP12A3-DP07 MOVED
1273	2108682.165	6043136.994	10.336	FD BORING AP12A3-DP17 MOVED
1274	2108669.34	6042974.144	10.924	FD BORING AP12A3-DP15 MOVED
1275	2109144.606	6042873.264	11.83	FD BORING AP12A2-DP05A MOVED
1276	2108574.926	6042419.491	11.378	FD BORING AP17A1-DP06 MOVED
1277	2109435.59	6042495.866	11.276	FD BORING AP12APS-DP01 MOVED
1278	2114024.394	6037475.528	4.864	FD BORING AP1AAPS-DP12
1279	2114049.429	6037475.375	4.852	FD BORING AP1AAPS-DP29 NEW
1280	2114059.532	6037475.317	4.839	FD BORING AP1AAPS-DP32 NEW
1281	2114012.52	6037497.565	4.907	FD BORING AP1AAPS-DP30 NEW
1282	2114012.529	6037453.472	5.05	FD BORING AP1AAPS-DP31 NEW
1283	2114007.926	6037506.452	5.012	FD BORING AP1AAPS-DP33 NEW
1284	2114007.97	6037444.798	5.148	FD BORING AP1AAPS-DP34 NEW

1285	2114049.756	6037475.455	4.855	FD BOR A1AAPS-DP29
1286	2114011.535	6037497.634	4.888	FD BOR A1AAPS-DP30
1287	2114012.621	6037453.406	4.977	FD BOR A1AAPS-DP31
1288	2114059.498	6037475.199	4.786	FD BOR A1AAPS-DP32
1289	2114069.587	6037474.912	4.777	FD BOR A1AAPS-DP35
1290	2114079.51	6037474.239	4.707	FD BOR A1AAPS-DP36
1291	2114089.591	6037473.964	4.742	FD BOR A1AAPS-DP37
1292	2114035.891	6037497.443	4.781	FD BOR A1AAPS-DP38
1293	2114040.184	6037506.921	4.8	FD PAINT A1AAPS-DP39
1294	2114038.399	6037453.374	4.861	FD BOR A1AAPS-DP40
1295	2114043.907	6037444.872	4.893	FD BOR A1AAPS-DP41
1296	2114099.176	6037473.477	4.743	FD BOR A1AAPS-DP42
1297	2114109.287	6037473.282	4.713	FD BOR A1AAPS-DP43
1298	2114069.192	6037408.176	4.585	FD BOR A1AAPS-A
1299	2114087.528	6037413.486	4.821	FD BOR A1AAPS-B
1300	2114110.862	6037412.981	4.697	FD BOR A1AAPS-C
1301	2114190.893	6037420.358	4.504	FD BOR A1AAPS-D
1302	2114219.827	6037471.571	4.408	FD BOR A1AAPS-E
1303	2114270.686	6037514.866	4.42	FD BOR A1AAPS-F
1304	2114164.488	6037472.455	4.609	FD BOR A1AAPS-G
1305	2114135.661	6037476.128	4.723	FD BOR A1AAPS-DP80 AKAAP1AAPS-H
1306	2114123.61	6037474.668	4.661	FD BOR A1AAPS-I
1307	2114109.651	6037456.646	4.746	FD BOR A1AAPS-DP82 AKA AP1AAPS-J
1308	2114109.19	6037443.188	4.799	FD PAINT A1AAPS-K
1309	2114079.42	6037444.045	4.781	FD PAINT A1AAPS-L
1310	2114079.472	6037459.282	4.766	FD PAINT A1AAPS-M
1311	2114109.163	6037488.349	4.666	FD PAINT A1AAPS-N
1312	2114109.257	6037503.571	4.668	FD BOR A1AAPS-DP81 AKA AP1AAPS-O
1313	2114078.959	6037504.307	4.696	FD BOR A1AAPS-P
1314	2114079.004	6037489.188	4.724	FD BOR A1AAPS-Q
1315	2114070.902	6037505.005	4.75	FD BOR A1AAPS-DP83 AKA AP1AAPS-R
1316	2114070.387	6037490.007	4.752	FD PAINT A1AAPS-S
1317	2114069.452	6037459.541	4.857	FD PAINT A1AAPS-T
1318	2114067.706	6037445.15	4.812	FD PAINT A1AAPS-DP84 AKA AP1AAPS-U

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Attachment E2
Utility Clearance Maps (on CD-ROM)

- Daily Field Reports
- Utility Clearance Maps

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Daily Field Reports

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT

Date: 3/10/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: D. BISSIRI / T. BLACK Equipment: EMLL / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
10:00	ARRIVE CH2M-HILL FIELD TRAILER MEET STEPHEN QUAYLE &
	MIKE GODWIN - DISCUSS SCOPE OF WORK & SAFE WORK PRACTICES
	DO TRIAL RUN DRIVE TO ALAMEDA HOSPITAL
11:00	START FIELD WORK - INVESTIGATE PROPOSED BORINGS: <APS-DP02>
	<APS-DP08>; <APS-DP12>; <APS-DP09>; <APS-DP07>; <APS-DP06>; <APS-DP01>; <APS-DP05>;
	<APS-DP04>; <APS-DP10>; <APS-DP-11>; <APS-DP13>; <APS-DP-14>; <APS-DP-15>;
	<APS-DP17>; <APS-DP-18>; <APS-DP03>; <APS-DP16> <APS-DP03> SDA
1530	SUSPEND INVESTIGATION FOR DAY
	PERFORM CALIBRATION / FUNCTION CHECK OF GPR
1545	PACK EQUIPMENT - DEPART SITE

FIELD DAY SUMMARY COMPLETED 6 HRS FIELD WORK / 18 proposed boring locations

David Bissiri Signature

David Bissiri Print

NORCAL Representative

Stephen B. Quayle Signature

Stephen B. Quayle Print

CLIENT Representative

NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/11/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0800	ARRIVE FIELD TRAILER - DAILY SAFETY MEETING - DISCUSS PLANNED SCOPE OF WORK FOR DAY - PERFORM MORNING EQUIPMENT CALIBRATION FUNCTION CHECK
0845	RESUME FIELD INVESTIGATION OF PROPOSED BORINGS: <API AIR33 DP14>; <API AIR33 DP13>; <API AIR 33 DP16>; <API AIR33 DP15>; <1A AFTA-DP35>; <1 AIR 33-DP11>; <1AIR33-DP10>; <1 AIR33-DP09>; <1AIR33-DP-12>; <1AW599B-DP-01>; <1AW599B-DP02>; <1AW599A-DP01>; <1AW599A-DP0 <1AFTA-DP29>; <1 AIR33-DP06>; <1AIR33-DP05>; <1AIR33-DP08>; <1AIR33-DP07>; <1AFTA-DP30>; <1AFTA-DP31>; <1AFTA-DP32>; <1AIR33-DP20>; <1AIR33-DP17>; <1AIR3-DP18>; <1AIR33-DP19>; <1AIR33-DP-34>; <AFTA-DP33>
1530	SUSPEND FIELD INVESTIGATION - PERFORME CALIBRATION / FUNCTION CHECK OF GPR - DISCUSS DAILY RESULTS W/ STEPHEN QUAYLE
1600	PACK EQUIPMENT - DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 8 HRS FIELD WORK / 37 proposed boring locations

Signature
DAVID BISSIRI Print
NORCAL Representative

Signature
Stephen B. Quayle Print
CLIENT Representative

NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/12/10 Client/Location: CH2M-Hill / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EMLL / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
1100	ARRIVE SITE - DISCUSS PLANNED SCOPE OF WORK -
	PERFORM MORNING EQUIPMENT CALIBRATION / FUNCTION CHECK
1115	RESUME FIELD INVESTIGATION - STARTING TO RAIN -
	USE EMLL EQUIPMENT ONLY - NO GPR DUE TO RAIN
	AND STANDING WATER IN LAFTA AREA.
1430	SUSPEND FIELD WORK DUE TO RAIN-INDUCED EQUIPMENT
	MALFUNCTION (M-SCOPE) - DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 3.5 HRS FIELD / 0 completed boring locations

Signature
DAVID BISSIRI Print
NORCAL Representative

Signature
Stephen B Quayle Print
CLIENT Representative

1350 INDUSTRIAL AVENUE, SUITE A • PETALUMA, CA 94952 • TELEPHONE (707) 763-1312 • FAX (707) 762-5587
www.norcalgeophysical.com

NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/15/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: RMLL / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0800	ARRIVE CH2M-HILL FIELD TRAILER - ATTEND DAILY SAFETY MEETING
	DISCUSS PROPOSED SCOPE OF WORK FOR THIS DATE
0830	PERFORM MORNING EQUIPMENT CALIBRATION / FUNCTION CHECK
0845	RESUME FIELD WORK AT PROPOSED BORINGS: (1AFTA-DP28);
	(1AFTA-DP27); (1AFTA-DP-26); (1AFTA-DP-25); (1AW495A-DP02);
	(1AIR33-DP01); (1AIR33-DP02); (1AIR33-DP03);
	(1AIR33-DP04); (1AW495A-DP01); (1AW495B-DP02);
	(1AW495B-DP01); (1AFTA-DP20); (1AFTA-DP21); (1AFTA-DP22);
	(1AFTA-DP19); (1AFTA-DP18); (1AW483B-DP01); (1AW483B-PP02);
	(1AW483-DP027; (1AW483-DP01); (1AMSA-DP09); (1AMSA-DP08)
	(1AMSA-DP07); (1AFTA-DP14); (1AFTA-DP15); (1AFTA-DP17);
	(1AFTA-DP16)
1230	BREAK FOR LUNCH
1300	RETURN FROM LUNCH
1530	SUSPEND FIELD WORK - DISCUSS DAILY FIELD RESULTS W/ STEPHEN QUAYLE
	PERFORM CALIBRATION / FUNCTION CHECK OF GPR
1600	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 7.5 HRS FIELD WORK / 28 proposed boring locations

D. Bissiri Signature

DAVID BISSIRI Print

NORCAL Representative

Stephen B. Quayle Signature

Stephen B. Quayle Print

CLIENT Representative

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/16/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T.BLACK/D.BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0815	ARRIVE FIELD TRAILER - ATTEND SAFETY BRIEFING - DISCUSS SCOPE OF PROPOSED WORK FOR THIS DATE
0845	PERFORM MORNING CALIBRATION / FUNCTION CHECK OF EQUIPMENT
0900	RESUME FIELD INVESTIGATION OF PROPOSED BORINGS: <1AW467B-DP02>; <1AW467B-DP01>; <1AW496-DP02>; <1AW496-DP01>; <1AW485B-DP02>; <1AW485B-DP01>; <AP1AFTA-DP01>; <AP1AFTA-DP02>; <1AFTA-DP09>; <AP1AFTA-DP10>; <
1200	BREAK FOR LUNCH
1230	RETURN FROM LUNCH - RESUME INVESTIGATION OF PROPOSED BORINGS: <AP1AFTA-DP11>; <AP1AFTA-DP13>; <AP1AFTA-DP07>; <AP1AFTA-DP06>; <AP1AFTA-DP05>; <AP1AFTA-DP04>; <AP1AFTA-DP03>; <1AW488-DP02>; <1AW488-DP01>; <1AA1-DP09>; <1AA1-DP08>;
1530	SUSPEND FIELD WORK - DISCUSS DAILY FIELD RESULTS W/ STEPHEN QUAYLE
1545	PERFORM CALIBRATION / FUNCTION CHECK OF GPR
1600	PACK EQUIPMENT - DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY: COMPLETED 7.5 HRS FIELD WORK / 21 proposed borings

DAVID BISSIRI — Print
NORCAL Representative

Stephen B. Quayle — Signature
Stephen B. Quayle — Print
CLIENT Representative

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/17/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIAI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0810	ARRIVE FIELD TRAILER - ATTEND SAFETY BRIEFING
	DISCUSS PLANNED SCOPE OF WORK FOR THIS DATE
0830	PERFORM MORNING EQUIPMENT CALIBRATION / FUNCTION CHECK
0845	RESUME FIELD INVESTIGATION OF PROPOSED BORINGS:
	<1AA1-DP07>; <1AA1-DP06>; <1AA1-DP03>; <1AA1-DP04>;
	<1AA1-DP01>; <1AA1-DP05>; <1AA1-DP02>; <1AMSA-DP01>;
	<1AMSA-DP02>; <1AMSA-DP03>; <1AMSA-DP04>; <1AMSA-DP10>;
	<1AMSA-DP05>; <1AMSA-DP06>; <1AFTA DP08>; <1A259-04>;
	<1A259-03>;
1545	SUSPEND FIELD INVESTIGATION - DISCUSS DAILY RESULTS
	W/STEPHEN QUAYLE
	PERFORM FUNCTION / CALIBRATION CHECK OF GPR
	PACK EQUIPMENT
1610	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 8 HRS FIELD WORK / 17 proposed borings

Signature
DAVID BISSIAI Print
NORCAL Representative

Signature
Stephen B. Quayle Print
CLIENT Representative

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/18/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0805	ARRIVE CH2M-HILL FIELD TRAILER – ATTEND SAFETY BRIEFING
	DISCUSS PROPOSED SCOPE OF WORK FOR THIS DATE
0820	PERFORM CALIBRATION / FUNCTION CHECK OF EQUIPMENT
0830	RESUME FIELD INVESTIGATION OF PROPOSED BORINGS & AREAS:
	(WEST SIDE OF BLDG 584 "L"-SHAPED AREA ~ 70'x50' ADJACENT
	TO CONCRETE CONTAINMENT WALL SURROUNDING AST)
	<12A5-DP09>; <12A5-DP15>; <12A5-DP08>; <12A5-DP07>;
	<12A5-DP06>; <12A5-DP05>; <12A5-DP04>; <12A5-DP03>;
	<12A5-DP02>;
1500	SUSPEND FIELD INVESTIGATION
1515	PERFORM CALIBRATION / FUNCTION CHECK OF GPR
	DISCUSS DAILY FIELD RESULTS W/ STEPHEN QUAYLE
	PACK EQUIPMENT
1530	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 7.5 HRS FIELD WORK / 1 AREA; 9 proposed borings

Signature
DAVID BISSIRI Print
NORCAL Representative

Signature
Stephen B. Quayle Print
CLIENT Representative

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10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/19/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0805	ARRIVE CH2M-HILL FIELD TRAILER - ATTEND SAFETY BRIEFING
	DISCUSS PROPOSED SCOPE OF WORK FOR THIS DATE
0820	PERFORM MORNING EQUIPMENT CALIBRATION / FUNCTION CHECK
0830	MOBILIZE FIELD INVESTIGATION OF PROPOSED BORINGS:
	<12A5-DP01>; <12A5-DP10>; <12A5-DP11>; <12A5-DP12>;
	<12A5-DP13>; <12A5-DP14>; <17A1-DP04>; <17A1-DP01>;
	<17A1-DP05>; <17A1-DP03>; <17A1-DP02>; <17A1-DP06>;
	<17A1-DP07>; <17A1-DP06A>; <17AR5-DP01>; <17A2-DP01>;
	<17A2-DP02>; <17A2-DP03>; <17A2-DP04>; <17A2-DP05>; <17A2-DP0
1145	BREAK FOR LUNCH
1215	RETURN FROM LUNCH
1545	SUSPEND FISCO INVESTIGATION - DISCUSS DAILY FIELD RESULTS W/ STEPHEN QUAYLE
1605	PERFORM CALIBRATION / FUNCTION CHECK OF GPR
	PACK EQUIPMENT
1615	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 7.5 HRS FISCO WORK / 21 proposed borings

Signature
DAVID BISSIRI Print
NORCAL Representative

Signature
Stephen B. Quayle Print
CLIENT Representative

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/22/10 Client/Location: CH2M-Hill / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0815	ARRIVE FIELD TRAILER - ATTEND DAILY SAFETY BRIEFING - DISCUSS
	PROPOSED SCOPE OF WORK FOR THIS DATE
0845	PERFORM MORNING CALIBRATION / FUNCTION CHECK OF EQUIPMENT
0850	RESUME FIELD INVESTIGATION OF PROPOSED BORINGS:
	(17A3-DP02); (17A3-DP01); (17A3-DP03); (17A3-DP05);
	(17A3-DP04); (12A4-DP08); (12A4-DP07); (12A4-DP03);
	(12A4-DP02); (12A4-DP06); (12A4-DP04)
1145	BREAK FOR LUNCH
1215	RETURN FROM LUNCH
1530	SUSPEND FIELD INVESTIGATION - DISCUSS FIELD RESULTS
	W/ STEPHEN QUAYLE OF CH2M-HILL
	PERFORM CALIBRATION / FUNCTION CHECK OF GPR
	PACK EQUIPMENT
1600	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 7.5 HRS FIELD WORK / 11 proposed borings

David Bissiri — Signature

David Bissiri — Print

NORCAL Representative

Stephen B. Quayle — Signature

Stephen B. Quayle — Print

CLIENT Representative

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 3/23/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0805	ARRIVE CH2M-HILL FIELD TRAILER - ATTEND SAFETY BRIEFING
	Discuss PROPOSED SCOPE OF WORK FOR THIS DATE
0815	PERFORM FUNCTION / CALIBRATION CHECK OF EQUIPMENT
0830	RESUME FIELD INVESTIGATION OF PROPOSED BORINGS:
	<12A4-DP09>; <12A4-DP10>; <12A4-DP11>; <12A4-DP01>;
	<12A2-DP02>; <12A2-DP04>; <12A2-DP03>; <12A2-DP06>;
	<12A2-DP07>; <12A6-DP01>; <1A259-DP01>; <12A6-DP02>;
	<12A3-DP10>; <12A3-DP12>; <12A3-DP11>
1600	SUSPEND FIELD INVESTIGATION UNTIL FURTHER NOTICE
	FROM CH2M-HILL DUE TO END OF 10-DAY CONTRACTUAL
	LIMIT - Discuss FIELD RESULTS w/ STEPHEN QUAYLE
	PERFORMED FUNCTION / CALIBRATION CHECK OF GPR
1625	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 8.5 HRS FIELD WORK / 15 proposed borings

Signature
David Bissiri Print
NORCAL Representative

Signature
Stephen B. Quayle Print
CLIENT Representative

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10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: 4/1/10 Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSINI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0645	DEPART COTATI OFFICE
0750	ARRIVE FIELD TRAILER - ATTEND SAFETY MEETING / DISCUSS SCOPE
	OF WORK FOR DAY
0815	PERFORM CALIBRATION / FUNCTION CHECK OF EQUIPMENT
0830	RESUME INVESTIGATION OF FOLLOWING PROPOSED BORINGS
	<IAW 494-DP01>; <IAW 494-DP02>; <IAW 407B-DP01>;
	<IAAPS-DP21>; <IAAPS-DP20>; <IAW 467B-DP01R>;
	<IAW 467B-DP02R>; <IAAPS-DP19>; <IAAPS-DP25>;
	<IAAPS-DP26>; <IAAPS-DP27>; <IAAPS-DP28>;
	<IAAPS-DP24>; <IAAPS-DP22>; <IAAPS-DP23>; <2CAPS-DP01>;
	<12APS-DP04>; <12APS-DP05>; <12APS-DP03>
1530	SUSPEND INVESTIGATION FOR DAY
1545	PERFORM AFTERNOON CALIBRATION / FUNCTION CHECK OF
	EQUIPMENT
1600	DEPART SITE
1730	RETURN COTATI OFFICE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 8 HRS FIELD WORK / 19 PROPOSED BORINGS

Signature — DAVID BISSINI Print — NORCAL Representative

Signature — Stephen B. Quayle Print — CLIENT Representative

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NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: ~~3/10~~ 4/2/10 P.S.B. Client/Location: CH2M-HILL / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0630	DEPART COTATI OFFICE
0750	ARRIVE CH2M-HILL FIELD TRAILER ATTEND SAFETY BRIEFING
	DISCUSS SCOPE OF WORK SCHEDULED FOR THIS DATE
0820	RESUME INVESTIGATION OF PROPOSED BORINGS: DP12 SBG
	<12APS-DP02>; <12APS-DP06>; <AP17APS-DP09>;
	<AP17APS-DP09>; <AP17APS-DP02>; <12APS-DP01>;
	<12A3-DP14-adjusted>; <12A3-DP15>; <12A3-DP16>;
	<12A3-DP13>; <12A3-DP06-adjusted>; <12A3-DP05>;
	<12A3-DP08>; <12A3-DP07>; <12A2-DP08>; <12A2-DP01>;
	<12A3-DP03>; <12A3-DP04>; <12A3-DP02>;
	<12A1-DP02>; <12A1-DP03>; <12A1-DP04>; <12A1-DP01>
1530	SUSPEND INVESTIGATION FOR DAY <12A3-DP01> SBG
1545	CONDUCT AFTERNOON CALIBRATION / FUNCTION CHECK
	FILL OUT PAPER WORK
1600	

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 8 HRS FIELD WORK / 23 PROPOSED BORINGS

Signature
DAVID BISSIRI Print
NORCAL Representative

Stephen B. Gayle Signature
Stephen B. Gayle Print
CLIENT Representative

NORCAL GEOPHYSICAL CONSULTANTS, INC.

10-106.52

DAILY FIELD REPORT/LIMITATIONS

Date: ~~3/10~~ 4/5/10 DSB. Client/Location: CH2M-Hill / NAS ALAMEDA

Personnel: T. BLACK / D. BISSIRI Equipment: EM61 / GPR

Project Description: DELINEATE DETECTABLE UNDERGROUND UTILITIES IN VICINITY OF PROPOSED BORING LOCATIONS

TIME	NOTES
0805	ARRIVE CH2M-HILL FIELD TRAILER - ATTEND SAFETY MEETING - DISCUSS PROPOSED SCOPE OF WORK FOR THIS DATE
0830	PERFORM MORNING CALIBRATION / FUNCTION CHECK OF EQUIPMENT
0840	RESUME INVESTIGATION OF PROPOSED BORINGS: <1AFTA-DP30>; <17APS-DP03>; <17APS-DP08>; <12A2-DP01>; <12A2-DP05>; <17APS-DP09>; <17APS-DP04>; <17APS-DP07>; <17APS-DP06>; <17APS-DP05>; <1AFTA-DP12>; <17APS-DP10>; <AP12A4-DP05>; <12A3-DP17>
1630	FINISH INVESTIGATION PER STEPHEN QUAYLE - RETURN FIELD TRAILER - FILL OUT PAPER WORK - DISCUSS FINDINGS
1640	PERFORM AFTERNOON CALIBRATION / FUNCTION CHECK OF GPR - PACK EQUIPMENT
1700	DEPART SITE

NOTE: Because of the inherent limitations of the geophysical instrumentation used, NORCAL can not assume liability in the event that utilities or other subsurface features are not detected. Attached is a description of our limitations.

FIELD DAY SUMMARY COMPLETED 8.5 HRS FIELD WORK / 14 PROPOSED BORING LOCATIONS

Signature

DAVID BISSIRI Print

NORCAL Representative

Signature

Stephen Quayle Print

CLIENT Representative

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Utility Clearance Maps

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PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-18-10

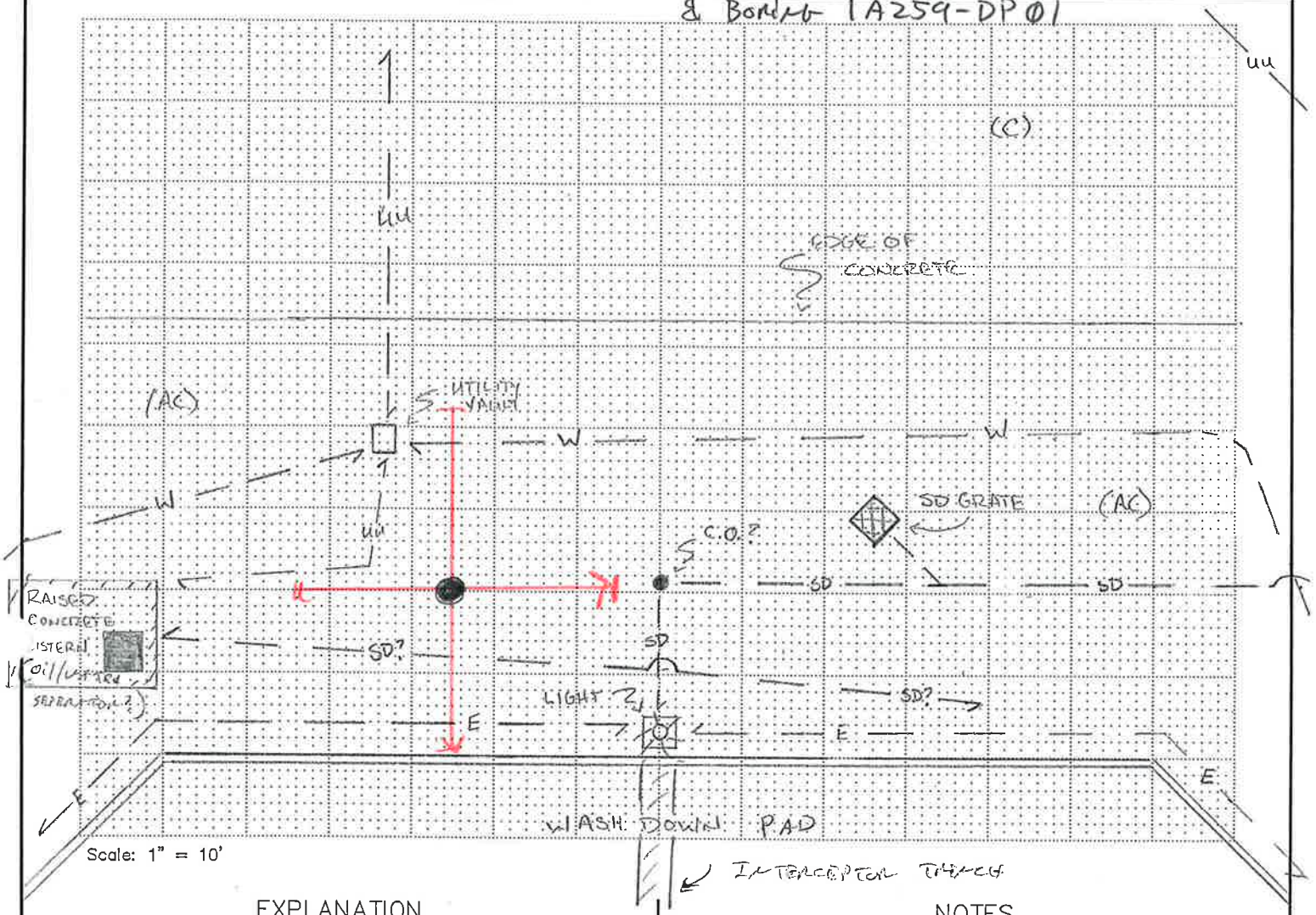
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: WASH PAD AREA & BORING 1A259-DP01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- ✓ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- ✓ SD (Storm Drain)
- ✓ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- ✓ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

SHEET 1/2

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

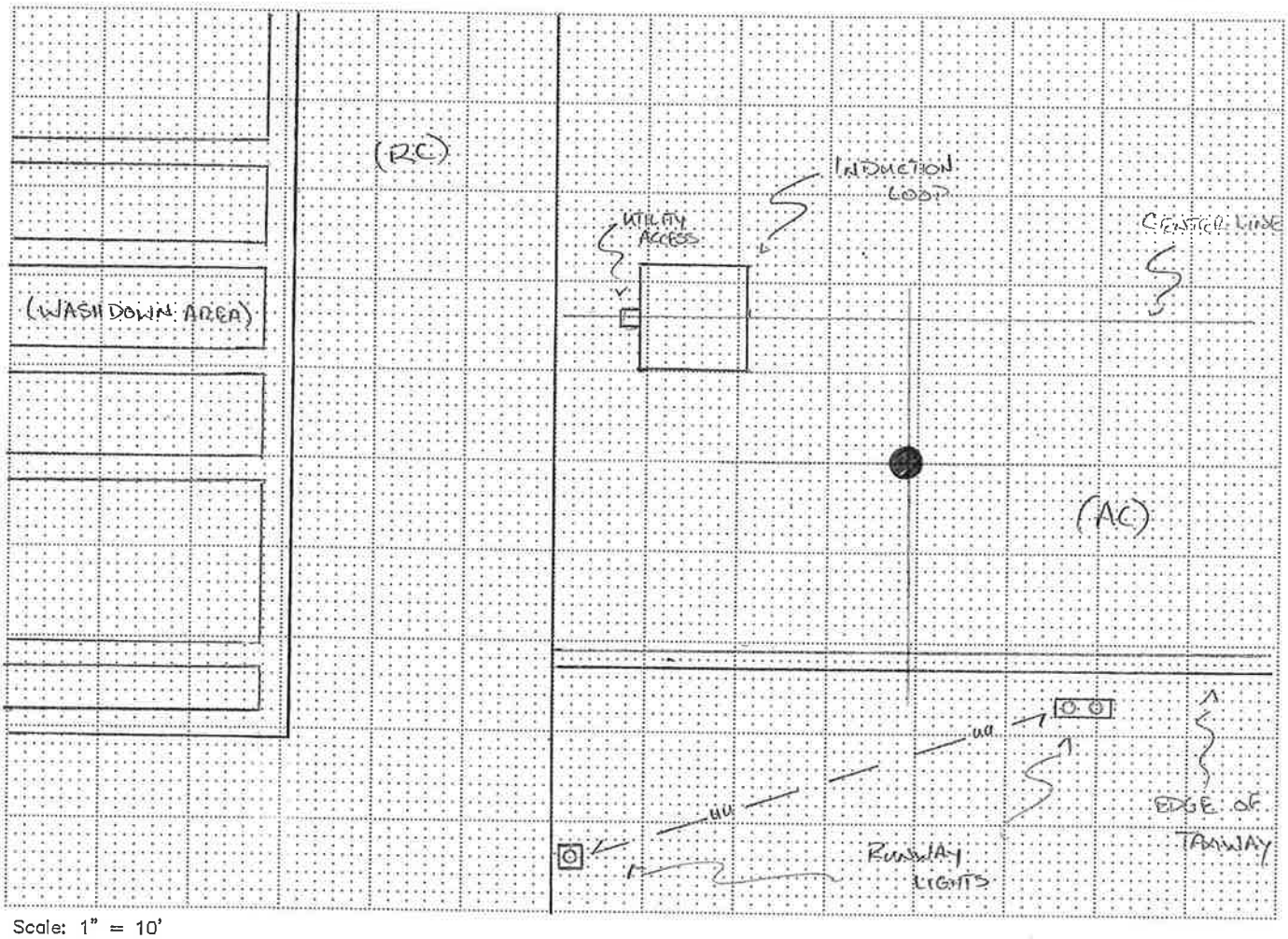
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1A295-03



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-18-10

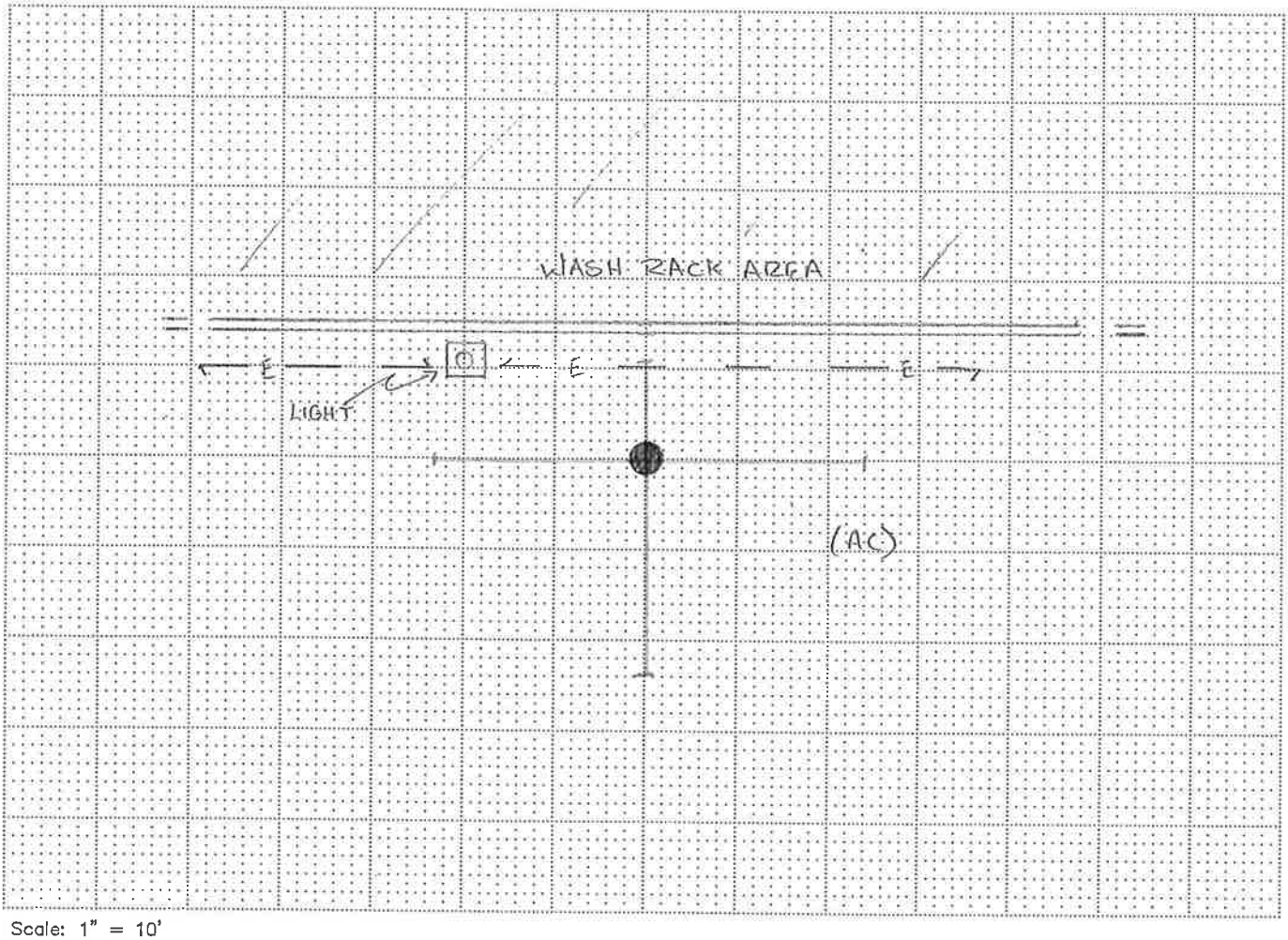
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1A259-04



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- ✓ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

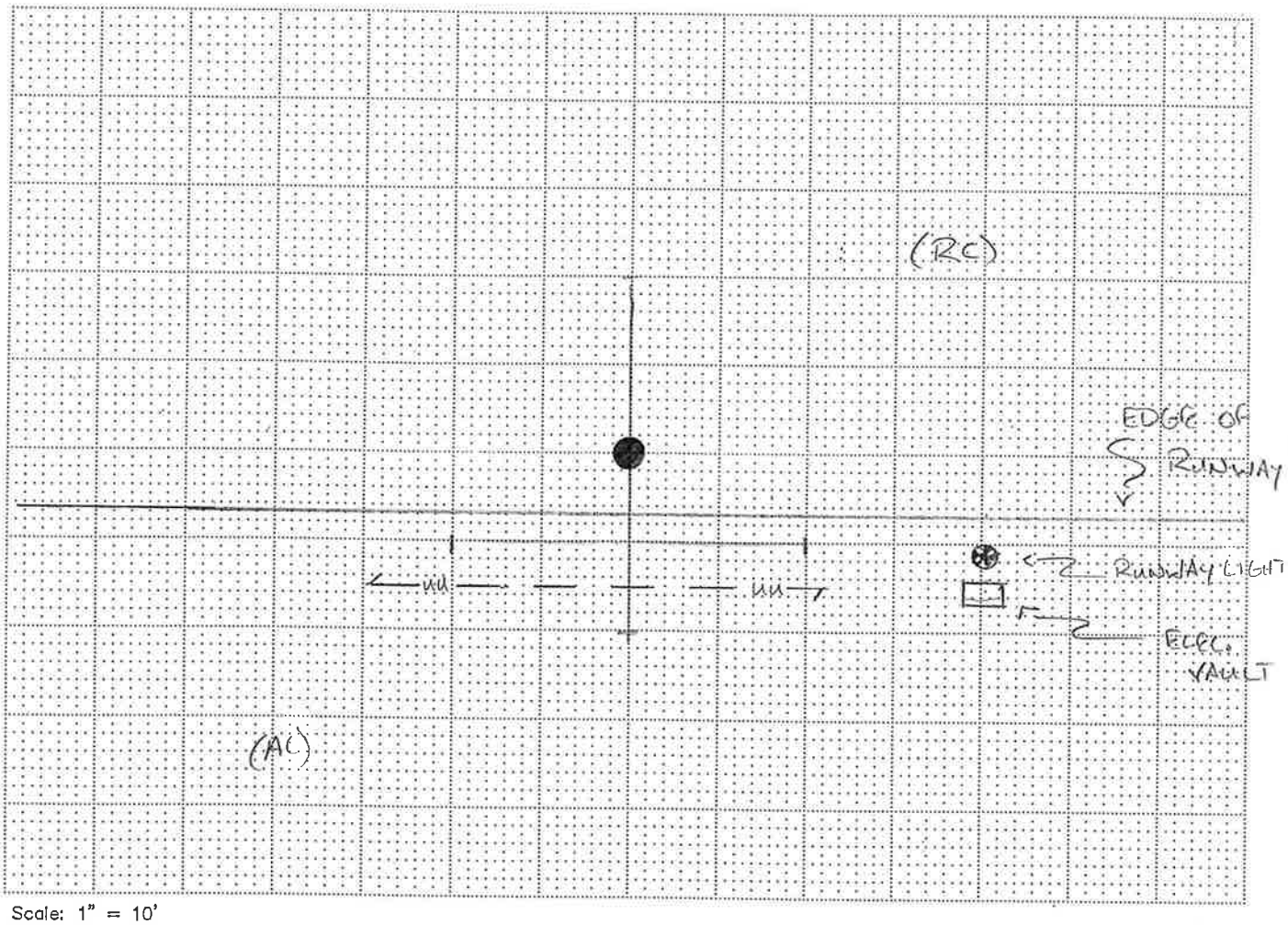
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA Pt., ALAMEDA CA

BORING: 1AA1-DP01



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EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ←— Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

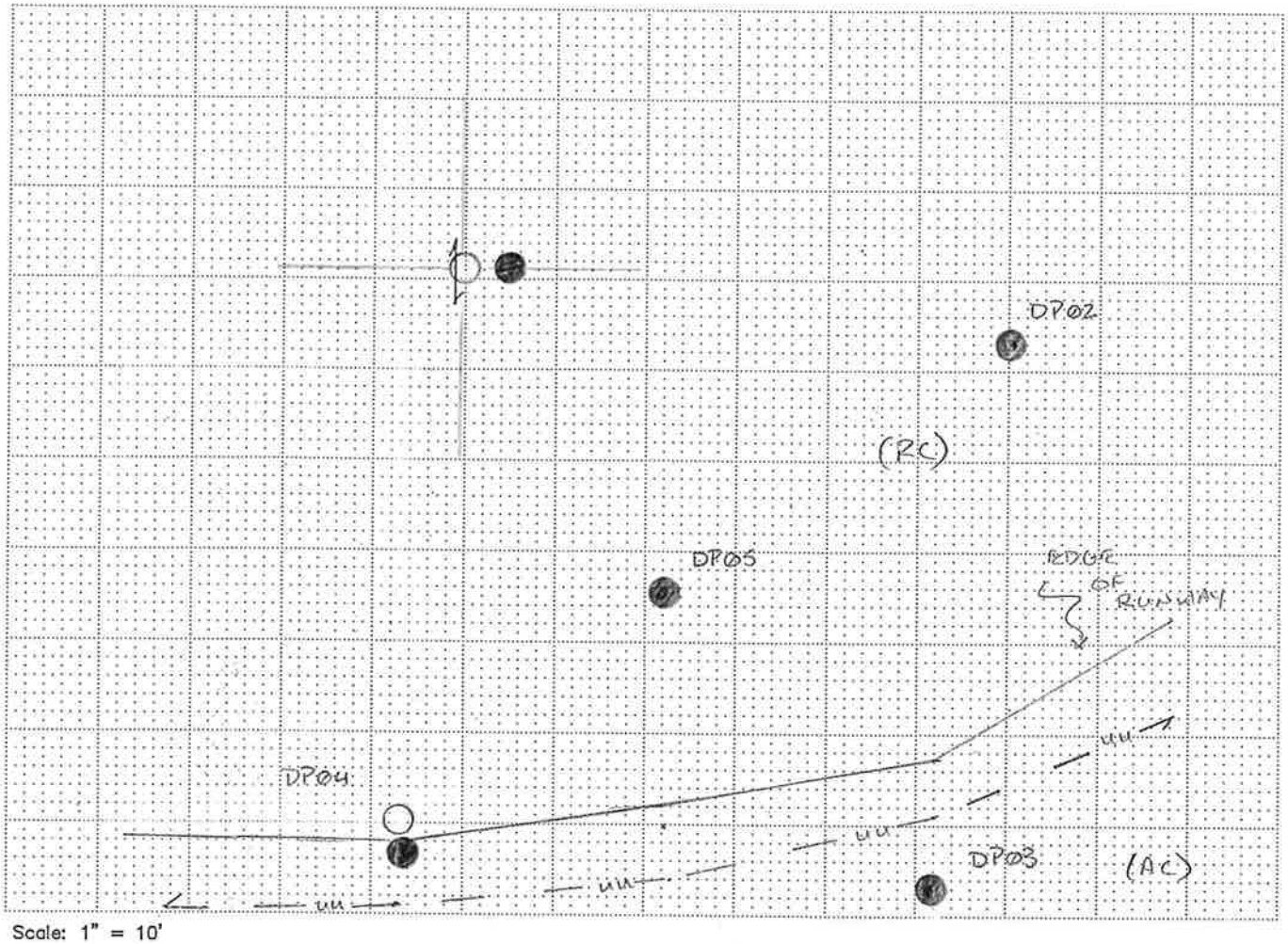
JOB: 10-106.52 | DATE: 03-17-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AA1- DP01, DP02, DP03, DP04, DP05



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- —— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

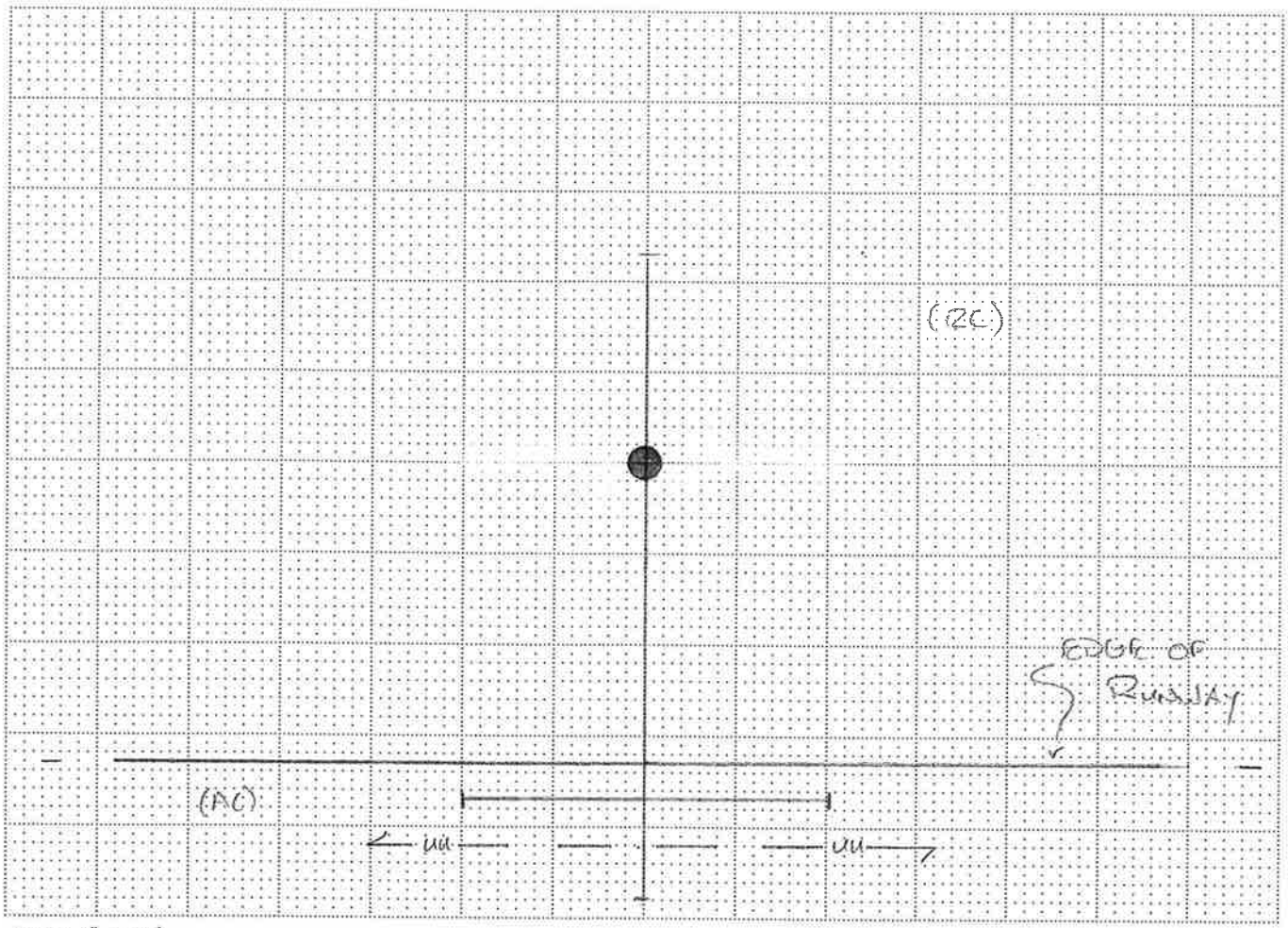
Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB	CLIENT: CH2M HILL
JOB: 10-106.52 DATE: 03-17-10	LOCATION: ALAMEDA PT., ALAMEDA CA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: IAA1-DP06



Scale: 1" = 10'

EXPLANATION

○	Original Boring Location
●	Final Boring Location
———	GPR Traverse
□ OR ⟶	Localized GPR Anomaly
— — —	Utility Alignment

Utilities

_ T (Telephone, Comm.)	_ SS (Sanitary Sewer)
_ E (Electric)	_ SD (Storm Drain)
_ NG (Natural Gas)	_ W (Water)
_ CA (Compressed Air)	_ FS (Fire Supression)
_ STM (Steam)	✓ UU (Undifferentiated Utility)

Surface

✓ RC (Reinforced Concrete)	_ Soil
_ AC (Asphalt)	_ Gravel
_ C (Concrete)	_ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

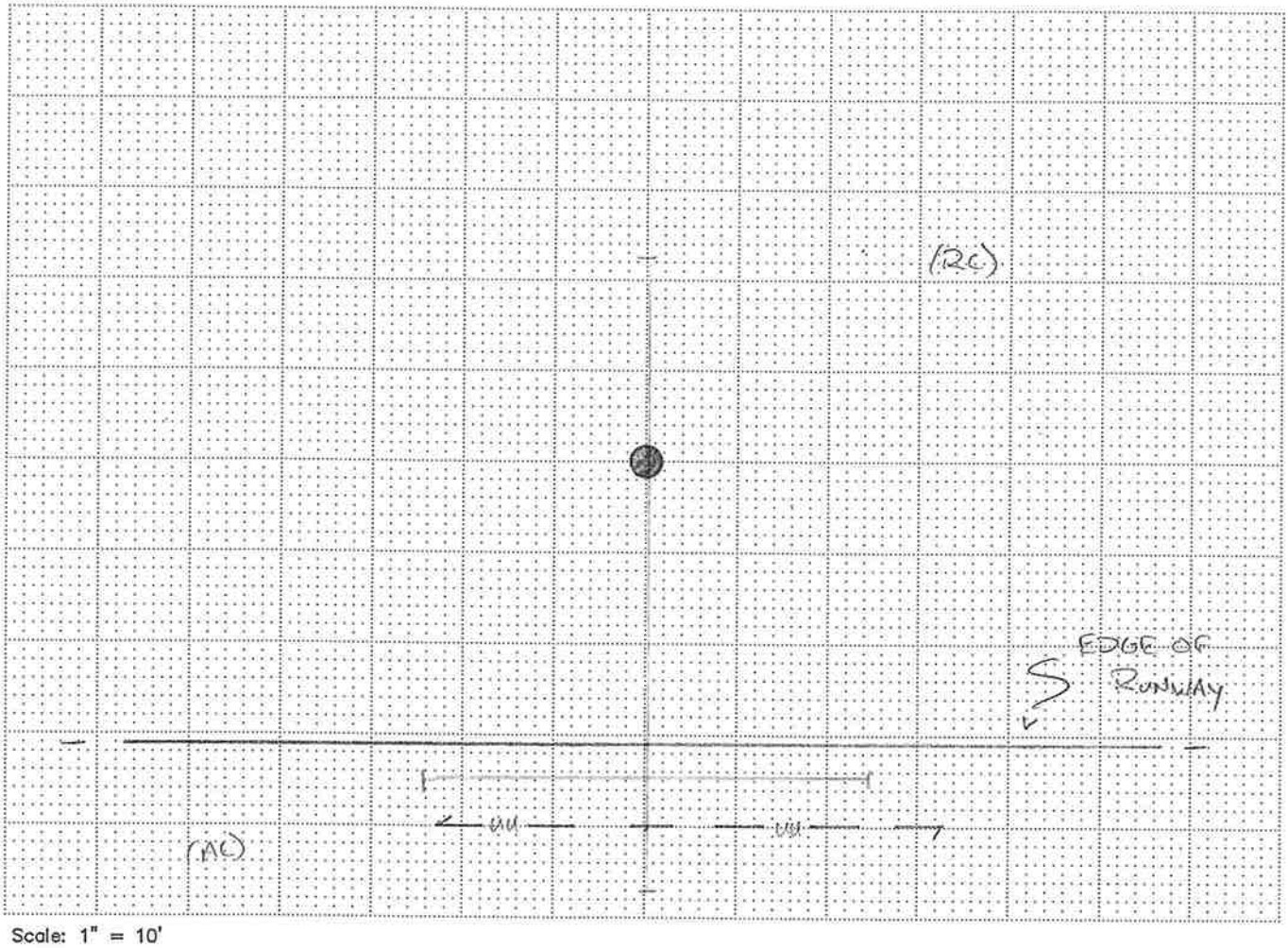
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AA1 - DP07



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ←→ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

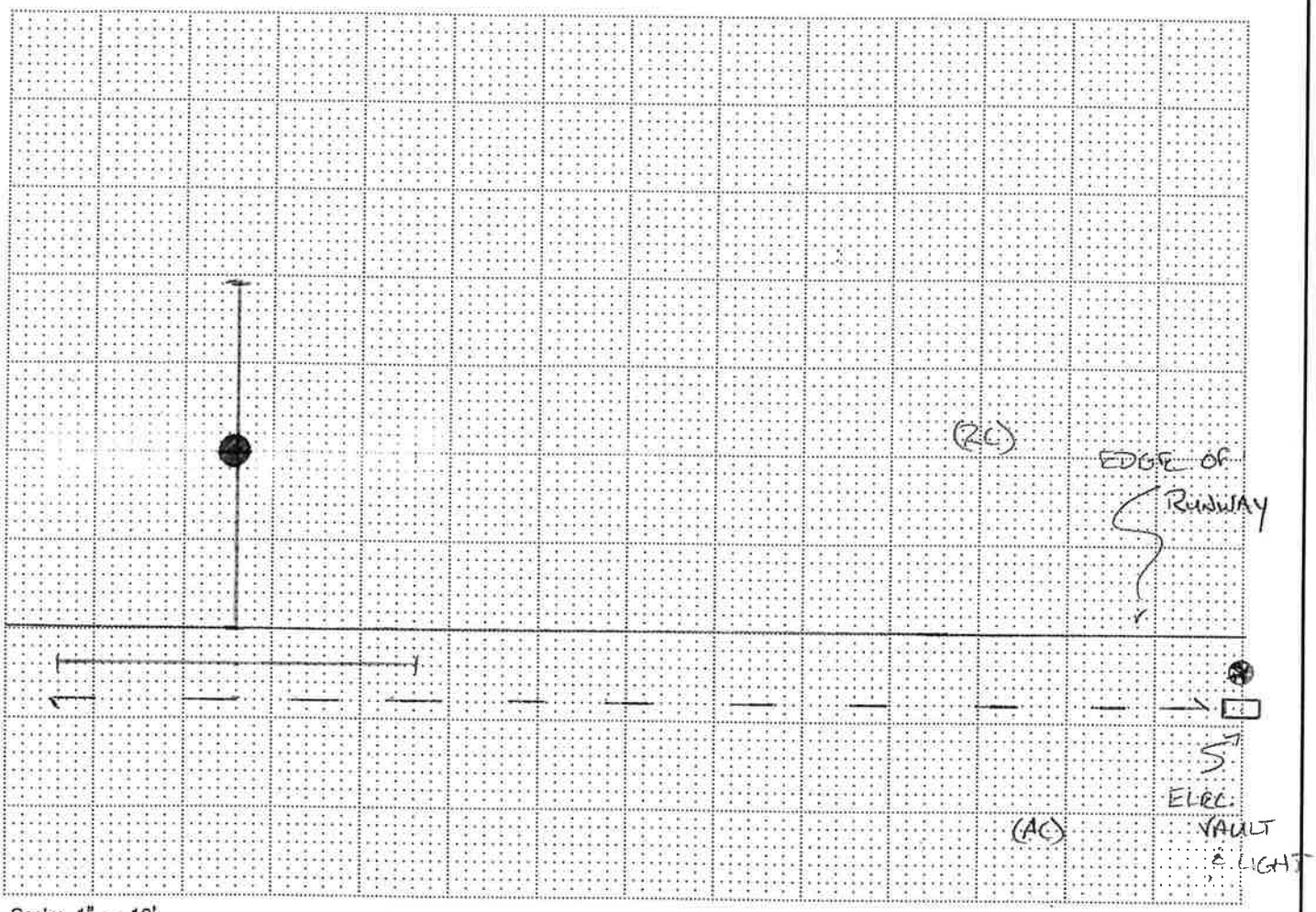
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AA1-DP08



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

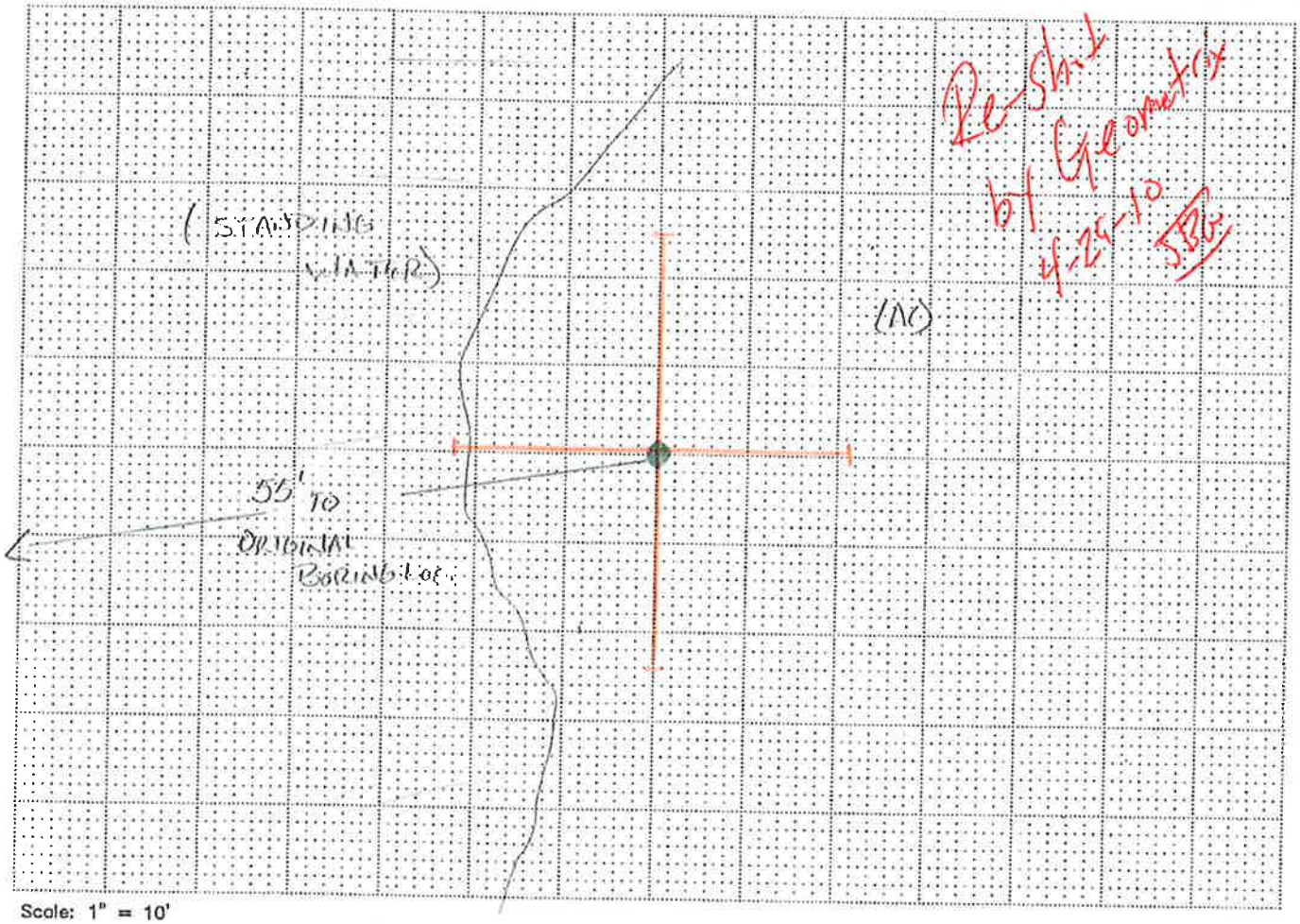
JOB: 10 - 106.52 | DATE: 4-5 - 10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP 12 A



EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ← Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

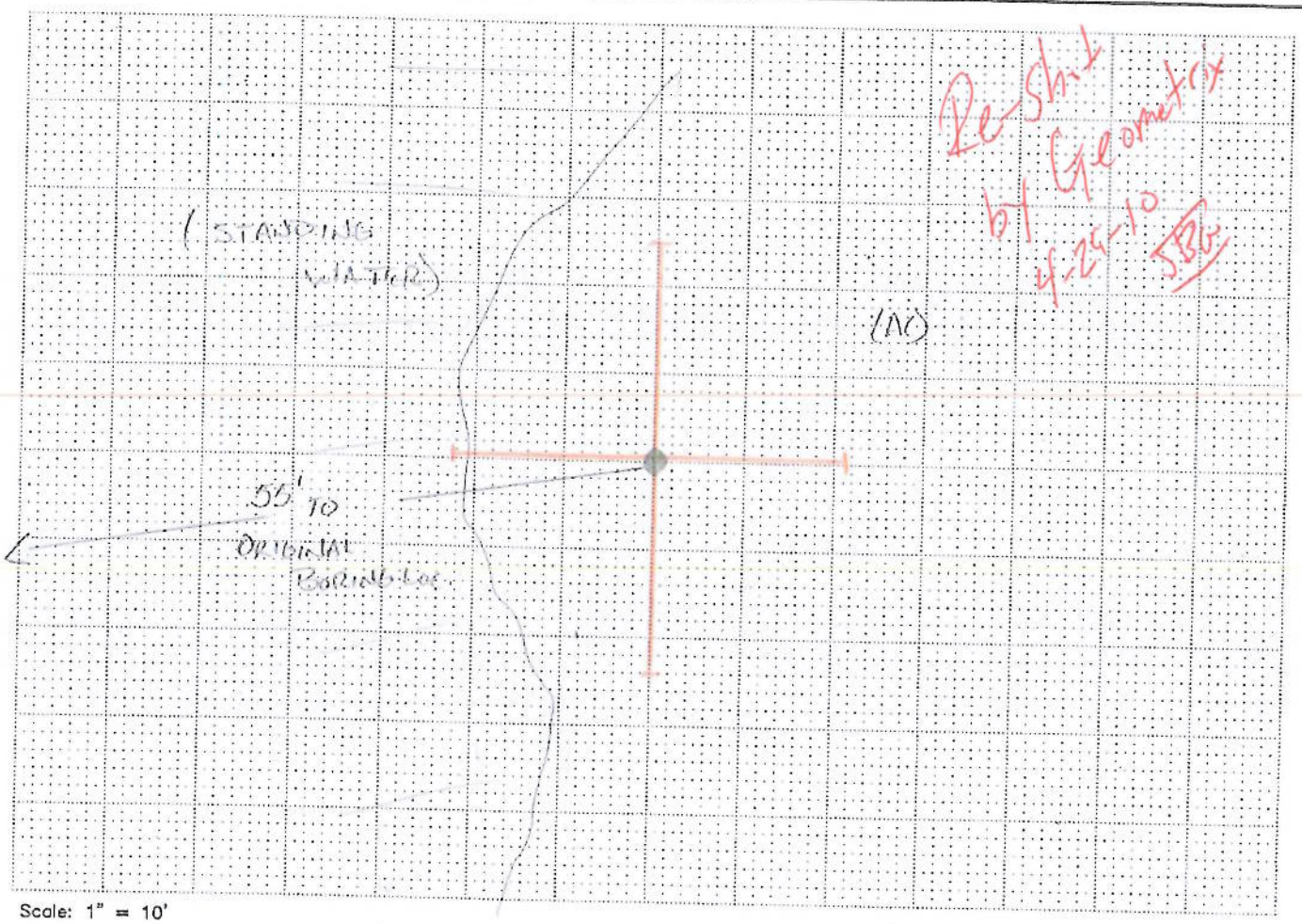
JOB: 10 - 106.52 | DATE: 4-5-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M Hill

LOCATION: Alameda Pt., Alameda CA

BORING: 1AFTA - DP 12A



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

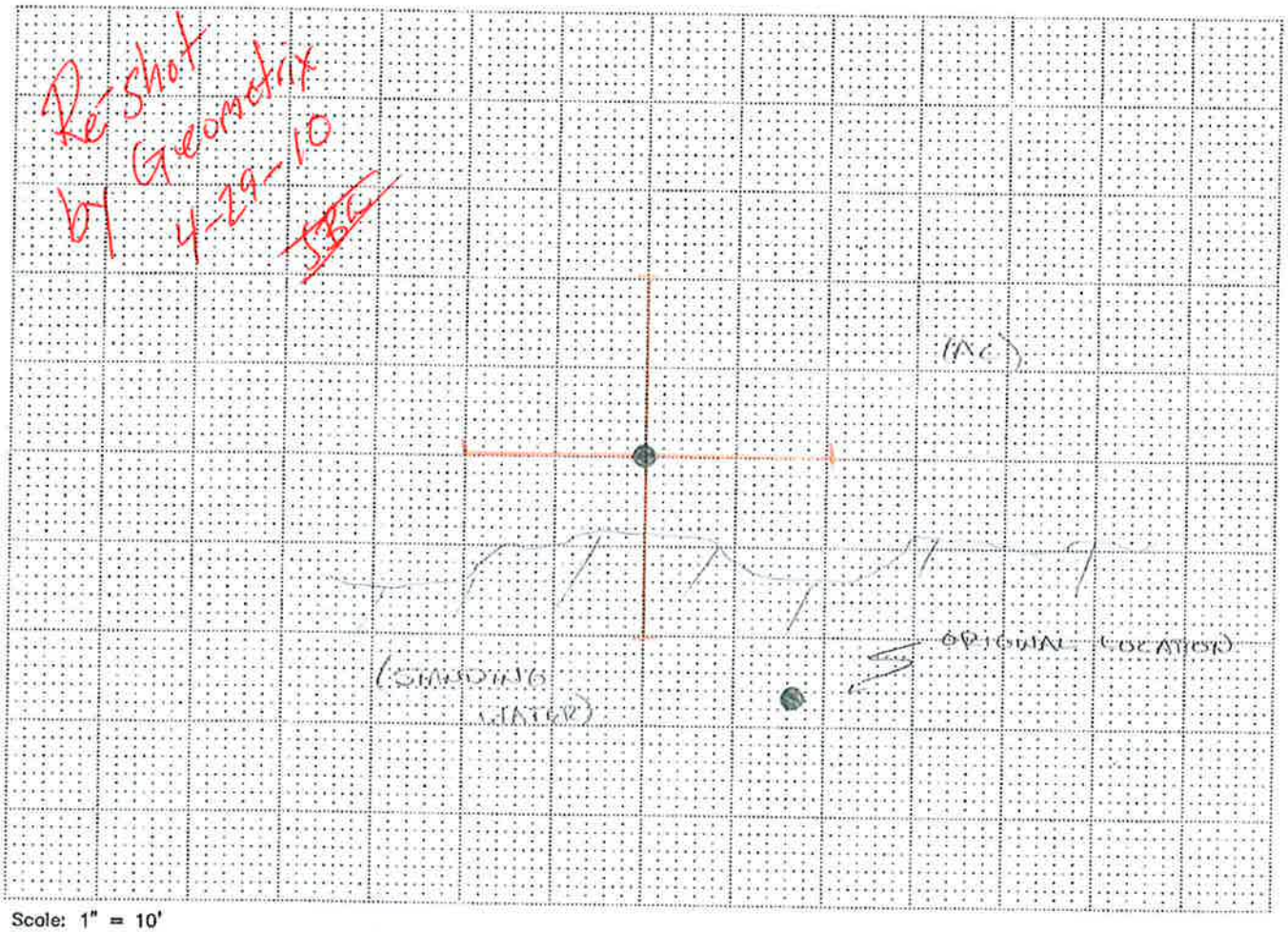
JOB: 10-106.52 | DATE: 4-5-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1A-AFTA-DP30 (ADJUSTED)



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ←→ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

NOTE: SEE 1A-AFTA-DP30 DATED: 3-11-10 FOR FULL SITE DESCRIPTION

PERSONNEL: TWB / DJB

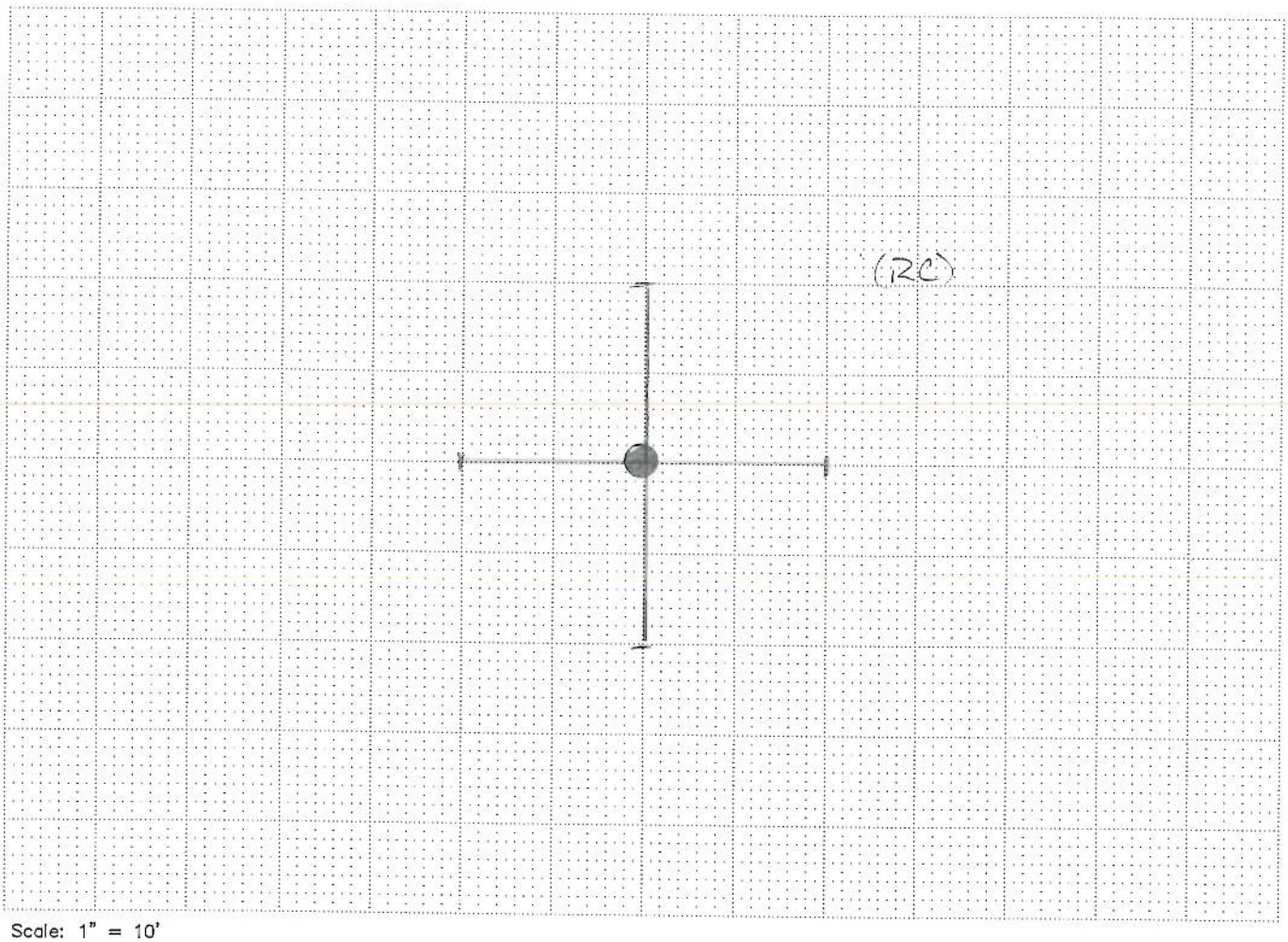
JOB: 10-106.52 DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ~~✓~~ EMI (Induction)
- ✓ Ambient
- ✓ GPR

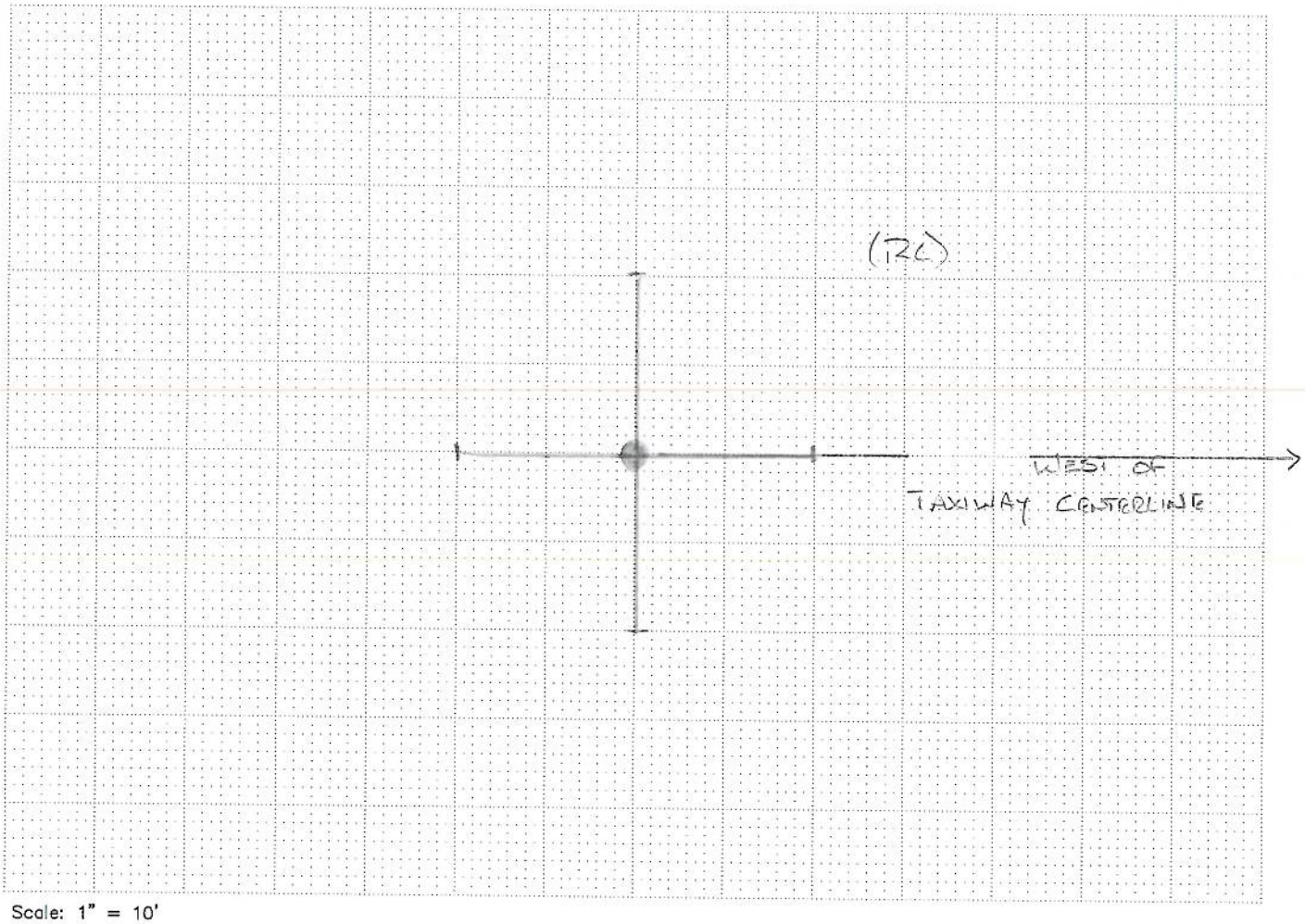
Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TMB / DJB	CLIENT: CH2M HILL
JOB: 10-106.52 DATE: 03-10-10	LOCATION: ALAMEDA P., ALAMEDA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: APS-DP-02



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	✓ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

* REINFORCED CONCRETE PRECLUDED USE OF METAL DETECTOR

N

PERSONNEL: TWB / DJB

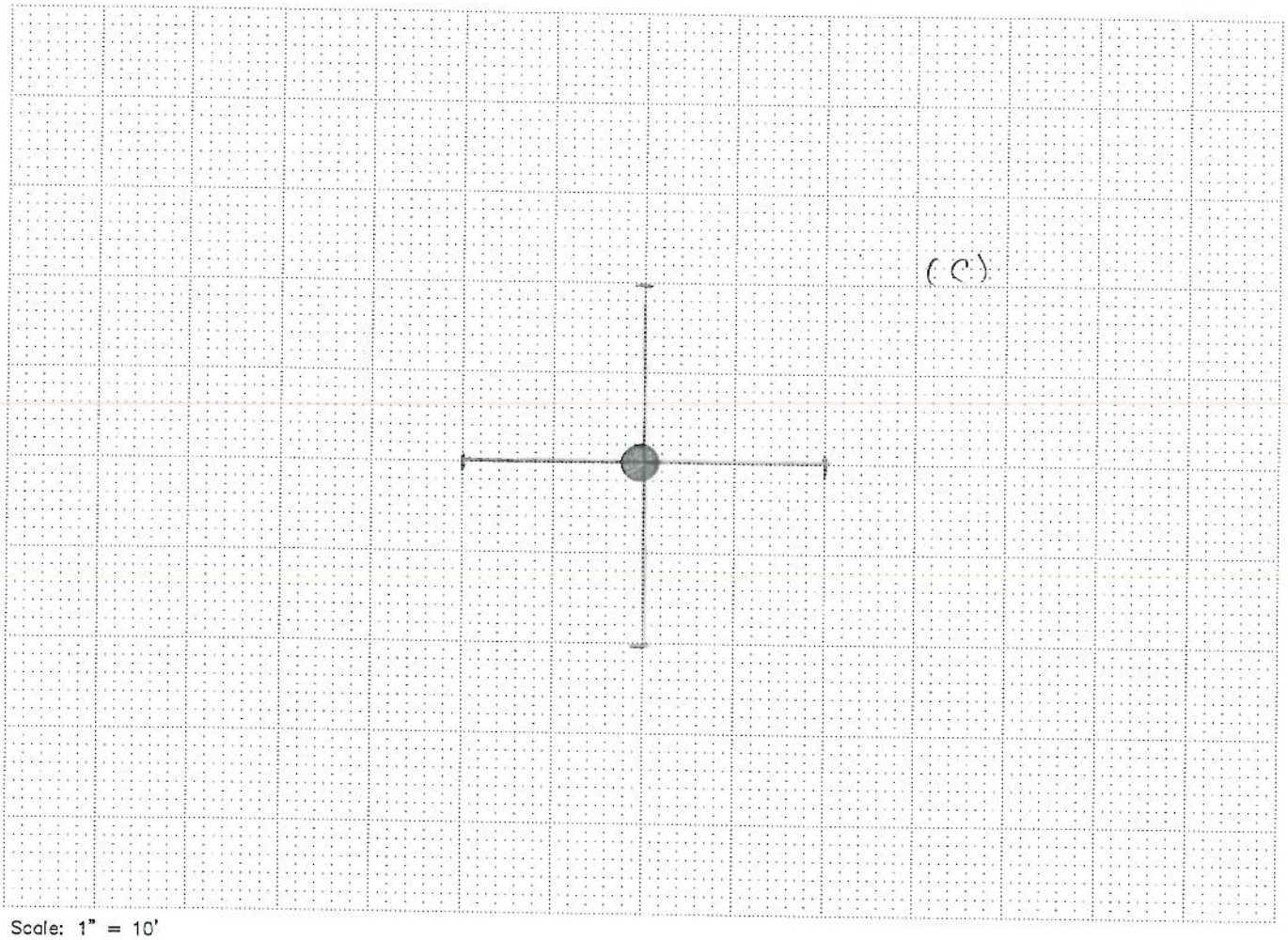
JOB: 10-106.52 | DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-03



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-10-10

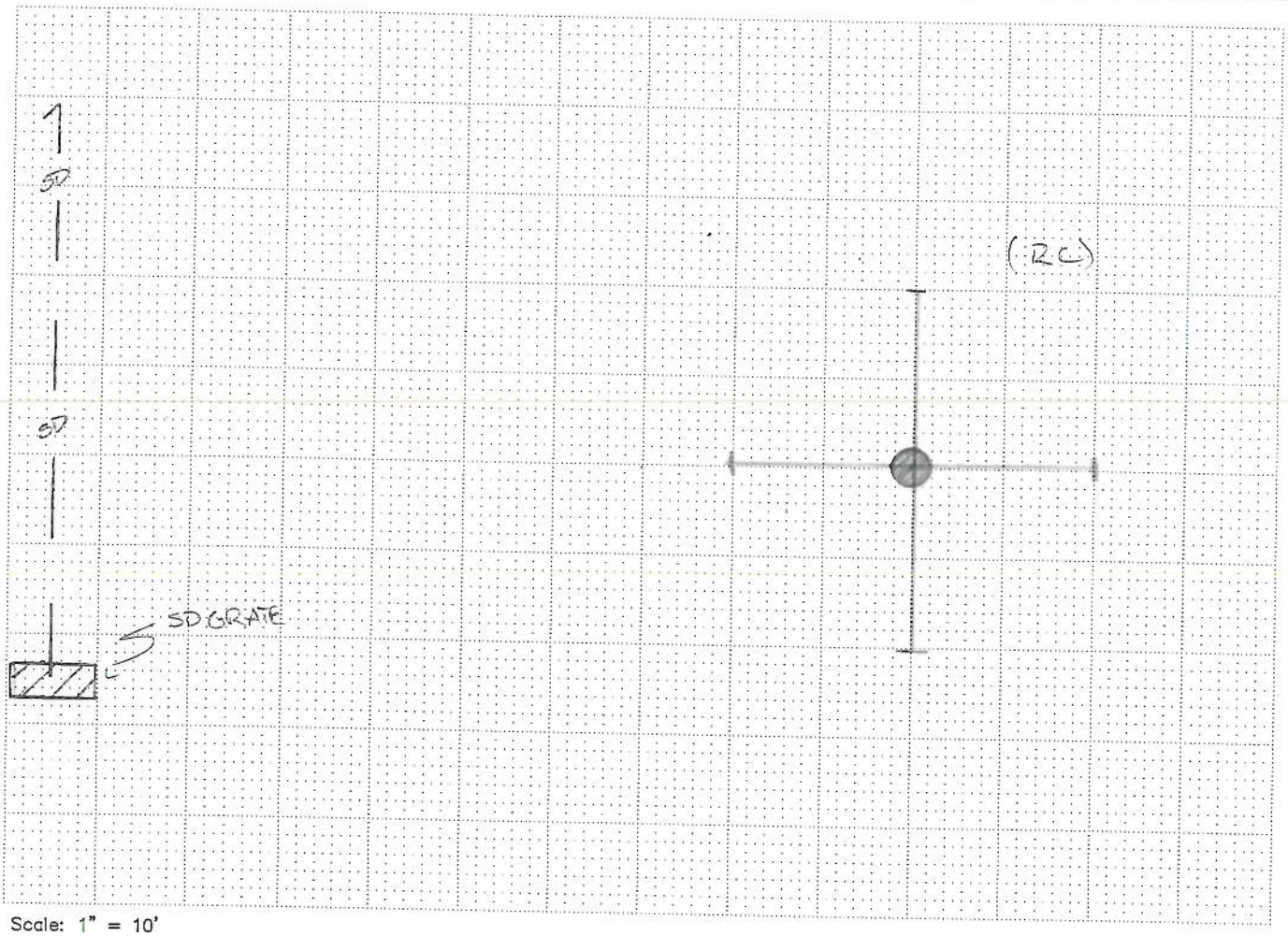
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-04



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- ✓ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ~~✓~~ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-10-10

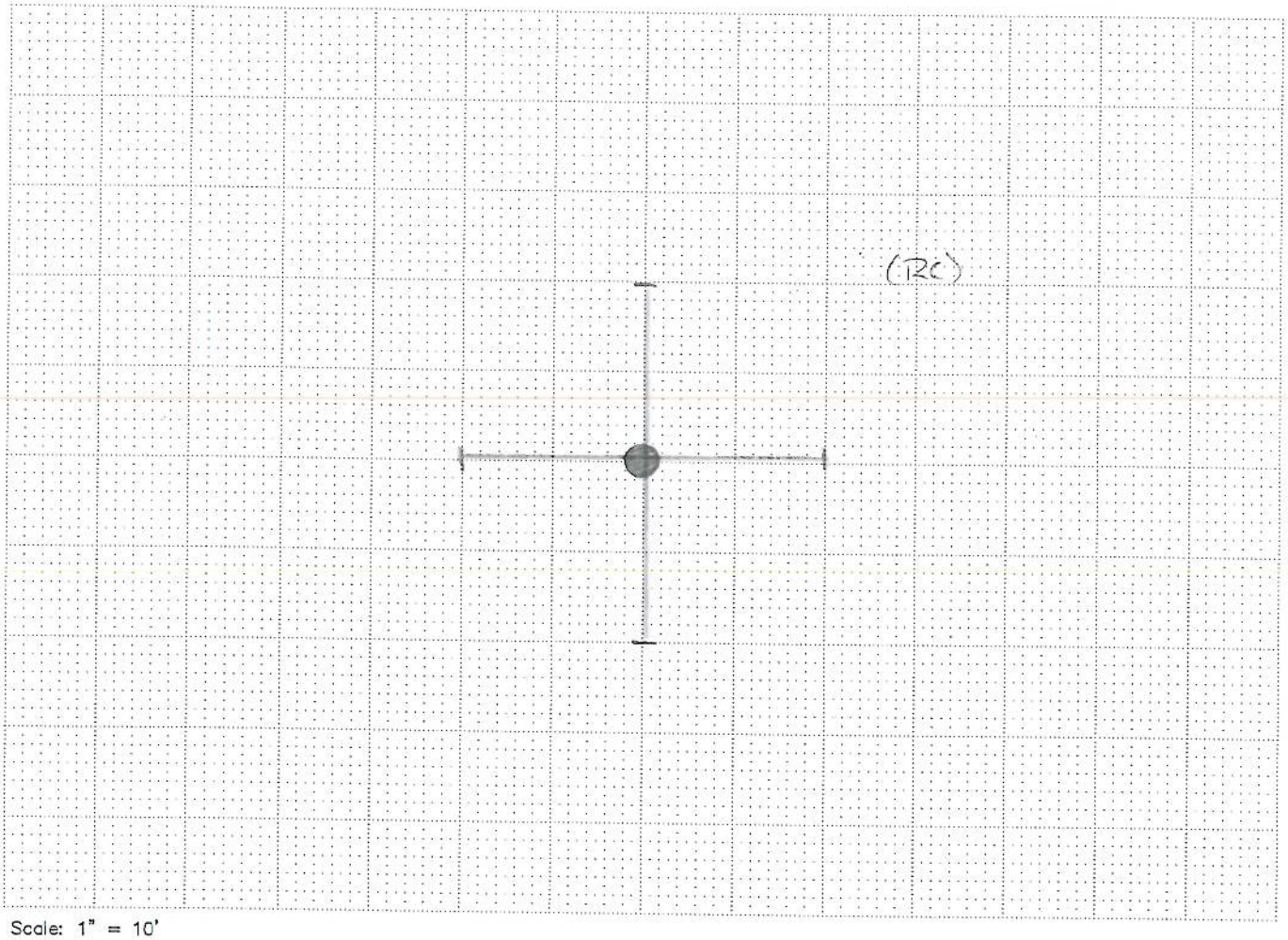
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-05



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-10-10

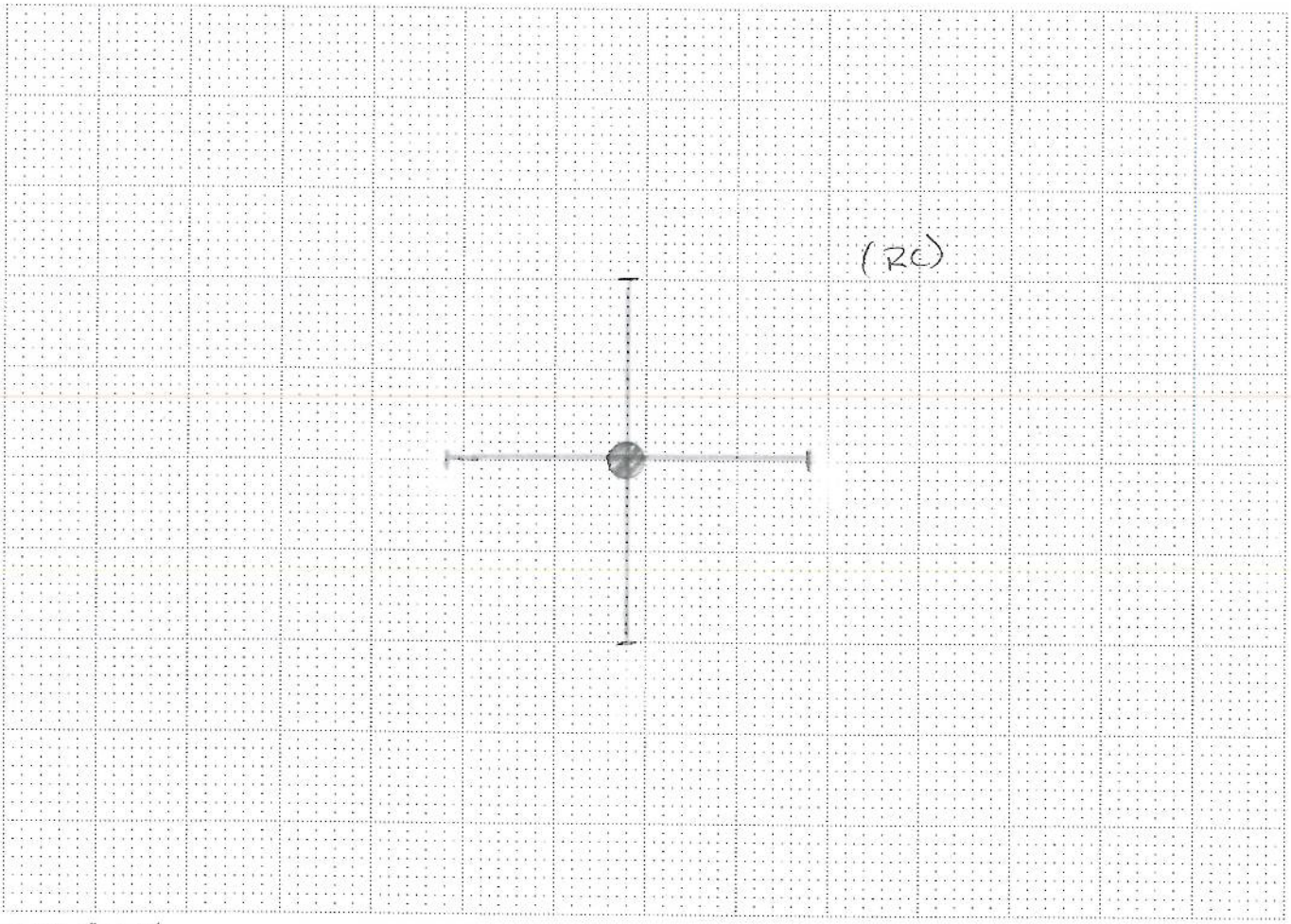
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-06



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EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB/DB

JOB: 10-106,52 DATE: 03-10-10

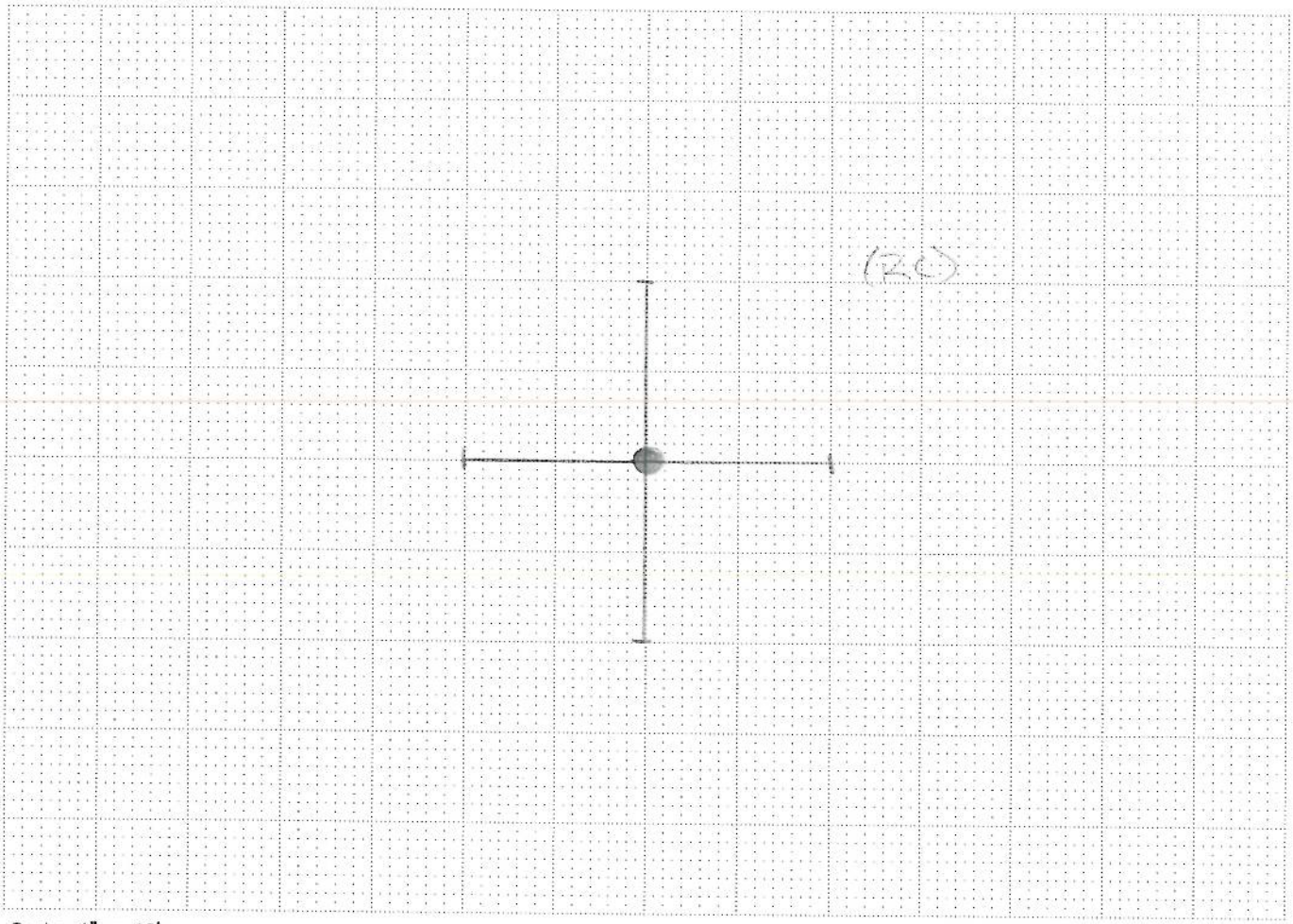
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-07



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	_ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB/DSB

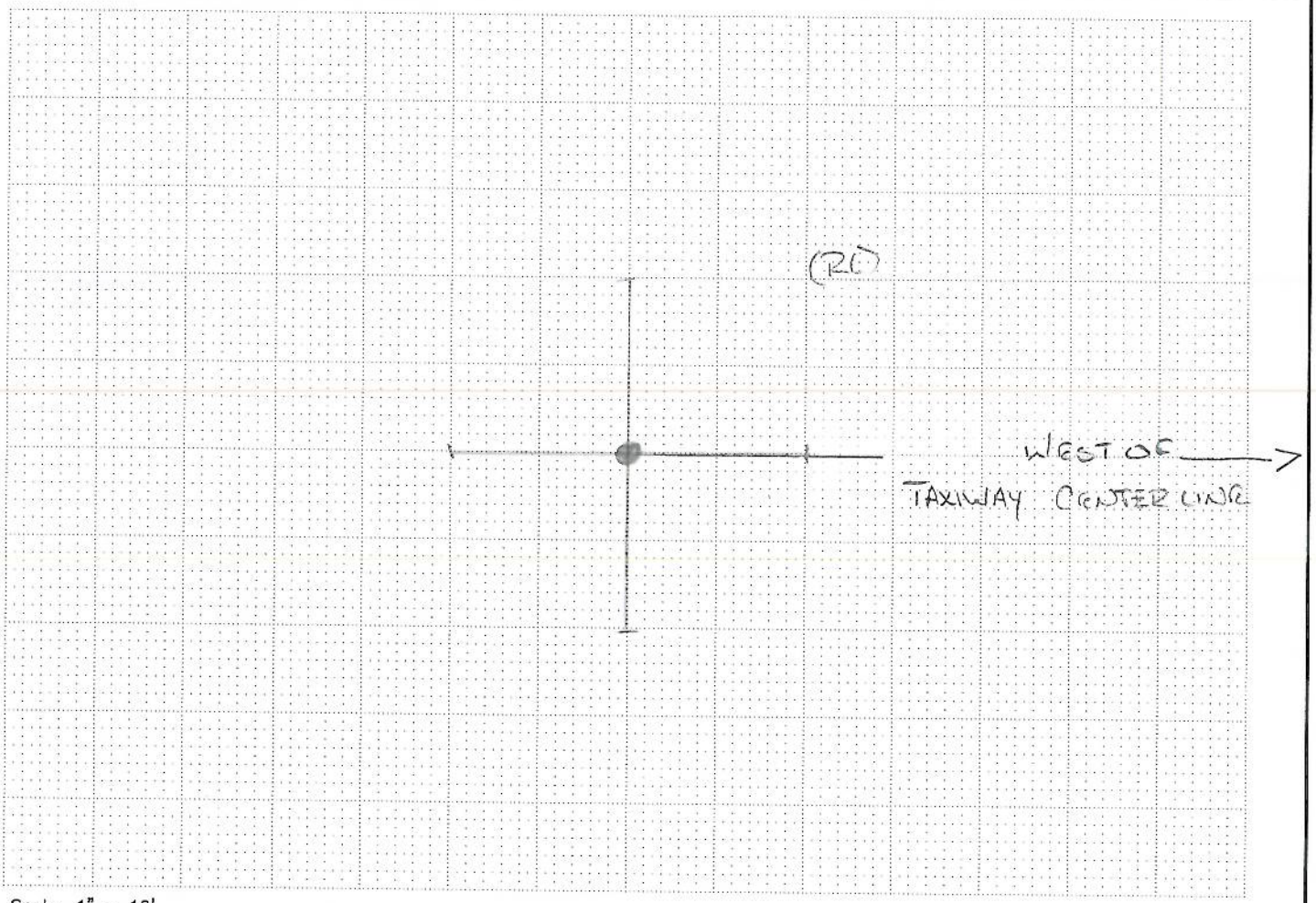
JOB: 10-106.52 DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA

BORING: APS-DP-08



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- _ EMI (Induction)
- ✓ Ambient
- ✓ GPR

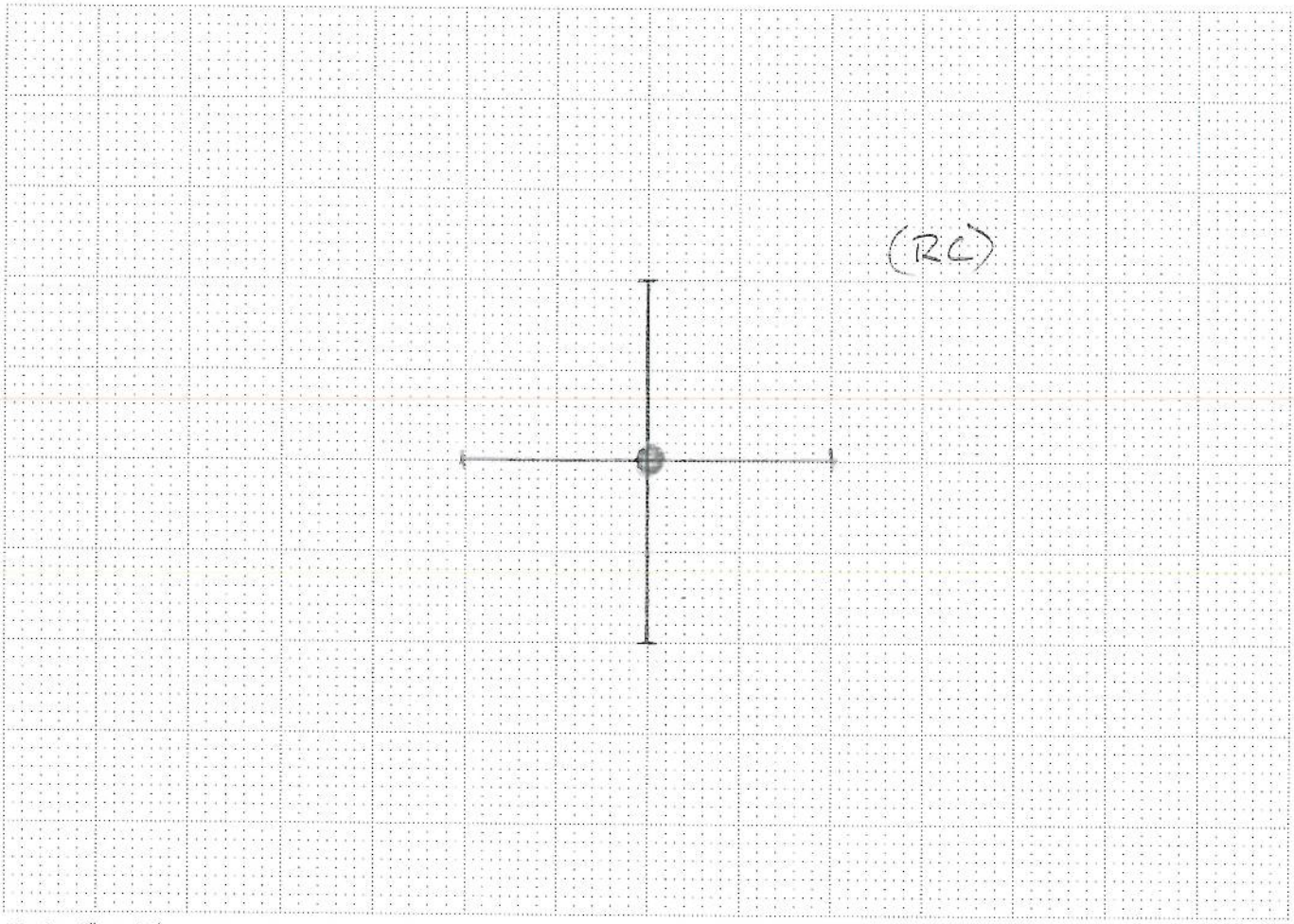
Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB/DJB	CLIENT: CH2M HILL
JOB: 10-106.52 / DATE: 03-10-10	LOCATION: ALAMEDA PT., ALAMEDA CA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: APS-DP-09



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	_ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB / DJB

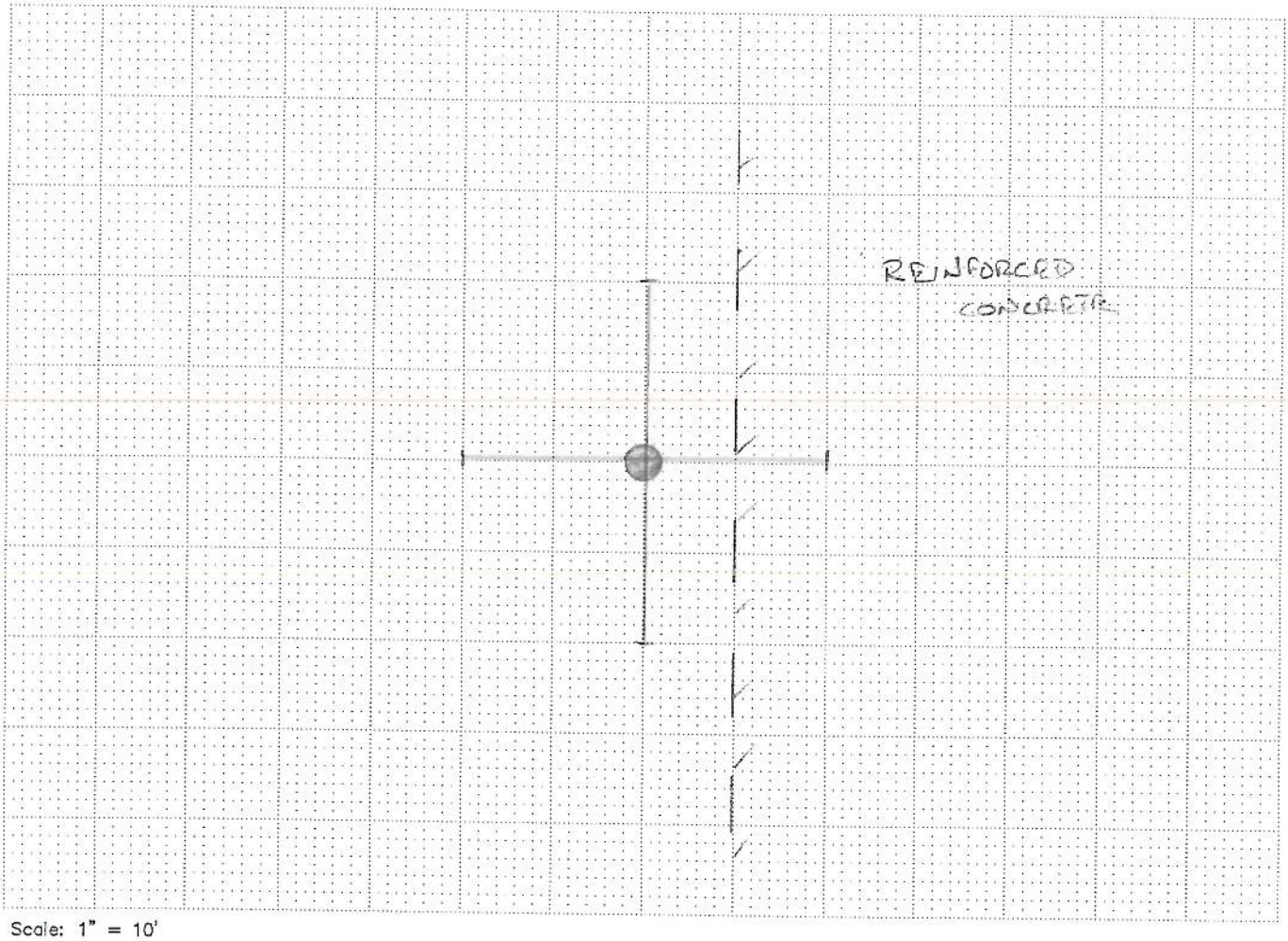
JOB: 10-106.52 | DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS - DP- 10



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-10-10

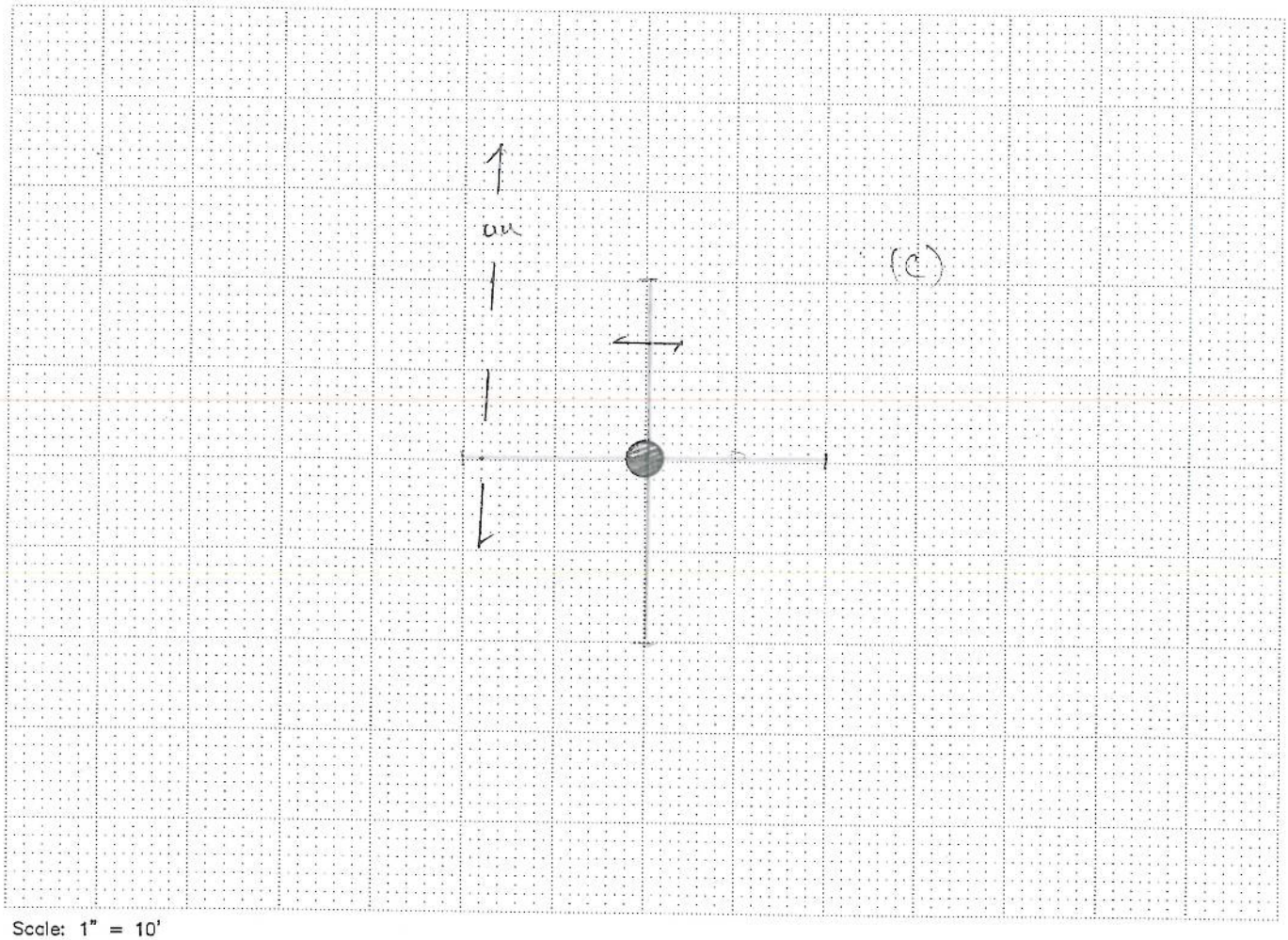
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-11



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

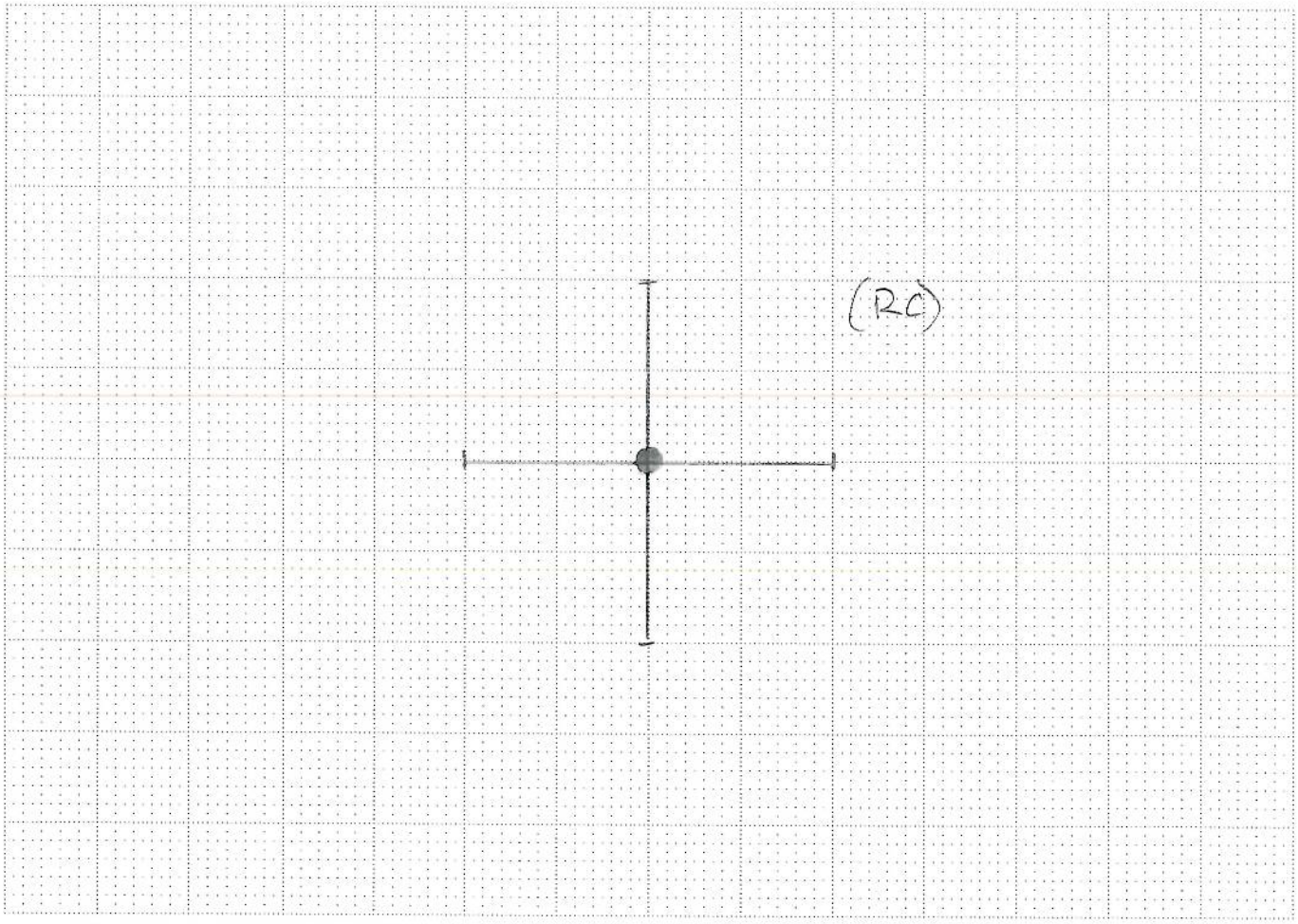
NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB	CLIENT: CH2M Hill
JOB: 10-106.52 DATE: 03-10-10	LOCATION: Alameda Pt., Alameda CA
NORCAL GEOPHYSICAL CONSULTANTS INC.	BORING: APS-DP-12



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

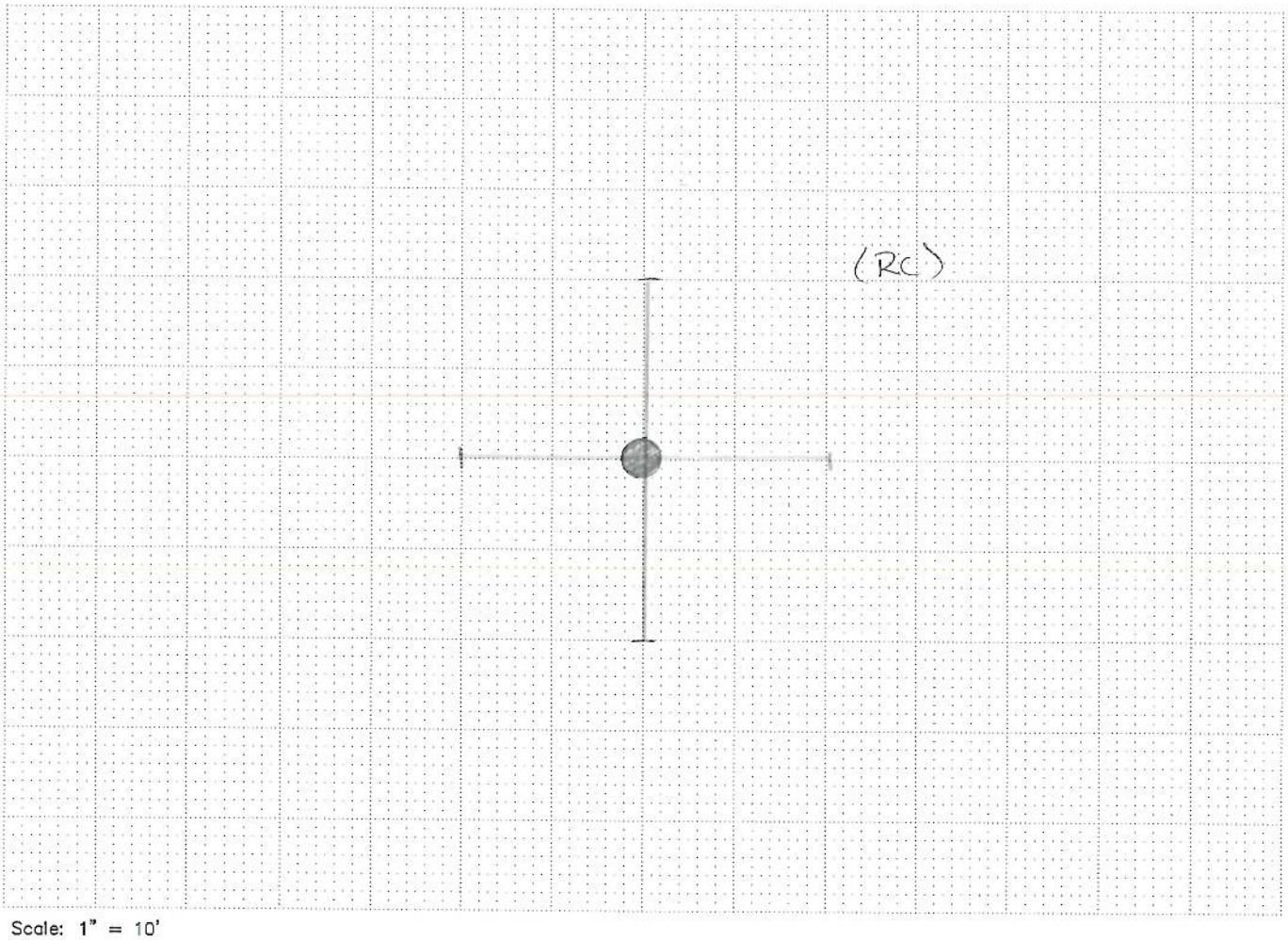
Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	_ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

* Reinforced Concrete Precluded the use of Metal Detector

N

PERSONNEL: TWB / DJB	CLIENT: CH2M HILL
JOB: 10-106.52 DATE: 03-10-10	LOCATION: ALAMEDA PT., ALAMEDA CA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: APS-DP-13



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

* REINFORCED CONCRETE PRECLUDED THE USE OF METAL DETECTOR

PERSONNEL: TWB / DJB

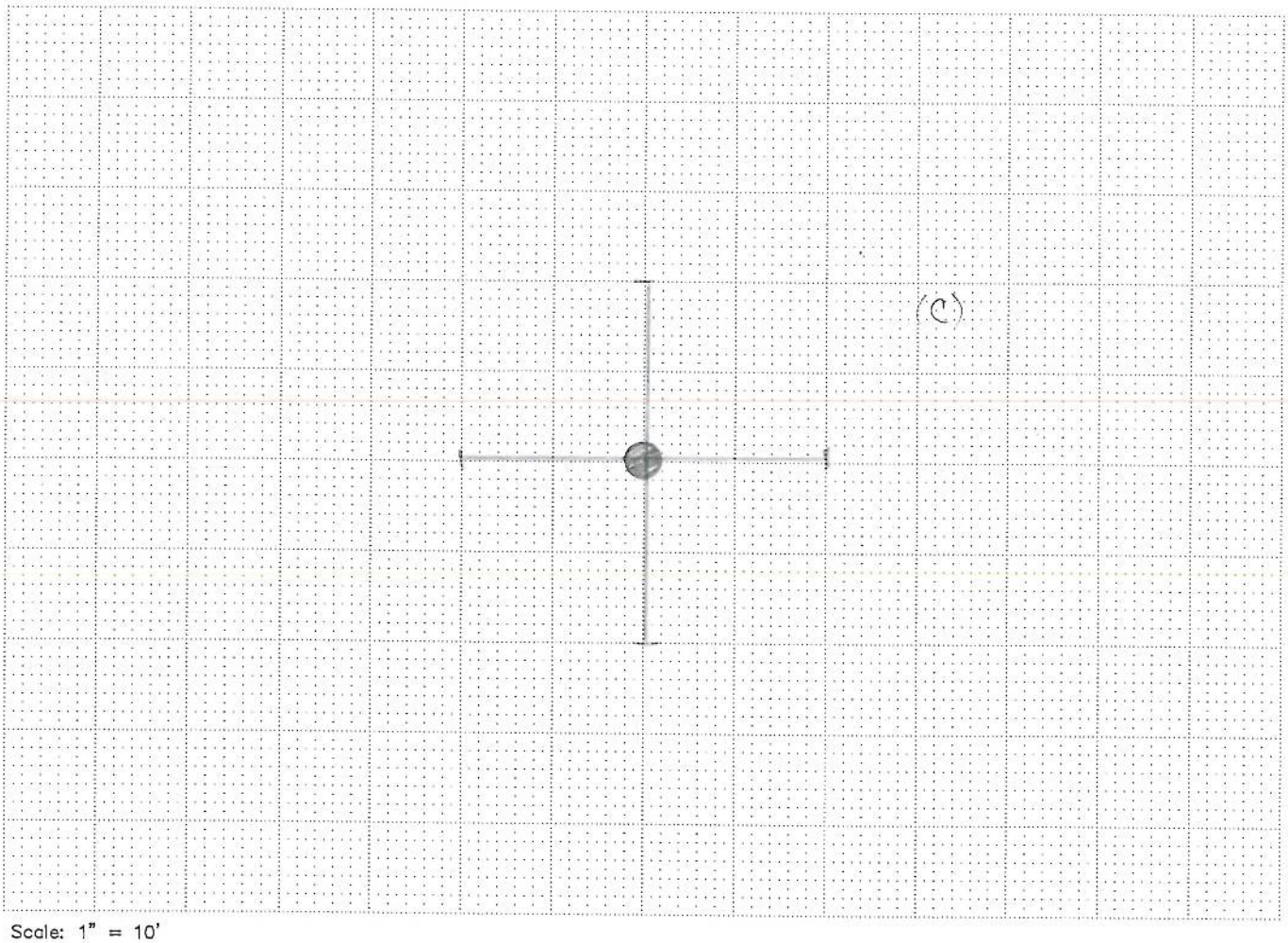
JOB: 10-106.52 | DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-14



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 DATE: 03-10-10

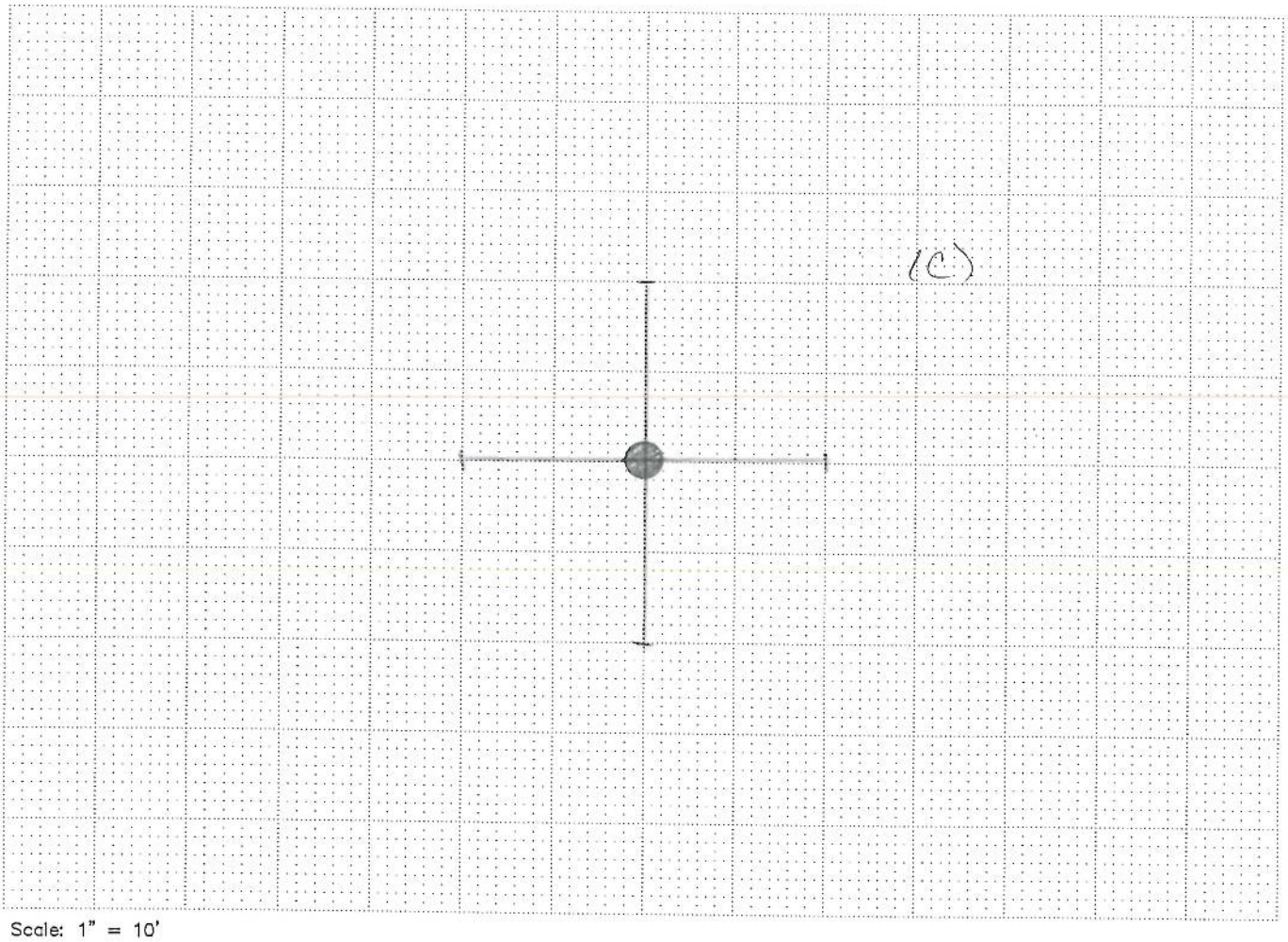
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-15



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

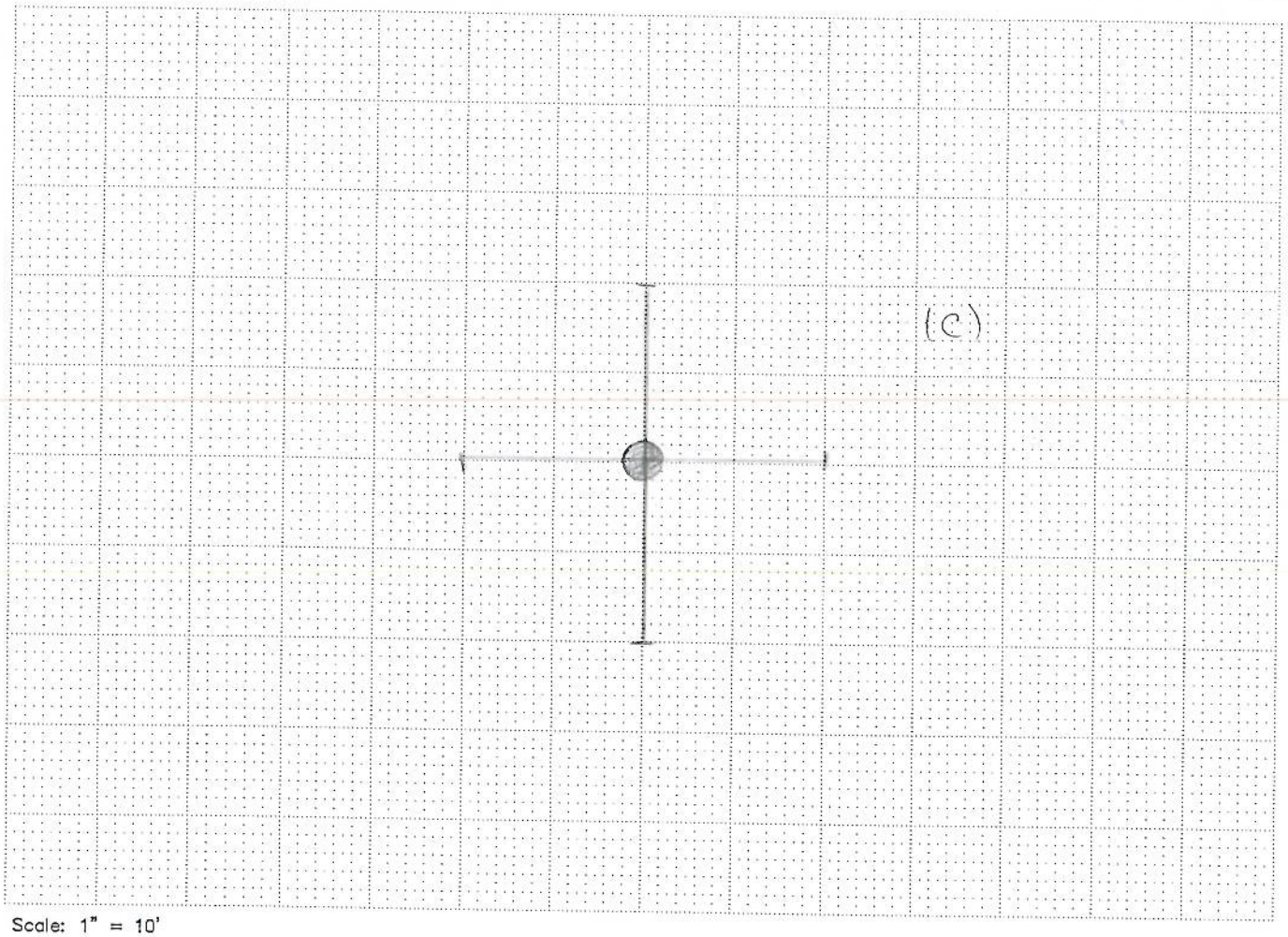
JOB: 10-106.52 | DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-16



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 DATE: 03-10-10

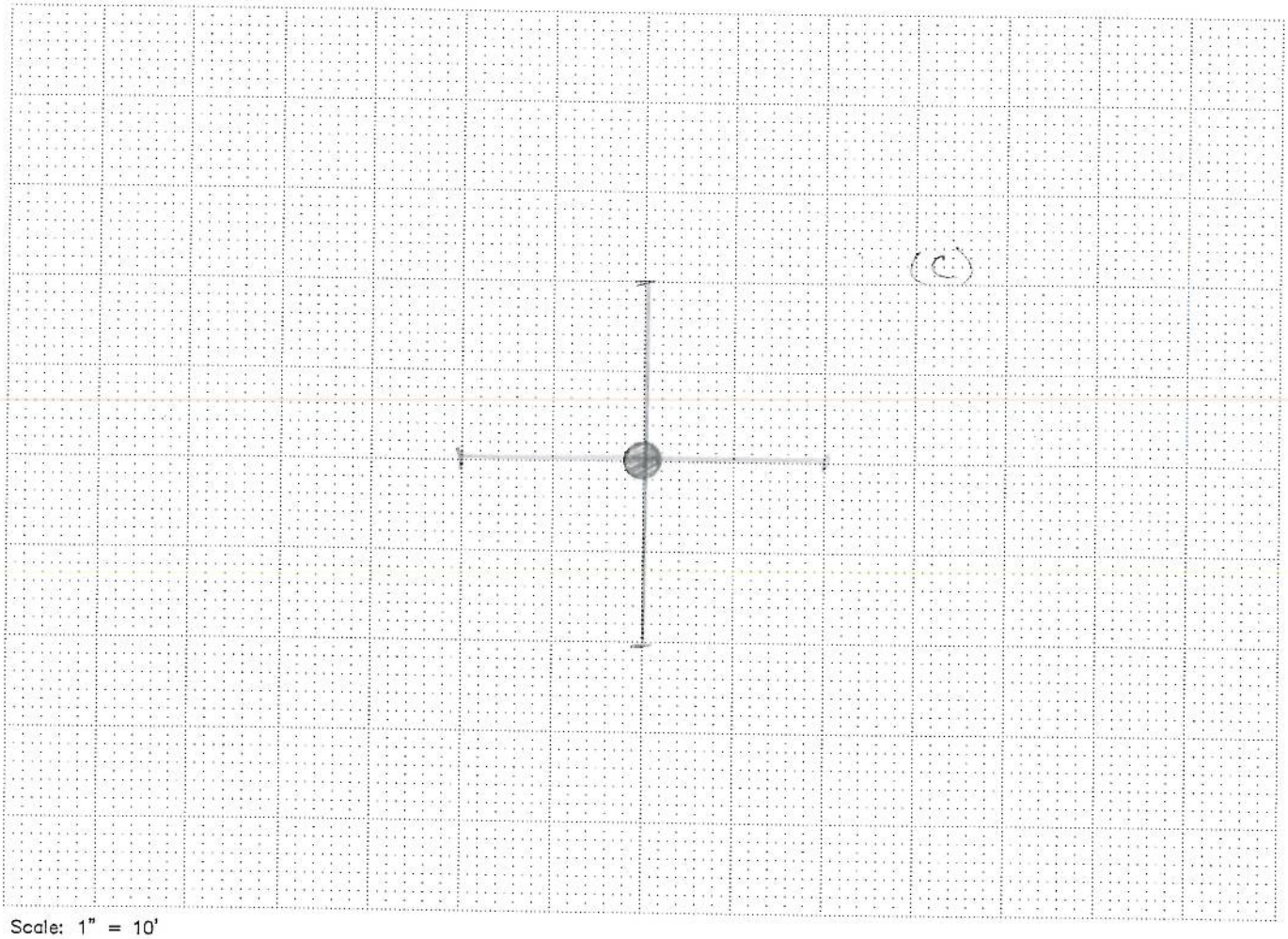
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-17



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

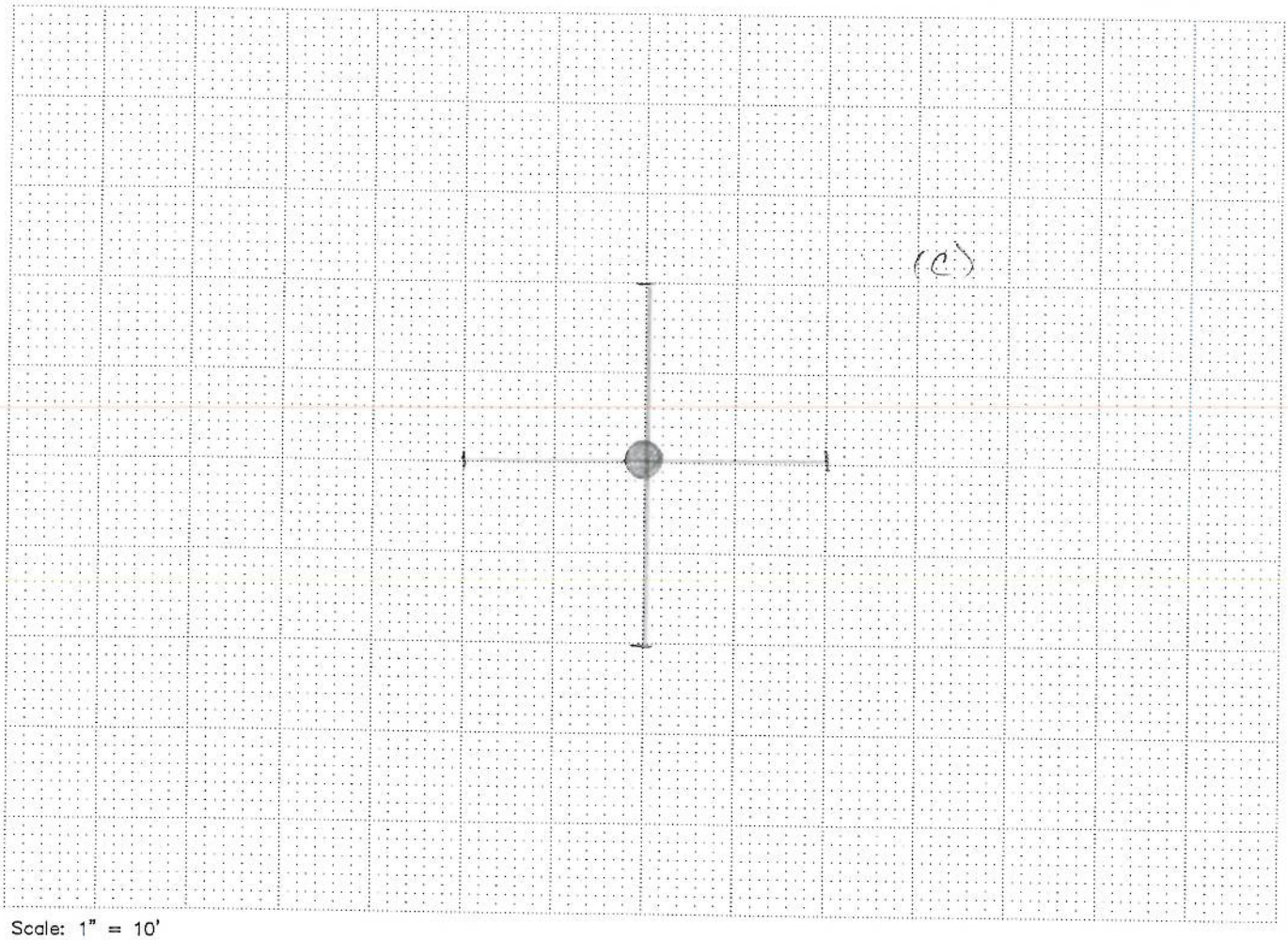
JOB: 10-106.52 | DATE: 03-10-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: APS-DP-18



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- ✓ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10 - 106.52 | DATE: 9 - 1 - 10

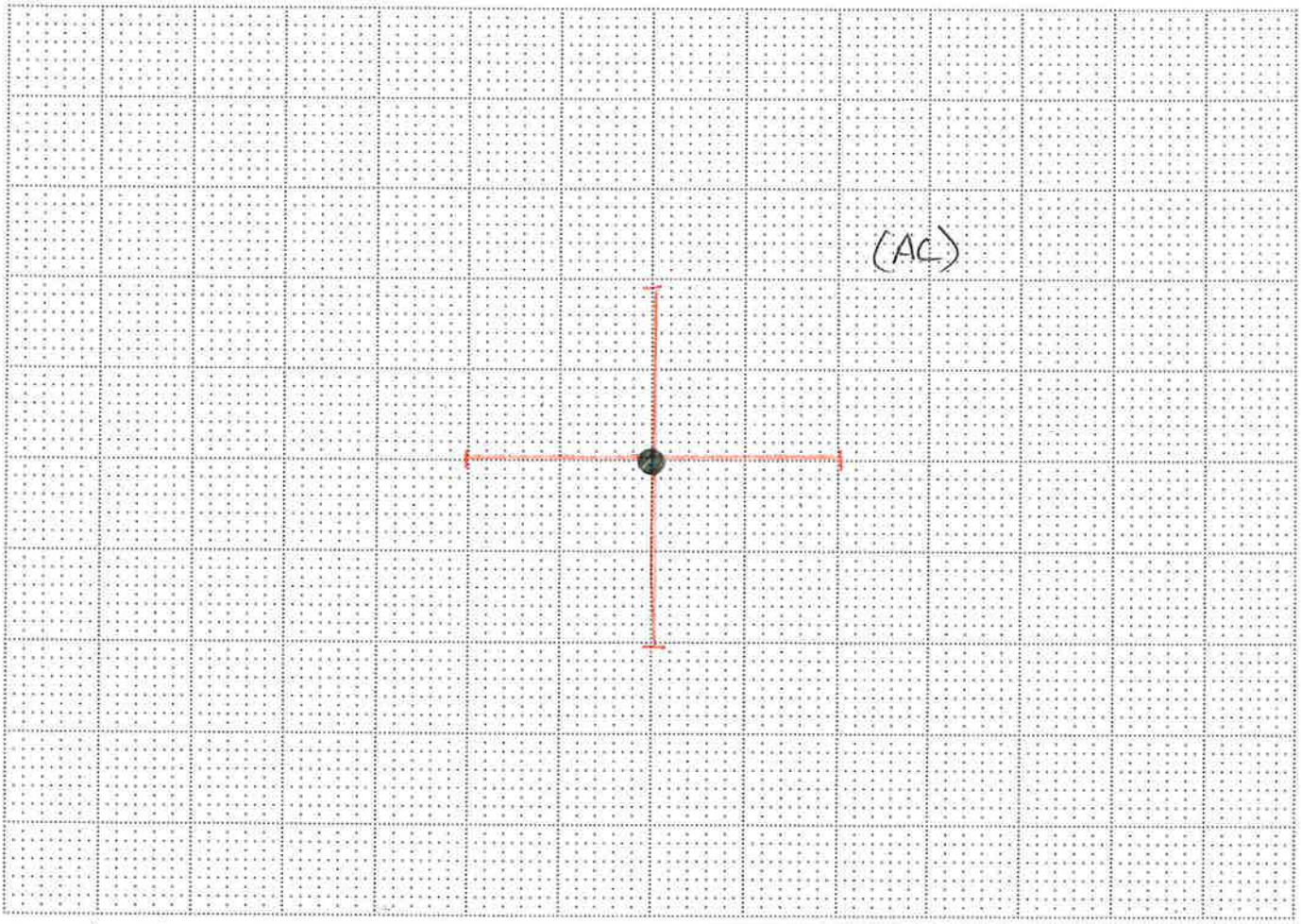
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M Hill

LOCATION: Alameda Pt., Alameda CA

BORING: IAAPS - DP19



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

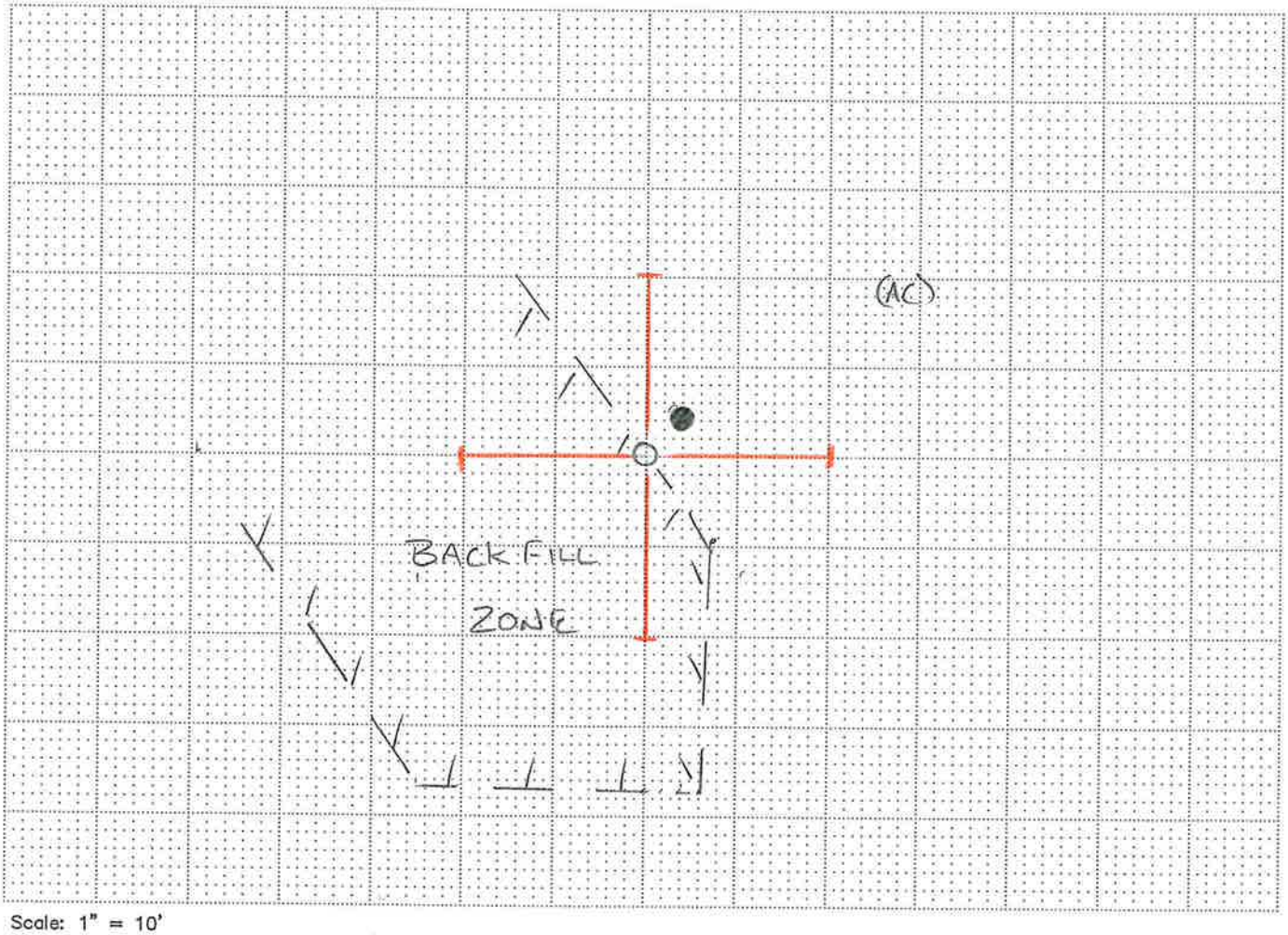
JOB: 10 - 106.52 | DATE: 3 - 1 - 10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AAPS-DP20



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

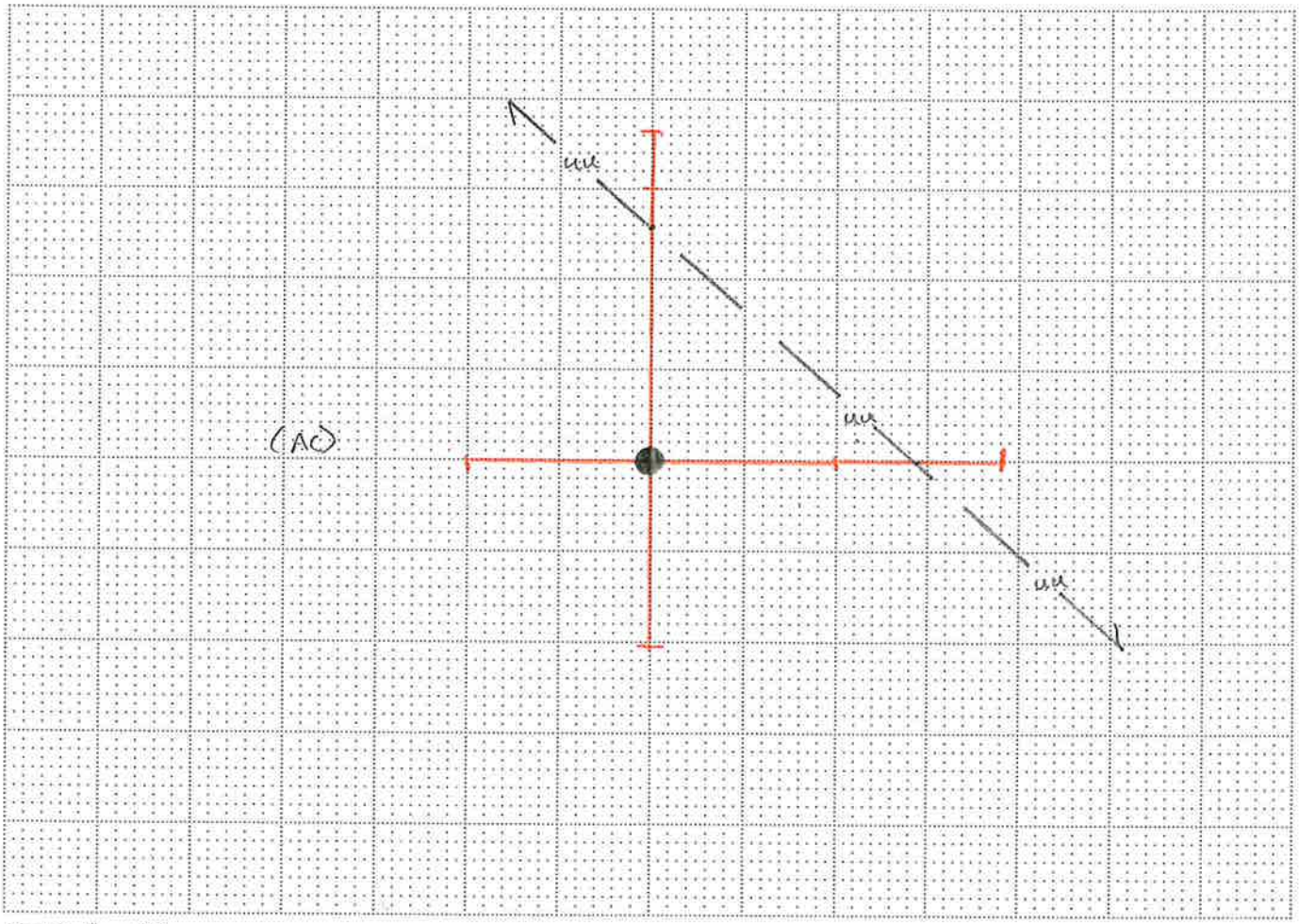
JOB: 10-106.52 | DATE: 6-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M Hill

LOCATION: Alameda Pt., Alameda CA

BORING: IAAPS-DP21



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ← Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

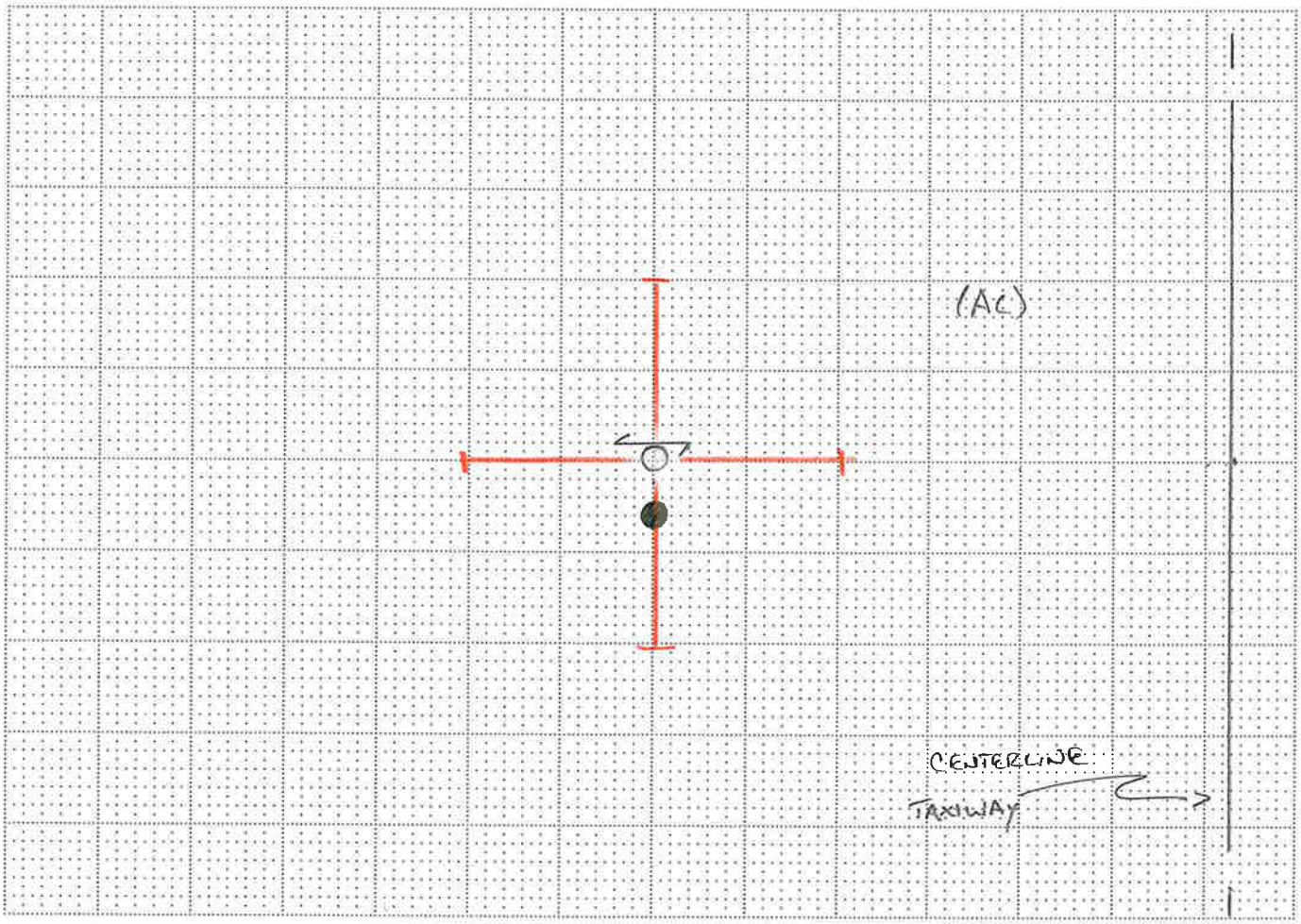
JOB: 10-106.52 | DATE: 4-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AAPS ~~1AAR3~~ - DP22



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ← Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

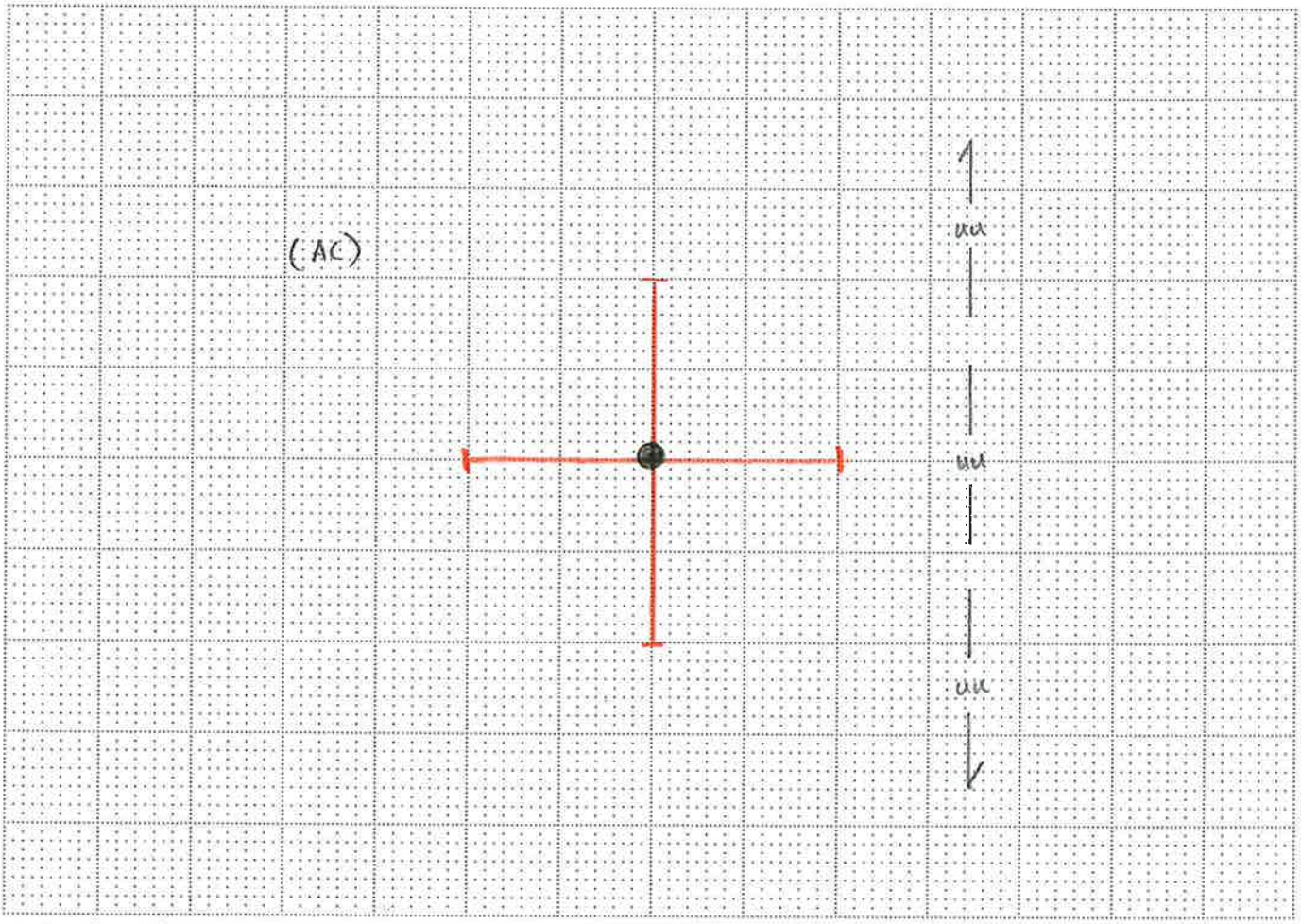
JOB: 10-106.52 | DATE: 9-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M Hill

LOCATION: Alameda Pt., Alameda CA

BORING: IAAPS-DP23



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——| GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

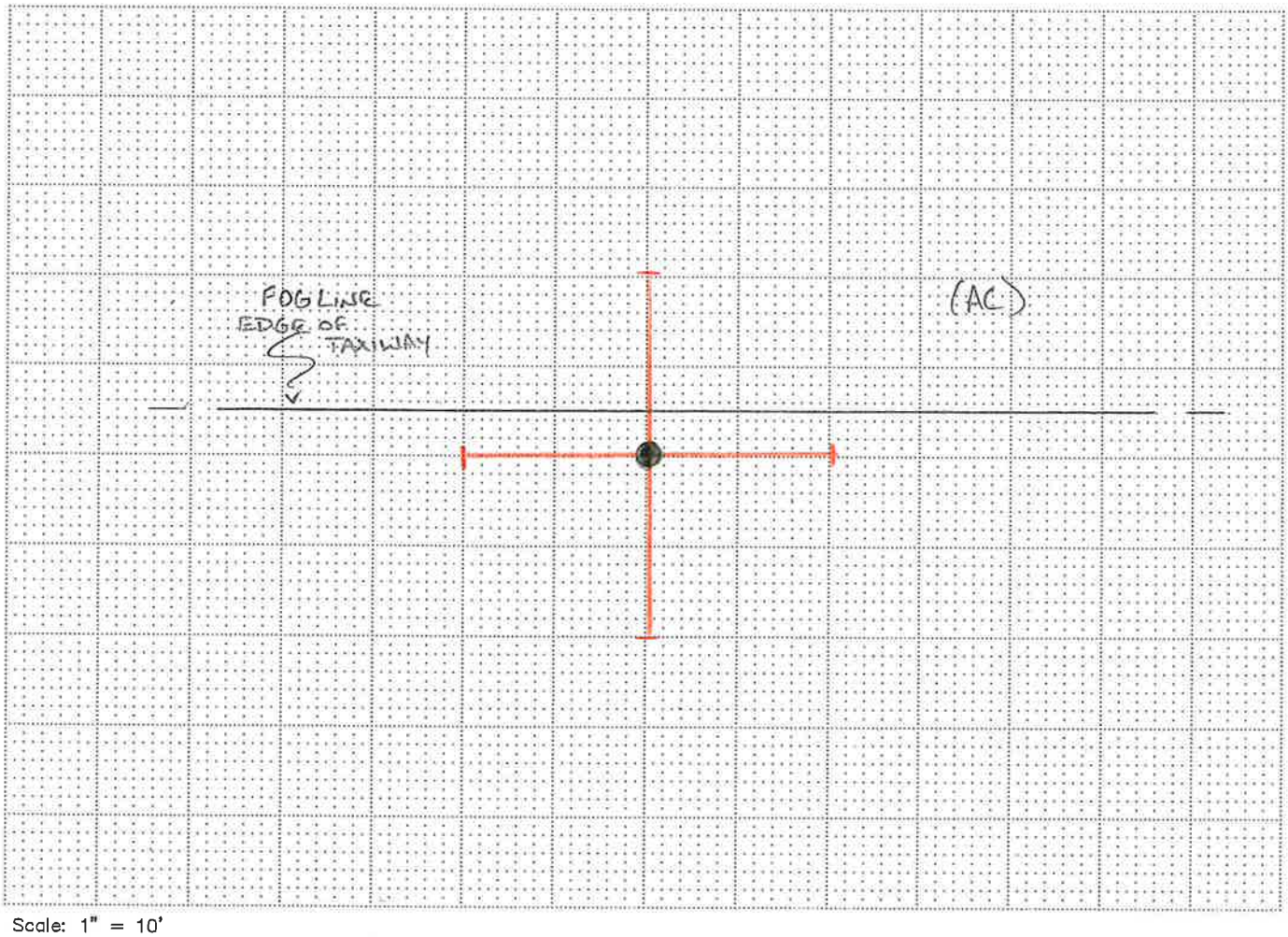
JOB: 10-106.52 | DATE: 4-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAAPS-DP24



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10 - 106.52 | DATE: 3 - 1 - 10

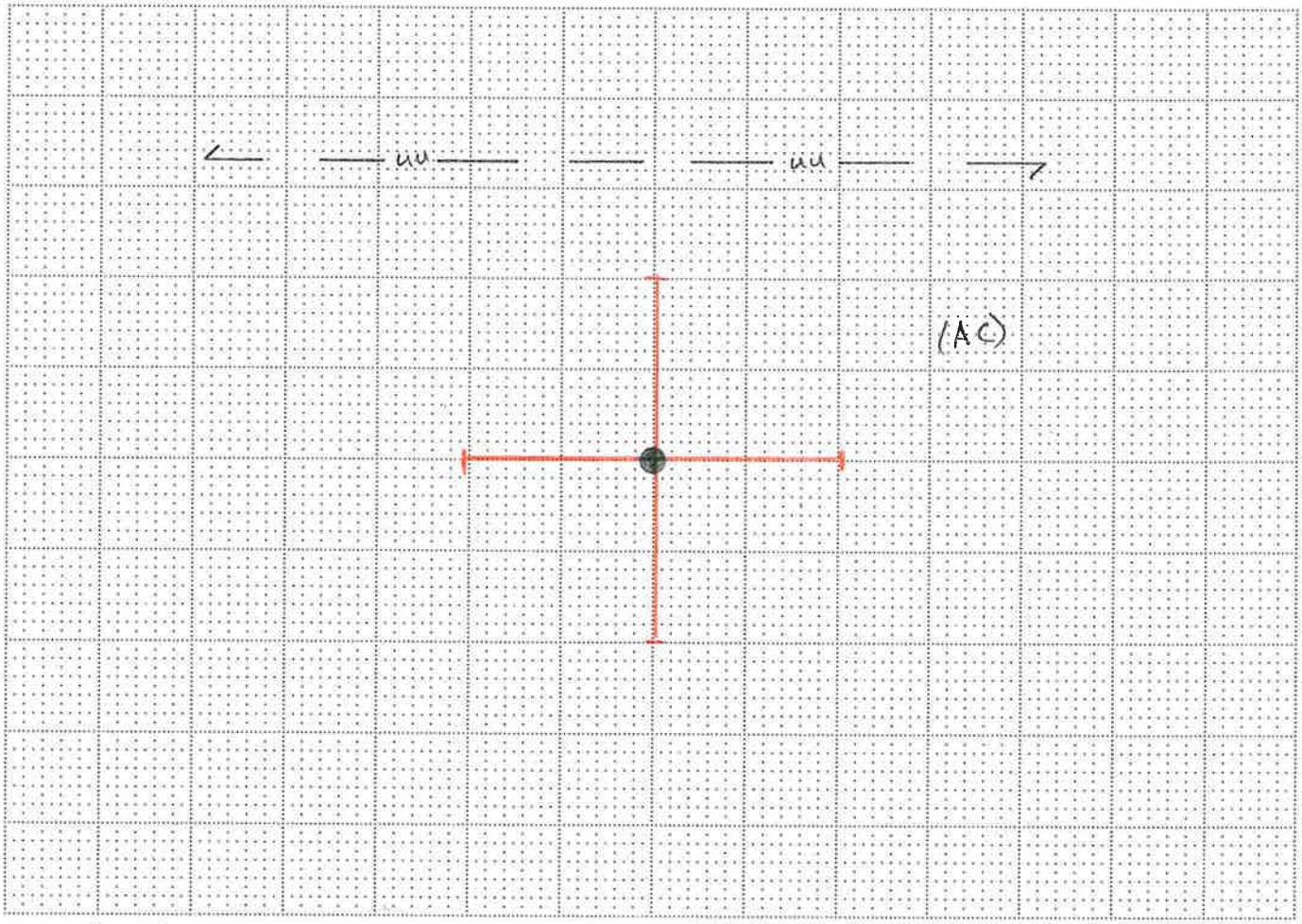
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAAPS - DP25



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

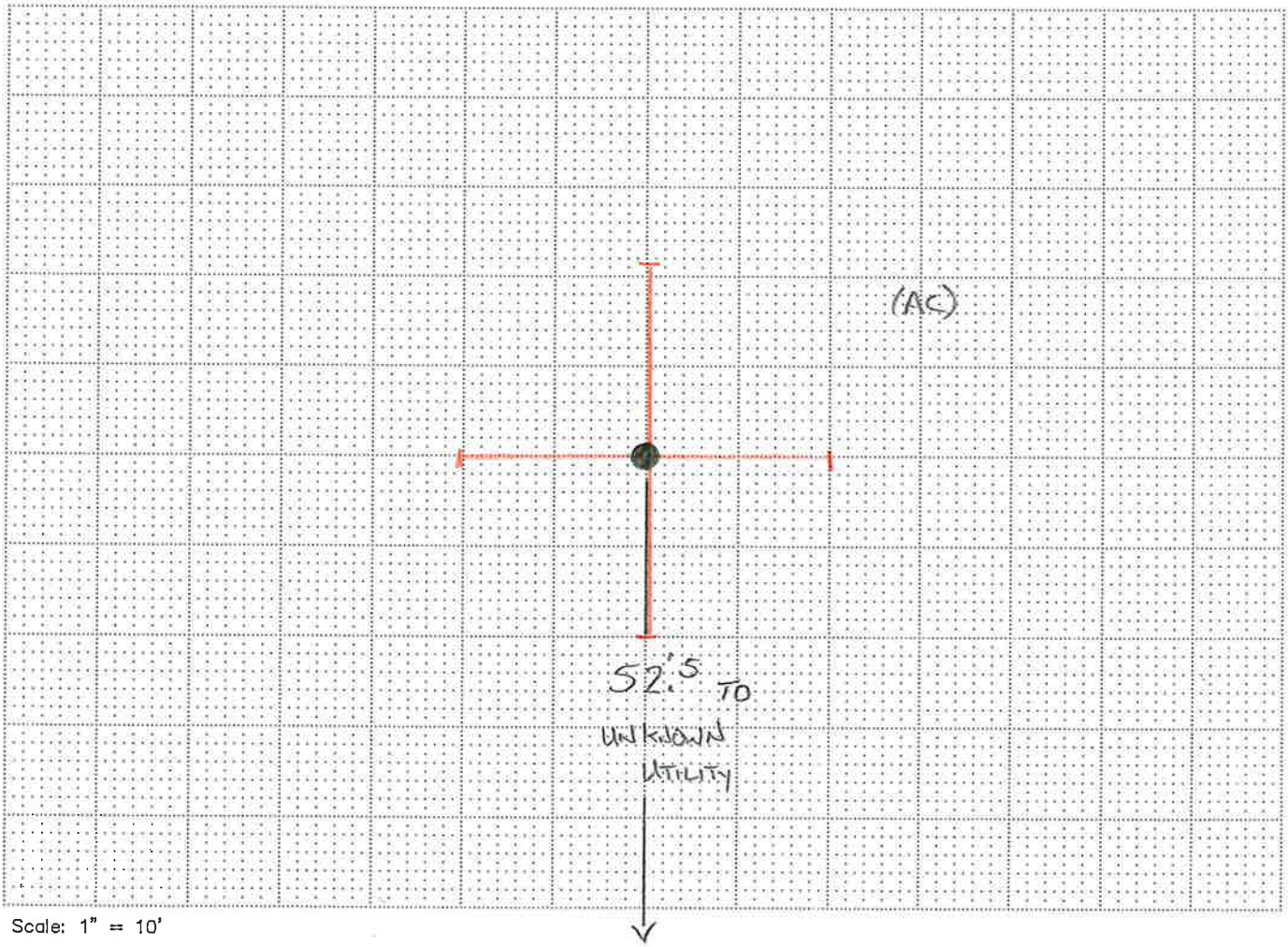
JOB: 10-106.52 | DATE: 8-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AAPS-DP26



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——| GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

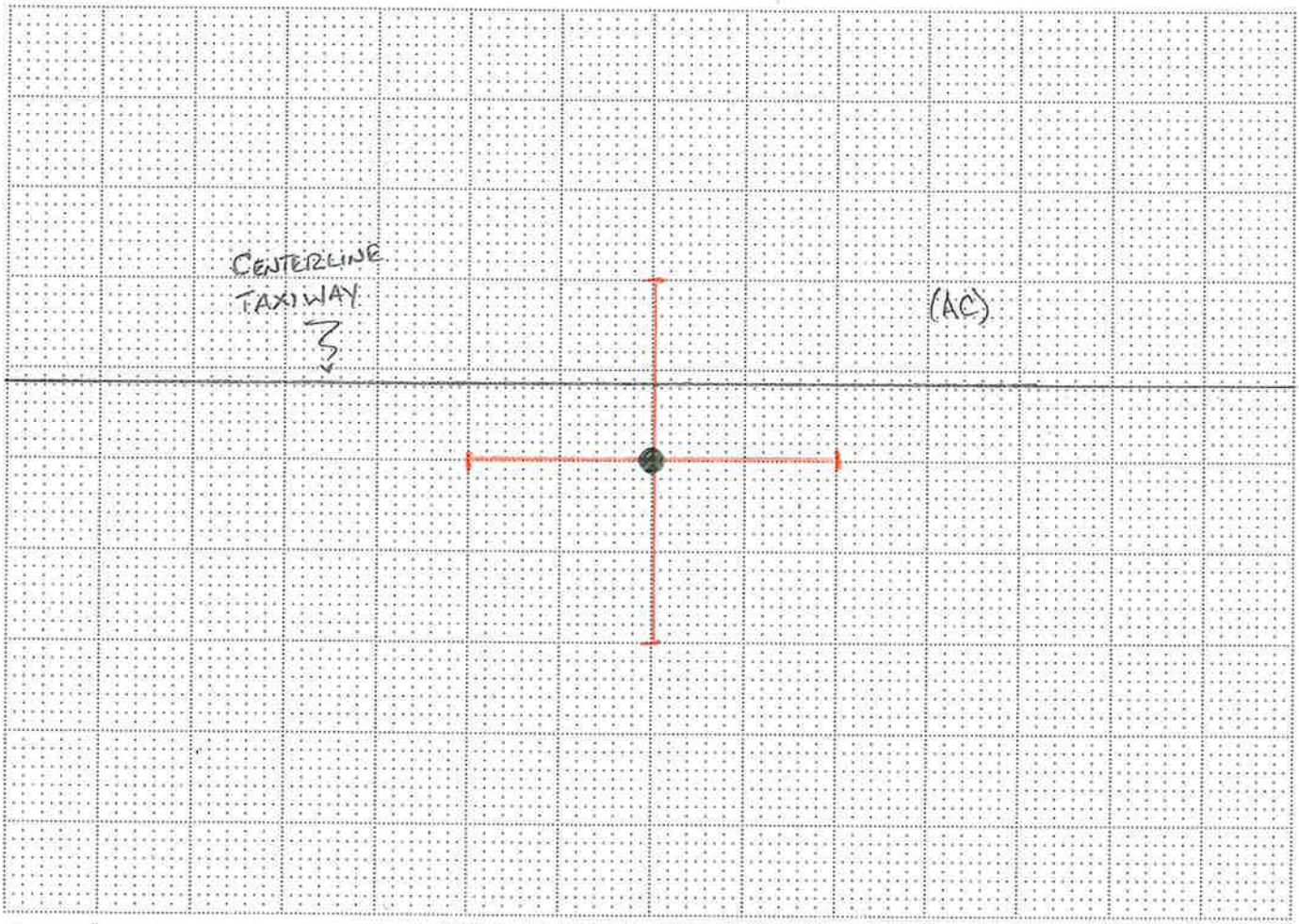
JOB: 10-106.52 | DATE: 4-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: AAPS-DP27



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

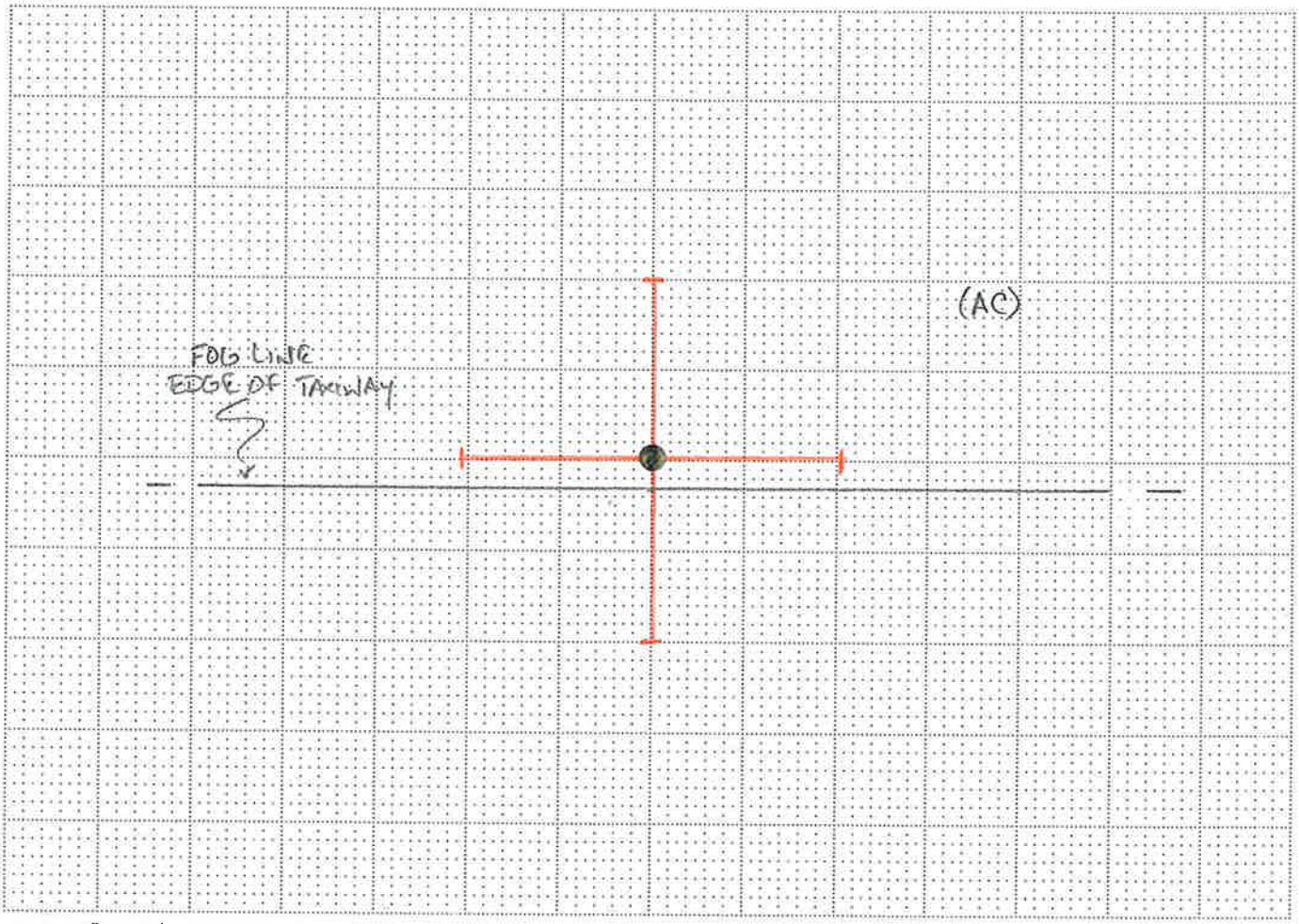
JOB: 10-106.52 | DATE: 4-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AAPS-DP28



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

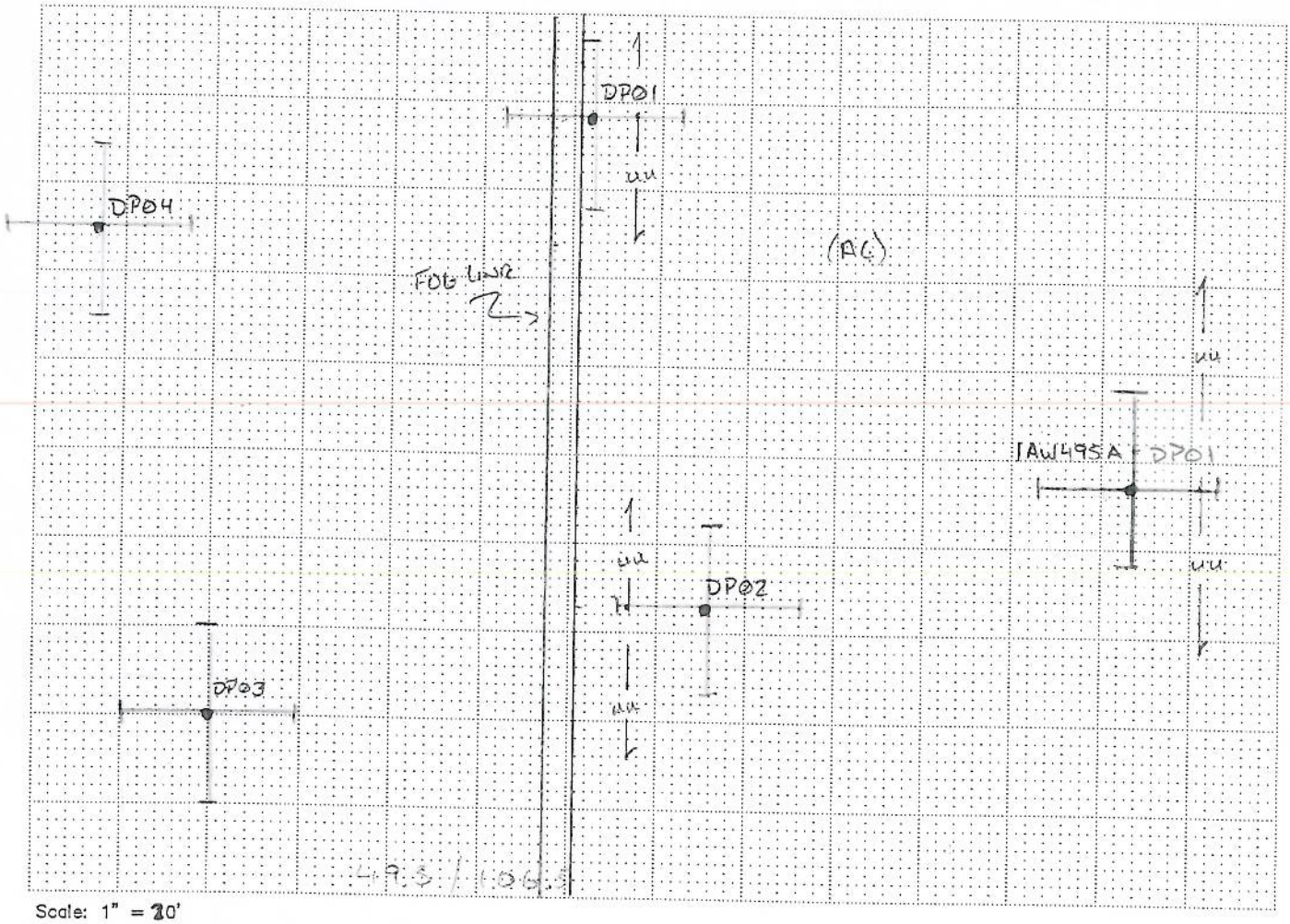
JOB: 10-106.52 | DATE: 03-15-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAIR33-DP01, 02, 03, 04



Scale: 1" = 20'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

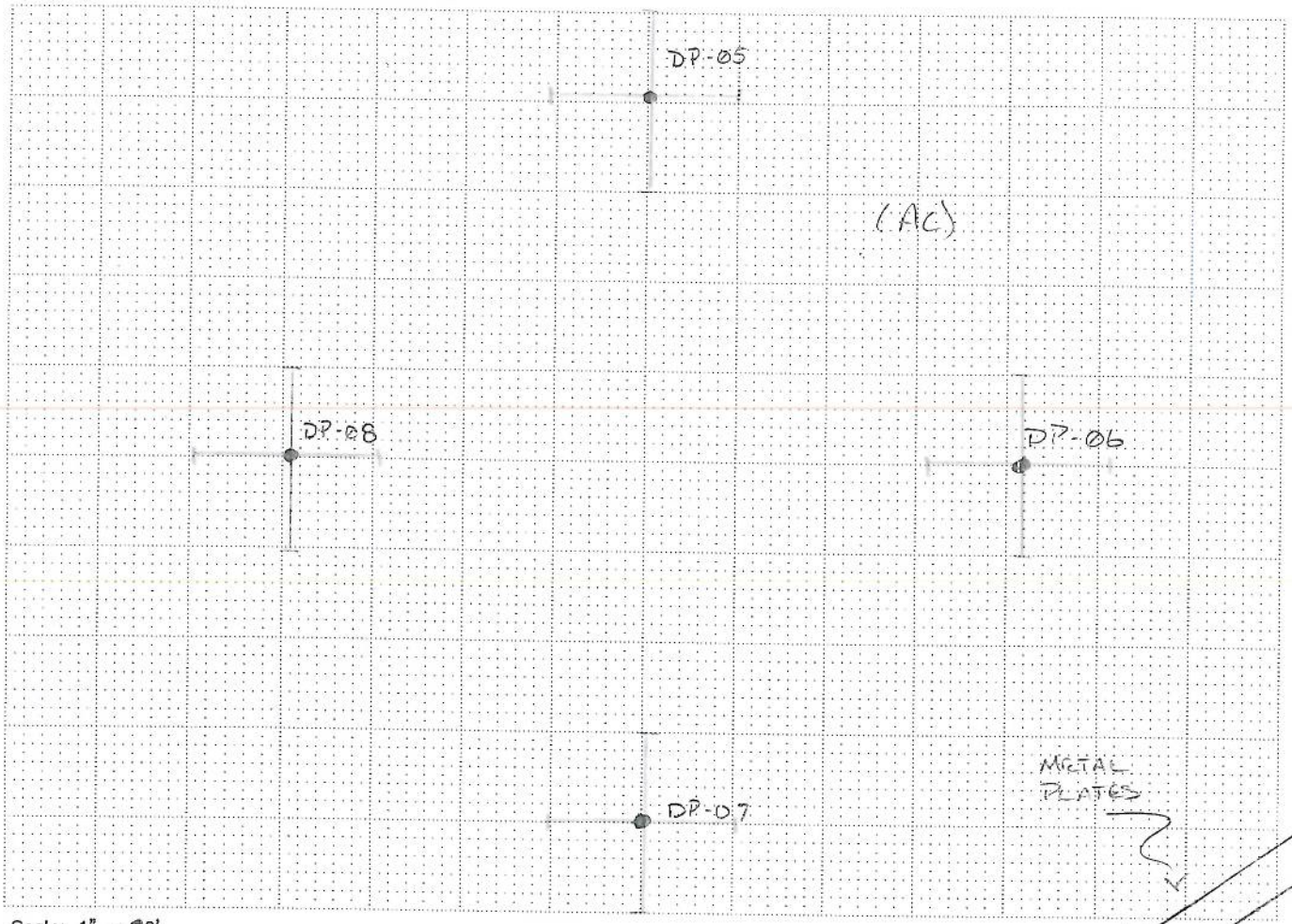
JOB: 10-106.52 | DATE: 03-11-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: AIR 33 DP-05, 06, 07, 08



Scale: 1" = 20'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

PERSONNEL: TWB / DJB

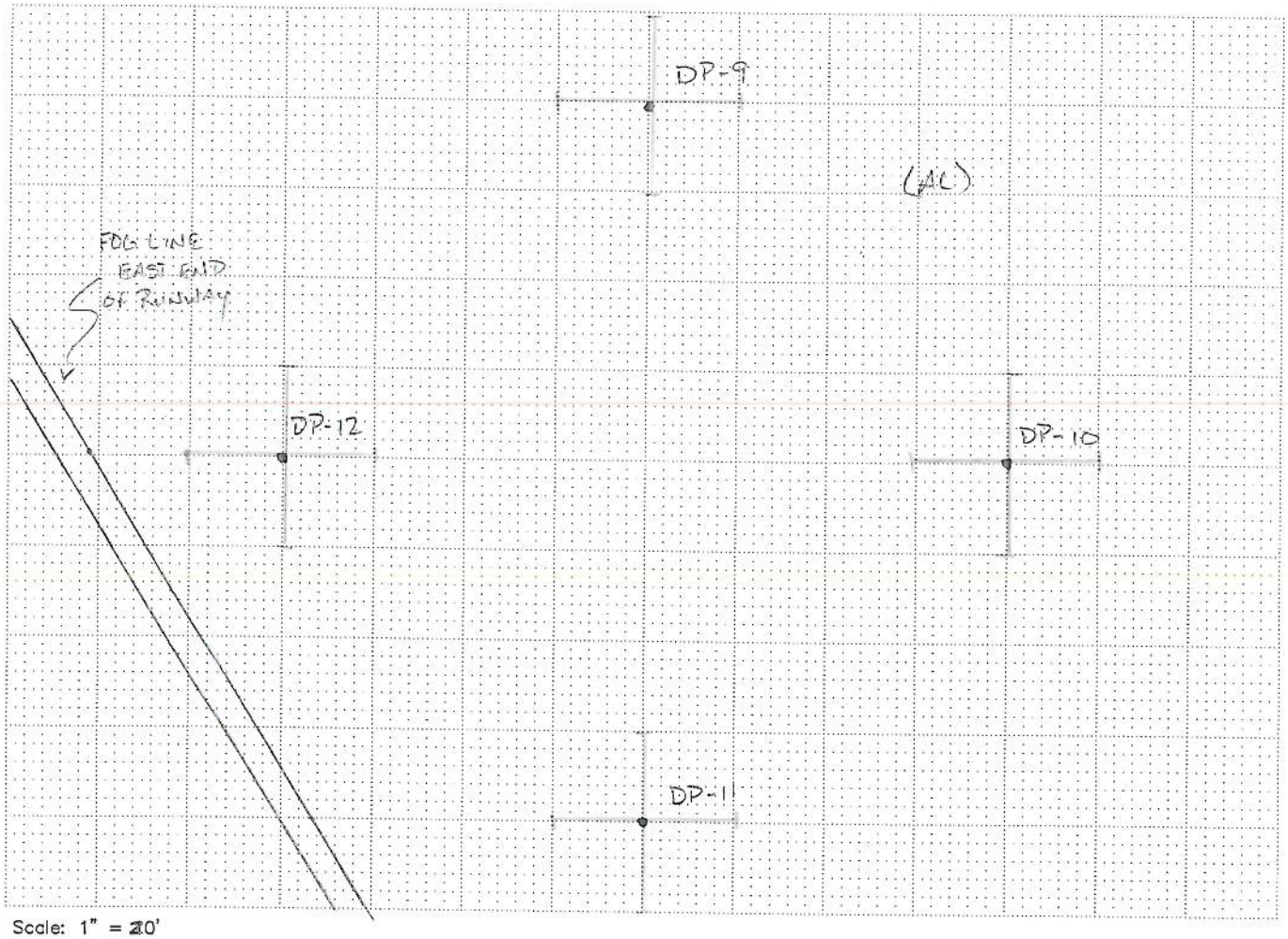
JOB: 10-106.52 | DATE: 03-11-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: I AIR 33 DP-09, 10, 11, 12



Scale: 1" = 20'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-11-10

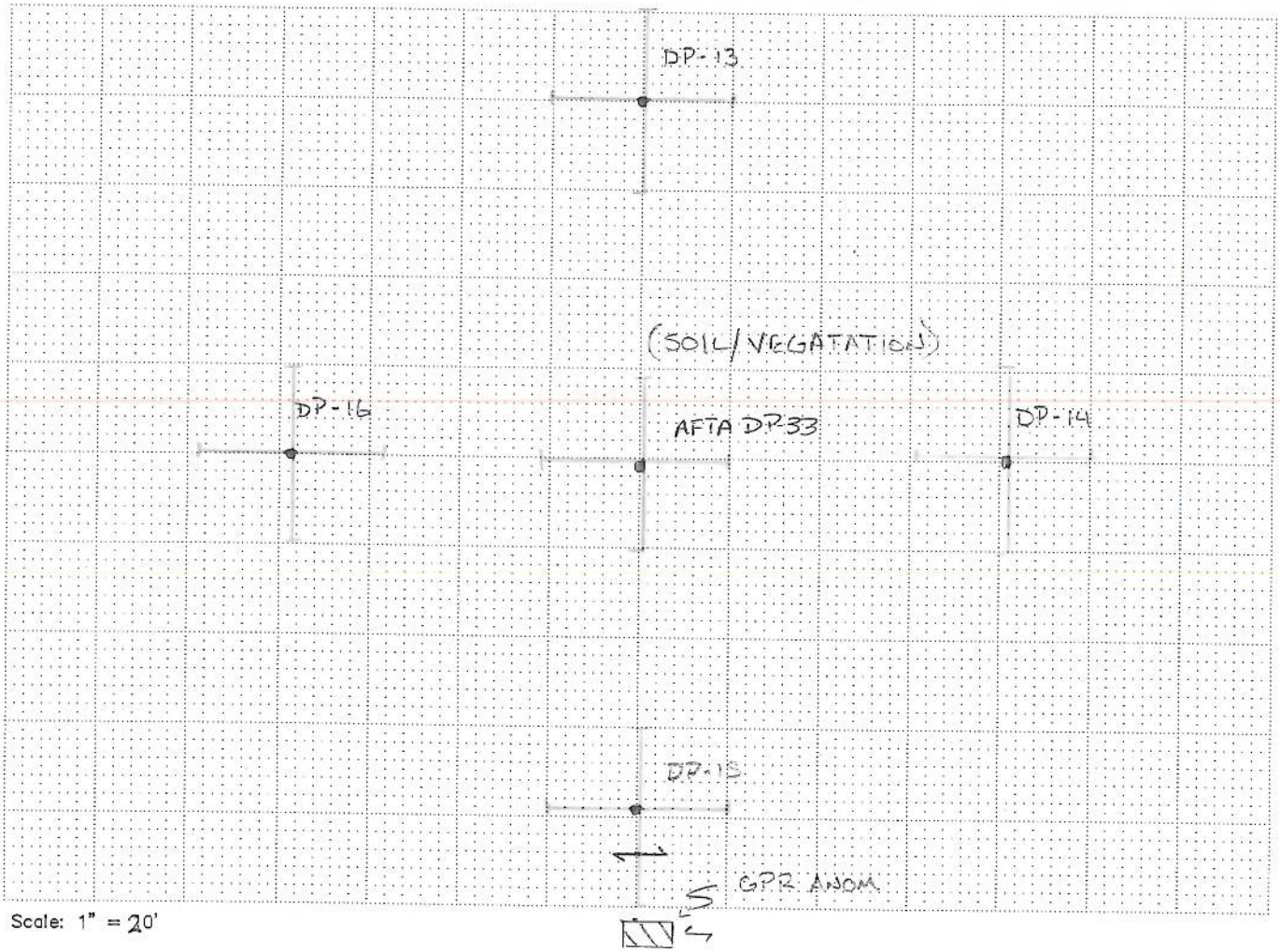
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: AP1 AIR 33 DP-13, 14, 15, 16 / AFTA DP33



Scale: 1" = 20'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-11-10

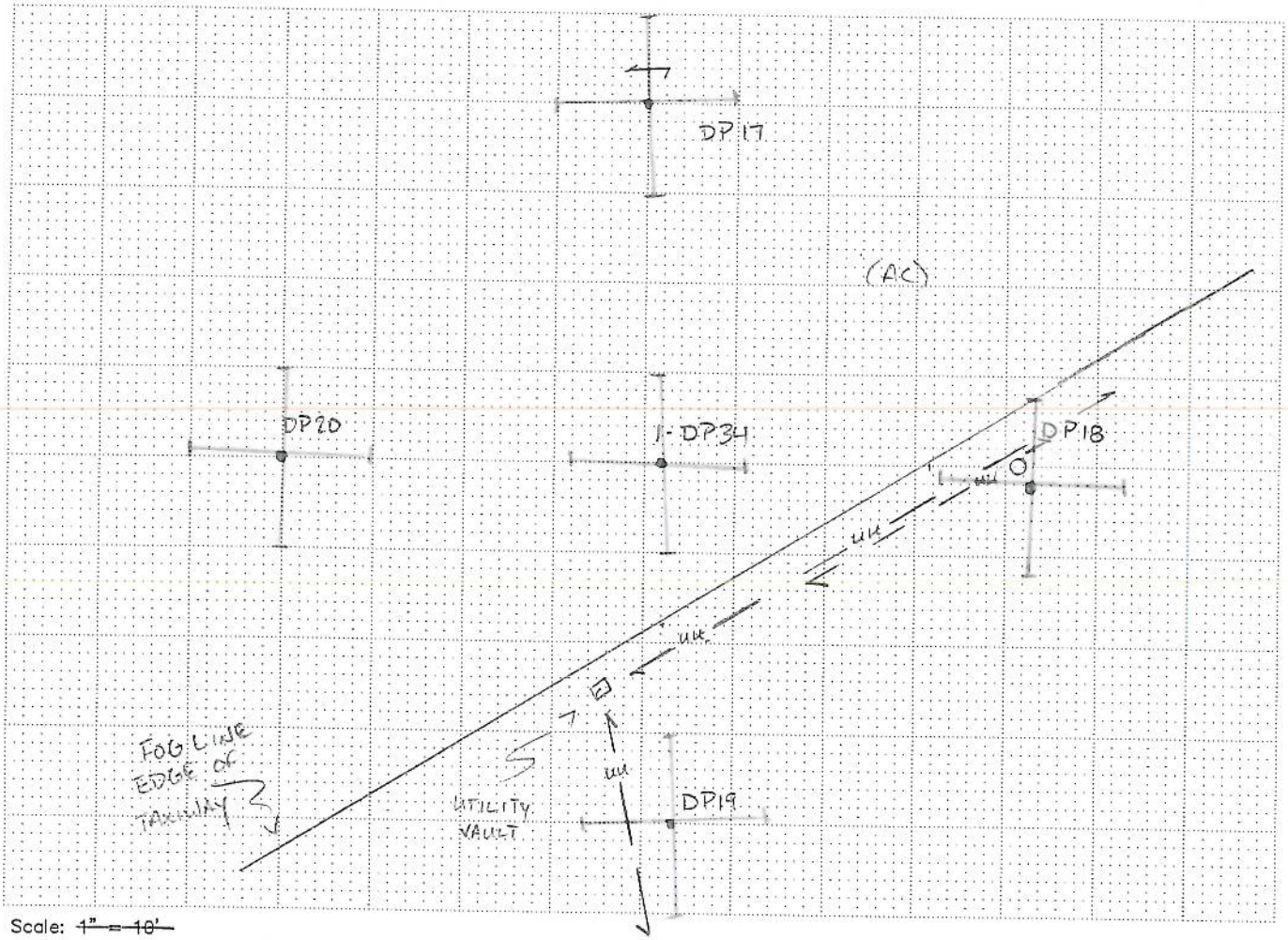
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AIR33 DP17, 18, 19, 20 / 1-DP34



Scale: ~~1" = 10'~~ 1" = 20'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

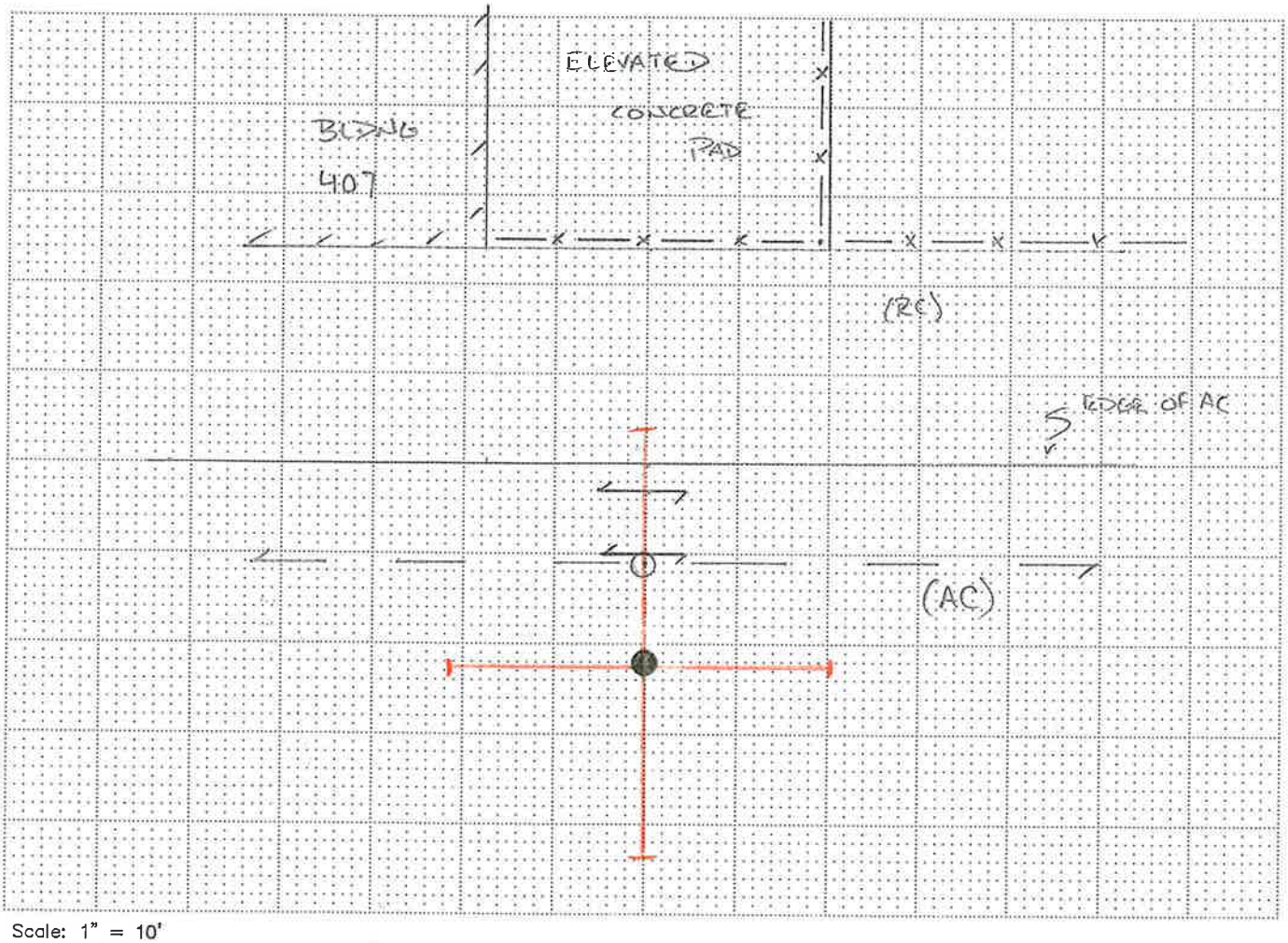
JOB: 10-106.52 | DATE: 4-1-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW 407B - DP01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

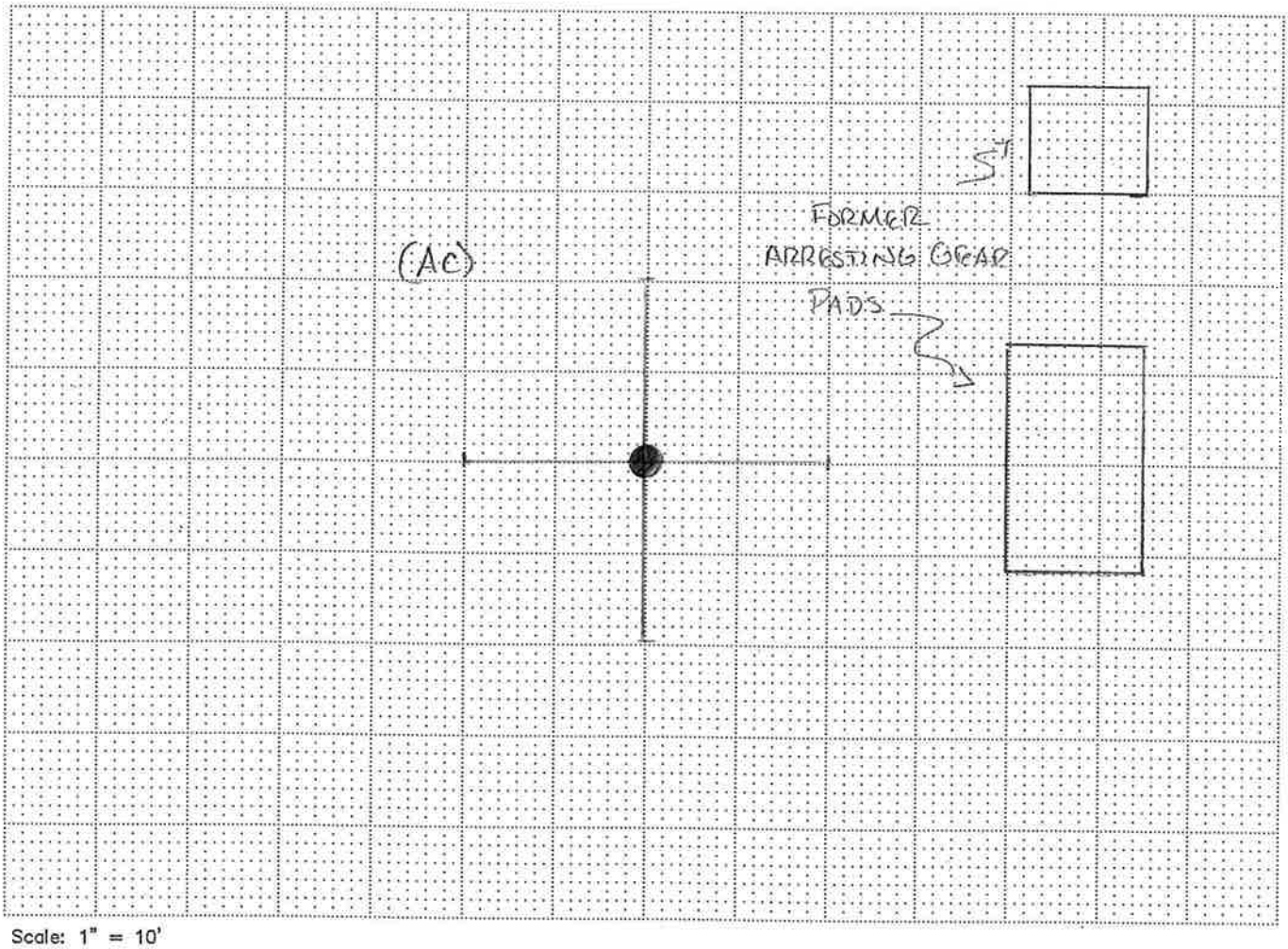
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW467B-DP01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other :	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

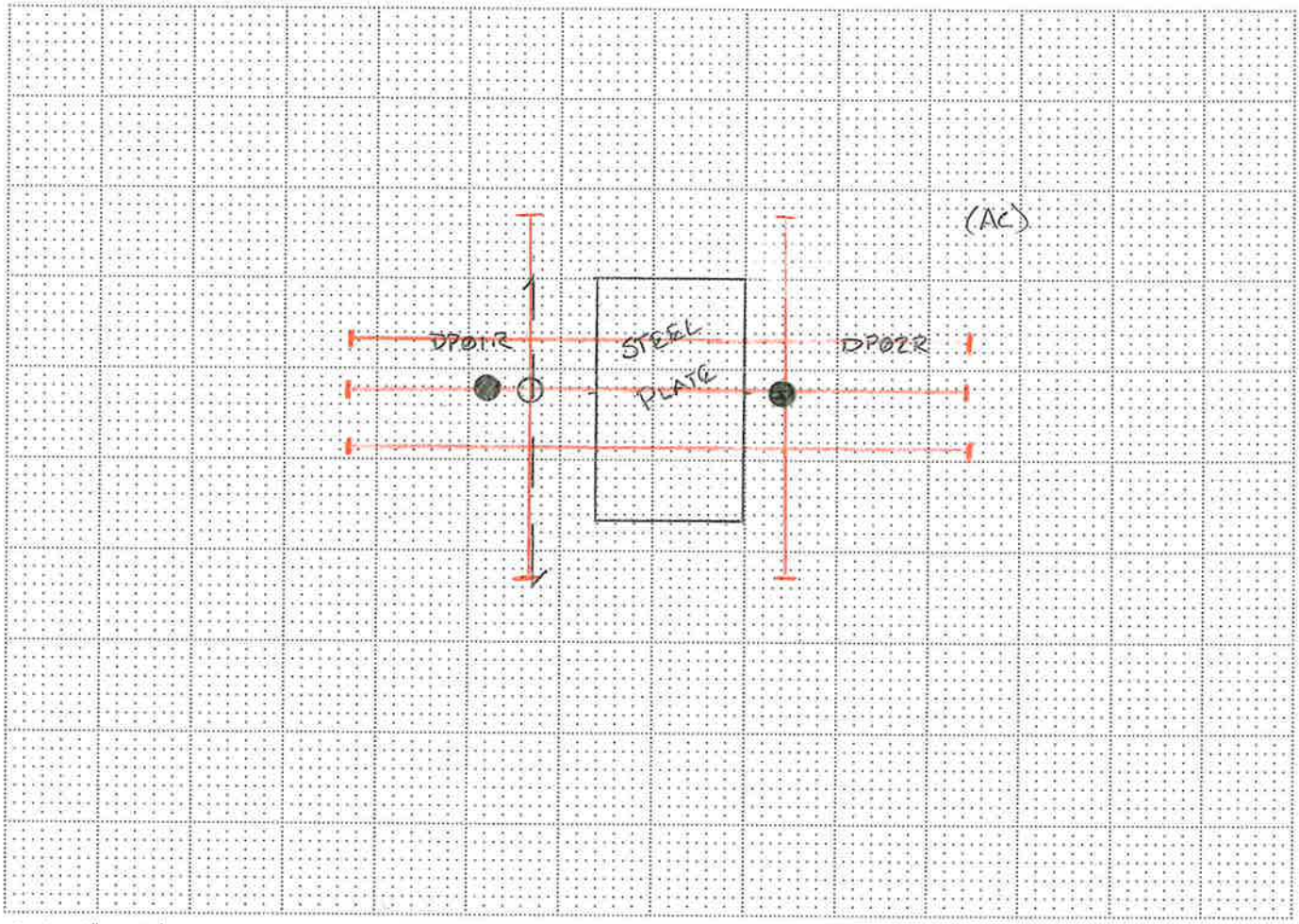
JOB: 10 - 106.52 | DATE: 4 - 1 - 10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW 467B - DP01R, DP02R



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ←→ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

* SEE MAP

IAW 467B - DP01, DP02

DATED: 3-16-10

FOR FULL SITE DESCRIPTION

PERSONNEL: TWB / DJB

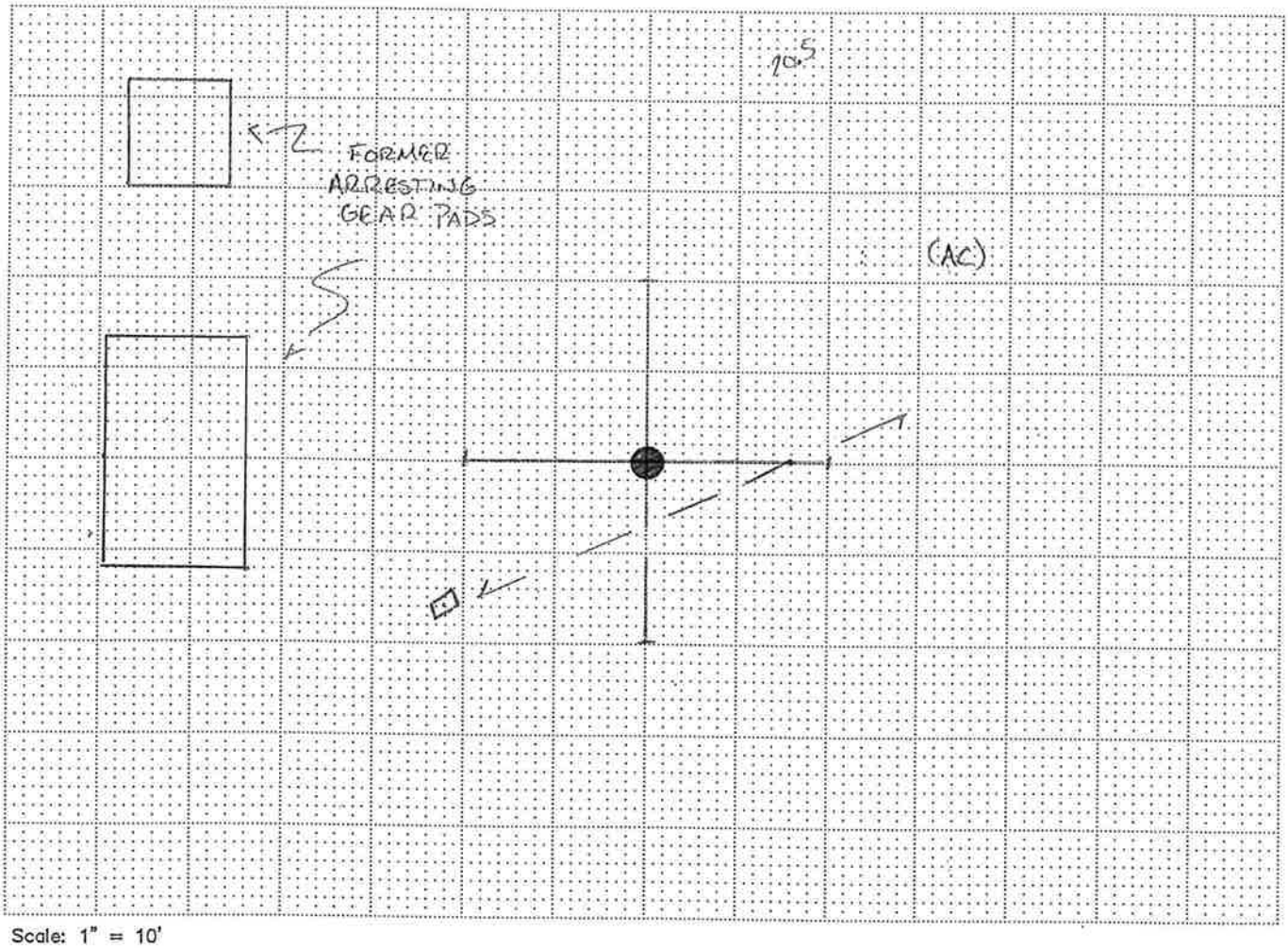
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW467B-DP02



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	✓ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other :	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

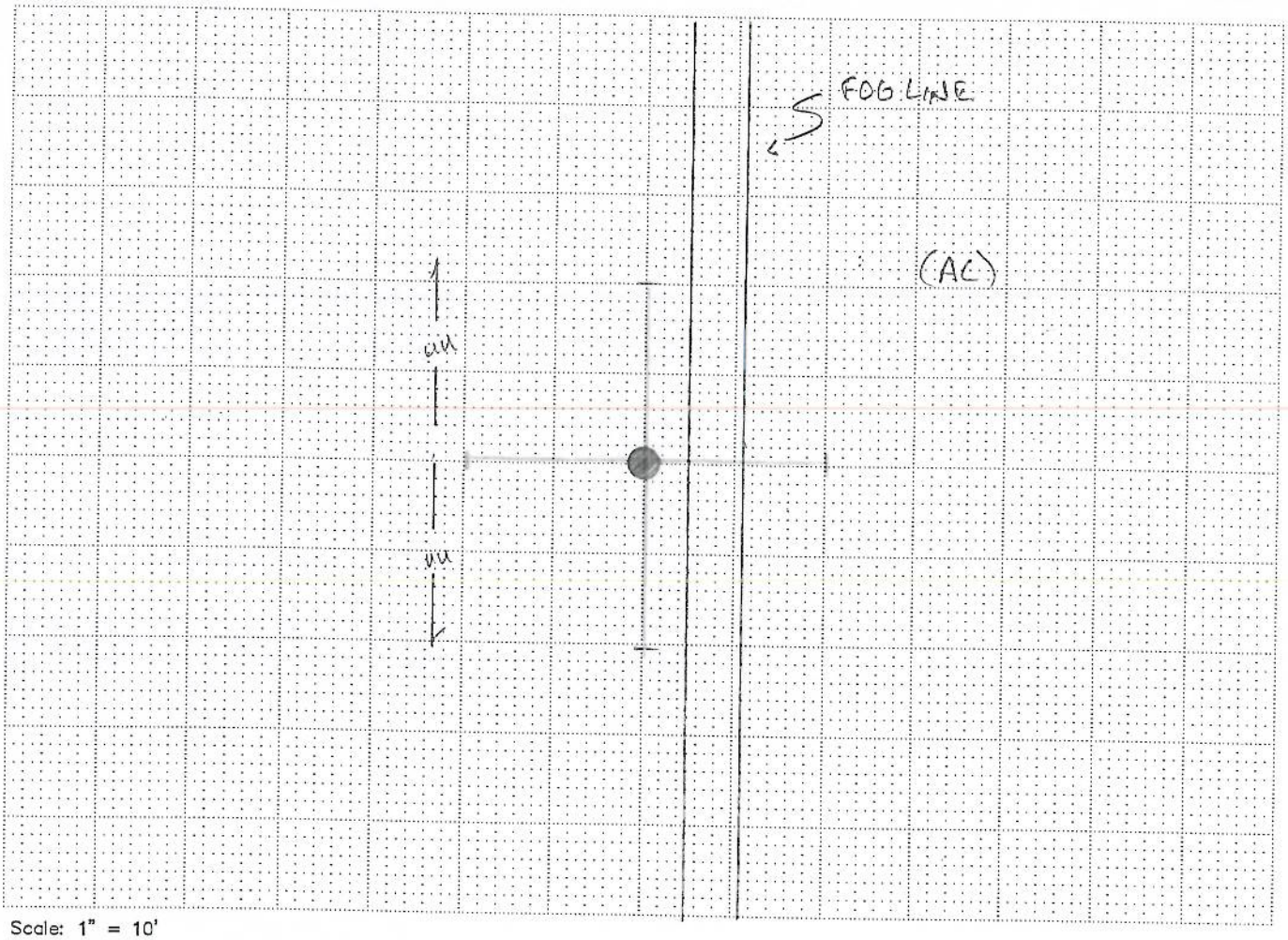
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW483-DP01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

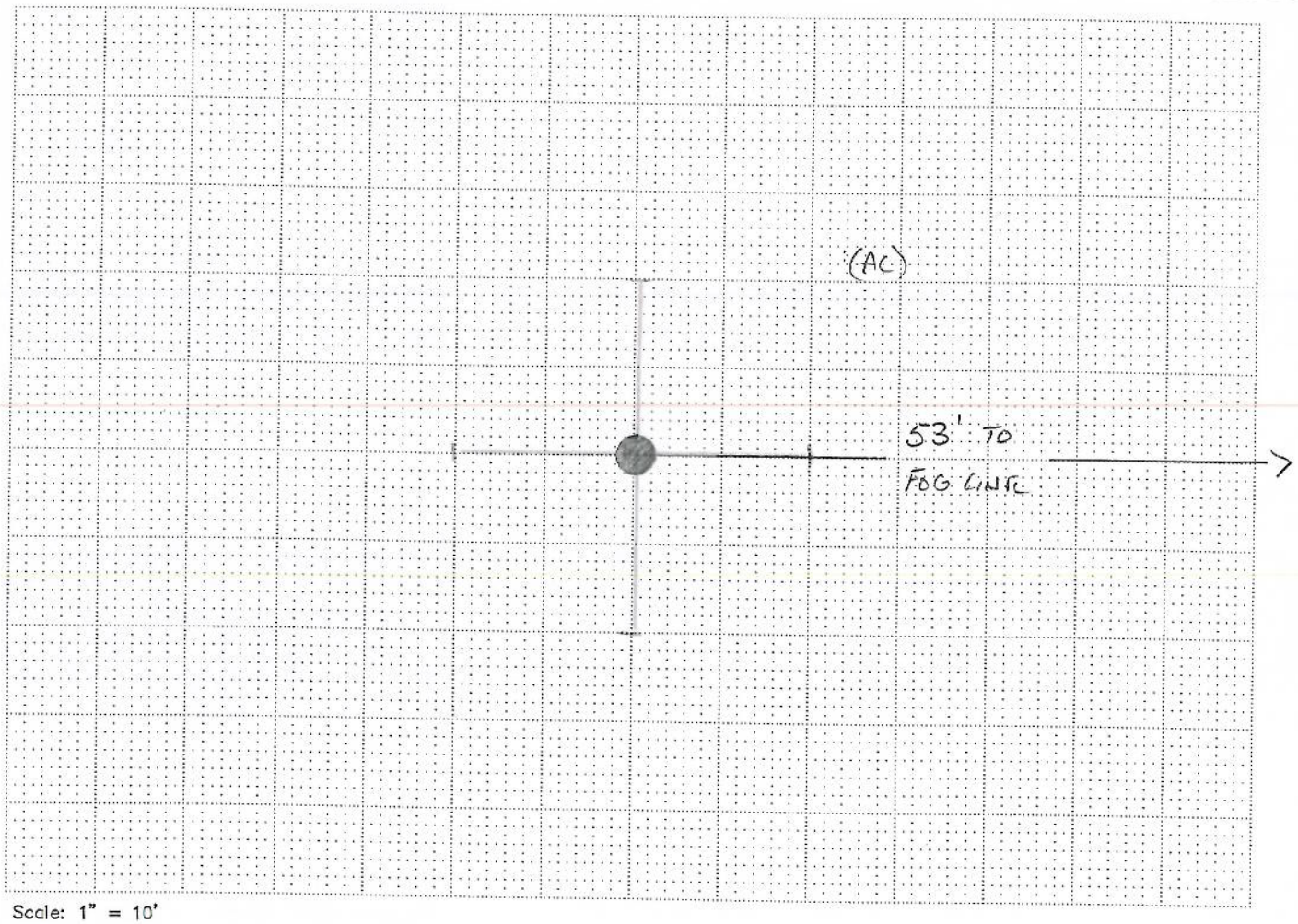
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AM483 - DP02



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferenticted Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03- -10

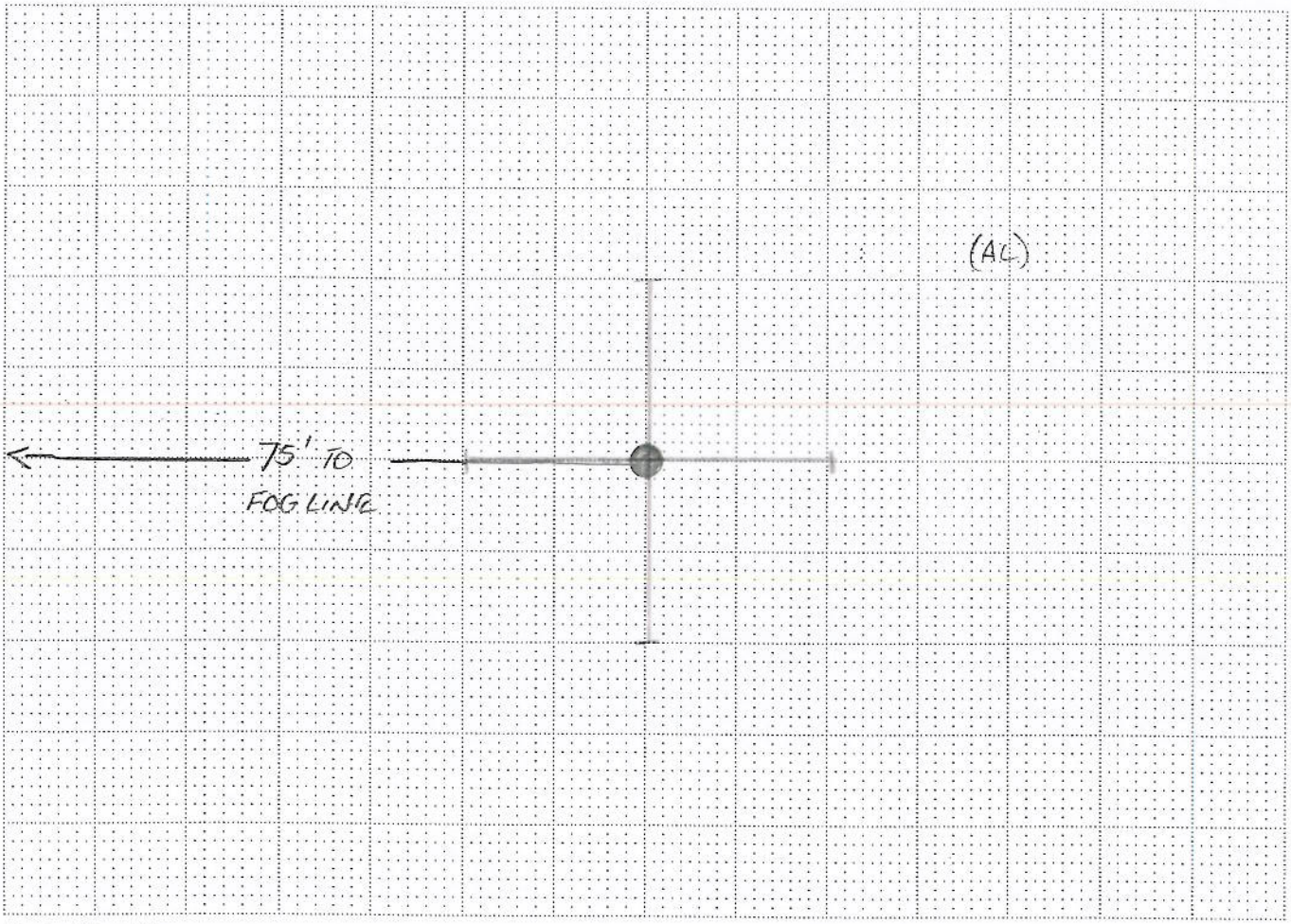
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW4833-DP02



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⟷ GPR Traverse
- ▭ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

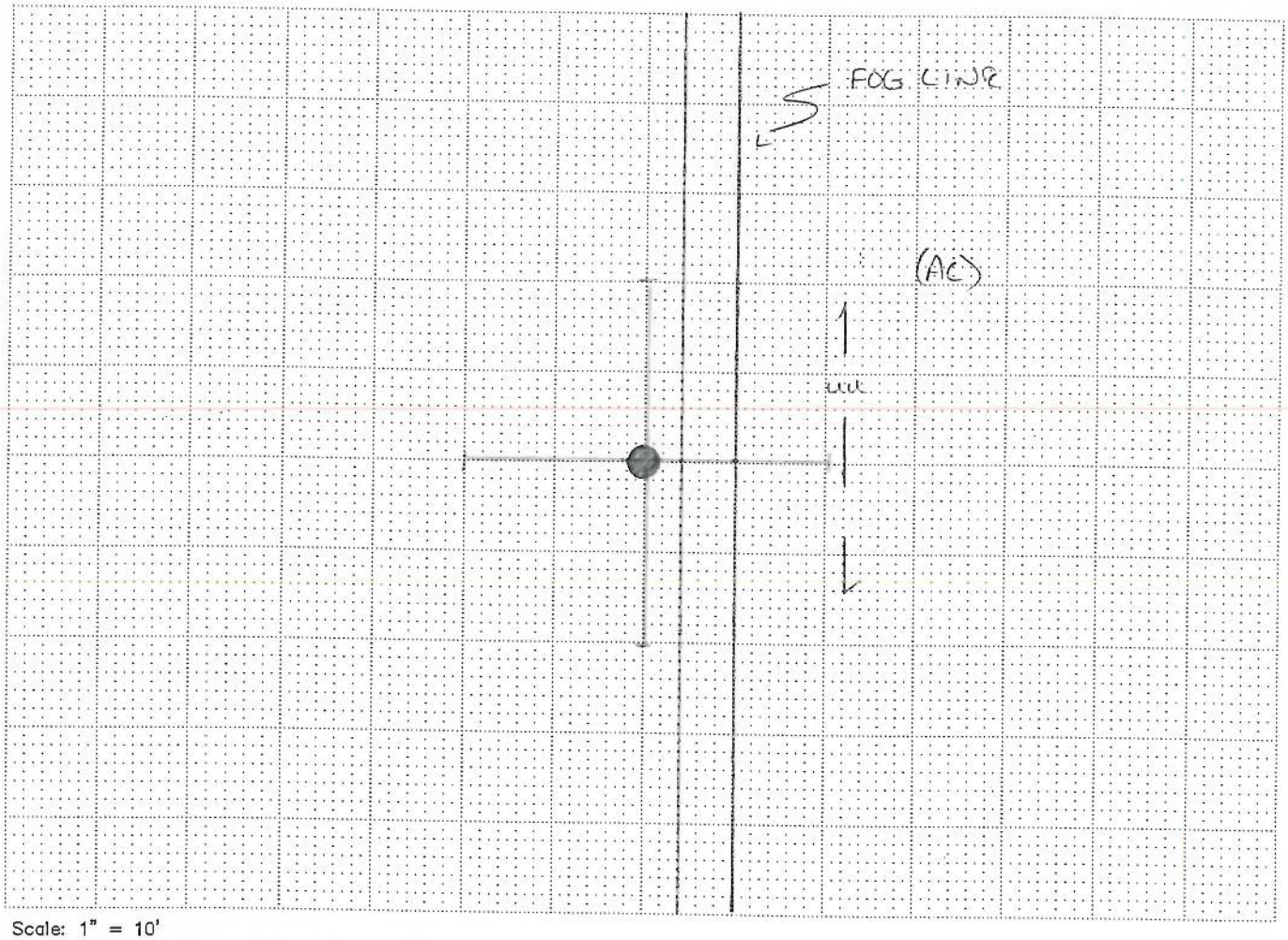
JOB: 10-106.52 | DATE: 03-15-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW483B-DP02



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- ✓ GPR

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- ✓ Dry
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REMARKS

N

PERSONNEL: TWB / DJB

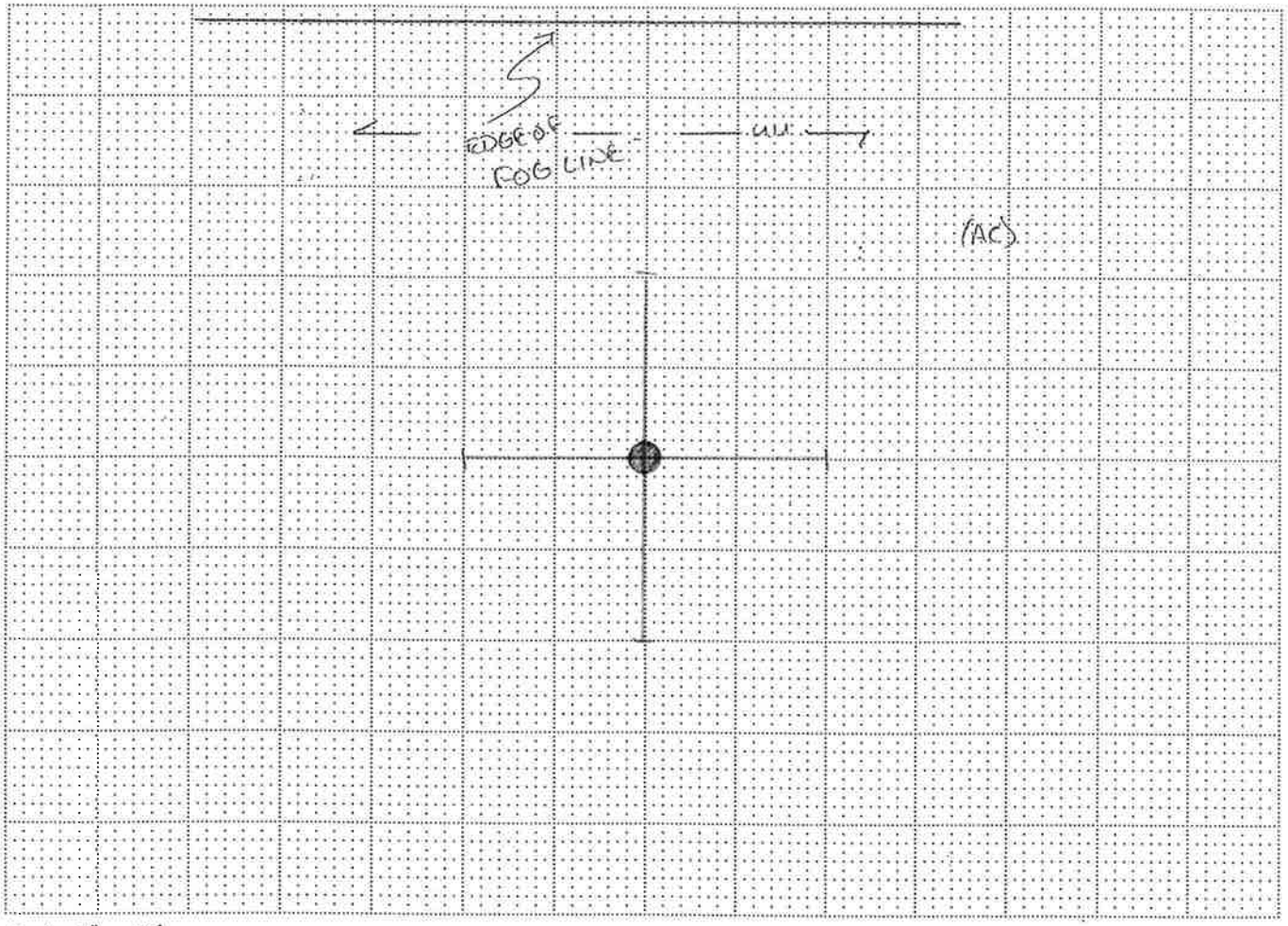
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAU 485B - DP01



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REMARKS

N

PERSONNEL: TWB / DJB

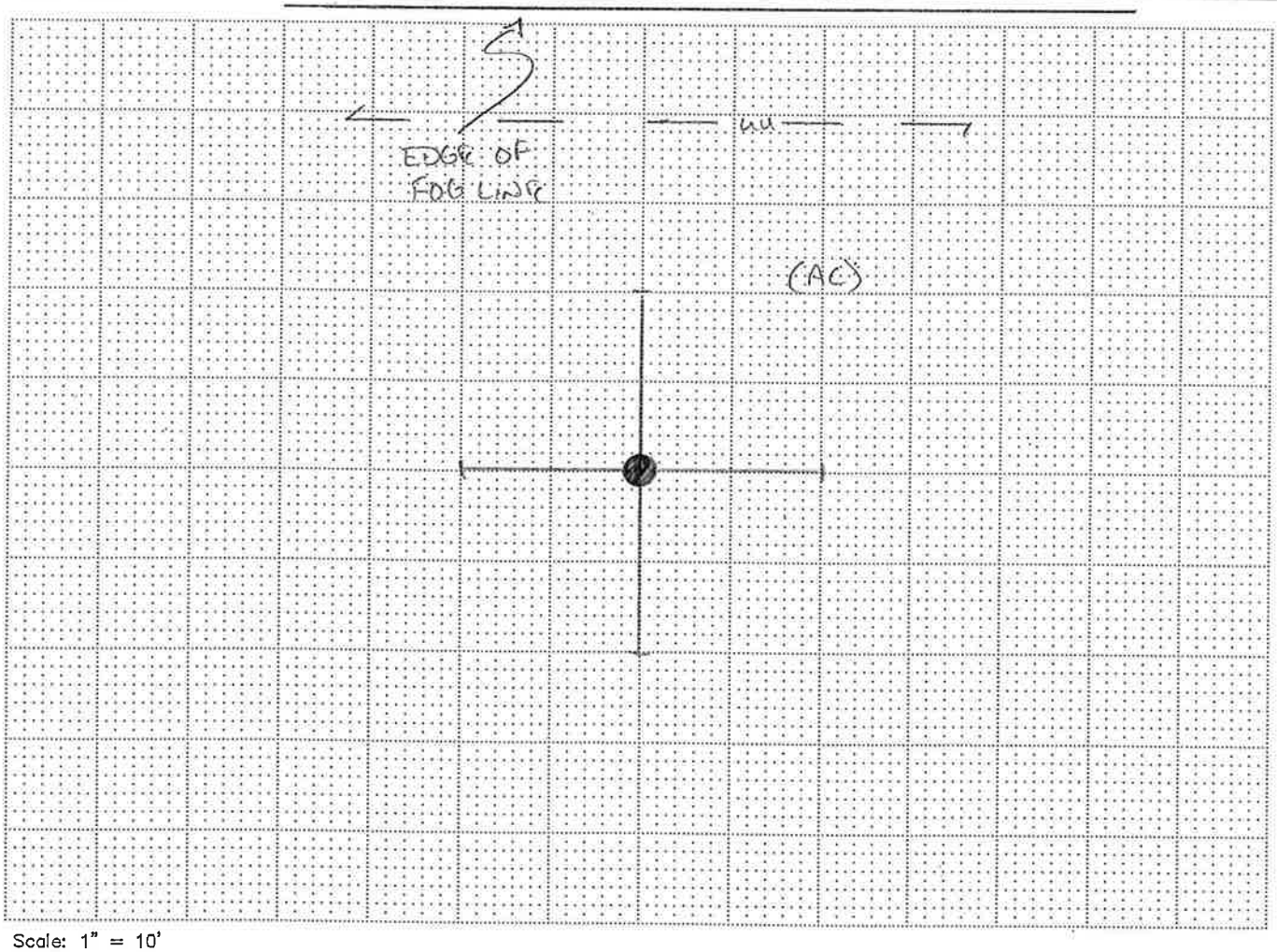
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW485B-DP02



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REMARKS

N

PERSONNEL: TWB / DJB

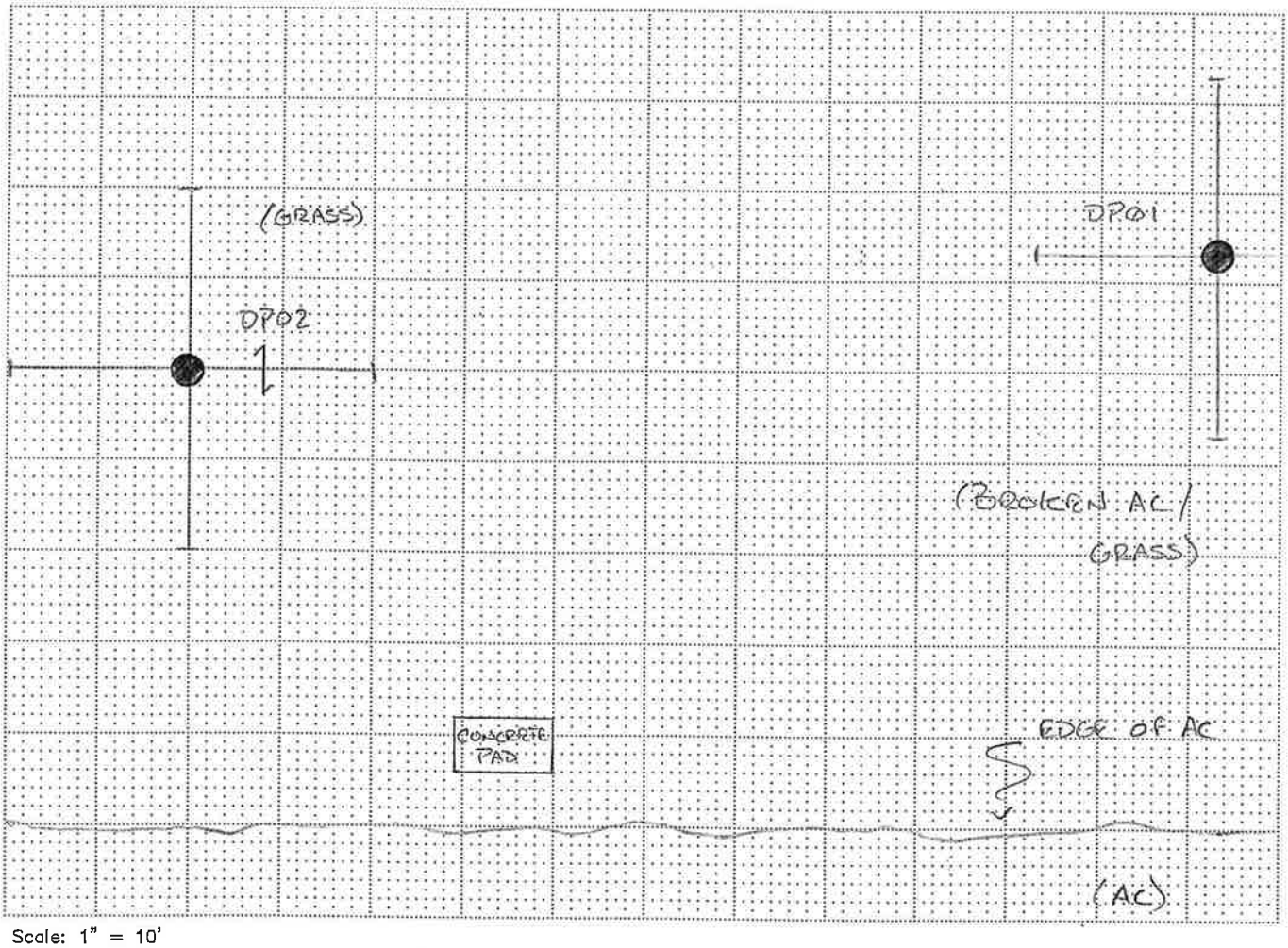
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW488-DP01, DP02



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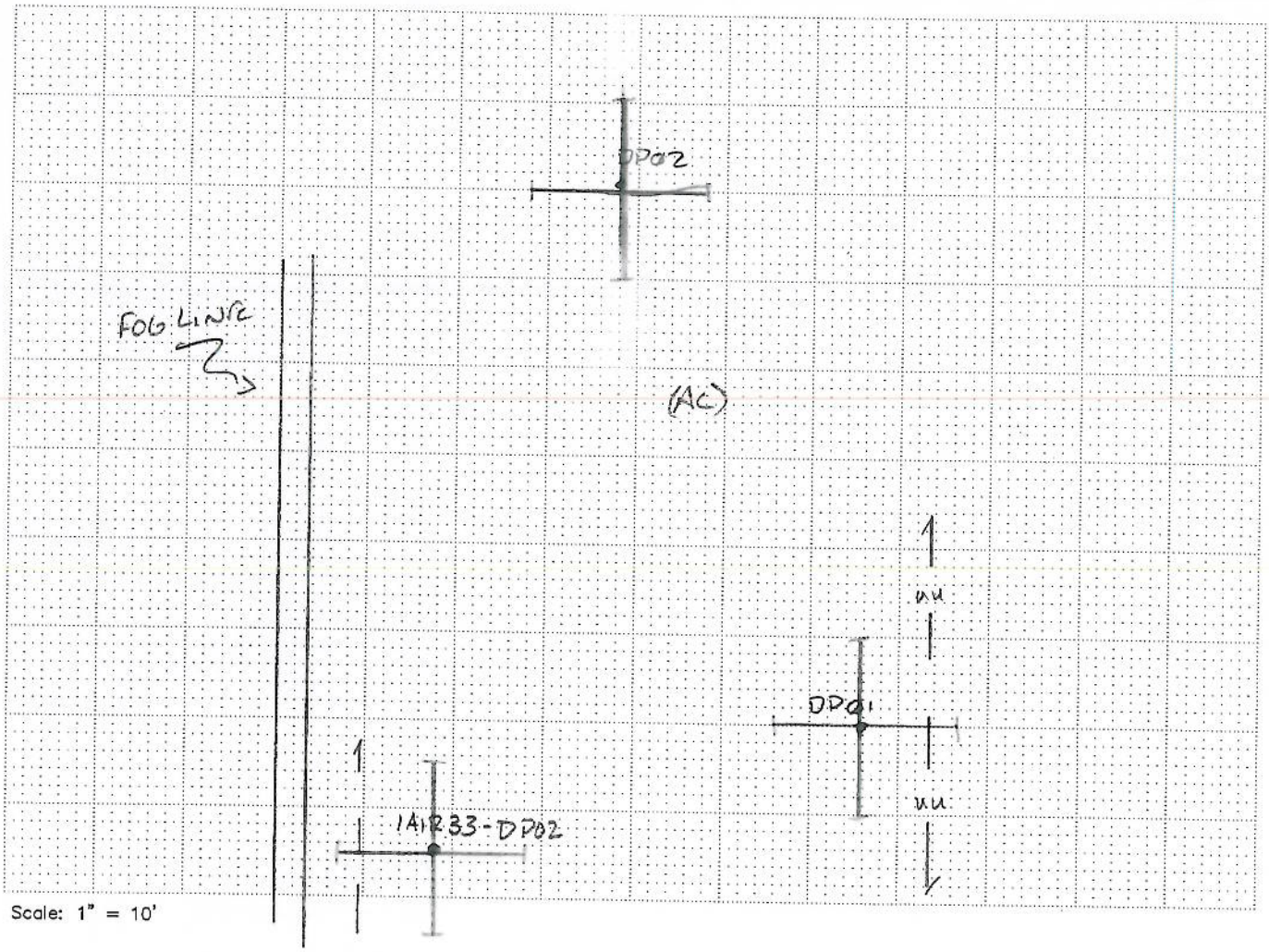
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB	CLIENT: CH2M HILL
JOB: 10-106.52 DATE: 03-15-10	LOCATION: ALAMEDA PT., ALAMEDA CA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: 1AW495A-DP01, DP02



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REMARKS

N

PERSONNEL: TWB / DJB

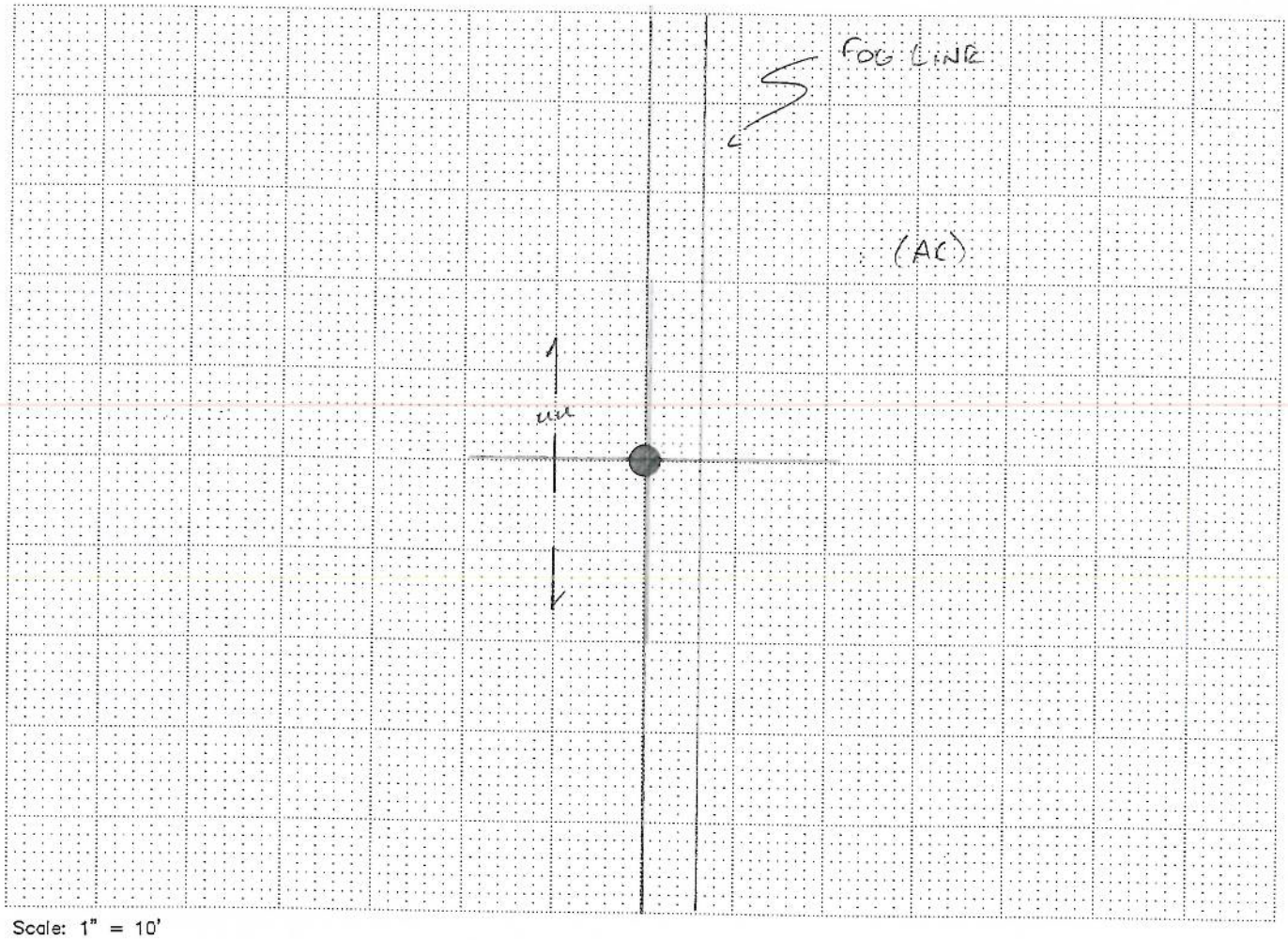
JOB: 10-106.52 | DATE: 03-15-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAM495B-DP01



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- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
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REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

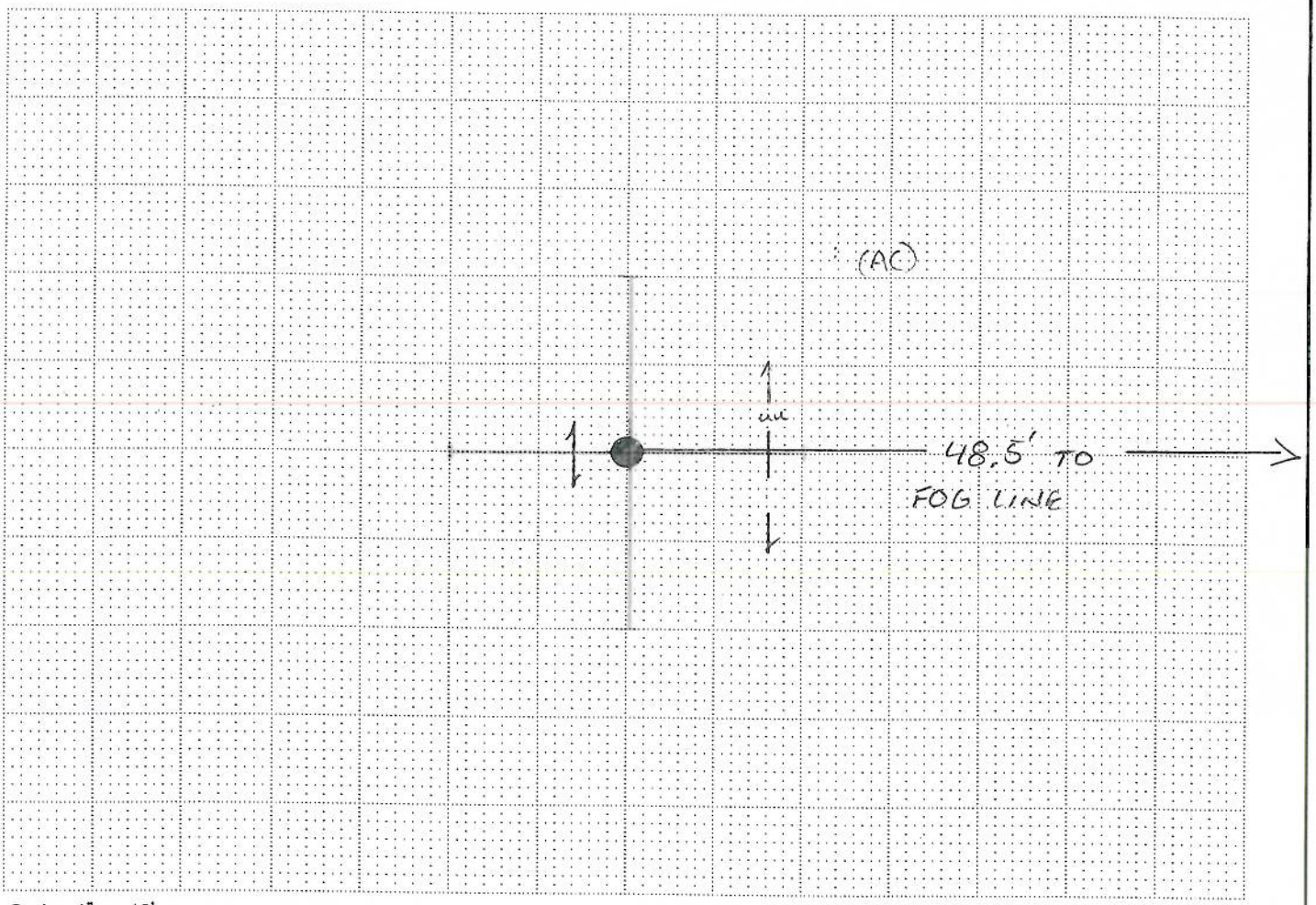
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAM 4953-DP02



Scale: 1" = 10'

EXPLANATION

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- ✓ EMI (Induction)
- ✓ Ambient
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Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-16-10

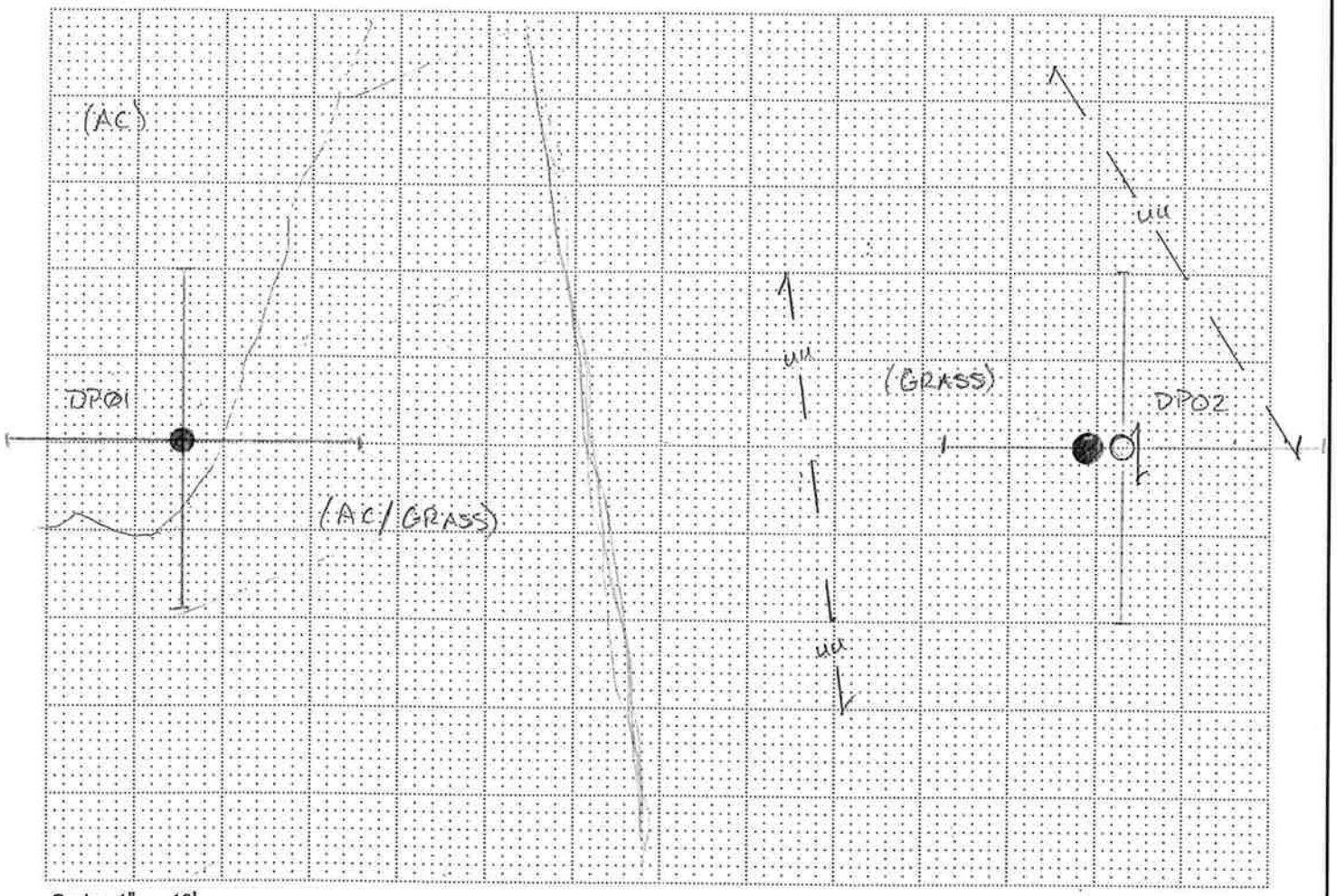
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW496-DP01, DP02



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✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
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✓ M Scope	✓ Ambient	_ other
_ other :	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

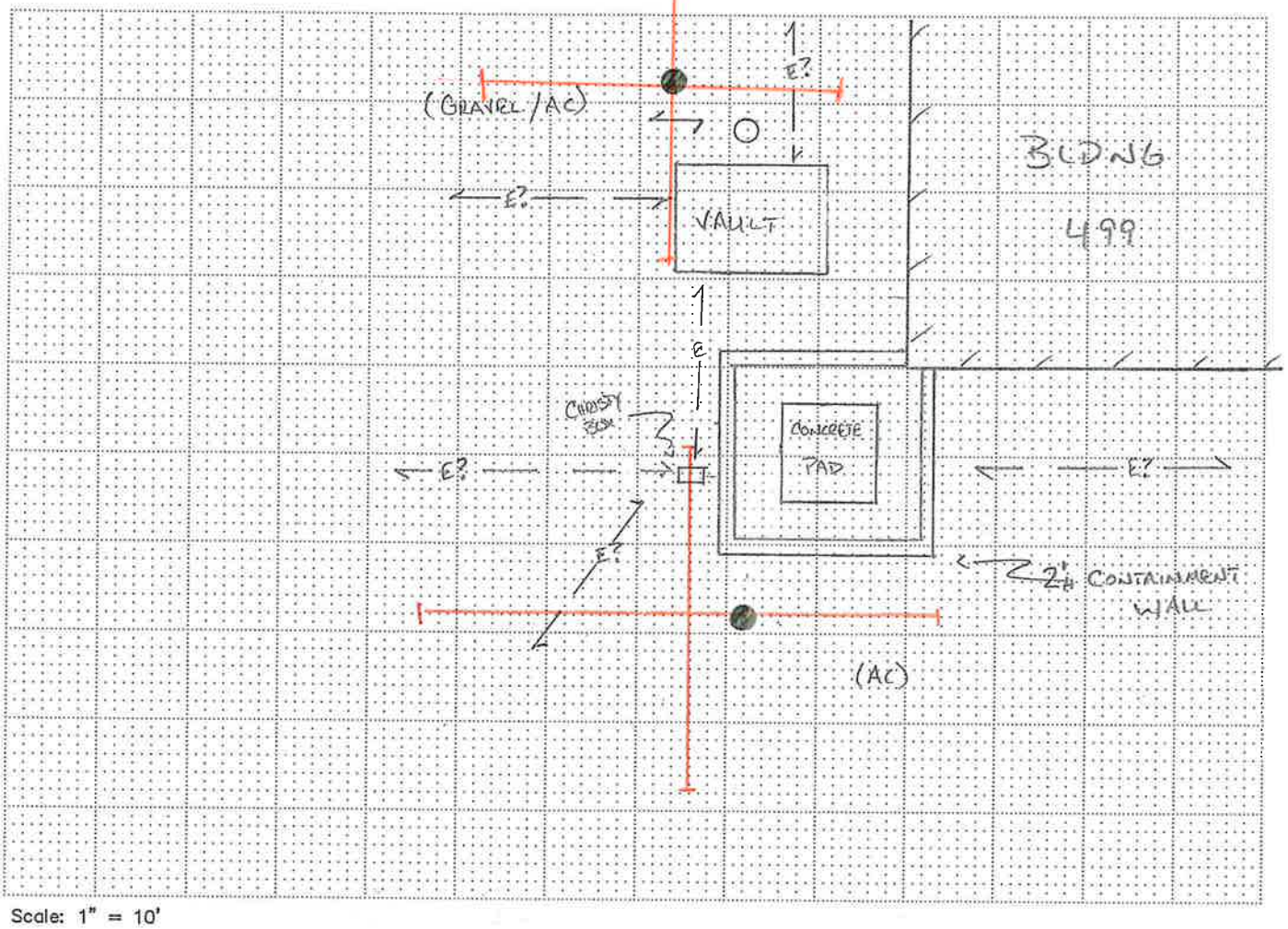
JOB: 10 - 106.52 | DATE: 5 - 1 - 10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW 499 - DP01, DP02



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EXPLANATION

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□ OR ←	Localized GPR Anomaly
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REMARKS

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PERSONNEL: TWB / DJB

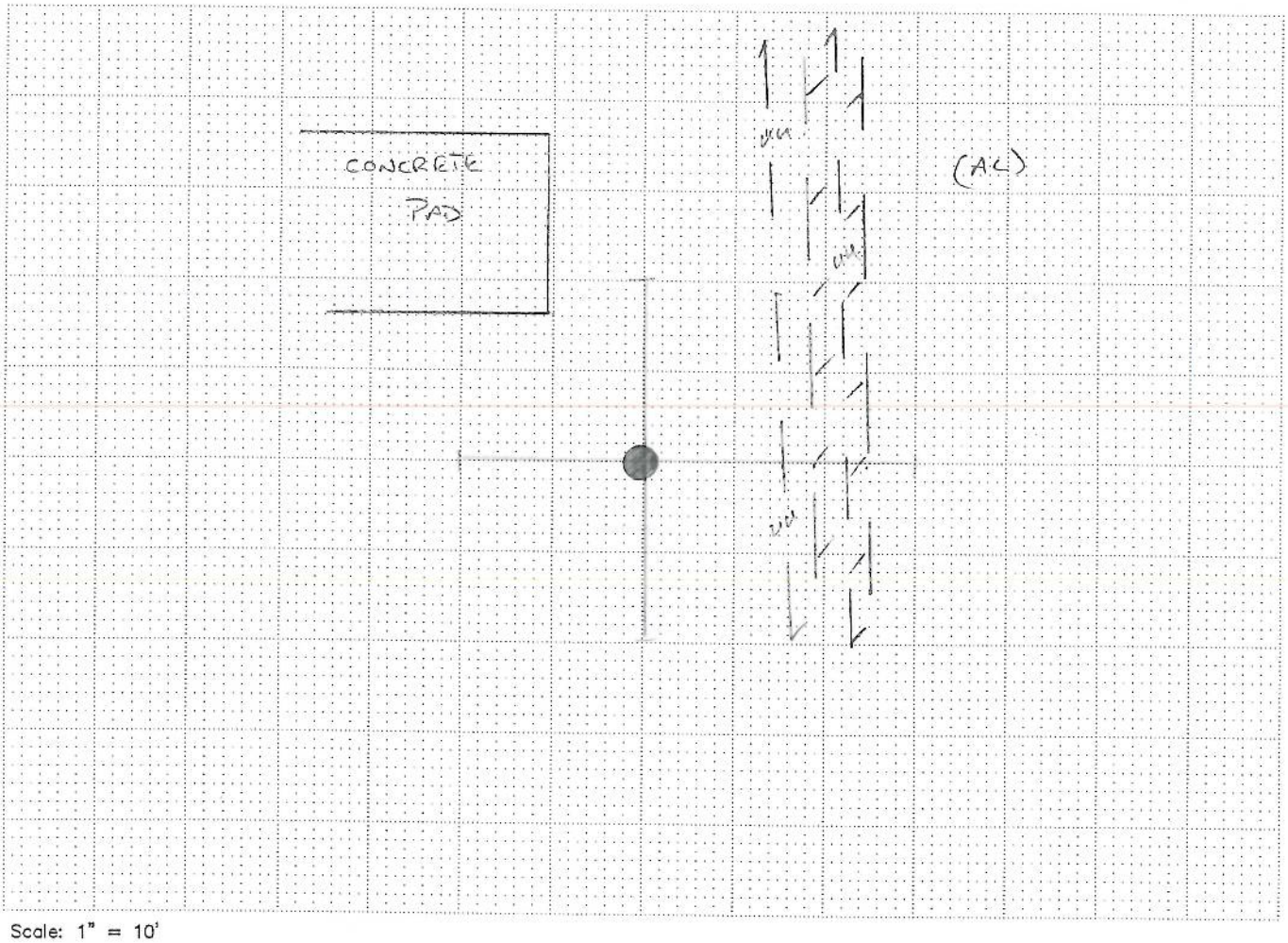
JOB: 10-106.52 | DATE: 03-11-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW599 A DP-01



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PERSONNEL: TWB / DJB

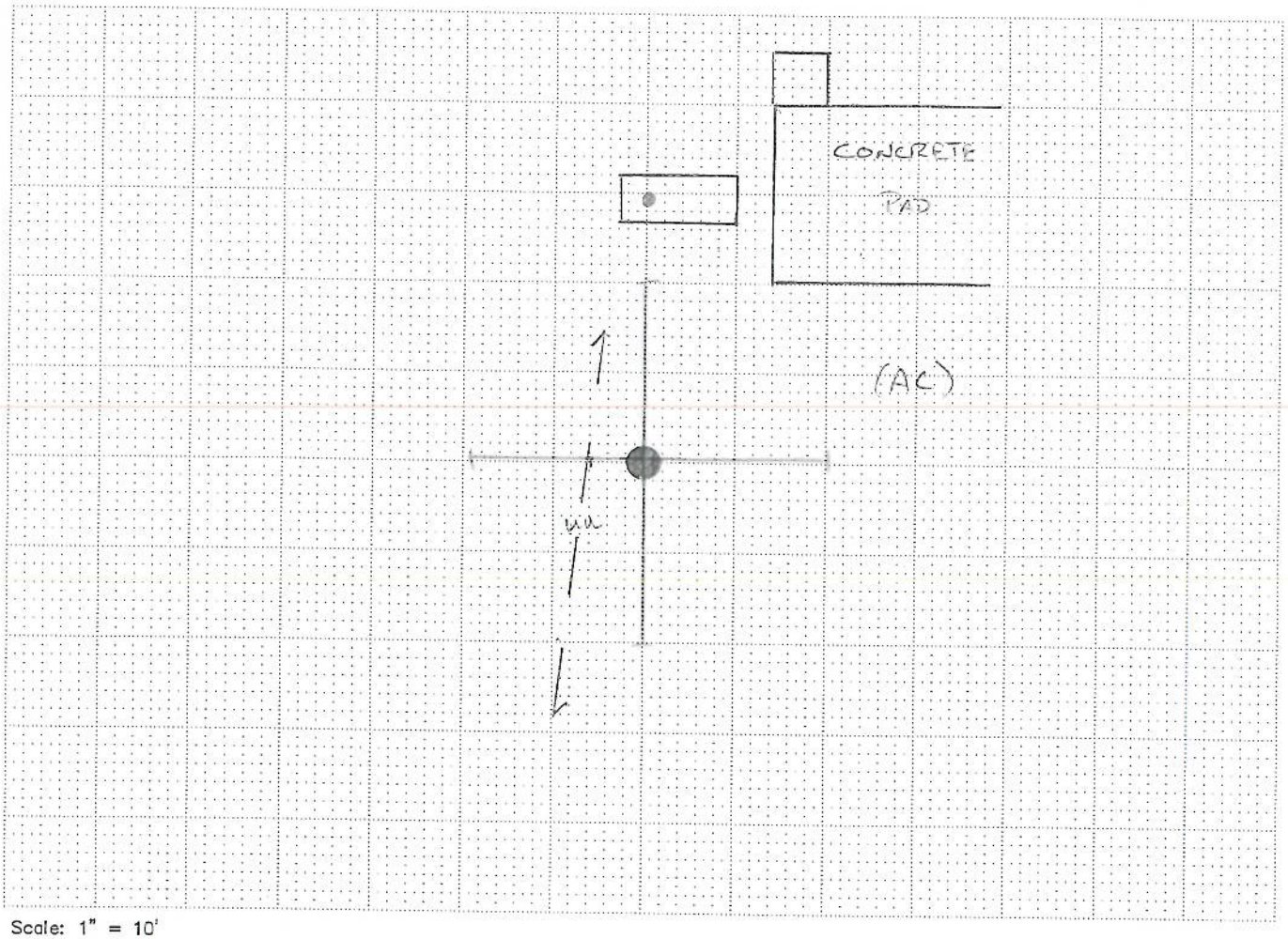
JOB: 10-106.52 | DATE: 03-11-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AW599A DP-02



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PERSONNEL: TWB / DJB

JOB: 10-106.52 DATE: 03-11-10

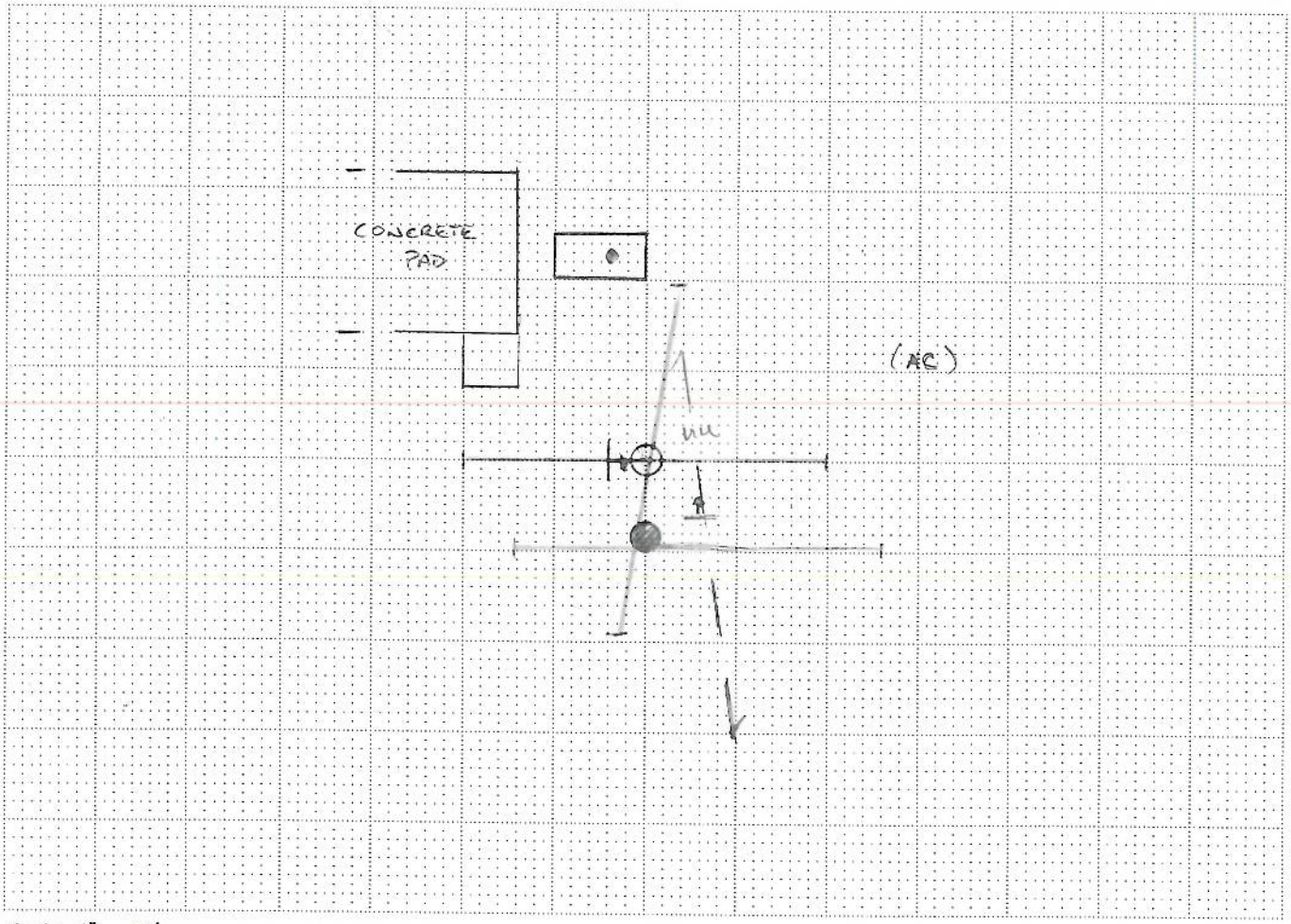
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAN599B-DP01



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PERSONNEL: TWB / DJB

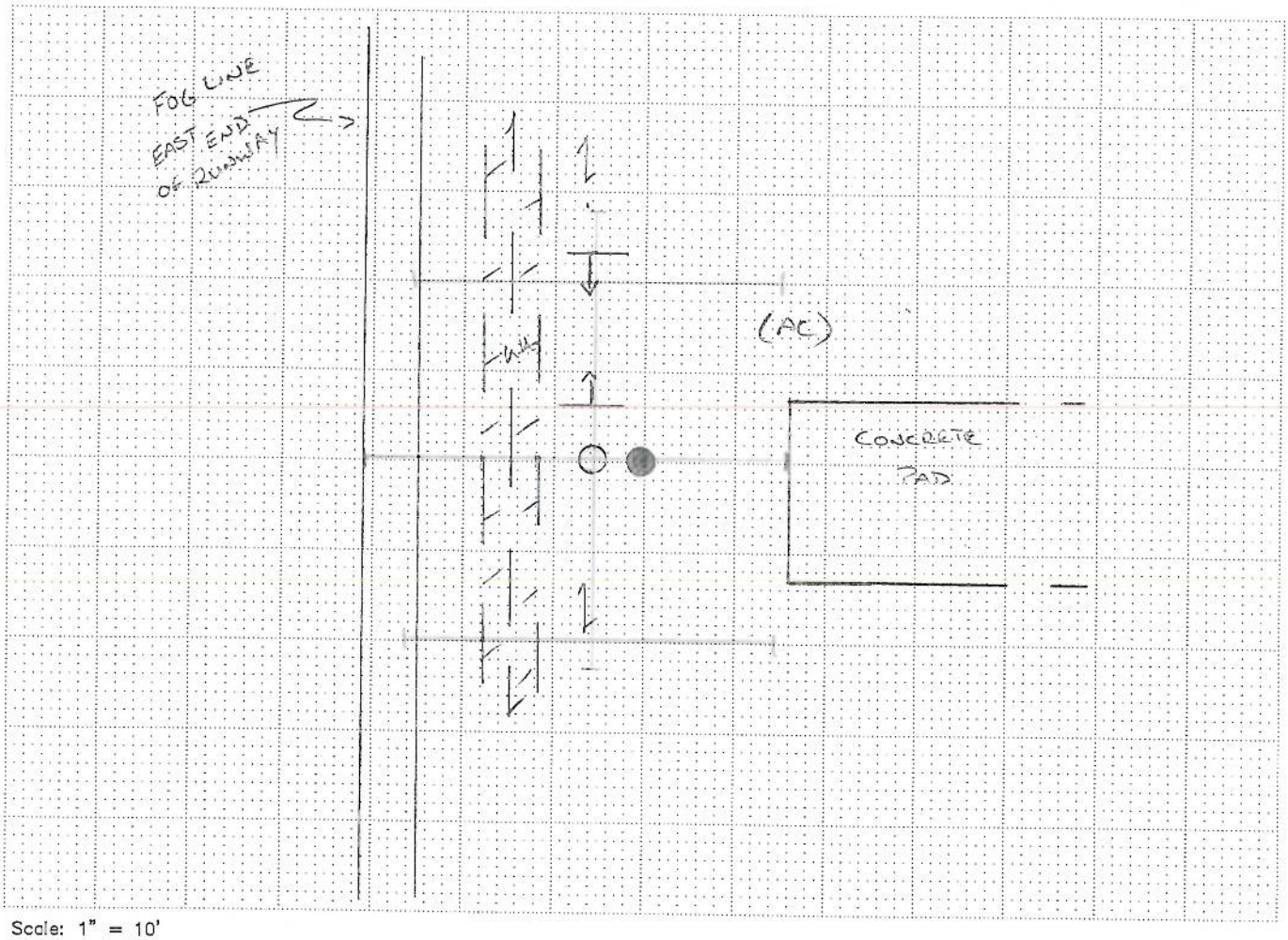
JOB: 10-106.52 | DATE: 03-11-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAW599 B DP-02



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REMARKS

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PERSONNEL: TWB / DJB

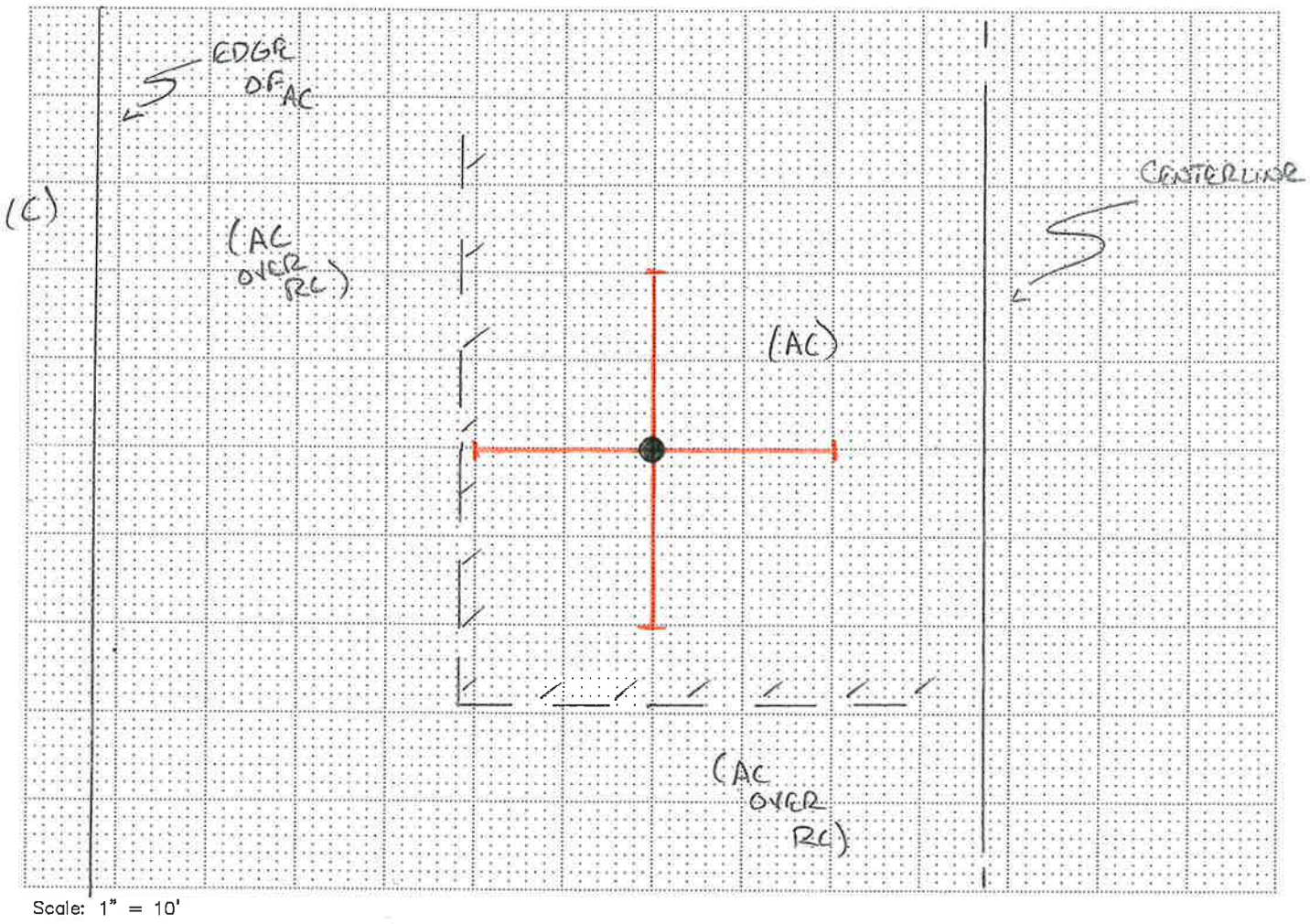
JOB: 10 - 106.52 | DATE: 4 - 1 - 10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 2 CAPS - DP01



Scale: 1" = 10'

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REMARKS

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PERSONNEL: TWB / DJB

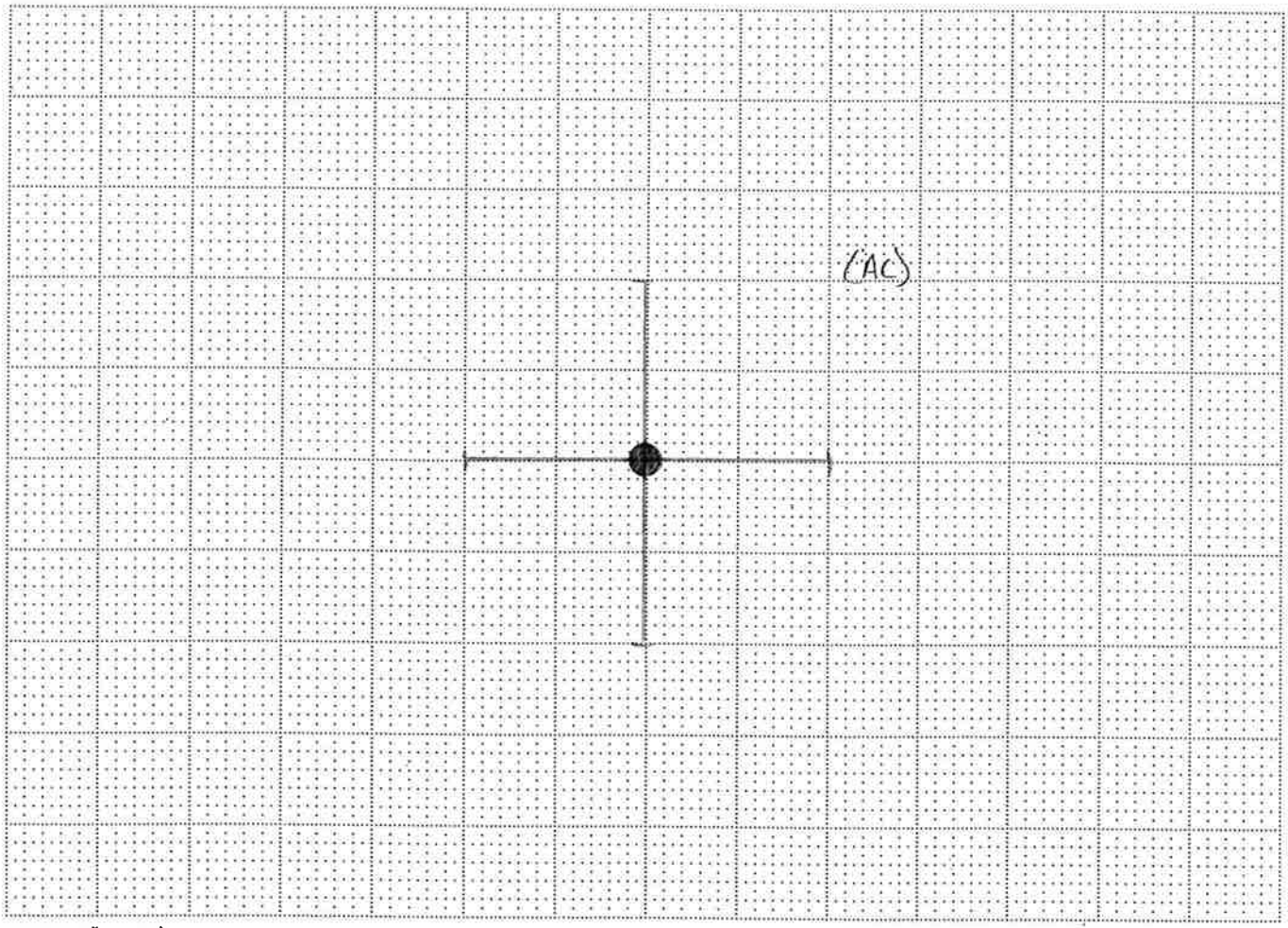
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: LAFTA-DP01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- —— GPR Traverse
- ▭ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-16-10

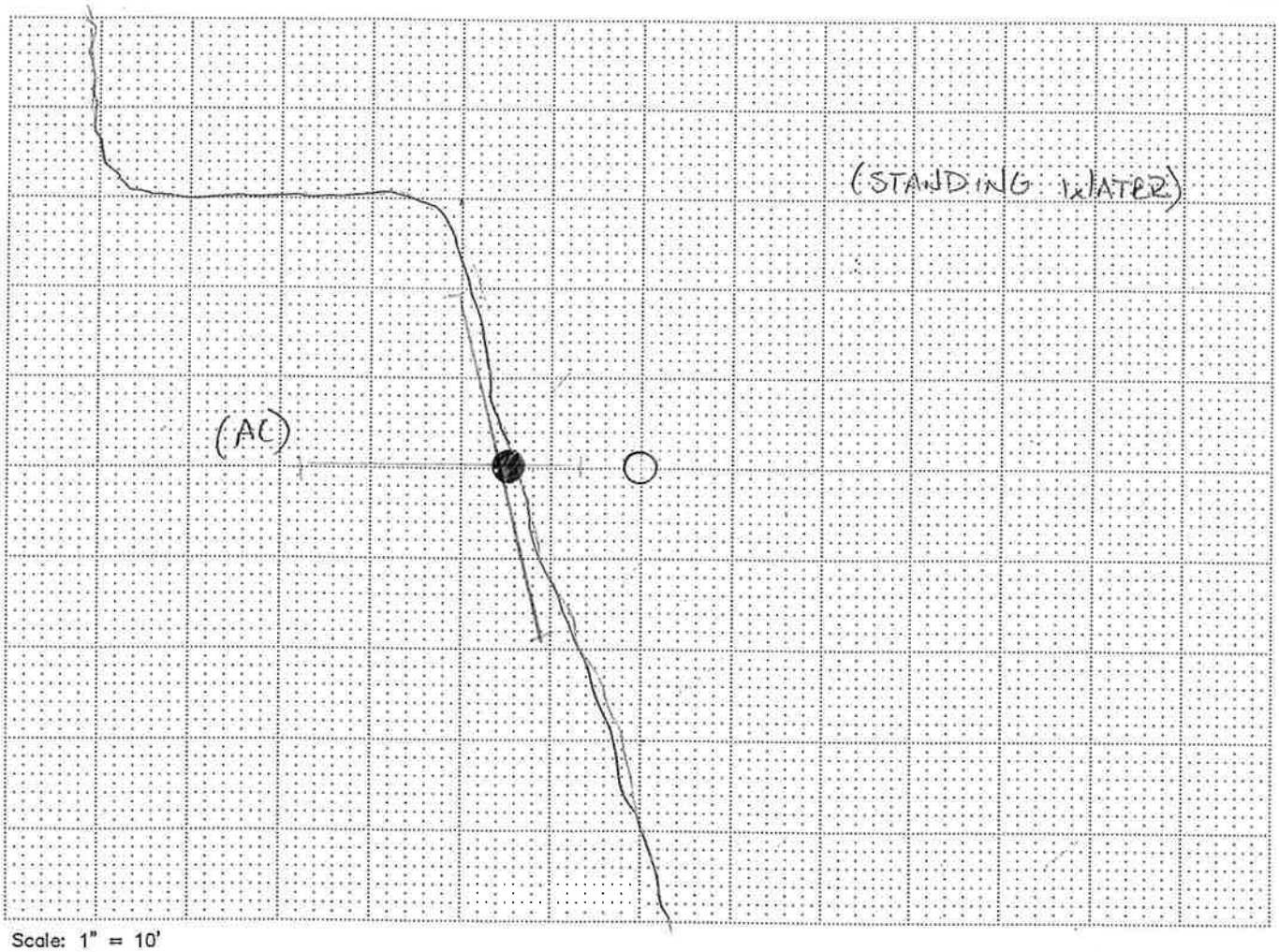
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAFTA-DP02



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	✓ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

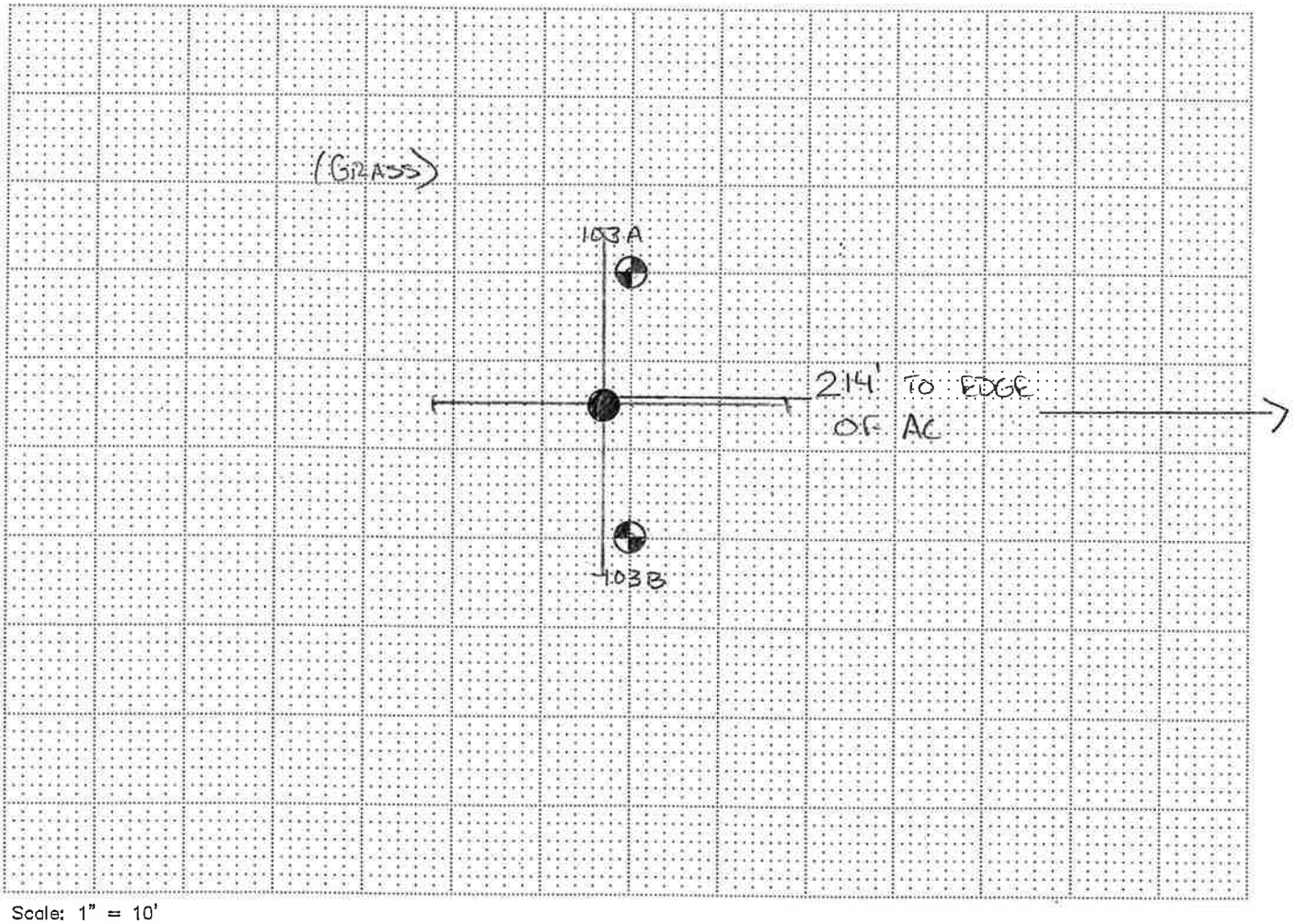
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP03



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other :	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

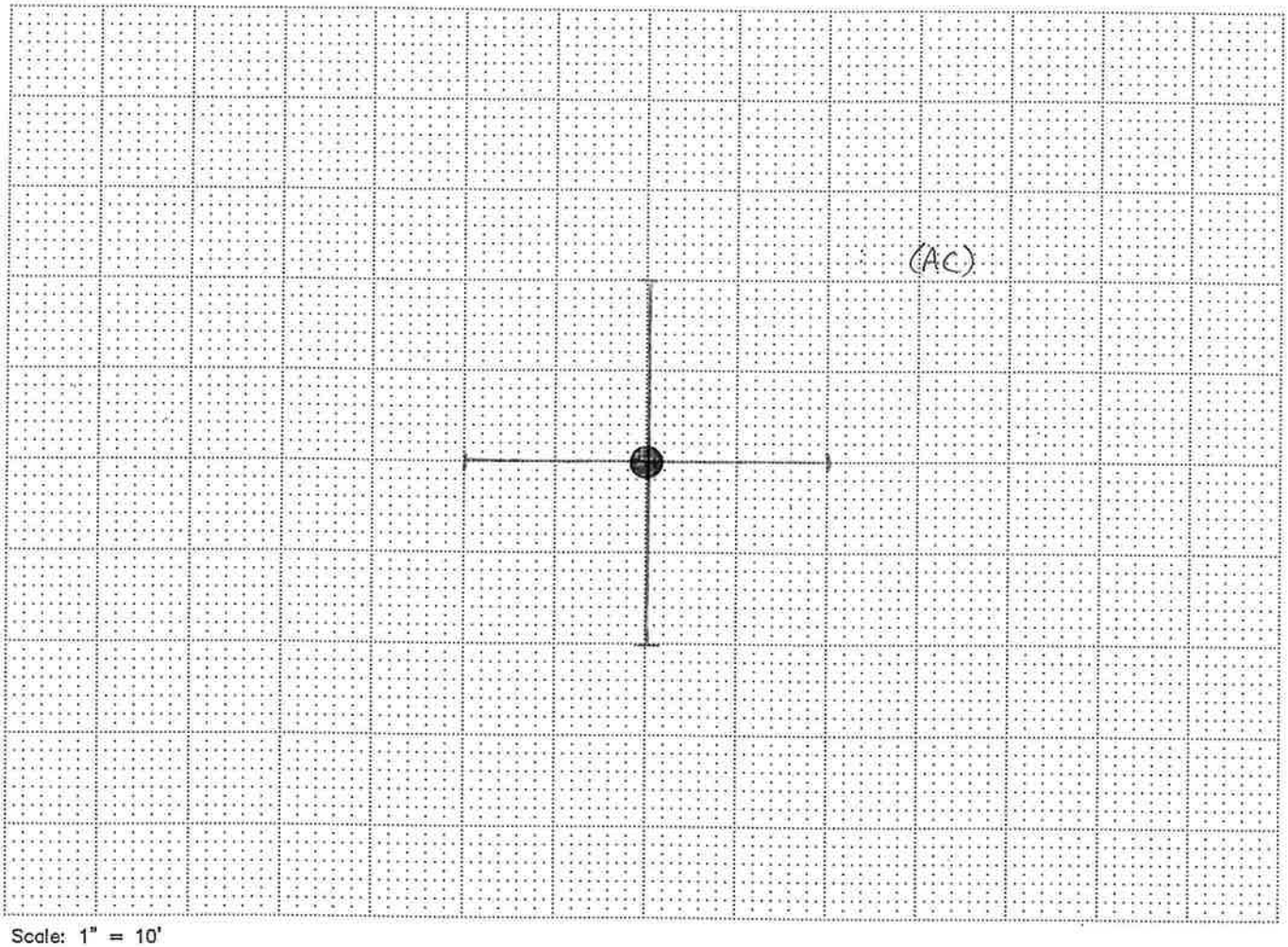
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA-DP04



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other :	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

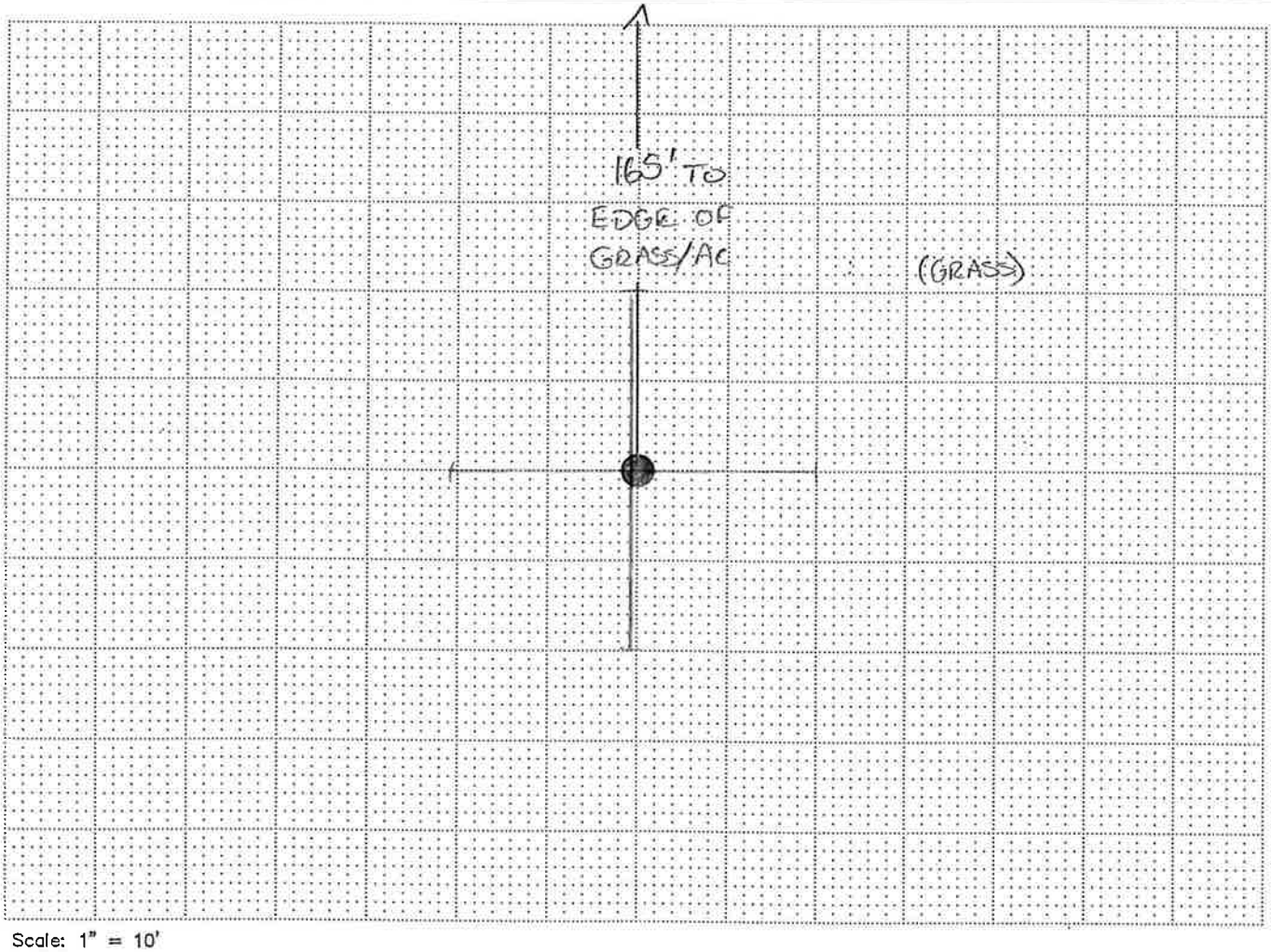
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP05



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

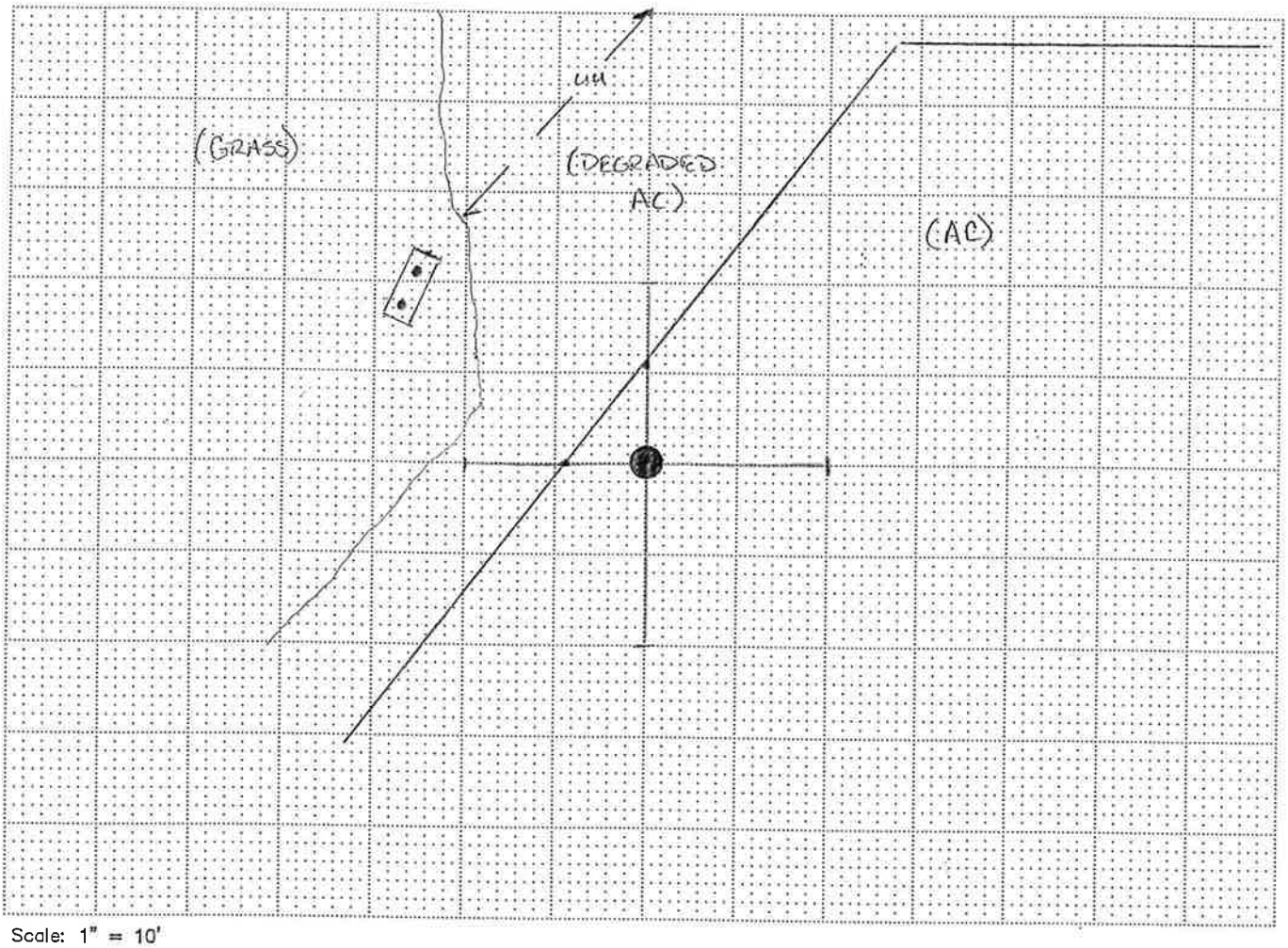
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAFTA-DP06



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

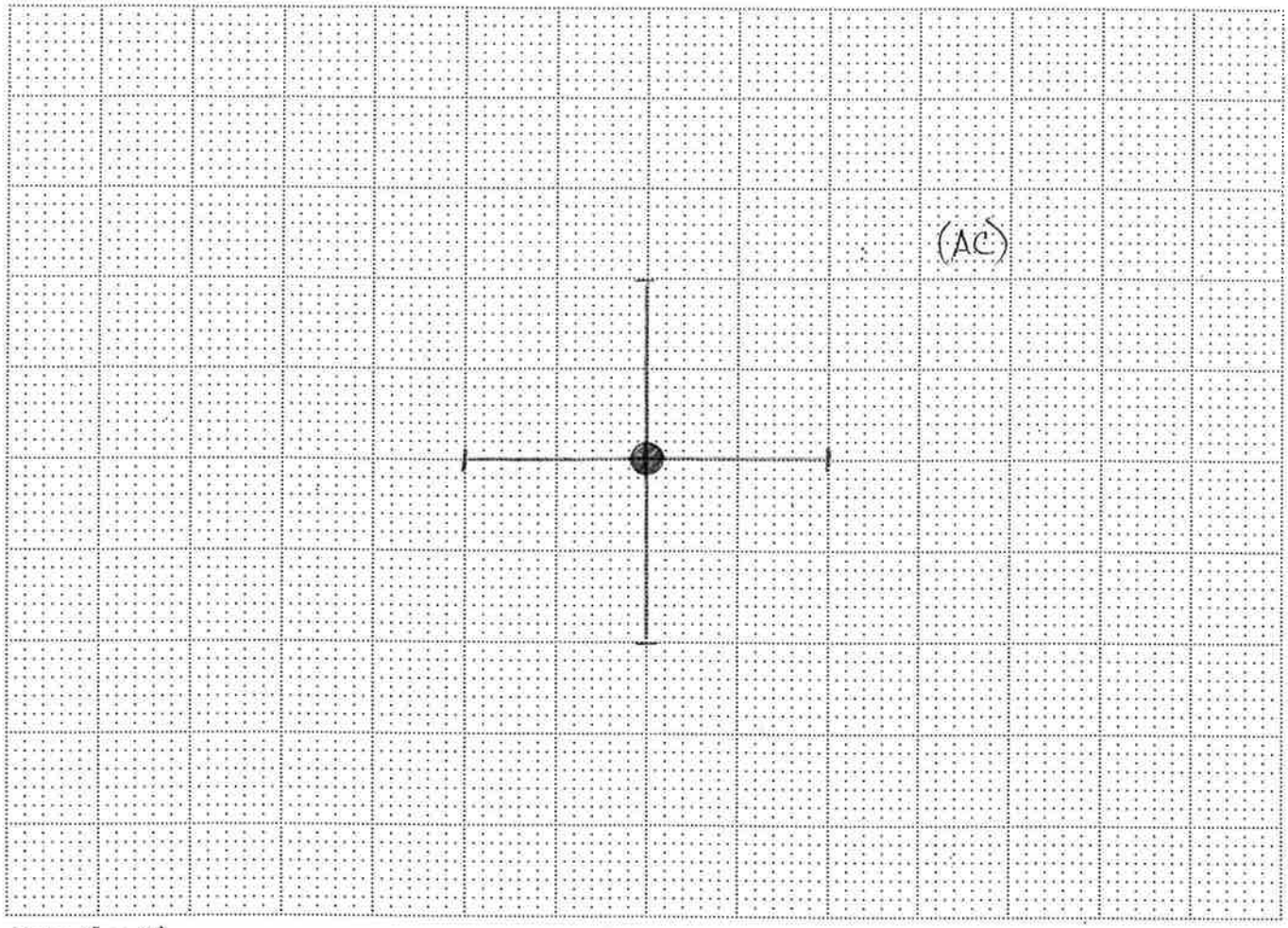
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA Pt., ALAMEDA CA

BORING: / AFTA - DP07



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

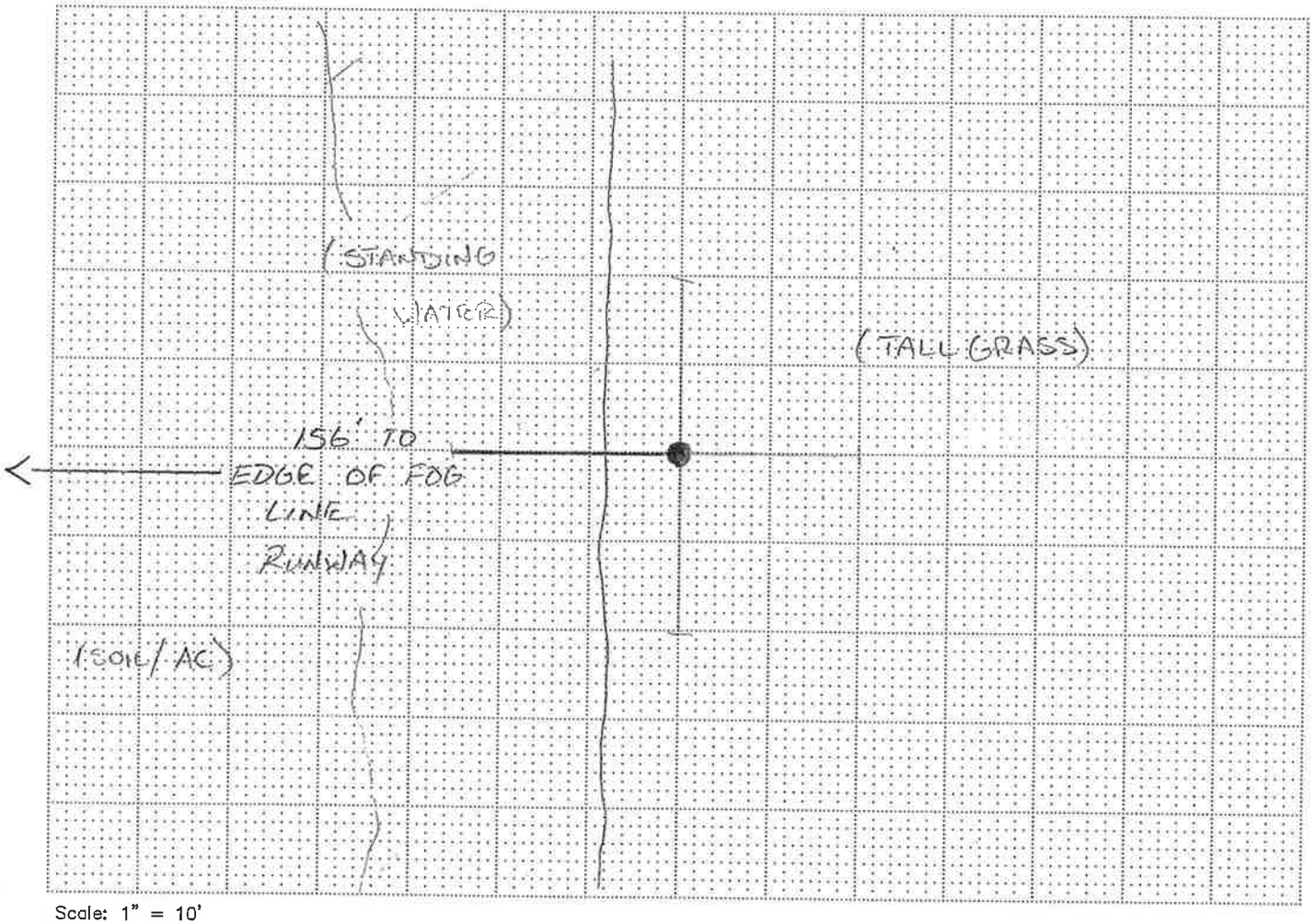
JOB: 10-106.52 | DATE: 03-17-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP08



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ←—— Localized GPR Anomaly
- ——— Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

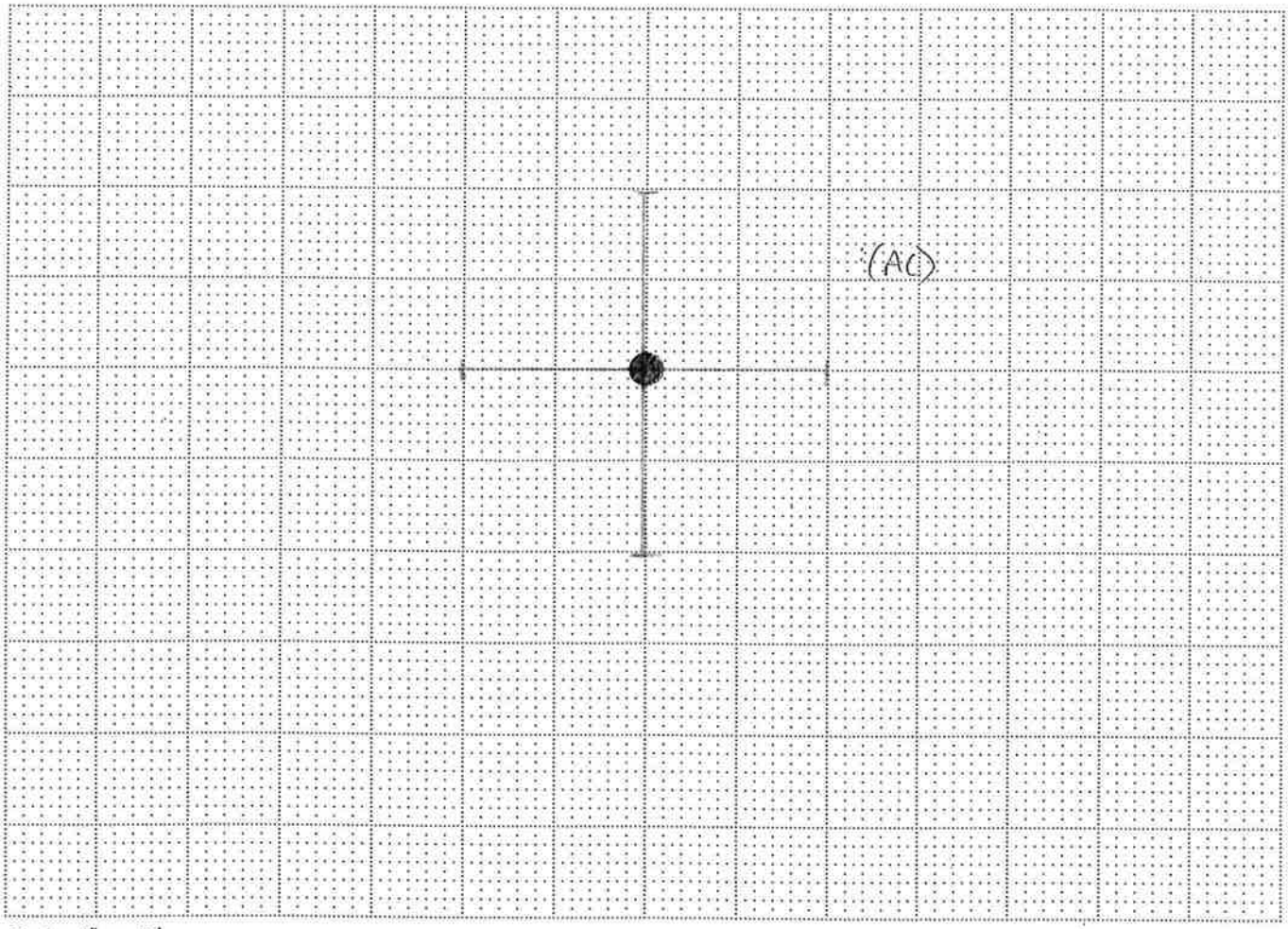
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP09



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

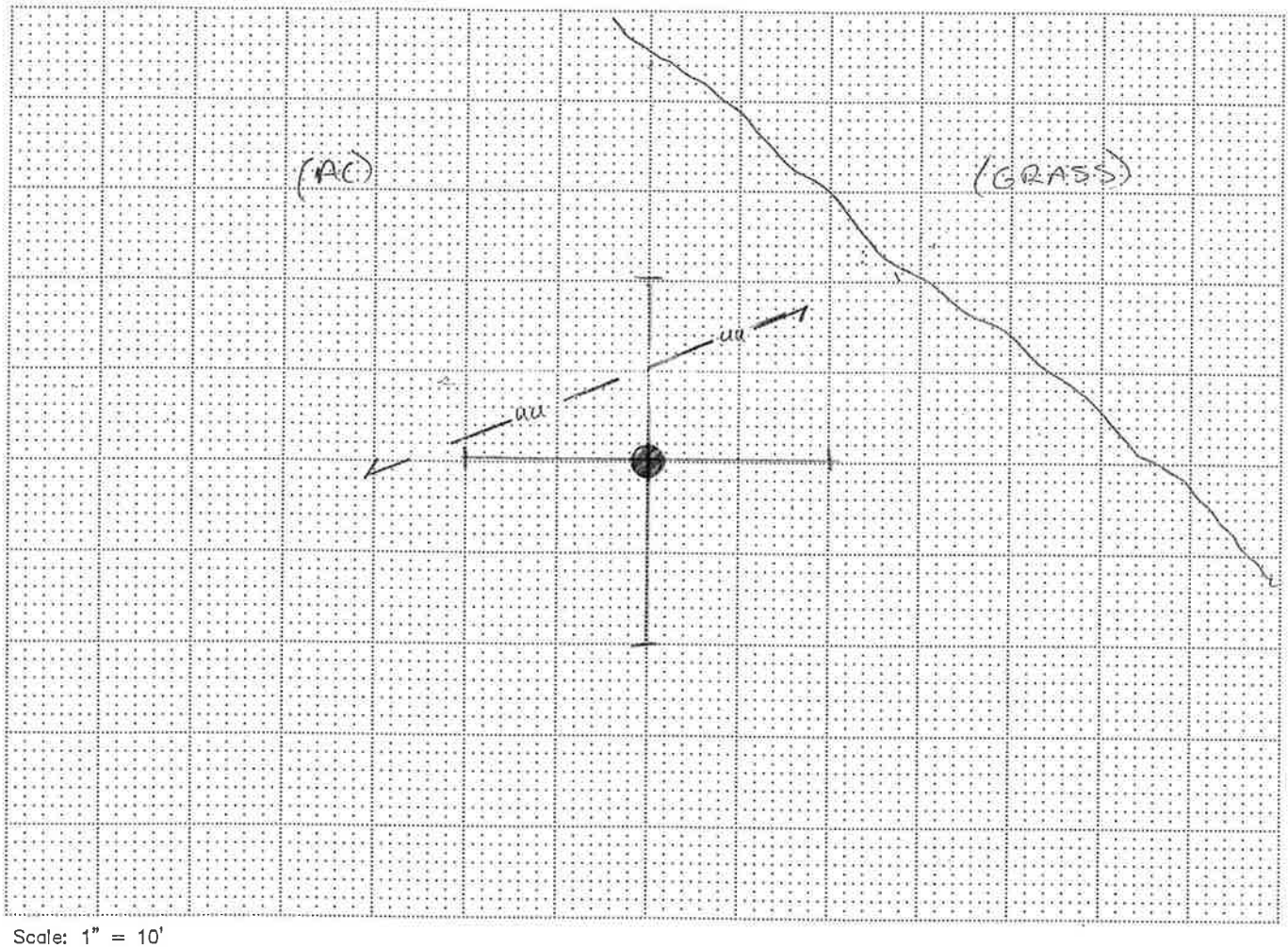
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP10



Scale: 1" = 10'

EXPLANATION

○	Original Boring Location
●	Final Boring Location
⊢——⊣	GPR Traverse
▭ OR ⟶	Localized GPR Anomaly
— — —	Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

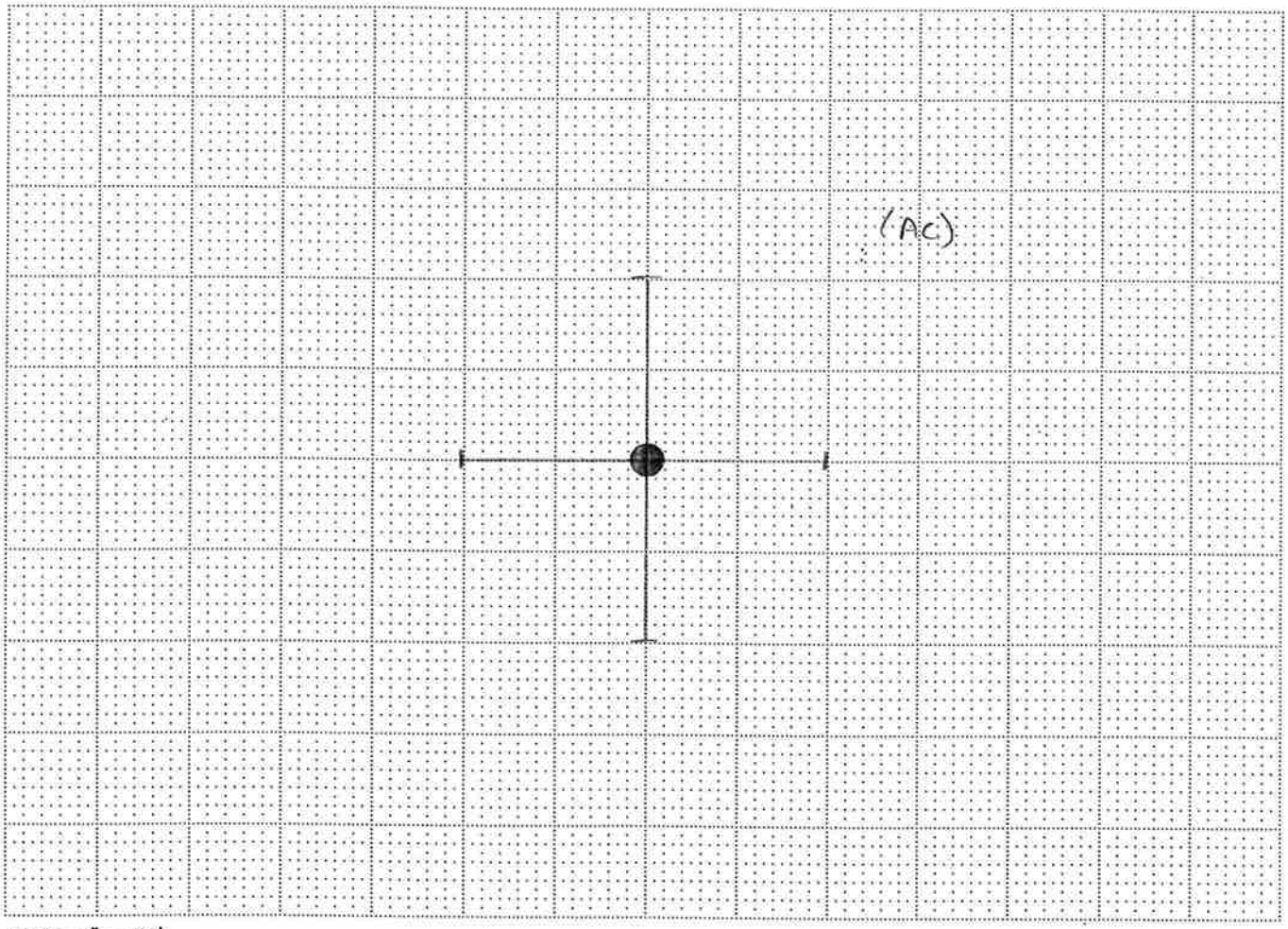
JOB: 10-106.52 | DATE: 03-16-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP11



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-16-10

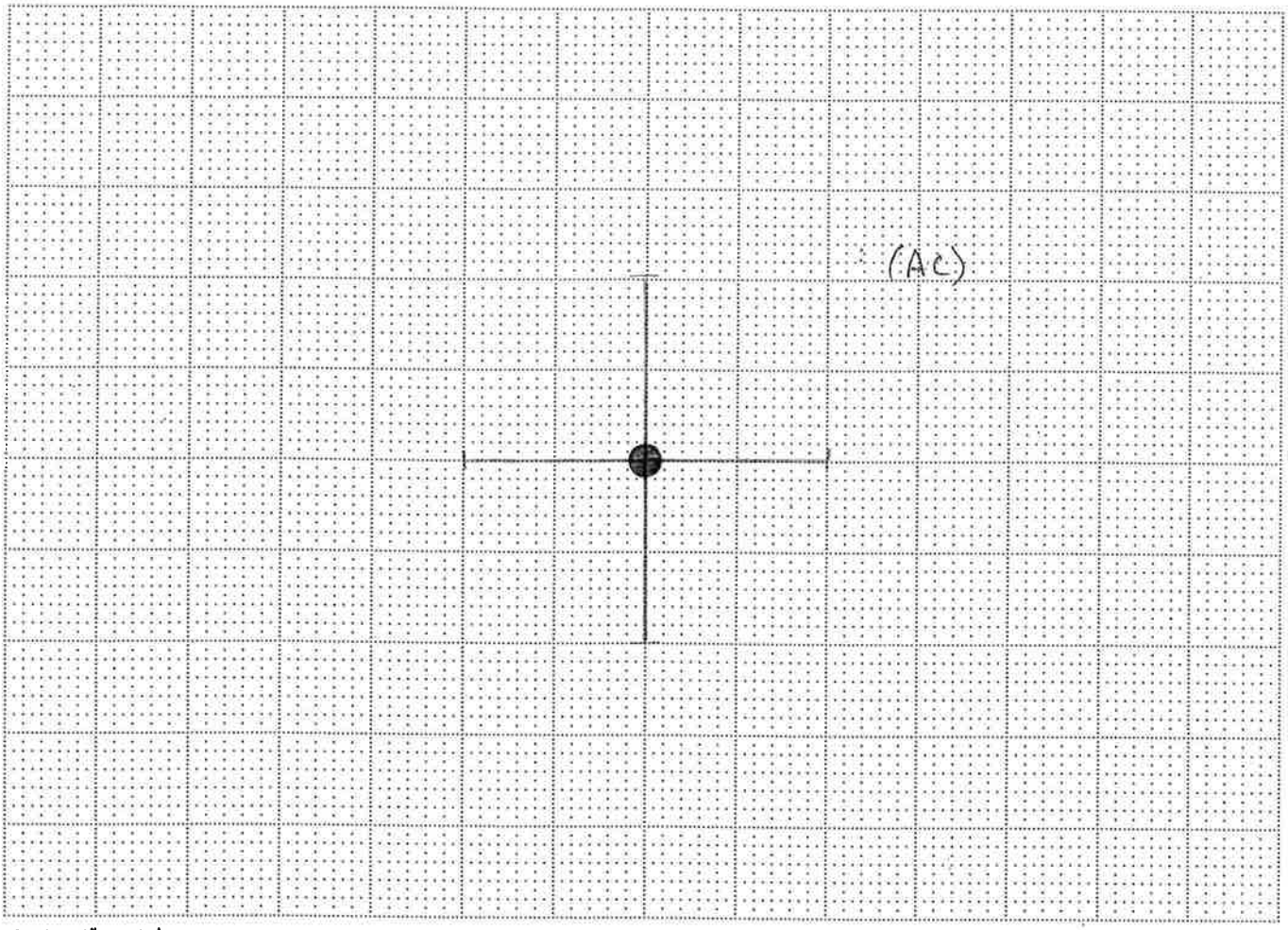
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP13



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

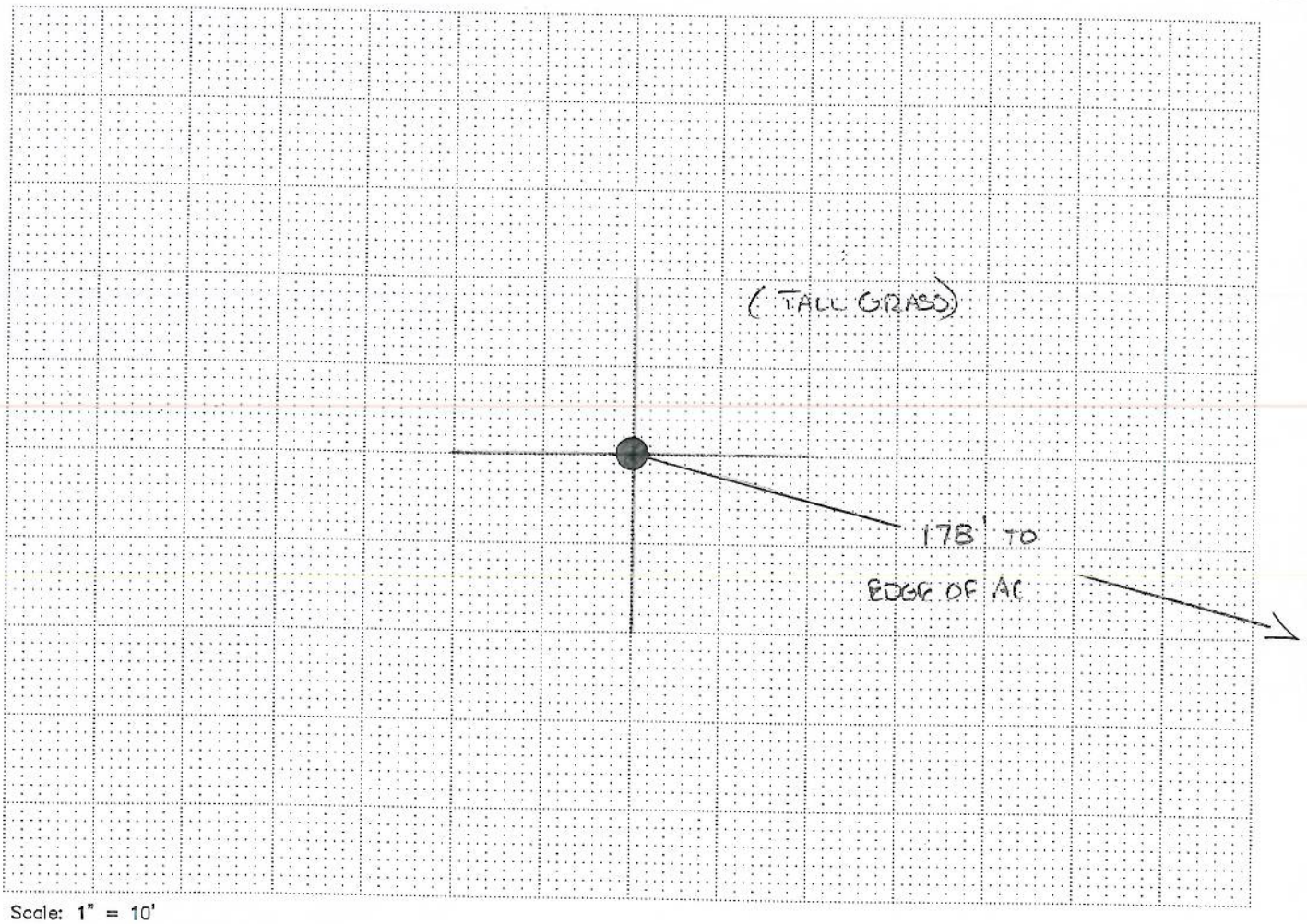
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAFTA-DP14



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

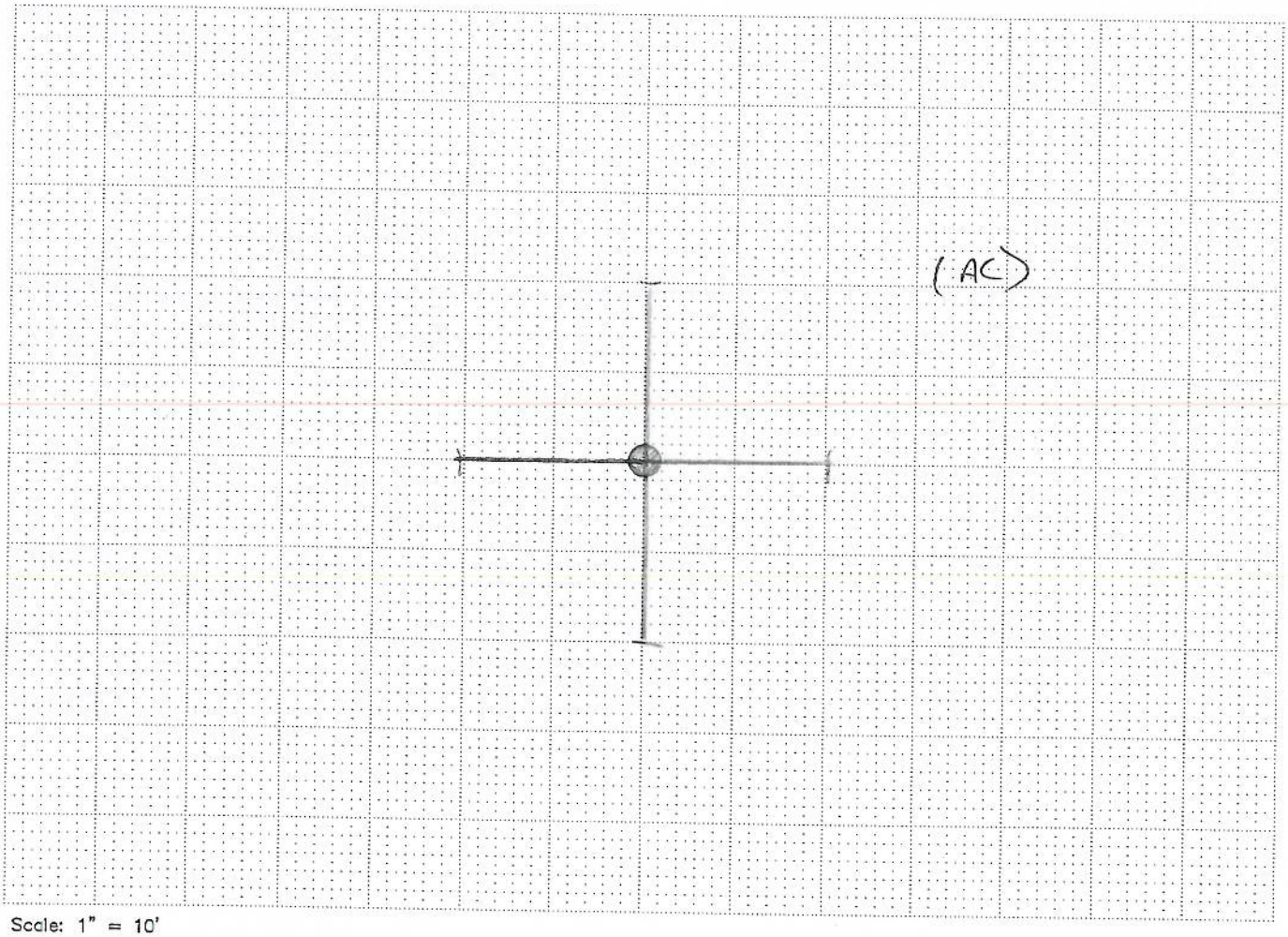
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP15



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

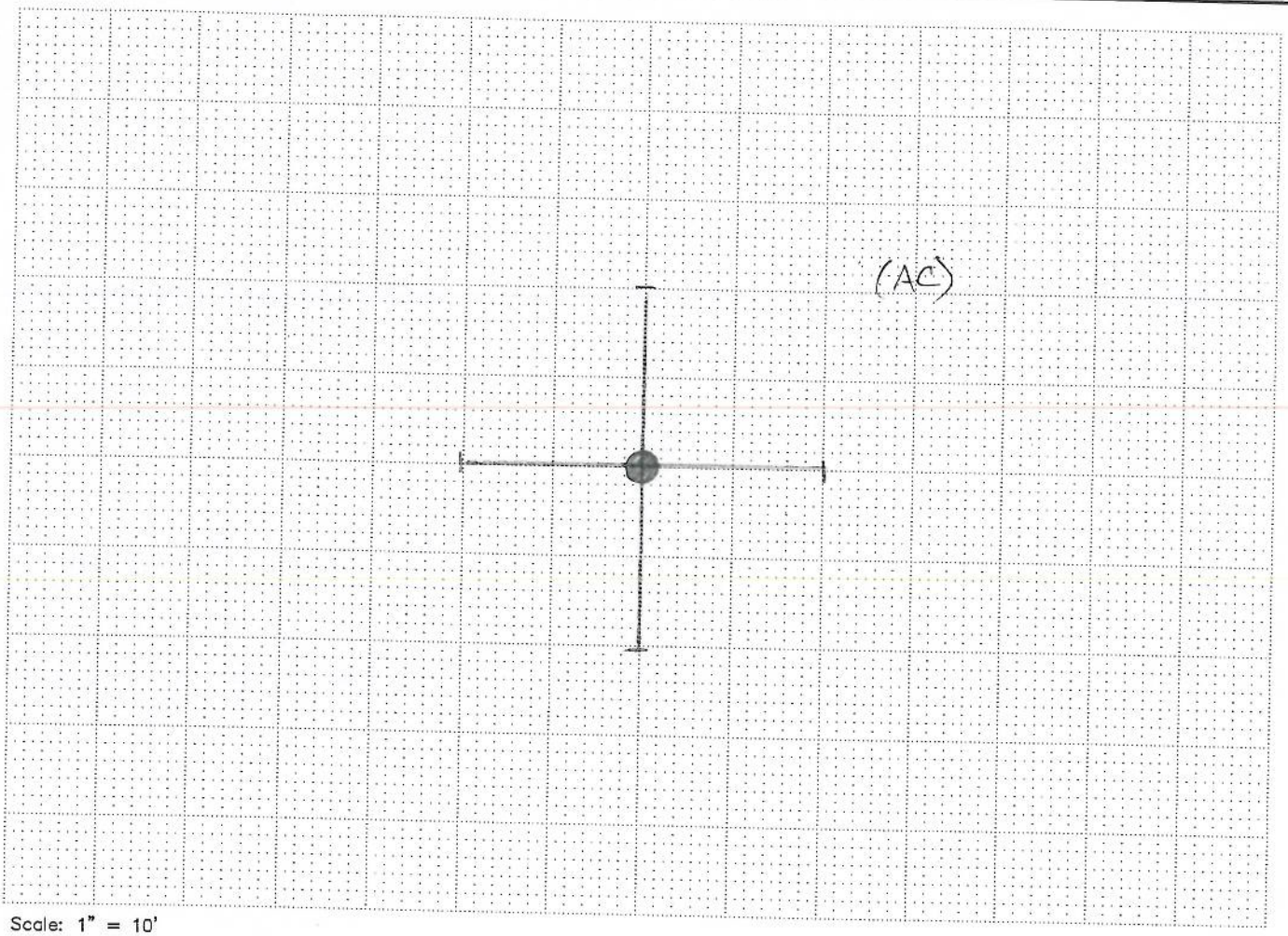
JOB: 10-106.52 | DATE: 03-15-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA-DP16



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- —— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

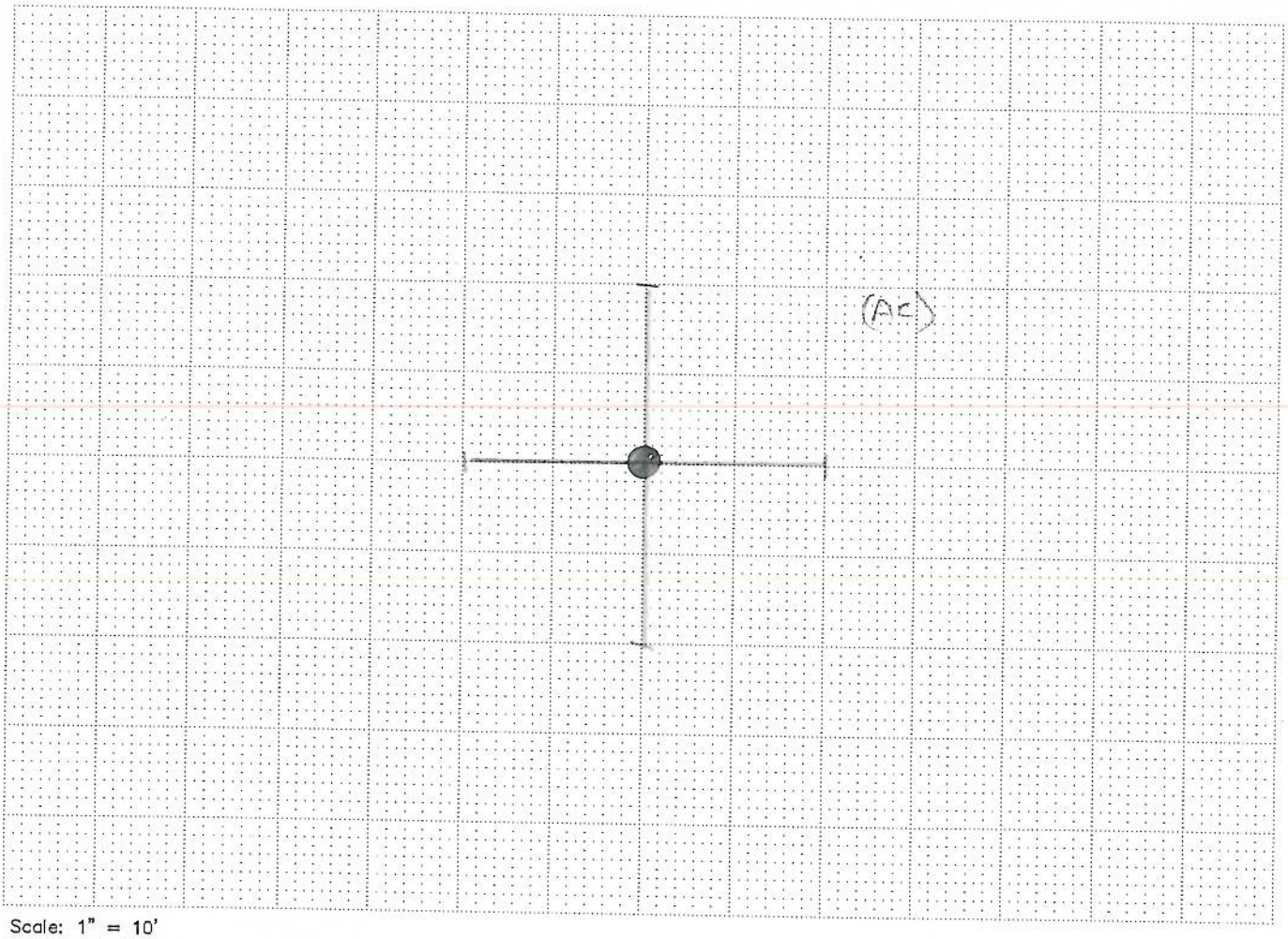
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAFTA-DP17



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

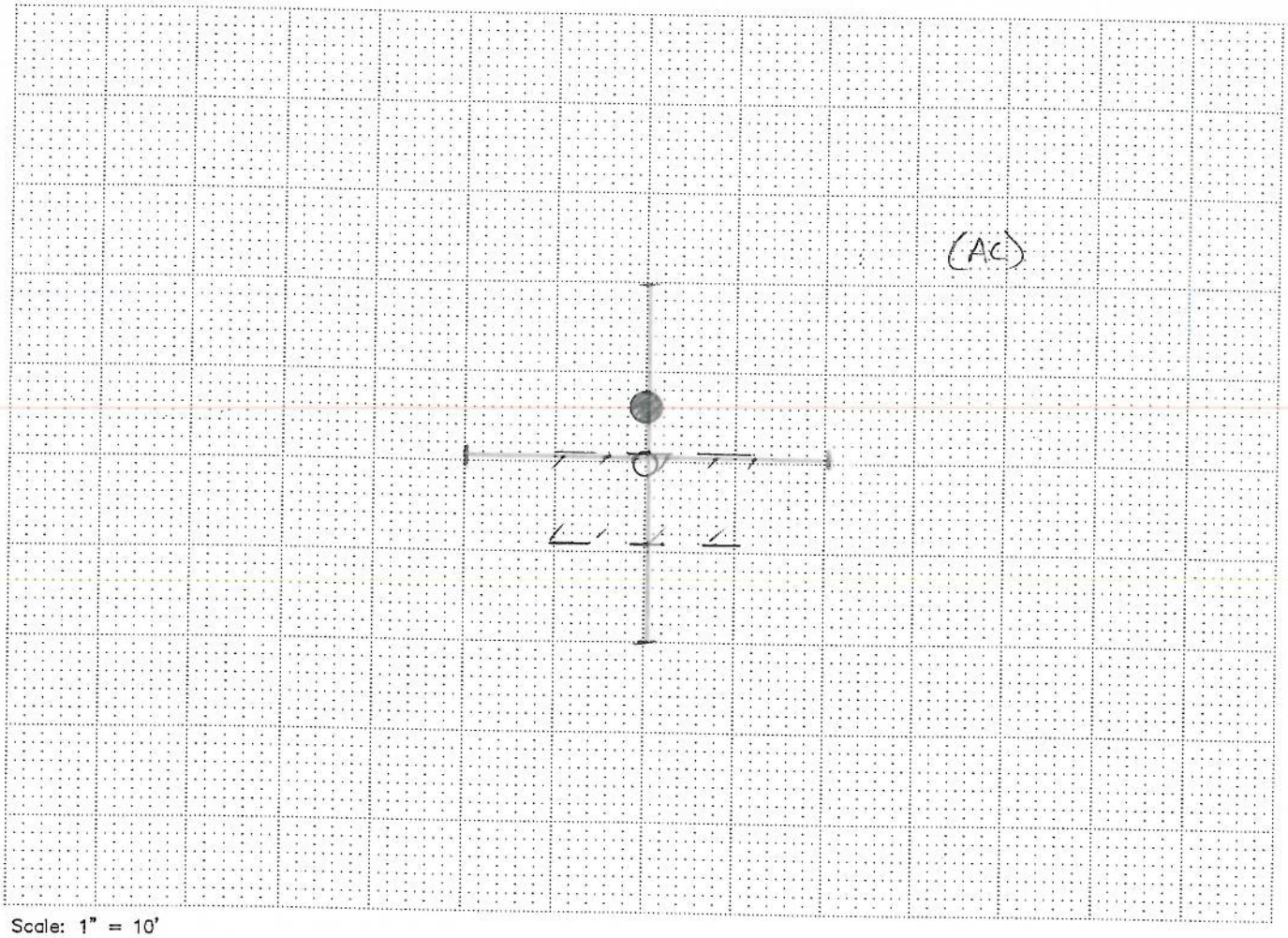
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP18



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

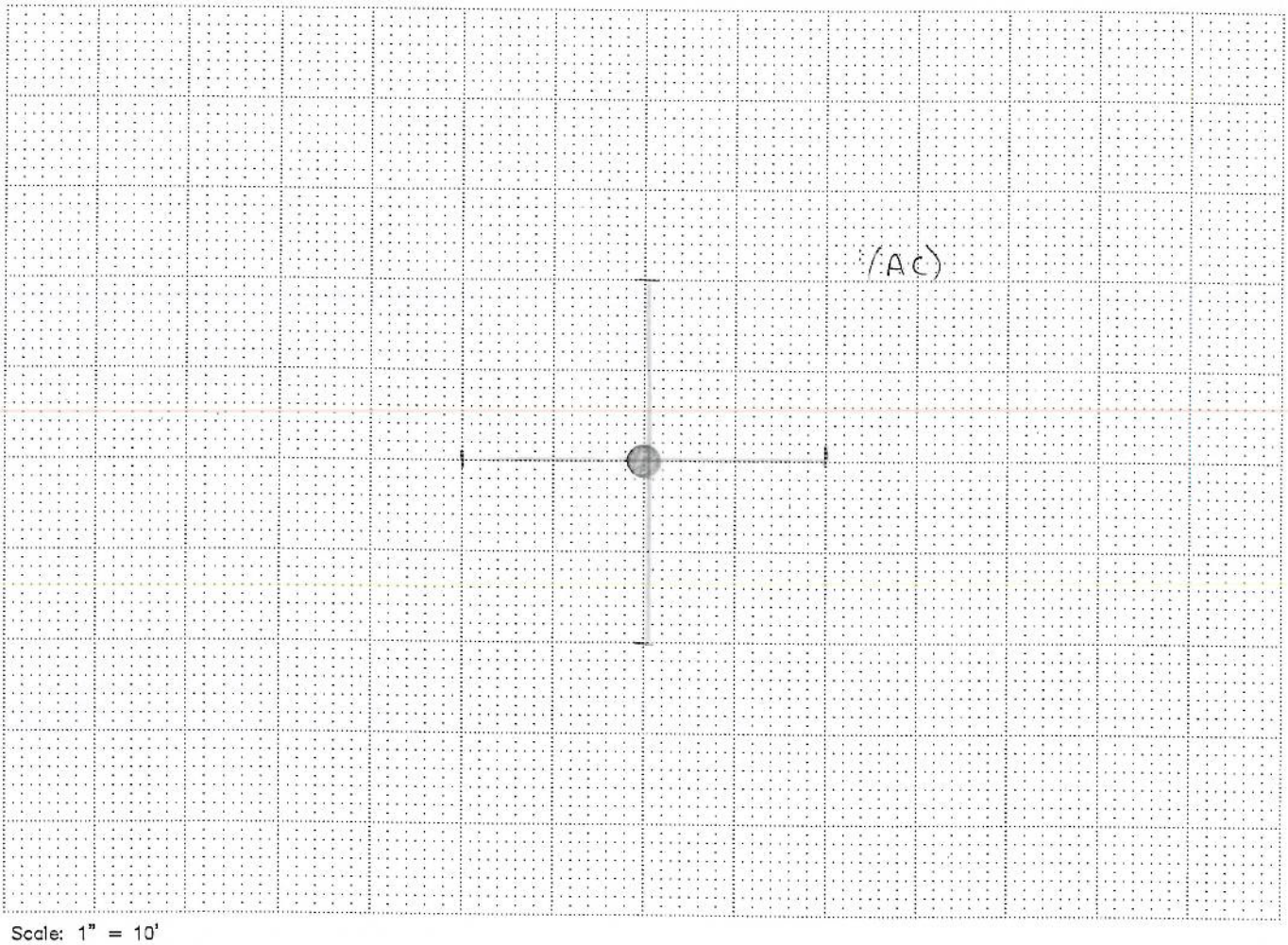
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP19



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- □ OR ←→ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

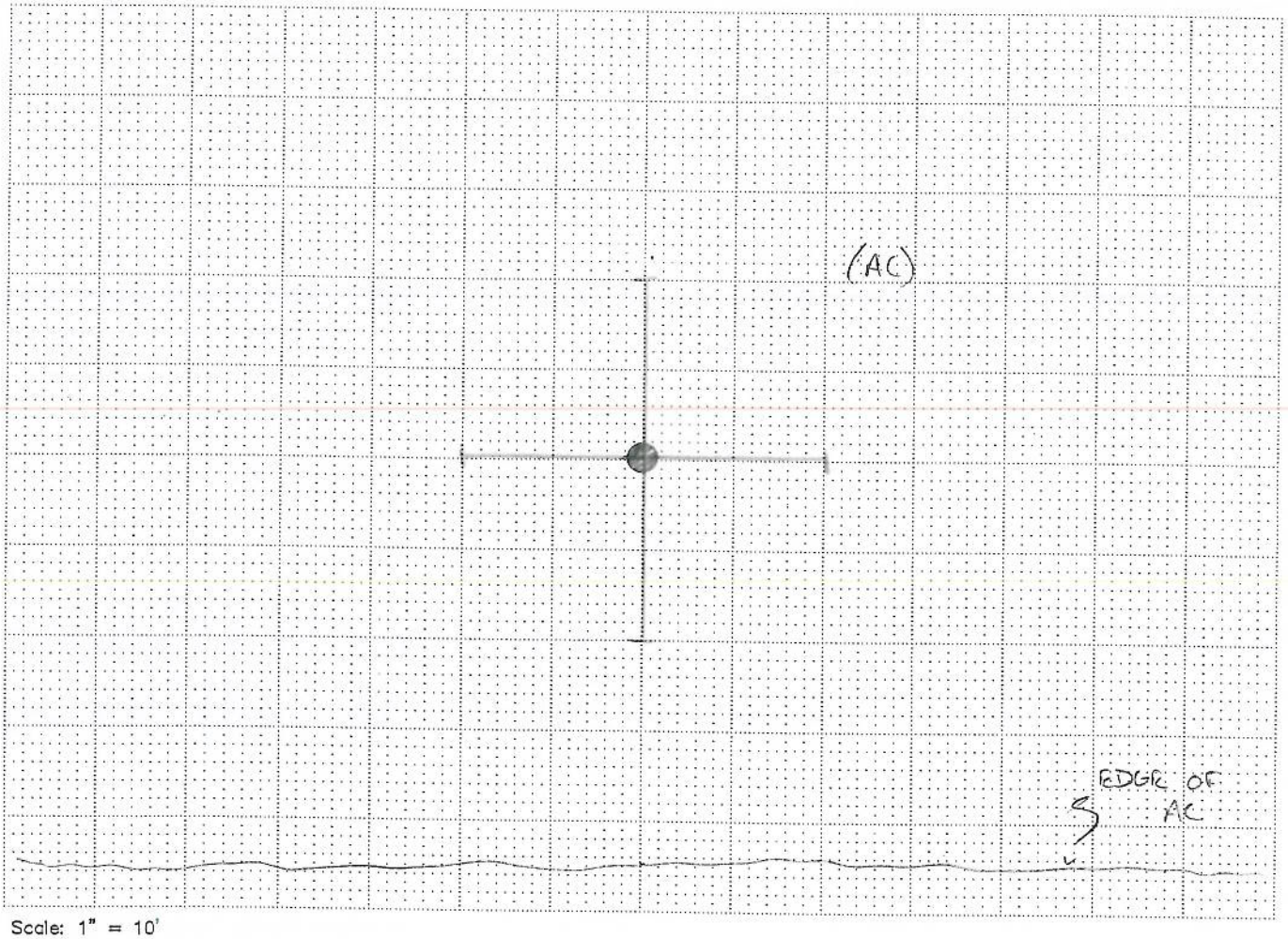
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA - DP20



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

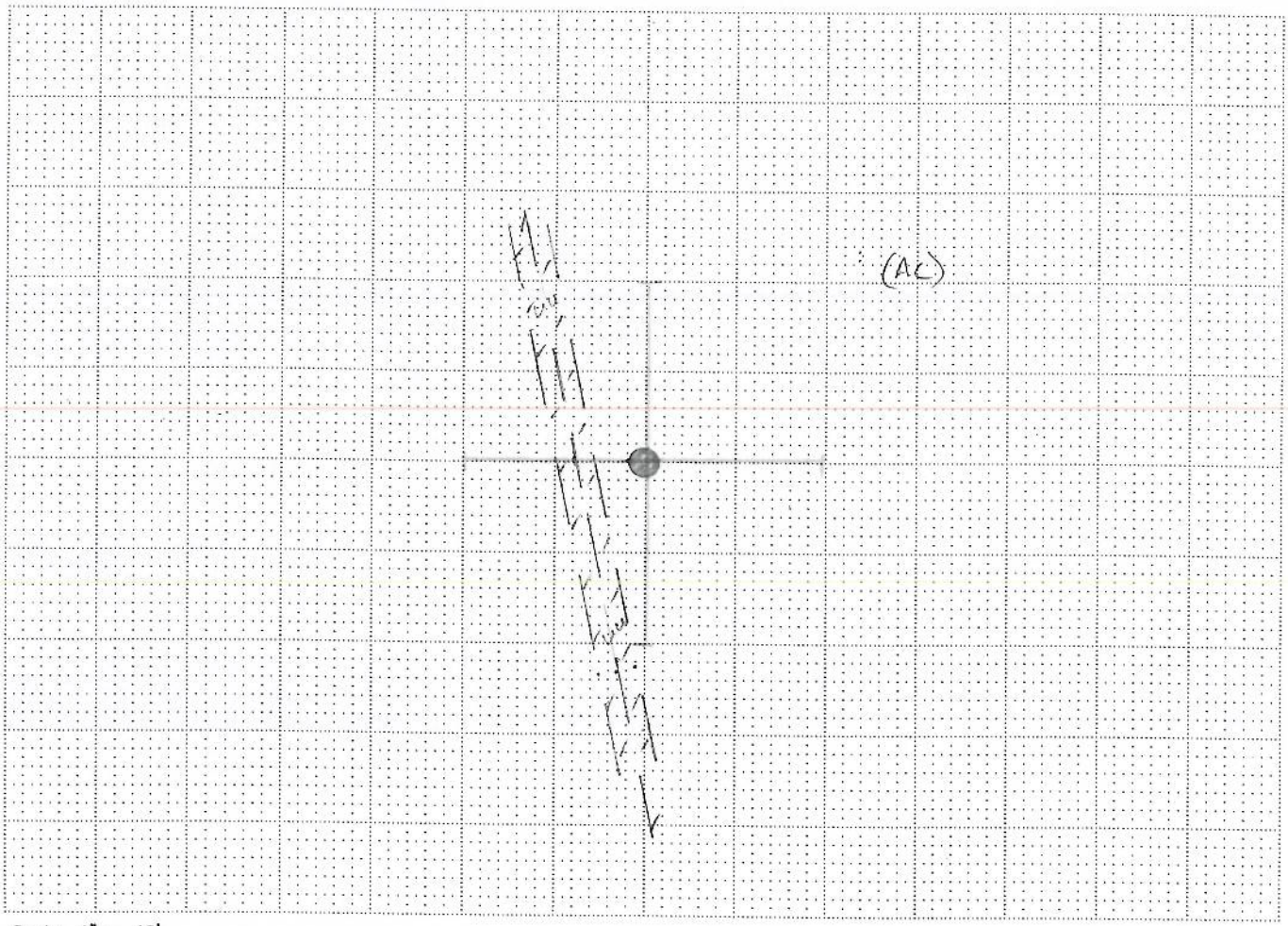
NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB	CLIENT: CH2M HILL
JOB: 10-106.52 DATE: 03-15-10	LOCATION: ALAMEDA PT., ALAMEDA CA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: 1AFTA-DP21



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

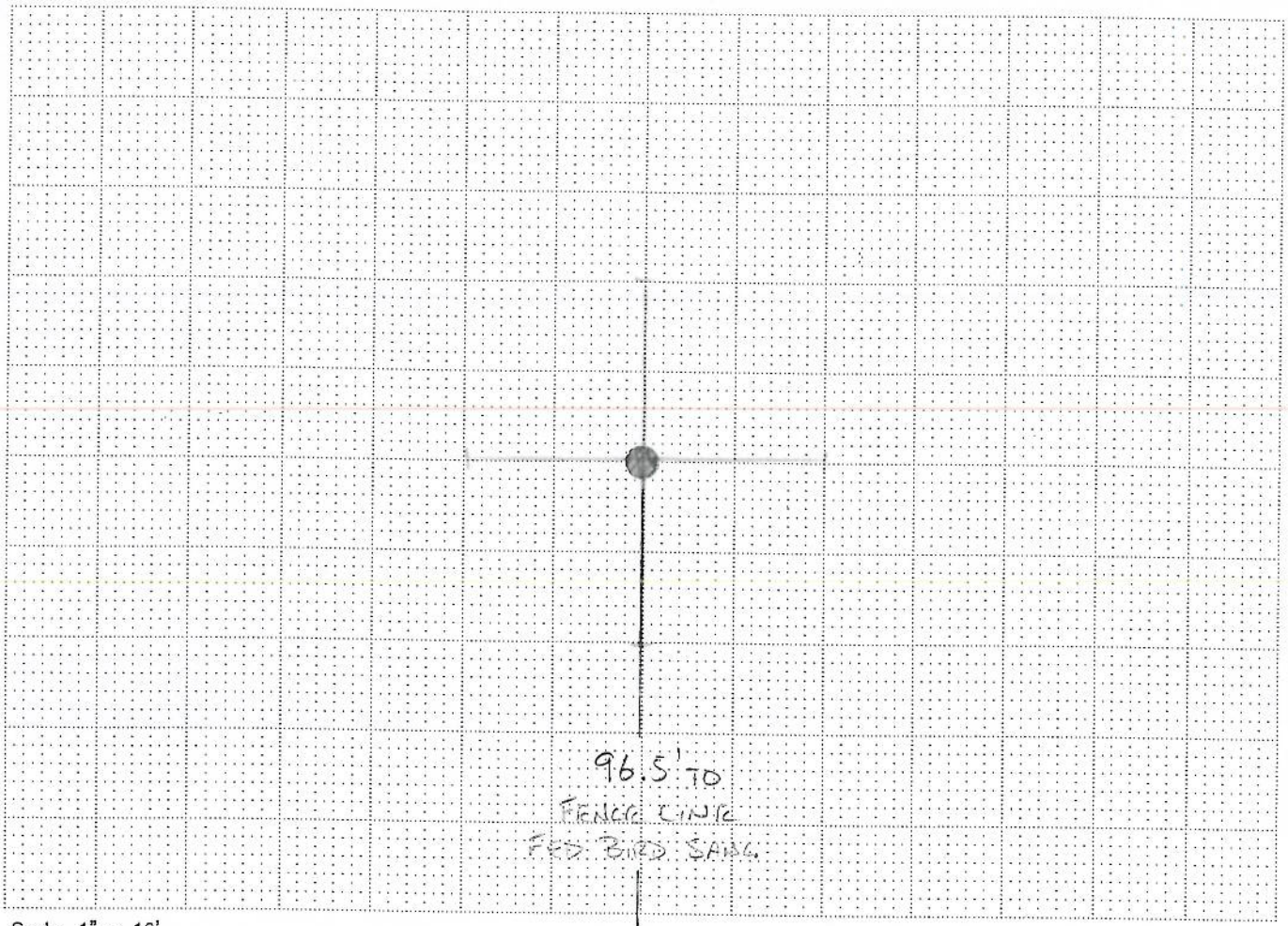
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAFTA-DP22



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

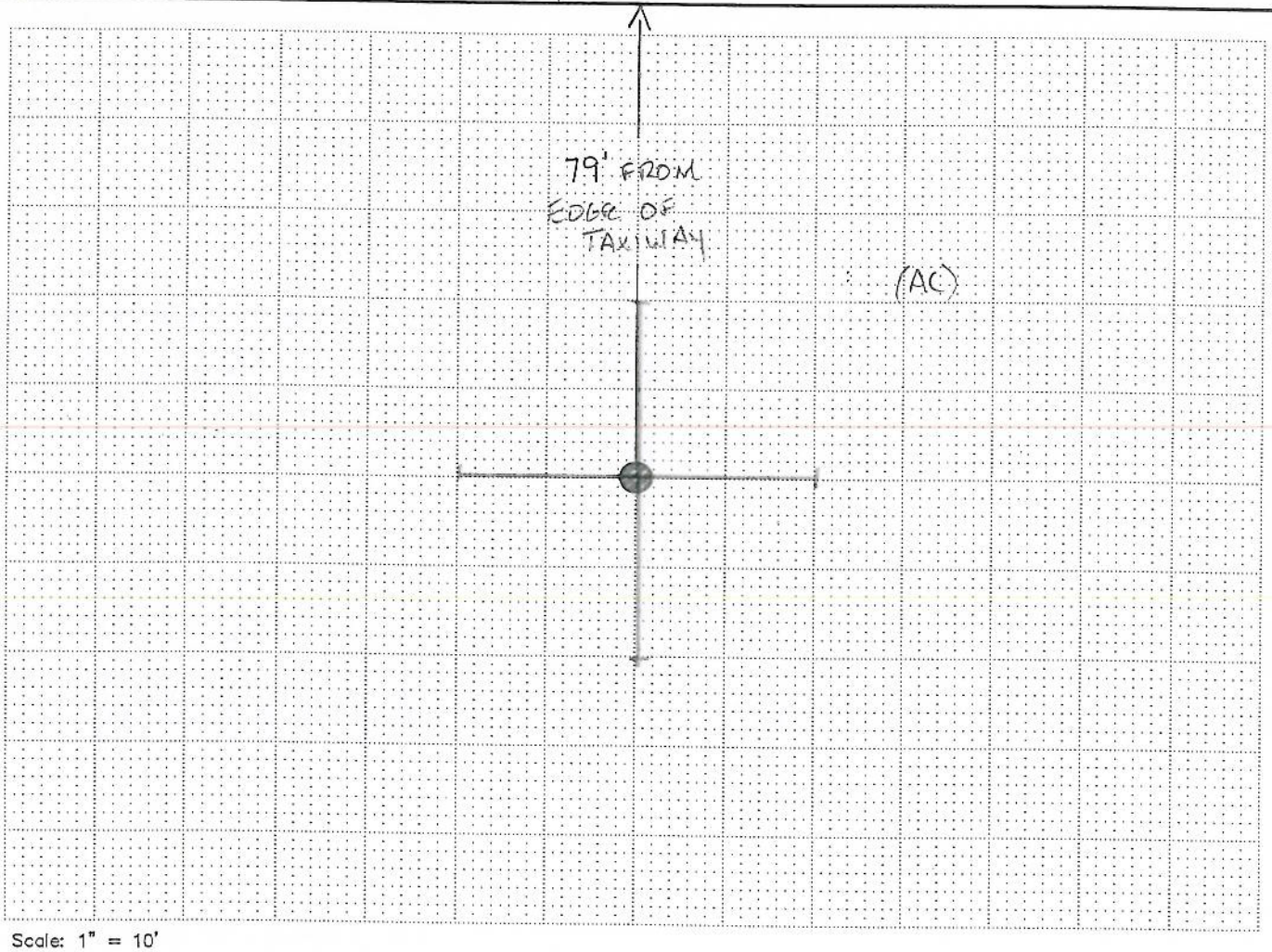
JOB: 10-106.52 | DATE: 03-15-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAFTA - DP25



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

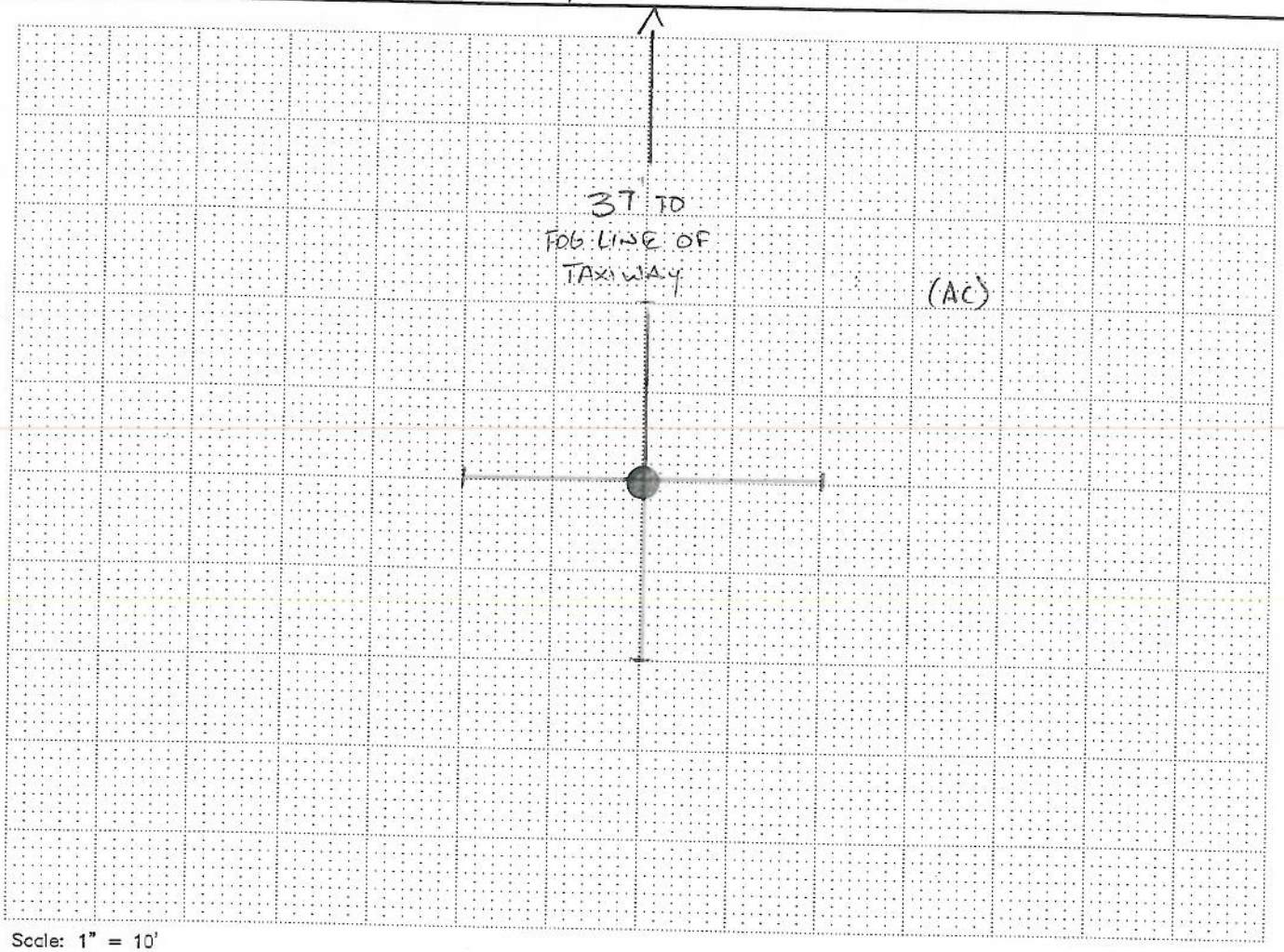
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP26



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

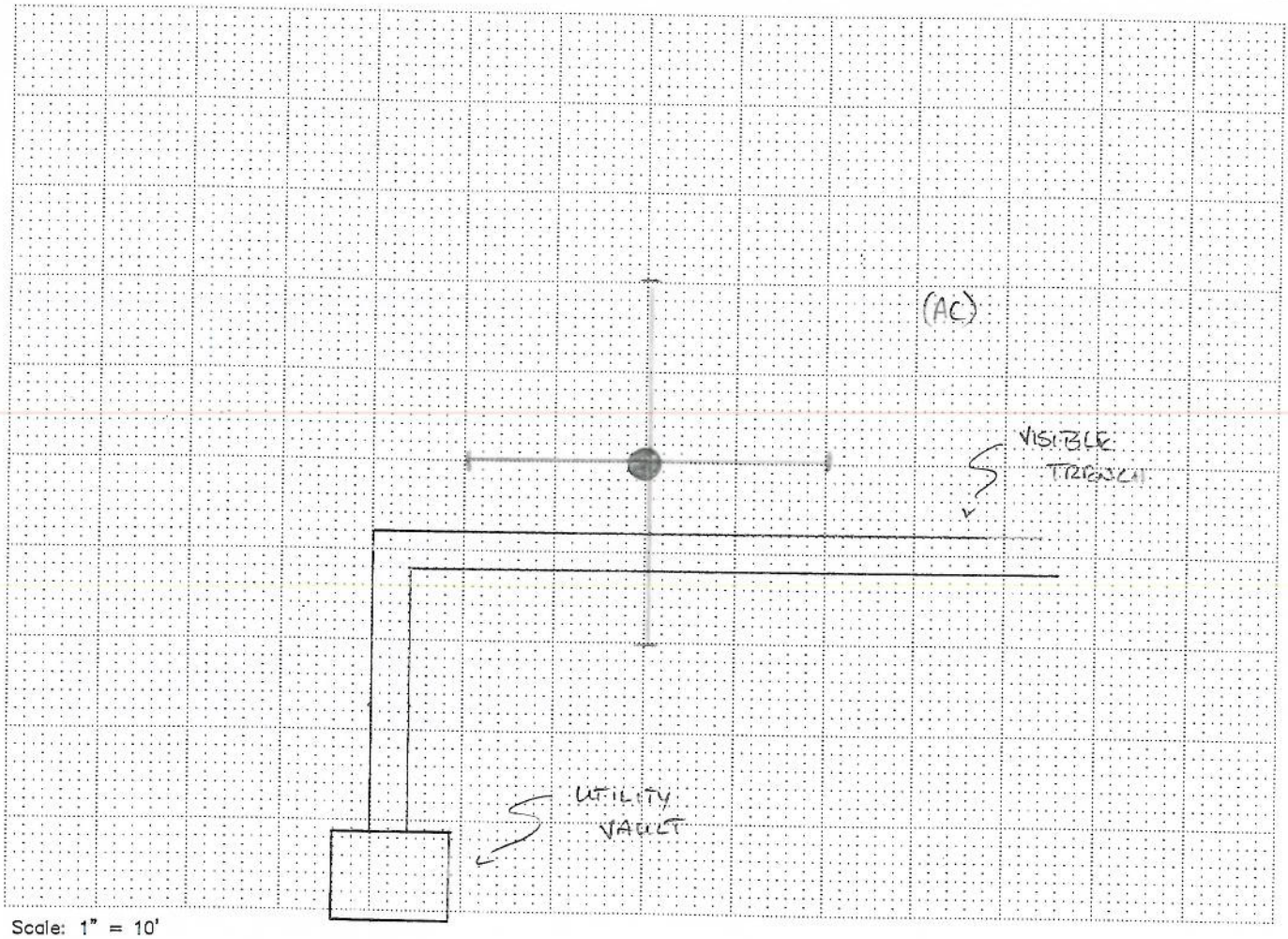
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP27



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

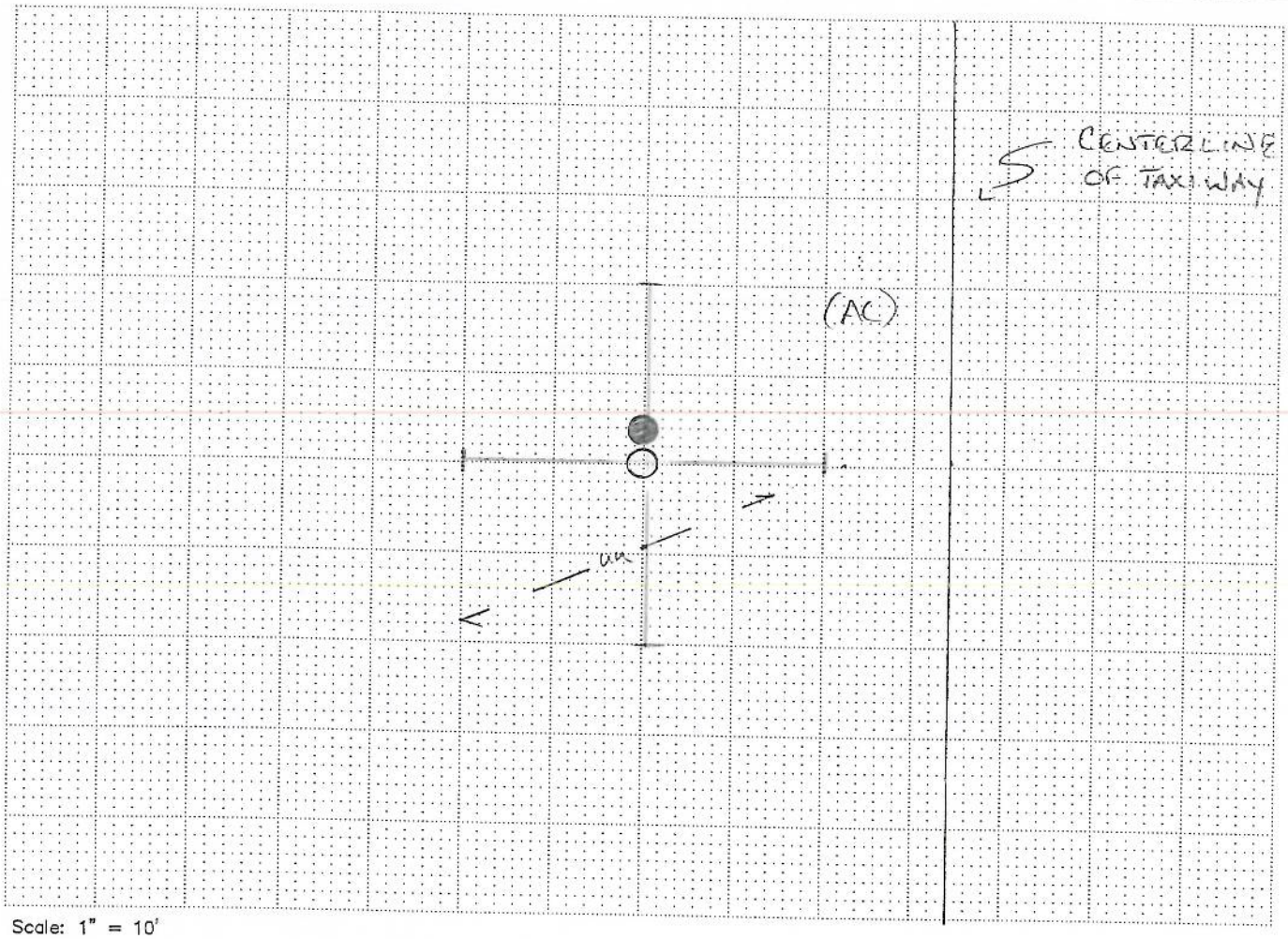
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA - DP28



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- ▭ GR ← Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-11-10

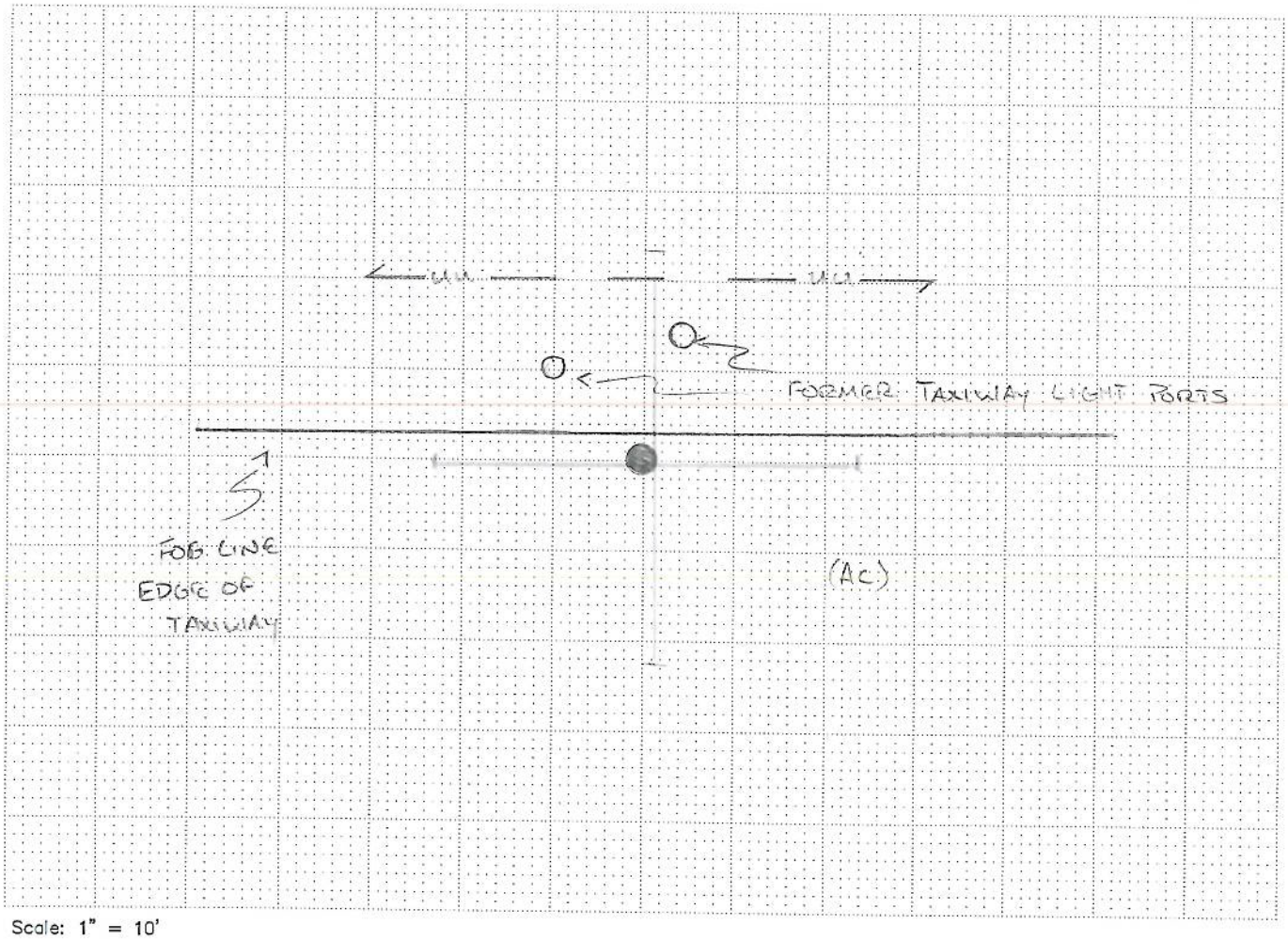
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA - DP30



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferenticted Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-11-10

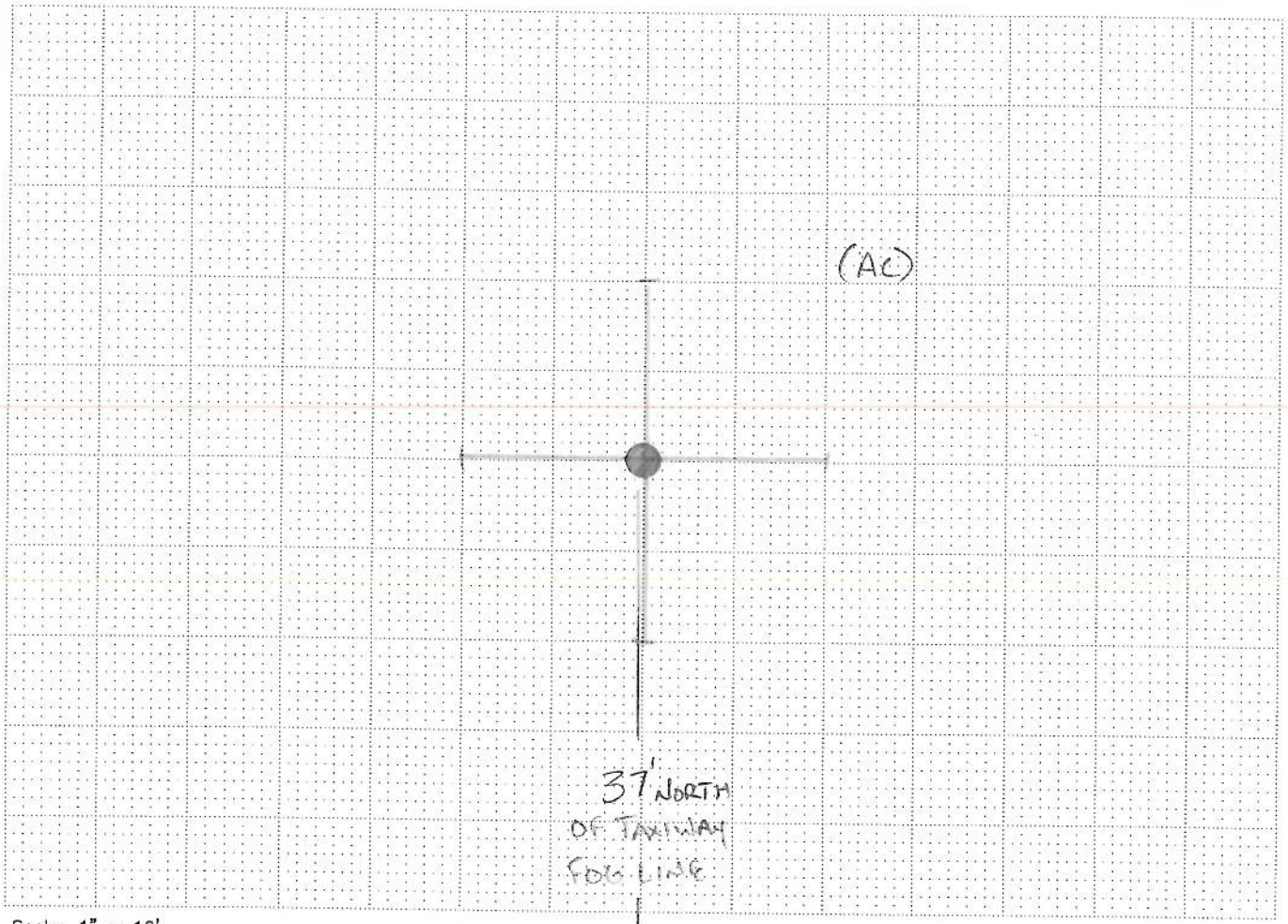
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1 AFTA DP-31



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

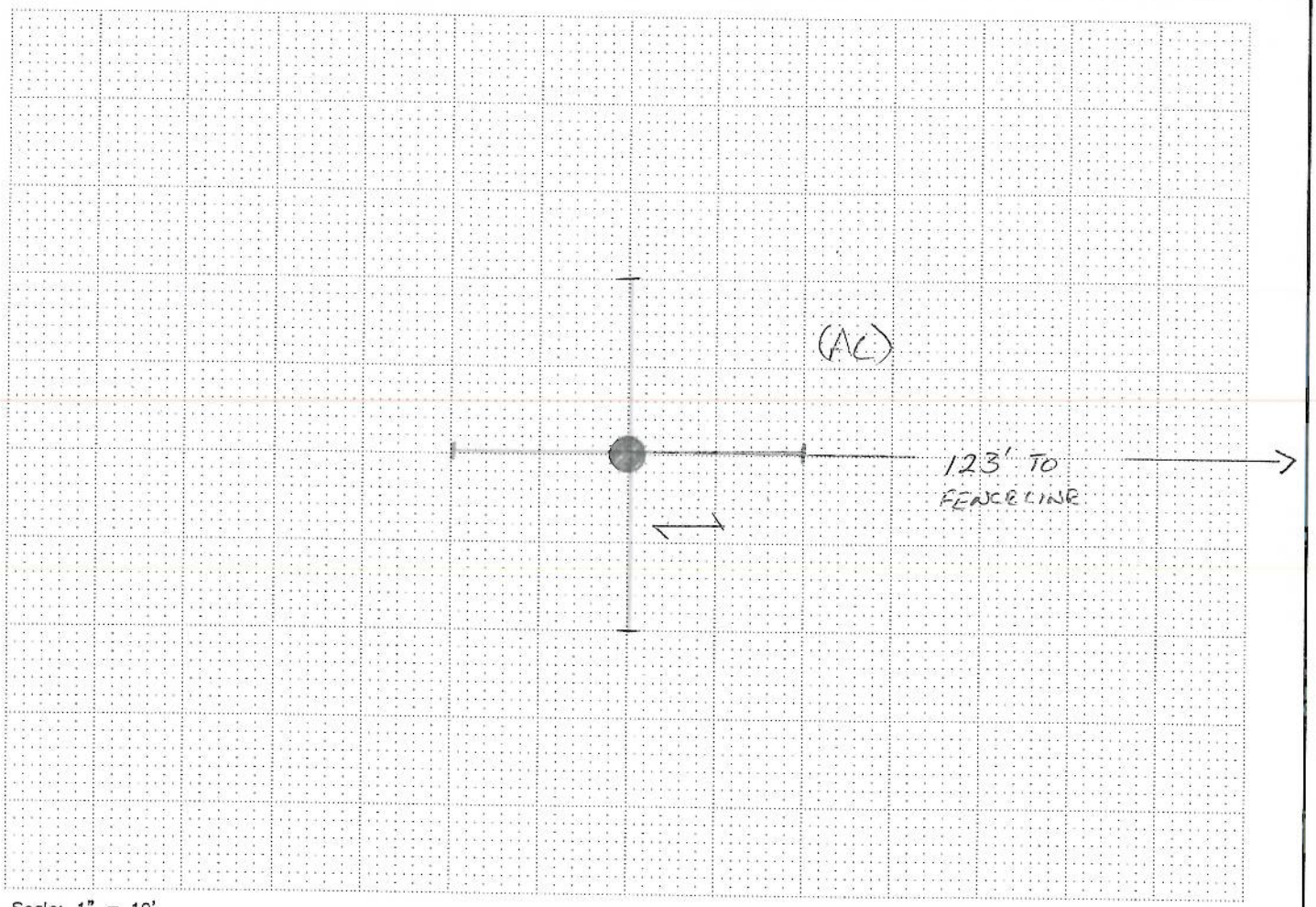
JOB: 10-106.52 | DATE: 03-11-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AFTA-DP32



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

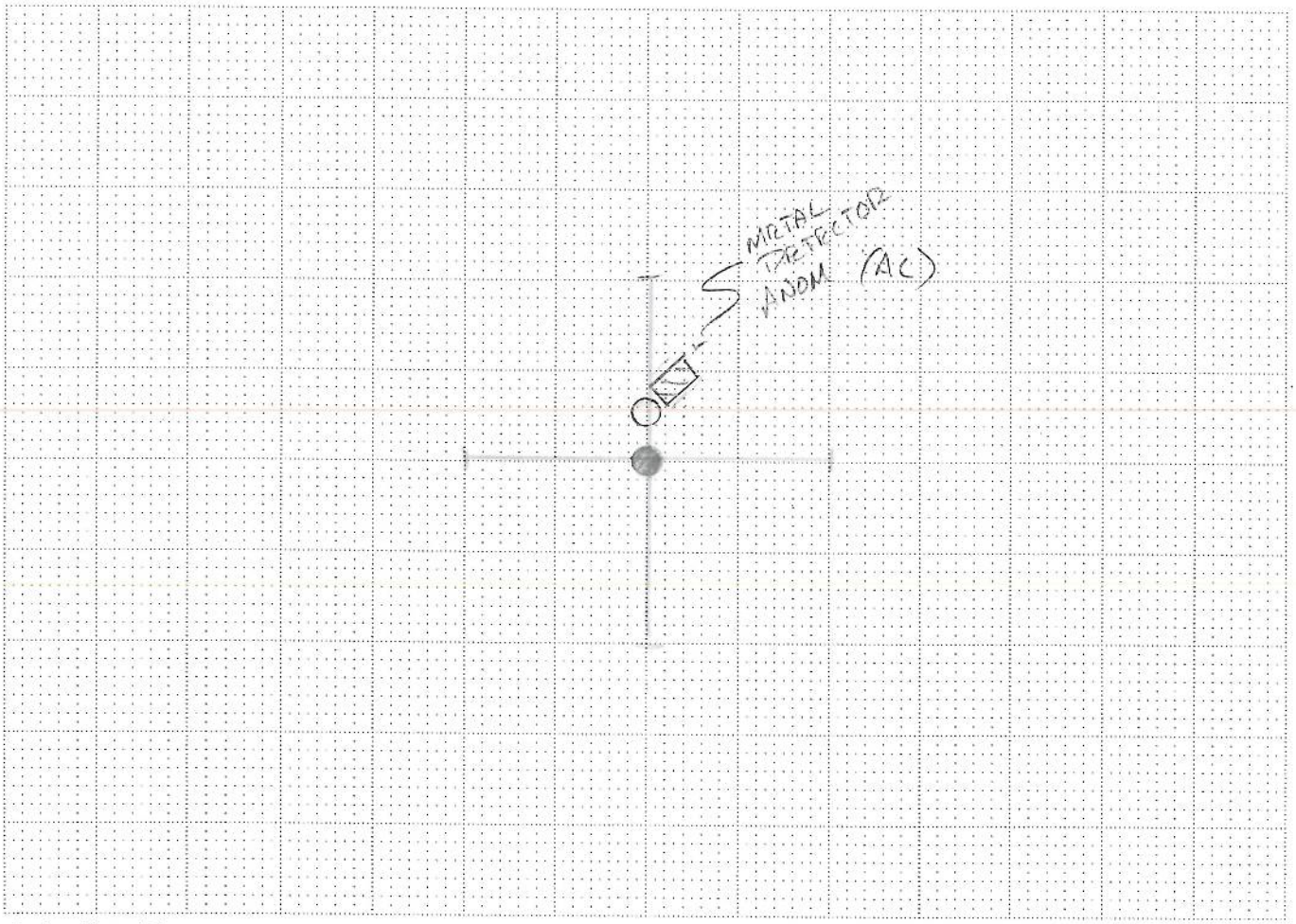
NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB	CLIENT: CH2M HILL
JOB: 10-106.52 / DATE: 03-11-10	LOCATION: ALAMEDA PT., ALAMEDA CA
NORCAL GEOPHYSICAL CONSULTANTS INC. NORCAL	BORING: 1A AFTA DP-35



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- ▭ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

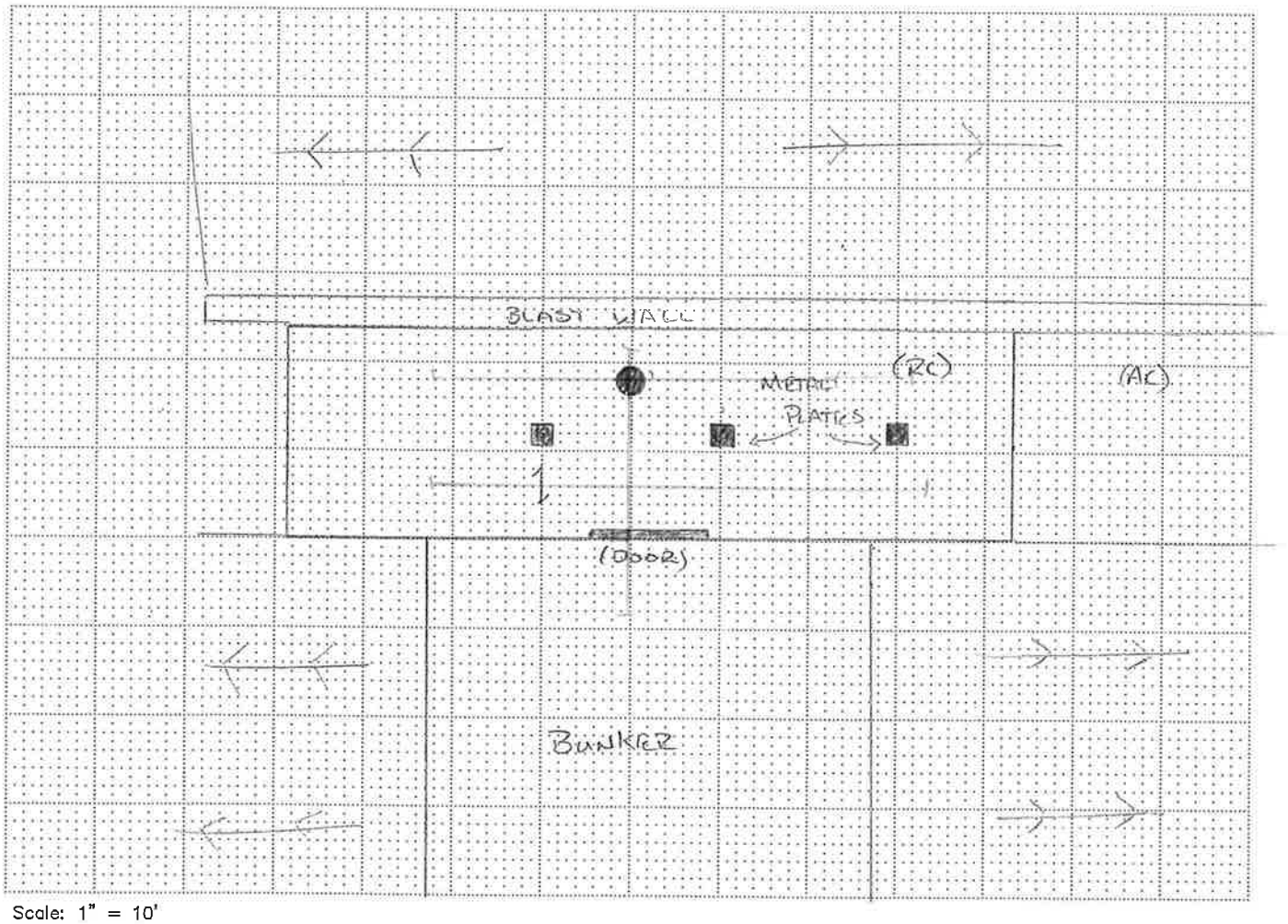
JOB: 10-106.52 | DATE: 03-17-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AMSA-DP01



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢—⊣ GPR Traverse
- ▭ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- ✓ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

* METAL DETECTOR LIMITED BY ACCESS AND REINFORCED CONCRETE BLAST WALLS.

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

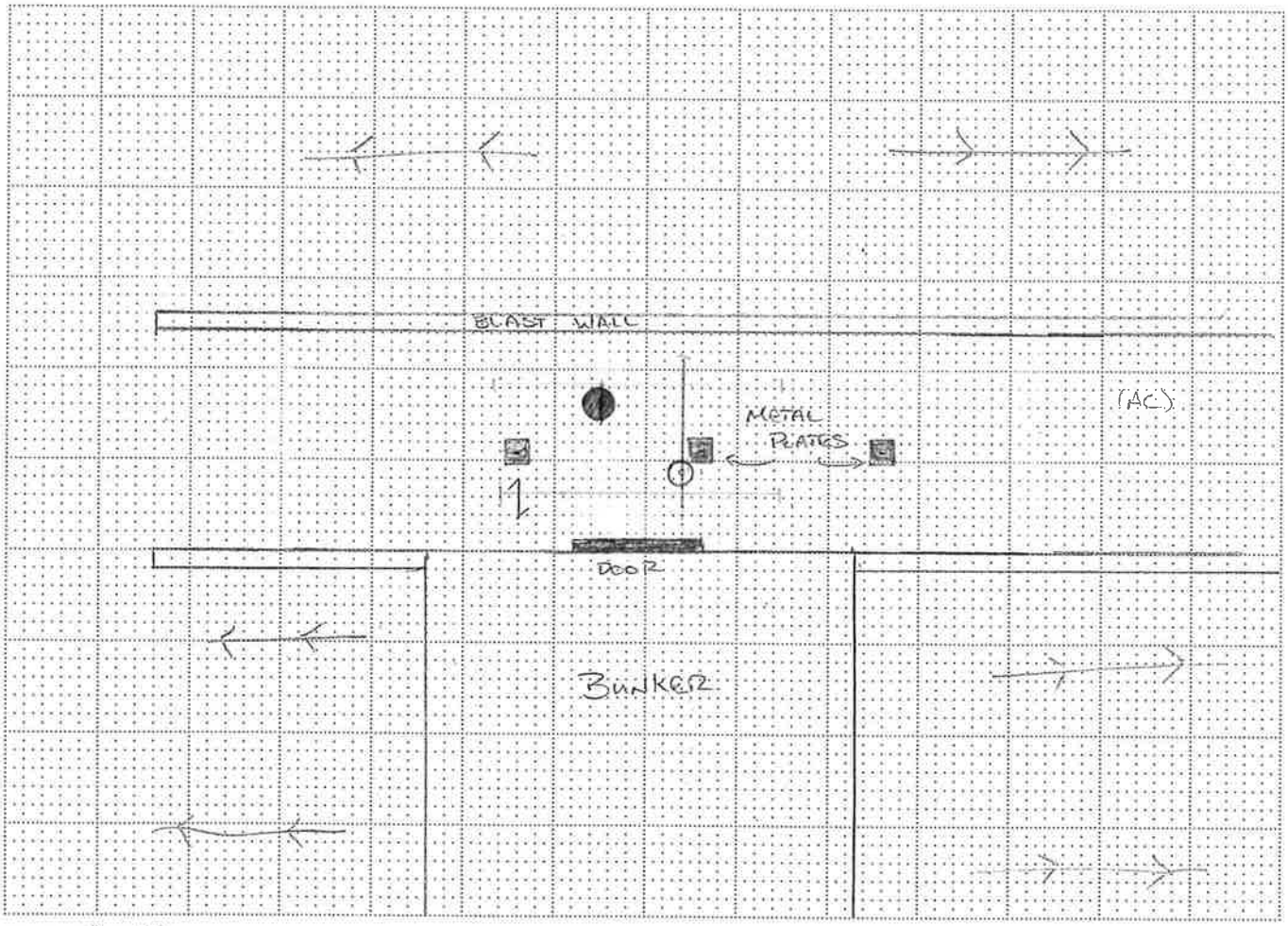
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AMSA-DP02



Scale: 1" = 10'

EXPLANATION

- Original Boring Location
- Final Boring Location
- GPR Traverse
- OR — Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

* METAL DETECTOR LIMITED BY ACCESS AND REINFORCED CONCRETE BLAST WALLS

PERSONNEL: TWB / DJB

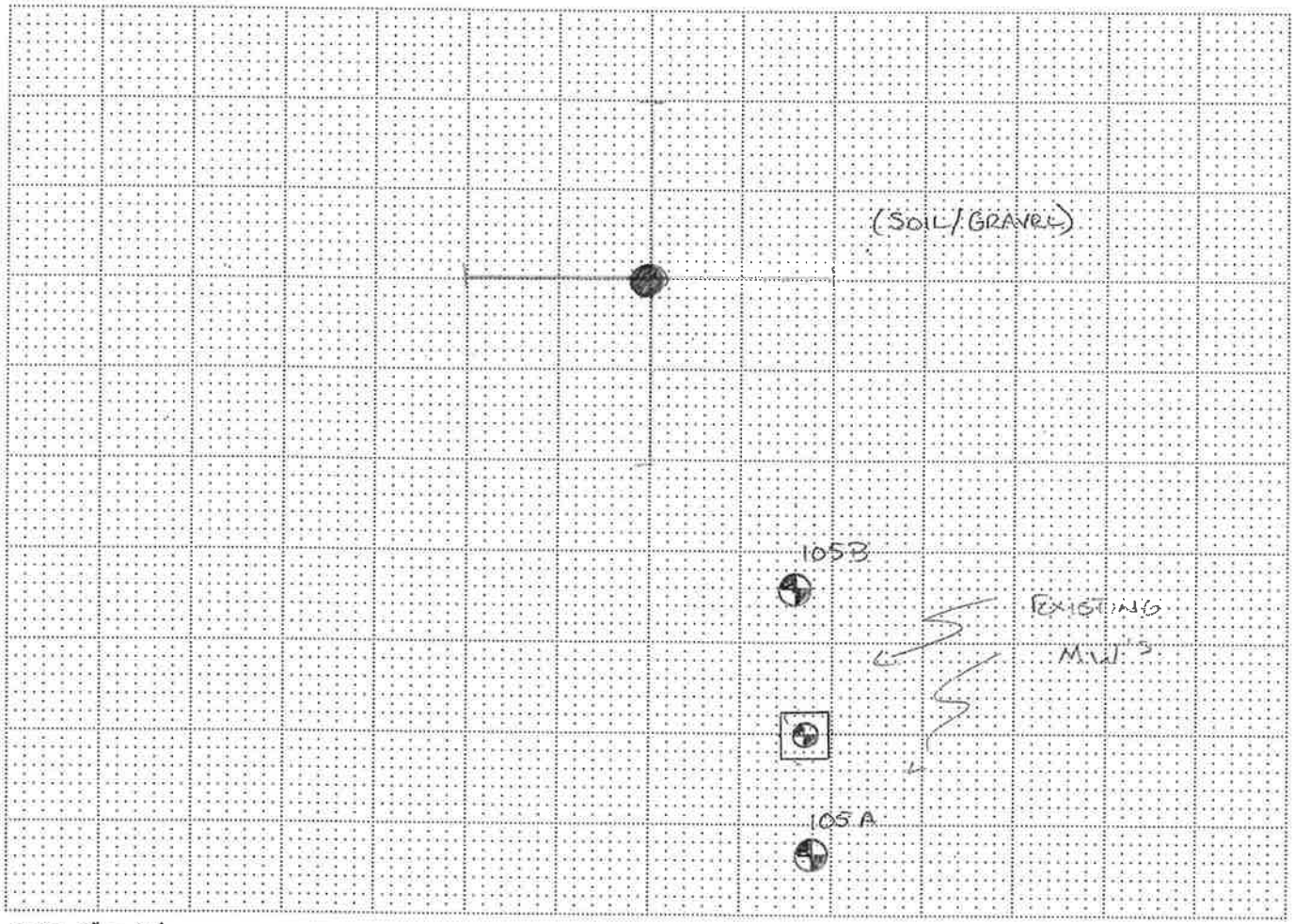
JOB: 10-106.52 | DATE: 03-17-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AMSA-DP03



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ←→ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

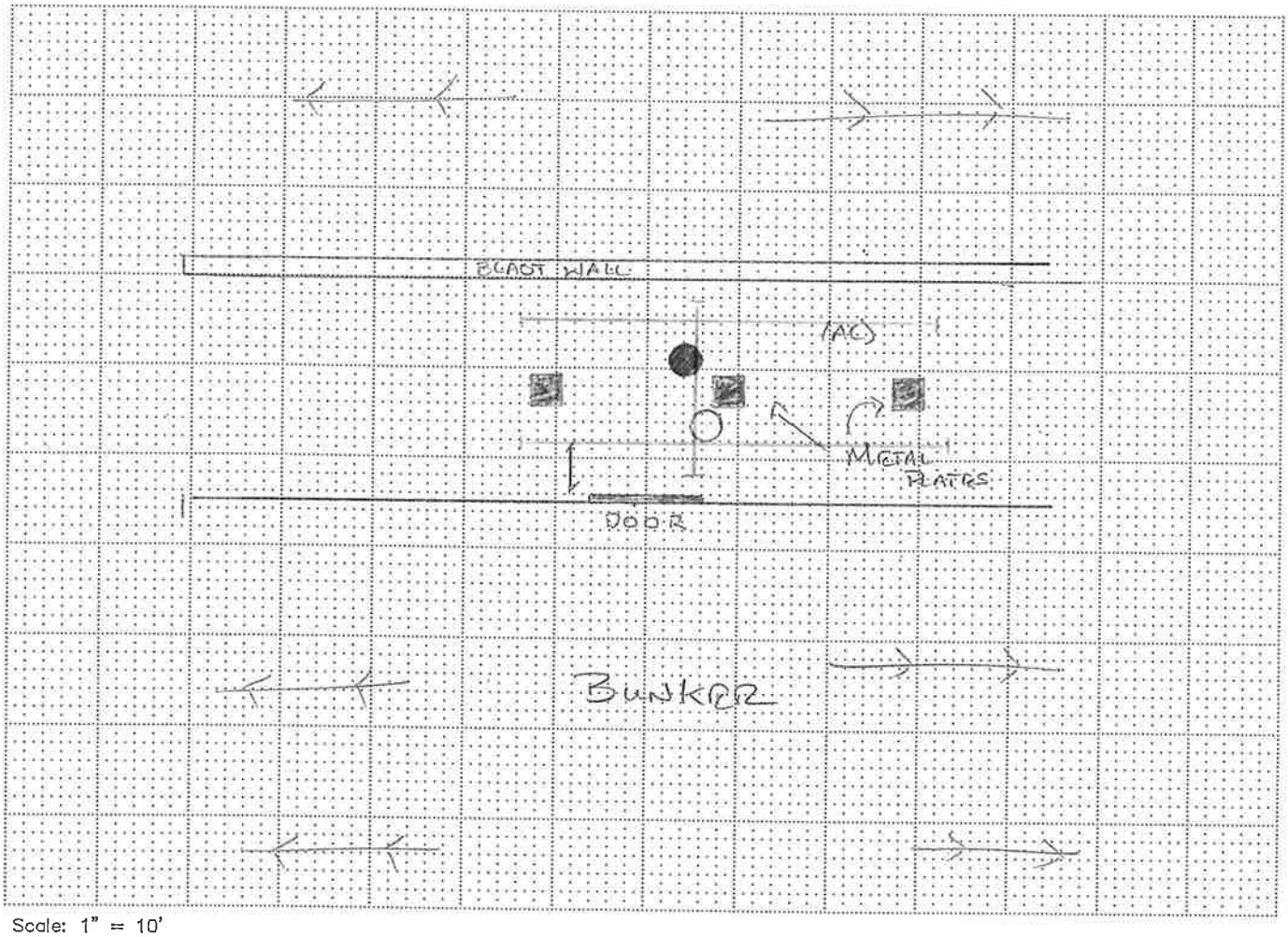
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAMSA-DP04



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ←→ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

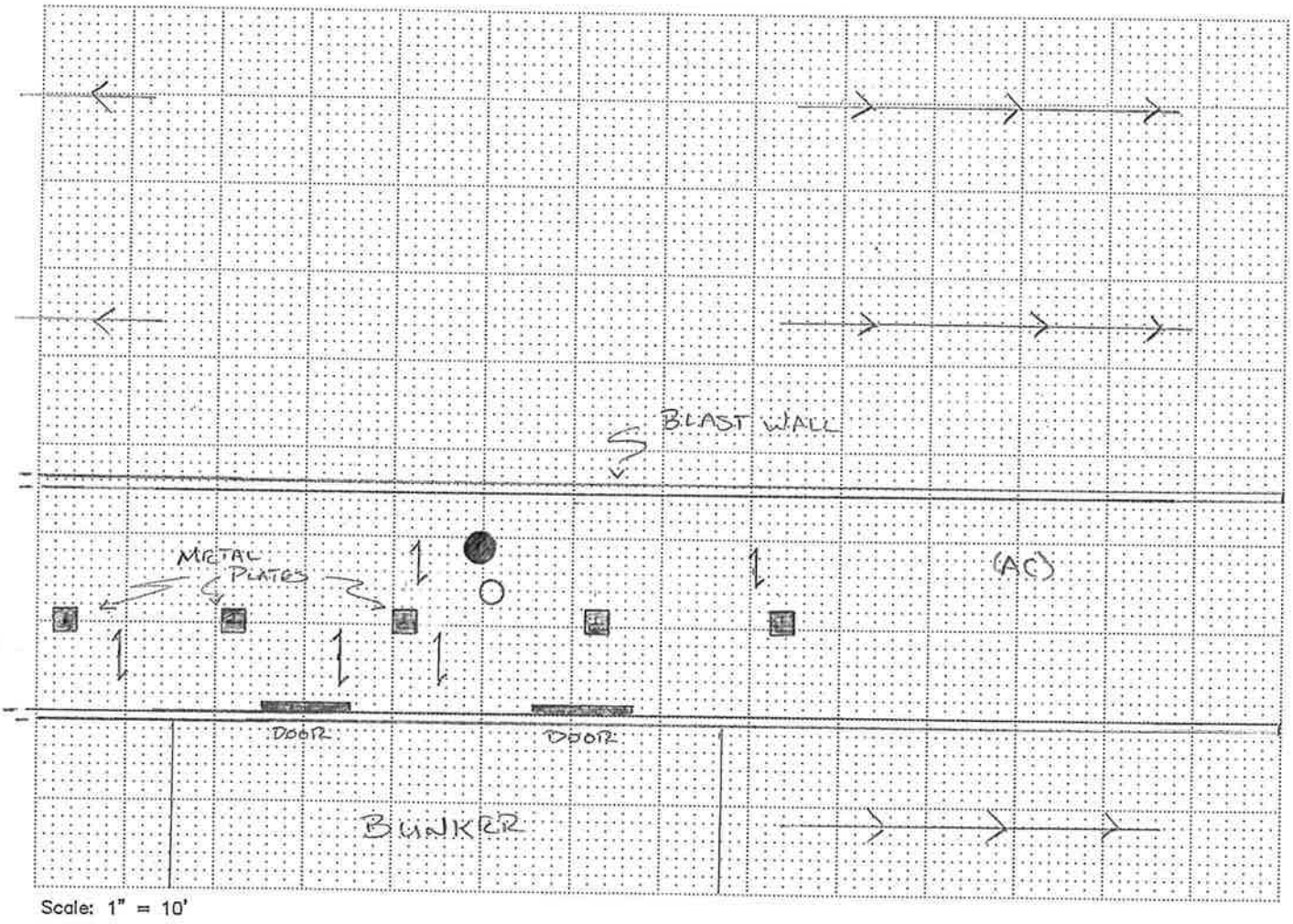
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAMSA-DP05



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

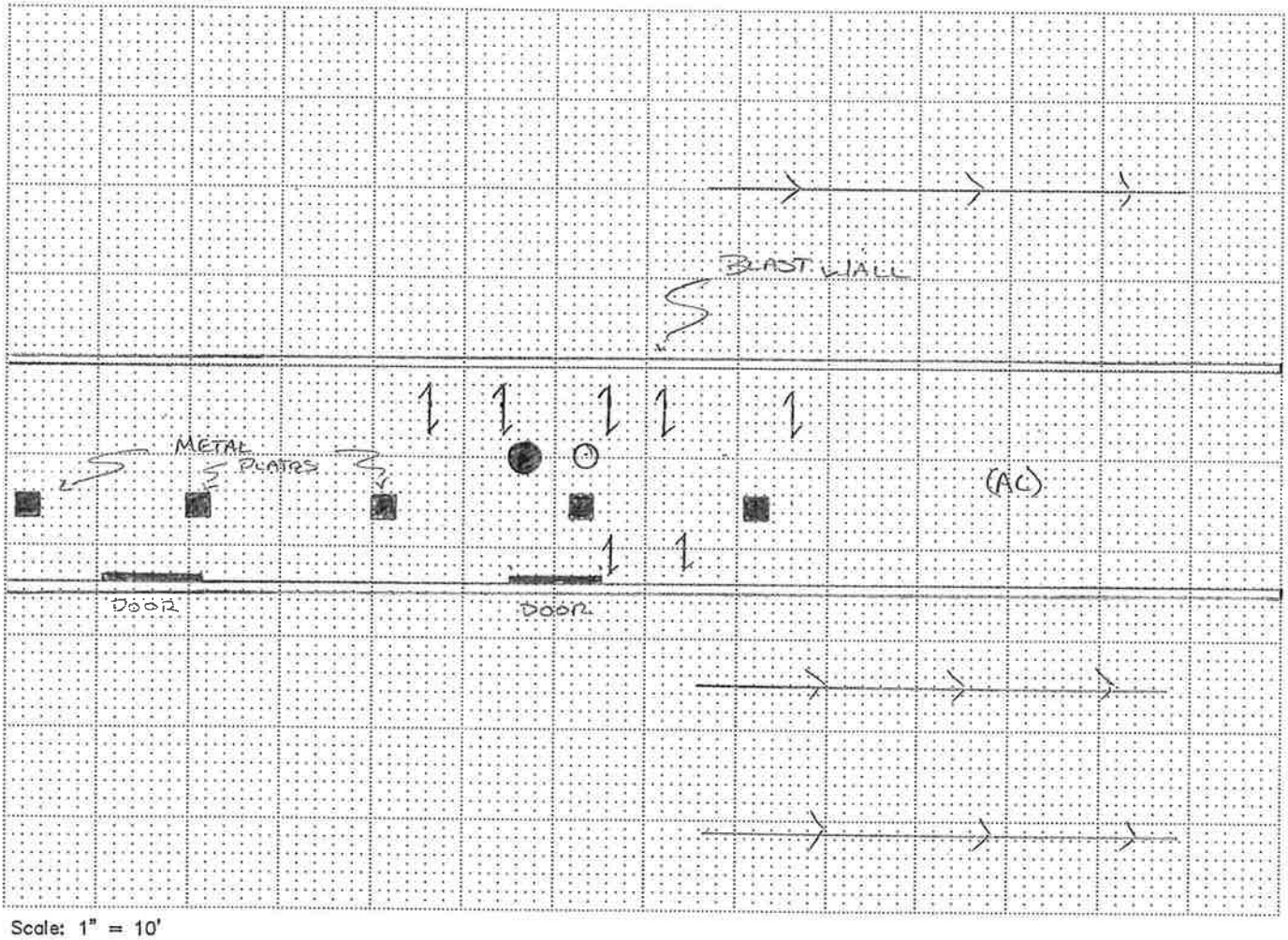
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAMSA-DP06



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ OR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

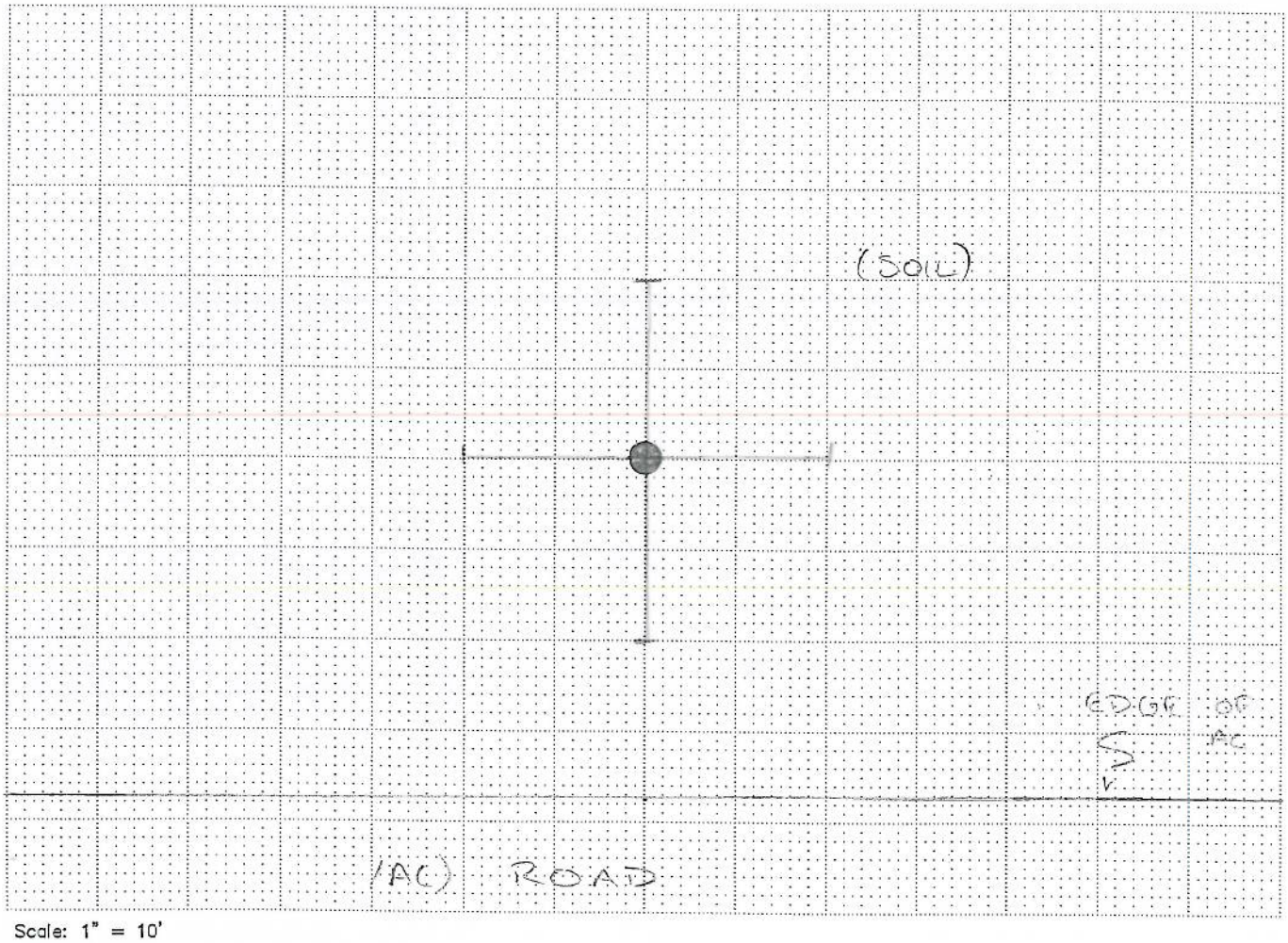
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAMSA-DP07



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ⟷ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-15-10

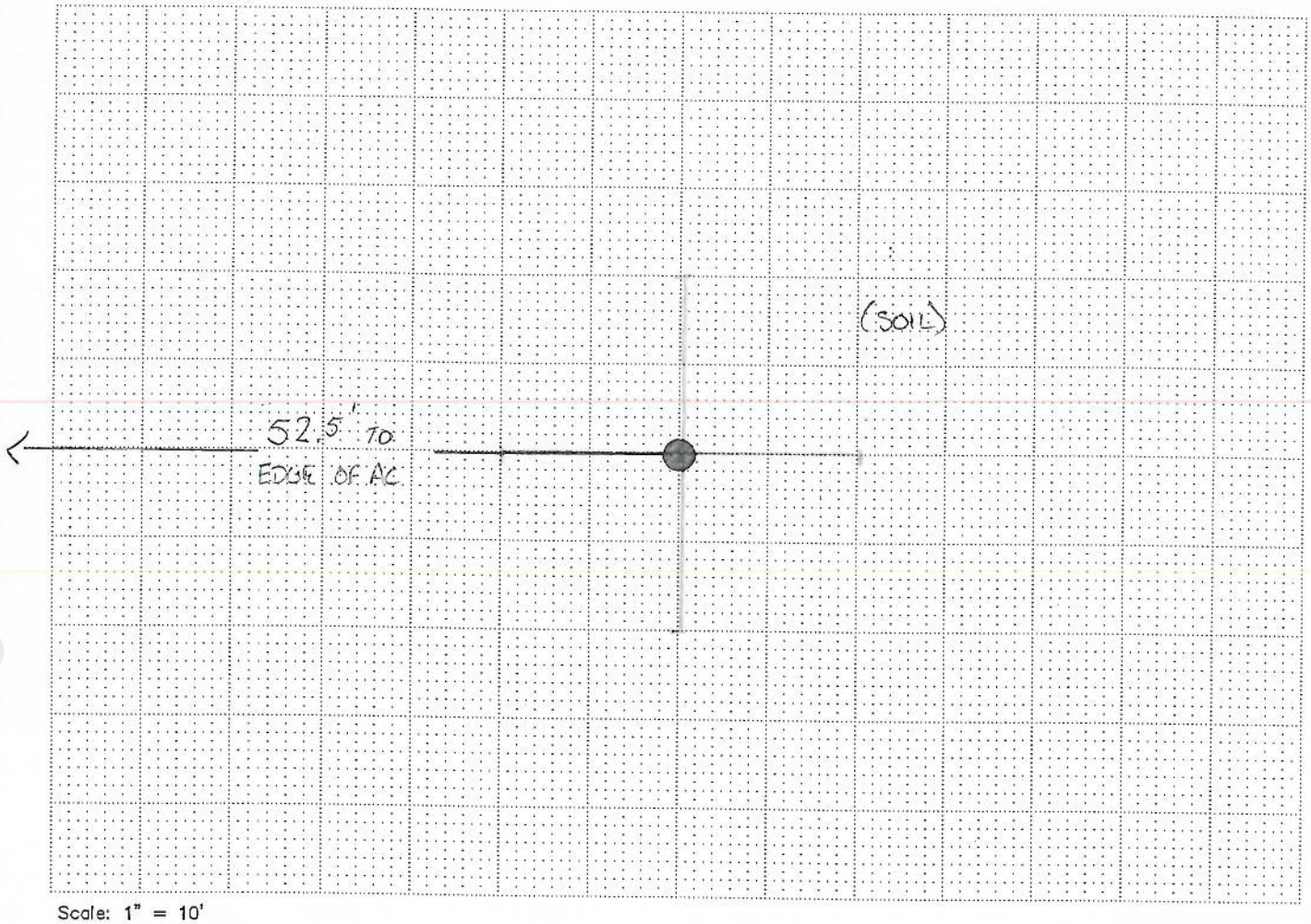
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: IAMSA-DP08



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- ▭ CR ⟵ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

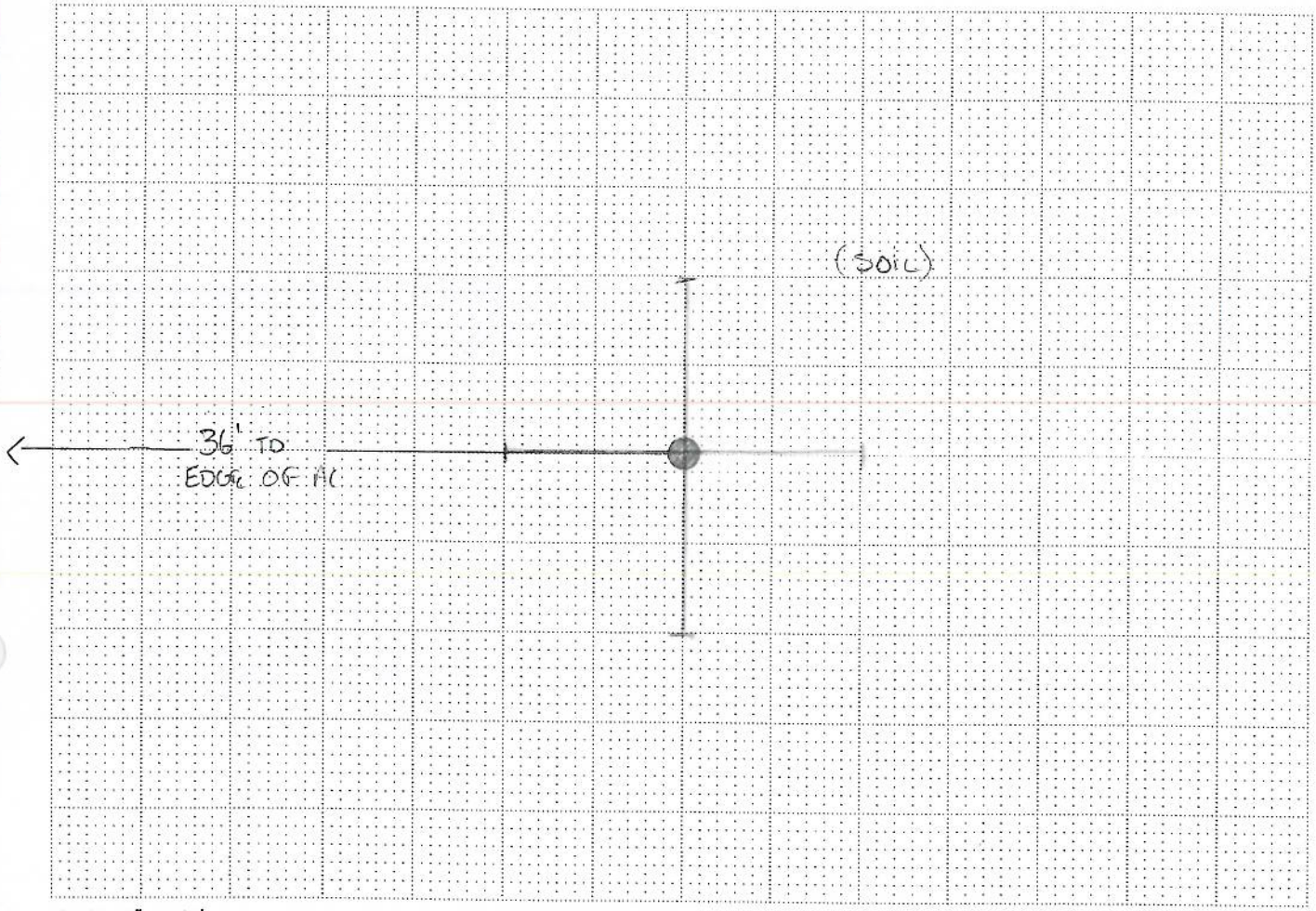
JOB: 10-106.52 | DATE: 03-15-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: 1AMSA-DP09



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- GPR Traverse
- OR Localized GPR Anomaly
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- ✓ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	_ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

JOB: 10-106.52 | DATE: 03-17-10

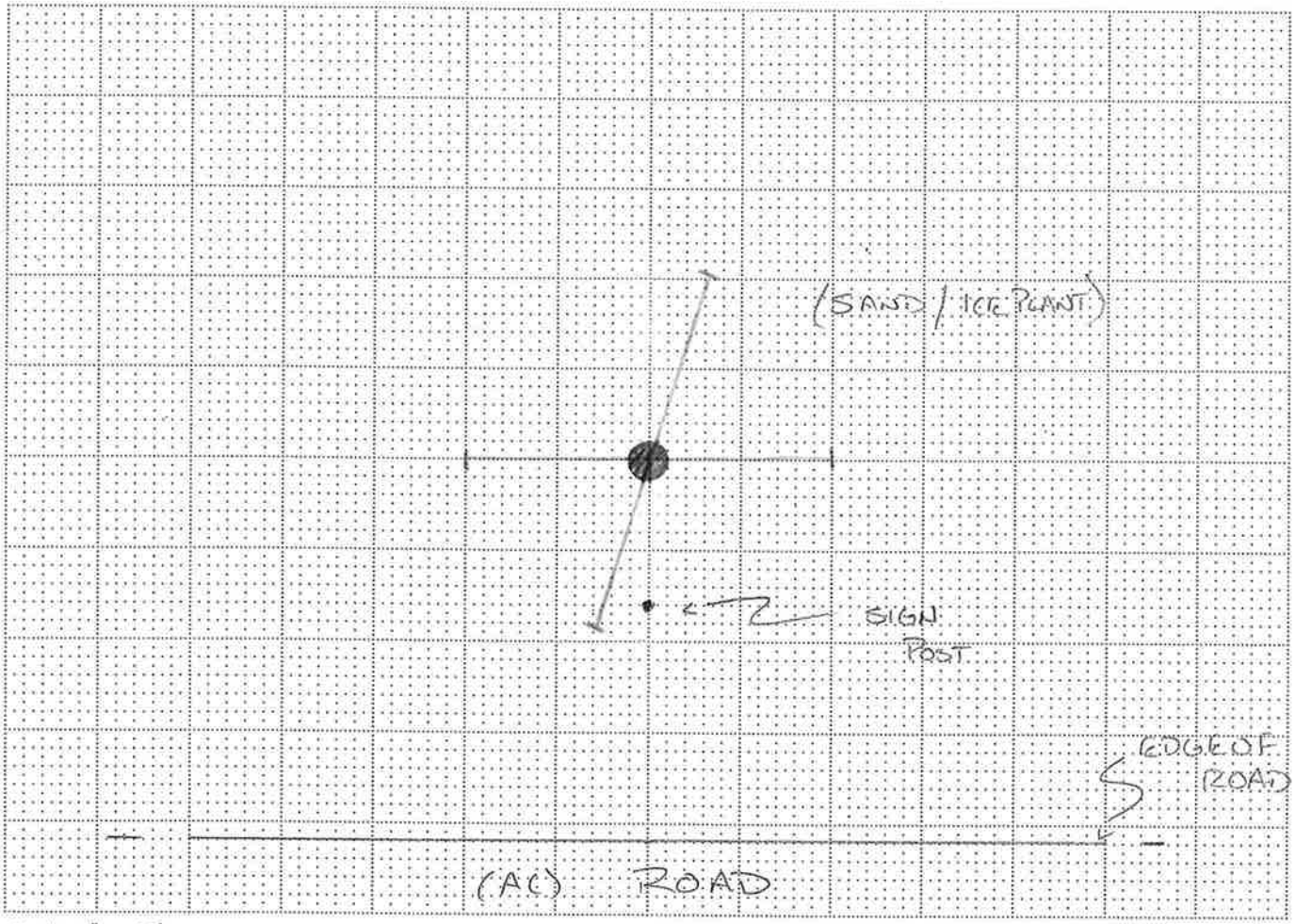
NORCAL GEOPHYSICAL CONSULTANTS INC.

NORCAL

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: ALAMSA-DP10



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ⊢——⊣ GPR Traverse
- □ OR ←—→ Localized GPR Anomaly
- —— — —— Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- _ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- _ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- ✓ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- _ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

PERSONNEL: TWB / DJB

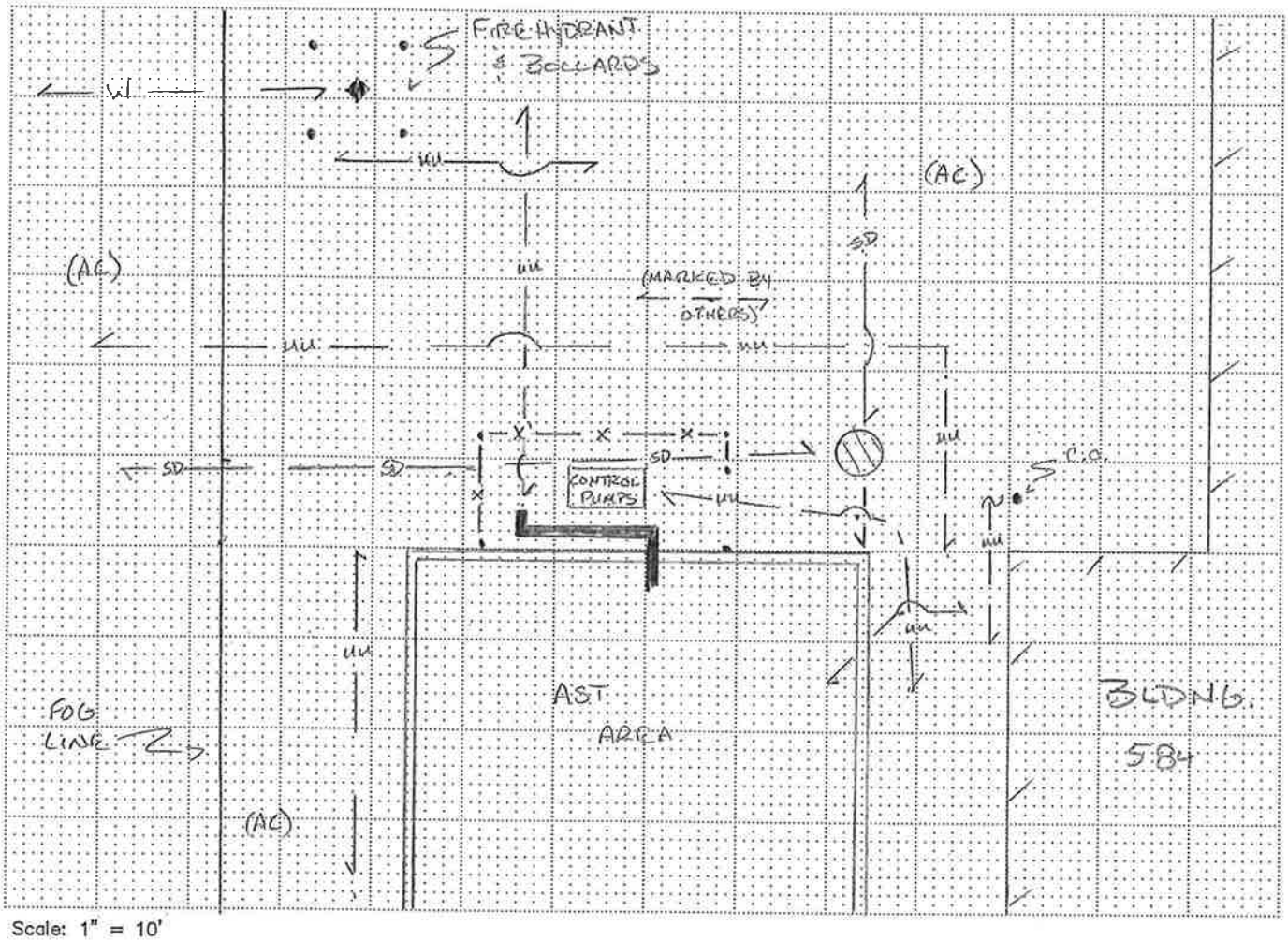
JOB: 10-106.52 | DATE: 03-18-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: AST & BLDG 584 AREA (1 of 2)



Scale: 1" = 10'

EXPLANATION

- ○ Original Boring Location
- ● Final Boring Location
- ——— GPR Traverse
- □ OR ⟶ Localized GPR Anomaly
- — — — Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- ✓ SD (Storm Drain)
- ✓ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:	Procedure:	Surface Conditions:
✓ GPR (Radar)	✓ EMC (Conduction)	_ Wet
✓ RD 400	✓ EMI (Induction)	✓ Dry
✓ M Scope	✓ Ambient	_ other
_ other	✓ GPR	

REMARKS

N

PERSONNEL: TWB / DJB

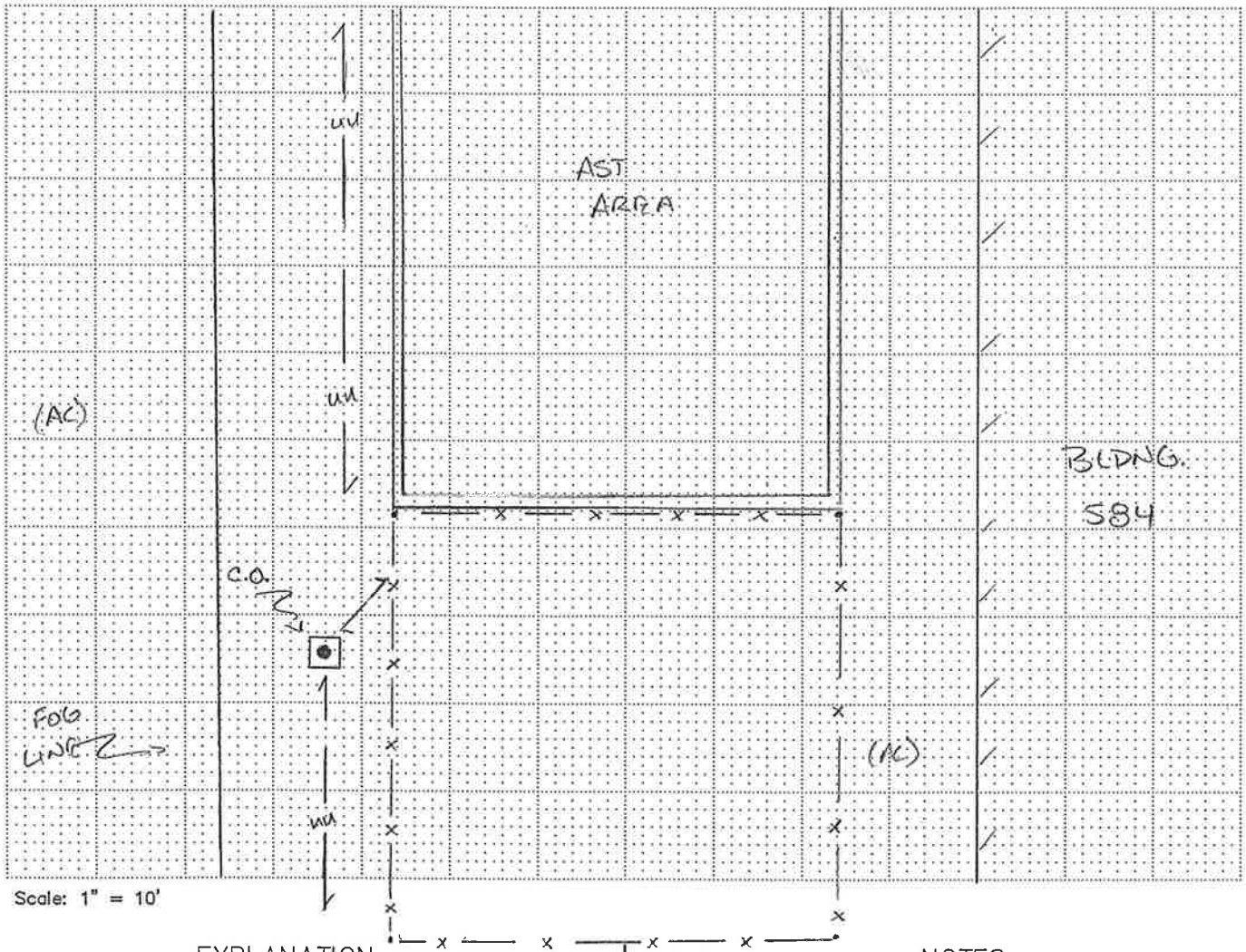
JOB: 10-106.52 | DATE: 03-18-10

NORCAL GEOPHYSICAL CONSULTANTS INC.

CLIENT: CH2M HILL

LOCATION: ALAMEDA PT., ALAMEDA CA

BORING: AST & BLDNG 584 AREA (2 OF 2)



EXPLANATION

- Original Boring Location
- Final Boring Location
- GPR Traverse
- Localized GPR Anomaly (OR)
- Utility Alignment

Utilities

- _ T (Telephone, Comm.)
- _ E (Electric)
- _ NG (Natural Gas)
- _ CA (Compressed Air)
- _ STM (Steam)
- _ SS (Sanitary Sewer)
- _ SD (Storm Drain)
- _ W (Water)
- _ FS (Fire Supression)
- ✓ UU (Undifferentiated Utility)

Surface

- _ RC (Reinforced Concrete)
- ✓ AC (Asphalt)
- _ C (Concrete)
- _ Soil
- _ Gravel
- _ other

NOTES

Equipment:
- ✓ GPR (Radar)
- ✓ RD 400
- ✓ M Scope
- _ other

Procedure:
- ✓ EMC (Conduction)
- ✓ EMI (Induction)
- ✓ Ambient
- ✓ GPR

Surface Conditions:
- _ Wet
- ✓ Dry
- _ other

REMARKS

N

Attachment E3
Field Forms (on CD-ROM)

- Boring Logs
- Groundwater Sampling Logs
- Chains of Custody

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Boring Logs

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CH2MHILL

PROJECT NUMBER:
383512

SOIL BORING EXPLANATION

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C | LOCATION : Alameda Point, Alameda, CA

DRILLING CONTRACTOR : RSI Drilling | DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

▼ Water Level Symbol

DP - Direct Push

NR - Not Recorded

FT - Feet

BGS - Below Ground Surface

* - Sample depth measured from bottom of surface cover (e.g. concrete, Asphalt Concrete Pavement (ACP), and/or Portland Cement Concrete Pavement PCCP)

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114056.838, E 6038142.93 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.2 ft bgs ▼ — START : 4/6/10 10:05 — END : 4/6/10 11:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.67' thick.	sample: DP01-07000/57000 & MS/MSD, 10:20, (0-0.5)' *
	0.0-2.0	100	DP			**CLAYEY SAND-WELL GRADED SAND (SC)** olive brown (2.5Y 4/3), moist, medium dense, faintly bedded, clean sand at base, clayey sand at top, subrounded to rounded quartz sand, mostly quartz sand, some feldspar, few lithics, 0/85/15.	sample: DP01-03000/53000, 10:15, (0-0.75)' * ▼ sample: DP01-07001, 10:25, (0.5-2)' * sample: DP01-03001, 11:00, (0.75-1.25)' *
2.0						**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, upward coarsening fine to medium grained, subrounded to round, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP01-07002, 10:30, (2-4)' *
	2.0-4.0	100	DP				
4.0						**WELL GRADED SAND (SW)** dark olive gray (5Y 3/2), wet, faintly bedded at base, dense, fine to medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP01-07003, 10:35, (4-8)' *
5	4.0-6.0	NR	DP				
6.0						**POORLY GRADED SAND (SP)** dark olive gray (5Y 3/2), wet, dense, faintly bedded, well rounded, trace silt, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
	6.0-8.0	NR	DP				
8.0						**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, very dense, faintly bedded, fine grained rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
10	8.0-10.0	NR	DP				
10.0						**POORLY GRADED SAND (SP)** dark olive gray (5Y 3/2), wet, dense, faintly bedded, trace shell fragments, fine, olive brown (2.5Y 4/3) at base rounded, trace silt, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
	10.0-12.0	NR	DP				
12.0						**POORLY GRADED SAND (SP)** upward coarsening with below. **SILTY SAND/WELL GRADED SAND (SM-SW)** dark olive gray (5Y 3/2), wet dense, bedded to laminated, shell fragments to 10% to upward coarsening sequences, mostly quartz sand, some feldspar, few lithics, 80% sand, 20% fine.	
	12.0-15.0	NR	DP				
15	15.0					**LEAN CLAY (CL)** greenish gray (10Y 5/1) to dark greenish gray (5GY 4/1), wet, very plastic, laminated, mostly quartz sand, some feldspar, few lithics, 100% fines. **SILT (ML)** greenish black (10Y 2.5/1), wet, soft, non-plastic to plastic with fine sand, mostly quartz sand, some feldspar, few lithics, 15% and 85% fines.	

Boring terminated at 15 ft bgs.

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114056.839, E 6038142.93 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.3 ft bgs — START : 4/6/10 13:25 — END : 4/6/10 14:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.5' thick.	sample: DP02-07004 & MS/MSD, 13:40, (0-0.5)' *
	2.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/4), dry to moist, faintly bedded to massive, contains clayey sand, casts of complete bivalve, firm, oval sandy clay clasts, medium grained rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP02-03003 & MS/MSD, (0-0.75)' * ▼ sample: DP02-07005, 13:45, (0.5-2)' * sample: DP02-03004, (0.75-1.25)' *
	4.0	100	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (2.5Y 3/2), moist to wet, dense to very dense, bivalve clay casts, shell hash at base, massive, medium grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics, gradational with below.	sample: DP02-07006, 13:50, (2-4)' *
5	6.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, very dense, faintly bedded, trace shells at base, medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand ~10% fines.	sample: DP02-07007, 13:55, (4-8)' *
	8.0	100	DP				
10	10.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, dense, massive, subrounded to rounded, medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines,.	
	12.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, dense, faintly bedded, four upward fining sequences, fine to fine medium grained, subrounded to well rounded quartz sand, 90% sand ~10% fines.	
15	15.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, medium dense, faintly bedded, fine, rounded, sand with shell fragments to 1 mm, 90% sand ~10% fines.	
						SILT (ML) dark gray (5Y 4/1), wet, laminated, non plastic, sharp contact with above. Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP03	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114579.533, E 6038215.49 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.1 ft bgs ▼ — START : 4/2/10 08:20 — END : 4/2/10 09:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						CONCRETE 0.8' thick.	sample: DP03-07008/DP03-03006, 09:05, (0-0.5)' * sample: DP03-07009, 09:10, (0.5-2)' *
		75	DP			**WELL GRADED SAND (SW)** brown (10YR 5/3), moist, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines, last 0.5' is wet. ▼	sample: DP03-07010/57010, 09:15, (2-4)' *
	3.0						
		85	DP			**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP03-07011, 09:20, (4-8)' *
5	5.0						
		100	DP				
	7.0						
		100	DP			**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines, some shells.	
	9.0					**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines, little shells.	
10		100	DP				
	11.0						
		100	DP				
	13.0					**WELL GRADED SAND (SW)** Same as above, except dense.	
						WELL GRADED SAND (SW) grayish brown (10YR 5/2), wet, dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines, some blocks of clay interbedded that are 10Y 5/1, greenish gray.	
15		100	DP				

Boring terminated at 16 ft bgs.

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP04	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114859.943, E 6038297.89 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs ▼ — START : 4/12/10 14:05 — END : 4/12/10 15:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE** 0.6' thick.	sample: DP04-07172, 14:40, (0-0.5)' * sample: DP04-03226, 14:45, (0-0.5)' * sample: DP04-07173, 14:43, (0.5-2)' *
	2.6	85	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, loose, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines. **WELL GRADED SAND (SW)** dark gray (2.5Y 4/1), moist, loose, fine to coarse, subrounded, well graded, hydrocarbon staining, solvent odor, 95% sand, 5% fines.	▼ sample: DP04-03267, 14:50, (1.5-2)' * sample: DP04-07174, 14:46, (2-4)' *
	4.6	100	DP	PID = 0.2		**LEAN CLAY (CL)** light yellowish brown (2.5Y 6/3), wet, soft, high plasticity, slow dilatancy, low toughness, 95% fines, 5% sand, no odor. **WELL GRADED SAND (SW)** dark gray (2.5Y 4/1), wet, fine to coarse, well graded, subrounded, no odor or staining, 95% sand, 5% fines.	sample: DP04-03268, 14:55, (3.5-4)' * sample: DP04-07175, 14:49, (4-8)' *
5	6.6	100	DP	PID = 0.2			
	8.6	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines, no odor or staining.	
						Boring terminated at 8.6 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP05	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114673.003, E 6038241.32 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.9 ft bgs ▼ — START : 4/9/10 14:25 — END : 4/9/10 15:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	NR	DP	PID = 122 PID = 269 PID = 24.5 PID = 54.8 PID = 11.3		**ASPHALT CONCRETE PAVEMENT** 0.50' thick. **POORLY GRADED SAND (SP)** dark gray (2.5Y 4/1), wet, medium dense, bedded to massive, medium grained, rounded to subangular, mostly quartz sand, some feldspar, few lithics,, gradation with below, strong odors.	sample: DP05-07176, 14:35, (0-0.5)' * sample: DP05-03269, 15:20, (0-0.5)' * sample: DP05-07177, 14:40, (0.5-2)' *
2.0	2.0 – 4.0	NR	DP	PID = 5.8 PID = 4.4		**SILTY SAND (SM)** greenish gray (10Y 5/1), wet, medium dense, thinly bedded, strong to moderate odor, very fine to medium grained, rounded quartz sand, 75% sand, 25% fines.	sample: DP05-07178, 14:45, (2-4)' * sample: DP05-03270/53270, 15:25, (2.1-3)' *
4.0	4.0 – 6.0	NR	DP			**SILTY SAND (SM)** olive gray (5Y 4/2), wet, faintly bedded, dense, trace shell fragments, moist 4-6', upward coarsening, bedded fine quartz sand at base, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 85% sand, 15% fines.	sample: DP05-07179, 14:50, (4-8)' *
5	6.0 – 8.0	NR	DP				
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST
STEPHEN B. QUAYLE
No. 7800
Exp. 5/31/2012
STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP06	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114463.925, E 6038206.88 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 4/12/10 13:30 — END : 4/12/10 14:40 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 5.9		**PORTLAND CEMENT CONCRETE PAVEMENT** 0.6' thick.	sample: DP06-07180/57180, 13:50, (0-0.5)' *
				PID = 5.9		**WELL GRADED SAND (SW)** brown (10YR 4/3) to dark grayish brown (2.5Y 4/2), moist to wet, loose to medium dense, wet, dense, bedded with fine and medium grained, upward coarsening sequences, gradational with below, 95% sand, 5% fines.	sample: DP06-03272, 14:20, (0-0.5)' * Slight TPH odors in core retrieval
	100	DP		PID = 17.4			sample: DP06-07181, 13:55, (0.5-2)' *
2.0				PID = 1.7			sample: DP06-03273, 14:25, (1-1.5)' *
	100	DP					sample: DP06-07182, 14:00, (2-4)' *
4.0						**WELL GRADED GRAVEL (GW)** dark gray (10YR 4/1), wet, dense, bioclastic gravel to 1/2", 25-40% shell fragments, subangular to rounded, mostly quartz sand, some feldspar, few lithics, sand 95% sand, 5% fines.	sample: DP06-03274, 14:30, (2.1-2.5)' *
5	100	DP				**POORLY GRADED SAND (SP)** dark grayish brown (2.5Y 4/2), wet, dense, massive trace shell fragments to 1/2", subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP06-07183, 14:05, (4-8)' *
6.0				PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, dense, faintly bedded, massive, trace shell fragments to 1/4", fine to medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
	100	DP					
8.0							
	100	DP					
10 10.0							
	100	DP				**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3) to light olive brown (2.5Y 5/4), wet, dense, massive to faintly bedded, trace shell fragments to 2mm, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
12.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3) to light olive brown (2.5Y 5/4), wet, dense, massive to faintly bedded, trace shell fragments to 2 mm, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, sand 95% sand, 5% fines, trace silt.	
	100	DP					
15 15.0						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP07	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114310.191, E 6037976.89 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 4/12/10 10:30 — END : 4/12/10 11:40 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.65' thick.	sample: DP07-07184, 11:05, (0-0.5)' * sample: DP07-03275 & MS/MSD, 11:30, (0-0.5)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist to wet, dense, massive, fine to medium grained, subrounded to round quartz sand 90% sand, ~10% gravel, gradational with below.	sample: DP07-07185, 11:10, (0.5-2)' * sample: DP07-03276, 11:35, (1.5-2)' *
2.0						**WELL GRADED SAND (SW)** olive gray (5Y 4/2), wet, dense, faintly bedded with intervals of fine sand, fine to medium sand, fine to medium, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, sand gradational with below.	sample: DP07-07186, 11:15, (2-4)' *
	2.0 - 4.0	100	DP				
4.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, dense, massive to grossly bedded, intervals of fine sand, dark gray sand to 5 mm thick, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, trace shell fragments to 1/2", gradational with below.	sample: DP07-07187, 11:20, (4-8)' *
5	4.0 - 6.0	100	DP				
	6.0 - 8.0	100	DP				
8.0						**POORLY GRADED SAND (SP)** grayish brown (2.5Y 5/2), wet, dense, faintly bedded, rounded medium grained, mostly quartz sand, some feldspar, few lithics, sand 95% sand, 5% fines, gradational with below.	
10	8.0 - 10.0	100	DP				
	10.0 - 12.0	100	DP				
12.0						**WELL GRADED SAND (SW)** dark gray (5Y 4/1), wet, dense, upward coarsening fine to medium grained rounded, mostly quartz sand, some feldspar, few lithics, sand 95% sand, 5% fines.	
15	12.0 - 15.0	100	DP				
15.0						**LEAN CLAY (CL)** light olive brown (2.5Y 5/3), wet, soft, plastic, laminated, 100% fines. Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP08	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114077.746, E 6037909.25 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.3 ft bgs ▼ — START : 4/12/10 13:15 — END : 4/12/10 13:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE** 0.8' thick.	sample: DP08-07900, 13:20, (0-0.5)' * sample: DP08-03910, 13:35, (0-0.5)' * sample: DP08-07901, 13:25, (0.5-2)' *
		90	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	▼ sample: DP08-03911, 13:40, (1.5-2)' *
	2.8			PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP08-07902, 13:30, (2-4)' *
		100	DP	PID = 0			
	4.8			PID = 0			sample: DP08-07903, 13:35, (4-8)' *
5		100	DP				
	6.8			PID = 0			
		100	DP				
	8.8					Boring terminated at 8.8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP09	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114291.743, E 6037660.82 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 4/12/10 08:35 — END : 4/12/10 09:40 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.60' thick.	sample: DP09-07192, 09:20, (0-0.5)' * sample: DP09-03281, 09:40, (0-0.5)' * sample: DP09-07193, 09:25, (0.5-2)' *
	2.0	100	DP			**POORLY GRADED SAND (SP)** yellowish brown (10YR 5/4), moist, loose, massive, subangular to round medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP09-03282, 09:45, (1.5-2)' *
	4.0	100	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist to wet, dense, grossly bedded, upward coarsening, fine to medium grained subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP09-07194, 09:30, (2-4)' *
5	6.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, dense, faintly bedded, trace shell fragments to 1/4", fine to medium grained subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP09-07195, 09:35, (4-8)' *
	8.0	100	DP				
	10.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (10YR 4/2), wet, dense, fainted bedded at base, medium grained subrounded to medium, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
10	12.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except trace shell fragments to 1/2", gradational with below.	
	15.0	100	DP			**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/3) to olive gray (5Y 4/2), wet, dense, massive fine grained rounded quartz sand with trace silt 95% sand, 5% fines.	
15						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP10	SHEET 1 OF 1

SOIL BORING LOG

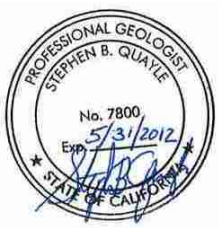
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113815.784, E 6038007.64 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.5 ft bgs ▼ — START : 4/6/10 08:45 — END : 4/6/10 09:35 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.67' thick.	sample: DP10-07196, 09:10, (0-0.5)' * sample: DP10-03284, 09:40, (0-0.5)' * sample: DP10-07197, 09:15, (0.5-2)' *
	2.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 5/3), dry, medium dense, fine to medium grained, subrounded, massive, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines.	
	4.0	80	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist to wet, medium dense, bedded, upward fining sequences, medium to very fine sand, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines, gradation with below.	sample: DP10-07198, 09:20, (2-4)' * ▼ sample: DP10-03285, 09:40, (2.1-2.5)' *
5	6.0	NR	DP			**POORLY GRADED SAND (SP)** dark grayish brown (2.5Y 4/2), wet, faintly bedded, dense, medium grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP10-07199, 09:25, (4-8)' *
	8.0	NR	DP			Trace shells.	
10						Boring terminated at 8 ft bgs.	
15							



SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP11	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113823.163, E 6037778.88 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.4 ft bgs — START : 4/6/10 15:00 — END : 4/6/10 16:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.60' thick.	sample: DP11-07200/57200, 15:50, (0-0.5)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), dry to moist, massive loose to dense, medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP11-03287, 15:05, (0-0.5)' * sample: DP11-07201, 15:55, (0.5-2)' * ▼ sample: DP11-03288, 15:10, (1.5-2)' *
2.0	2.0 - 4.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, faintly bedded, three upward coarsening sequences, gradational with above, fine grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics, gradational with above.	sample: DP11-07202, 16:00, (2-4)' *
4.0	4.0 - 6.0	100	DP			**POORLY GRADED SAND (SP)** yellowish brown (10YR 5/4), wet, dense, massive, fine to medium grained, subrounded to rounded, mostly quartz sand, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP11-07203, 16:05, (4-8)' *
5 — 6.0	6.0 - 8.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, very dense, massive, medium grained, trace shell fragments, mostly quartz sand, some feldspar, few lithics, gradational with below.	
8.0	8.0 - 12.0	100	DP				
10 — 12.0	12.0 - 15.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, faintly bedded, dense, two upward fining sequences, medium to fine grained, rounded, mostly quartz sand, mostly quartz sand, 90% sand, ~10% fines.	
15 — 15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP12	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114024.394, E 6037475.53 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.3 ft bgs — START : 4/7/10 08:25 — END : 4/7/10 09:35 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 25		**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP12-07204 & MS/MSD, 08:30, (0-0.5)' *
	2.0	100	DP	PID = 6.6		**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)** dark greenish gray (10Y 4/1), wet, dense, massive, rounded pebbles to 1", vitreous Surface due to NAPL, strong odor, medium grained, quartz sand, mostly quartz sand, some feldspar, few lithics, 50% gravel, 35% sand, 15% fines.	sample: DP12-03290/53290, 09:25, (0-0.75)' *
				PID = 0.7			sample: DP12-07205, 08:35, (0.5-2)' *
	4.0	100	DP	PID = 0.5		**SILTY SAND (SM)** moist, dense, bedded sand and silt, fine grained rounded quartz sand with silt, mostly quartz sand, some feldspar, few lithics, 60% sand, 40% fines.	sample: DP12-03291, 09:30, (1.5-2)' *
				PID = 4.2		**LEAN CLAY (CL)** greenish gray (10Y 5/1), moist, firm, laminated, trace silt, plastic, no odor, mostly quartz sand, some feldspar, few lithics, 100% fines.	sample: DP12-07206, 08:40, (2-4)' *
5	6.0	100	DP	PID = 3.3		**POORLY GRADED SAND (SP)** dark greenish gray (10Y 4/1) to olive brown (2.5Y 4/3), wet, dense, faintly bedded, no odor, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP12-03292, 09:40, (3.5-4)' *
						POORLY GRADED SAND (SP) olive brown (2.5Y 4/3), Same as above, except gradational with below.	sample: DP12-07207, 08:45, (4-8)' *
	8.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3) to brown (10YR 4/3), wet, dense, faintly bedded, medium grained rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
10	10.0	100	DP			**POORLY GRADED SAND (SP)** brown (10YR 4/3), wet, dense, finely bedded to massive, medium grained rounded quartz, mostly quartz sand, some feldspar, few lithics, gradational with below, wet.	
	12.0	100	DP				
15	15.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (10YR 4/2), wet, massive, trace shell fragments, upward coarsening, fine to medium grained quartz, mostly quartz sand, some feldspar, few lithics,.	
						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP13	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113487.270, E 6038191.49 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.5 ft bgs ▼ — START : 4/1/10 13:50 — END : — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.6' thick.	sample: DP13-07208, 14:15, (0-0.5)' * sample: DP13-03293, 14:45, (0-0.5)' * sample: DP13-07209, 14:20, (0.5-2)' *
	2.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), dry, loose, massive, angular to subrounded, medium to fine quartz sand, some feldspar, few lithics, gradational with below, 95% sand, 5% fines.	
	4.0	100	DP			**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/3), moist to wet, dense, massive, bioclastic at base with bivalve hinges, fine grained quartz sand, subangular to rounded, 95% sand, 5% fines, gradational with below.	sample: DP13-07210/57210, 14:25, (2-4)' * ▼ sample: DP13-03294, 14:50, (3.25-3.75)' *
5	6.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), wet, dense, massive, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP13-07211, 14:30, (4-8)' *
	8.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/4), wet, dense, faintly bedded with medium grained and fine grained rounded quartz sand, gap graded, 95% sand, 5% fines, gradational with below.	
10	10.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), wet, dense, massive to faintly bedded, subrounded to rounded medium, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
	12.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/4), wet, very dense, faintly bedded, fine, subangular to rounded sand, trace shell fragments to 1/4", 95% sand, 5% fines, gradational with below.	
15	15.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), wet, very dense, massive, trace shell fragments to 1/4", medium grained, rounded quartz sand, 95% sand, 5% fines.	
						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP14	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113290.669, E 6038195.20 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.6 ft bgs ▼ — START : 4/1/10 13:00 — END : 4/1/10 13:25 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE** 0.8' thick.	sample: DP14-07212/DP14-03296, 13:20, (0-0.5)' * sample: DP14-07213, 13:25, (0.5-2)' *
	2.8	100	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP14-07214, 13:30, (2-4)' * ▼
	4.8	100	DP	PID = 0		**WELL GRADED SAND (SW)** olive gray (5Y 5/2), wet, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP14-03297, 13:30, (3.5-4)' * sample: DP14-07215, 13:35, (4-8)' *
5	6.8	100	DP	PID = 0		**WELL GRADED SAND (SW)** olive gray (5Y 5/2), wet, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines, trace shell from 7-8'.	
	8.8	100	DP	PID = 0		Boring terminated at 8.8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP15	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113327.764, E 6037820.54 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.5 ft bgs ▼ — START : 4/1/10 09:15 — END : 4/1/10 09:45 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**CONCRETE** 1' thick.	sample: DP15-03299/DP15-07216, 09:30, (0-0.5)' * ▼ sample: DP15-07217, 09:55, (0.5-2)' *
		100	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist to wet, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP15-07218, 09:40, (2-4)' *
	3.0						
		100	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, loose, fine to coarse, well graded, subrounded, well graded, subrounded, 95% sand, 5% fines.	sample: DP15-07219, 09:45, (4-8)' *
5	5.0						
		100	DP	PID = 0			
	7.0						
		100	DP	PID = 0			
	9.0						
10						Boring terminated at 9 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP16	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113168.257, E 6037538.62 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs ▼ — START : 3/31/10 14:30 — END : 3/31/10 15:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP			**CONCRETE** 0.8' thick.	sample: DP16-07220 & DP16-57220, 15:35, (0-0.5)' *
						WELL GRADED SAND (SW) brown (10YR 5/3), moist, loose, fine to coarse, subrounded, well graded, 95% sand, 5% silt.	sample: DP16-03302, 14:55, (0-0.5)' *
							sample: DP16-07221, 15:45, (0.5-2)' *
2.0	2.0 – 4.0	100	DP				▼ sample: DP16-07222, 15:45, (2-4)' *
						WELL GRADED SAND (SW) brown (10YR 5/3), wet, loose, fine to coarse, subrounded, well graded, 95% sand, 5% silt, density transitions from loose to dense with increasing depth.	
4.0	4.0 – 6.0	100	DP				sample: DP16-07223, 15:50, (4-8)' *
5							
6.0	6.0 – 8.0	100	DP				
8.0	8.0 – 10.0	100	DP				
10							
10.0	10.0 – 12.0	100	DP				
12.0	12.0 – 13.0	100	DP				
13.0	13.0 – 15.0	100	DP				
15							
15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP17	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112997.623, E 6037876.18 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.1 ft bgs — START : 3/31/10 11:10 — END : 3/31/10 14:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						CONCRETE 0.7' thick.	sample: DP17-03305, 14:00, (0-0.5)' * sample: DP17-07224, 12:00, (0-0.5)' * sample: DP17-07225, 12:00, (0.5-2)' *
	2.7	85	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, loose, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	▼ sample: DP17-07226, 12:00, (2-4)' *
	4.7	100	DP	PID = 0			sample: DP17-07227, 12:00, (4-8)' *
5	6.7	100	DP	PID = 0			
	8.7	100	DP	PID = 0			
10	10.7	100	DP	PID = 0		**CLAYEY SAND (SC)** olive gray (5Y 5/2), wet, loose, sand is fine and medium, poorly graded, subrounded, fines are clay, high plasticity, no dilatancy, low toughness, weakly cemented, several blocks of clay mixed in with clayey sand.	
	12.7	100	DP	PID = 0		**LEAN CLAY (CL)** olive gray (5Y 5/2), wet, soft, high plasticity, no dilatancy, low toughness, 95% fines, 5% sand.	
15	15.7	100	DP	PID = 0		**CLAYEY SAND (SC)** dark gray (10YR 4/1), wet, poorly graded, coarse grained, subangular, medium dense, some shells from 14-15', some intact, some broken.	
						Boring terminated at 15.7 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP18	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : Not Measured — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112726.833, E 6037998.60 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.2 ft bgs ▼ — START : 3/31/10 09:30 — END : 3/31/2010 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE** 8" thick.	sample: DP18-07228/DP18-03308, 10:15, (0-0.5)' * sample: DP18-07229, 10:15, (0.5-2)' *
	3.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP18-03309, 10:30, (1.5-2)' * ▼ sample: DP18-07230/DP18-57230, 10:30, (2-4)' *
5	5.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP18-07231, 10:30, (4-8)' *
	7.0	100	DP	PID = 0			
	9.0	100	DP	PID = 0			
10						Boring terminated at 9 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP19	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113920.952, E 6036424.39 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.5 ft bgs — START : 4/2/10 11:00 — END : 4/2/10 12:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0	0.5					**ASPHALT** 0.3' thick.	sample: DP19-07232 and DP19-03311, 11:46, (0-0.5)' *
	2.5	100	DP			**POORLY GRADED GRAVEL (GP)** very dark grayish brown (10YR 3/2), dry, loose, gap graded, subangular, 90% gravel, 10% and. **POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), dry to moist, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines. **WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), loose to medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP19-07233, 11:45, (0.5-2)' * sample: DP19-07234, 11:50, (2-4)' *
	4.5	100	DP				sample: DP19-03312, 11:50, (3.5-4)' * sample: DP19-07235, 11:55, (4-8)' *
5	6.5	100	DP			**WELL GRADED SAND (SW)** Same as above, except wet and medium dense.	
	8.5	100	DP				
	10.5	100	DP			**WELL GRADED SAND (SW)** grayish brown (2.5Y 5/2), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines, trace shells.	
10	12.5	100	DP				
	15.5	100	DP				
15						Boring terminated at 15.5 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP20	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 16.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113540.699, E 6036492.19 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.4 ft bgs ▼ — START : 4/5/10 09:20 — END : 4/2/10 10:20 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.5' thick.	sample: DP20-07236, 09:50, (0-0.5)' * sample: DP20-03314, 10:25, (0-0.5)' * sample: DP20-07237, 09:55, (0.5-2)' *
	0.0	100	DP			**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)** very dark brown (10YR 2/2), dry to moist, dense, well rounded fragments to 1.5, rounded quartz sand, non plastic fines, 50% gravel, 40% sand, 10% fines.	
2.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), dry, medium dense, subangular, medium grained, mostly quartz, some feldspar, few lithics, 90% sand, ~10% fines.	sample: DP20-07238, 10:00, (2-4)' *
	2.0	NR	DP			**POORLY GRADED SAND (SP)** yellowish brown (10YR 5/4), moist, dense, massive, subrounded to rounded, medium grain, mostly quartz, some feldspar, few lithics, fine grained at base, gradational with below.	sample: DP20-03315, 10:30, (3.5-4)' *
4.0						**POORLY GRADED SAND (SP)** Same as above, except faintly bedded, trace shell, moist to wet at base, gradational with below.	sample: DP20-07239, 10:05, (4-8)' *
5	4.0	NR	DP				sample: DP20-03316, 10:35, (5-5.5)' * ▼
6.0						**WELL GRADED SAND WITH GRAVEL (SW)** dark grayish brown (10YR 4/2), wet, dense, massive, faintly bedded, 15% shell hash, rounded medium grained, mostly quartz sand, some feldspar, few litchis, 15% gravel, 85% sand, 5% fines.	
	6.0	NR	DP				
8.0						**CLAYEY SAND (SC)** olive gray (5Y 4/2), moist, firm, plastic, fine grained sand.	
						WELL GRADED SAND WITH GRAVEL (SW) dark grayish brown (10YR 4/2), wet, dense, massive, faintly bedded, 15% shell hash, rounded medium grained, mostly quartz sand, some feldspar, few litchis, 15% gravel, 85% sand, 5% fines.	
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP21	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112992.426, E 6037170.16 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.5 ft bgs — START : 4/2/10 13:35 — END : 4/2/10 15:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0						**ASPHALT** 0.2' thick.	sample: DP21-03317, 14:20, (0-0.5)' * sample: DP21-07240/57240, (0-0.5)' * sample: DP21-07241, 14:45, (0.5-2)' *
	2.2	100	DP	PID = 0		**SILTY SAND (SM)** very dark grayish brown (10YR 3/2), dry to moist, loose, sand is poorly graded, subrounded, fine, fines are silt, no plasticity, rapid dilatancy, gravel is coarse, subrounded, 5% gravel, 75% sand, 20% silt.	
	4.2	100	DP			**WELL GRADED SAND (SW)** brown (10YR 5/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP21-07242, 14:50, (2-4)' * ▼ sample: DP21-03318, 15:35, (3.5-4)' *
5	6.2	100	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	sample: DP21-07243, 14:55, (4-8)' *
	8.2	100	DP	PID = 0			
10	10.2	100	DP	PID = 0			
	12.2	100	DP				
15	15.2	100	DP				Total depth = 15', 15.16' bgs
						Boring terminated at 15.2 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP22	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112114.010, E 6038234.28 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs — START : 4/2/10 13:15 — END : 4/2/10 15:05 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 1.25' thick.	sample: DP22-07244, 14:00, (0-0.5)' *
	NR	DP					sample: DP22-07245, 14:00, (0.5-2)' * sample: DP22-03320/53320, 14:30, (0.51-1.5)' *
2.0						**WELL GRADED GRAVEL (GW)** light brownish gray (2.5Y 6/2), dry, hard, massive, rounded pebbles to 1.5, recycled at base, 50% gravel, 40% sand, 10% fines.	sample: DP22-03321, 14:35, (1.75-2.25)' *
	NR	DP				**WELL GRADED SAND (SW)** greenish gray (10Y 5/1), dry to moist, dense to very dense, rounded medium grained quartz sand to fine grained angular quartz sand at top, 95% sand, 5% fines.	sample: DP22-07246, 14:10, (2-4)' *
4.0						**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), moist to wet at base, massive, subangular to rounded medium grained, mostly quartz, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP22-07247, 14:15, (4-8)' *
5	NR	DP					
6.0						**WELL GRADED SAND (SW)** olive gray (5Y 4/2), wet, very dense, faintly bedded, rounded to subangular, medium grained, mostly quartz, some feldspar, few lithics, 95% sand 5% fines, gradational with below.	
	NR	DP				**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, very dense, faintly bedded, rounded, fine to medium grained quartz sand, 95% sand, 5% fines.	
8.0							
	NR	DP					
10	10.0					**POORLY GRADED SAND (SP)** very dark gray (5Y 3/1), wet, very dense, faintly bedded, upward fining, fine to medium subangular to rounded quartz sand, 95% sand, 5% fines, gradational with below.	
	NR	DP					
12.0						**POORLY GRADED SAND (SP)** dark grayish brown (2.5Y 4/2), wet, very dense, bedded, two upward fining sequences, medium to fine grained rounded quartz sand, 95% sand, 5% fines.	
						WELL GRADED SAND (SW) dark greenish gray (10Y 4/1), wet, dense to loose, bioclastic, fine grained, rounded quartz sand.	
	NR	DP				**LEAN CLAY (CL)** greenish gray (10Y 5/1), wet, soft, very plastic, 100% fines.	
15	15.0						
						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP23	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111848.716, E 6037562.21 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.7 ft bgs ▼ — START : 4/5/10 13:15 — END : 4/5/10 14:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.3' thick.	sample: DP23-07248/DP23-03323, 14:00, (0-0.5)' *
		100	DP			**POORLY GRADED SAND WITH GRAVEL (SP)** very dark grayish brown (10YR 3/2), wet, loose, sand is fine, poorly graded, subrounded, gravel is fine and medium, gap graded, and subangular, 20% gravel, 75% sand, 5% fines.	sample: DP23-07249, 14:03, (0.5-2)' * ▼
2.3						**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP23-07250/57250, 14:06, (2-4)' *
		100	DP				sample: DP23-03324, 14:15, (3.5-4)' *
4.3						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP23-07251, 14:08, (4-8)' *
5		100	DP				
6.3				PID = 0			
		100	DP	PID = 0			
8.3				PID = 0		**SILT WITH SAND (ML)** very dark bluish gray (5B 3/1), wet, fines are silt with low plasticity, rapid dilatancy, weak cementation, sand is very fine, poorly graded, subrounded, 25% sand, 65% fines.	2" layer of mostly shells with sand
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP24	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112255.286, E 6035432.24 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.7 ft bgs — START : 4/2/10 09:15 — END : 4/2/10 10:25 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.5' thick.	sample: DP24-07252, 09:45, (0-0.5)' * sample: DP24-03326, 10:15, (0-0.5)' * sample: DP24-07253, 09:50, (0.5-2)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND WITH SILT AND GRAVEL (SW-SM)** dark yellowish brown (10YR 3/4), dry, loose, angular fragments to 1/2", recycled Asphalt Concrete Pavement, medium grained, angular to rounded, mostly quartz sand, some feldspar, few lithics, 40% gravel, 50% sand, ~10% fines.	
2.0	2.0 - 4.0	100	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/6), dry, loose, medium to fine grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP24-07254, 09:55, (2-4)' *
4.0							sample: DP24-03327, 10:20, (3.5-4)' *
5	4.0 - 6.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except gradational with above, wet at base.	sample: DP24-07255, 10:00, (4-8)' * Set 5' screen, 10' blank, non PAH hole with steel casing Set 5' screen, 5' blank in PAH boring, raised 2' stickup
6.0	6.0 - 8.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), saturated, dense, massive, upward coarsening, fine to medium quartz, feldspar, lithic sand, 95% sand, 5% fines, gradational with below.	
8.0	8.0 - 10.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, very dense, faintly cross bedded, fine grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
10 10.0	10.0 - 12.0	100	DP			**POORLY GRADED SAND (SP)** dark gray (2.5Y 4/1), wet, very dense, faintly cross bedded, medium grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
12.0	12.0 - 15.0	100	DP			**WELL GRADED SAND (SW)** dark gray (2.5Y 4/1) to olive brown (2.5Y 4/3), wet, very dense, faintly bedded, medium grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics.	
15 15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP25	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112526.443, E 6034786.84 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.6 ft bgs ▼ — START : 4/5/10 10:00 — END : 4/5/10 11:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.3' thick.	sample: DP25-07256/DP-03329, 10:30, (0-0.5)' *
		100	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, poorly graded, subrounded, fine grained, trace gravel that is medium grained and subrounded, 5% gravel 90% sand, 5% fines.	sample: DP25-07257, 10:35, (0.5-2)' *
	2.3			PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP25-07258, 10:40, (2-4)' *
		100	DP				
	4.3			PID = 0			sample: DP25-07259, 10:45, (4-8)' * ▼
5		100	DP				
	6.3			PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP25-03330/53330, 10:45, (6.5-7)' *
		100	DP				
	8.3			PID = 0			
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP26	SHEET 1 OF 1

SOIL BORING LOG

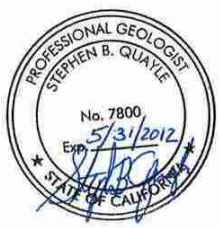
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112569.537, E 6035084.46 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.4 ft bgs — START : 4/5/10 14:05 — END : 4/5/10 15:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.35' thick.	sample: DP26-07260/57260, 14:35, (0-0.5)' *
	NR	DP				**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, subrounded, mostly quartz sand, feldspar, few lithics, massive.	sample: DP26-03332, 15:05, (0-0.5)' * sample: DP26-07261, 14:40, (0.5-2)' *
2.0						**POORLY GRADED SAND (SP)** yellowish brown (10YR 5/4), moist, dense, massive, subrounded medium grained, mostly feldspar, few lithics, 95% sand 5% fines, gradational with below.	sample: DP26-07262, 14:45, (2-4)' *
	NR	DP				**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), moist to wet, massive to faintly bedded, wet at base, 90% sand, ~10% fines, gradational with below.	sample: DP26-03333, 15:10, (3-3.5)' *
4.0							
	NR	DP				**WELL GRADED SAND (SW)** Same as above, except wet, gradational with below.	sample: DP26-07263, 14:50, (4-8)' *
5							
6.0							
	NR	DP				**WELL GRADED SAND (SW)** wet, very dense, faintly bedded, subrounded to rounded, medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
8.0							
						Boring terminated at 8 ft bgs.	
10							
15							



SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP27	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112258.450, E 6034925.55 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 6.0 ft bgs ▼ — START : 4/5/10 11:15 — END : 4/5/10 13:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.67' thick.	sample: DP27-07264, 13:20, (0-0.5)' * sample: DP27-03335, 13:45, (0-0.5)' * sample: DP27-07265, 13:25, (0.5-2)' *
	NR	DP				**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)** very dark brown (10YR 2/2), wet, very dense, massive, rounded pebbles to 1.5, rounded, medium grained quartz sand, 45% gravel, 45% sand, 10% fines.	
2.0							sample: DP27-07266, 13:30, (2-4)' *
	NR	DP				**POORLY GRADED SAND (SP)** yellowish brown (10YR 5/4), moist, dense, massive, subangular to rounded, medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP27-03336, 13:50, (3.5-4)' *
4.0							sample: DP27-07267, 13:35, (4-8)' *
5	NR	DP				**WELL GRADED SAND (SW)** brown (10YR 4/3), wet, very dense, faintly bedded at 1' intervals, upward coarsening, subrounded to rounded, medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP27-03337, 13:55, (5.5-6)' * ▼
6.0							
	NR	DP				**WELL GRADED SAND (SW)** brown (10YR 4/3), wet, very dense, four upward fining sequences, fine to medium grained, rounded quartz sand, 95% sand, 5% fines.	
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP28	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112246.329, E 6034707.38 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.6 ft bgs ▼ — START : 4/5/10 11:20 — END : 4/5/10 12:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0	0.5					**ASPHALT** 0.5' thick.	sample: DP28-07268/DP28-03338, 11:50, (0-0.5)' *
	2.5	100	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, sand is fine, poorly graded, subrounded, gravel is medium and subangular, 5% gravel, 90% sand, 5% fines.	sample: DP28-07269, 11:52, (0.5-2)' *
	4.5	100	DP	PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP28-07270/57270, 11:54, (2-4)' *
5	6.5	100	DP	PID = 0		**WELL GRADED SAND (SW)** Same as above, except wet, interspersed with blocks of weakly cemented sandy silt that is yellowish brown (10YR 5/6).	sample: DP28-03339, 11:54, (3.5-4)' *
	8.5	100	DP	PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3) to dark gray (10YR 4/1), wet, medium dense, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines, color transitioning to dark greenish gray (10Y 4/1).	sample: DP28-07271, 11:56, (4-8)' * ▼
10	10.5	100	DP	PID = 0			
	12.5	100	DP	PID = 0		**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, medium dense, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines, trace blocks of clay.	
15	15.5	100	DP	PID = 0			
						Boring terminated at 15.5 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP30	SHEET 1 OF 1

SOIL BORING LOG

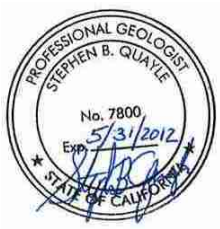
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114011.535, E 6037497.63 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.9 ft bgs — START : 4/30/10 12:00 — END : 4/30/10 13:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP30-07276, 12:25, (0-0.5)' *
							sample: DP30-03344, (0-0.5)' *
							sample: DP30-07277, 12:30, (0.5-2)' *
							sample: DP30-03345, (0.51-1)' *
						POORLY GRADED SAND (SP) olive brown (2.5Y 4/3), moist, medium dense, laminated, fragmented, subangular to rounded quartz sand 95% sand, 5% fines.	
		90	DP			**POORLY GRADED SAND (SP)** dark olive gray (5Y 3/2), moist, dense, laminated , fine grained, subangular to rounded quartz sand with silt 90% sand, ~10% fines.	sample: DP30-07278, 12:35, (2-4)' *
4.0						**POORLY GRADED SAND (SP)** olive gray (5Y 4/2) to dark gray (5Y 4/1), moist, dense, laminated, fine grained, subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 90% sand, ~10% fines.	
5						**WELL GRADED SAND (SW)** dark olive gray (5Y 3/2), wet, medium dense, laminated with dark sand lamination at 4 mm thick at 1/2-2 intervals, upward coarsening, fine to medium grained , subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 90% sand, ~10% fines.	sample: DP30-07279, 12:40, (4-8)' *
		95	DP			**WELL GRADED SAND (SW)** olive (5Y 4/3), wet, medium dense, faintly bedded with dark sand laminations to 3mm thick at 1-3 intervals, trace shell fragments to 1/4", fine to medium grained, subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 90% sand, ~10% fines, gradational with below.	
8.0							
10		100	DP				
12.0							
		100	DP				
15	15.0					Boring terminated at 15 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP31	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 5.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114012.621, E 6037453.41 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.0 ft bgs ▼ — START : 4/30/10 09:50 — END : 4/30/10 11:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.15' thick.	sample: DP31-07280/57280, 11:10, (0-0.5)' *
						WELL GRADED SAND (SW) brown (10YR 4/3), wet, medium dense, massive, gravelly to 1', subrounded fragments to 1/4", fine to medium grained subangular to rounded, mostly quartz sand, some feldspar, few lithics, 10% gravel, 85% sand, 5% fines, gradational with below.	sample: DP31-03347, 11:25, (0-0.5)' * ▼ sample: DP31-07281, 11:15, (0.5-2)' * sample: DP31-03348, 11:30, (0.51-1)' *
	4.0	90	DP			**WELL GRADED SAND (SW)** olive gray (5Y 4/2), wet, medium dense, faintly bedded with dark sand, laminations 3mm thick at 1/2-2 intervals, medium grained, subangular to subrounded, mostly quartz sand, some feldspar, few lithics and chert, 90% sand, ~10% fines, gradational with below.	sample: DP31-07282, 11:20, (2-4)' *
5	8.0	90	DP				sample: DP31-07283, 11:25, (4-8)' *
10	12.0	100	DP				
15	15.0	100	DP				
						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP80	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114135.661, E 6037476.13 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.0 ft bgs ▼ — START : 5/4/10 15:10 — END : 5/4/10 16:05 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP80-07296, 15:50, (0-0.5)' * sample: DP80-03361, 16:00, (0-0.5)' * sample: DP80-07297, 15:52, (0.5-2)' * sample: DP80-03360, 16:08, (0.51-1)' *
		85	DP			**SILTY SAND (SM)** dark yellowish brown (10YR 3/4), moist, medium dense, massive, trace gravel to 1/2", fine to medium grained quartz sand with silt 85% sand, 15% fines.	
						WELL GRADED SAND (SW) dark gray (10YR 4/1), moist to wet, medium dense, faint bedding, 15-20% shell fragments to 1/2" at top, clayey sand, bivalve casts at base, upward coarsening, fine to medium grained, subangular to rounded, mostly quartz sand, some feldspar, some chert, few lithics, 90% sand, ~10% fines.	sample: DP80-07298, 15:54, (2-4)' *
4.0							sample: DP80-07299, 15:55, (4-8)' *
5		95	DP				Shallow grab groundwater point DTW = 1' bgs Deep grab groundwater point DTW = 1.95' bgs
						POORLY GRADED SAND (SP) olive gray (5Y 4/2), wet, medium dense, massive medium grained, subrounded to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 95% sand, 5% fines.	
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP81	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114109.257, E 6037503.57 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.9 ft bgs — START : 5/4/10 17:50 — END : 5/4/10 18:40 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP81-07300, 18:15, (0-0.5)' * sample: DO81-03362, 18:40, (0-0.5)' * sample: DP81-07301, 18:22, (0.5-2)' * sample: DP81-03363, 18:45, (0.51-1)' *
		NR	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), moist, medium dense, faintly bedded, trace gravel to 1/4", medium grained, subangular to rounded, mostly quartz sand, some feldspar, some chert, few lithics, with silt 85% sand, 15% fines, gradational with below.	
						WELL GRADED SAND (SW) olive gray (5Y 4/2), moist to wet, medium dense, faintly bedded, 10% shell fragments to 1/2", bivalve casts at base, upward coarsening, upward poor grading, fine to medium grained, subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, trace silt 90% sand, ~10% fines, gradational with below.	sample: DP81-07302, 18:25, (2-4)' *
4.0							
5							sample: DP81-07303, 18:21, (4-8)' * Shallow grab groundwater point DTW = 0.9' bgs
		NR	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, medium dense, massive, upward coarsening, fine to medium grained, subrounded to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 95% sand, 5% fines.	Deep grab groundwater point DTW = 1.85' bgs
8.0						Boring terminated at 8 ft bgs.	
10							
15							

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP82	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114109.651, E 6037456.65 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.9 ft bgs — START : 5/5/10 09:10 — END : 5/5/10 10:20 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP82-07304, 09:30, (0-0.5)' * sample: DP82-03365, 09:58, (0-0.5)' * sample: DP82-07305, 09:35, (0.5-2)' * sample: DP82-03366, 09:59, (0.5001-1)' *
	4.0	85	DP			**POORLY GRADED SAND (SP)** dark yellowish brown (10YR 4/4), moist, medium dense to dense, massive, subrounded to rounded, medium grained, mostly quartz sand, some chert, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP82-07306, 09:40, (2-4)' *
5	8.0	100	DP			**POORLY GRADED SAND (SP)** dark olive gray (5Y 3/2), wet, medium dense, faintly bedded, 10% shell fragments to 1/2", imbricated shell fragments, bivalve sandy clay clasts to 1", medium grained, subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP82-07307, 09:45, (4-8)' *
10	12.0	80	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, medium dense, upward coarsening, faintly bedded with dark sand laminations to 3mm thick at 2-3' intervals, subangular to rounded, medium grained, mostly quartz sand, some chert, some feldspar, few lithics, 90% sand, ~10% fines.	Shallow grab groundwater point DTW = 0.90' bgs
15	15.0	100	DP			**LEAN CLAY (CL)** olive gray (5Y 4/2) to greenish gray(10Y 5/1), wet, soft, laminated, plastic intervals with silt to 1/2" thick 100% fines. **POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, medium dense, laminated, very fine grained, subrounded to rounded, mostly quartz sand, some chert, few lithics 95% sand, 5% fines. **WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, medium dense, massive, fine to medium grained, subrounded to rounded, mostly quartz sand, some red chert, few lithics.	
						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP83	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114070.901, E 6037505.00 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.9 ft bgs — START : 5/5/10 11:15 — END : 5/5/10 11:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP83-07308, 10:35, (0-0.5)' * sample: DP83-03368, 11:48, (0-0.5)' * sample: DP83-07309, 10:40, (0.5-2)' *
		NR	DP	PID = 0		**POORLY GRADED SAND (SP)** dark yellowish brown (10YR 4/4), moist, medium dense, thinly bedded, extremely bedded at base, medium grained, subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 95% sand, 5% fines.	
						WELL GRADED SAND (SW) dark greenish gray (5GY 4/1), moist, medium dense, thinly bedded, upward coarsening, very fine to medium grained, subangular to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 90% sand, 10% fines.	sample: DP83-07310, 10:45, (2-4)' *
4.0						**POORLY GRADED SAND (SP)** olive gray (5Y 4/2), wet, medium dense, extremely bedded to bedded, medium grained, subrounded to rounded, mostly quartz sand, some chert, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP83-03369, 11:55, (3.5-4)' *
				PID = 0			sample: DP83-07311, 10:50, (4-8)' *
5						**POORLY GRADED SAND (SP)** Same as above, except gradational with below.	
		NR	DP	PID = 0		**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, medium dense, extremely bedded to thinly bedded, dark sand laminations to 3 mm thick, 1/4-1 intervals, subrounded to rounded, medium grained, mostly quartz sand, some red chert, some feldspar, few lithics 95% sand, 5% fines.	Shallow groundwater, point set at 7' DTW = 0.9' bgs Deep groundwater point set at 15' bgs DTW = 1.45' bgs
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AAPS-DP84	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114067.706, E 6037445.15 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.3 ft bgs — START : 5/5/10 13:20 — END : 5/5/10 14:30 — LOGGER : Quayle

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP84-07312, 13:40, (0-0.5)' * sample: DP84-03371, 14:13, (0-0.5)' * sample: DP84-07313, 13:45, (0.5-2)' *
						POORLY GRADED SAND (SP) dark yellowish brown (10YR 4/4), moist, medium dense, fine grained, 95% sand, 5% fines, no HC odor.	▼
		75	DP				sample: DP84-03372, 14:15, (1.5-2)' *
						SILT (ML) dark yellowish brown (10YR 4/4) to dark olive gray (5Y 3/2), moist, firm, 100% fines, no HC odor.	sample: DP84-07314, 13:50, (2-4)' *
						POORLY GRADED SAND (SP) dark olive gray (5Y 3/2), wet, dense to medium dense, fine to medium sand, 95% sand, 5% fines, no HC odor.	
4.0							sample: DP84-07315, 13:55, (4-8)' *
5		88	DP				
8.0							
10		100	DP				Shallow grab groundwater point set at 7' bgs DTW = 1.25' bgs
							Deep grab groundwater point set at 15' bgs DTW = 1.20' bgs
12.0							
		100	DP				
15	15.0					**LEAN CLAY (CL)** dark greenish gray (5GY 4/1) to black(N2.5), wet, soft, low to medium plasticity, no HC odor.	
						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP2CAPS-DP01	SHEET 1 OF 1

SOIL BORING LOG

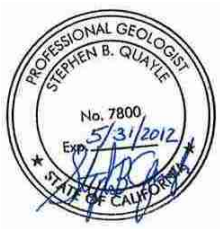
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 8.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114913.562, E 6038460.96 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.0 ft bgs — START : 4/13/10 09:00 — END : 4/13/10 13:10 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP			**ASPHALT CONCRETE PAVEMENT** 2.0' thick.	sample: DP01-07296, 09:10, (0-0.5)' * sample: DP01-03359, 09:45, (0-0.5)' * sample: DP01-07297, 09:15, (0.5-2)' *
2.0	2.0 – 4.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), wet, dense, faintly bedded, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, sand 90% sand, ~10% fines, gradational with below, trace silt.	sample: DP01-03360/53360, 09:50, (1.5-2)' * sample: DP01-07298, 09:20, (2-4)' *
4.0	4.0 – 6.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), wet, dense, thickly bedded, fine grained sand with medium grained sand, rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines, gradational with below.	sample: DP01-07299, 09:25, (4-8)' *
6.0	6.0 – 8.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except wet and thickly bedded.	
8.0	8.0 – 10.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (10YR 4/2), wet, dense, faintly bedded, fine grained, rounded to well rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines, trace silt.	
10.0	10.0 – 12.0	50	DP			**LEAN CLAY (CL)** dark gray (10YR 4/1), wet, soft, laminated, plastic,100% fines. **WELL GRADED SAND (SW)** very dark greenish gray (10Y 3/1), wet, dense, bedded, shell fragments to 2 mm, fine to medium grained subangular to rounded quartz sand 90% sand, ~10% fines.	
12.0	12.0 – 15.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, dense, laminated, very fine grained quartz sand 90% sand, ~10% fines. **INTERBEDDED LEAN CLAY/SAND/SILT (CL/SW/ML)** black (N2.5) to greenish black(10Y 2.5/1), wet to moist, soft to dense, original ground, original bay mud at base, very plastic.	
15.0						Boring terminated at 15 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT - APS GRACE.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114979.571, E 6032830.80 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.0 ft bgs ▼ — START : 4/7/10 10:55 — END : 4/7/10 11:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0.1		**PORTLAND CEMENT CONCRETE PAVEMENT** 0.70' thick.	sample: DP01-03009, 11:20, (0-0.5)' *
	2.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), moist, massive with concretion fragments at top, medium grained, rounded quartz, mostly quartz sand, some feldspar, few lithics, 85% sand, 15% fines, trace silt.	
	4.0	100	DP			**MIXED LEAN CLAY TO CLAYEY SAND (CL-SC)** dark greenish gray (5GY 4/1), moist, very dense, trace shells, trace red brick, trace rounded pebbles to 1", fine angular quartz sand, plastic, weathered AC material or recycled Asphalt Concrete Pavement base material at 4-4.25'.	sample: DP01-03010/53010, 11:25, (3.5-4)' * ▼
5	6.0	100	DP	PID = 0.5 PID = 22.7		**WELL GRADED SAND (SW)** dark gray (5Y 4/1), moist, very dense, angular and medium pebbles to 2", medium grained, angular to round quartz, mostly quartz sand, some feldspar, few lithics, 10% gravel, 80% sand, ~10% fines, gradational with below.	Odor at 4.5-5.5' sample: DP01-03011, 11:30, (5-5.5)' * after drilling core, wet at 6'
	8.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), wet, dense, massive medium grained, round quartz, mostly quartz sand, few lithics.	
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114958.079, E 6032854.09 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.8 ft bgs ▼ — START : 4/7/10 13:20 — END : 4/7/10 13:35 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0.1		**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP02-0301200, 13:30, (0-0.5)' *
	0.0 - 2.0	100	DP			**SILTY SAND (SM)** brown (10YR 4/3), moist, dense, massive, with pebbles to 1", angular to rounded, medium to fine grained, mostly quartz sand, some feldspar, few lithics, 5% gravel, 80% sand, 15% fines, trace shells 3-4' bgs, gradational with below.	Slight odor in 3rd core 4-6' bgs
2.0							
	2.0 - 4.0	100	DP				sample: DP02-03013, 13:35, (3.3-3.8)' * ▼
4.0							
	4.0 - 6.0	100	DP	PID = 0.5 PID = 1.6 PID = 0.1		**WELL GRADED SAND (SW)** black (2.5Y 2.5/1) to very dark gray (5Y 3/1), wet, very dense to hard massive angular to rounded pebbles to 2, subangular to rounded, medium grained quartz sand, slight odor 4-5' bgs.	
5							
6.0						**POORLY GRADED SAND (SP)** dark olive gray (5Y 3/2), wet, dense, bioclastic 10-20% shell fragments to 1/2", massive, medium grained, subrounded to rounded,12g copper wire fragments at base.	
	6.0 - 8.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, massive, dense, no shell fragments, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP03	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114936.588, E 6032832.60 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.9 ft bgs — START : 4/7/10 15:00 — END : 4/7/10 15:25 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.15' thick.	sample: DP03-03015, 15:10, (0-0.5)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, massive, rounded, mostly quartz sand, 90% sand, ~10% fines.	
2.0						**SILTY SAND WITH GRAVEL (SM)** dark yellowish brown (10YR 4/4), moist, very dense, moist bioclastic to 25% granite/basalt, angular to rounded pebbles to 2, low plastic fines, rounded medium grain quartz sand, mostly quartz sand, some feldspar, few lithics, 30% gravel, 55% sand, 15% fines.	sample: DP03-03016, 15:15, (2.5-3)' *
	2.0 - 4.0	100	DP			**WELL GRADED GRAVEL WITH SAND (GW)** yellowish red (5YR 5/8), dry, dense, angular chert pebbles to 1/2" angular chert sand, manufacture base brick, mostly quartz sand, some feldspar, few lithics, 60% sand, 35% fines, trace fines.	
4.0				PID = 2.5		**SILTY SAND (SM)** dark yellowish brown (10YR 4/4), moist to wet at 3' , massive fines, low plasticity with 15-25% shell fragments, 5% charcoal fragments, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 10% gravel, 70% sand, 20% fines.	
5	4.0 - 6.0	NR	DP	PID = 1.1		**WELL GRADED SAND (SW)** very dark gray (5Y 3/1), wet, dense to very dense, massive 10% recycled AC fragments, silty base, 10% gravel, 80% sand, ~10% fines, mottled black (2.5Y 2.5/1), slight odors from 4-5', medium grained rounded, mostly quartz sand, some feldspar, few lithics, 5% gravel, 90% sand, 5% fines.	
6.0				PID = 0.6		**POORLY GRADED SAND (SP)** dark gray (5Y 4/1), wet, dense, massive, 5% shell fragments, upward fine, medium grained, rounded quartz, mostly quartz sand, some feldspar, few lithics, 5% gravel, 90% sand, 5% fines.	
	6.0 - 8.0	NR	DP				
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP04	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114956.288, E 6032811.10 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.1 ft bgs ▼ — START : 4/7/10 14:15 — END : 4/7/10 14:45 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.15' thick.	Odor at 4-6' bgs
	2.0	NR	DP			**SILTY SAND WITH GRAVEL (SM)** dark brown (10YR 3/3), moist, very dense, massive, bioclastic 10-15% shell fragments, angular to rounded, pebbles to 1", medium grained rounded, mostly quartz sand, some feldspar, few lithics, 15% gravel, 70% sand, 15% fines.	sample: DP04-03018, 14:30, (0-0.5)' *
	4.0	NR	DP			**SILTY SAND WITH GRAVEL (SM)** Same as above, except wet at 3' bgs.	sample: DP04-03019, 14:35, (2.5-3)' * ▼
5	6.0	NR	DP	PID = 1.2 PID = 1.9 PID = 1.7		**SILTY SAND WITH GRAVEL (SM)** dark gray (2.5Y 4/1) to black(2.5Y 2.5/1), wet, hard, angular to rounded pebbles to 2, contains brick, porcelain, wood, wire, granite pebbles, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 30% gravel, 55% sand, 15% fines.	
	8.0	NR	DP	PID = 7.2		**WELL GRADED SAND (SW)** very dark gray (2.5Y 3/1), wet, dense, grossly bedded, trace shell fragments, pebbles to 1", medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 5% gravel, 95% sand, 5% fines.	
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP05	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114957.749, E 6032831.00 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.7 ft bgs ▼ — START : 4/7/10 15:35 — END : 4/7/10 16:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.70' thick.	sample: DP05-03021, 15:45, (0-0.5)' *
	0.0 - 2.0	100	DP			**SILTY SAND WITH GRAVEL (SM)** dark yellowish brown (10YR 4/4), moist, very dense, massive fines, low plasticity, pebbles to 2, angular rounded quartz, medium grained sand, mostly quartz sand, some feldspar, few lithics, 30% gravel, 55% sand, 15% fines, sharp contact with below.	
2.0							
	2.0 - 4.0	100	DP				sample: DP05-03022, 15:50, (3.1-3.6)' * ▼
4.0				PID = 2.1		**SILTY SAND (SM)** very dark gray (2.5Y 3/1) to dark gray (2.5Y 4/1), wet, dense, faintly bedded, medium grained quartz, mostly quartz sand, some feldspar, few lithics, 80% sand, 20% fines, subrounded to rounded.	
5	4.0 - 6.0	100	DP	PID = 3.2			
				PID = 1.2		**WELL GRADED SAND (SW)** dark gray (5Y 4/1), wet, massive, dense to very dense, shell fragments, 2 pebbles to 2, upward fining, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0							
	6.0 - 8.0	100	DP				
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP06	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114928.500, E 6033036.00 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.9 ft bgs ▼ — START : 4/8/10 08:45 — END : 4/8/10 09:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.85' thick.	sample: DP06-03024, 09:00, (0-0.5)' * No odors, debris with boring
	0.0 - 2.0	100	DP			**POORLY GRADED SAND (SP)** dark yellowish brown (10YR 4/4), dry, loose, massive trace shell fragments, medium grained subangular to subrounded, mostly quartz sand, some feldspar, few lithics, 100% sand, gradational with below.	
2.0							sample: DP06-03025, 09:05, (2.5-3)' * ▼
	2.0 - 4.0	80	DP				
4.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, dense, faintly bedded, subrounded to round medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
5						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, faintly bedded, fine grained sand at base, upward coarsening, fine to medium grained, subrounded to round, mostly quartz sand, some feldspar, few lithics.	
	4.0 - 8.0	80	DP				
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP07	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114931.999, E 6033226.00 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.7 ft bgs — START : 4/8/10 09:20 — END : 4/8/10 09:40 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP07-03027, 09:30, (0-0.5)' *
	0.0 - 2.0	100	DP			**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/4), dry, loose, moist at base, massive shell fragments to 1", medium grained, subrounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
2.0						**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), wet, dense, faintly bedded, bioclastic to 10% upward coarsening, medium grained rounded, mostly quartz sand, some feldspar, few lithics, gradational with below.	sample: DP07-03028, 09:35, (2.25-2.75)' *
	2.0 - 4.0	100	DP				
4.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3) to olive gray (5Y 4/2), wet, faintly bedded, 10% shell fragments bioclastic, dense, medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics.	
5	4.0 - 8.0	100	DP				
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP08	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114927.250, E 6033434.00 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.6 ft bgs ▼ — START : 4/8/10 10:05 — END : 4/8/10 10:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.80' thick.	sample: DP08-03030/53030, 10:05, (0-0.5)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/4), dry, loose, massive trace shell fragments, medium grained subrounded, mostly quartz sand, some feldspar, few lithics, gradational with below.	sample: DP08-03031, 10:10, (2.1-2.6)' * ▼
2.0							
	2.0 - 4.0	100	DP			**LEAN CLAY (CL)** dark grayish brown (2.5Y 4/2), moist, firm, plastic with angular fine grained sand, bioclastic, 25% sand, 75% fines.	
4.0						**POORLY GRADED SAND (SP)** olive gray (5Y 4/2) to light olive brown (2.5Y 5/4), wet, faintly bedded to massive, subrounded to rounded medium grained, 95% sand, 5% fines.	
5	4.0 - 8.0	100	DP				
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AA1-DP09	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114920.750, E 6033822.00 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.3 ft bgs ▼ — START : 4/8/10 10:35 — END : 4/8/10 10:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	no odors, no staining, no clay or debris sample: DP09-03033, 10:40, (0-0.5)' *
	2.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), loose to dense at base, dry to wet at base, massive trace shell fragments to 1/4", medium grained subrounded to round, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines, gradational with below.	sample: DP09-03034, 10:45, (1.75-2.25)' * ▼
	4.0	100	DP				
5	8.0	NR	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, very dense, faintly bedded, trace shell fragments to 1/4", fine to medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines.	
						WELL GRADED SAND (SW) dark grayish brown (2.5Y 4/2), wet, very dense, bedded, 10% shell fragments to 1/2", medium grained subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines.	
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW407A-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112776.920, E 6037501.76 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.5 ft bgs ▼ — START : 3/29/10 09:15 — END : 3/29/10 09:50 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT** 0.5' thick.	sample: DP01-03102, 09:50, (0-0.5)' * ▼ Perched water next to concrete pad which may be affecting borehole water level.
		50	DP			**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), wet, loose, fine to coarse grained, well graded, subrounded, gravel is fine and medium grained, rounded and subrounded, 5% gravel, 90% sand, 5% fines.	
	2.5			PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), wet, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP01-03103, 09:55, (2-2.5)' *
		100	DP				
	4.5			PID = 0			
5		100	DP				
	6.5			PID = 0			
		100	DP				
	8.5			PID = 0			
						Boring terminated at 8.5 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW407A-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112784.538, E 6037456.05 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs ▼ — START : 3/29/10 10:10 — END : 3/29/10 10:50 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.8' thick.	Free standing water at asphalt/soil interface sample: DP02-03105, 10:35, (0-0.5)' *
		75	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, poorly graded, subrounded trace subrounded fine and medium gravel from 0.0-0.15' bgs, 95% sand, 5% fines.	▼
2.8						**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), moist, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP02-03106, 10:41, (2-2.5)' *
		100	DP	PID = 0			
4.8						**WELL GRADED SAND (SW)** gray (10YR 5/1), wet, loose to medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
5		100	DP	PID = 0			
6.8							
		100	DP	PID = 0			
8.8							
						Boring terminated at 8.8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW407B-DP01 SHEET 1 OF 1

SOIL BORING LOG

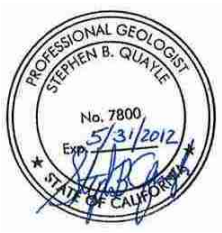
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112806.568, E 6037464.12 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.3 ft bgs — START : 4/2/10 10:55 — END : 4/2/10 11:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP			**ASPHALT CONCRETE PAVEMENT** 0.5' thick.	sample: DP01-03108A, 11:20, (0-0.5)' *
						WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM) very dark brown (10YR 2/2), moist, very dense, massive, well rounded fragments to 3/4, subangular to rounded medium grained quartz sand, 65% gravel, 25% sand, 10% fines.	▼ sample: DP01-03109A/53109, 11:25, (1.25-1.75)' *
2.0	2.0 – 4.0	100	DP			**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, dense, massive, subangular to rounded medium grained quartz sand, 95% sand, 5% fines.	
						WELL GRADED SAND (SW) dark grayish brown (2.5Y 4/2), wet, very dense, massive, rounded fine grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
4.0	4.0 – 6.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, very dense, massive, medium grained, rounded quartz sand, 95% sand, 5% fines.	
6.0	6.0 – 8.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except gradational with above.	
8.0						Boring terminated at 8 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW407B-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112818.285, E 6037501.63 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.5 ft bgs — START : 4/28/10 15:15 — END : 4/28/10 15:35 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						PORTLAND CEMENT CONCRETE PAVEMENT 0.4' thick.	sample: DP02-03112, 15:33, (0-0.5)' *
		NR	DP			**WELL GRADED SAND (SW)** grayish brown (2.5Y 5/2), wet, fine to coarse, well graded, subrounded, loose, 95% sand, 5% fines.	sample: DP02-03113, 15:30, (1.5-2)' *
	2.4						
		NR	DP			**WELL GRADED SAND (SW)** Same as above, except light olive brown (2.5Y 5/3), wet.	
	4.4						
5						Boring terminated at 4.4 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW467B-DP01 SHEET 1 OF 1

SOIL BORING LOG

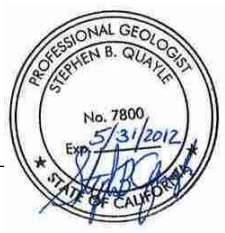
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115324.012, E 6033724.89 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.2 ft bgs — START : 4/8/10 14:05 — END : 4/8/10 15:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.40' thick.	sample: DP01-07108, 15:10, (0-0.5)' * sample: DP01-03048, 14:30, (0-0.5)' * sample: DP01-07109, 15:15, (0.5-2)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND WITH SILT (SW-SM)** very dark brown (10YR 2/2), dry, loose, massive angular fragments to 1", pebbles <10%, subangular fine to medium quartz sand, 5% gravel, 85% sand, 10% fines.	
2.0						**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), dry, medium dense, faintly bedded to massive, fine to medium grained subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP01-07110/57110, 15:20, (2-4)' * sample: DP01-03049/53049, 14:35, (2.5-3)' *
	2.0 - 4.0	80	DP			**WELL GRADED SAND (SW)** dark yellowish brown (10YR 4/4), wet, massive, subrounded to rounded, medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
4.0							sample: DP01-07111, 15:25, (4-8)' *
5	4.0 - 6.0	NR	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, dense, massive, fine to medium grained subrounded to round, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0						**WELL GRADED SAND (SW)** same as above, except olive gray (5Y 5/2), wet, gradational with above.	
	6.0 - 8.0	NR	DP				
8.0						**WELL GRADED SAND (SW)** Same as above, except slight upward fining sequence.	
10	8.0 - 12.0	NR	DP				
12.0						**WELL GRADED SAND (SW)** Same as above, except shell fragments to 1" at 13.5' bgs, juvenile oyster shells, whole.	
	12.0 - 15.0	NR	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, thinly bedded, dense, fine grained, angular to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines.	
15	15.0					Boring terminated at 15 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW467B-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115324.012, E 6033775.14 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.0 ft bgs ▼ — START : 4/8/10 11:05 — END : 4/8/10 11:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP02-07112, 11:20, (0-0.5)' *
						POORLY GRADED SAND (SP) brown (10YR 4/3), loose to medium dense, massive micaceous, chert lithics, fine to medium grained, angular to round, mostly quartz sand, some feldspar, few lithics, gradational with below.	sample: DP02-03051, 11:40, (0-1)' *
	100	DP					sample: DP02-07113, 11:25, (0.5-2)' *
2.0							
						WELL GRADED SAND (SW) olive brown (2.5Y 4/3), moist to wet at base, dense to very dense, upward fining, micaceous, subrounded to rounded, medium grain, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP02-07114, 11:30, (2-4)' *
	100	DP					
4.0							sample: DP02-03052, 11:45, (3.5-4)' *
							sample: DP02-07115, 11:35, (4-8)' *
5							▼ sample: DP02-03053, 11:50, (4.75-5.25)' *
		80	DP				
						WELL GRADED SAND (SW) dark greenish gray (10Y 4/1), wet, very dense, massive trace shell fragments to 1/2", slight upward fining sequence, rounded, medium grained, mostly quartz sand, some feldspar, few lithics,.	
8.0							
						WELL GRADED SAND (SW) greenish gray (10Y 5/1), wet, very dense, 2 upward fining sequences, very fine grained to medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics,, trace mica, trace shell fragments.	
10	100	DP					
12.0							
	100	DP					
15							
15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW483A-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113474.135, E 6035297.68 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.9 ft bgs ▼ — START : 3/30/10 11:10 — END : 3/30/2010 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT CONCRETE PAVEMENT 1' thick.	sample: DP01-07132, 11:45, (0-0.5)' * sample: DP01-03036, 11:45, (0-0.5)' * sample: DP01-07133, 11:50, (0.5-2)' *
	2.0	100	DP			**SILTY GRAVEL WITH SAND (GM)** brownish yellow (10YR 6/8), moist, dense, gravel to 2, recycled AC and concrete base, 50% gravel, 35% sand, 15% fines.	
	4.0	NR	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), dry to moist, massive, angular to subrounded quartz, rounded feldspar and lithics, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% gravel.	sample: DP01-07134, 11:55, (2-4)' * ▼ sample: DP01-03067, 11:55, (3.5-4)' *
5	6.0	NR	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), Same as above, except wet at base, no shell fragments.	sample: DP01-07135, 00:05, (4-8)' *
	8.0	NR	DP			**WELL GRADED SAND (SW)** Same as above, except wet sands, no shell fragments.	
	9.0	NR	DP				
10						Boring terminated at 9 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW483A-DP02 SHEET 1 OF 1

SOIL BORING LOG

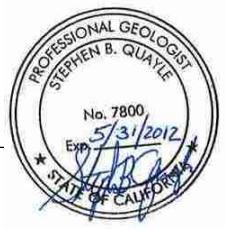
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113443.504, E 6035247.78 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.0 ft bgs ▼ — START : 3/30/10 13:40 — END : 3/30/10 15:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP02-07136, 14:10, (0-0.5)' * sample: DP02-03069 & MS/MSD, 14:30, (0-1)' *
	0.0–2.0	100	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, massive, angular to subrounded, mostly quartz sand, some feldspar, few lithics, medium grained, 90% sand, ~10% fines.	sample: DP02-07137, 14:15, (0.5-2)' *
2.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), dry to moist, massive, medium grained, upward fining, angular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP02-07138, 14:20, (2-4)' *
	2.0–4.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, massive, loose, rounded, medium grained, mostly quartz, some feldspar, few lithics, 95% sand, 5% fines. ▼	
4.0							sample: DP02-03070 & FD, 14:35, (3.5-4.5)' * sample: DP02-07139, 14:25, (4-8)' *
5	4.0–6.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except olive (5Y 4/3).	
6.0							
	6.0–8.0	100	DP				
8.0							
	8.0–10.0	100	DP			**WELL GRADED SAND (SW)** olive (5Y 4/3), wet, loose, massive trace shell fragments, medium rounded, mostly quartz sand, some feldspar, very well rounded lithics, 95% sand 5% fines.	
10 10.0							
	10.0–12.0	100	DP			**WELL GRADED SAND (SW)** same as above, except gradational with above, trace shell fragments.	
12.0							
	12.0–15.0	NR	DP			**SILTY SAND (SM)** dark greenish gray (10Y 4/1), wet, medium firm, non plastic, faintly bedded, very fine quartz sand to silt, 55% sand, 45% fines.	set 5' screen, 3' casing PAH hole set 5' screen, 10' blank, non PAH sand sample
15 15.0						Boring terminated at 15 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW483B-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113600.047, E 6035531.79 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.3 ft bgs ▼ — START : 3/31/10 10:40 — END : 3/31/10 12:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.15' thick.	sample: DP01-07040/57040, 11:00, (0-0.5)' *
	2.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), dry, loose, massive, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand 5% fines.	sample: DP01-03072, 11:25, (0-0.5)' * sample: DP01-07041, 11:05, (0.5-2)' *
	4.0	NR	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, massive, angular to rounded quartz, stained brown, medium grained quartz, 95% sand, 5% fines.	sample: DP01-07042, 11:10, (2-4)' *
	6.0	NR	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), dry to moist, loose to medium dense, massive to faintly bedded, poorly graded sand at base, grading to well graded sand at tom, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand 5% fines.	▼ sample: DP01-03073, 11:30, (3-3.5)' * sample: DP01-07043, 11:15, (4-8)' *
5	8.0	NR	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, loose to medium dense, massive, subangular to rounded medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
		NR	DP			**WELL GRADED SAND (SW)** Same as above except, gradational with above.	
						Boring terminated at 8 ft bgs.	
10							
15							

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW483B-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113571.835, E 6035455.49 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.6 ft bgs ▼ — START : 3/31/10 08:30 — END : 3/31/10 10:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.75' thick.	sample: DP02-03075, 10:00, (0-0.5)' * sample: DP02-07144, 09:30, (0-0.5)' * sample: DP02-07145, 09:35, (0.5-2)' *
		75	DP			**SILTY GRAVEL WITH SAND (GM)** olive brown (2.5Y 4/3), moist, medium, massive, angular fragments to 2", silt to medium sand fines, aggregate base, 50% gravel, 35% sand, 15% fines.	
						SILTY SAND (SM) very dark brown (10YR 2/2), moist, dense, massive, medium to angular quartz sand, silt fines, 85% sand 15% fines.	sample: DP02-07146, 09:40, (2-4)' *
4.0						**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist to wet, loose, massive, medium grained, angular to rounded quartz, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, sand wet at base.	sample: DP02-03076, 10:05, (3.25-3.75)' * ▼
5		100	DP				sample: DP02-07147, 09:45, (4-8)' *
6.0							
		100	DP				
8.0						**LEAN CLAY WITH WELL GRADED SAND (CL-SW)** dark yellowish brown (10YR 4/6), moist, firm, low plasticity with fine quartz sand, 50% sand, 50% fines.	
						WELL GRADED SAND (SW) olive brown (2.5Y 4/3), Loose, massive, medium grained, rounded quartz sand, 95% sand, 5% fines.	
		100	DP				
10 10.0							Set 5' screen, 3' blank in PAH hole
		100	DP				Set 5' screen, 10' blank in non PAH hole with drill rod remains to 13-12'
12.0							
		100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, medium dense, upward fining, medium to fine grained rounded quartz sand, 95% sand, 5% fines.	
15 15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW485B-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115334.837, E 6035162.12 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.6 ft bgs — START : 4/12/10 10:30 — END : 4/12/10 11:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT** 0.2' thick.	sample: DP01-03084, 11:05, (0-0.5)' * sample: DP01-07156, 10:40, (0-0.5)' * sample: DP01-07157, 10:43, (0.5-2)' *
		85	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (2.5Y 3/2), wet, loose, fine grained, poorly graded, subrounded, trace grave, 5% gravel, 90% sand, 5% fines.	
	2.2			PID = 0		**SILTY GRAVEL (GM)** gray (2.5Y 5/1), dry, gravel is fine and coarse, gap graded, subrounded, fines are silt, no plasticity, weak cementation, 80% gravel, 5% sand, 15% silt, upper 3" of zone appears to be road base.	sample: DP01-07158, 10:46, (2-4)' * sample: DP01-03085, 11:15, (2.5-3)' *
		90	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist to wet, dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
	4.2			PID = 0.1		**WELL GRADED SAND (SW)** Same as above, except light olive brown (2.5Y 5/3), and wet.	sample: DP01-07159, 10:48, (4-8)' *
5		100	DP				
	6.2			PID = 0			
		100	DP				
	8.2					**CLAYEY SAND (SC)** light yellowish brown (2.5Y 6/3), wet, dense, fine to coarse grained, well graded, subrounded, fines are clay, no plasticity to low plasticity, slow dilatancy, no toughness, weak cementation, 85% sand, 15% clay. Boring terminated at 8.2 ft bgs.	
10							
15							

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SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW485B-DP02 SHEET 1 OF 1

SOIL BORING LOG

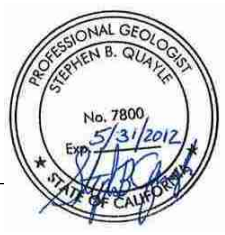
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115332.603, E 6035106.42 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs ▼ — START : 4/12/10 08:30 — END : 4/12/10 10:10 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT** 0.2' thick.	sample: DP02-07160/57160, 09:15, (0-0.5)' *
		80	DP			**POORLY GRADED SAND (SP)** dark gray (10YR 4/1), moist, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines.	sample: DP02-03087, 09:55, (0-0.5)' * sample: DP02-07161, 09:18, (0.5-2)' *
	2.2			PID = 0.8		**SILT WITH GRAVEL (ML)** very dark grayish brown (2.5Y 3/2), dry, hard, fines have no plasticity, rapid dilatancy, no toughness, weak cementation, gravel is fine and coarse, gap graded, subrounded, 20% gravel, 5% sand, 75% fines, 0.5' to 2' sweet fuel or solvent odor.	▼ sample: DP02-03088, 10:00, (1.5-2)' * sample: DP02-07162, 09:20, (2-4)' *
		85	DP	PID = 0.8		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse grained, subrounded, 95% sand, 5% fines.	sample: DP02-03089, 10:05, (2.5-3)' *
	4.2						sample: DP02-07163, 09:22, (4-8)' *
5		100	DP				
	6.2						
		100	DP				
	8.2			PID = 0		**WELL GRADED SAND (SW)** Same as above, except dense.	Sweet fuel or solvent odor from 0.5-2'
		100	DP				
10	10.2			PID = 0			
		100	DP				
	12.2			PID = 0			
		100	DP				
15	15.2			PID = 0		Boring terminated at 15.2 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AW488-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113918.822, E 6037385.32 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.2 ft bgs — START : 3/29/10 14:15 — END : 3/25/10 14:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, poorly graded, fine grained, subrounded, 95% sand, 5% fines, trace roots.	grassy surface sample: DP01-03090/53090 with FD, 14:40, (0-0.5)' *
	0.0-2.0	100	DP			**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), moist, loose, well graded, fine to coarse, subrounded, 95% sand, 5% fines.	
2.0				PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), wet, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	sample: DP01-03091/53091 (NOTE: sample collected from groundwater/vadose interface), 14:45, (1.5-2)' *
	2.0-4.0	100	DP				
4.0				PID = 0			
5	4.0-6.0	100	DP				
6.0				PID = 0			heaving sands
	6.0-8.0	100	DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

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SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AW488-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113915.780, E 6037329.57 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs — START : 3/29/10 13:45 — END : 3/29/10 14:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, poorly graded, subrounded, trace roots, 95% sand, 5% fines.	Grass surface sample: DP02-03093, 14:15, (0-0.5)' *
	100		DP			**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), moist, loose, well graded, fine to coarse, micaeous, subrounded, 95% sand, 5% fines.	
2.0				PID = 0		**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP02-03094, 14:20, (2.25-2.75)' *
	100		DP				
4.0				PID = 0		**LEAN CLAY WITH SAND (CL)** dark greenish gray (10Y 4/1), wet, 20% sand, 80% fines, 2" band of clay.	
5	100		DP			**WELL GRADED SAND (SW)** brown (10YR 5/3), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
6.0				PID = 0			
	100		DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST
STEPHEN B. QUAYLE
No. 7800
Exp. 5/31/2012
STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW495A-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112774.899, E 6036015.27 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.8 ft bgs ▼ — START : 3/26/10 14:00 — END : 3/26/10 15:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.67' thick.	sample: DP01-07116, 14:40, (0-0.5)' * sample: DP01-03054, 15:05, (0-0.5)' * sample: DP01-07117, 14:45, (0.5-2)' *
	0.0-2.0	100	DP			**WELL GRADED SAND (SW)** dark yellowish brown (10YR 4/4), dry, loose, massive medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
2.0						**WELL GRADED GRAVEL (GW)** black (10YR 2/1), moist, hard, angular to rounded fragments to 1", top 0.25' recycled AC abase.	sample: DP01-07118, 14:50, (2-4)' *
	2.0-4.0	100	DP	PID = 0.2		**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), moist, loose to medium dense, massive, rounded medium quartz sand, some feldspar, 95% sand, 5% fines.	Headspace from recycled ACP layer ▼ sample: DP01-03055, 15:10, (3.5-4)' *
4.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), moist, loose, massive, gradational with above, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP01-07119, (4.0001-8)' *
5	4.0-6.0	100	DP				
6.0						**WELL GRADED SAND (SW)** Same as above, except wet in water hole.	
	6.0-8.0	100	DP				sample: DP01-03056, 15:15, (7.5-8)' *
8.0							
	8.0-9.0	100	DP				
9.0						Boring terminated at 9 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW495A-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112812.166, E 6035960.42 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.0 ft bgs — START : 3/26/10 10:35 — END : 3/26/10 11:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.15' thick.	sample: DP02-03057, 11:30, (0-0.5)' * sample: DP02-07120/57120, 11:05, (0-0.5)' *
	2.0	100	DP	PID = 0		**WELL GRADED SAND WITH GRAVEL (SW)** very dark brown (10YR 2/2), dry to moist, loose to dense with 2" layer olive brown sand, massive recycled concrete and AC at base, 15% gravel, 80% sand, 5% fines.	sample: DP02-07121, 11:10, (0.5-2)' *
	4.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3) to very dark gray (10YR 3/1), moist to wet, loose to medium dense, 2" thick gravelly sand at base, recycled AC base material.	sample: DP02-07122, 11:15, (2-4)' * sample: DP02-03058, 11:35, (3.5-4)' *
5	6.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), wet, loose to medium dense, massive medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP02-07123, 11:20, (4-8)' *
	8.0	100	DP				
	10.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except gradational with below.	
10	12.0	100	DP			**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, loose to medium dense, medium grained, rounded, mostly quartz sand, some feldspar, some lithics, massive, mostly medium grained, gap graded, 98% sand 2% fines.	
	15.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except more fine grained.	Set 5' screen/8 blanks with PAH hole Set 5' screen/10 blanks in non-PAH sample hole
15						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW495B-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112657.021, E 6035784.63 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.5 ft bgs ▼ — START : 3/26/10 08:30 — END : 3/26/10 10:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0.1		**ASPHALT CONCRETE PAVEMENT** 0.67' thick.	sample: DP01-07124, 10:00, (0-0.5)' * sample: DP01-03060, 09:20, (0-1)' * sample: DP01-07125, 10:05, (0.5-2)' *
	0.0 - 2.0	100	DP			**WELL GRADED GRAVEL WITH SILT (GW-GM)** very dark brown (10YR 2/2) to dark yellowish brown (10YR 4/4), dry, hard, massive, fragments to 1", recycled concrete and AC at base, 50% gravel, 15% sand, 10% fines.	
2.0						**WELL GRADED SAND (SW)** brown (10YR 5/3), moist to wet, loose, massive upward fining, mostly quartz sand, some feldspar, few lithics, rounded to angular fragments, medium sand, 95% sand, 5% fines.	sample: DP01-07126, 10:10, (2-4)' * sample: DP01-03061/53061, (2.5-3)' *
	2.0 - 4.0	100	DP				▼
4.0						**WELL GRADED SAND (SW)** brownish yellow (10YR 6/6), wet, firm, massive, very fine to medium grained, rounded to angular fragments, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP01-07127, 10:15, (4-8)' *
5	4.0 - 6.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, loose, massive, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0							
	6.0 - 8.0	100	DP				
8.0							
	8.0 - 9.0	100	DP				
9.0						Boring terminated at 9 ft bgs.	
10							
15							

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW495B-DP02 SHEET 1 OF 1

SOIL BORING LOG

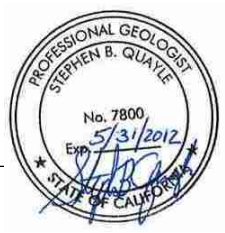
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112670.695, E 6035719.90 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.7 ft bgs — START : 3/25/10 14:40 — END : 3/25/10 15:20 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP02-07128, (0-0.5)' *
							sample: DP02-03063, 15:05, (0-0.5)' *
							sample: DP02-07129, (0.5-2)' *
		85	DP			**WELL GRADED GRAVEL WITH SAND (GW)** very dark brown (10YR 2/2), dry, loose, subrounded, clasts to 1/2", massive, 50% gravel, 45% sand, 5% fines.	
2.0						**WELL GRADED SAND (SW)** dark yellowish brown (10YR 4/4), moist, medium dense, massive, medium grained, mostly quartz sand, some feldspar, 95% sand, 5% fines.	
							sample: DP02-071309/57130, (2-4)' *
		100	DP				▼ sample: DP02-03064, (2.5-3)' *
4.0							
							sample: DP02-07131, (4-8)' *
5		100	DP			**LEAN CLAY WITH SAND (CL)** yellowish brown (10YR 5/4), most, firm, plastic, limonites staining, 15% sand, 85% fines.	
6.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), wet, loose to medium dense, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
		100	DP				
8.0							sample: DP02-03065, (7.5-8)' *
							Set 1' PVC temp casing, placed plastic and bentonite around annulus at ground surface
		100	DP				Acetate sleeve stuck inside core barrel
10							
11.0							Heaving sands
		NR	DP				
15	15.0					Boring terminated at 15 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AW496-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 7.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115132.132, E 6034667.17 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.3 ft bgs ▼ — START : 4/9/10 11:25 — END : 4/9/10 12:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT** 0.3' thick.	▼ sample: DP01-07148, 12:05, (0-0.5)' * sample: DP01-03078, 12:00, (0-0.5)' * sample: DP01-07149, 12:05, (0.5-2)' *
		75	DP			**SILTY SAND (SM)** very dark grayish brown (10YR 3/2), moist, loose, fine to coarse, well graded, subrounded, no plasticity, rapid dilatancy, 80% sand, 15% fines, 5% fine to medium subrounded gravel.	
	2.3			PID = 0		**POORLY GRADED GRAVEL (GP)** very dark grayish brown (10YR 3/2), dry, dense, fine to coarse, gap graded, subrounded to rounded, moderately cemented, most likely road base.	sample: DP01-07150/57150, 12:05, (2-4)' *
		75	DP			**SANDY SILT (ML)** very dark grayish brown (10YR 3/2), moist, loose, soft, fines have no plasticity, rapid dilatancy, weak cementation, sand is fine, poorly graded, subrounded, 40% sand, 60% silt.	sample: DP01-03079, 12:10, (3.5-4)' *
	4.3					**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), moist, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP01-07151, 12:05, (4-8)' *
5		80	DP				
	6.3					**LEAN CLAY WITH SAND (CL)** light yellowish brown (2.5Y 6/3), wet, soft, high plasticity, slow dilatancy, low toughness, sand is fine, 15% sand, 85% fines.	
		100	DP				
	8.3			PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), moist, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
		100	DP				
10	10.3			PID = 0			
		100	DP				
	12.3			PID = 0		**CLAYEY SAND (SC)** light yellowish brown (2.5Y 6/3), wet, medium dense, low plasticity, slow dilatancy, sand is fine to coarse, well graded, subrounded, 70% sand, 30% clay/fines.	
		65	DP				
15	15.3			PID = 0		**CLAYEY SAND (SC)** Same as above, except no plasticity, rapid dilatancy, 85% sand, 15% fines.	
						Boring terminated at 15.3 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AW496-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 8.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115140.263, E 6034719.33 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.3 ft bgs — START : 4/9/10 14:00 — END : 4/9/10 15:10 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**WELL GRADED SAND WITH SILT (SW-SM)** very dark grayish brown (10YR 3/2), moist, loose, fine to coarse, subrounded, well graded, not plastic, rapid dilatancy, weak cementation, 90% sand, ~10% fines.	Grass surface sample: DP02-07152, 14:50, (0-0.5)' * sample: DP02-03081, 15:05, (0-0.5)' * sample: DP02-07153, 14:53, (0.5-2)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND (SW)** gray (2.5Y 5/1), moist to wet, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% silt.	
2.0							sample: DP02-07154, 14:55, (2-4)' *
	2.0 - 4.0	100	DP				sample: DP02-03082, 15:10, (3.5-4)' *
4.0							
	4.0 - 6.0	100	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% silt.	sample: DP02-07155, 14:58, (4-8)' *
5							
6.0							
	6.0 - 8.0	100	DP			**LEAN CLAY (CL)** light yellowish brown (2.5Y 6/4), wet, soft, high plasticity, slow dilatancy, sand is fine, 70% clay, 30% sand.	
8.0						**LEAN CLAY (CL)** light yellowish brown (2.5Y 6/4), firm, high plasticity, 100% fines.	
						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AW499-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113023.242, E 6037358.31 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.9 ft bgs ▼ — START : 4/1/10 15:00 — END : 4/1/10 16:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, poorly graded, subrounded, trace organic matter, trace roots, 95% sand, 5% fines.	Grass surface sample: DP01-03096/DP01-07164, 15:20, (0-0.5)' *
	0.0-2.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), moist, loose, fine grained to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP01-07165, 15:25, (0.5-2)' *
2.0				PID = 0		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP01-07166, 15:30, (2-4)' *
	2.0-4.0	100	DP				
4.0				PID = 0			sample: DP01-07167, 15:35, (4-8)' *
5	4.0-6.0	100	DP				
6.0				PID = 0			
	6.0-8.0	100	DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AW499-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113004.437, E 6037285.63 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs ▼ — START : 4/1/10 10:55 — END : — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.15' thick.	sample: DP02-07168, 11:25, (0-0.5)' * sample: DP02-03099, 11:55, (0-0.5)' * sample: DP02-07169/DP02-57169, 11:30, (0.5-2)' *
	0.0-2.0	75	DP			**POORLY GRADED SAND WITH GRAVEL (SP)** very dark brown (10YR 2/2), dry, loose, rounded fragments to 3/4, recycled AC base material, with medium angular to rounded quartz sand, 35% gravel, 55% sand, ~10% fines.	▼ sample: DP02-03100, 00:05, (1.25-1.75)' *
2.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), moist, loose, massive, medium grained, subangular to rounded quartz sand, some feldspar, lithics , 95% sand, 5% fines.	sample: DP02-07170/57170 & MS/MSD, 11:35, (2-4)' *
	2.0-4.0	100	DP			**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/3) to very dark greenish gray(10Y 3/1), interbedded colors, wet, loose, upward coarsening, fine to medium grained, angular to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines.	
4.0							sample: DP02-07171, 11:40, (4-8)' *
5	4.0-6.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), wet, medium dense, massive subangular to rounded medium grained quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0						**WELL GRADED SAND (SW)** Same as above except, gradational with above.	
	6.0-8.0	100	DP				
8.0						**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), wet, dense, upward coarsening, predominately fine grained rounded quartz sand, thinly bedded at base, 90% sand, ~10% fines.	
10	8.0-10.0	100	DP				
10.0						**POORLY GRADED SAND (SP)** Same as above, except olive brown, upward coarsening, very fine sand to fine to medium quartz sand.	
	10.0-12.0	100	DP				
12.0						**INTERBEDDED LEAN CLAY WITH POORLY GRADED SAND (SP/CL)** light olive brown (2.5Y 5/4) to very dark gray (2.5Y 3/1), wet, soft, high plasticity, laminated, alternating brown and gray clay layers, 2-4" thick, poorly graded sand, wet, very dark gray, medium grained.	
15	12.0-15.0	100	DP				
15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW599A-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111675.481, E 6036359.89 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.5 ft bgs ▼ — START : 3/29/10 14:45 — END : 3/29/10 15:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.2' thick.	sample: DP01-03036, 15:25, (0-0.5)' * sample: DP01-07092, 15:05, (0-0.5)' * sample: DP01-07093, 15:10, (0.5-2)' *
	2.0	80	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), dry, loose, massive, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
	4.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except faint bedding features at 3', fine sand.	sample: DP01-07094, 15:15, (2-4)' *
5	6.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose to medium dense, massive, wet at 4.75', medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP01-07095, 15:20, (4-8)' * ▼ sample: DP01-03037 , 15:30, (4.25-4.75)' *
	8.0	100	DP			**WELL GRADED SAND (SW)** Same as above except, massive.	
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW599A-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111649.538, E 6036318.37 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.0 ft bgs ▼ — START : 3/30/10 09:00 — END : 3/30/10 10:25 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**ASPHALT CONCRETE PAVEMENT** 0.25' thick.	Slight odor 0-0.5' sample: DP02-03039, 10:10, (0-0.5)' * sample: DP02-07096, 09:35, (0-0.5)' * sample: DP02-07097, 09:40, (0.5-2)' *
	0.0-2.0	100	DP			**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)** very dark brown (10YR 2/2), dry to moist, dense, massive, gravel to 1", angular quartz sand, recycled concrete and AC, fine grained, 45% gravel, 45% sand, 10% fines.	
2.0						**SILTY SAND (SM)** strong brown (7.5YR 5/6), dry to moist, massive, medium to coarse sand, angular and rounded fragments to 5 mm, low plasticity fines, 75% sand, 25% fines.	sample: DP02-07098, 09:45, (2-4)' *
	2.0-4.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), dry, massive, gradational with above, medium grained, angular to rounded quartz, rounded lithics and feldspar, 95% sand, 5% fines.	
4.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), moist to wet, massive, gradational with above, medium grained, angular to rounded quartz, rounded lithics and feldspar, mostly quartz, some feldspar, few lithics, 95% sand, 5% sand.	▼ sample: DP02-03040/53040, 10:15, (3.75-4.25)' * sample: DP02-07099, 09:50, (4-8)' *
5	4.0-6.0	100	DP				5' screen/3' blank in PAH hole 5' screen, 10' blank non PAH hole
6.0						**WELL GRADED SAND (SW)** Same as above except, gradational with above, ~5% shell fragments to 1/2.	
	6.0-8.0	100	DP				
8.0						**WELL GRADED SAND (SW)** Same as above, except faintly bedded, decreasing shell content.	
	8.0-10.0	100	DP				
10 10.0						**WELL GRADED SAND (SW)** Same as above, except shells.	
	10.0-12.0	100	DP				
12.0							
	12.0-15.0	100	DP				
15 15.0						Boring terminated at 15 ft bgs.	

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SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW599B-DP01 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111820.948, E 6036595.57 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.5 ft bgs — START : 3/29/10 09:00 — END : 3/29/10 10:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.1' thick.	sample: DP01-07100/57100, 09:45, (0-0.5)' *
	0.0 - 2.0	100	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, massive, plant debris, medium grained, rounded, mostly quartz sand, some feldspar, 90% sand, ~10% fines.	sample: DP01-03042, 09:45, (0-0.5)' * sample: DP01-07101, 09:50, (0.5-2)' *
2.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/6), dry, loose, massive, medium grained, rounded, quartz sand, 95% sand, 5% fines.	sample: DP01-07102, 10:00, (2-4)' *
	2.0 - 4.0	100	DP			**WELL GRADED GRAVEL WITH SILT AND SAND (GW-GM)** very dark brown (10YR 2/2), dry, loose, gravel to 1", angular, concrete and AC recycled base, rounded, quartz sand, 65% gravel, 25% sand, 10% fines.	▼ sample: DP01-03043, 10:00, (3.5-4)' *
4.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/6), dry to moist, loose, massive, medium grained, mostly quartz sand, some feldspar, some lithics, 95% sand, 5% fines.	sample: DP01-07103, 10:05, (4-8)' *
5	4.0 - 6.0	100	DP			**LEAN CLAY (CL)** yellowish brown (10YR 5/4), moist, firm, plastic, trace sand, 100% fines.	
6.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), moist to wet, loose, massive, shell fragments to 1/4", rounded, medium quartz sand, 95% sand, 5% fines.	
	6.0 - 8.0	100	DP			**WELL GRADED SAND (SW)** Same as above except, massive.	
8.0						Boring terminated at 8 ft bgs.	
10							
15							

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:
383512	AP1AW599B-DP02 SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111802.943, E 6036541.63 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.0 ft bgs — START : 3/29/10 10:30 — END : 3/29/10 12:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP02-07104, (0-0.5)' * sample: DP02-03045, (0-0.5)' * sample: DP02-07105, (0.5-2)' *
	0.0-2.0	100	DP			**WELL GRADED GRAVEL WITH SAND (GW)** dark brown (10YR 3/3), dry, loose, to dense, gravel fragments to 1.5", recycled concrete and Asphalt Concrete Pavement base, medium to coarse sand, fines, 70% gravel, 25% sand, 5% fines, sharp contact with below.	
2.0							sample: DP02-07106, (2-4)' *
	2.0-4.0	100	DP				
4.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), dry to moist, loose, massive, upward fining, gradational with below, quartz sand, medium grained, 95% sand, 5% fines.	sample: DP02-07107, (4-8)' *
5	4.0-6.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except wet at 5'.	sample: DP02-03046, (4.75-5.25)' *
6.0							
	6.0-8.0	100	DP				
8.0						**WELL GRADED SAND (SW)** olive gray (5Y 4/2), wet, medium dense, massive, minor bedding at base, medium grained, quartz round grained, 95% sand, 5% fines, gradational with below.	Set 5' blank, 5' screen in PAH boring
	8.0-10.0	100	DP				5' screen, 10' blank casing in non PAH boring, drill rod comes in hole for deep boring
10 10.0							
	10.0-12.0	100	DP				
12.0							
	12.0-15.0	100	DP				
15 15.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3) to olive gray (5Y 4/2), wet, thinly bedded, dense, fine to medium grained, rounded, mostly quartz sand, 95% sand, 5% fines.	

Boring terminated at 15 ft bgs.

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112777.530, E 6035942.48 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.9 ft bgs — START : 3/23/10 15:45 — END : 3/23/10 16:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.9' thick.	Wet during hand auger cleaning of hole at 5' bgs sample: DP01-07012, 16:10, (0-0.5)' * sample: DP01-07013, 16:15, (0.5-2)' *
0.9						**WELL GRADED SAND (SW)** black (2.5Y 2.5/1), dry, loose, medium to fine sand, 90% sand, ~10% fines.	
		80	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), dry to wet at 4', massive to faintly bedded, upward fining, medium/coarse sand to fine sand from 5' bgs to 1' bgs, massive and wet to base.	sample: DP01-07014, 16:20, (2-4)' *
4.0							▼ sample: DP01-07015, 16:25, (4-8)' *
5		100	DP				
6.0							
		100	DP				
8.0							
		100	DP				
10	10.0					Boring terminated at 10 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP02	SHEET 1 OF 1

SOIL BORING LOG

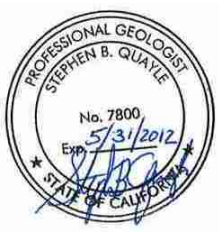
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112737.529, E 6035982.48 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.8 ft bgs — START : 3/24/10 10:00 — END : 3/24/10 10:45 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.3' thick.	sample: DP02-07016, 10:50, (0-0.5)' *
						POORLY GRADED GRAVEL WITH SAND (GP) very dark grayish brown (10YR 3/2), moist, gravel is fine to coarse, gap graded, gravel is subangular, sand is fine grained, poorly graded, subrounded, 80% gravel, 20% sand.	sample: DP02-07017, 10:55, (0.5-2)' *
	2.3	100	DP	PID = 0		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, fine to coarse grained, subrounded, well graded, weakly cemented, loose to medium dense, homogenous, 95% sand, 5% fines.	sample: DP02-07018, 11:00, (2-4)' *
	4.3	100	DP	PID = 0		**POORLY GRADED GRAVEL (GP)** very dark grayish brown (10YR 3/2), gravel is mostly coarse with some fines, gap graded, some fine poorly graded sand and some silt, 85% gravel, 10% sand, 5% fines.	
5	6.3	100	DP	PID = 0		**POORLY GRADED GRAVEL** Same as above, except wet.	sample: DP02-07019, (4-8)' *
	8.3	100	DP				
						Boring terminated at 8.3 ft bgs.	
10							
15							



SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP03	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112697.530, E 6035942.48 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.2 ft bgs — START : 3/24/10 10:50 — END : 3/24/10 11:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						CONCRETE 1.25' thick.	sample: DP03-07020/57020, 11:30, (0-0.5)' * sample: DP03-07021, 11:35, (0.5-2)' *
	3.3	100	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, homogenous, trace organic material (does not appear to be contamination), no odor or staining, 90% sand, ~10% fines. **WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, fine to coarse, medium dense, subrounded, well grained, 95% sand, 5% fines.	sample: DP03-07022, 11:40, (2-4)' *
5	5.3	100	DP	PID = 0		**POORLY GRADED GRAVEL WITH SAND (GP)** black (10YR 2/1) to very dark grayish brown (10YR 3/2), gravel is fine and coarse, gap graded, subangular, sand is fine grained, poorly graded, subrounded, loose, trace organics, no odor or staining, 90% gravel, 10% sand. **WELL GRADED SAND (SW)** grayish brown (10YR 5/2), wet, fine to coarse, medium dense, subrounded, well graded, 95% sand, 5% fines.	sample: DP03-07023, 11:50, (4-8)' *
	7.3	100	DP	PID = 0		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist to wet, fine to coarse, medium dense, subrounded, well graded, 95% sand, 5% fines.	
	9.3	100	DP	PID = 0			
10						Boring terminated at 9.3 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP04	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112737.529, E 6035902.48 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.5 ft bgs ▼ — START : 3/24/10 13:00 — END : 3/24/10 14:10 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						CONCRETE 1.5' thick.	sample: DP04-07024, 14:05, (0-0.5)' * sample: DP04-07025, 14:10, (0.5-2)' *
	3.5	100	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, dense, sand is fine, poorly graded, subrounded, 90% sand, ~10% fines. **WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, fine to coarse grained, subrounded, medium dense, well graded, homogenous, 95% sand, 5% fines.	sample: DP04-07026, 14:15, (2-4)' * ▼
5	5.5	80	DP	PID = 0		**POORLY GRADED SAND (SP)** black (10YR 2/1) to very dark grayish brown (10YR 3/2), fine and coarse grained, gap graded, subangular, sand is fine, subrounded, poorly graded, 85% gravel, 15% fines. **WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist to wet, fine to coarse grained, subrounded, medium dense, 95% sand, 5% fines.	sample: DP04-07027, 14:20, (4-8)' *
	7.5	90	DP	PID = 0			
	9.5	100	DP	PID = 0		**WELL GRADED SAND (SW)** Same as above, except wet.	
10						Boring terminated at 9.5 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP05	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111852.017, E 6036411.71 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.6 ft bgs ▼ — START : 3/23/10 13:00 — END : 3/23/10 14:10 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0.1		**ASPHALT CONCRETE PAVEMENT** 1.5' thick.	0-000 mg/m3 dust sample: DP05-07028, 14:00, (0-0.5)' * sample: DP05-07029, 14:05, (0.5-2)' *
		100	DP			**SILTY SAND (SM)** black (10YR 2/1), dry, dense, massive, slight asphalt, odor, fine sand, trace pebbles, 85% sand, 15% fines.	sample: DP05-07030/57030, 14:10, (2-4)' *
	4.0					**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), dry, loose, medium to fine sand, massive, quartz, feldspar, mica, 95% sand, 5% fines.	
						SILTY GRAVEL WITH SAND (GM) black with red Asphalt Concrete Pavement, 50% gravel, 25% sand, 25% fines.	
5		100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), moist to wet, faintly bedded to 1 cm thick, bedding distinguished by micaceous layers, 95% sand, 5% fines.	sample: DP05-07031, 14:45, (4-8)' *
	6.0						▼
		100	DP				
	8.0						
		100	DP				
	9.5						
10						Boring terminated at 9.5 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP06	SHEET 1 OF 1

SOIL BORING LOG

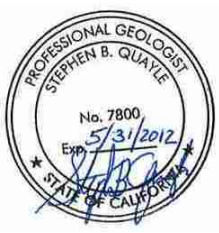
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111812.017, E 6036451.71 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.2 ft bgs — START : 3/23/10 14:45 — END : 3/23/10 15:05 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT CONCRETE PAVEMENT 1.0' thick.	sample: DP06-07032, 15:00, (0-0.5)' *
							sample: DP06-07033, 15:05, (0.5-2)' *
		100	DP			**SILTY GRAVEL WITH SAND (GM)** light olive brown (2.5Y 5/4), dry, dense, massive gap graded angular to medium concrete fragments with silty matrix, 75% gravel, 10% sand, 15% fines.	
						WELL GRADED SAND (SW) black (2.5Y 2.5/1), dry, dense, massive, medium to fine sand, 90% sand, ~10% fines.	sample: DP06-07034, 15:10, (2-4)' *
	4.0					**WELL GRADED SAND (SW)** olive (5Y 5/3), dry to moist, loose, massive, quartz sand 90% sand, ~10% fines.	
						SILTY GRAVEL WITH SAND (GM) black (5Y 2.5/1), dry, loose, rounded fragments to 2', recycled clastic, base material with Asphalt Concrete Pavement 50% gravel, 35% sand, 15% fines.	sample: DP06-07035 & MS/MSD, 15:20, (4-8)' *
5		100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), dry to moist, loose to medium dense, medium to fine grained sand, quartz, feldspar, mica 90% sand, ~10% fines.	
	6.0					Wet at 6' bgs.	
		100	DP				
	8.0						
		100	DP				
	9.0						
10						Boring terminated at 9 ft bgs.	
15							



SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP07	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111772.017, E 6036411.71 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.9 ft bgs ▼ — START : 3/23/10 10:00 — END : 3/23/10 11:45 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0.9		**ASPHALT CONCRETE PAVEMENT** 1.3' thick.	sample: DP07-07036, 11:20, (0-0.5)' * sample: DP07-07037, 11:25, (0.5-2)' *
		100	DP			**SILTY SAND (SM)** black (10YR 2/1), dry, medium dense, shell fragments, fine sand, 85% sand, 15% fines. **POORLY GRADED SAND (SP)** dark gray (5Y 4/1), moist, loose, angular quartz sand, medium, with mica fines, 90% sand, 10% very fine sand.	sample: DP07-07038, 11:30, (2-4)' *
4.5						**POORLY GRADED GRAVEL (GP)** black (2.5Y 2.5/1), hard, asphalt cemented round gravel. **WELL GRADED SAND (SW)** greenish gray (10Y 5/1), moist, loose to medium dense, massive, quartz, mica, 95% sand, 5% fines, gradational with below.	sample: DP07-07039, 11:35, (4-8)' *
5		75	DP				
6.5						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose, massive, sand gap graded, medium and fine grained, micaceous, 95% sand, 25% fines.	
		100	DP				
8.5							
		100	DP				
9.5							
10						Boring terminated at 9.5 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP08	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111812.017, E 6036371.71 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 3/23/10 09:00 — END : 3/23/10 09:55 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0.5		**ASPHALT CONCRETE PAVEMENT** 1.67' thick.	Odor at 0-1' gs sample: DP09-07040/57040, 09:45, (0-0.5)' * sample: DP09-07041, 09:50, (0.5-2)' *
	2.0					**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), moist, loose, rounded, mostly quartz, some feldspar, 90% sand, ~10% fines, pebble to 2.	sample: DP09-07042, 09:55, (2-4)' *
		100	DP			**POORLY GRADED SAND (SP)** dark greenish gray (10Y 4/1), moist, loose, angular medium quartz sand, massive, 95%, 5% micaceous fines.	
	4.0					**WELL GRADED GRAVEL WITH SAND (GW)** black (10YR 2/1), dry, loose, massive, angular to rounded, pebbles to 1", 75% gravel, 20% sand, 5% fines.	sample: DP09-07043, 10:05, (4-8)' *
5		100	DP			**WELL GRADED SAND (SW)** dark greenish gray (10GY 4/1) to dark grayish brown (2.5Y 4/2), moist, massive, sharp contact with above and with run, medium fine greenish gray, coarse to medium grained sand, 90% sand, ~10% fines.	
	6.0						
		100	DP			**WELL GRADED SAND (SW)** olive (5Y 4/4), wet, medium dense, coarse to fine sand, angular to rounded fragments, quartz, feldspar, mica, 95% sand, 5% fines.	
	8.0						
		100	DP				
10	10.0						
						Boring terminated at 10 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP09	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111389.261, E 6036867.99 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 3/22/10 13:15 — END : 3/22/10 15:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**ASPHALT CONCRETE PAVEMENT** 0.2' thick.	sample: DP09-07044, 14:30, (0-0.5)' *
	0.0 - 2.0	95	DP			**POORLY GRADED SAND (SP)** very dark brown (10YR 2/2), moist, loose, non-bedded quartz sand, 100% sand.	sample: DP09-07045, 14:40, (0.5-2)' *
2.0				PID = 0		**WELL GRADED SAND (SW)** olive gray (5Y 4/2), moist, loose, massive, very fine to medium, mostly quartz sand, some feldspar, some micaceous, 95% sand, 5% silt.	sample: DP09-07046, 14:45, (2-4)' *
	2.0 - 4.0	95	DP			**WELL GRADED SAND (SW)** Same as above, except contains minor amount shell fragments, wet below 2.5'.	
4.0				PID = 0			sample: DP09-07047, 14:55, (4-8)' *
5	4.0 - 6.0	100	DP			**WELL GRADED SAND (SW)** dark gray (2.5Y 4/1), wet, medium dense, massive, mostly quartz sand, some feldspar, some micaceous, shell fragments, 95% sand, 5% fines.	
6.0				PID = 0		**LEAN CLAY (CL)** dark greenish gray (10Y 4/1), moist, dense, plastic, 90% clay, 10% sand.	
	6.0 - 8.0	100	DP			**WELL GRADED SAND (SW)** black (2.5Y 2.5/1), wet, medium dense, rapid dilatancy, trace bedding with mica at base, limonite stained, angular rock fragments at base.	
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP10	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111349.260, E 6036907.99 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.5 ft bgs ▼ — START : 3/22/10 15:15 — END : 3/22/10 15:45 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**ASPHALT CONCRETE PAVEMENT** 0.25' thick.	sample: DP10-07048, 15:35, (0-0.5)' *
	2.0	100	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, mottled with fragments, bluish clay, mostly quartz sand, some micaceous, 90% sand, 10% mica/silt.	sample: DP10-07049, 15:45, (0.5-2)' *
	4.0	75	DP	PID = 0		**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), moist at base, loose, massive, mostly quartz sand,, some feldspar, some micaceous, 95% sand, 5% fines. **WELL GRADED SAND (SW)** Same as above, except wet, loose at 3' bgs.	sample: DP10-07050/57050, 15:50, (2-4)' * ▼
5	6.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** Same as above, except massive sand grains size increase slightly, medium grained.	sample: DP10-07051, 15:55, (4-8)' *
	8.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, loose, (liquid), micaceous, quartz and feldspar, 100% sand.	
10				PID = 0		Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP11	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111309.261, E 6036867.99 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.0 ft bgs ▼ — START : 3/22/10 14:30 — END : 3/22/10 15:22 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0.2		**ASPHALT** 0.3' thick.	sample: DP11-07052, 14:31, (0-0.5)' *
		100	DP	PID = 0.3 PID = 0.4 PID = 0.2		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, loose, rapid dilatancy, no plasticity, homogenous, 95% sand, 5% fines.	sample: DP11-07053, 14:45, (0.5-2)' *
2.3						**LEAN CLAY (CL)** black (10YR 2/1), hard, moist, high plasticity, high toughness, 95% fines, 5% sand, hydrocarbon staining and diesel odor, little oily material.	sample: DP11-07054, 14:56, (2-4)' *
		100	DP	PID = 0.2		**WELL GRADED SAND (SW)** Same as above, except moist.	
4.3				PID = 0.2			sample: DP11-07055, 15:00, (4-8)' *
5		100	DP	PID = 0.2		**WELL GRADED SAND (SW)** Same as above, except wet. ▼	
6.3				PID = 0.2			
		100	DP	PID = 0.2		**POORLY GRADED SAND (SP)** dark gray (2.5Y 4/1), wet, medium dense, fine and medium grained, homogenous, trace mica, 95% sand, 5% fines.	
8.3				PID = 0.2			
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP12	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111349.260, E 6036827.99 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.0 ft bgs ▼ — START : 3/22/10 12:45 — END : 3/22/10 14:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.3' thick.	sample: DP012-07056, 13:50, (0-0.5)' *
						WELL GRADED SAND (SW) dark grayish brown (10YR 4/2), moist, loose, no plasticity, rapid dilatancy, homogenous, well graded, fine to coarse, subrounded, 95% sand, 5% fines.	sample: DP012-07057, 14:00, (0.5-2)' *
				PID = 0.1			
		80	DP	PID = 0.1		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, loose, no plasticity, rapid dilatancy, subrounded, fine to coarse, 95% sand, 5% fines.	sample: DP012-07058, 13:45, (2-4)' *
				PID = 0.2			
	4.3			PID = 0.2			sample: DP012-07059, 14:09, (4-8)' *
5		80	DP			**WELL GRADED SAND (SW)** Same as above, except wet at 5-8' bgs.	▼
	8.3						
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP13	SHEET 1 OF 1

SOIL BORING LOG

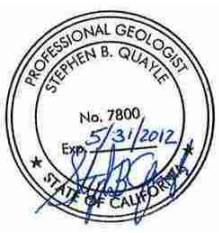
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111392.496, E 6037337.22 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.0 ft bgs — START : 3/22/10 05:40 — END : 3/22/2010 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP	PID = 0.2		**SILTY SAND (SM)** dark reddish gray (2.5YR 3/1), moist, loose, poorly graded, subrounded, no plasticity, rapid dilatancy, 80% sand, 20% silt.	grassy surface, no gravel, topsoil, trace roots, trace mica, trace organic material sample: DP13-07060/57060, 15:58, (0-0.5)' *
						WELL GRADED SAND (SW) light olive brown (2.5Y 5/3), moist, fine to coarse, subrounded, no plasticity, rapid dilatancy, 95% sand, 5% silt.	sample: DP13-07061, 16:02, (0.5-2)' *
2.0	2.0 – 4.0	100	DP	PID = 0.2			sample: DP13-07062, 16:12, (2-4)' *
						POORLY GRADED SAND-SILTY SAND (SP-SM) light yellowish brown (2.5Y 6/3), moist, medium dense, poorly graded, subrounded, no plasticity, rapid dilatancy, 85% sand, 15% silt.	
4.0	4.0 – 6.0	100	DP	PID = 0.2		**POORLY GRADED SAND (SP)** light olive brown (2.5Y 5/3), wet, poorly graded, subrounded, no plasticity, rapid dilatancy, 95% sand, 5% silt.	sample: DP13-07063, 16:22, (4-8)' *
6.0	6.0 – 8.0	100	DP	PID = 0.2			
8.0				PID = 0.2		Boring terminated at 8 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP14	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111352.496, E 6037377.22 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.4 ft bgs — START : 3/23/10 08:30 — END : 3/23/10 09:50 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**POORLY GRADED SAND WITH SILT (SP-SM)** very dark grayish brown (10YR 3/2), moist, dense, rapid dilatancy, no plasticity, homogenous, trace roots, 90% sand, 10% silt.	sample: DP14-07064, 09:10, (0-0.5)' * Topsoil at surface. sample: DP14-07065, 09:15, (0.5-2)' *
	0.0-2.0	75	DP			**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), wet, medium dense, rapid dilatancy, subrounded, fine to coarse, 95% sand, 5% fines.	
2.0				PID = 0		**POORLY GRADED GRAVEL (GP)** gray (2.5Y 5/1) to grayish brown (2.5Y 5/2), wet, gravel is medium dense and coarse, poorly graded, subangular, no cementation, fines are silty, sand is fine and poorly graded, 90% gravel, 5% sand, 5% fines.	sample: DP14-07066, 09:55, (2-4)' *
	2.0-4.0	75	DP				
4.0				PID = 0			sample: DP14-07067, 10:00, (4-8)' *
5	4.0-6.0	60	DP				
6.0				PID = 0		**POORLY GRADED SAND (SP)** gray (2.5Y 5/1), wet, sand is fine grained, dense, weakly cemented, homogenous, 95% sand, 5% fines.	
	6.0-8.0	80	DP				
8.0				PID = 0		**POORLY GRADED SAND (SP)** gray (2.5Y 5/1) to grayish brown (2.5Y 5/2), wet, gravel is medium dense and coarse, poorly graded, subangular, no cementation, fines are silty, sand is fine and poorly graded, 90% gravel, 5% sand, 5% fines.	
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP15	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111312.496, E 6037337.22 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.6 ft bgs — START : 3/23/10 09:55 — END : 3/23/10 10:35 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0		75	DP	PID = 0		**POORLY GRADED SAND WITH SILT (SP-SM)** very dark grayish brown (10YR 3/2), moist, loose, rapid dilatancy, no plasticity, homogenous, 90% sand, 10% silt, trace roots.	sample: DP15-07068, 10:18, (0-0.5)' * Topsoil at surface. sample: DP15-07069, 10:25, (0.5-2)' *
2.0		80	DP	PID = 0		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), wet, medium dense, subrounded, fine to coarse, weakly cemented, homogenous, 95% sand, 5% fines.	sample: DP15-07070/57070, 10:33, (2-4)' *
4.0		85	DP	PID = 0		**WELL GRADED SAND (SW)** gray (2.5Y 5/1), wet, medium dense, homogenous, 95% sand, 5% fines.	sample: DP15-07071, 10:42, (4-8)' *
6.0		85	DP	PID = 0			
8.0				PID = 0		Boring terminated at 8 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP16	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111352.496, E 6037297.22 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.6 ft bgs — START : 3/23/10 10:45 — END : 3/23/10 11:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**SILTY SAND (ML)** very dark gray (7.5YR 3/1), moist, loose, subrounded, poorly graded, weakly grained, homogenous, 80% sand, 20% silt.	Topsoil, trace asphalt sample: DP16-07072, 11:04, (0-0.5)' * sample: DP16-07073 with FD, 11:06, (0.5-2)' *
		100	DP			**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, fine to coarse, subrounded, no plasticity, rapid dilatancy, 95% sand, 5% fines.	▼
2.0				PID = 0		**POORLY GRADED GRAVEL (GP)** grayish brown (10YR 5/2), wet, medium to coarse with trace cobble, subangular, poorly graded, sand is poorly graded, fine, 90% gravel, 5% sand, 5% silt.	sample: DP16-07074, 11:20, (2-4)' *
		75	DP				
4.0				PID = 0		**POORLY GRADED GRAVEL (GP)** gray (10YR 5/1), Same as above, except no cobbles in sample, only gravel.	Could only drill from 4-5' because of gravel and cobbles. sample: DP16-07075, 11:25, (4-8)' *
5		90	DP				
6.0				PID = 0			
		60	DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP17	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111389.261, E 6037793.51 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs — START : 3/23/10 13:00 — END : 3/23/10 13:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0	0.5			PID = 0		**ASPHALT** 0.5' thick.	sample: DP17-07076, 14:10, (0-0.5)' *
	2.5	100		PID = 0		**POORLY GRADED GRAVEL (GP)** light brownish gray (2.5Y 6/2), moist, subangular, coarse with some fine sands, homogenous, trace fines, 95% gravel, 5% fines.	sample: DP17-07077, 14:15, (0.5-2)' * ▼ sample: DP17-07078, 14:25, (2-4)' *
	4.5	90		PID = 0		**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), wet, fine to coarse grained, subrounded, well graded, medium dense, weak cementation, homogenous, 95% sand, 5% fines.	sample: DP17-07079, 14:30, (4-8)' *
5	6.5	100		PID = 0		**WELL GRADED SAND (SW)** gray (2.5Y 5/1), fine to coarse grained, subrounded, loose to medium dense, weak cementation, homogenous, similar 2-4'.	
	8.5	100		PID = 0		Boring terminated at 8.5 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP18	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 8.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111349.260, E 6037833.51 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.9 ft bgs — START : 3/23/10 14:25 — END : 3/23/10 14:45 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.3' thick.	sample: DP18-07080/57080, 14:35, (0-0.5)' *
	2.3	100		PID = 0		**POORLY GRADED SAND (SP)** grayish brown (10YR 5/2), moist, loose, medium grained, some fine to medium subangular gravel beneath asphalt, 10% gravel, 90% sand, 0% fines.	sample: DP18-07081, 14:38, (0.5-2)' * ▼ sample: DP18-07082, 14:52, (2-4)' *
	4.3	100		PID = 0		**POORLY GRADED SAND (SP)** grayish brown (10YR 5/2), wet, loose, medium grained, poorly graded, subrounded, homogenous, weakly cemented, 95% sand, 5% silt.	sample: DP18-07083, 15:00, (4-8)' *
5	6.3	100		PID = 0			
	8.3	100		PID = 0			
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP19	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 8.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111309.261, E 6037793.51 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs — START : 3/23/10 16:15 — END : 3/23/2010 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.5						**ASPHALT** 0.3' thick.	sample: DP19-07084, 16:30, (0-0.5)' *
		75		PID = 0		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), moist, loose, rapid dilatancy, subrounded, fine to coarse, homogenous, 95% sand, 5% fines.	sample: DP19-07085, 16:33, (0.5-2)' *
2.5							sample: DP19-07086, 16:40, (2-4)' *
		15		PID = 0		**POORLY GRADED GRAVEL (GP)** very dark gray (10YR 3/1) to very dark gray (10YR 3/1), wet, some cobbles, very little fines, 95% gravel, 5% fines.	
4.5						Boring terminated at 4.5 ft bgs.	
5							
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP19A	SHEET 1 OF 1

SOIL BORING LOG

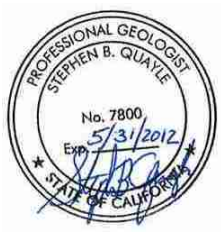
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 8.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111309.261, E 6037793.51 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.7 ft bgs — START : 3/24/10 08:45 — END : 3/24/10 09:05 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT** 0.3' thick.	
		75	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, fine grained, poorly graded, no plasticity, rapid dilatancy, medium dense, homogenous, 90% sand, ~10% fines, weak cementation. ▼	
	4.3			PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), wet, fine to coarse, well graded, subrounded, weakly cemented, medium dense, rapid dilatancy, 95% sand, 5% fines.	
5		50	DP	PID = 0		**POORLY GRADED GRAVEL (GP)** light yellowish brown (10YR 6/4) to gray (10YR 5/1), wet, gravel is fine to coarse, poorly graded, fine grained, size is comprised of chips from larger grains, 95% sand, 5% sand, subangular, 10YR 5/1 increasing with depth.	sample: DP19-07087, 09:20, (4-8)' *
	6.3			PID = 0			
		50	DP	PID = 0			
	8.3					Boring terminated at 8.3 ft bgs.	
10							
15							



SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AIR33-DP20	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111349.260, E 6037753.51 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.3 ft bgs — START : 3/24/10 04:20 — END : 3/24/10 04:34 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT (CONCRETE)** 0.3' thick.	sample: DP20-07088, 09:30, (0-0.5)' *
		80				**POORLY GRADED GRAVEL (GP)** dark gray (10YR 4/1) to brown (10YR 4/3), moist to wet, gravel is fine to coarse, gap graded, no odor on dark gray section, 85% gravel, 10% sand, 5% fines.	sample: DP20-07089, 09:35, (0.5-2)' *
2.3				PID = 0			sample: DP20-07090/57090, 09:40, (2-4)' *
		100				**POORLY GRADED SAND (SP)** wet, medium dense, poorly graded, fine grained, no plasticity, weak cementation, homogenous, 95% sand, 5% fines.	
4.3				PID = 0			sample: DP20-07091, 11:05, (4-8)' *
5		100				**POORLY GRADED SAND (SP)** Same as above, except wet.	
6.3				PID = 0			
		100					
8.3				PID = 0			
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113961.046, E 6034481.83 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.5 ft bgs — START : 4/9/10 08:35 — END : 4/9/10 08:45 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**PORTLAND CEMENT CONCRETE PAVEMENT** 0.75' thick.	sample: DP01-03114, 08:40, (0-0.5)' *
	0.0 - 2.0	100	DP			**WELL GRADED GRAVEL WITH SAND (GW)** black (10YR 2/1) to very dark grayish brown (2.5Y 3/2), dry, hard, massive, angular to rounded pebbles, recycled Asphalt Concrete Pavement, chert, concentrations, sand to clay fines, fragments to 3/4, 65% gravel, 25% sand, 10% fines.	
2.0							
	2.0 - 4.0	100	DP			**WELL GRADED SAND (SW)** dark yellowish brown (10YR 4/4), moist to wet, dense, massive with dark laminations at 0.3' intervals, black rounded fragmented lith), very fine to medium grained subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	sample: DP01-03115, 08:45, (3.5-4)' *
4.0							
	4.0 - 6.0	NR	DP			**WELL GRADED SAND (SW)** dark yellowish brown (10YR 4/4), Same as above, except wet, massive.	▼
5							
6.0							
	6.0 - 8.0	NR	DP			**POORLY GRADED SAND (SP)** olive gray (5Y 4/2), wet, dense, massive medium grained subrounded to round, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP01-03116, 08:50, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113461.792, E 6034440.87 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.0 ft bgs — START : 4/9/10 09:15 — END : 4/9/10 09:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.40' thick.	sample: DP02-03117, 09:25, (0-0.5)' *
	2.0	NR	DP			**SILTY GRAVEL WITH SAND (GM)** very dark grayish brown (10YR 3/2) to yellowish brown (10YR 5/8), dry, very hard, rounded to angular pebbles to 3/4" recycled Asphalt Concrete Pavement chert, concrete gravels, plastic fines, mostly quartz sand, some feldspar, few lithics, 65% gravel, 20% sand, 15% fines.	
	4.0	NR	DP			**SILTY SAND (SM)** light yellowish brown (2.5Y 6/4), moist, dense, massive upward fining gradational with sand above, fine to medium grained subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 85% sand, 15% fines.	sample: DP02-03118, 09:30, (3.5-4)' *
5	6.0	NR	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), wet, massive, medium grained, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	
	8.0	NR	DP			**WELL GRADED SAND (SW)** Same as above, except wet.	sample: DP02-03119, 09:35, (7.5-8)' *
10						Boring terminated at 8 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP03	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113428.997, E 6034870.31 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.0 ft bgs — START : 4/9/10 10:40 — END : 4/9/10 10:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 - 2.0	NR	DP			**ASPHALT CONCRETE PAVEMENT** 0.15' thick. **SILTY GRAVEL WITH SAND (GM)** olive brown (2.5Y 4/3) to olive (5Y 4/3), dry, very hard angular to rounded pebbles to 2, massive, silt to clay fines, non-plastic fines, 60% gravel, 25% sand, 15% fines.	sample: DP03-03120/53120, 10:50, (0-0.5)' *
2.0	2.0 - 4.0	NR	DP				sample: DP03-03121, 10:55, (3.5-4)' *
4.0	4.0 - 6.0	NR	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist to wet, massive, dense, angular to rounded medium grain , mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines, trace silt, gradational with below. **POORLY GRADED SAND (SP)** brown (10YR 4/3), wet, dense, massive, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0	6.0 - 8.0	NR	DP			**POORLY GRADED SAND (SP)** dark gray (2.5Y 4/1), wet, dense, faintly bedded, trace shell fragments to 1 mm, rounded fine to medium grain, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP03-03122, 11:00, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP04	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112958.920, E 6034400.16 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.6 ft bgs — START : 4/9/10 09:45 — END : 4/9/10 09:55 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 65.8		**ASPHALT CONCRETE PAVEMENT** 0.40' thick.	sample: DP04-03123, 09:55, (0-0.5)' *
		100	DP			**SILTY GRAVEL WITH SAND (GM)** very dark grayish brown (10YR 3/2) to yellowish brown (10YR 5/8), dry, very hard, round to angular, pebbles to 1", recycled Asphalt Concrete Pavement concrete chert base, plastic fines, medium grained round to angular sand, mostly quartz sand, some feldspar, few lithics, 65% gravel, 20% sand, 15% fines.	Top 0-0.5' petroleum odor no odor below 0.5'
2.5							
		100	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/4), moist, dense, massive, fine to medium grained, subangular to round, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradational with below.	▼ sample: DP04-03124, 10:00, (3.5-4)' *
4.5							
		100	DP			**WELL GRADED SAND (SW)** Same as above, except gradational with below.	
6.5							
		100	DP			**WELL GRADED SAND (SW)** very dark grayish brown (2.5Y 3/2), wet, dense, massive, fine to medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP04-03125, 10:05, (7.5-8)' *
						Boring terminated at 8 ft bgs.	

5

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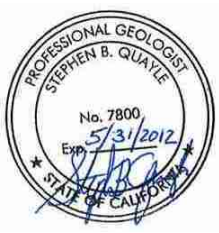

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP05	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111692.097, E 6034875.94 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.8 ft bgs ▼ — START : 3/26/10 09:45 — END : 3/26/10 10:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.4' thick.	sample: DP10-03126, 10:15, (0-0.5)' *
	2.4	100		PID = 0		**POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC)** yellowish brown (10YR 5/4), moist, loose, gravel is fine to medium grained, poorly graded, subangular and subrounded, sand is fine and medium grained, subrounded, poorly graded, fines are clay, high plasticity, weakly cemented, 75% gravel, 15% sand, 10% fines.	
	4.4	NR		PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), moist but not wet, medium dense, fine to coarse, subrounded, well graded, homogenous, 95% sand, 5% fines.	Capillary fringe from 3.5-4' sample: DP10-03127, 10:20, (3.5-4)' *
5	6.4	NR		PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), wet, medium dense, fine to coarse, subrounded, well graded, homogenous, 95% sand, 5% fines. ▼	
	8.4	NR		PID = 0			7.5-8' bgs sample was not collected, zone is saturated
10						Boring terminated at 8.4 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP06	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111662.593, E 6035410.89 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.6 ft bgs ▼ — START : 3/26/10 13:15 — END : 3/26/10 13:45 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE**.	sample: DP06-03129, 13:40, (0-0.5)' *
	2.5	100		PID = 0		**POORLY GRADED SAND WITH CLAY AND SAND (GP-GC)** yellowish brown (10YR 5/4), wet, loose, gravel is fine to medium gravel, poorly graded, subangular to subrounded, sand is fine and medium grained, subrounded, poorly graded, fines are clay, high plasticity, weak cementation, 75% gravel, 15% sand, 10% fines.	
	4.5	100		PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), dry, medium dense, fine to medium grained, subrounded, well graded, 95% sand, 5% fines. **POORLY GRADED SAND WITH CLAY AND SAND (GP-GC)** Same as 0.5-2', except moist.	sample: DP06-03130 with FD, 13:50, (3.5-4)' *
5	6.5	100		PID = 0		**POORLY GRADED SAND WITH CLAY AND SAND (GP-GC)** Same as 2-4', except increased moisture with depth.	Capillary fringe at 5.5-6.0' ▼ sample: DP06-03131, 13:55, (5.5-6)' *
	8.5	100		PID = 0		**POORLY GRADED SAND WITH CLAY AND SAND (GP-GC)** Same as 4-6', except wet.	
10						Boring terminated at 8.5 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP07	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111773.734, E 6035163.08 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.6 ft bgs — START : 3/26/10 10:30 — END : 3/26/10 11:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0							
	0.0 - 2.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), dry to moist, loose, fine to coarse, subrounded, well grained, homogenous, 95% sand, 5% fines.	Surface is vegetation sample: DP07-03132, 11:00, (0-0.5)' *
2.0							
	2.0 - 4.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** Same as above, except moist.	Capillary fringe from 2-2.5' sample: DP07-03133, 11:05, (2-2.5)' *
				PID = 0		**WELL GRADED SAND (SW)** Same as above, except wet, trace shells.	
4.0							
	4.0 - 6.0	100	DP	PID = 0			
5							
6.0							
	6.0 - 8.0	80	DP	PID = 0		**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), Same as above.	
8.0							
				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP08	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113172.825, E 6034557.84 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.4 ft bgs — START : 4/9/10 11:30 — END : 4/9/10 11:50 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist, loose, massive, upward fining, angular to subrounded, fine to medium grained quartz sand, 90% sand, ~10% fines, gradational with below.	sample: DP08-03135, 11:55, (0-0.5)' *
2.0	2.0 – 4.0	100	DP			**SILTY SAND (SM)** yellowish brown (10YR 5/8), moist to wet, wet at base, dense, minor silty fragments, fine to medium, subangular to rounded, mostly quartz sand, some feldspar, few lithics, 85% sand 15% fines, gradational with below.	sample: DP08-03136, 12:05, (3.5-4)' *
4.0	4.0 – 6.0	100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), wet dense to very dense, faintly bedded at base, medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0	6.0 – 8.0	100	DP				sample: DP08-03137, 12:05, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP09	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112919.469, E 6034521.24 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.8 ft bgs — START : 4/9/10 11:00 — END : 4/9/10 11:25 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist, loose to medium dense, massive, upward fining angular to subrounded, fine to medium grained, mostly quartz sand, some feldspar, few lithics, 90% sand, 10% fines, gradational with below.	sample: DP09-03138, 11:20, (0-0.5)' *
2.0	2.0 – 4.0	100	DP			**SILTY SAND (SM)** yellowish brown (10YR 5/8), moist to wet, dense, fragments of silty sand to 2 with angular fine quartz sand, fine to medium grained, mostly quartz sand, some feldspar, few lithics, 80% sand, 20 fines.	▼ sample: DP09-03139, 11:25, (3.5-4)' *
4.0	4.0 – 6.0	100	DP			**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4) to brown (10YR 4/3), wet, faintly bedded at based, poorly graded at top, medium grained, subrounded to rounded, mostly quartz sand, some feldspar, few lithics, 90% sand, ~10% fines, trace silt.	
5							
6.0	6.0 – 8.0	100	DP				sample: DP09-03140/53190, 11:30, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AMSA-DP10	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111917.303, E 6034464.94 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.0 ft bgs — START : 3/26/10 08:30 — END : 3/26/10 09:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), moist to dry, fine to medium grained, subrounded, well graded, loose, 95% sand, 5% fines, some roots to 4".	Surface is grass, no asphalt sample: DP10-03141, 09:10, (0-0.5)' *
	0.0-2.0	100	DP				
2.0				PID = 0		**WELL GRADED SAND (SW)** Same as 0-2', except no roots.	Capillary fringe at 2-2.5' sample: DP10-03142, 09:15, (2-2.5)' *
	2.0-4.0	80	DP			**WELL GRADED SAND (SW)** Same as 2-2.5', except transitioning to wet at approximately 2.5'.	
4.0				PID = 0			▼
5	4.0-6.0	100	DP				
6.0				PID = 0			
	6.0-8.0	100	DP				7.5-8' bgs sample was not collected, saturated soils
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 7.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115051.420, E 6035012.63 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.0 ft bgs — START : 4/8/10 10:10 — END : 4/8/10 10:50 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0						**ASPHALT** 0.3' thick.	sample: DP01-03144, 10:40, (0-0.5)' *
	2.3	100	DP	PID = 0.8		**CLAYEY GRAVEL WITH SAND (GC)** very dark gray (2.5Y 3/1), wet, loose, sand is fine, medium, and trace coarse grained, subrounded and subangular, gap graded, fines are clay, high plasticity, slow dilatancy, sand is fine, poorly graded, sample has hydrocarbon odor, no trace product observed, minor hydrocarbon staining.	sample: DP01-03145, 10:55, (1.5-2)' *
	4.3	90	DP	PID = 0.5		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), dry, loose, poorly graded, fine grained, subrounded, no staining, no odor, 95% sand, 5% fines.	
	6.3	90	DP	PID = 0.3		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, well graded, fine to coarse, subrounded, no staining or odor, 95% sand, 5% fines.	
5	8.3	100	DP	PID = 0.3		**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), wet, dense, well graded, fine to coarse, subrounded, no staining or odor, 95% sand, 5% fines.	
				PID = 0.3			
				PID = 0.3			
10						Boring terminated at 8.3 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115051.420, E 6035480.62 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.8 ft bgs — START : 4/8/10 09:30 — END : 4/7/10 10:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0.3		**ASPHALT** 0.1' thick.	sample: DP02-03147, 09:50, (0-0.5)' *
	2.1	95	DP			**POORLY GRADED GRAVEL WITH SILT (GP-GM)** very dark grayish brown (10YR 3/2), wet, loose, fine and medium grained, poorly graded, subangular, 80% gravel, 10% sand, 10% fines.	▼ sample: DP02-03148, 10:00, (1.5-2)' *
	4.1	75	DP	PID = 0.3		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines. **WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, sand is fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
5	6.1	100	DP	PID = 0.3		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines.	Deeper samples not collected because of saturated conditions
	8.1	100	DP	PID = 0.3		**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, medium dense to dense, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
10				PID = 0.3		Boring terminated at 8.1 ft bgs.	
15							

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP03	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115024.290, E 6035938.44 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.2 ft bgs — START : 4/8/10 14:00 — END : 4/8/10 14:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/4), moist, loose, fine to coarse, well graded, subrounded, trace chunks of weakly cemented clayey sand that are light olive brown (2.5Y 5/6).	Very thin layer of grass and topsoil at surface. sample: DP03-03150 with FD, 14:10, (0-0.5)' *
		100	DP				
2.0						**CLAYEY SAND (SC)** light olive brown (2.5Y 5/6), moist, loose, sand is fine to coarse, well graded, subrounded, fines are clay, medium plasticity, rapid dilatancy, weakly cemented, medium toughness, 70% sand 30% clay.	sample: DP03-03151, 14:30, (1.5-2)' *
		100	DP	PID = 0			
4.0						**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/4), wet, dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
		100	DP	PID = 0			
6.0							
		100	DP	PID = 0		**WELL GRADED SAND (SW)** dark grayish brown (2.5Y 4/2), wet, dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
8.0							
				PID = 0		Boring terminated at 8 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP04	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115020.898, E 6036403.04 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.7 ft bgs — START : 4/8/10 08:50 — END : 4/7/10 09:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.4' thick.	sample: DP04-03153, 09:10, (0-0.5)' *
		80	DP			**SILTY SAND (SM)** very dark grayish brown (10YR 3/2), moist, sand is fine, poorly graded, subrounded, fines are silt, no plasticity, rapid dilatancy, gravel is fine and coarse, subangular, 10% gravel, 75% sand, 15% fines.	
2.4				PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
		80	DP				sample: DP04-03154, 09:35, (3.5-4)' *
4.4				PID = 0.3		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense to dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	Deeper samples not collected, saturated conditions
5		80	DP				
6.4				PID = 0.3		Trace blocks of weakly cemented fine sand and silt, yellow brown (10YR 5/6) throughout, trace shell throughout from 4-8' bgs.	
		100	DP				
8.4				PID = 0.3		Boring terminated at 8.4 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP05	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2115000.551, E 6036867.64 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.5 ft bgs — START : 4/9/10 10:10 — END : 4/9/10 10:46 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	Grass at surface. sample: DP05-03156, 10:25, (0-0.5)' *
	0.0-2.0	30	DP	PID = 0			
2.0							
	2.0-4.0	70	DP				▼ sample: DP05-03157, 10:30, (3.5-4)' *
4.0							
5	4.0-6.0	75	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), wet, dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines, 2" band of weakly cemented silty sand that is yellowish brown (10YR 5/6) at 4.5', trace shells throughout.	
6.0				PID = 0			
	6.0-8.0	100	DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP06	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114980.204, E 6037318.68 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs — START : 4/7/10 13:00 — END : 4/7/10 13:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.3' thick.	sample: DP06-03159, 13:25, (0-0.5)' *
		90	DP			**POORLY GRADED GRAVEL (GP)** very dark grayish brown (10YR 3/2), wet, loose, gravel is fine and coarse, gap graded, subangular, sand is fine to coarse, subrounded, 90% gravel, 10% sand.	
	2.3			PID = 0.1		**WELL GRADED SAND (SW)** very dark grayish brown (10YR 3/2) to light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
		90	DP				
	4.3			PID = 0		Light yellowish brown (2.5Y 6/3), wet at 4' bgs.	sample: DP06-03160/53160, 13:30, (3.5-4)' *
5		90	DP				Deeper sample not collected because of wet conditions
	6.3			PID = 0		**WELL GRADED SAND (SW)** gray (10YR 5/1), wet, dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
		100	DP				
	8.3					Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP07	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114942.900, E 6037732.41 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.6 ft bgs — START : 4/7/10 14:00 — END : 4/7/10 14:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE/ASPHALT (CONCRETE)** 0.5' thick.	sample: DP07-03162, 14:20, (0-0.5)' *
	2.5	85	DP	PID = 0.1		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines. **POORLY GRADED SAND (SP)** light yellowish brown (2.5Y 6/3), dry to moist, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines. **POORLY GRADED SAND (SP)** Same as above, except wet, medium dense.	
	4.5	90	DP	PID = 0.2		**POORLY GRADED SAND (SP)** Same as above, except dense.	sample: DP07-03163, 14:30, (3.5-4)' *
5	6.5	90	DP	PID = 0		**POORLY GRADED SAND (SP)** light yellowish brown (2.5Y 6/3) to light brownish gray (2.5Y 6/2), wet, fine grained, poorly graded, medium dense, subrounded, 95% sand, 5% fines.	
	8.5	100	DP	PID = 0		Boring terminated at 8.5 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP08	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 7.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114603.775, E 6035019.41 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs — START : 4/9/10 08:30 — END : 4/9/10 09:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0							Grass surface
	0.0 – 2.0	90	DP			**WELL GRADED SAND (SW)** very dark grayish brown (10YR 3/2), wet, loose, fine to coarse grained, subrounded, well graded, 5% gravel, 90% sand, 5% fines, some roots.	sample: DP08-03278, 08:45, (0-0.5)' *
						WELL GRADED SAND (SW) dark gray (N4), moist, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines, no odor or staining.	sample: DP08-03279, 09:10, (1.5-2)' *
2.0	2.0 – 4.0	75	DP			**WELL GRADED SAND (SW)** gray (2.5Y 5/1), wet, medium or dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
4.0	4.0 – 6.0	100	DP			**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
5				PID = 0			
6.0	6.0 – 8.0	100	DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP09	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114600.384, E 6035473.84 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs — START : 4/7/10 08:20 — END : 4/7/10 09:45 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.3' thick.	sample: DP07-03168, 09:45, (0-0.5)' *
		75	DP			**POORLY GRADED SAND (SP)** grayish brown (10YR 5/2), wet, loose, fine grained, poorly graded, 95% sand, 5% fines.	
	2.3					**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	sample: DP07-03169/53170, 10:00, (1.5-2)' *
		100	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	
	4.3					**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, dense, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	Deeper samples not collected because of saturated conditions
5		100	DP				
	6.3					**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), wet, dense, fine to coarse, subrounded, well graded, 95% sand, 5% fines.	
		100	DP				
	8.3					Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP10	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114586.819, E 6035941.83 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.8 ft bgs — START : 4/7/10 10:40 — END : 4/7/10 11:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0		75	DP	PID = 0		**ASPHALT** 0.3' thick.	sample: DP10-03171, 10:55, (0-0.5)' *
						POORLY GRADED GRAVEL WITH SAND (GP) light brownish gray (2.5Y 6/2), wet, loose, gravel is gap graded, fine and coarse, subangular, sand is fine to coarse, subrounded, droplets of free product throughout sample, smell of diesel, 80% gravel 20% sand.	sample: DP10-03172, 11:15, (1.5-2)' *
2.3		100	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), wet, loose, weakly cemented, fine grained, poorly graded, subrounded, solvent, odor 95% sand, 5% fines.	
						WELL GRADED SAND (SW) light yellowish brown (2.5Y 6/3), moist, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
4.3		100	DP	PID = 0.2		**WELL GRADED SAND (SW)** Same as 0.75-2', except wet.	
5						**WELL GRADED SAND (SW)** Same as 2-4', except gray (2.5Y 5/1).	
6.3		100	DP	PID = 0.2			
8.3		100	DP				
10						Boring terminated at 8.3 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP11	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114590.210, E 6036403.04 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.3 ft bgs — START : 4/6/10 08:20 — END : 4/6/10 10:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.2' thick.	sample: DP11-03174, 09:50, (0-0.5)' *
		70	DP	PID = 0		**POORLY GRADED SAND WITH GRAVEL (SP)** very dark grayish brown (10YR 3/2), moist, loose, sand is fine, poorly graded, subrounded, gravel is fine and coarse, gap graded, subangular, 20% gravel, 75% sand, 5% fines.	
2.2				PID = 0		**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	▼ sample: DP11-03175, 10:10, (2-2.5)' *
		85	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
4.2				PID = 0		**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	Deeper samples not collected because of wet conditions
5		100	DP				
6.2				PID = 0			
		100	DP			**WELL GRADED SAND WITH SILT (SW-SM)** olive brown (2.5Y 4/3) to yellowish brown (10YR 5/6), sand is light olive brown and silt is brown, sand is fine to coarse, well graded, subrounded, silt appears in blocks that are about 1 in diameter, one band of silt is present from 3.6-7.7', silt is mixed with fine and medium sand, no plasticity, rapid dilatancy and is firm and weakly cemented, 90% sand, 10% fines.	
8.2				PID = 0		Boring terminated at 8.2 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP12	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 6.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114635.157, E 6036925.38 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.8 ft bgs — START : 4/6/10 10:35 — END : 4/6/10 11:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.2' thick.	sample: DP12-03178, (0-0.5)' *
		75	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), wet, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines.	
2.2				PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	Deeper samples not collected because of saturated conditions
		65	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
4.2				PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/4), Same as 2-4'.	
5		100	DP				
6.2							
		100	DP				
8.2						Boring terminated at 8.2 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP13	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114590.210, E 6037332.24 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 0.5 ft bgs — START : 4/6/10 13:00 — END : 4/6/10 14:10 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.2' thick.	sample: DP13-03180/53180, 13:40, (0-0.5)' *
		80	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), poorly graded, fine grained, subrounded, loose, moist, 95% sand 5% fines.	
2.2				PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	Deeper samples not collected because of saturated conditions
		100	DP			**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), wet, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
4.2				PID = 0			
5		100	DP				
6.2							
		100	DP				
8.2							
						Boring terminated at 8.2 ft bgs.	
10							
15							

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP14	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114122.218, E 6035477.23 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.0 ft bgs — START : 4/8/10 15:30 — END : 4/8/2010 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP14-03183, 14:30, (0-0.5)' *
	0.0-2.0	100	DP				
2.0						**WELL GRADED SAND (SW)** Same as above, except wet, dense to medium dense.	
	2.0-4.0	100	DP				
4.0				PID = 0			Deeper samples not collected because of saturated conditions
5	4.0-6.0	100	DP				
6.0				PID = 0			
	6.0-8.0	100	DP				
8.0				PID = 0		**WELL GRADED SAND (SW)** dark gray (2.5Y 4/1), wet, dense fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP15	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 12.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114122.218, E 6035941.83 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs ▼ — START : 3/30/10 14:30 — END : 3/30/10 15:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT** 0.2' thick.	sample: DP15-03186, 15:15, (0-0.5)' *
	2.0	70	DP			**WELL GRADED SAND WITH GRAVEL (SW)** very dark grayish brown (10YR 3/2), moist, loose, sand is fine to coarse, subangular and subrounded, well graded, gravel is fine and medium, poorly graded, subrounded, 70% sand, 30% gravel.	▼
	4.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), moist, loose, sand is fine to coarse, subrounded, well graded, 95% sand, 5% fines.	sample: DP15-03187, 15:20, (3.5-4)' *
5	6.0	100	DP	PID = 0		**WELL GRADED SAND (SW)** brown (10YR 4/3), wet, loose, sand is fine to coarse, subrounded, well graded, 95% sand, 5% fines.	
	8.0	100	DP	PID = 0			
				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP16	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114118.827, E 6036406.43 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.5 ft bgs — START : 3/30/10 14:00 — END : 3/30/10 14:20 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.4' thick.	sample: DP16-03189, 14:15, (0-0.5)' *
	2.4	50	DP	PID = 0		**WELL GRADED SAND (SW)** very dark grayish brown (10YR 3/2) to brown (10YR 5/3), wet, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	▼ sample: DP16-03190/53190, 14:30, (1.5-2)' *
	4.4	100	DP	PID = 0		**WELL GRADED SAND (SW)** changing from brown to light brownish gray with depth, wet, loose, sand is fine to coarse, well graded, subrounded, 95% sand, 5% silt.	
5	6.4	100	DP				
	8.4	100	DP				
						Boring terminated at 8.4 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP17	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2114122.218, E 6036864.25 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 3/30/10 10:45 — END : 3/30/10 11:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0							Grass surface
	0.0 - 2.0	75	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), wet, loose, fine, poorly graded, subrounded, trace roots, 95% sand, 5% fines.	sample: DP17-03192, 00:05, (0-0.5)' *
						WELL GRADED SAND (SW) light brownish gray (10YR 6/2), dry to moist, loose to medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	sample: DP17-03193, 00:05, (1.5-2)' *
2.0	2.0 - 4.0	85	DP	PID = 0		**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), wet, loose, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
4.0	4.0 - 6.0	100	DP	PID = 0			
6.0	6.0 - 8.0	100	DP	PID = 0			
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP18	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 15.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113664.399, E 6035938.44 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.8 ft bgs ▼ — START : 3/30/10 09:00 — END : 3/30/10 09:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.2' thick.	sample: DP18-03195, 10:25, (0-0.5)' *
	2.2	100	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), wet, loose, fine to medium grained, poorly graded, subrounded, 95% sand, 5% fines. **WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), dry to moist, medium dense, fine to coarse, well graded, subrounded, 95% sand, 5% fines.	
	4.2	100	DP	PID = 0			sample: DP18-03196, 10:30, (3.5-4)' *
5	6.2	100	DP	PID = 0		**WELL GRADED SAND (SW)** Same as above, except wet.	▼ sample: DP18-03197, 10:35, (4.5-5)' *
	8.2	100	DP	PID = 0		Boring terminated at 8.2 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP19	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 17.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113661.008, E 6036406.43 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 5.9 ft bgs ▼ — START : 3/30/10 08:20 — END : 3/30/10 08:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT 0.5' thick.	sample: DP16-03189, 08:55, (0-0.5)' *
		75	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), dry, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines. **WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), dry to moist, loose to medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
2.5							
		90	DP	PID = 0			sample: DP16-03199, 09:25, (3.5-4)' *
4.5							
5		90	DP	PID = 0			▼ sample: DP16-03200/53200, 09:15, (5.5-6)' *
6.5							
		100	DP			**WELL GRADED SAND (SW)** brown (10YR 5/3), wet, loose, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	
8.5						Boring terminated at 8.5 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP20	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 14.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113199.798, E 6035938.44 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.0 ft bgs ▼ — START : 3/25/10 08:45 — END : 3/25/10 09:30 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT CONCRETE PAVEMENT 1' thick.	sample: DP20-03201, 09:20, (0-0.5)' *
		100	DP			**WELL GRADED GRAVEL WITH SAND (GW)** very dark brown (10YR 2/2), dry, loose, rounded to angular, fragments to 3/4, 50% gravel, 45% sand, 5% fines. **WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), dry to moist, loose, upward fining, medium to medium fine sand, shell fragments, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
4.0							sample: DP20-03202, 09:25, (3.5-4)' * ▼
5		NR	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, medium dense, faint contact with above, fine to medium grained, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
6.0							Heaving sand at 6'
		NR	DP				
8.0							sample: DP20-03203, 09:30, (7.5-8)' *
						Boring terminated at 8 ft bgs.	
10							
15							

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP21	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 15.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113196.407, E 6036403.04 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.7 ft bgs — START : 3/25/10 09:45 — END : 3/25/10 10:15 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP21-03204, 10:10, (0-0.5)' *
	0.0 - 2.0	NR	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, fine grained, 0.2' thick, 95% sand, 5% fines.	
	2.0 - 4.0	NR	DP				sample shifted to 3-3.5' to sample at top of groundwater level ▼ sample: DP21-03205, 10:20, (3-3.5)' *
5	4.0 - 6.0	NR	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), dry to moist, loose, massive, fine to medium grained, rounded grains, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% silts.	
	6.0 - 8.0	100	DP			**WELL GRADED SAND (SW)** wet at base, fine to medium grained, rounded grains, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP21-03206, 10:15, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	
10							
15							

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SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP22	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 15.5 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2113226.659, E 6036850.41 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 4.5 ft bgs — START : 3/24/10 14:00 — END : 3/24/10 15:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT (CONCRETE)** 0.3' thick.	sample: DP22-03207, 15:25, (0-0.5)' *
	2.3	100	DP	PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, subrounded, 90% sand, ~10% fines. **POORLY GRADED SAND (SP)** light yellowish brown (2.5Y 6/3), moist, medium dense, fine grained, subrounded, 95% sand, 5% fines.	
	4.3	100	DP	PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), moist to wet, fine to coarse, well graded, subrounded, medium dense, 95% sand, 5% fines.	sample: DP22-03208 prior to saturated, 15:30, (3.5-4)' *
5	6.3	100	DP	PID = 0		**WELL GRADED SAND (SW)** Same as above, except more moisture, not wet. **WELL GRADED SAND (SW)** Same as above, except wet.	
	8.3	100	DP	PID = 0			sample: DP22-03209, 15:45, (7.5-8)' *
10						Boring terminated at 8.3 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP23	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 13.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112740.353, E 6036400.46 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 3.1 ft bgs ▼ — START : 3/23/10 08:40 — END : 3/23/10 10:05 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT CONCRETE PAVEMENT 0.25' thick.	sample: DP23-03210 with FD, 09:25, (0-0.5)' *
		100	DP			**SILTY SAND WITH GRAVEL (SM)** dark brown (10YR 3/3), dry, loose, angular fragments to 2, brick, concrete, 75% gravel, 10% sand, 15% fines.	
	2.3					**WELL GRADED SAND (SW)** yellowish brown (10YR 5/4), moist to dry, loose, nonplastic, medium grained, rounded, mostly quartz sand, some feldspar, few lithics and micaceous, 95% sand, 5% fines.	
		100	DP				sample: DP23-03211, 09:50, (2.5-3)' * ▼ Sample depth moved to 2.5-3' to sample above groundwater
	4.3					**WELL GRADED SAND (SW)** Same as above, except wet at 3.5-4', wet flowing water in 4-6' core.	
5		100	DP				
	6.3					**WELL GRADED SAND (SW)** Same as above, except massive, no bedding or other depositional features.	
		100	DP				sample: DP23-03212, 10:00, (7.5-8)' *
	8.3					Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP24	SHEET 1 OF 1

SOIL BORING LOG

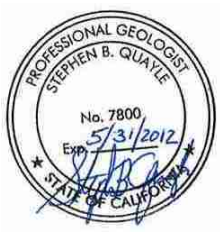
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.8 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112741.979, E 6037328.85 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.5 ft bgs — START : 3/24/10 15:05 — END : 3/24/10 15:20 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.67' thick.	sample: DP24-03213, 15:15, (0-0.5)' *
	0.0 - 2.0	90	DP			**WELL GRADED GRAVEL WITH SAND (GW)** very dark brown (10YR 2/2), dry to slightly moist, loose to dense, rounded pebbles to 1", base material under pavement, fine sand matrix, 50% gravel, 40% sand, 10% fines.	
	2.0 - 4.0	90	DP			**WEL GRADED SAND (SW)** olive brown (2.5Y 4/3), moist to wet, medium dense, upward fining, trace shell fragments, massive, medium rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP24-03214, 15:20, (2-2.5)' * ▼
	4.0 - 6.0	100	DP			**WEL GRADED SAND (SW)** Same as above, except flowing/heaving sand in sample barrel.	
	6.0 - 8.0	100	DP				sample: DP24-03215, 15:25, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	



SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP25	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112270.596, E 6036867.64 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.1 ft bgs — START : 3/24/10 10:15 — END : 3/24/10 10:40 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0.2		**ASPHALT CONCRETE PAVEMENT** 0.67' thick.	sample: DP25-03216, 10:35, (0-0.5)' *
	0.0 - 2.0	75	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, very well rounded quartz, trace pebbles, mostly quartz sand, some feldspar, few lithics, trace mica, appears stained <5% gravel, 95% sand, 5% fines.	
2.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/4), moist to wet, loose, massive, shell fragments to 1/2", rounded to well rounded, medium to fine grained, mostly quartz sand, some feldspar, few lithics, <5% gravel, 95% sand, 5% fines (gravel/fraction shells).	▼ Middle sample moved 2-2.5' to sample soil above groundwater sample: DP25-03217, 10:40, (2-2.5)' *
	2.0 - 4.0	80	DP				
4.0				PID = 0.1			
5	4.0 - 6.0	100	DP				
6.0							
	6.0 - 8.0	100	DP				sample: DP25-03218, 10:45, (7.5-8)' *
8.0				PID = 0		Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP26	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 11.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112273.987, E 6037332.24 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.1 ft bgs ▼ — START : 3/24/10 11:15 — END : 3/24/10 12:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.5' thick.	sample: DP26-03219, 11:50, (0-0.5)' *
	0.0 - 2.0	75	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, pebbles to 1/2", rounded quartz sand, 10% gravel, 85% sand, 5% fines.	
2.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), loose, moist, massive, upward fining from 4', well rounded to angular quartz, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, gradation with below, slight color change due to water.	Middle sample moved 1.5-2.5' to sample soil above groundwater ▼ sample: DP26-03220/53220, 11:55, (1.5-2.5)' *
	2.0 - 4.0	70	DP				
4.0							
	4.0 - 6.0	75	DP				
5							
6.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose, massive heaving in sample casing, fine grained, well rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines, trace shell fragments.	
	6.0 - 8.0	100	DP				sample: DP26-03221, 00:05, (7.5-8)' *
8.0						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP27	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112273.987, E 6037790.06 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.3 ft bgs ▼ — START : 3/24/10 13:45 — END : 3/24/10 14:25 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP27-03222, 14:10, (0-0.5)' *
	0.0 - 2.0	80	DP			**WELL GRADED SAND (SW)** very dark brown (10YR 2/2), dry, loose, pebbles to 1" rounded, sand, rounded, fine grained, 35% gravel, 60% sand, 5% fines.	sample: DP27-03223, 14:15, (1.5-2)' *
2.0						**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), moist to wet at base, loose to medium dense, upward fining, medium to medium fine sand, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines. 2.5' - Same as above, except wet and firm. ▼	
	2.0 - 4.0	80	DP				
4.0							
5	4.0 - 6.0	100	DP				
6.0							
	6.0 - 8.0	100	DP				
8.0							sample: DP27-03224, 14:20, (7.5-8)' *
						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP28	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112267.205, E 6038261.45 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.2 ft bgs — START : 3/25/10 08:00 — END : 3/25/10 08:40 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**CONCRETE/ASPHALT** 1.5' thick.	sample: DP28-03225, 09:05, (0-0.5)' *
				PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, poorly graded, subrounded, fine grained, loose, 90% sand, 5% fines, 5% gravel.	sample: DP28-03226, 09:15, (2-2.5)' *
	3.5					**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), moist, medium dense, fine to coarse, subrounded, 95% sand, 5% fines.	
5	5.5	65	DP			**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), wet, medium dense, fine to coarse, subrounded, 95% sand, 5% fines, 0.25' thick band of clay that is yellowish brown (10YR 5/6) at 3.25' bgs.	Just above the saturated zone.
	7.5	100	DP	PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), wet, medium dense, fine to coarse, subrounded, homogenous, 95% and 5% fines.	
	9.5	100	DP	PID = 0		**POORLY GRADED GRAVEL WITH SAND (GP)** very dark grayish brown (10YR 3/2), wet, gravel is fine and coarse, gap graded, subangular, gravel is more shallow than sand, sand zone from 7.75-8', sand is poorly graded, subrounded, fine, 80% gravel, 20% sand.	sample: DP28-03227, 09:30, (7.5-8)' *
10						Boring terminated at 9.5 ft bgs.	
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP29	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.6 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111809.386, E 6036867.64 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs ▼ — START : 3/25/10 10:40 — END : 3/24/10 11:10 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
				PID = 0		**ASPHALT (CONCRETE)** 0.3' thick.	sample: DP29-03228, 11:10, (0-0.5)' *
		65	DP			**POORLY GRADED GRAVEL (GP)** very dark grayish brown (10YR 3/2), wet, fine and coarse, gap graded, subangular, 95% gravel, 5% sand.	
	2.3			PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist to wet, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines.	From above the saturated zone. ▼ sample: DP29-03229, 11:15, (1.5-2)' *
		100	DP			**POORLY GRADED SAND (SP)** light brownish gray (10YR 6/2), moist to wet, dense to medium dense, fine and medium grained, subrounded, poorly/gap graded, homogenous, 95% sand, 5% fines.	
	4.3			PID = 0		**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/4), wet, medium dense, well graded, subrounded, fine to coarse, homogenous, 95% sand, 5% fines.	
5		100	DP			**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), wet, medium dense, fine to coarse, well graded, subrounded, trace shells throughout, 95% sand, 5% fines.	
	6.3			PID = 0			
		100	DP				sample: DP29-03230 with FD, 11:30, (7.5-8)' *
	8.3			PID = 0			
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP30	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111826.703, E 6037325.69 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.8 ft bgs — START : 4/5/10 14:40 — END : 4/5/10 15:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						CONCRETE 0.6' thick.	sample: DP30-03231, 15:25, (0-0.5)' *
		100	DP	PID = 0		**POORLY GRADED SAND WITH GRAVEL (SP)** very dark grayish brown (10YR 3/2), wet, loose, sand is fine, poorly graded, subrounded, gravel is fine and medium gap graded, subangular, 20% gravel, 75% sand, 5% fines.	
2.6						**WELL GRADED SAND (SW)** light yellowish brown (2.5Y 6/3), moist, loose, sand is fine to coarse, subrounded, well graded, 95% sand, 5% fines.	Deeper samples not collected because of saturated conditions
		100	DP			**WELL GRADED SAND (SW)** grayish brown (10YR 5/2), wet, medium dense, sand is fine to coarse, well graded, subrounded, 95% sand, 5% fines, trace shells.	
4.6							
5		100	DP	PID = 0			
6.6							
		100	DP	PID = 0			
8.6							
						Boring terminated at 8.6 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP31	SHEET 1 OF 1

SOIL BORING LOG

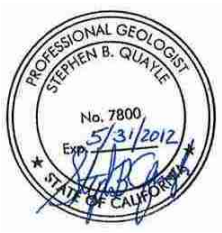
PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.7 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111809.386, E 6037793.45 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.1 ft bgs — START : 3/25/10 09:30 — END : 3/25/10 10:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT (CONCRETE) 0.3' thick.	sample: DP31-03234, 10:10, (0-0.5)' *
		60	DP			**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), moist, loose, fine grained, poorly graded, subrounded, 95% sand, 5% fines.	
	2.3			PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), moist, medium dense, fine to coarse grained, well graded, subrounded, 95% sand, 5% fines.	sample: DP31-03235 from unsaturated zone, 10:20, (2-2.5)' *
		80	DP	PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2) to yellowish brown (10YR 5/6), moist, medium dense to dark, fine to coarse grained, well graded, subrounded, yellowish brown laminations of fine grained material, 95% sand, 5% fines, trace shells, yellowish brown (10YR 5/6) from 3.5-4'.	
	4.3			PID = 0			
5		100	DP	PID = 0		**WELL GRADED SAND (SW)** light brownish gray (10YR 6/2), wet, medium dense to dense, fine to coarse grained, well graded, subrounded, interspersed with yellowish brown (10YR 5/6), blocks of moderately cemented fines and sand, 95% sand and 5% fines, trace shell throughout.	
	6.3			PID = 0			
		100	DP			**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), wet, medium dense, fine to coarse grained, well graded, subrounded, 95% sand 5% fines, trace shell fragments.	sample: DP31-03236, 10:30, (7.5-8)' *
	8.3						sample: DP31-03237, (8-8.3)' *
				PID = 0		Boring terminated at 8.3 ft bgs.	
10							
15							



SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP32	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 8.2 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111812.777, E 6038261.45 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.0 ft bgs — START : 3/24/10 11:00 — END : 3/24/10 11:45 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
						ASPHALT CONCRETE PAVEMENT 1' thick.	sample: DP32-03237, 11:15, (0-0.5)' *
		NR	DP			**WELL GRADED GRAVEL WITH SAND (GW)** very dark brown (10YR 2/2), dry, loose, angular to rounded, fragments to 3/4, concrete, asphalt, lithics fragments, 75% gravel, 25% sand, <5% fines.	sample: DP32-03238, 11:20, (1.5-2)' *
	2.0					**POORLY GRADED SAND (SP)** olive brown (2.5Y 4/3), moist to wet, medium dense, fine grained, rounded to angular grains, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
		NR	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose to medium dense, medium grained, mostly quartz sand, some feldspar, 95% sand, 5% fines.	
	4.0					**WELL GRADED SAND (SW)** olive gray (5Y 4/2) to very dark greenish gray(10Y 3/1), wet, loose to medium dense, massive, 5-10% shell fragments (< 5mm), 95% sand, 5% fines.	
5		NR	DP				
	6.0						
		NR	DP				
				PID = 0.1		**LEAN CLAY (CL)** very dark greenish gray (10Y 3/1), moist, firm, plastic with sand.	sample: DP32-03239, 11:25, (7.5-8)' *
	8.0					**WELL GRADED SAND (SW)** olive gray (5Y 4/2) to very dark greenish gray(10Y 3/1), wet, loose to medium dense, massive, 5-10% shell fragments (< 5mm), 95% sand, 5% fines.	
						Boring terminated at 8 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP33	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111350.611, E 6037336.64 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.4 ft bgs — START : 3/25/10 13:00 — END : 3/25/10 14:00 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0				PID = 0		**POORLY GRADED SAND (SP)** very dark grayish brown (10YR 3/2), poorly graded, fine, subrounded, loose, 95% sand, 5% silt, trace gravel, trace roots.	Grassy surface sample: DP33-03240 with FD, 13:30, (0-0.5)' *
	0.0 - 2.0	80	DP			**WELL GRADED SAND (SW)** light brownish gray (2.5Y 6/2), moist, medium dense, fine to coarse grained, well graded, subrounded, homogenous, 95% sand, 5% fines, trace shells.	
2.0				PID = 0		**CLAYEY GRAVEL (GC)** yellowish brown (10YR 5/4), moist, gravel is loose, clay is firm, gravel is fine and coarse, gap graded, subangular, clay has high plasticity, slow dilatancy, weakly cemented, 70% gravel, 5% sand, 25% fines.	sample: DP33-03241, 13:45, (1.75-2.25)' *
	2.0 - 4.0	40	DP				
4.0				PID = 0		**POORLY GRADED GRAVEL (GP)** light olive gray (5Y 6/2), wet, loose, gap graded, subangular, fine to coarse grained, sand is fine, poorly graded, subrounded, 80% gravel, 20% sand.	
5	4.0 - 6.0	60	DP				
6.0				PID = 0		**POORLY GRADED GRAVEL (GP)** pale brown (10YR 6/3), wet, loose, gap graded, subangular, fine to coarse grained, sand is fine, subrounded, poorly graded, 95% gravel, 5% sand.	
	6.0 - 8.0	60	DP				
8.0				PID = 0		Boring terminated at 8 ft bgs.	7.8-8' sample not collected due to saturated conditions.
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP34	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 9.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2111349.102, E 6037793.85 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.1 ft bgs — START : 3/25/10 14:10 — END : 3/25/10 14:30 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.3' thick.	sample: DP34-03243, 14:25, (0-0.5)' *
	2.3	75	DP	PID = 0		**POORLY GRADED GRAVEL WITH CLAY AND SAND (GP-GC)** light brownish gray (2.5Y 6/2), moist to wet, loose, subangular, gap graded, fine to coarse, fines are clay, high plasticity, no dilatancy, sand is fine, poorly graded and subrounded, 85% gravel, 5% sand, 10% fines.	sample: DP34-03244, 14:40, (1.75-2.25)' *
	4.3	100	DP	PID = 0		**POORLY GRADED GRAVEL (GP)** yellowish brown (10YR 5/4), moist, loose to medium dense, gap graded, subangular, 90% gravel, 10% sand. **WELL GRADED SAND (SW)** grayish brown (10YR 5/2) to yellowish brown (10YR 5/6), transitioning with depth, wet, medium dense, subrounded, well graded, fine to coarse, homogenous, 95% sand, 5% fines.	
5	6.3	100	DP	PID = 0			
	8.3	100	DP				7.5-8' bgs sample not collected due to saturated conditions
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1AFTA-DP35	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.0 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2110890.358, E 6037325.46 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.2 ft bgs — START : 3/26/10 14:30 — END : 3/26/10 15:15 — LOGGER : A. Rippert

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0				PID = 0		**ASPHALT** 0.3' thick.	sample: DP35-03246, 15:00, (0-0.5)' *
		100	DP			**POORLY GRADED GRAVEL (GP)** brown (10YR 5/3), moist, loose, gap grained, subrounded, fine and medium, 90% gravel, 5% sand, 5% fines.	
	2.3			PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3), moist and moisture increases with depth, loose to medium dense, well graded, fine to coarse grained, subrounded, 95% sand, 5% fines.	▼
		100	DP				sample: DP35-03247, 15:15, (3.5-4)' *
	4.3			PID = 0		**WELL GRADED SAND (SW)** brown (10YR 5/3) to gray (2.5Y 6/1), wet, medium dense to loose, well graded, fine to coarse, subrounded, 95% sand, 5% fines.	
5		100	DP				
	6.3			PID = 0			
		100	DP				
	8.3			PID = 0			
						Boring terminated at 8.3 ft bgs.	
10							
15							

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT - AFTA IR33 LUCRETIA.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1A259-DP01	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.1 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112589.195, E 6037709.64 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.0 ft bgs — START : 3/31/10 16:00 — END : 4/1/10 09:25 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0						**ASPHALT CONCRETE PAVEMENT** 0.15' thick.	sample: DP01-03254, 16:05, (0-0.5)' *
	2.0	90	DP			**SILTY GRAVEL WITH SAND (GM)** dark grayish brown (2.5Y 4/2), moist, dense, angular fragments to 1", recycled AC base material, 50% gravel, 35% sand, 15% fines.	
		100	DP			**WELL GRADED SAND (SW)** brown (10YR 4/3), loose, moist, massive angular to rounded medium grained sand, 95% sand, 5% fines, gradational with below.	sample: DP01-03255, 16:10, (1.75-2.25)' *
	4.0					**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, medium dense, medium grained, rounded quartz sand, 95% sand, 5% fines, gradational with below.	
5	6.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, loose, upward coarsening, massive subangular to rounded, mostly quartz sand, some feldspar sand, gradational with below.	
	8.0	100	DP			**WELL GRADED SAND (SW)** Same as above, except wet, loose, upward coarsening, very fine quartz sand at base, gradational with below.	
10	10.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, medium dense, massive grained rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	
	12.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, dense, very fragmented rounded, mostly quartz sand, some lithics, 95% sand, 5% fines.	Set 5' screen, 5' blank in hand auger hole Set 5' screen, 10' blank in logged hole, with drill rod
15	15.0	100	DP			**WELL GRADED SAND (SW)** olive gray (5Y 4/2), wet, firm, non plastic, laminated to bedded, very fine quartz sand and silt.	
						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1A259-DP02	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.9 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112548.090, E 6037719.33 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : Not Measured — START : 4/1/10 15:40 — END : 4/1/10 16:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
							No logging, water table at surface, installed PVC casing in two holes, used disposable tips on drive casing
5							Set 5' screen, 5' blank in hand auger hole. Set 5' screen, 15' blank in adjacent hole.
		0	DP				
10							
15	15.0						

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1A259-DP03	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 10.3 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112515.444, E 6037778.59 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 2.5 ft bgs ▼ — START : 3/31/10 15:20 — END : 3/31/10 16:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0–2.0	100	DP			**ASPHALT CONCRETE PAVEMENT** 0.5' thick. **SILTY GRAVEL (GM)** dark grayish brown (2.5Y 4/2) to very dark brown (10YR 2/2), dry, dense to hard, massive angular to rounded fragments to 1.5', silty at base, 65% gravel, 25% sand, 10% fines.	sample: DP03-03260/53260, 15:35, (0-0.5)' *
2.0	2.0–4.0	100	DP			**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/3), wet, loose, massive, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	▼ sample: DP03-03261, 15:40, (2.25-2.75)' *
4.0	4.0–6.0	100	DP				
5 6.0	6.0–8.0	100	DP				
8.0	8.0–10.0	100	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose to medium dense, massive, medium grained, mostly quartz sand, some feldspar, few lithics, rounded sand, upward coarsening from 13', very fine rounded quartz sand to medium grained quartz sand, 95% sand, 5% fines.	
10 10.0	10.0–12.0	100	DP				
12.0	12.0–15.0	100	DP			**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, firm, thinly bedded, two upward fining sequences, medium to very fine grained.	
15 15.0						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

CH2MHILL

PROJECT NUMBER:	BORING NUMBER:	
383512	AP1A259-DP04	SHEET 1 OF 1

SOIL BORING LOG

PROJECT : ESI Transfer Parcels FED-1A, 2B, and 2C — LOCATION : Alameda Point, Alameda, CA

ELEVATION : 4.4 ft — DRILLING CONTRACTOR : RSI Drilling

COORDINATES : N 2112471.034, E 6037722.38 — DRILLING METHOD AND EQUIPMENT : Geoprobe, DPT

WATER LEVELS : 1.4 ft bgs — START : 3/31/10 14:00 — END : 3/31/10 15:00 — LOGGER : M. Godwin

DEPTH BELOW GROUND SURFACE (ft)	INTERVAL (ft)	RECOVERY (%)	#TYPE	ENVIRONMENTAL DATA	GRAPHIC LOG	SOIL DESCRIPTION (SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS, & INSTRUMENTATION)
0.0	0.0 – 2.0	100	DP			**ASPHALT CONCRETE PAVEMENT** 0.33' thick.	sample: DP04-03263, 14:30, (0-0.5)' *
						WELL GRADED GRAVEL WITH SAND (GW) very dark brown (10YR 2/2), dry, loose, massive, rounded fragments to 1", 45% gravel, 45% sand, 10% fines.	
						WELL GRADED SAND (SW) yellowish brown (10YR 5/4), loose, moist, massive, medium grained, rounded, mostly quartz sand, some feldspar, few lithics, 95% sand, 5% fines.	sample: DP04-03264, 14:35, (1.25-1.75)' *
2.0	2.0 – 4.0	100	DP				
4.0	4.0 – 6.0	NR	DP				
5						**WELL GRADED SAND (SW)** dark greenish gray (10Y 4/1), wet, medium dense, massive, fine to medium grained, rounded quartz, some lithics, 95% sand, 5% fines.	
6.0	6.0 – 8.0	NR	DP			**WELL GRADED SAND (SW)** olive brown (2.5Y 4/3), wet, loose to medium dense, upward fining, medium rounded to subangular, mostly quartz sand, some lithics, 95% sand, 5% fines.	
8.0	8.0 – 10.0	NR	DP			**WELL GRADED SAND (SW)** very dark greenish gray (10Y 3/1), wet, firm, upward fining, thinly bedded, medium to fine, rounded quartz sand.	
						WELL GRADED SAND (SW) olive brown (2.5Y 4/3), wet, medium dense, upward coarsening, fine to medium grained rounded quartz, 95% sand, 5% fines.	
10 10.0	10.0 – 12.0	NR	DP			**WELL GRADED SAND (SW)** greenish black (10Y 2.5/1), wet, medium dense, thinly bedded, 4 sequences, upward coarsening, very fine sand to medium sand, rounded quartz, organic (dead plant) odor.	Set 5' screen, 5' blank in hand auger hole Set 5' screen, 10' blank with sampled boring, drill rod remain in hole
12.0	12.0 – 15.0	NR	DP			**SILT (ML)** dark greenish gray (5GY 4/1), wet, firm, non plastic, laminated, top of upward coarsening sequence.	
15 15.0						**WELL GRADED SAND (SW)** light olive brown (2.5Y 5/4), wet, firm, bedded, fine grained quartz sand.	
						Boring terminated at 15 ft bgs.	

PROFESSIONAL GEOLOGIST STEPHEN B. QUAYLE No. 7800 Exp. 5/31/2012 STATE OF CALIFORNIA

SOIL BORING LOG 383512, ALAMEDA POINT.GPJ, CH2M GEOTECH_06_REVISED_383512.GLB, 2/1/11

Groundwater Sampling Logs

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CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AWIA259-DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Point	SC/OC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Windy Cloudy
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 1100
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03524

PUMP VOLUME	V_p	=	ml
TUBING INSIDE DIAMETER	D	= 0.17	in.
TUBING LENGTH	L	=	in.
CONVERSION FROM in^3 TO ml	1 in^3	= 16.39	ml

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	Comments
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03524	SW8260B/624	N	3x40mL VOA	HCl			
	03524	↓	MS/MSD	6x40mL VOA	↓			
				SC				

REMARKS: Sample at 7' (shallow) well.

CH2MHILL

PROJECT	LOCATION ID:
CLEAN 1000; CTO-FZN0	AWIA259-DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Point	SCOC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Windy, Cloudy
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 1130
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03525

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

INCOMPLETE

PURGING DATA | **FIELD PARAMETERS (within range for 3 consecutive measurements)** | **COMMENTS**

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03525	SVOC 8260B/624	N	3x40mL VOA	HCl			

S.C

REMARKS: Sample at 15' (deep) well.

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API 4259 - DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY: ~~JWB~~

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
~~PER. PUMP~~	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Windy, Sunny
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 1625
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03526

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03526	SW8260B/624	N	3x40mL VOA	HCl			
			S.C					

REMARKS: Sample depth for DP02-03526 is 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API A 259-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Point	SC/OC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY MDL

PURGING DATE: NA
WEATHER: Windy Sunny
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 1635
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03526

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03526	SW8260B1624	N	3x40mL VOA	HCl			
	0C							
				S.C				

REMARKS: Sample depth for DP02-03526 is 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAW259-DP03

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Point	RC/OC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA

WEATHER: Windy, Cloudy

TEMPERATURE:

SUBCONTRACTOR:

DATE OF SAMPLING: 03/31/10

TIME OF SAMPLING: 1630, 1645

SAMPLE MATRIX: Groundwater

SAMPLE ID: DP03-03528, -03529

PUMP VOLUME V_P = ml.

TUBING INSIDE DIAMETER D = 0.17 in.

TUBING LENGTH L = in.

CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA / FIELD PARAMETERS (within range for 3 consecutive measurements) / COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
03/31	03528	SW8260B/624	N	3x 40mL VOA	HCL			
↓	03529	↓	↓	↓	↓			

REMARKS: 7' → 03528

15' → 03529

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAW259-DP04

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Point	RC/OC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: windy/cloudy
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 03/31/10
TIME OF SAMPLING: 1520, 1550
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP04-03530, 53530, 03531

PUMP VOLUME V_P = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA / **FIELD PARAMETERS** (within range for 3 consecutive measurements) / **COMMENTS**

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
03/31	03530	SW8260B/624	N	3x40ml VOA	HCl			
	53530	SW8260B/624	FD	3x40ml VOA	HCl			
	03531	SW8260B/624	N	3x40ml VOA	HCl			

REMARKS: 7' → 03530 & 53530
15' → 03531

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API AAPS-DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC / RC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: low 60s
SUBCONTRACTOR:

DATE OF SAMPLING: 4/6/2010
TIME OF SAMPLING: 1315
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03500 & 53500

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA | **FIELD PARAMETERS (within range for 3 consecutive measurements)** | **COMMENTS**

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03500	SW6010A/7470A	N	3 x 250ml	HNO_3			
	↓	SW8260B/624	↓	9 x 40mL	HCl			
		SW8015B-P		6 x 40mL	HCl			
		SW8015B-E		6 x 1L Amber	—			
	↓	SW8015B-S Sim	↓	↓	—			
	53500	↓	FD		HNO_3			
	↓		↓		HCl			
					HCl			
					—			
				↓	—			

REMARKS: Sample depth at 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1 AAPS – DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER: Sunny, 10w 60s
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/6/2010
TIME OF SAMPLING: 1420
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03501

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03501	SW6010B/7470A	N	250 mL	HNO3			
		SW8260B/624		3x40mL	HCl			
		SW8015B-P		2x40mL	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8270Sim			—			

S. C

REMARKS: sample depth @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP/AAPS - DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY	CHECKED BY
383512.FI.DP		SC	

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
~~PER. PUMP~~	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/6/2010
TIME OF SAMPLING: 1500 & 1520
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03502 & 03503

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) SBC

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03502	SW6010B/7470A	N	250mL	HNO_3			
		SW8015B-P		3x40mL	HCl			
		SW8015B-E		2x1L Amber	HCl			
		SW8270SIM		↓	—			
		SW8260B/624		3x40mL	—			
	03503	↓	↓	↓	HNO_3			
	↓				HCl			
					HCl			
					—			
					—			

REMARKS: Depth of sample 03502 is at 7' & 03503 is @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APMW-57B -DP02

DISCRETE GROUNDWATER SAMPLING RECORD	JOB NO. 383512.FI.DP	SITE	PREPARED BY SC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY MDG

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR: 03900 & 03901

DATE OF SAMPLING: 4/6/2010
TIME OF SAMPLING: 0850 & 0930
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03506 & 03507

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in. SBC
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

PUMPING SYSTEM VOLUME CALCULATION
PUMPING SYSTEM VOLUME (V_S) SBC
$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$
$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

see page 008

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

See page 008

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
03900	03506	SW8270Sim	G	2x1L Amber	—			
	↓	SW8015B-E	↓	↓	—			
		SW6010B/7470A		1x250mL	HNO_3			
	↓	SW8260B/624		3x40mL VOA	HCl			
03901	03507	SW8270Sim		2x1L Amber	HCl	S.C		
	↓	SW8015B-E		↓	—			
		SW6010B/7470A		1x250mL	HNO_3			
	↓	SW8260B/624	↓	3x40mL VOA	HCl			

REMARKS: Sample depth for 03506 is 7' & 03507 is 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API/APPS-DP03

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/OC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Windy
TEMPERATURE: 40°
SUBCONTRACTOR:

DATE OF SAMPLING: 4/2/2010
TIME OF SAMPLING: 1035 & 1105
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP03-03504 & 03505

PUMP VOLUME SBG

	V_P	=		ml
TUBING INSIDE DIAMETER	D	=	0.17	in.
TUBING LENGTH	L	=		in.
CONVERSION FROM in^3 TO ml.	1 in^3	=	16.39	ml

PUMPING SYSTEM VOLUME CALCULATION SBG

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03504	SW8270Sim	N	2x1L Amber	—			
		SW8015B-E		↓	—			
		SW6010B/7470A		250 mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
	↓	SW8260B/624		3x40mL VOA	HCl			
	03505	SW8270Sim		2x1L Amber	—			
		SW8015B-E		↓	—			
		SW6010B/7470A		250mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
	↓	SW8260B/624	↓	3x40mL VOA	HCl			

REMARKS: Sample depth for 03504 is 7'
Sample depth for 03505 is 15'

Site: API AAPS - DP24 (DP24-03572 & 03573)
Date: 4/2/2010
Sample Time: 1350 & 1410
Sampling Analysis:

SW 8270 Sim	2 x 1L Amber
SW 8015 B-E	2 x 1L Amber
SW 6010 B/7470A	250mL Poly
SW 8015 B-P	2 x 40mL VOA
SW 8260 1624	3 x 40mL VOA

Site: API AAPS - DP22 (DP22-03568 & 03569)
Date: 4/2/2010
Sample Time:
Sampling Analysis:

SW 8270 Sim	2 x 1L Amber
SW 8015 B-E	2 x 1L Amber
SW 6010 B/7470A	250mL Poly
SW 8015B-P	2 x 40mL VOA
SW 8260 1624	2 x 40mL VOA

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP/APPS-DP05

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 9/9/2010
TIME OF SAMPLING: 1605 & 1625
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03902 & 03903

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03902	SW8260B/624	N	3x40mL VOA	HCl			
		SW6010B/7470A		1x 250mL	HNO_3			
		SW8270Sim		2x1L Amber	—			
		SW8015B-E		2x1L Amber	—			
		~~SW8015B-P~~		2x40mL VOA	HCl			
	03903				HCl			
					HNO_3			
					—			
					—			

REMARKS: 03902 sample is @ 7'
03903 sample is @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	IAAPS-DP06

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/13/2010
TIME OF SAMPLING: 0855/0930
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03536 & 03537

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03536	SW8260B/624	N	3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8270Sim		2x1L Amber	—			
	↓	SW6010B/7470A		1x250mL	HNO_3			
	03537	↓	↓	↓	HCl			
	↓				HCl			
					—			
					—			
					HNO_3			

S.C

REMARKS: 03536 sampled at depth of 7'
03537 sampled at depth of 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP/APS- DP07

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: low 50s
SUBCONTRACTOR:

DATE OF SAMPLING: 4/12/2010
TIME OF SAMPLING: 1525 & 1555
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03538 & 03539

PUMP VOLUME V_P = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03538	SW6010B/7470A	N	1x250mL	HNO_3			
		SW8260B/624		3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8270Sim		2x1L Amber	—			
	03539				HNO_3			
					HCl			
					HCl			
					—			

S.C

REMARKS: 03538 is at depth of 7'
03539 is at depth of 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	IAAPS-DP09

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Windy, Partly cloudy
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/12/2010
TIME OF SAMPLING: 1405 & 1430
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03542 & 03543

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03542	SW6010B/7470A	N	1x250mL	HNO_3			
		SW8270 sim		2x1L Amber	—			
		SW8015B-E		↓	—			
		SW8260B/624		3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
	03543	↓	↓	↓	HNO_3	↓	↓	↓
	↓				—			
					—			
					HCl			
					HCl			

S.C

REMARKS: 03542 at depth 7'
03543 at depth 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIMAPS- DP11

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/7/2010
TIME OF SAMPLING: 0830 & 0945
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03546 & 03547

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA / **FIELD PARAMETERS** (within range for 3 consecutive measurements) / **COMMENTS**

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03546	SW8260B/624	MS/MSD	40mL VOA x3	HCl			
		SW8015B-P		6x40 mL VOA	HCl			
		SW8015B-E		6x1L Amber	—			
		SW8270Sim		↓	—			
	↓	SW6010B/7470A	↓	3x250mL	HNO3			
	03547	SW8260B/624	N	3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8270Sim		↓	—			
	↓	SW6010B/7470A	↓	1x250 mL	HNO3			

REMARKS: Sample 03546 is at depth of 7'
Sample 03547 is at depth of 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAAPS-DP12

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/7/2010
TIME OF SAMPLING: 1120 & 1150
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03548 & 03549

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER SBC D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) SBC

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03548	SW8260B/624	N	3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8260Sim		2x1L Amber	—			
		SW6010B/7470A		1x250mL	HNO_3			
	03549				HCl			
					HCl			
					—			
					—			
					HNO_3			

REMARKS: Sample depth for 03548 is 7' & 03549 is 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	IAP/APPS – DP13

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/OC

PURGING CRITERIA: None

CHECKED BY MDG

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Light rain
TEMPERATURE: 43°
SUBCONTRACTOR: RSI Drilling

DATE OF SAMPLING: 4/2/2010
TIME OF SAMPLING: 0850
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP13-03550 & 53550

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER SBC D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) SBC

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03550	SW8270Sim	N	2x1L Amber	—			
		SW8015B-E		↓	—			
		SW6010B/7470A		250mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
	↓	SW8260B/624	↓	3x40mL VOA	HCl			
	53550	SW8270Sim	FD	2x1L Amber	—			
		SW8015B-E		↓	—			
		SW6010B/7470A		250mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
	↓	SW8260B/624	↓	3x40mL VOA	HCl		SC	

REMARKS: Sample depth @ 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAPPS-DP13

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/OC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
~~PER. PUMP~~	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE: 65°
SUBCONTRACTOR: RSI drilling

DATE OF SAMPLING: 4/2/2010
TIME OF SAMPLING: 0930
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP13-03551

PUMP VOLUME V_p = ml
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03551	SW8270Sim	N	2x1L Amber	—			
		SW8015B-E		↓	—			
		SW6010B/7470A		250mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
		SW8260B(62		3x40mL VOA	HCl			
				S.C				

REMARKS: Sample depth @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	IA APS-DP17

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/OC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: 68°
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 0905
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP17-03558

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	Comments
										SBC
		SBC				SBC				

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03558	SW8015B-P	N	2x40mL VOA	HCl			
		SW8260B/1624		3x40mL VOA	HCl			
		SW8270SIM		2x1L Amber	—			
		SW8015B-E		2x1L Amber	—			
	↓	SW6010B/7470A	↓	250mL	HNO_3			
				S.C				

REMARKS: sample depth for DP17 @ 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	1A APS - DP17

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/OC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA

WEATHER:

TEMPERATURE:

SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010

TIME OF SAMPLING: 0945

SAMPLE MATRIX: Groundwater

SAMPLE ID: DP17-03559

PUMP VOLUME V_p = ml.

TUBING INSIDE DIAMETER D = 0.17 in.

TUBING LENGTH L = in.

CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBG

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03559	SW8015 B - P	N	2x40mL VOA	HCl			
		SW8260B/624		3x40mL VOA	HCl			
		SW8270 Sim		2x1L Amber	—			
		SW8015 B-E		2x1L Amber	—			
	↓	SW6010B/7470A	↓	250 mL	HNO_3			
				S.C				

REMARKS: Sample depth for DP17 @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAAPS-DP19

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/OC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/5/2010
TIME OF SAMPLING: 0945 & 1030
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP19-03562 & 03563

PUMP VOLUME V_p = ml
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	~~Type~~ Volume (S.C)	~~Volume~~ Type (S.C)	Preservative	COC# Depth	Ship Date	Laboratory
	03562	SW8270Sim	2x1L Amber	G/N	—	7'		
	↓	SW8015B-E	2x1L Amber	↓	—	↓		
		SW6010B/7470A	250mL		HNO_3			
		SW8015B-P	2x40mL VOA		HCl			
	↓	SW8260B/624	3x40mL VOA		HCl	↓		
	03563	↓	↓		—	15'		
	↓				—	↓		
					HNO_3			
					HCl			
	↓	↓	↓	↓	HCl	↓		

REMARKS:

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	ADI-MPS-DP21

DISCRETE GROUNDWATER SAMPLING RECORD	JOB NO. 383512.FI.DP	SITE	PREPARED BY Samantha Chan

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: upper 40s
SUBCONTRACTOR:

DATE OF SAMPLING: 4/5/2010
TIME OF SAMPLING: 1310
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP21-03566 ~~MS/MSD~~ S.C

PUMP VOLUME — SBG
TUBING INSIDE DIAMETER — V_p = ml.; D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) — SBG

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03566	SW8270Sim	N	2x1L Amber	—			
	↓	SW8015B-E	↓	↓	—			
		SW6010B/7470A		250mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
	↓	SW8260B/624	↓	3x40mL VOA	HCl			
	03566	SW8270Sim	MS/MSD	4x1L Amber	—			
	↓	SW8015B-E	↓	↓	—			
		SW6010B/7470A		2x250mL	HNO_3			
		SW8015B-P		4x40mL VOA	HCl			
	↓	SW8260B/624	↓	6x40mL VOA	HCl			S.C

REMARKS: Sample depth @ 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAAPS-DP21

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		Samantha Chen

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: Low 60s
SUBCONTRACTOR:

DATE OF SAMPLING: 4/3/2018
TIME OF SAMPLING: 1340
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP21-03567

PUMP VOLUME	V_p	=	ml.
TUBING INSIDE DIAMETER	D	= 0.17	in.
TUBING LENGTH	L	=	in.
CONVERSION FROM in^3 TO ml.	1 in^3	= 16.39	ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) SBC

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type N (S.C)	Volume	Preservative	COC#	Ship Date	Laboratory
	03567	SW8270 Sim	2x1L Amber	2x1L Amber	—			
		SW8015B-E		↓				
		SW6010B/7470A		250mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
	↓	SW8260B/624	↓	3x40mL VOA	HCl			
				S.C				

REMARKS: Sample depth @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIMAPS-DP28

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	SC
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny, upper 50s
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/6/2010
TIME OF SAMPLING: 1030
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03580 + 53550

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in. SBC
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) SBC

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type (S.C)	Volume	Preservative	COC#	Ship Date	Laboratory
	03580	SW6010B/7470A	N	1x250mL	HNO_3			
		SW8260B/624		3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
	↓	SW8270 Sim	↓	2x1L Amber	—			
	53550	↓	FD	↓	HNO_3			
	↓	↓	↓	↓	HCl			
					HCl			
					—			
					—			

REMARKS: Sample depth @ 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API AAPS-DP28

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: upper 50s
SUBCONTRACTOR:

DATE OF SAMPLING: 4/6/2010
TIME OF SAMPLING: 1115
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03581

PUMP VOLUME V_P = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA | **FIELD PARAMETERS (within range for 3 consecutive measurements)** | **COMMENTS**

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03581	SW8010B/7470A	N	250 mL	HNO_3			
		SW8015B-P		2x40mL VOA	HCl			
		SW8260B/624		3x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8270 Sim	↓	↓	—			
			SC					

REMARKS: Sample depth @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1AAPSDP31 DP30

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	SITE SAME AS FROM APSDP12 DP31 / DP30	S QUAYLE

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/30/10
TIME OF SAMPLING: 1330, 1400, 1500, 1520
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP31-03584/DP31-03585 DP30-03582/DP30-03583

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBG				SBG				SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
DP31-03584	03585	SW8015-P	N	2x40ml VOA	HCL			
		SW8015-E		2x1L AMBER	—			
		SW8260B/624		3x40ml VOA	HCL			
		SW8270SIM		2x1L AMBER	—			
DP30-03582/03583		SW8015-P	N	2x40ml VOA	HCL			
		SW8260/624		3x40ml VOA	HCL			
		SW8015-E		2x1L AMBER	—			
		SW8270SIM		2x1L AMBER	—			

REMARKS: DP31-03584 shallow well; DP31-03585 deep well
DP30-03582 shallow well; DP30-03583 deep well

shallow = 7 ft bgs
deep = 15 ft bgs

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1AAPS DP80 AP1AAPS DP81

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	AP1AAPS DP12 STEP OUTS	STEPHEN QUAYLE

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 05/04/10
TIME OF SAMPLING: 1630, 1654, 1900, 1930
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP80-03594, DP80-03595, DP81-03596, DP80-03597

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA / FIELD PARAMETERS (within range for 3 consecutive measurements) / COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
DP80-03594/03595		SW8260B/624	N	3x40 ml VOA	HCL			
		8015-P		2x40 ml VOA	HCL			
		8015-E		2x1 L AMBER	—			
		SW8270-SIM		2x1 L AMBER	—			
DP81-03596/03597		SW8260B/624	N	3x40ml VOA	HCL			
		8015-P		2x40 ml VOA	HCL			
		8015-E		2x1L AMBER	—			
		SW8270-SIM		2x1L AMBER	—			

REMARKS: DP80-03594 shallow well point, DP80-03595 deeper well point
DP81-03596 shallow well point, DP81-03597 deeper well point

shallow = 7 ft bgs
deep = 15 ft bgs

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1AAPSDP82 AP1AAPSDP83 AP1AAPSDP84

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	AP1AAPSDP12 STEPOUTS	STEPHEN QUAYLE

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 5/5/10
TIME OF SAMPLING: 1100, 1125, 1505, 1530, 1600, 1630
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP82-03598, DP82-03599, DP83-03600, DP83-03601, DP83-03602, DP83-03603

PUMP VOLUME V_P = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBA

PUMPING SYSTEM VOLUME CALCULATION
PUMPING SYSTEM VOLUME (V_S)
$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$
V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBA

PURGING DATA / FIELD PARAMETERS (within range for 3 consecutive measurements) / COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBA				SBA				SBA

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
DP82-03598 / 03599		SW 8260B/624	~~3x40ml VOA~~ SBA	3x40 ml VOA	HCL			
↓	↓	SW 8015-P	N ↓	2x40 ml VOA	HCL			
		SW 8015-E		2x1L AMBER	—			
↓	↓	SW 8270 SIM	↓	2x1L AMBER	—			
DP83-03600 / 03601		SW8260/624	N	3x40ml VOA	HCL			
↓	↓	SW 8015-P	↓	2x40ml VOA	HCL			
		SW 8015-E		2x1L AMBER	—			
↓	↓	SW 8270 SIM	↓	2x1L AMBER	—			
DP84-03602 / 03603		SW 8260/624	N	3x40 ml VOA	HCL			
↓	↓	SW 8015-P	↓	2x40 ml VOA	HCL			
		SW 8015-E		2x1 L AMBER	—			
↓	↓	SW 8270 SIM	↓	2x1 L AMBER	—			

REMARKS: DP82 03598 shallow / DP82 03599 deep
DP83 03600 shallow / DP83-03601 deep
DP84 03602 shallow / DP83 03603 deep

shallow 7 ft bgs
deep 15 ft bgs

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API AW467B

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	DP02	

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY: MSB

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/23/2010
TIME OF SAMPLING: 1420, 1440
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03508 & 03509

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBG				SBG				SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03508	SW8082	N	1L Amber x2	—			
	03509	↓	N	↓	—			
				S.C				

REMARKS: 03508 @ 7'
03509 @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAN-476B-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC | OC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER: Sunny, low 60s
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/8/2010
TIME OF SAMPLING: 1400 & 1550
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03508 & 03509

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03508	SW8260B/624	MS/MSD	9x40mL VOA				
	↓	SW8015B-E	↓	6x1L Amber				
		SW8270 Sim		↓				
		SW8082						
	↓	SW6010B/7470A		3x250mL				
	03509	↓	N	9x40mL VOA				
	↓		↓	6x1L Amber				
				↓				
	↓	↓	↓	3x250mL				

S.C

REMARKS: Sample depth for 03508 is 7' & 03509 is 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API AW 483A - DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

CHECKED BY:

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/30/2010
TIME OF SAMPLING: 1600
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03514

PUMP VOLUME — SBG
TUBING INSIDE DIAMETER — D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

V_p = ml.

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) — SBG

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBG				SBG				SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03514	SW8270Sim	N	2x1LAmber	—		3/30/2010	
		SW8015B-E		2x1LAmber	—			
		SW6010B/7470A		250mL	HNO_3			
		SW8260B/624		3x40mL VOA	~~Methanol~~	HCl(SC)		
		SW8082		2x1LAmber	—			
				S.C				

REMARKS: Shallow well sampling at 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAN483A-DP02

DISCRETE GROUNDWATER SAMPLING RECORD	JOB NO. 383512.FI.DP	SITE	PREPARED BY SC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	~~NA~~	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/30/2010
TIME OF SAMPLING: ~~1600~~ 1645 (S.C)
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03515

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03515	SW8270Sim	N	2x1LAmber	—		3/31/10	
	↓	SW8015B-E	↓	↓	—		↓	
		SW6010B/7470A		250mL	HNO_3			
		SW8260B/624		3x40mL VOA	~~Methanol~~	HCl (S.C)		
	↓	SW8082		2x1LAmber	—			

REMARKS: Deep well sampling at 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAW483B-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Point	RC/OC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: 60F.
SUBCONTRACTOR:

DATE OF SAMPLING: 03/31/10
TIME OF SAMPLING: 1040 / 1130
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03516, -03517

PUMP VOLUME — V_p = ml.
TUBING INSIDE DIAMETER — D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA / FIELD PARAMETERS (within range for 3 consecutive measurements) / COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
03/31	03516	6010B/7470A	N	250ml	HNO_3			
		8015B-E	N	2x1L Amber	—			
		SW8270Sim	N	2x1L Amber	—			
		8260B	N	3x40ml VOA	HCL			
	↓	PCBs	N	2x1L Amber	—			
	03517	6010B/7470A		250ml	HNO_3			
		8015B-E		2x1L Amber	—			
		SW8270SIM		↓	—			
		8260B		3x40ml VOA	HCL			
↓	↓	PCBs	↓	2x1L Amber	—			

REMARKS: 03516 @ 7'
03517 @ 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	HAPIAN 985B -DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Raining, windy
TEMPERATURE: 40s
SUBCONTRACTOR:

DATE OF SAMPLING: 4/12/2010
TIME OF SAMPLING: 1050 & 1135
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03500, 53500 & 03501

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA / **FIELD PARAMETERS (within range for 3 consecutive measurements)** / **COMMENTS**

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
53500,	03500	SW6010B/7470A	~~N~~ FD/N	250 mL	HNO_3			
	↓	SW8015B-E	FD/N	2x1L Amber	—			
		SW8270Sim	FD/N	↓	—			
		SW8082	FD/N		—			
	↓	SW8260B/624	FD/N	3x40mL VOA	HCl			
	03501	↓	N	250mL	HNO_3			
	↓		↓	2x1L Amber	—			
				↓	—			
				3x40mL VOA	HCl			
S.C								

REMARKS: Sample 03500 & 53500 depth is 7'
03501 depth is 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP/AW495A-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY	CHECKED BY
383512.FI.DP	Alameda Pt		MBC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: 70F.
SUBCONTRACTOR:

DATE OF SAMPLING: 3/26/2010
TIME OF SAMPLING: 1345
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03510 & 53510

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
03510	03510	SW8260B/624	N	3 x 40mL	methanol			
03510	03510	SW8270Sim	N	2 x 1L Amber				
	03510	SW8015B-E	N	↓				
	53510	SW8260B/624	DP	3 x 40mL	methanol			
	53510	SW8270Sim	DP	2 x 1L Amber				
	53510	SW8015B-E	DP	↓				
				0C				

REMARKS: Sample depth 7'. this is also a duplicate sample.

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP/AW495A DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Pt	OC/SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE: 70F.
SUBCONTRACTOR:

DATE OF SAMPLING: 3/26/2010
TIME OF SAMPLING: 1500
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03511

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03511	SW8260B 1624	N	3x4mL	methanol			
	03511	SW8270 SIM	N	2x1Lamber				
	03511	SW8015B-E	N	2x1Lamber				

S.C.

REMARKS: Sample depth at ~~@~~ 15' (S.C)

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1AW495B - DP02 AP1AW495A - DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Pt	OC/SC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER: Cloudy, misting, sprinkling
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/29/10
TIME OF SAMPLING:
SAMPLE MATRIX: Groundwater
SAMPLE ID: ↓ See below

(same wells/points for metals only)

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03512	Filter Metal	N	250 mL	HNO_3		3/29/10	7'
	03512	PCB	N	2x1L Amber	—		↓	7'
	03513	Filter Metal	N	250 mL	HNO_3			15'
	03513	PCB	N	2x1L Amber	—			15'
	03511	PCB	N	2x1L Amber	—		3/29/10	15'
	03511	Filter Metal	N	250 mL	HNO_3			15'
	03510	Filter Metal	(S.C) N	250 mL	HNO_3			7'
	03510	~~Filter Metal~~ PCB	N	2x1L Amber	—			7'
	53510	Filter Metal	DF	250 mL	HNO_3			7'
	53510	PCB	DF	2x1L Amber	—		↓	7'

S.C

REMARKS:

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP/AW495B - DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda PT	OC/SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny, Clear
TEMPERATURE: 70 F
SUBCONTRACTOR:

DATE OF SAMPLING: 3/26/2010
TIME OF SAMPLING: 1020
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02 - 03512

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03512	SW8260B/624	N	3x40mL	methanol			
SC	~~03513~~	"						
SC	~~03514~~							
	03512	SW8270Sim	N	2x1 Lamber				
	03512	SW8015B-E	N	2x1 Lamber				
	~~03512~~	~~SW~~						
					S.C.			

REMARKS: Sample depth 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1AMW495B-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP	Alameda Pt	OC/SC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny, Clear
TEMPERATURE: 40F.
SUBCONTRACTOR:

DATE OF SAMPLING: 3/26/2010
TIME OF SAMPLING: 1100
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03513

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBG				SBG			SBG	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03513	SW8260B/624	N	3x40ml Vial	methanol			
	03513	SW8270Sim	N	2x 1L Amber				
	03513	SW8015B-E	N	2x 1L Amber				

0°C

REMARKS: Sample depth 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	API AW 496 -DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
~~BLADDER PUMP~~	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/9/10
TIME OF SAMPLING: 1415 & 1500
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03518 & 03519

PUMP VOLUME — V_p = ml.
TUBING INSIDE DIAMETER — SBC — D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S) SBC

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03518	SW8260B/624	N	3x40mL VOA	HCl			
		SW6010B/7470A		1x 250mL	HNO_3			
		SW8015B - E		3x1L Amber	—			
		SW8270 sim		2x1L Amber	—			
	03519				HCl			
					HNO_3			
					—			
				S.C				

REMARKS: 03518 at depth of 7'
03519 at depth of 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAN4968-DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/12/2010
TIME OF SAMPLING: 0915
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03519

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

SBC

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

PURGING DATA			FIELD PARAMETERS (within range for 3 consecutive measurements)							COMMENTS
Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03519	SW8270SIM	N	1L Amber x1	—			
	03519	SW6010B/7470A	N	250mL poly x1	HNO_3			

S.C

REMARKS: Resampling of 03519 @ 15'. well ran ~~dry~~ dry last friday.

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP1AW499-DP02

DISCRETE GROUNDWATER SAMPLING RECORD	JOB NO. 383512.FI.DP	SITE	PREPARED BY SC/OC

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
~~PER. PUMP~~	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

CHECKED BY

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 1400
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03522

PUMP VOLUME — V_p = ml.
TUBING INSIDE DIAMETER — D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC				SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
		D3522 N	SW8270Sim	2x1L Amber	—			
		03522	SW8260B/624	40 mL VOA	HCl			
		03522	SW8015B-E	2x1L Amber	—			
		03522	SW6010B/7470A	250mL	HNO_3			

S. C

REMARKS: Sample depth for DP02-03522 is 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAW499-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/AC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/1/2010
TIME OF SAMPLING: 1435
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03523

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
		03523 N	SW8260B/624	3x40mL VOA	HCl			
			SW8270SIM/625	2x1L Amber	—			
			SW8015B-E	2x1L Amber	—			
			SW6010B/7470A	1x250mL	HNO_3			

S.C

REMARKS: Sample depth for DP02-03523 is 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAW599A - DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC / RC

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/30/2010
TIME OF SAMPLING: 1305
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03504

PUMP VOLUME — V_p = ml.
TUBING INSIDE DIAMETER — D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBC

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBC			

COMMENTS

SBC

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03504	SW8270SIM	N	2x1L Amber	—		3/30/10	
	03504	SW8015B-E	N	2x1L Amber	—			
	03504	SW6010B/7470A	N	~~2x1L Amber~~ S.C	250mL HNO_3			
	03504	SW8260B/624	N	3x40mL VOA	~~Methanol~~ HCl (S.C)			
				S.C				

REMARKS: Shallow well sampling at 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAN5991A -DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC/RC

PURGING CRITERIA: None

CHECKED BY: NM

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/30/2010
TIME OF SAMPLING: 1430
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03505

PUMP VOLUME — V_p = ml.
TUBING INSIDE DIAMETER — D = 0.17 in.
TUBING LENGTH — L = in.
CONVERSION FROM in^3 TO ml. — 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03505	SW8270Sim	N	2x1L Amber	—		3/30/10	
		SW8015B-E		2x1L Amber	—			
		SW6010B/7470A		250mL	HNO3			
		SW8260B/1624		3x40mL VOA	+Methanol	HCl (5C)		

S.C

REMARKS: Deep well sampling at 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIMW5998-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/30/2010
TIME OF SAMPLING: 0915
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03506

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03506	SW8270Sim	~~2x1L Amber~~ (S.C) N	2x1L Amber	—		3/30/2010	7'
	03506	SW8015B-E	N	2x1L Amber	—		3/30/2010	7'
	03506	SW6010B-7470A	N	250mL	HNO_3		3/30/2010	7'
	03506	SW8260B 1624	N	3x40mL VOA	~~methanol~~	HCl (S.C)	3/30/2010	7'
				S.C				

REMARKS: shallow well sampling at 7'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	APIAN599B-DP02

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		SC

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING CRITERIA: None

PURGING DATE: NA
WEATHER:
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 3/30/2010
TIME OF SAMPLING: 1035
SAMPLE MATRIX: Groundwater
SAMPLE ID: DP02-03507

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBG

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

V_S = ( ) + 3.1415 * 0.17^2 / 4 * ( ) * 16.39 ml/in^3 = ( ) ml

SBG

PURGING DATA

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)
		SBG

FIELD PARAMETERS (within range for 3 consecutive measurements)

Temp (°C)	pH [± 0.1]	Conductivity (µ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)
			SBG			

COMMENTS

SBG

LABORATORY ANALYSIS

Sampled	Container #	Analysis	~~Type~~ Volume (S.C)	~~Volume~~ Type (S.C)	Preservative	COC#	Ship Date	Laboratory
	03507	SW8270Sim	2x1L Amber	N	—		3/30/10	
	03507	SW8015B-E	2x1L Amber	N	—		↓	
	03507	SW6010B/7470A	250mL	N	HNO_3			
	03507	SW8260B/624	3x40mL VOA	N	~~Methanol~~	HCl (S.C)		
				S.C				

REMARKS: deep well sampling at 15'

CH2MHILL

PROJECT	LOCATION ID.
CLEAN 1000; CTO-FZN0	AP2CARS-DP01

DISCRETE GROUNDWATER SAMPLING RECORD

JOB NO.	SITE	PREPARED BY
383512.FI.DP		

PURGING CRITERIA: None

CHECKED BY

	PURGE METHOD	SAMPLING METHOD
BLADDER PUMP	NA	G
PER. PUMP	NA	
BAILER	NA	
OTHER:	NA	

PURGING DATE: NA
WEATHER: Sunny
TEMPERATURE:
SUBCONTRACTOR:

DATE OF SAMPLING: 4/13/2010
TIME OF SAMPLING: 1100 & 1150
SAMPLE MATRIX: Groundwater
SAMPLE ID: 03904 & 03905

PUMP VOLUME V_p = ml.
TUBING INSIDE DIAMETER D = 0.17 in.
TUBING LENGTH L = in.
CONVERSION FROM in^3 TO ml. 1 in^3 = 16.39 ml.

SBC

PUMPING SYSTEM VOLUME CALCULATION

PUMPING SYSTEM VOLUME (V_S)

$V_S = V_P + \pi * D^2 / 4 * L * 16.39\ ml/in^3$

$V_S = (\quad) + 3.1415 * 0.17^2 / 4 * (\quad) * 16.39\ ml/in^3 = (\quad)$ ml

SBC

PURGING DATA

FIELD PARAMETERS (within range for 3 consecutive measurements)

COMMENTS

Time Begin (hrs)	Time Finish (hrs)	Water Removed (ml)	Temp (°C)	pH [± 0.1]	Conductivity (μ mhos) [± 3%]	ORP (mV) [± 10 mV]	DO (mg/L) [± 10%]	Turbidity (NTU) [± 10%]	Water Level (ft)	COMMENTS
		SBC				SBC			SBC	

LABORATORY ANALYSIS

Sampled	Container #	Analysis	Type	Volume	Preservative	COC#	Ship Date	Laboratory
	03904	SW8260B/624	N	3x40mL VOA	HCl			
		SW8015B-P		2x40mL VOA	HCl			
		SW8015B-E		2x1L Amber	—			
		SW8270Sim		2x1L Amber	—			
	↓	SW6010B/7470A		1x250mL	HNO_3			
	03905	↓	↓	↓	HCl	↓	↓	↓
	↓				HCl			
					—			
					—			
					HNO_3			

REMARKS: 03904 is at sample depth of 7'
03905 is at sample depth of 15'

Chains of Custody

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1003199

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/21/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 03/24/2010 08:30

Logged In By: William Schwab
Date Logged In: 03/24/2010 13:14

Samples Received at: **4.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1003199-01 DP09-07044 [Solid] Sampled 03/22/2010 14:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:30	QSM4.1
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:30	QSM4.1
1003199-02 DP09-07045 [Solid] Sampled 03/22/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:40	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:40	QSM4.1
1003199-03 DP09-07046 [Solid] Sampled 03/22/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:45	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:45	QSM4.1
1003199-04 DP09-07047 [Solid] Sampled 03/22/2010 14:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:55	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:55	QSM4.1
1003199-05 DP10-07048 [Solid] Sampled 03/22/2010 15:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:35	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:35	QSM4.1
1003199-06 DP10-07049 [Solid] Sampled 03/22/2010 15:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:45	QSM4.1
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:45	QSM4.1

1003199

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1003199-07 DP10-07050 [Solid] Sampled 03/22/2010 15:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:50	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:50	QSM4.1
1003199-08 DP10-07051 [Solid] Sampled 03/22/2010 15:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:55	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:55	QSM4.1
1003199-09 DP10-57050 [Solid] Sampled 03/22/2010 15:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:50	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:50	QSM4.1
1003199-10 DP11-07052 [Solid] Sampled 03/22/2010 14:31 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:31	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:31	QSM4.1
1003199-11 DP11-07053 [Solid] Sampled 03/22/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:45	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:45	QSM4.1
1003199-12 DP11-07054 [Solid] Sampled 03/22/2010 14:56 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:56	QSM4.1
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:56	QSM4.1
1003199-13 DP11-07055 [Solid] Sampled 03/22/2010 15:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:00	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:00	QSM4.1
1003199-14 DP12-07056 [Solid] Sampled 03/22/2010 13:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 15:50	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 15:50	QSM4.1
1003199-15 DP12-07057 [Solid] Sampled 03/22/2010 14:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:00	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:00	QSM4.1
1003199-16 DP12-07058 [Solid] Sampled 03/22/2010 13:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 15:45	QSM4.1
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 15:45	QSM4.1

1003199

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003199-17 DP12-07059 [Solid] Sampled 03/22/2010 14:09 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 16:09	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 16:09	QSM4.1
1003199-18 DP13-07060 [Solid] Sampled 03/22/2010 15:58 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 17:58	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 17:58	QSM4.1
1003199-19 DP13-07061 [Solid] Sampled 03/22/2010 16:02 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 18:02	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 18:02	QSM4.1
1003199-20 DP13-07062 [Solid] Sampled 03/22/2010 16:12 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 18:12	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 18:12	QSM4.1
1003199-21 DP13-07063 [Solid] Sampled 03/22/2010 16:22 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 18:22	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 18:22	QSM4.1
1003199-22 DP13-57060 [Solid] Sampled 03/22/2010 16:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	20	03/29/2010 18:00	QSM4.1
SMS_PAH_8270C_3546_LOW	04/14/2010 14:00	20	04/05/2010 18:00	QSM4.1
1003199-23 EB-201 [Water] Sampled 03/22/2010 13:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	20	03/29/2010 15:05	QSM4.1
1003199-24 EB-202 [Water] Sampled 03/23/2010 07:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	20	03/30/2010 09:45	QSM4.1
1003199-25 EB-100 [Water] Sampled 03/23/2010 07:54 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	20	03/30/2010 09:54	QSM4.1
1003199-26 EB-101 [Water] Sampled 03/22/2010 12:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	20	03/29/2010 14:50	QSM4.1
1003199-27 EB-102 [Water] Sampled 03/23/2010 08:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	20	03/30/2010 10:45	QSM4.1

Reviewed By

Date

Chain of Custody Record

COC Number: **32310**

CH2MHILL *3/22/2010 5:53:21 PM* Page 1 of 6

Project Name Location
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003199

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim	
DP09-07044	22-Mar-10 14:30	N	Soil				
			Field Filtered: ☐	1	4°C	☑	-01
			Total Containers:	1			
DP09-07045	22-Mar-10 14:40	N	Soil				
			Field Filtered: ☐	1	4°C	☑	-02
			Total Containers:	1			
DP09-07046	22-Mar-10 14:45	N	Soil				
			Field Filtered: ☐	1	4°C	☑	-03
			Total Containers:	1			
DP09-07047	22-Mar-10 14:55	N	Soil				
			Field Filtered: ☐	1	4°C	☑	-04
			Total Containers:	1			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	Tamara Grant	3/23/10 0850
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	3/24/10 08:30	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254698895980215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.4°C

Chain of Custody Record

COC Number: **32310**

CH2MHILL *3/22/2010 5:53:21 PM* Page 2 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP10-07048	22-Mar-10 15:35	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP10-07049	22-Mar-10 15:45	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP10-07050	22-Mar-10 15:50	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP10-07051	22-Mar-10 15:55	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

1003199
-05
-06
-07
-08

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamala Frank	3/23/10 0850
Received by		
Relinquished by		
Received by	[signature]	3/24/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698895980215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.4°C

Chain of Custody Record

COC Number: **32310**

CH2MHILL *3/22/2010 5:53:21 PM* Page 3 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003199

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP10-57050	22-Mar-10 15:50	N	Soil			
		Field Filtered: ☐	1	4°C		☑ -09
		Total Containers:		1		
DP11-07052	22-Mar-10 14:31	N	Soil			
		Field Filtered: ☐	1	4°C		☑ -10
		Total Containers:		1		
DP11-07053	22-Mar-10 14:45	N	Soil			
		Field Filtered: ☐	1	4°C		☑ -11
		Total Containers:		1		
DP11-07054	22-Mar-10 14:56	N	Soil			
		Field Filtered: ☐	1	4°C		☑ -12
		Total Containers:		1		

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	Jamie Jaeni	3/23/10 0850
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		3/24/10 08:30

2.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698895980215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32310**

CH2MHILL *3/22/2010 5:53:21 PM* Page 4 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP11-07055	22-Mar-10 15:00	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP12-07056	22-Mar-10 13:50	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP12-07057	22-Mar-10 14:00	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP12-07058	22-Mar-10 13:45	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

100399
-13
-14
-15
-16

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	Jamie Frank	3/24/10 850
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		3/24/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698895980215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.4°C

Chain of Custody Record

COC Number: 32310

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv
DP12-07059	22-Mar-10 14:09	N	Soil		
			Field Filtered: ☐	1	4°C
			Total Containers:		1
DP13-07060	22-Mar-10 15:58	N	Soil		
			Field Filtered: ☐	1	4°C
			Total Containers:		1
DP13-07061	22-Mar-10 16:02	N	Soil		
			Field Filtered: ☐	1	4°C
			Total Containers:		1
DP13-07062	22-Mar-10 16:12	N	Soil		
			Field Filtered: ☐	1	4°C
			Total Containers:		1

SM8270Sim

1003199

-17 -18 -19 -20

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	Jamie Eby	3/23/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		3/24/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254698895980215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.4°C

Chain of Custody Record

COC Number: **32310**

CH2MHILL *3/22/2010 5:53:21 PM* Page 6 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP13-07063	22-Mar-10 16:22	N	Soil			
		Field Filtered: ☐		1	4°C	☑
		Total Containers:		1		
DP13-57060	22-Mar-10 16:00	N	Soil			
		Field Filtered: ☐		1	4°C	☑
		Total Containers:		1		

1003199

-21

-22

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	Janice Jarvis	3/23/10 0852
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	3/24/10 0830	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254698895980215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.4°C

Chain of Custody Record

COC Number: **32310W**

CH2MHILL *3/23/2010 9:18:05 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
EB-201	22-Mar-10 13:05	N	Water			
			Field Filtered: ☐	2	4°C	☑
			Total Containers:	2		
EB-202	23-Mar-10 7:45	N	Water			
			Field Filtered: ☐	2	4°C	☑
			Total Containers:	2		

1003199

-23

-24

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	3/23/10 920
Received by		
Relinquished by		
Received by		3/24/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254698896020215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
~~Janice Shilling~~
Sonya Gordon

Special Instructions:

Report Copy to

2.4°C

Chain of Custody Record

COC Number: **32310W**

CH2MHILL *3/23/2010 9:10:39 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
EB-100	23-Mar-10 7:54	N	Water			
			Field Filtered: ☐	2	4°C	☑
			Total Containers:	2		
EB-101	22-Mar-10 12:50	N	Water			
			Field Filtered: ☐	2	4°C	☑
			Total Containers:	2		
EB-102	23-Mar-10 8:45	N	Water			
			Field Filtered: ☐	2	4°C	☑
			Total Containers:	2		

1003199

-25

-26

-27

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	3/23/10 0920
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	3/24/10 08:30

Shipping Details

Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896020215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody and ~~Janice Shilling~~ Sonja Gordon

Special Instructions:

Report Copy to

2.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003199 Number of Coolers: 1 of 3

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/24/10 08:30 Date cooler(s) opened: 3/24/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4602

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/23/10 Seal Initials: -

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

Dates samples were logged-in: 3/24/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	(N/A)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003199 Number of Coolers: 2 of 3

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/24/10 08:30 Date cooler(s) opened: 3/24/10

Opened By (print): Will Schrad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9820

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/23/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.0°C

~~Dates samples~~ were logged-in: ~~3/24/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 3

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003499 Number of Coolers: 3 of 3

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/24/10 08:30 Date cooler(s) opened: 3/24/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9598

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/23/10 Seal Initials: -

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.6c

~~Dates samples were logged-in:~~ 3/24/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 3

Sample Delivery Group Assignment Form

CLIENT: CH2M Hill, Inc.
PROJECT NAME: Alameda Point CTO-FZN0
SDG #: Alameda001
MATRIX: Soil/Water

QC LEVEL: EDD/IVQSM
Report Due: 4/21/2010 - 4/21/2010
Client Sample Count: 22

Sample Type	Sampled	Received	Lab ID	Client ID	SW8270C
Client Sample	3/22/2010	3/24/2010	1003199-01	DP09-07044	X
Client Sample	3/22/2010	3/24/2010	1003199-02	DP09-07045	X
Client Sample	3/22/2010	3/24/2010	1003199-03	DP09-07046	X
Client Sample	3/22/2010	3/24/2010	1003199-04	DP09-07047	X
Client Sample	3/22/2010	3/24/2010	1003199-05	DP10-07048	X
Client Sample	3/22/2010	3/24/2010	1003199-06	DP10-07049	X
Client Sample	3/22/2010	3/24/2010	1003199-07	DP10-07050	X
Client Sample	3/22/2010	3/24/2010	1003199-08	DP10-07051	X
Client Sample	3/22/2010	3/24/2010	1003199-09	DP10-57050	X
Client Sample	3/22/2010	3/24/2010	1003199-10	DP11-07052	X
Client Sample	3/22/2010	3/24/2010	1003199-11	DP11-07053	X
Client Sample	3/22/2010	3/24/2010	1003199-12	DP11-07054	X
Client Sample	3/22/2010	3/24/2010	1003199-13	DP11-07055	X
Client Sample	3/22/2010	3/24/2010	1003199-14	DP12-07056	X
Client Sample	3/22/2010	3/24/2010	1003199-15	DP12-07057	X
Client Sample	3/22/2010	3/24/2010	1003199-16	DP12-07058	X
Client Sample	3/22/2010	3/24/2010	1003199-17	DP12-07059	X
Client Sample	3/22/2010	3/24/2010	1003199-18	DP13-07060	X
Client Sample	3/22/2010	3/24/2010	1003199-19	DP13-07061	X
Client Sample	3/22/2010	3/24/2010	1003199-20	DP13-07062	X
Client Sample	3/22/2010	3/24/2010	1003199-21	DP13-07063	X
Client Sample	3/22/2010	3/24/2010	1003199-22	DP13-57060	X
Equipment Blank	3/22/2010	3/24/2010	1003199-23	EB-201	X
Equipment Blank	3/23/2010	3/24/2010	1003199-24	EB-202	X
Equipment Blank	3/23/2010	3/24/2010	1003199-25	EB-100	X
Equipment Blank	3/22/2010	3/24/2010	1003199-26	EB-101	X
Equipment Blank	3/23/2010	3/24/2010	1003199-27	EB-102	X

1003202

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/22/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 03/25/2010 08:30 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 03/25/2010 10:35

Samples Received at: **2.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1003202-21 EB-100 [Water] Sampled 03/23/2010 00:00 Pacific				
[NO ANALYSES]				
1003202-24 TB-101 [Water] Sampled 03/24/2010 07:55 Pacific				
[NO ANALYSES]				
1003202-01 DP22-03207 [Solid] Sampled 03/24/2010 15:25 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 17:25	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 17:25	+MO
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 17:25	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 17:25	
1003202-02 DP22-03208 [Solid] Sampled 03/24/2010 15:30 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 17:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 17:30	+MO
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 17:30	
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 17:30	
1003202-03 DP22-03209 [Solid] Sampled 03/24/2010 15:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 17:45	
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 17:45	soil TAL + Mo
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 17:45	
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 17:45	+MO

1003202

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003202-04 DP23-03210 [Solid] Sampled 03/24/2010 09:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 11:25	QSM4.1
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 11:25	soil TAL + Mo
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 11:25	
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 11:25	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 11:25	AP VIALS. QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 11:25	+MO
1003202-05 DP23-03211 [Solid] Sampled 03/24/2010 09:50 Pacific				**QSM4.1**
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 11:50	AP VIALS. QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 11:50	QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 11:50	+MO
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 11:50	
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 11:50	LOW VOLUME!! Wait until VOC analysis complete
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 11:50	soil TAL + Mo
1003202-06 DP23-03212 [Solid] Sampled 03/24/2010 10:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 12:00	QSM4.1
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 12:00	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 12:00	+MO
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 12:00	
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 12:00	AP VIALS. QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 12:00	LOW VOLUME!! Wait until VOC analysis complete
1003202-07 DP23-53210 [Solid] Sampled 03/24/2010 09:25 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 11:25	+MO
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 11:25	QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 11:25	LOW VOLUME!! Wait until VOC analysis complete
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 11:25	
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 11:25	soil TAL + Mo
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 11:25	AP VIALS. QSM4.1
1003202-08 DP24-03213 [Solid] Sampled 03/24/2010 15:15 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 17:15	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 17:15	+MO
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 17:15	QSM4.1
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 17:15	AP VIALS. QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 17:15	LOW VOLUME!! Wait until VOC analysis complete
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 17:15	

1003202

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003202-09 DP24-03214 [Solid] Sampled 03/24/2010 15:20 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 17:20	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 17:20	+MO
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 17:20	LOW VOLUME!! Wait until VOC analysis complete
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 17:20	
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 17:20	AP VIALS. QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 17:20	QSM4.1
1003202-10 DP24-03215 [Solid] Sampled 03/24/2010 15:25 Pacific				**QSM4.1**
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 17:25	AP VIALS. QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 17:25	LOW VOLUME!! Wait until VOC analysis complete
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 17:25	+MO
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 17:25	
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 17:25	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 17:25	QSM4.1
1003202-11 DP25-03216 [Solid] Sampled 03/24/2010 10:35 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 12:35	
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 12:35	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 12:35	+MO
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 12:35	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 12:35	AP VIALS. QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 12:35	QSM4.1
1003202-12 DP25-03217 [Solid] Sampled 03/24/2010 10:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 12:40	QSM4.1
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 12:40	soil TAL + Mo
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 12:40	
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 12:40	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 12:40	AP VIALS. QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 12:40	+MO
1003202-13 DP25-03218 [Solid] Sampled 03/24/2010 10:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 12:45	QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 12:45	+MO
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 12:45	soil TAL + Mo
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 12:45	LOW VOLUME!! Wait until VOC analysis complete
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 12:45	
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 12:45	AP VIALS. QSM4.1

1003202

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003202-14 DP26-03219 [Solid] Sampled 03/24/2010 11:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 13:50	QSM4.1
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 13:50	AP VIALS. QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 13:50	LOW VOLUME!! Wait until VOC analysis complete
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 13:50	+MO
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 13:50	soil TAL + Mo
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 13:50	
1003202-15 DP26-03220 [Solid] Sampled 03/24/2010 11:55 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 13:55	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 13:55	QSM4.1
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 13:55	AP VIALS. QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 13:55	LOW VOLUME!! Wait until VOC analysis complete
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 13:55	soil TAL + Mo
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 13:55	+MO
1003202-16 DP26-03221 [Solid] Sampled 03/24/2010 12:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 14:00	+MO
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 14:00	
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 14:00	soil TAL + Mo
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 14:00	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 14:00	AP VIALS. QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 14:00	QSM4.1
1003202-17 DP26-53220 [Solid] Sampled 03/24/2010 11:55 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 13:55	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 13:55	QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 13:55	+MO
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 13:55	LOW VOLUME!! Wait until VOC analysis complete
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 13:55	soil TAL + Mo
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 13:55	AP VIALS. QSM4.1
1003202-18 DP27-03222 [Solid] Sampled 03/24/2010 14:10 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 16:10	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 16:10	QSM4.1
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 16:10	
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 16:10	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 16:10	AP VIALS. QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 16:10	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003202-19 DP27-03223 [Solid] Sampled 03/24/2010 14:15 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 16:15	soil TAL + Mo
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 16:15	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 16:15	AP VIALS. QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 16:15	QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 16:15	+MO
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 16:15	
1003202-20 DP27-03224 [Solid] Sampled 03/24/2010 14:20 Pacific				**QSM4.1**
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 16:20	LOW VOLUME!! Wait until VOC analysis complete
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 16:20	AP VIALS. QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/31/2010 16:20	QSM4.1
SGC_DRO_8015B_3546	04/15/2010 14:00	20	04/07/2010 16:20	+MO
MET_ICP_LOW6010B_FULL	04/15/2010 14:00	20	09/20/2010 16:20	soil TAL + Mo
MET_7471A_MERCURY	04/15/2010 14:00	20	04/21/2010 16:20	
1003202-22 EB-103 [Water] Sampled 03/24/2010 07:55 Pacific				**QSM4.1**
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 09:55	QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 09:55	QSM4.1
SGC_DRO_8015B_3510	04/15/2010 14:00	20	03/31/2010 09:55	+MO. LOW VOLUME!!
MET_7470_MERCURY	04/15/2010 14:00	20	04/21/2010 09:55	
MET_ICP_6010B_FULL	04/15/2010 14:00	20	09/20/2010 09:55	water TAL + Mo
1003202-23 TB-100 [Water] Sampled 03/24/2010 07:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 09:45	QSM4.1
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 09:45	QSM4.1
1003202-25 EB-203 [Water] Sampled 03/24/2010 14:35 Pacific				**QSM4.1.**
VGC_GRO_8015B	04/15/2010 14:00	20	04/07/2010 16:35	
MET_ICP_6010B_FULL	04/15/2010 14:00	20	09/20/2010 16:35	water TAL + Mo
VOC_8260B_AP9	04/15/2010 14:00	20	04/07/2010 16:35	
MET_7470_MERCURY	04/15/2010 14:00	20	04/21/2010 16:35	
SMS_PAH_8270C_3510_LOW	04/15/2010 14:00	20	03/31/2010 16:35	LOW VOLUME!!
SGC_DRO_8015B_3510	04/15/2010 14:00	20	03/31/2010 16:35	+MO. LOW VOLUME!!
1003202-26 DP01-07012 [Solid] Sampled 03/23/2010 16:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:10	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:10	QSM4.1

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Analysis	Due	TAT	Expires	Comments
1003202-27 DP01-07013 [Solid] Sampled 03/23/2010 16:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:15	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:15	QSM4.1
1003202-28 DP01-07014 [Solid] Sampled 03/23/2010 16:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:20	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:20	QSM4.1
1003202-29 DP01-07015 [Solid] Sampled 03/23/2010 16:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:25	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:25	QSM4.1
1003202-30 DP05-07028 [Solid] Sampled 03/23/2010 14:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:00	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:00	QSM4.1
1003202-31 DP05-07029 [Solid] Sampled 03/23/2010 14:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:05	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:05	QSM4.1
1003202-32 DP05-07030 [Solid] Sampled 03/23/2010 14:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:10	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:10	QSM4.1
1003202-33 DP05-07031 [Solid] Sampled 03/23/2010 14:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:15	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:15	QSM4.1
1003202-34 DP05-57030 [Solid] Sampled 03/23/2010 14:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:10	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:10	QSM4.1
1003202-35 DP06-07032 [Solid] Sampled 03/23/2010 15:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 17:00	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 17:00	QSM4.1
1003202-36 DP06-07033 [Solid] Sampled 03/23/2010 15:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 17:05	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 17:05	QSM4.1

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Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003202-37 DP06-07034 [Solid] Sampled 03/23/2010 15:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 17:10	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 17:10	QSM4.1
1003202-38 DP06-07035 [Solid] Sampled 03/23/2010 15:20 Pacific				**QSM4.1. MS/MSD**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 17:20	QSM4.1. MS/MSD
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 17:20	QSM4.1. MS/MSD
1003202-39 DP07-07036 [Solid] Sampled 03/23/2010 11:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:20	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:20	QSM4.1
1003202-40 DP07-07037 [Solid] Sampled 03/23/2010 11:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:25	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:25	QSM4.1
1003202-41 DP07-07038 [Solid] Sampled 03/23/2010 11:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:30	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:30	QSM4.1
1003202-42 DP07-07039 [Solid] Sampled 03/23/2010 11:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:35	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:35	QSM4.1
1003202-43 DP08-07040 [Solid] Sampled 03/23/2010 09:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:45	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:45	QSM4.1
1003202-44 DP08-07041 [Solid] Sampled 03/23/2010 09:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:50	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:50	QSM4.1
1003202-45 DP08-07042 [Solid] Sampled 03/23/2010 09:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:55	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:55	QSM4.1
1003202-46 DP08-07043 [Solid] Sampled 03/23/2010 10:05 Pacific				**QSM4.1. MS/MSD**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:05	QSM4.1. MS/MSD
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:05	QSM4.1. MS/MSD

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Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003202-47 DP08-57040 [Solid] Sampled 03/23/2010 09:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:50	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:50	QSM4.1
1003202-48 DP14-07064 [Solid] Sampled 03/23/2010 09:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:40	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:40	QSM4.1
1003202-49 DP14-07065 [Solid] Sampled 03/23/2010 09:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:45	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:45	QSM4.1
1003202-50 DP14-07066 [Solid] Sampled 03/23/2010 09:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 11:55	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 11:55	QSM4.1
1003202-51 DP14-07067 [Solid] Sampled 03/23/2010 10:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:00	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:00	QSM4.1
1003202-52 DP15-07068 [Solid] Sampled 03/23/2010 10:18 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:18	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:18	QSM4.1
1003202-53 DP15-07069 [Solid] Sampled 03/23/2010 10:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:25	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:25	QSM4.1
1003202-54 DP15-07070 [Solid] Sampled 03/23/2010 10:33 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:33	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:33	QSM4.1
1003202-55 DP15-07071 [Solid] Sampled 03/23/2010 10:42 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:42	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:42	QSM4.1
1003202-56 DP15-57070 [Solid] Sampled 03/23/2010 10:33 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 12:33	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 12:33	QSM4.1

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Analysis	Due	TAT	Expires	Comments
1003202-57 DP16-07072 [Solid] Sampled 03/23/2010 11:04 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:04	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:04	QSM4.1
1003202-58 DP16-07073 [Solid] Sampled 03/23/2010 11:06 Pacific				**QSM4.1. MS/MSD**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:06	QSM4.1. MS/MSD
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:06	QSM4.1. MS/MSD
1003202-59 DP16-07074 [Solid] Sampled 03/23/2010 11:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:20	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:20	QSM4.1
1003202-60 DP16-07075 [Solid] Sampled 03/23/2010 11:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 13:25	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 13:25	QSM4.1
1003202-61 DP17-07076 [Solid] Sampled 03/23/2010 14:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:10	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:10	QSM4.1
1003202-62 DP17-07077 [Solid] Sampled 03/23/2010 14:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:15	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:15	QSM4.1
1003202-63 DP17-07078 [Solid] Sampled 03/23/2010 14:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:25	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:25	QSM4.1
1003202-64 DP17-07079 [Solid] Sampled 03/23/2010 14:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:30	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:30	QSM4.1
1003202-65 DP17-07080 [Solid] Sampled 03/23/2010 14:37 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:37	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:37	QSM4.1
1003202-66 DP18-07081 [Solid] Sampled 03/23/2010 14:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:50	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:50	QSM4.1

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
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Analysis	Due	TAT	Expires	Comments
1003202-67 DP18-07082 [Solid] Sampled 03/23/2010 14:52 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:52	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:52	QSM4.1
1003202-68 DP18-07083 [Solid] Sampled 03/23/2010 15:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 17:00	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 17:00	QSM4.1
1003202-69 DP18-57080 [Solid] Sampled 03/23/2010 14:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 16:35	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 16:35	QSM4.1
1003202-70 DP19-07084 [Solid] Sampled 03/23/2010 16:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:30	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:30	QSM4.1
1003202-71 DP19-07085 [Solid] Sampled 03/23/2010 16:33 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:33	QSM4.1
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:33	QSM4.1
1003202-72 DP19-07086 [Solid] Sampled 03/23/2010 16:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	20	04/06/2010 18:40	QSM4.1
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	20	03/30/2010 18:40	QSM4.1
SGS/Paradigm (SUB028)				
1003202-01 DP22-03207 [Solid] Sampled 03/24/2010 15:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 17:25	sub to SGS - Wilmington
1003202-02 DP22-03208 [Solid] Sampled 03/24/2010 15:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 17:30	sub to SGS - Wilmington
1003202-03 DP22-03209 [Solid] Sampled 03/24/2010 15:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 17:45	sub to SGS - Wilmington
1003202-04 DP23-03210 [Solid] Sampled 03/24/2010 09:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 11:25	sub to SGS - Wilmington
1003202-05 DP23-03211 [Solid] Sampled 03/24/2010 09:50 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 11:50	sub to SGS - Wilmington
1003202-06 DP23-03212 [Solid] Sampled 03/24/2010 10:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 12:00	sub to SGS - Wilmington

1003202

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1003202-07 DP23-53210 [Solid] Sampled 03/24/2010 09:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 11:25	sub to SGS - Wilmington
1003202-08 DP24-03213 [Solid] Sampled 03/24/2010 15:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 17:15	sub to SGS - Wilmington
1003202-09 DP24-03214 [Solid] Sampled 03/24/2010 15:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 17:20	sub to SGS - Wilmington
1003202-10 DP24-03215 [Solid] Sampled 03/24/2010 15:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 17:25	sub to SGS - Wilmington
1003202-11 DP25-03216 [Solid] Sampled 03/24/2010 10:35 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 12:35	sub to SGS - Wilmington
1003202-12 DP25-03217 [Solid] Sampled 03/24/2010 10:40 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 12:40	sub to SGS - Wilmington
1003202-13 DP25-03218 [Solid] Sampled 03/24/2010 10:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 12:45	sub to SGS - Wilmington
1003202-14 DP26-03219 [Solid] Sampled 03/24/2010 11:50 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 13:50	sub to SGS - Wilmington
1003202-15 DP26-03220 [Solid] Sampled 03/24/2010 11:55 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 13:55	sub to SGS - Wilmington
1003202-16 DP26-03221 [Solid] Sampled 03/24/2010 12:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 14:00	sub to SGS - Wilmington
1003202-17 DP26-53220 [Solid] Sampled 03/24/2010 11:55 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 13:55	sub to SGS - Wilmington
1003202-18 DP27-03222 [Solid] Sampled 03/24/2010 14:10 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 16:10	sub to SGS - Wilmington
1003202-19 DP27-03223 [Solid] Sampled 03/24/2010 14:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 16:15	sub to SGS - Wilmington
1003202-20 DP27-03224 [Solid] Sampled 03/24/2010 14:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 16:20	sub to SGS - Wilmington

1003202

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1003202-22 EB-103 [Water] Sampled 03/24/2010 07:55 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 09:55	sub to SGS - Wilmington. LOW VOLUME!!
1003202-25 EB-203 [Water] Sampled 03/24/2010 14:35 Pacific				**QSM4.1.**
SUB_DIOXINS_8290	04/15/2010 14:00	20	04/23/2010 16:35	sub to SGS - Wilmington. LOW VOLUME!!

Reviewed By

Date

Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:21:55 PM Page 1 of 7

Project Name
Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP22-03207	24-Mar-10 15:25	N	Soil				
	Field Filtered: ☐	1			MeOH	☑	☐
	Field Filtered: ☐	1			XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:	2					
DP22-03208	24-Mar-10 15:30	N	Soil				
	Field Filtered: ☐	1			MeOH	☑	☐
	Field Filtered: ☐	1			XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:	2					
DP22-03209	24-Mar-10 15:45	N	Soil				
	Field Filtered: ☐	1			MeOH	☑	☐
	Field Filtered: ☐	1			XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:	2					

1003202

-01

-02

-03

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Franke	3/24/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:21:55 PM Page 2 of 7

Project Name | **Location**
Task Order | Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP23-03210	24-Mar-10 9:25	N	Soil					1003202
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°(	☐	☑	- 04
	Total Containers:			2				
DP23-03211	24-Mar-10 9:50	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°(	☐	☑	-05
	Total Containers:			2				
DP23-03212	24-Mar-10 10:00	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°(	☐	☑	-06
	Total Containers:			2				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	3/24/10
Relinquished by		1630
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **32410P**

CH2MHILL 3/24/2010 4:21:55 PM Page 3 of 7

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP23-53210	24-Mar-10 9:25	N	Soil					1003202
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	1	XH2O, 1XMeOH,4°C	☐	☑	-07
			Total Containers:	2				
DP24-03213	24-Mar-10 15:15	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	1	XH2O, 1XMeOH,4°C	☐	☑	-08
			Total Containers:	2				
DP24-03214	24-Mar-10 15:20	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	1	XH2O, 1XMeOH,4°C	☐	☑	-09
			Total Containers:	2				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jones	3/24/10
Relinquished by	Jamie Jones	1630
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:21:55 PM Page 4 of 7

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP24-03215	24-Mar-10 15:25	N	Soil					1003202
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑	-10
	Total Containers:			2				
DP25-03216	24-Mar-10 10:35	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑	-11
	Total Containers:			2				
DP25-03217	24-Mar-10 10:40	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑	-12
	Total Containers:			2				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	3/24/10 1636
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:21:55 PM Page 5 of 7

Project Name
Task Order **Location**
Project Number 383512.FI.DP **Project:** 2010-FED1a-Soil
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP25-03218	24-Mar-10 10:45	N	Soil					1003202
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑	-13
	Total Containers:			2				
DP26-03219	24-Mar-10 11:50	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑	-14
	Total Containers:			2				
DP26-03220	24-Mar-10 11:55	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑	-15
	Total Containers:			2				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	3/24/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:21:55 PM Page 6 of 7

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP26-03221	24-Mar-10 12:00	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°I	☐	☑	-16
	Total Containers:			2				
DP26-53220	24-Mar-10 11:55	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°I	☐	☑	-17
	Total Containers:			2				
DP27-03222	24-Mar-10 14:10	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°I	☐	☑	-18
	Total Containers:			2				

1003202

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	3/24/10 16:32
Received by		
Relinquished by		
Received by	A Williams	3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:21:55 PM Page 7 of 7

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP27-03223	24-Mar-10 14:15	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			2			
DP27-03224	24-Mar-10 14:20	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			1	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			2			

1003202

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-20

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	James Frank	3/24/10
Relinquished by		
Received by		
Relinquished by		3/25/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:39:56 PM Page 1 of 2

Project Name | **Location**
Task Order | **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-100	23-Mar-10	N	Water				
Source blank 030810 prep 3/24/10			Field Filtered:☐	2	MeOH	☑	☐
Source blank 030810 prep 3/24/10			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
EB-103	24-Mar-10	7:55	N	Water			
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-100	24-Mar-10	7:45	N	Water			
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1003202

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	3/24/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:39:56 PM Page 2 of 2

Project Name | **Location**
Task Order | **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
TB-101	24-Mar-10 7:55	N	Water				
		Field Filtered: ☐		2	MeOH	☑	☐
		Field Filtered: ☐		3	H2O,MeOH,4°C	☐	☑
		Total Containers:		5			

1003202

-24

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Ford	3/24/10 1630
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: 32410P

CH2MHILL 3/24/2010 4:32:37 PM Page 1 of 1

Project Name Location
Task Order Project: 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-203	24-Mar-10 14:35	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
				Total Containers:	5		

1003202

-25

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	3/24/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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ıain of Custody Record

COC Number: **32410**

CH2MHILL 3/24/2010 8:06:37 AM Page 1 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager Tamara Frank
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SM8270Sim
DP01-07012	23-Mar-10 16:10	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP01-07013	23-Mar-10 16:15	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP01-07014	23-Mar-10 16:20	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP01-07015	23-Mar-10 16:25	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		

1003202

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-27

-28

-29

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

3.4°C

Shipping Details
Method of Shipment: ~~FedEx~~
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:
Sample Custody
and
~~Janice Shilling~~
Sonya Gordon

Report Copy to

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COC Number: 32410

CH2MHILL 3/24/2010 8:06:37 AM Page 2 of 12

Project Name
Task Order
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Location
Project: 2010-FED1a-Soil

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP05-07028 ✓	23-Mar-10 14:00 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP05-07029 ✓	23-Mar-10 14:05 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP05-07030 ✓	23-Mar-10 14:10 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP05-07031 ✓	23-Mar-10 14:15 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

1003202

-30

-31

-32

-33

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaia Frank	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3.4°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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COC Number: **32410**

CH2MHILL *3/24/2010 8:06:37 AM* Page 3 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

SM8270Sim

1003202

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	
DP05-57030 ✓	23-Mar-10	14:10 ✓ N	Soil			-34
		Field Filtered: ☐		1	4°C	☑
		Total Containers:		1		
DP06-07032 ✓	23-Mar-10	15:00 ✓ N	Soil			-35
		Field Filtered: ☐		1	4°C	☑
		Total Containers:		1		
DP06-07033 ✓	23-Mar-10	15:05 ✓ N	Soil			-36
		Field Filtered: ☐		1	4°C	☑
		Total Containers:		1		
DP06-07034 ✓	23-Mar-10	15:10 ✓ N	Soil			-37
		Field Filtered: ☐		1	4°C	☑
		Total Containers:		1		

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Hart	3/24/10 0915
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details

Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

Chain of Custody Record

COC Number: 32410

CH2MHILL 3/24/2010 8:06:37 AM Page 4 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP06-07035 ✓	23-Mar-10 15:20 ✓	N	Soil			
LAB QC			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP07-07036 ✓	23-Mar-10 11:20 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP07-07037 ✓	23-Mar-10 11:25 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP07-07038 ✓	23-Mar-10 11:30 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

1003202

-38

-39

-40

-41

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Janice Shilling	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:37 AM* Page 5 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP07-07039 ✓	23-Mar-10 11:35 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP08-07040 ✓	23-Mar-10 9:45 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP08-07041 ✓	23-Mar-10 9:50 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP08-07042 ✓	23-Mar-10 9:55 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

1003202

-42

-43

-44

-45

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Terrace Frank	3/24/10 0915
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:37 AM* Page 6 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

SW8270Sim

1003202

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	
DP08-07043 ✓	23-Mar-10 10:05 ✓	N	Soil			-46
LAB QC			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP08-57040 ✓	23-Mar-10 9:50 ✓	N	Soil			-47
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP14-07064 ✓	23-Mar-10 9:40 ✓	N	Soil			-48
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP14-07065 ✓	23-Mar-10 9:45 ✓	N	Soil			-49
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby Frank	3/24/10 915
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	3/25/10 08:30

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:38 AM* Page 7 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

SW8270Sim

1003202

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	
DP14-07066 ✓	23-Mar-10 9:55 ✓	N	Soil			-50
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP14-07067 ✓	23-Mar-10 10:00 ✓	N	Soil			-51
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP15-07068 ✓	23-Mar-10 10:18 ✓	N	Soil			-52
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP15-07069 ✓	23-Mar-10 10:25 ✓	N	Soil			-53
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:38 AM* Page 8 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

SW8270Sim

1003202

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	
DP15-07070 ✓	23-Mar-10 10:33 ✓	N	Soil			-54
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP15-07071 ✓	23-Mar-10 10:42 ✓	N	Soil			-55
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP15-57070 ✓	23-Mar-10 10:33 ✓	N	Soil			-56
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP16-07072 ✓	23-Mar-10 11:04 ✓	N	Soil			-57
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Frank	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:38 AM* Page 9 of 12

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

SW8270Sim

1003202

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	
DP16-07073 ✓	23-Mar-10 11:06	MS	Soil			-58
LAB QC			Field Filtered: ☐	1	4°C	
			Total Containers:	1		
DP16-07074 ✓	23-Mar-10 11:20	N	Soil			-59
			Field Filtered: ☐	1	4°C	
			Total Containers:	1		
DP16-07075 ✓	23-Mar-10 11:25	N	Soil			-60
			Field Filtered: ☐	1	4°C	
			Total Containers:	1		
DP17-07076 ✓	23-Mar-10 14:10	N	Soil			-61
			Field Filtered: ☐	1	4°C	
			Total Containers:	1		

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Hark	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by	3/25/10 08:30	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:38 AM* Page 10 of 12

Project Name Location
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP17-07077 ✓	23-Mar-10 14:15	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP17-07078 ✓	23-Mar-10 14:25	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP17-07079 ✓	23-Mar-10 14:~~39~~ 30	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
DP18-07080 ✓	23-Mar-10 14:37 ✓	N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

1003202
-62
-63
-64
-65

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Janice Frank	9/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

Chain of Custody Record

COC Number: 32410

CH2MHILL 3/24/2010 8:06:38 AM Page 11 of 12

Project Name
Task Order — Location: Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
DP18-07081 ✓	23-Mar-10 14:50	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP18-07082 ✓	23-Mar-10 14:52	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP18-07083 ✓	23-Mar-10 15:00	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		
DP18-57080 ✓	23-Mar-10 14:35	N	Soil			
	Field Filtered: ☐			1	4°C	☑
	Total Containers:			1		

1003202

-66

-67

-68

-69

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jessica Frank	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by		3/25/10 08:30

3.4°C

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32410**

CH2MHILL *3/24/2010 8:06:38 AM* Page 12 of 12

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8270Sim
✓ DP19-07084	23-Mar-10 16:30	✓N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
✓ DP19-07085	23-Mar-10 16:33	✓N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		
✓ DP19-07086	23-Mar-10 16:40	✓N	Soil			
			Field Filtered: ☐	1	4°C	☑
			Total Containers:	1		

1003202
-70
-71
-72

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	3/24/10 0915
Relinquished by		
Received by		
Relinquished by		
Received by	3/25/10 08130	

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254698896130215
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 1 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/25/10 08:30 Date cooler(s) opened: 3/25/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1010

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/24/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.4°C

Dates samples were logged-in: • 3/25/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	Yes	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

If Non-Conformance issues were present, list by sample ID: _____

- No Dry weight containers recld in shipment for all CAR#: _____
soil GRO + VOC samples. Only 2 NaHSO4 vials + 1 MeOH vial rec'd for VOC+GRO to be ran out of. Need another MeOH vial for GRO!

Samples DP22-03207, 03208, 03209, ED-100, TB-101, + ED-203 not recld in shipmt.

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 2 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/25/10 08:30 Date cooler(s) opened: 3/25/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1020

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/24/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6°C

~~Dates samples were logged in: 3/25/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 5

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 3 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/25/10 08:30 Date cooler(s) opened: 3/25/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1075

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/24/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5°C

~~Dates samples were logged in: 3/25/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 5

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 4 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/25/10 08:30 Date cooler(s) opened: 3/25/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1064

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/24/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.7°C

~~Dates samples were logged in: 3/25/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 5

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 5 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/25/10** **08:30** Date cooler(s) opened: **3/25/10**

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9613

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/24/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0°C

Dates samples were logged in: 3/25/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 5

Chain of Custody Record

COC Number: 32510

CH2MHILL 3/25/2010 12:03:24 PM Page 6 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP20-07091	24-Mar-10 9:45	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☑	☐
			Total Containers:		1				
DP20-57090	24-Mar-10 9:40	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☑	☐
			Total Containers:		1				
DP22-03207	24-Mar-10 15:25	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				

1003202

-01

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Frank	3/25/10 1400
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL *3/25/2010 12:03:24 PM* Page 7 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP22-03208	24-Mar-10 15:30	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				
DP22-03209	24-Mar-10 15:45	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				

1003202

-02

-03

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	3/25/10 1400
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 8 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP23-03210	24-Mar-10 9:25	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				
DP23-03211	24-Mar-10 9:50	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				

1003202

-04

-05

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 9 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP23-03212	24-Mar-10 10:00	N	Soil						
		Field Filtered:☐		1	4°C	☐	☐	☐	☑
		Field Filtered:☐		1	4°C	☑	☐	☐	☐
		Field Filtered:☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					
DP23-53210	24-Mar-10 9:25	N	Soil						
		Field Filtered:☐		1	4°C	☐	☐	☐	☑
		Field Filtered:☐		1	4°C	☑	☐	☐	☐
		Field Filtered:☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					

1003202

-06

-07

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Foard	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record COC Number: 32510

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP24-03213	24-Mar-10 15:15	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					
DP24-03214	24-Mar-10 15:20	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					

1003202
-08
-09

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamgia Ford	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL *3/25/2010 12:03:25 PM*

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP24-03215	24-Mar-10 15:25	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					
DP25-03216	24-Mar-10 10:35	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					

1003202
-10
-11

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record COC Number: 32510

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP25-03217	24-Mar-10 10:40	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					
DP25-03218	24-Mar-10 10:45	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					

1003202

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Trimble	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510**

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP26-03219	24-Mar-10 11:50	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				
DP26-03220	24-Mar-10 11:55	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				

1003202
-14
-15

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jurt	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510**

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP26-03221	24-Mar-10 12:00	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					
DP26-53220	24-Mar-10 11:55	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					

1003202

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-17

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:25 PM Page 15 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP27-03222	24-Mar-10 14:10	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				
DP27-03223	24-Mar-10 14:15	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐
			Total Containers:		3				

1003202

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Ford	3/25/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510**

CH2MHILL

Project Name	**Location**
Task Order	**Project:** 2010-FED1a-Soil
Project Number	383512.FI.DP
Project Manager	Jamie Eby
Sample Manager	
Turnaround Time	21 Days
PO Number	TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP27-03224	24-Mar-10 14:20	N	Soil						
		Field Filtered: ☐		1	4°C	☐	☐	☐	☑
		Field Filtered: ☐		1	4°C	☑	☐	☐	☐
		Field Filtered: ☐		1	4°C	☐	☑	☐	☐
		Total Containers:		3					

1003202

-20

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	3/25/10 1400
Received by		
Relinquished by	[signature]	3/26/10 09:00
Received by		2.7°C

Shipping Details

Method of Shipment: FedEx

On Ice: yes / no

Airbill No:

Lab Name: Empirical Laboratories, LLC

Lab Phone: (615) 345-1115

ATTN:

Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510W**

CH2MHILL *3/25/2010 9:36:40 AM* Page 1 of 2

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8290
EB-100	22-Mar-10	N	Water		TF 3/24/10			
			Field Filtered: ☐	~~2~~ 1	4°C	☐	☐	☑
			Field Filtered: ☐	1	HNO4	☑	☐	☐
Source blank 030810 prep 3/24			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	~~5~~ 4	TF 3/25/10			
EB-103	24-Mar-10 7:55	N	Water					
			Field Filtered: ☐	~~2~~ 1	TF 3/25/10 4°C	☐	☐	☑
			Field Filtered: ☐	1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	~~5~~ 4	3/25/10			

1603202

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		3/25/10
Relinquished by	Jamaia Grant	10 AM
Received by		
Relinquished by		
Received by	[illegible]	3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890098
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-7Q

Chain of Custody Record

COC Number: **32510W**

CH2MHILL *3/25/2010 9:32:56 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
EB-203	24-Mar-10 14:35	N	Water						
	Field Filtered: ☐			2	4°C	☐	☐	☐	☑
	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑	☐
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐
	Total Containers:			7 6					
EB-204	25-Mar-10 7:45	N	Water						
	Field Filtered: ☐			2 1	4°C	☐	☐	☐	☑
	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐
	Total Containers:			5 4					

TF 3/25/10

TF 3/25/10

TF 3/25/10

TF 3/25/10

100 3202

- 25

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamara Frank	3/25/10 10:00
Received by		
Relinquished by		
Received by		3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890098
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1009

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.7°C

Dates samples were logged-in: 3/26/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaal (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0929

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9c

Dates samples were logged-in: ~~3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0918

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0098

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202 Number of Coolers: 8 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/26/10** **09:00** Date cooler(s) opened: **3/26/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0962

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

1003219

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/23/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 03/26/2010 09:00 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 03/26/2010 17:56

Samples Received at: **2.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1003219-01 DP02-07016 [Solid] Sampled 03/24/2010 10:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 12:50	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 12:50	
1003219-02 DP02-07017 [Solid] Sampled 03/24/2010 10:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 12:55	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 12:55	
1003219-03 DP02-07018 [Solid] Sampled 03/24/2010 11:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:00	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:00	
1003219-04 DP02-07019 [Solid] Sampled 03/24/2010 11:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:05	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:05	
1003219-05 DP03-07020 [Solid] Sampled 03/24/2010 11:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:30	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:30	
1003219-06 DP03-07021 [Solid] Sampled 03/24/2010 11:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:35	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:35	

1003219

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-07 DP03-07022 [Solid] Sampled 03/24/2010 11:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:40	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:40	
1003219-08 DP03-07023 [Solid] Sampled 03/24/2010 11:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:50	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:50	
1003219-09 DP03-57020 [Solid] Sampled 03/24/2010 11:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 13:30	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 13:30	
1003219-10 DP04-07024 [Solid] Sampled 03/24/2010 14:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 16:05	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 16:05	
1003219-11 DP04-07025 [Solid] Sampled 03/24/2010 14:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 16:10	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 16:10	
1003219-12 DP04-07026 [Solid] Sampled 03/24/2010 14:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 16:15	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 16:15	
1003219-13 DP04-07027 [Solid] Sampled 03/24/2010 14:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 16:20	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 16:20	
1003219-14 DP19-07087 [Solid] Sampled 03/24/2010 09:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 11:20	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 11:20	
1003219-15 DP20-07088 [Solid] Sampled 03/24/2010 09:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 11:30	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 11:30	
1003219-16 DP20-07089 [Solid] Sampled 03/24/2010 09:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 11:35	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 11:35	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-17 DP20-07090 [Solid] Sampled 03/24/2010 09:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 11:40	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 11:40	
1003219-18 DP20-07091 [Solid] Sampled 03/24/2010 09:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 11:45	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 11:45	
1003219-19 DP20-57090 [Solid] Sampled 03/24/2010 09:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	03/31/2010 11:40	
SMS_PAH_8270C_3546_LOW	04/16/2010 14:00	20	04/07/2010 11:40	
1003219-20 EB-100 [Water] Sampled 03/22/2010 00:00 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/18/2010 02:00	soil TAL + Mo
SGC_DRO_8015B_3510	04/16/2010 14:00	20	03/29/2010 02:00	+MO. LOW VOLUME!!
MET_7470_MERCURY	04/16/2010 14:00	20	04/19/2010 02:00	
1003219-21 EB-204 [Water] Sampled 03/25/2010 07:45 Pacific				**QSM4.1**
MET_7470_MERCURY	04/16/2010 14:00	20	04/22/2010 09:45	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 09:45	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 09:45	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 09:45	soil TAL + Mo
SGC_DRO_8015B_3510	04/16/2010 14:00	20	04/01/2010 09:45	+MO. LOW VOLUME!!
SGC_PCB8082A_3510	04/16/2010 14:00	20	04/01/2010 09:45	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	04/16/2010 14:00	20	04/01/2010 09:45	
1003219-22 EB-104 [Water] Sampled 03/25/2010 07:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/16/2010 14:00	20	04/01/2010 09:40	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 09:40	soil TAL + Mo
SGC_DRO_8015B_3510	04/16/2010 14:00	20	04/01/2010 09:40	+MO.
MET_7470_MERCURY	04/16/2010 14:00	20	04/22/2010 09:40	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 09:40	LOW VOLUME!!!!
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 09:40	LOW VOLUME!!!!
1003219-23 DP02-03147 [Solid] Sampled 03/25/2010 15:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 17:05	ON HOLD, CONTAINER NOT RECD IN SHIPMENT!!
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 17:05	AP VIALS.
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 17:05	AP VIALS. LOW VOLUME!! Wait until VOC analysis compl

1003219

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-24 DP02-03148 [Solid] Sampled 03/25/2010 15:10 Pacific				**QSM4.1**
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 17:10	AP VIALS. LOW VOLUME!! Wait until VOC analysis compl
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 17:10	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 17:10	ON HOLD, CONTAINER NOT RECD IN SHIPMENT!!
1003219-25 DP02-03149 [Solid] Sampled 03/25/2010 15:15 Pacific				**QSM4.1**
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 17:15	AP VIALS. LOW VOLUME!! Wait until VOC analysis compl
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 17:15	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 17:15	ON HOLD, CONTAINER NOT RECD IN SHIPMENT!!
1003219-26 DP20-03201 [Solid] Sampled 03/25/2010 09:20 Pacific				**QSM4.1**
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 11:20	AP VIALS.
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 11:20	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 11:20	soil TAL + Mo
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 11:20	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 11:20	
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 11:20	
1003219-27 DP20-03202 [Solid] Sampled 03/25/2010 09:25 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 11:25	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 11:25	+MO
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 11:25	AP VIALS.
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 11:25	soil TAL + Mo
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 11:25	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 11:25	
1003219-28 DP20-03203 [Solid] Sampled 03/25/2010 09:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 11:30	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 11:30	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 11:30	+MO
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 11:30	AP VIALS.
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 11:30	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 11:30	soil TAL + Mo

1003219

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1003219-29 DP21-03204 [Solid] Sampled 03/25/2010 10:10 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 12:10	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 12:10	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 12:10	AP VIALS.
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 12:10	+MO
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 12:10	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 12:10	soil TAL + Mo
1003219-30 DP21-03205 [Solid] Sampled 03/25/2010 10:20 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 12:20	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 12:20	AP VIALS.
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 12:20	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 12:20	soil TAL + Mo
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 12:20	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 12:20	
1003219-31 DP21-03206 [Solid] Sampled 03/25/2010 10:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 12:15	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 12:15	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 12:15	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 12:15	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 12:15	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 12:15	+MO
1003219-32 DP28-03225 [Solid] Sampled 03/25/2010 09:05 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 11:05	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 11:05	+MO
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 11:05	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 11:05	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 11:05	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 11:05	
1003219-33 DP28-03226 [Solid] Sampled 03/25/2010 09:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 11:15	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 11:15	AP VIALS.
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 11:15	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 11:15	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 11:15	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 11:15	soil TAL + Mo

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-34 DP28-03227 [Solid] Sampled 03/25/2010 09:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 11:30	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 11:30	+MO
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 11:30	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 11:30	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 11:30	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 11:30	soil TAL + Mo
1003219-35 DP29-03228 [Solid] Sampled 03/25/2010 11:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:10	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:10	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:10	+MO
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:10	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:10	AP VIALS.
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:10	
1003219-36 DP29-03229 [Solid] Sampled 03/25/2010 11:15 Pacific				**QSM4.1**
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:15	AP VIALS.
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:15	AP VIALS.
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:15	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:15	soil TAL + Mo
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:15	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:15	
1003219-37 DP29-03230 [Solid] Sampled 03/25/2010 11:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:30	AP VIALS.
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:30	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:30	AP VIALS.
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:30	+MO
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:30	
1003219-38 DP29-53230 [Solid] Sampled 03/25/2010 11:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:30	AP VIALS.
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:30	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:30	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:30	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:30	soil TAL + Mo
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:30	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-39 DP31-03234 [Solid] Sampled 03/25/2010 10:10 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 12:10	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 12:10	+MO
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 12:10	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 12:10	AP VIALS.
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 12:10	AP VIALS.
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 12:10	soil TAL + Mo
1003219-40 DP31-03235 [Solid] Sampled 03/25/2010 10:20 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 12:20	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 12:20	AP VIALS.
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 12:20	soil TAL + Mo
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 12:20	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 12:20	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 12:20	+MO
1003219-41 DP31-03236 [Solid] Sampled 03/25/2010 10:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 12:30	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 12:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 12:30	+MO
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 12:30	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 12:30	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 12:30	AP VIALS.
1003219-42 DP32-03237 [Solid] Sampled 03/25/2010 11:15 Pacific				**QSM4.1**
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:15	AP VIALS.
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:15	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:15	soil TAL + Mo
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:15	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:15	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:15	AP VIALS.
1003219-43 DP32-03238 [Solid] Sampled 03/25/2010 11:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:20	
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:20	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:20	AP VIALS.
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:20	+MO
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:20	AP VIALS.
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:20	soil TAL + Mo

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-44 DP32-03239 [Solid] Sampled 03/25/2010 11:25 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 13:25	+MO
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 13:25	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 13:25	AP VIALS.
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 13:25	
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 13:25	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 13:25	soil TAL + Mo
1003219-45 DP33-03240 [Solid] Sampled 03/25/2010 13:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 15:30	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 15:30	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 15:30	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 15:30	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 15:30	soil TAL + Mo
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 15:30	
1003219-46 DP33-03241 [Solid] Sampled 03/25/2010 13:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 15:45	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 15:45	AP VIALS.
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 15:45	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 15:45	+MO
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 15:45	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 15:45	AP VIALS.
1003219-47 DP33-53240 [Solid] Sampled 03/25/2010 13:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 15:30	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 15:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 15:30	+MO
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 15:30	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 15:30	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 15:30	
1003219-48 DP34-03243 [Solid] Sampled 03/25/2010 14:25 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 16:25	+MO
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 16:25	
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 16:25	soil TAL + Mo
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 16:25	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 16:25	AP VIALS.
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 16:25	AP VIALS.

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003219-49 DP34-03244 [Solid] Sampled 03/25/2010 14:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/16/2010 14:00	20	04/01/2010 16:40	
MET_7471A_MERCURY	04/16/2010 14:00	20	04/22/2010 16:40	
SGC_DRO_8015B_3546	04/16/2010 14:00	20	04/08/2010 16:40	+MO
MET_ICP_LOW6010B_FULL	04/16/2010 14:00	20	09/21/2010 16:40	soil TAL + Mo
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 16:40	AP VIALS.
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 16:40	AP VIALS.
1003219-50 TB-104 [Water] Sampled 03/25/2010 07:40 Pacific				**QSM4.1**
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 09:40	
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 09:40	
1003219-51 TB-204 [Water] Sampled 03/25/2010 07:55 Pacific				**QSM4.1**
VOC_8260B_AP9	04/16/2010 14:00	20	04/08/2010 09:55	
VGC_GRO_8015B	04/16/2010 14:00	20	04/08/2010 09:55	
SGS/Paradigm (SUB028)				
1003219-20 EB-100 [Water] Sampled 03/22/2010 00:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/21/2010 02:00	sub to SGS - Wilmington. LOW VOLUME!!
1003219-21 EB-204 [Water] Sampled 03/25/2010 07:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 09:45	sub to SGS - Wilmington. LOW VOLUME!!
1003219-22 EB-104 [Water] Sampled 03/25/2010 07:40 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 09:40	sub to SGS - Wilmington. LOW VOLUME!!
1003219-26 DP20-03201 [Solid] Sampled 03/25/2010 09:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 11:20	sub to SGS - Wilmington
1003219-27 DP20-03202 [Solid] Sampled 03/25/2010 09:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 11:25	sub to SGS - Wilmington
1003219-28 DP20-03203 [Solid] Sampled 03/25/2010 09:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 11:30	sub to SGS - Wilmington
1003219-29 DP21-03204 [Solid] Sampled 03/25/2010 10:10 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 12:10	sub to SGS - Wilmington
1003219-30 DP21-03205 [Solid] Sampled 03/25/2010 10:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 12:20	sub to SGS - Wilmington

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1003219-31 DP21-03206 [Solid] Sampled 03/25/2010 10:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 12:15	sub to SGS - Wilmington
1003219-32 DP28-03225 [Solid] Sampled 03/25/2010 09:05 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 11:05	sub to SGS - Wilmington
1003219-33 DP28-03226 [Solid] Sampled 03/25/2010 09:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 11:15	sub to SGS - Wilmington
1003219-34 DP28-03227 [Solid] Sampled 03/25/2010 09:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 11:30	sub to SGS - Wilmington
1003219-35 DP29-03228 [Solid] Sampled 03/25/2010 11:10 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:10	sub to SGS - Wilmington
1003219-36 DP29-03229 [Solid] Sampled 03/25/2010 11:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:15	sub to SGS - Wilmington
1003219-37 DP29-03230 [Solid] Sampled 03/25/2010 11:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:30	sub to SGS - Wilmington
1003219-38 DP29-53230 [Solid] Sampled 03/25/2010 11:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:30	sub to SGS - Wilmington
1003219-39 DP31-03234 [Solid] Sampled 03/25/2010 10:10 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 12:10	sub to SGS - Wilmington
1003219-40 DP31-03235 [Solid] Sampled 03/25/2010 10:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 12:20	sub to SGS - Wilmington
1003219-41 DP31-03236 [Solid] Sampled 03/25/2010 10:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 12:30	sub to SGS - Wilmington
1003219-42 DP32-03237 [Solid] Sampled 03/25/2010 11:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:15	sub to SGS - Wilmington
1003219-43 DP32-03238 [Solid] Sampled 03/25/2010 11:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:20	sub to SGS - Wilmington
1003219-44 DP32-03239 [Solid] Sampled 03/25/2010 11:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 13:25	sub to SGS - Wilmington

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1003219-45 DP33-03240 [Solid] Sampled 03/25/2010 13:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 15:30	sub to SGS - Wilmington
1003219-46 DP33-03241 [Solid] Sampled 03/25/2010 13:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 15:45	sub to SGS - Wilmington
1003219-47 DP33-53240 [Solid] Sampled 03/25/2010 13:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 15:30	sub to SGS - Wilmington
1003219-48 DP34-03243 [Solid] Sampled 03/25/2010 14:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 16:25	sub to SGS - Wilmington
1003219-49 DP34-03244 [Solid] Sampled 03/25/2010 14:40 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/16/2010 14:00	20	04/24/2010 16:40	sub to SGS - Wilmington

Reviewed By

Date

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 1 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP02-07016	24-Mar-10 10:50	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP02-07017	24-Mar-10 10:55	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP02-07018	24-Mar-10 11:00	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP02-07019	24-Mar-10 11:05	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					

1003219
-01
-02
-03
-04

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Frank	3/25/10 1400
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 2 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP03-07020	24-Mar-10 11:30	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP03-07021	24-Mar-10 11:35	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP03-07022	24-Mar-10 11:40	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP03-07023	24-Mar-10 11:50	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					

1003215

-05

-06

-07

-08

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	3/25/10
Relinquished by		14 00
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 3 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP03-57020	24-Mar-10 11:30	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP04-07024	24-Mar-10 14:05	N	Soil						
jl			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP04-07025	24-Mar-10 14:10	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP04-07026	24-Mar-10 14:15	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					

1003219
-09
-10
-11
-12

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jarit	3/25/10 1400
Relinquished by		
Received by		
Relinquished by	Shilling	3/26/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 4 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP04-07027	24-Mar-10 14:20	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP19-07084	23-Mar-10 16:30	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP19-07085	23-Mar-10 16:33	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP19-07086	23-Mar-10 16:40	N	Soil						
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					

1003219 - 13

1003202 - 70 - 71 - 72

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Fark	3/25/10 1400
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 5 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290	
DP19-07087	24-Mar-10 9:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	
			Total Containers:		1					
DP20-07088	24-Mar-10 9:30	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	
			Total Containers:		1					
DP20-07089	24-Mar-10 9:35	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	
			Total Containers:		1					
DP20-07090	24-Mar-10 9:40	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	
			Total Containers:		1					

1003219
-14
-15
-16
-17

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Hark	3/25/10
Relinquished by		1400
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510**

CH2MHILL 3/25/2010 12:03:24 PM Page 6 of 16

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP20-07091	24-Mar-10 9:45	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP20-57090	24-Mar-10 9:40	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☑	☐
			Total Containers:	1					
DP22-03207	24-Mar-10 15:25	N	Soil						
			Field Filtered:☐	1	4°C	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐
			Total Containers:	3					

1003219
-18
-19
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-01

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jarvis	3/25/10 1400
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510W**

CH2MHILL 3/25/2010 9:36:40 AM Page 1 of 2

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

100324 - 20

1003202 - 22

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8290
EB-100	22-Mar-10	N	Water		TF 3/24/10			
			Field Filtered: ☐	2 / 1	4°C	☐	☐	☑
			Field Filtered: ☐	1	HNO4	☑	☐	☐
Source blank 030810 prep 3/24			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	5/4	TF 3/25/10			
EB-103	24-Mar-10 7:55	N	Water		TF 3/25/10			
			Field Filtered: ☐	2 / 1	4°C	☐	☐	☑
			Field Filtered: ☐	1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	5/4	3/25/10			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Frank	3/25/10 10 AM
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890098
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510W**

CH2MHILL *3/25/2010 9:32:56 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
EB-203	24-Mar-10 14:35	N	Water						
	Field Filtered: ☐			~~2~~ 1	4°C	☐	☐	☐	☑
	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑	☐
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐
	Total Containers:			~~7~~ 6					
EB-204	25-Mar-10 7:45	N	Water						
	Field Filtered: ☐			~~2~~ 1	4°C	☐	☐	☐	☑
	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐
	Total Containers:			~~5~~ 4					

TF 3/25/10

TF 3/25/10

TF 3/25/10

TF 3/25/10

1003202 - 25

1003249 - 21

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Grant	3/25/10 10:00
Relinquished by		
Received by		
Relinquished by	Whitfield	3/26/10 09:00
Received by		

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890098
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510W**

CH2MHILL 3/25/2010 9:36:40 AM Page 2 of 2

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8290
EB-104	25-Mar-10 7:40	N	Water					
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	5				

TF 3/25/10

1003219

-12

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	3/25/10 10 PM
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890098
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:32 PM Page 1 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP02-03147	25-Mar-10 15:05	N	Soil				
			Field Filtered: ☐	1	0 MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			
DP02-03148	25-Mar-10 15:10	N	Soil				
			Field Filtered: ☐	1	0 MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			
DP02-03149	25-Mar-10 15:15	N	Soil				
			Field Filtered: ☐	1	0 MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			

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-23

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please run MeOH for TPH-P
Use water sample for VOC

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Stark	3/25/10 1600
Received by		
Relinquished by		
Received by		3/26/10 09:00

2.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:32 PM Page 2 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP20-03201	25-Mar-10 9:20	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			
DP20-03202	25-Mar-10 9:25	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			
DP20-03203	25-Mar-10 9:30	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			

1003219

-26

-27

-28

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	3/25/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:32 PM Page 3 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP21-03204	25-Mar-10 10:10	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP21-03205	25-Mar-10 10:20	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP21-03206	25-Mar-10 10:15	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

1003219

-29

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Ford	3/25/10 1600
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2 pg

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1063219

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP28-03225	25-Mar-10 9:05	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-32
			Total Containers:	4				
DP28-03226	25-Mar-10 9:15	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-33
			Total Containers:	4				
DP28-03227	25-Mar-10 9:30	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-34
			Total Containers:	4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jost	3/25/10 1800
Relinquished by		
Received by		
Relinquished by		
Received by		3/26/10 09:00

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:33 PM Page 5 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP29-03228	25-Mar-10 11:10	N	Soil					
			Field Filtered:☐	1	MeOH	☑	☐	
			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑	-35
			Total Containers:		4			
DP29-03229	25-Mar-10 11:15	N	Soil					
			Field Filtered:☐	1	MeOH	☑	☐	
			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑	-36
			Total Containers:		4			
DP29-03230	25-Mar-10 11:30	N	Soil					
			Field Filtered:☐	1	MeOH	☑	☐	
			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑	-37
			Total Containers:		4			

1003215

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Ford	3/25/10 1600
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510P**

CH2MHILL *3/25/2010 3:44:33 PM* Page 6 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP29-53230	25-Mar-10 11:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP31-03234	25-Mar-10 10:10	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP31-03235	25-Mar-10 10:20	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

1003219

-38

-39

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	3/25/10 1600
Received by		
Relinquished by	[signature]	3/26/10 09:00
Received by		

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:33 PM Page 7 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP31-03236	25-Mar-10 10:30	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:		4		
DP32-03237	25-Mar-10 11:15	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:		4		
DP32-03238	25-Mar-10 11:20	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:		4		

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	3/25/10 1600
Received by		
Relinquished by	[signature]	3/26/10 09:00
Received by		

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:33 PM Page 8 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP32-03239	25-Mar-10 11:25	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP33-03240	25-Mar-10 13:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP33-03241	25-Mar-10 13:45	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

100321A

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaro Grant	3/25/10 1600
Received by		
Relinquished by		
Received by		3/26/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.7°C

Chain of Custody Record

COC Number: **32510P**

CH2MHILL 3/25/2010 3:44:33 PM Page 9 of 9

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP33-53240	25-Mar-10 13:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP34-03243	25-Mar-10 14:25	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP34-03244	25-Mar-10 14:40	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

1003219

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	James Jant	3/25/10 1600
Relinquished by		
Received by		
Relinquished by	Mitchell	3/26/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202, 1003219 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 1009

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.7°C

Dates samples were logged-in: 3/26/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaad (Initial): ws

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... ws 3/26/10	Yes	(No)*	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

*-for 1003219

If Non-Conformance issues were present, list by sample ID: _____

Rec'd vials (5) for EB-204 with no cohesive tests listed on COC. Tagged for VOC+GRO per container labels CAR#: _____

Rec'd samples TB-104 + TB-204 that are not listed on COC. Tagged for VOC+GRO as -SOIL-51 per containers rec'd.

For 1003219

pH<2 for metals (H_2O)

save for EB-104

2 vials broken in shipment for EB-104. No dry weight containers rec'd in shipment w/ all terracore samples (requesting GRO+VOC soils). DP02-03147 on COC has containers w/ ID as DP02-03063. DP02-03148 on COC has labels as DP02-03064. DP02-03149 on COC has containers ID as DP02-03047

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202, 1003219 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0929

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9c

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202, 1003219 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0918

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 4 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 0984

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-8°C

Dates samples were logged-in: ~~3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 5 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0973

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 6 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0995

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.5°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202, 1003219 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0098

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6°C

Dates samples were logged-in: 3/26/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003202, 1003219 Number of Coolers: 8 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/26/10 09:00 Date cooler(s) opened: 3/26/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0962

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/25/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

~~Dates samples were logged-in: 3/26/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 3 of 14

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP02-57130	25-Mar-10 15:55	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Total Containers:	1						
DP20-03201	25-Mar-10 9:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐
			Total Containers:	3						
DP20-03202	25-Mar-10 9:25	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐
			Total Containers:	3						

100

100329
+ -26

-27

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Hart	3/26/10 1020
Relinquished by		
Received by		
Relinquished by		
Received by		3/27/10 11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 4 of 14

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP20-03203	25-Mar-10 9:30	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP21-03204	25-Mar-10 10:10	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Hart	3/26/10 1020
Received by		
Relinquished by	[signature]	3/27/10 11:00
Received by		

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 5 of 14

Project Name
Task Order **Location**
Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP21-03205	25-Mar-10 10:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP21-03206	25-Mar-10 10:15	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003209

- 30

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	3/26/10 1020
Relinquished by		
Received by		
Relinquished by		
Received by		3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.0°C

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 6 of 14

Project Name
Task Order
Location
Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP28-03225	25-Mar-10 9:05	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP28-03226	25-Mar-10 9:15	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	3/26/10 1032
Received by		
Relinquished by	[signature]	3/27/10 11:00
Received by		

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 7 of 14

Project Name
Task Order
Location
Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP28-03227	25-Mar-10 9:30	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐
			Total Containers:	3						
DP29-03228	25-Mar-10 11:10	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐
			Total Containers:	3						

1003219

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Faris	3/26/10 1022
Received by		
Relinquished by	Michelle	3/27/10 11:00
Received by		3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 8 of 14

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP29-03229	25-Mar-10 11:15	N	Soil							
	Field Filtered: ☐			1	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			1	4°C	☑	☐	☐	☐	☐
	Field Filtered: ☐			1	4°C	☐	☑	☐	☐	☐
	Total Containers:			3						
DP29-03230	25-Mar-10 11:30	N	Soil							
	Field Filtered: ☐			1	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			1	4°C	☑	☐	☐	☐	☐
	Field Filtered: ☐			1	4°C	☐	☑	☐	☐	☐
	Total Containers:			3						

1003219

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Farr	3/26/10 1020
Received by		
Relinquished by		
Received by		3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.0°C

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 9 of 14

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP29-53230	25-Mar-10 11:30	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP31-03234	25-Mar-10 10:10	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	3/26/10 1070
Received by		
Relinquished by		
Received by		3/27/10 11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 10 of 14

Project Name
Task Order
Location
Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270SIm	SW8290
DP31-03235	25-Mar-10 10:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP31-03236	25-Mar-10 10:30	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	3/26/10 1022
Relinquished by		
Received by		
Relinquished by		
Received by		3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.0°C

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 11 of 14

Project Name
Task Order **Location**
Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP32-03237	25-Mar-10 11:15	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP32-03238	25-Mar-10 11:20	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219
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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Ford	3/26/10 1022
Received by		
Relinquished by		
Received by		3/27/10 11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 12 of 14

Project Name
Task Order
Location
Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP32-03239	25-Mar-10 11:25	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP33-03240	25-Mar-10 13:30	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Hart	3/26/10 1000
Received by		
Relinquished by		
Received by	Michael Hall	3/27/10 11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 13 of 14

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP33-03241	25-Mar-10 13:45	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP33-53240	25-Mar-10 13:30	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1003219
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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	3/26/10 1024
Received by		
Relinquished by		
Received by		3/27/10 11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:
Sample Custody
and
Janice Shilling

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:57 AM Page 14 of 14

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP34-03243	25-Mar-10 14:25	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP34-03244	25-Mar-10 14:40	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

100329

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Fort	3/26/10 1052
Received by		
Relinquished by	[illegible]	3/27/10 11.00
Received by		

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: ~~yes~~ / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610W**

CH2MHILL 3/26/2010 10:17:26 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8082	SW8270Sim
EB-204	25-Mar-10 7:45	N	Water				
			Field Filtered: ☐	8 4	4°C	☑	☑
			Total Containers:	8 4			

1003219

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TF 3/24/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jank	3/24/10 1020
Received by		
Relinquished by		
Received by		3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8734 6980 0087
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.0°C

Chain of Custody Record

COC Number: **32610W**

CH2MHILL 3/26/2010 10:16:13 AM Page 1 of 1

1003219

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8260B/624	SW8270Sim
EB-104	25-Mar-10 7:40	N	Water					
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☑	☐	☐
	Total Containers:			4				
EB-105	26-Mar-10 8:20	N	Water					
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	☐
	Total Containers:			3				

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		3/26/10
Relinquished by	Jamie Eby	1022
Received by		
Relinquished by		
Received by		3/27/10 11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 835469890087
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1101

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0c

Dates samples were logged-in: 3/29/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 2 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0087

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

~~Dates samples were logged-in: 3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/27/10 11:00** Date cooler(s) opened: **3/27/10**

Opened By (print): Will Schaub (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1086

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

~~Dates samples were logged-in:~~ **3/29/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____			
10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 4 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1097

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.4°C

~~Dates samples were logged-in:~~ ~~3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

see pase 1 of 6

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 5 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaub (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0470

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

~~Dates samples were logged-in: 3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 Number of Coolers: 6 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/27/10 11:00** Date cooler(s) opened: **3/27/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6480

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

~~Dates samples were logged in: 3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

- See page 1 of 6

1003228

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/26/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 03/27/2010 11:00

Logged In By: William Schwab
Date Logged In: 03/29/2010 15:37

Samples Received at: **5.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1003228-11 DP02-03063 [Solid] Sampled 03/25/2010 15:05 Pacific				
[NO ANALYSES] analysis moved to 1003219-23				
1003228-12 DP02-03064 [Solid] Sampled 03/25/2010 15:10 Pacific				
[NO ANALYSES] analysis moved to 1003219-24				
1003228-13 DP02-03065 [Solid] Sampled 03/25/2010 15:15 Pacific				
[NO ANALYSES] analysis moved to 1003219-25				
1003228-01 DP01-03054 [Solid] Sampled 03/26/2010 15:05 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 17:05	water TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 17:05	
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 17:05	AP Vials
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 17:05	
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 17:05	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 17:05	+MO
1003228-02 DP01-03055 [Solid] Sampled 03/26/2010 15:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 17:00	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 17:00	water TAL + Mo
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 17:00	+MO
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 17:00	
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 17:00	AP Vials
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 17:00	+ Aroclor-1262 & 1268

1003228

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1003228-03 DP01-03056 [Solid] Sampled 03/26/2010 15:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 17:15	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 17:15	water TAL + Mo
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 17:15	AP Vials
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 17:15	
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 17:15	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 17:15	+MO
1003228-04 DP01-03060 [Solid] Sampled 03/26/2010 09:20 Pacific				**MS/MSD. QSM4.1**
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 11:20	MS/MSD.
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 11:20	MS/MSD. water TAL + Mo
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 11:20	MS/MSD. +MO
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 11:20	MS/MSD. + Aroclor-1262 & 1268
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 11:20	MS/MSD. AP Vials
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 11:20	MS/MSD
1003228-05 DP01-03061 [Solid] Sampled 03/26/2010 09:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 11:30	
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 11:30	
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 11:30	AP Vials
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 11:30	+ Aroclor-1262 & 1268
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 11:30	water TAL + Mo
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 11:30	+MO
1003228-06 DP01-53061 [Solid] Sampled 03/26/2010 09:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 11:30	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 11:30	water TAL + Mo
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 11:30	+MO
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 11:30	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 11:30	AP Vials
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 11:30	
1003228-07 DP02-03057 [Solid] Sampled 03/26/2010 11:30 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 13:30	+MO
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 13:30	
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 13:30	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 13:30	AP Vials
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 13:30	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 13:30	water TAL + Mo

1003228

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003228-08 DP02-03058 [Solid] Sampled 03/26/2010 11:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 13:35	
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 13:35	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 13:35	water TAL + Mo
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 13:35	+MO
SGC_PCB8082A_3546	04/19/2010 14:00	20	04/09/2010 13:35	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 13:35	AP Vials
1003228-09 DP35-03246 [Solid] Sampled 03/26/2010 15:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 17:00	AP Vials
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 17:00	+MO
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 17:00	
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 17:00	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 17:00	water TAL + Mo
1003228-10 DP35-03247 [Solid] Sampled 03/26/2010 15:15 Pacific				**VOC Terracores not received in shipment!!!**
MET_7471A_MERCURY	04/19/2010 14:00	20	04/23/2010 17:15	
MET_ICP_6010B_FULL	04/19/2010 14:00	20	09/22/2010 17:15	water TAL + Mo
VGC_GRO_8015B	04/19/2010 14:00	20	04/09/2010 17:15	AP VIAL
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/02/2010 17:15	
SGC_DRO_8015B_3546	04/19/2010 14:00	20	04/09/2010 17:15	+MO
1003228-14 DP02-07128 [Solid] Sampled 03/25/2010 15:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/01/2010 17:05	
SMS_PAH_8270C_3546_LOW	04/19/2010 14:00	20	04/08/2010 17:05	
1003228-15 DP02-07129 [Solid] Sampled 03/25/2010 15:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/19/2010 14:00	20	04/08/2010 17:50	
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/01/2010 17:50	
1003228-16 DP02-07130 [Solid] Sampled 03/25/2010 15:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/19/2010 14:00	20	04/08/2010 17:55	
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/01/2010 17:55	
1003228-17 DP02-07131 [Solid] Sampled 03/25/2010 16:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/19/2010 14:00	20	04/08/2010 18:00	
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/01/2010 18:00	

1003228

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments	
1003228-18 DP02-57130 [Solid] Sampled 03/25/2010 15:55 Pacific				**QSM4.1**	
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	20	04/01/2010 17:55		
SMS_PAH_8270C_3546_LOW	04/19/2010 14:00	20	04/08/2010 17:55		
1003228-19 EB-105 [Water] Sampled 03/26/2010 08:20 Pacific				**QSM4.1**	
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 10:20		
1003228-20 TB-105 [Water] Sampled 03/26/2010 07:50 Pacific				**QSM4.1.**	**pending client verif.**
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 09:50		
1003228-21 TB-205 [Water] Sampled 03/26/2010 00:00 Pacific				**QSM4.1.**	**pending client verif.**
VGC_GRO_8015B	04/19/2010 14:00	20	04/09/2010 02:00		
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 02:00		
1003228-22 EB-205 [Water] Sampled 03/26/2010 14:15 Pacific				**QSM4.1.**	**pending client verif.**
VOC_8260B_AP9	04/19/2010 14:00	20	04/09/2010 16:15		
VGC_GRO_8015B	04/19/2010 14:00	20	04/09/2010 16:15		
SGS/Paradigm (SUB028)					
1003228-09 DP35-03246 [Solid] Sampled 03/26/2010 15:00 Pacific				**QSM4.1**	
SUB_DIOXINS_8290	04/19/2010 14:00	20	04/25/2010 17:00	sub to SGS - Wilmington	
1003228-10 DP35-03247 [Solid] Sampled 03/26/2010 15:15 Pacific				**VOC Terracores not received in shipment!!!**	
SUB_DIOXINS_8290	04/19/2010 14:00	20	04/25/2010 17:15	sub to SGS - Wilmington	

Reviewed By

Date

Chain of Custody Record

COC Number: **32610P**

CH2MHILL 3/26/2010 3:52:30 PM Page 1 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8260B/624
DP01-03054	26-Mar-10 15:05	N	Soil			
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☑
			Total Containers:	3		
DP01-03055	26-Mar-10 15:00	N	Soil			
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☑
			Total Containers:	3		
DP01-03056	26-Mar-10 15:15	N	Soil			
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☑
			Total Containers:	3		
DP01-03060	26-Mar-10 9:20	N	Soil	9		
LAB QC			Field Filtered: ☐	~~3~~	XH2O, 1XMeOH,4°C	☑
			Total Containers:	~~3~~		

1003228
-01
-02
-03
-04

9 TF 3/20/10 1550

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	3/20/10 1550
Received by		
Relinquished by		
Received by	[signature]	3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.1°C

Chain of Custody Record

COC Number: **32610P**

CH2MHILL *3/26/2010 3:52:31 PM* Page 2 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003220

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8260B/624	
DP01-03061	26-Mar-10 9:30	N	Soil				-05
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☑	
			Total Containers:	3			
DP01-53061	26-Mar-10 9:30	N	Soil				-06
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☑	
			Total Containers:	3			
DP02-03057	26-Mar-10 11:30	N	Soil				-07
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☑	
			Total Containers:	3			
DP02-03058	26-Mar-10 11:35	N	Soil				-08
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☑	
			Total Containers:	3			

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	3/26/10 1550
Received by		
Relinquished by	[signature]	3/27/10 11:00
Received by		

1.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610P**

CH2MHILL 3/26/2010 4:07:54 PM Page 3 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624																				
DP35-03246	26-Mar-10 15:00	N	Soil																								
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Total Containers:			3																							
DP35-03247	26-Mar-10 15:15	N	Soil																								
	Field Filtered: ☐			1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	Total Containers:			4																							

100328

-09

-10

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	[signature] [signature]	3/26/10 1550
Relinquished by		
Received by		
Relinquished by	[signature]	3/27/10 11:00
Received by		

1.10C

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:55 AM Page 1 of 14

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP02-03063	25-Mar-10 15:05	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☑	☐
			Total Containers:	2						
DP02-03064	25-Mar-10 15:10	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☑	☐
			Total Containers:	2						
DP02-03065	25-Mar-10 15:15	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☑	☐
			Total Containers:	2						

Title 32 Metals TF 3/24/10

1003219
1003220 SWO 3/30/10

-11-23 SWO 3/30/10

-12-24 SWO 3/30/10

-13-25 SWO 3/30/10

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaria Trant	3/26/10 10:20
Received by		
Relinquished by		
Received by		3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0087
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.1°C

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 2 of 14

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290	
DP02-07128	25-Mar-10 15:05	N	Soil								1003228
	Field Filtered: ☐			1	4°C	☐	☐	☐	☐	☑	☐ -14
	Total Containers:			1							
DP02-07129	25-Mar-10 15:50	N	Soil								
	Field Filtered: ☐			1	4°C	☐	☐	☐	☐	☑	☐ -15
	Total Containers:			1							
DP02-07130	25-Mar-10 15:55	N	Soil								
	Field Filtered: ☐			1	4°C	☐	☐	☐	☐	☑	☐ -16
	Total Containers:			1							
DP02-07131	25-Mar-10 16:00	N	Soil								
	Field Filtered: ☐			1	4°C	☐	☐	☐	☐	☑	☐ -17
	Total Containers:			1							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Faist	3/26/10 1022
Received by		
Relinquished by		
Received by		3/27/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.1°C

Chain of Custody Record

COC Number: **32610**

CH2MHILL 3/26/2010 10:03:56 AM Page 3 of 14

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP02-57130	25-Mar-10 15:55	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐
			Total Containers:	1						
DP20-03201	25-Mar-10 9:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐
			Total Containers:	3						
DP20-03202	25-Mar-10 9:25	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐
			Total Containers:	3						

1003228 - 26

1003219 - 26 - 27

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Hart	3/26/10 1020
Received by		
Relinquished by	[illegible]	3/27/10 11:00
Received by		

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32610W**

CH2MHILL 3/26/2010 10:16:13 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8260B/624	SW8270Sim
EB-104	25-Mar-10 7:40	N	Water					
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☑	☐	☐
			Total Containers:	4				
EB-105	26-Mar-10 8:20	N	Water					
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	☐
			Total Containers:	3				

1003219
-12
1003228
-19

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	3/26/10
Relinquished by	[signature]	1020
Received by		
Relinquished by	[signature]	3/27/10
Received by		11:00

3.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8354 6989 0087
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219, 1003228 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/27/10 11:00** Date cooler(s) opened: **3/27/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1101

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0c

Dates samples were logged-in: **3/29/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaal (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... 3/29/10 WS	(Yes)	(No)	N/A - 1003228 only
18. Was headspace present in any included VOA vials?	(Yes)	(No) WS 3/29/10	N/A - 1003228 only

If Non-Conformance issues were present, list by sample ID: _____

No Dry weight containers rec'd w/ terracore samples! CAR#: _____

Sample DP35-03247 not rec'd in shipment!

Rec'd samples TB-105, TB-205, & EB-205 not listed on COC.

Headspace present in 2 TB-105 vials, present in 3 TB-205 vials, present in 2 EB-105 vials

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219, 1003228 Number of Coolers: 2 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0087

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

~~Dates samples were logged-in: 3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219, 1003227 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/27/10 11:00** Date cooler(s) opened: **3/27/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1086

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°

~~Dates samples were logged-in:~~ **3/29/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219 1003228 Number of Coolers: 4 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 1097

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.4°C

~~Dates samples were logged-in:~~ ~~3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see pase 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219, 1003228 Number of Coolers: 5 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaub (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0470

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

~~Dates samples were logged-in: 3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003219, 1003228 Number of Coolers: 6 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/27/10 11:00 Date cooler(s) opened: 3/27/10

Opened By (print): Will Schaedt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6480

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

~~Dates samples were logged in: 3/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

- See page 1 of 6

CH2MHILL **CHAIN OF CUSTODY RECORD** 3/29/2010 9:07:31 AM Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/26/2010
COC Number: 32910

1003228

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	30	28	28	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	PCBs (8082) LAB QC	Explosives (8330)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
DP01-03054 -01	3/26/2010 15:05 Soil		x ✓	x ✓					x ✓			3	
DP01-03055 -02	3/26/2010 15:00 Soil		x ✓	x ✓					x ✓			3	
DP01-03056 -03	3/26/2010 15:15 Soil		x ✓	x ✓					x ✓			3	
DP01-03060 -04	3/26/2010 9:20 Soil		x ✓		x ✓							~~2~~ 3	
DP01-03060 ↓	3/26/2010 9:20 Soil									x	MS/MSD	~~1~~ 2	
DP01-03061 -05	3/26/2010 9:30 Soil		x ✓	x ✓					x ✓			3	
DP01-07116	3/26/2010 14:40 Soil	x ✓										1	
DP01-07117	3/26/2010 14:45 Soil	x ✓										1	
DP01-07118	3/26/2010 14:50 Soil	x ✓										1	
DP01-07119	3/26/2010 14:55 Soil	x ✓										1	
DP01-07124	3/26/2010 10:00 Soil	x ✓										1	
DP01-07125	3/26/2010 10:05 Soil	x ✓										1	
DP01-07126	3/26/2010 10:10 Soil	x ✓										1	
DP01-07127	3/26/2010 10:15 Soil	x ✓										1	

WS 3/30/10 1005

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Faria	3/29/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by	3/30/10 09:00	4.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6987 0074
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:
ATTN:
Sample Custody and Janice Shilling

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/29/2010 9:07:31 AM* Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/26/2010
COC Number: 32910

1003208

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	30	28	28	28		
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	PCBs (8082) LAB QC	Explosives (8330)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
DP01-53061 -06	3/26/2010	9:30	Soil		x ✓	x ✓					x ✓		3	
DP02-03057 -07	3/26/2010	11:30	Soil		x ✓	x ✓					x ✓		3	
DP02-03058 -08	3/26/2010	11:35	Soil		x ✓	x ✓					x ✓		3	
DP02-07120	3/26/2010	11:05	Soil	x ✓									1	
DP02-07121	3/26/2010	11:10	Soil	x ✓									1	
DP02-07122	3/26/2010	11:15	Soil	x ✓									1	
DP02-07123	3/26/2010	11:20	Soil	x ✓									1	
DP02-57120	3/26/2010	11:05	Soil	x ✓									1	
DP05-03126	3/26/2010	10:15	Soil					x ✓					1	
DP05-03127	3/26/2010	10:20	Soil					x ✓					1	
DP06-03129	3/26/2010	13:40	Soil					x ✓					1	
DP06-03130	3/26/2010	13:50	Soil					x ✓					1	
DP06-03131	3/26/2010	13:55	Soil					x ✓					1	
DP06-53130	3/26/2010	13:50	Soil					x ✓					1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Faxel	3/29/10 1100
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

3/29/2010 9:07:32 AM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/26/2010
COC Number: 32910

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	30	28	28	28		
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	PCBs (8082) LAB QC	Explosives (8330)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
DP07-03132	3/26/2010 11:00 Soil					x ✓					1	
DP07-03133	3/26/2010 11:05 Soil					x ✓					1	
DP10-03141	3/26/2010 9:10 Soil					x ✓					1	
DP10-03142	3/26/2010 9:15 Soil					x ✓					1	
DP35-03246 1003273_09	3/26/2010 15:00 Soil		x ✓				x ✓				2	
DP35-03246 ↓	3/26/2010 15:00 Soil							x ✓			1	
DP35-03247 1003273_10	3/26/2010 15:15 Soil		x ✓				x ✓	x ✓			3	
										TOTAL NUMBER OF CONTAINERS	53	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	3/29/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32910P**

CH2MHILL *3/29/2010 3:48:12 PM* Page 2 of 2

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP02-03045	29-Mar-10 11:45	N	Soil				
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			3			
DP02-03046	29-Mar-10 11:50	N	Soil				
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			3			
DP35-03246	26-Mar-10 15:00	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Total Containers:			1			
DP35-03247	26-Mar-10 15:15	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Total Containers:			1			

100328 -04 ↓ -10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Ford	3/29/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0881

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-6°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	(N/A)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003278 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6870

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003288 Number of Coolers: 3 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6907

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-9°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s) (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228 Number of Coolers: 4 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 3941

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228 Number of Coolers: 5 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 8076

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228 Number of Coolers: 6 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0892

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.0°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228 Number of Coolers: 7 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/30/10 09:00** Date cooler(s) opened: **3/30/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0860

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3°C

Dates samples were logged-in: **3/30/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

1003248

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/27/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 03/30/2010 09:00 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 03/30/2010 17:34

Samples Received at: **1.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1003248-01 DP-01-03036 [Solid] Sampled 03/29/2010 15:25 Pacific				**QSM 4.1**
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 17:25	water TAL + Mo
SGC_DRO_8015B_3546	04/20/2010 14:00	20	04/12/2010 17:25	+MO
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 17:25	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/05/2010 17:25	
MET_7471A_MERCURY	04/20/2010 14:00	20	04/26/2010 17:25	
1003248-02 DP-01-03037 [Solid] Sampled 03/29/2010 15:30 Pacific				**QSM 4.1.**
SGC_DRO_8015B_3546	04/20/2010 14:00	20	04/12/2010 17:30	+MO
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 17:30	AP VIALS.
MET_7471A_MERCURY	04/20/2010 14:00	20	04/26/2010 17:30	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/05/2010 17:30	
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 17:30	water TAL + Mo
1003248-03 DP-01-03042 [Solid] Sampled 03/29/2010 10:20 Pacific				**QSM 4.1**
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 12:20	water TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/05/2010 12:20	
SGC_DRO_8015B_3546	04/20/2010 14:00	20	04/12/2010 12:20	+MO
MET_7471A_MERCURY	04/20/2010 14:00	20	04/26/2010 12:20	
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 12:20	AP VIALS.

1003248

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003248-04 DP-01-03043 [Solid] Sampled 03/29/2010 10:25 Pacific				**QSM 4.1**
MET_7471A_MERCURY	04/20/2010 14:00	20	04/26/2010 12:25	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/05/2010 12:25	
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 12:25	AP VIALS.
SGC_DRO_8015B_3546	04/20/2010 14:00	20	04/12/2010 12:25	+MO
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 12:25	water TAL + Mo
1003248-05 DP-02-03045 [Solid] Sampled 03/29/2010 11:45 Pacific				**QSM 4.1**
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 13:45	AP VIALS.
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/05/2010 13:45	
1003248-06 DP-02-03046 [Solid] Sampled 03/29/2010 11:50 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/05/2010 13:50	
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 13:50	AP VIALS.
1003248-07 EB-106 [Water] Sampled 03/29/2010 08:15 Central				**QSM 4.1**
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/05/2010 08:15	+ Aroclor-1262 & 1268
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 08:15	water TAL + Mo
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/05/2010 08:15	+MO
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	20	04/05/2010 08:15	
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 08:15	
MET_7470_MERCURY	04/20/2010 14:00	20	04/26/2010 08:15	
1003248-08 TB-106 [Water] Sampled 03/29/2010 08:15 Central				**QSM 4.1**
VOC_8260B_AP9	04/20/2010 14:00	20	04/12/2010 08:15	
1003248-09 EB-105 [Water] Sampled 03/26/2010 08:00 Central				**QSM 4.1**
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/22/2010 08:00	water TAL + Mo
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 08:00	+MO
MET_7470_MERCURY	04/20/2010 14:00	20	04/23/2010 08:00	
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/02/2010 08:00	+ Aroclor-1262 & 1268
1003248-10 TB-305 [Water] Sampled 03/26/2010 08:20 Central				**QSM 4.1**
VOC_8260B_AP9	04/20/2010 14:00	20	04/09/2010 08:20	
1003248-11 EB-205 [Water] Sampled 03/26/2010 14:15 Central				**QSM 4.1**
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 14:15	+MO. LOW VOLUME!!
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/22/2010 14:15	water TAL + Mo
MET_7470_MERCURY	04/20/2010 14:00	20	04/23/2010 14:15	
LC_EXPL_8330A	04/20/2010 14:00	20	04/02/2010 14:15	LOW VOLUME!!

1003248

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003248-12 DP02-03512 [Water] Sampled 03/29/2010 10:40 Central				**QSM 4.1**
MET_7470_MERCURY	04/20/2010 14:00	20	04/26/2010 10:40	
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/05/2010 10:40	+ Aroclor-1262 & 1268
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 10:40	water TAL + Mo
1003248-13 DP02-03513 [Water] Sampled 03/29/2010 12:10 Central				**QSM 4.1**
MET_7470_MERCURY	04/20/2010 14:00	20	04/26/2010 12:10	
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/05/2010 12:10	+ Aroclor-1262 & 1268
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/25/2010 12:10	water TAL + Mo
1003248-14 DP01-07116 [Solid] Sampled 03/26/2010 14:40 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 16:40	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 16:40	
1003248-15 DP01-07117 [Solid] Sampled 03/26/2010 14:45 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 16:45	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 16:45	
1003248-16 DP01-07118 [Solid] Sampled 03/26/2010 14:50 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 16:50	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 16:50	
1003248-17 DP01-07119 [Solid] Sampled 03/26/2010 14:55 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 16:55	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 16:55	
1003248-18 DP01-07124 [Solid] Sampled 03/26/2010 10:00 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 12:00	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 12:00	
1003248-19 DP01-07125 [Solid] Sampled 03/26/2010 10:05 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 12:05	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 12:05	
1003248-20 DP01-07126 [Solid] Sampled 03/26/2010 10:10 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 12:10	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 12:10	
1003248-21 DP01-07127 [Solid] Sampled 03/26/2010 10:15 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 12:15	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 12:15	

1003248

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003248-22 DP02-07120 [Solid] Sampled 03/26/2010 11:05 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:05	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 13:05	
1003248-23 DP02-07121 [Solid] Sampled 03/26/2010 11:10 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 13:10	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:10	
1003248-24 DP02-07122 [Solid] Sampled 03/26/2010 11:15 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:15	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 13:15	
1003248-25 DP02-07123 [Solid] Sampled 03/26/2010 11:20 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 13:20	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:20	
1003248-26 DP02-57120 [Solid] Sampled 03/26/2010 11:05 Pacific				**QSM 4.1**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	20	04/09/2010 13:05	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:05	
1003248-27 DP05-03126 [Solid] Sampled 03/26/2010 10:15 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 12:15	
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 12:15	
1003248-28 DP05-03127 [Solid] Sampled 03/26/2010 10:20 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 12:20	
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 12:20	
1003248-29 DP06-03129 [Solid] Sampled 03/26/2010 13:40 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 15:40	
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 15:40	
1003248-30 DP06-03130 [Solid] Sampled 03/26/2010 13:50 Pacific				**QSM 4.1**
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 15:50	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 15:50	
1003248-31 DP06-03131 [Solid] Sampled 03/26/2010 13:55 Pacific				**QSM 4.1**
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 15:55	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 15:55	

1003248

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003248-32 DP06-53130 [Solid] Sampled 03/26/2010 13:50 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 15:50	
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 15:50	
1003248-33 DP07-03132 [Solid] Sampled 03/26/2010 11:00 Pacific				**QSM 4.1**
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 13:00	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:00	
1003248-34 DP07-03133 [Solid] Sampled 03/26/2010 11:05 Pacific				**QSM 4.1**
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 13:05	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 13:05	
1003248-35 DP10-03141 [Solid] Sampled 03/26/2010 09:10 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 11:10	
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 11:10	
1003248-36 DP10-03142 [Solid] Sampled 03/26/2010 09:15 Pacific				**QSM 4.1**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	20	04/02/2010 11:15	
LC_EXPL_8330A	04/20/2010 14:00	20	04/09/2010 11:15	
1003248-37 DP02-03510 [Water] Sampled 03/26/2010 13:45 Central				**QSM 4.1**
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	20	04/02/2010 13:45	
VOC_8260B_AP9	04/20/2010 14:00	20	04/09/2010 13:45	
MET_7470_MERCURY	04/20/2010 14:00	20	04/23/2010 13:45	
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/22/2010 13:45	water TAL + Mo
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 13:45	+MO
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/02/2010 13:45	+ Aroclor-1262 & 1268
1003248-38 DP02-03511 [Water] Sampled 03/26/2010 13:45 Central				**QSM 4.1**
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 13:45	+MO
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/02/2010 13:45	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/20/2010 14:00	20	04/09/2010 13:45	
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	20	04/02/2010 13:45	
MET_7470_MERCURY	04/20/2010 14:00	20	04/23/2010 13:45	
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/22/2010 13:45	water TAL + Mo
1003248-39 DP02-03512 [Water] Sampled 03/26/2010 10:20 Central				**QSM 4.1**
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 10:20	+MO
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	20	04/02/2010 10:20	
VOC_8260B_AP9	04/20/2010 14:00	20	04/09/2010 10:20	

1003248

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003248-40 DP02-03513 [Water] Sampled 03/26/2010 11:00 Central				**QSM 4.1**
VOC_8260B_AP9	04/20/2010 14:00	20	04/09/2010 11:00	
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	20	04/02/2010 11:00	
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 11:00	+MO
1003248-41 DP02-53510 [Water] Sampled 03/26/2010 13:45 Central				**QSM 4.1**
MET_7470_MERCURY	04/20/2010 14:00	20	04/23/2010 13:45	
MET_ICP_6010B_FULL	04/20/2010 14:00	20	09/22/2010 13:45	water TAL + Mo
SGC_DRO_8015B_3510	04/20/2010 14:00	20	04/02/2010 13:45	+MO
SGC_PCB8082A_3510	04/20/2010 14:00	20	04/02/2010 13:45	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	20	04/02/2010 13:45	
VOC_8260B_AP9	04/20/2010 14:00	20	04/09/2010 13:45	
SGS/Paradigm (SUB028)				
1003248-11 EB-205 [Water] Sampled 03/26/2010 14:15 Central				**QSM 4.1**
SUB_DIOXINS_8290	04/20/2010 14:00	20	04/25/2010 14:15	sub to SGS - Wilmington. LOW VOLUME!!

Reviewed By

Date

Chain of Custody Record

COC Number: **32910P**

CH2MHILL 3/29/2010 3:48:12 PM Page 1 of 2

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003248

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SM8015B-P	SM8260B/624	
DP01-03036	29-Mar-10 15:25	N	Soil					
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°C			☐	☑	-01
	Total Containers:	3						
DP01-03037	29-Mar-10 15:30	N	Soil					
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°C			☐	☑	-02
	Total Containers:	3						
DP01-03042	29-Mar-10 10:20	N	Soil					
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°C			☐	☑	-03
	Total Containers:	3						
DP01-03043	29-Mar-10 10:25	N	Soil					
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°C			☐	☑	-04
	Total Containers:	3						

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Frank	3/29/10 1600
Received by		
Relinquished by		
Received by		3/30/10 09:00

4.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:
Sample Custody
and
Janice Shilling

Report Copy to

Chain of Custody Record

COC Number: **32910P**

CH2MHILL *3/29/2010 3:48:12 PM* Page 2 of 2

Project Name Location
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP02-03045	29-Mar-10 11:45	N	Soil				
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑
			Total Containers:	3			
DP02-03046	29-Mar-10 11:50	N	Soil				
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑
			Total Containers:	3			
DP35-03246	26-Mar-10 15:00	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Total Containers:	1			
DP35-03247	26-Mar-10 15:15	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Total Containers:	1			

1003248
-05
-06
1003288
-09
-10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Jones	3/29/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

4.9c

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32910P**

CH2MHILL *3/29/2010 4:03:46 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003248

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8260B/624
EB-106	29-Mar-10 8:15	N	Water			
	Field Filtered: ☐			3	H2O,MeOH,4°C	☑ -07
	Total Containers:			3		
TB-106	29-Mar-10 8:15	N	Water			
	Field Filtered: ☐			3	H2O,MeOH,4°C	☑ -08
	Total Containers:			3		

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		3/29/10 16:00
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **33010B**

CH2MHILL *3/29/2010 3:23:12 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

100348

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8082	SW8270Sim
EB-106	29-Mar-10 8:15	N	Water					
			Field Filtered: ☐	~~6~~ 4	4°C	☐	☑	☑
			Field Filtered: ☐	2	4°C	☑	☐	☐
			Total Containers:	~~10~~ 6				

-07

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Grant	3/29/10 1530
Received by		
Relinquished by		
Received by	3/30/10 09:00	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.9°C

Chain of Custody Record

COC Number: **32910B**

CH2MHILL *3/29/2010 11:28:16 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003248

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082
EB-105	26-Mar-10 8:00	N	Water					
				Field Filtered: ☐ 1 ✓	HNO4	☑	☐	☐
				Field Filtered: ☐ ~~8~~ 2	4°C	☐	☐	☑
				Field Filtered: ☐ 2 ✓	4°C	☐	☑	☐
				Total Containers: ~~11~~ 5				

-09

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Franklin	3/29/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0074
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32910B**

CH2MHILL *3/29/2010 11:29:19 AM* Page 1 of 1

Project Name
Task Order **Location**
Project: 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8260B/624
TB-305	26-Mar-10 8:20	N	Water			
			Field Filtered: ☐	3	~~H2O,MeOH,4°C~~ HCl	☑
			Total Containers:	3		

1003248

-10

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jant	3/29/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	3/30/10 09:00

Shipping Details

Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0076
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

4.9°C

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32910B**

CH2MHILL *3/29/2010 11:39:26 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

100348

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	8330	SW6010B/7470A	SW8015B-E	SW8290	
EB-205	26-Mar-10	N	Water							
			Field Filtered: ☐	2 ✓	4°C	☐	☐	☐	☑	
			Field Filtered: ☐	1 ✓	~~None~~	☑	☐	☐	☐	-11
			Field Filtered: ☐	~~2~~ 1	HNO4	☐	☑	☐	☐	
			Field Filtered: ☐	2 ✓	4°C	☐	☐	☑	☐	
				Total Containers:	7					

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	1500 3/29/10
Relinquished by		
Received by		
Relinquished by		3/30/10 09:00
Received by		4.9c

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0074
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/29/2010 3:14:24 PM* Page 1 OF 1

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 3/29/2010
COC Number: 33010w

	Container:	1 x 250 ml Poly	2 x 1L Amber			
	Preservatives:	HNO4	4°C			
	Filtered:	NA	NA			
	Holding Time:	28	7			
		Title 22 Metals (6010B/7470A)	PCBs (8082)		Number of Containers	1003248 COMMENTS
DP02-03512	3/29/2010 10:40 Water	X	X		5	-12
DP02-03513	3/29/2010 12:10 Water	X	X		5	-13
				TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Janice Shilling	3/29/10 1550
Received by		
Relinquished by		
Received by		3/30/10 09:00 4.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

3/29/2010 9:07:31 AM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/26/2010
COC Number: 32910

1003228

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	30	28	28	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	PCBs (8082) LAB QC	Explosives (8330)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
DP01-03054 -01	3/26/2010 15:05 Soil		x ✓	x ✓					x ✓			3	
DP01-03055 -02	3/26/2010 15:00 Soil		x ✓	x ✓					x ✓			3	
DP01-03056 -03	3/26/2010 15:15 Soil		x ✓	x ✓					x ✓			3	
DP01-03060 -04	3/26/2010 9:20 Soil		x ✓		x ✓						MS/MSD	~~2~~ 3	
DP01-03060 ↓	3/26/2010 9:20 Soil									x		~~1~~ 2	
DP01-03061 -05	3/26/2010 9:30 Soil		x ✓	x ✓					x ✓			3	
DP01-07116 1003228-M	3/26/2010 14:40 Soil	x ✓										1	
DP01-07117 -15	3/26/2010 14:45 Soil	x ✓										1	
DP01-07118 -16	3/26/2010 14:50 Soil	x ✓										1	
DP01-07119 -17	3/26/2010 14:55 Soil	x ✓										1	
DP01-07124 -18	3/26/2010 10:00 Soil	x ✓										1	
DP01-07125 -19	3/26/2010 10:05 Soil	x ✓										1	
DP01-07126 -20	3/26/2010 10:10 Soil	x ✓										1	
DP01-07127 -21	3/26/2010 10:15 Soil	x ✓										1	

ws 3/30/10
1005

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Faust	3/29/10 1100
Received by		
Relinquished by		
Received by		3/30/10 09:00 4.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6987 0074
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** 3/29/2010 9:07:31 AM Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/26/2010
COC Number: 32910

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	30	28	28	28		
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	PCBs (8082) LAB QC	Explosives (8330)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
DP01-53061 (1003208-06)	3/26/2010	9:30	Soil		x ✓	x ✓					x ✓		3	
DP02-03057 (-07)	3/26/2010	11:30	Soil		x ✓	x ✓					x ✓		3	
DP02-03058 (-08)	3/26/2010	11:35	Soil		x ✓	x ✓					x ✓		3	
DP02-07120 (1003248-22)	3/26/2010	11:05	Soil	x ✓									1	
DP02-07121 (-23)	3/26/2010	11:10	Soil	x ✓									1	
DP02-07122 (-24)	3/26/2010	11:15	Soil	x ✓									1	
DP02-07123 (-25)	3/26/2010	11:20	Soil	x ✓									1	
DP02-57120 (-26)	3/26/2010	11:05	Soil	x ✓									1	
DP05-03126 (-27)	3/26/2010	10:15	Soil				x ✓						1	
DP05-03127 (-28)	3/26/2010	10:20	Soil				x ✓						1	
DP06-03129 (-29)	3/26/2010	13:40	Soil				x ✓						1	
DP06-03130 (-30)	3/26/2010	13:50	Soil				x ✓						1	
DP06-03131 (-31)	3/26/2010	13:55	Soil				x ✓						1	
DP06-53130 (-32)	3/26/2010	13:50	Soil				x ✓						1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Faxel	3/29/10 1100
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/29/2010 9:07:32 AM* Page 3 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/26/2010
COC Number: 32910

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	30	28	28	28		
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	PCBs (8082) LAB QC	Explosives (8330)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
DP07-03132 1003248-33	3/26/2010	11:00	Soil					x ✓				1	
DP07-03133 -34	3/26/2010	11:05	Soil					x ✓				1	
DP10-03141 -35	3/26/2010	9:10	Soil					x ✓				1	
DP10-03142 -36	3/26/2010	9:15	Soil					x ✓				1	
DP35-03246 1003273-09	3/26/2010	15:00	Soil		x ✓				x ✓			2	
DP35-03246 ↓	3/26/2010	15:00	Soil						x ✓			1	
DP35-03247 1003273-10	3/26/2010	15:15	Soil		x ✓				x ✓	x ✓		3	
										TOTAL NUMBER OF CONTAINERS		53	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jard	3/29/10 1100
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
4.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **32910W**

CH2MHILL 3/29/2010 8:13:07 AM Page 1 of 2 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003248

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8260B/624	SW8270Sim	
DP02-03510	26-Mar-10 13:45	N	Water						
	Field Filtered: ☐			2 ✓	4°C	☐	☐	☑	
	Field Filtered: ☐			2 ✓	4°C	☑	☐	☐	-37
	Field Filtered: ☐			3 ✓	~~H2O,MeOH,4°C~~ pres VOA	☐	☑	☐	
	Total Containers:			7					
DP02-03511	26-Mar-10 13:45	N	Water						
	Field Filtered: ☐			✓2	4°C	☐	☐	☑	
	Field Filtered: ☐			✓2	4°C	☑	☐	☐	-38
	Field Filtered: ☐			✓3	~~H2O,MeOH,4°C~~ pres VOA	☐	☑	☐	
	Total Containers:			7					

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	3/29/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0076
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4-9e

Chain of Custody Record

COC Number: **32910W**

CH2MHILL 3/29/2010 8:13:07 AM Page 2 of ~~2~~ 3

Project Name Location
Task Order Project: 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8260B/624	SW8270Sim
DP02-03512	26-Mar-10 10:20	N	Water					
			Field Filtered: ☐	2 ✓	4°C	☐	☐	☑
			Field Filtered: ☐	2 ✓	4°C	☑	☐	☐
			Field Filtered: ☐	3 ✓ ~~H2O,MeOH,4°C~~ pres. VOA		☐	☑	☐
			Total Containers:	7				
DP02-03513	26-Mar-10 11:00	N	Water					
			Field Filtered: ☐	2 ✓	4°C	☐	☐	☑
			Field Filtered: ☐	2 ✓	4°C	☑	☐	☐
			Field Filtered: ☐	3 ✓ ~~H2O,MeOH,4°C~~ pres. VOA		☐	☑	☐
			Total Containers:	7				

ws 3/30/10
1003428
1003248
-39
-40

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaia Trask	3/29/10 10:00
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.9°C

Chain of Custody Record

COC Number: **32910W**

CH2MHILL *3/29/2010 8:19:06 AM* Page 3 of 3

Project Name Location
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003248

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8260B/624	SW8270Sim
DP02-53510	26-Mar-10 13:45	N	Water					
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☑	☐	☐
			Field Filtered: ☐	3 ✓	H2O,MeOH,4°C	☐	☑	☐
			Total Containers:		7			

-41

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Faith	3/29/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		3/30/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.9°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003248 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0881

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-6°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	WS 3/30/10 Yes	(No) *	N/A ← 1003248 only
18. Was headspace present in any included VOA vials?	WS 3/30/10 Yes	No	(N/A) WS 3/30/10

If Non-Conformance issues were present, list by sample ID: _____

* DP01-03037 dry weight container not recd! CAR#: _____

Headspace present in one vial on all samples: TB-106, FB-106 1003248 only!
† TB-305

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003248 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6870

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003248 Number of Coolers: 3 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6907

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-9°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003248 Number of Coolers: 4 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 8941

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR# _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003240 Number of Coolers: 5 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 8076

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s) (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003248 Number of Coolers: 6 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0892

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.0°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003228, 1003248 Number of Coolers: 7 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/30/10 09:00 Date cooler(s) opened: 3/30/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0860

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/29/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3°C

Dates samples were logged-in: 3/30/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/30/2010 9:50:50 AM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/30/2010
COC Number: 33010

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-03036	3/29/2010 15:25 Soil		x ✓	x ✓	1003248-01	2	
DP01-03037	3/29/2010 15:30 Soil		x ✓	x ✓	-02	2	
DP01-03042	3/29/2010 10:20 Soil		x ✓	x ✓	-03	2	
DP01-03043	3/29/2010 10:25 Soil		x ✓	x ✓	-04	2	
DP01-03090	3/29/2010 14:40 Soil			x ✓	1003254-31	1	
DP01-03091	3/29/2010 14:45 Soil			x ✓	-32	1	
DP01-03102	3/29/2010 9:50 Soil			x ✓	-33	1	
DP01-03103	3/29/2010 9:55 Soil			x ✓	-34	1	
DP01-07092	3/29/2010 15:05 Soil	x ✓			-35	1	
DP01-07093	3/29/2010 15:10 Soil	x ✓			-36	1	
DP01-07094	3/29/2010 15:15 Soil	x ✓			-37	1	
DP01-07095	3/29/2010 15:20 Soil	x ✓			-38	1	
DP01-07100	3/29/2010 9:45 Soil	x ✓			-39	1	
DP01-07101	3/29/2010 9:50 Soil	x ✓			-40	1	

	Signatures	Date/Time
Approved by		
Sampled by		3/30/10
Relinquished by	Janice Shilling	1100
Received by		
Relinquished by		
Received by		3/31/10

08:30 1.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **33010W**

CH2MHILL 3/30/2010 11:13:55 AM Page 1 of 1

Project Name
Task Order **Location**
Project: 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8270Sim
EB-106	29-Mar-10 8:15	N	Water						
			Field Filtered:☐	1	HNO4	☑	☐	☐	☐
			Total Containers:	1					
EB-107	29-Mar-10 7:30	N	Water						
			Field Filtered:☐	1	HNO4	☑	☐	☐	☐
			Field Filtered:☐	8	4°C	☐	☐	☑	☑
			Field Filtered:☐	2	4°C	☐	☑	☐	☐
			Total Containers:	11					

1003248
-07
1003254
-01

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		3/30/10
Relinquished by	Jamie Eby	1100
Received by		
Relinquished by		
Received by		3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **33010W**

CH2MHILL 3/30/2010 10:59:52 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8082
DP02-03510	26-Mar-10 13:45	N	Water				
sampled 3/29/10 1400			Field Filtered: ☐	1	HNO4	☑	☐
sampled 3/29/10 1400			Field Filtered: ☐	~~1~~ 2	4°C	☐	☑
			Total Containers:	~~5~~ 3			
DP02-03511	26-Mar-10 13:45	N	Water				
sampled 3/29/10 1425			Field Filtered: ☐	1	HNO4	☑	☐
sampled 3/29/10 1425			Field Filtered: ☐	~~1~~ 2	4°C	☐	☑
			Total Containers:	~~5~~ 3			
DP02-53510	29-Mar-10 14:00	N	Water				
sampled 3/29/10 1400			Field Filtered: ☐	1	HNO4	☑	☐
sampled 3/29/10 1400			Field Filtered: ☐	~~1~~ 2	4°C	☐	☑
			Total Containers:	~~5~~ 3			

1003248
-37
-38
-41

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Terrance Frost	3/30/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		3/31/10 08:20

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003248, 1003254 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature):

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 0837

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.4°C

Dates samples were logged-in: 3/31/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial) WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 3/31/10	Yes	(No)	N/A → NO for 1003254 only!
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all metals

If Non-Conformance issues were present, list by sample ID:

No Dry Weight containers recd for DP02-03039, DP02-03040, DP02-53040, CAR#:

1003254 only!

2 vials broken in shipment for DP02-03506, 3 L ambers broken for DP02-03507! These 2 samples DP02-03506 & 03507 all parameters on hold per hot cooler!

1003248

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254 Number of Coolers: 6 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0815

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.8°C

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254 Number of Coolers: 7 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/31/10 08:30** Date cooler(s) opened: **3/31/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0005

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers? ..... 3/31/10 WS	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	~~Yes~~	(No)	N/A

All ice melted to H_2O

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 15.5°C

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

1003254

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/28/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 03/31/2010 08:30 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 03/31/2010 13:13

Samples Received at: **4.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1003254-01 EB-107 [Water] Sampled 03/30/2010 07:30 Pacific				**QSM4.1**
MET_7470_MERCURY	04/21/2010 14:00	20	04/27/2010 09:30	
MET_ICP_6010B_FULL	04/21/2010 14:00	20	09/26/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	04/21/2010 14:00	20	04/06/2010 09:30	+MO
SMS_PAH_8270C_3510_LOW	04/21/2010 14:00	20	04/06/2010 09:30	
SGC_PCB8082A_3510	04/21/2010 14:00	20	04/06/2010 09:30	+ Aroclor-1262 & 1268
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 09:30	LOW VOLUME!!!
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 09:30	LOW VOLUME!!!
1003254-02 TB-107 [Water] Sampled 03/30/2010 07:25 Pacific				**QSM4.1**
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 09:25	LOW VOLUME!!!
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 09:25	LOW VOLUME!!!
1003254-03 EB-207 [Water] Sampled 03/30/2010 07:45 Pacific				**QSM4.1**
MET_7470_MERCURY	04/21/2010 14:00	20	04/27/2010 09:45	
MET_ICP_6010B_FULL	04/21/2010 14:00	20	09/26/2010 09:45	water TAL + Mo
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 09:45	LOW VOLUME!!!
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 09:45	LOW VOLUME!!!
SGC_DRO_8015B_3510	04/21/2010 14:00	20	04/06/2010 09:45	+MO
1003254-04 TB-207 [Water] Sampled 03/30/2010 07:45 Pacific				**QSM4.1**
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 09:45	LOW VOLUME!!!
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 09:45	LOW VOLUME!!!

1003254

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1003254-05 DP01-03066 [Solid] Sampled 03/30/2010 12:05 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/21/2010 14:00	20	04/13/2010 14:05	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 14:05	+MO
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 14:05	
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 14:05	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 14:05	AP VIALS
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 14:05	soil TAL + Mo
1003254-06 DP01-03067 [Solid] Sampled 03/30/2010 12:10 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/21/2010 14:00	20	04/13/2010 14:10	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 14:10	AP VIALS
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 14:10	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 14:10	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 14:10	+MO
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 14:10	
1003254-07 DP02-03039 [Solid] Sampled 03/30/2010 10:10 Pacific				**QSM4.1. NO DRY WEIGHT CONTAINER RECD!**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 12:10	NO CONTAINER RECD!!
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 12:10	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 12:10	soil TAL + Mo
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:10	AP VIALS
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 12:10	+MO
1003254-08 DP02-03040 [Solid] Sampled 03/30/2010 10:15 Pacific				**QSM4.1. NO DRY WEIGHT CONTAINER RECD!**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 12:15	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:15	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 12:15	NO CONTAINER RECD!!
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 12:15	+MO
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 12:15	soil TAL + Mo
1003254-09 DP02-03069 [Solid] Sampled 03/30/2010 14:30 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 16:30	MS/MSD.
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 16:30	MS/MSD.
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 16:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 16:30	MS/MSD. +MO
SGC_PCB8082A_3546	04/21/2010 14:00	20	04/13/2010 16:30	MS/MSD. + Aroclor-1262 & 1268
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 16:30	MS/MSD. AP VIALS

1003254

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003254-10 DP02-03070 [Solid] Sampled 03/30/2010 14:35 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 16:35	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 16:35	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 16:35	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 16:35	AP VIALS
SGC_PCB8082A_3546	04/21/2010 14:00	20	04/13/2010 16:35	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 16:35	+MO
1003254-11 DP02-53040 [Solid] Sampled 03/30/2010 10:15 Pacific				**QSM4.1. NO DRY WEIGHT CONTAINER RECD!**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 12:15	NO CONTAINER RECD!!
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:15	AP VIALS
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 12:15	
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 12:15	+MO
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 12:15	soil TAL + Mo
1003254-12 DP02-53070 [Solid] Sampled 03/30/2010 14:35 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 16:35	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 16:35	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 16:35	+MO
SGC_PCB8082A_3546	04/21/2010 14:00	20	04/13/2010 16:35	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 16:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 16:35	
1003254-13 DP15-03186 [Solid] Sampled 03/30/2010 15:15 Pacific				**QSM4.1**
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 17:15	AP VIALS
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 17:15	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 17:15	
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 17:15	+MO
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 17:15	soil TAL + Mo
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 17:15	AP VIALS
1003254-14 DP15-03187 [Solid] Sampled 03/30/2010 15:20 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 17:20	soil TAL + Mo
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 17:20	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 17:20	
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 17:20	+MO
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 17:20	AP VIALS
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 17:20	

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1003254-15 DP15-03189 [Solid] Sampled 03/30/2010 14:15 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 16:15	+MO
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 16:15	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 16:15	soil TAL + Mo
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 16:15	AP VIALS
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 16:15	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 16:15	
1003254-16 DP16-03190 [Solid] Sampled 03/30/2010 14:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 16:30	
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 16:30	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 16:30	AP VIALS
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 16:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 16:30	+MO
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 16:30	AP VIALS
1003254-17 DP16-53190 [Solid] Sampled 03/30/2010 14:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 16:30	
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 16:30	AP VIALS
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 16:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 16:30	+MO
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 16:30	
1003254-18 DP17-03192 [Solid] Sampled 03/30/2010 12:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 14:00	
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 14:00	AP VIALS
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 14:00	soil TAL + Mo
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 14:00	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 14:00	AP VIALS
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 14:00	+MO
1003254-19 DP17-03193 [Solid] Sampled 03/30/2010 12:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 14:00	AP VIALS
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 14:00	AP VIALS
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 14:00	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 14:00	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 14:00	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 14:00	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003254-20 DP18-03195 [Solid] Sampled 03/30/2010 10:25 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 12:25	
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 12:25	AP VIALS
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:25	AP VIALS
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 12:25	+MO
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 12:25	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 12:25	soil TAL + Mo
1003254-21 DP18-03196 [Solid] Sampled 03/30/2010 10:30 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 12:30	+MO
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 12:30	
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 12:30	AP VIALS
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:30	AP VIALS
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 12:30	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 12:30	
1003254-22 DP18-03197 [Solid] Sampled 03/30/2010 10:35 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 12:35	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 12:35	soil TAL + Mo
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 12:35	AP VIALS
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 12:35	
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 12:35	+MO
1003254-23 DP19-03198 [Solid] Sampled 03/30/2010 09:15 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 11:15	soil TAL + Mo
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 11:15	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 11:15	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 11:15	
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 11:15	AP VIALS
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 11:15	+MO
1003254-24 DP19-03199 [Solid] Sampled 03/30/2010 09:25 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 11:25	+MO
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 11:25	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 11:25	soil TAL + Mo
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 11:25	AP VIALS
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 11:25	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 11:25	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1003254-25 DP19-03200 [Solid] Sampled 03/30/2010 08:53 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 10:53	
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 10:53	+MO
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 10:53	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 10:53	AP VIALS
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 10:53	soil TAL + Mo
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 10:53	AP VIALS
1003254-26 DP19-53200 [Solid] Sampled 03/30/2010 09:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/21/2010 14:00	20	04/27/2010 11:15	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/26/2010 11:15	soil TAL + Mo
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 11:15	AP VIALS
VGC_GRO_8015B	04/21/2010 14:00	20	04/13/2010 11:15	AP VIALS
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/13/2010 11:15	+MO
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/06/2010 11:15	
1003254-27 EB-206 [Water] Sampled 03/29/2010 08:05 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	04/21/2010 14:00	20	09/25/2010 10:05	water TAL + Mo
MET_7470_MERCURY	04/21/2010 14:00	20	04/26/2010 10:05	
1003254-28 EB-304 [Water] Sampled 03/26/2010 08:20 Pacific				**QSM4.1**
SGC_PCB8082A_3510	04/21/2010 14:00	20	04/02/2010 10:20	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3510	04/21/2010 14:00	20	04/02/2010 10:20	+MO
1003254-29 EB-305 [Water] Sampled 03/29/2010 12:40 Pacific				**QSM4.1**
MET_7470_MERCURY	04/21/2010 14:00	20	04/26/2010 14:40	
MET_ICP_6010B_FULL	04/21/2010 14:00	20	09/25/2010 14:40	water TAL + Mo
1003254-30 EB-307 [Water] Sampled 03/30/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 09:40	LOW VOLUME!!!
MET_ICP_6010B_FULL	04/21/2010 14:00	20	09/26/2010 09:40	water TAL + Mo
SMS_PAH_8270C_3510_LOW	04/21/2010 14:00	20	04/06/2010 09:40	
SGC_DRO_8015B_3510	04/21/2010 14:00	20	04/06/2010 09:40	+MO
MET_7470_MERCURY	04/21/2010 14:00	20	04/27/2010 09:40	
1003254-31 DP01-03090 [Solid] Sampled 03/29/2010 14:40 Pacific				
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 16:40	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 16:40	
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 16:40	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003254-32 DP01-03091 [Solid] Sampled 03/29/2010 14:45 Pacific				
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 16:45	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 16:45	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 16:45	
1003254-33 DP01-03102 [Solid] Sampled 03/29/2010 09:50 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 11:50	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 11:50	soil TAL + Mo
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 11:50	
1003254-34 DP01-03103 [Solid] Sampled 03/29/2010 09:55 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 11:55	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 11:55	soil TAL + Mo
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 11:55	
1003254-35 DP01-07092 [Solid] Sampled 03/29/2010 15:05 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 17:05	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 17:05	
1003254-36 DP01-07093 [Solid] Sampled 03/29/2010 15:10 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 17:10	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 17:10	
1003254-37 DP01-07094 [Solid] Sampled 03/29/2010 15:15 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 17:15	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 17:15	
1003254-38 DP01-07095 [Solid] Sampled 03/29/2010 15:20 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 17:20	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 17:20	
1003254-39 DP01-07100 [Solid] Sampled 03/29/2010 09:45 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 11:45	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 11:45	
1003254-40 DP01-07101 [Solid] Sampled 03/29/2010 09:50 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 11:50	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 11:50	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003254-41 DP01-07102 [Solid] Sampled 03/29/2010 10:00 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 12:00	
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 12:00	
1003254-42 DP01-07103 [Solid] Sampled 03/29/2010 10:05 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 12:05	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 12:05	
1003254-43 DP01-53090 [Solid] Sampled 03/29/2010 14:40 Pacific				
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 16:40	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 16:40	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 16:40	
1003254-44 DP01-57100 [Solid] Sampled 03/29/2010 09:45 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 11:45	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 11:45	
1003254-45 DP02-03045 [Solid] Sampled 03/29/2010 11:45 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 13:45	
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 13:45	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 13:45	soil TAL + Mo
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/12/2010 13:45	+MO
1003254-46 DP02-03046 [Solid] Sampled 03/29/2010 11:50 Pacific				
SGC_DRO_8015B_3546	04/21/2010 14:00	20	04/12/2010 13:50	+MO
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 13:50	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 13:50	
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 13:50	
1003254-47 DP02-03093 [Solid] Sampled 03/29/2010 14:15 Pacific				
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 16:15	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 16:15	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 16:15	
1003254-48 DP02-03094 [Solid] Sampled 03/29/2010 14:20 Pacific				
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 16:20	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 16:20	
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 16:20	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1003254-49 DP02-03105 [Solid] Sampled 03/29/2010 10:35 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 12:35	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 12:35	soil TAL + Mo
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 12:35	
1003254-50 DP02-03106 [Solid] Sampled 03/29/2010 10:41 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 12:41	
MET_ICP_LOW6010B_FULL	04/21/2010 14:00	20	09/25/2010 12:41	soil TAL + Mo
MET_7471A_MERCURY	04/21/2010 14:00	20	04/26/2010 12:41	
1003254-51 DP02-07104 [Solid] Sampled 03/29/2010 11:25 Pacific				
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 13:25	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 13:25	
1003254-52 DP02-07105 [Solid] Sampled 03/29/2010 11:30 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 13:30	
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 13:30	
1003254-53 DP02-07106 [Solid] Sampled 03/29/2010 11:40 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 13:40	
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 13:40	
1003254-54 DP02-07107 [Solid] Sampled 03/29/2010 11:35 Pacific				
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	20	04/05/2010 13:35	
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	20	04/12/2010 13:35	
1003254-55 DP02-03506 [Water] Sampled 03/30/2010 09:15 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	04/21/2010 14:00	20	09/26/2010 11:15	water TAL + Mo
SGC_DRO_8015B_3510	04/21/2010 14:00	20	04/06/2010 11:15	+MO
MET_7470_DIS_MERCURY	04/21/2010 14:00	20	04/27/2010 11:15	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 11:15	LOW VOLUME!!! ONLY 1 VIAL!!!
SMS_PAH_8270C_3510_LOW	04/21/2010 14:00	20	04/06/2010 11:15	
1003254-56 DP02-03507 [Water] Sampled 03/30/2010 10:35 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	04/21/2010 14:00	20	09/26/2010 12:35	water TAL + Mo
MET_7470_DIS_MERCURY	04/21/2010 14:00	20	04/27/2010 12:35	
VOC_8260B_AP9	04/21/2010 14:00	20	04/13/2010 12:35	
SMS_PAH_8270C_3510_LOW	04/21/2010 14:00	20	04/06/2010 12:35	limited vol 500mL for PAH
SGC_DRO_8015B_3510	04/21/2010 14:00	20	04/06/2010 12:35	+MO limited vol. 500mL for DRO

SGS/Paradigm (SUB028)

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1003254-03 EB-207 [Water] Sampled 03/30/2010 07:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 09:45	sub to SGS - Wilmington
1003254-13 DP15-03186 [Solid] Sampled 03/30/2010 15:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 17:15	sub to SGS - Wilmington
1003254-14 DP15-03187 [Solid] Sampled 03/30/2010 15:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 17:20	sub to SGS - Wilmington
1003254-15 DP15-03189 [Solid] Sampled 03/30/2010 14:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 16:15	sub to SGS - Wilmington
1003254-16 DP16-03190 [Solid] Sampled 03/30/2010 14:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 16:30	sub to SGS - Wilmington
1003254-17 DP16-53190 [Solid] Sampled 03/30/2010 14:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 16:30	sub to SGS - Wilmington
1003254-18 DP17-03192 [Solid] Sampled 03/30/2010 12:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 14:00	sub to SGS - Wilmington
1003254-19 DP17-03193 [Solid] Sampled 03/30/2010 12:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 14:00	sub to SGS - Wilmington
1003254-20 DP18-03195 [Solid] Sampled 03/30/2010 10:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 12:25	sub to SGS - Wilmington
1003254-21 DP18-03196 [Solid] Sampled 03/30/2010 10:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 12:30	sub to SGS - Wilmington
1003254-22 DP18-03197 [Solid] Sampled 03/30/2010 10:35 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 12:35	sub to SGS - Wilmington
1003254-23 DP19-03198 [Solid] Sampled 03/30/2010 09:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 11:15	sub to SGS - Wilmington
1003254-24 DP19-03199 [Solid] Sampled 03/30/2010 09:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 11:25	sub to SGS - Wilmington
1003254-25 DP19-03200 [Solid] Sampled 03/30/2010 08:53 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 10:53	sub to SGS - Wilmington

1003254

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1003254-26 DP19-53200 [Solid] Sampled 03/30/2010 09:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/21/2010 14:00	20	04/29/2010 11:15	sub to SGS - Wilmington

Reviewed By

Date

Chain of Custody Record

COC Number: **33010P**

CH2MHILL *3/30/2010 4:50:35 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003254

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-107	30-Mar-10 7:30	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	-01
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:		5			
TB-107	30-Mar-10 7:25	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	-02
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:		5			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaca	3/30/10 1450
Relinquished by		
Received by		
Relinquished by	[signature]	3/31/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.4°C

Chain of Custody Record

COC Number: **33010W**

CH2MHILL *3/30/2010 11:13:55 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8270Sim
EB-106	29-Mar-10 8:15	N	Water						
			Field Filtered:☐	1	HNO4	☑	☐	☐	☐
			Total Containers:		1				
EB-107	29-Mar-10 7:30	N	Water						
			Field Filtered:☐	1	HNO4	☑	☐	☐	☐
			Field Filtered:☐	8	4°C	☐	☐	☑	☑
			Field Filtered:☐	2	4°C	☐	☑	☐	☐
			Total Containers:		11				

1003248
-07
1003254
-01

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		3/30/10
Sampled by	Jamie Eby	1100
Relinquished by		
Received by		
Relinquished by		
Received by		3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **33010P**

CH2MHILL *3/30/2010 4:43:31 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003254

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-207	30-Mar-10 7:45	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			
TB-207	30-Mar-10 7:45	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			

-03

-04

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	3/30/10 1640
Relinquished by		
Received by		
Relinquished by		
Received by		3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1.6°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **33010P**

CH2MHILL *3/30/2010 4:32:30 PM* Page 1 of 7

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003254

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP01-03066	30-Mar-10 12:05	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-05
			Total Containers:	3				
DP01-03067	30-Mar-10 12:10	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-06
			Total Containers:	3				
DP02-03039	30-Mar-10 10:10	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-07
			Total Containers:	3				
DP02-03040	30-Mar-10 10:15	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-08
			Total Containers:	3				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Frank	3/30/10 1630
Received by		
Relinquished by		
Received by		3/31/10 08:30

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1.6°C

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **33010P**

CH2MHILL *3/30/2010 4:32:30 PM* Page 2 of 7

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP02-03069	30-Mar-10 14:30	N	Soil					1003254
LAB QC			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	X2 MS/MSD -09
			Total Containers:	3				
DP02-03070	30-Mar-10 14:35	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-10
			Total Containers:	3				
DP02-53040	30-Mar-10 10:15	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-11
			Total Containers:	3				
DP02-53070	30-Mar-10 14:35	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-12
			Total Containers:	3				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Jurst	3/30/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by	3/31/10 08:30	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **33010P**

CH2MHILL *3/30/2010 4:32:30 PM* Page 3 of 7

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003254

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP15-03186	30-Mar-10 15:15	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	-13
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☐	☑	
			Total Containers:		4			
DP15-03187	30-Mar-10 15:20	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	-14
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☐	☑	
			Total Containers:		4			
DP16-03189	30-Mar-10 14:15	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	-15
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☐	☑	
			Total Containers:		4			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jones	3/30/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	3/31/10

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

08:30 1.6°C

Chain of Custody Record

COC Number: **33010P**

CH2MHILL 3/30/2010 4:32:30 PM Page 4 of 7

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP16-03190	30-Mar-10 14:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP16-53190	30-Mar-10 14:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP17-03192	30-Mar-10 12:00	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

1003254

-16

-17

-18

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jank	3/30/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		3/31/10 08:30

1.6°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **33010P**

CH2MHILL *3/30/2010 4:32:30 PM* Page 5 of 7

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003254

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SM8015B-P	SM8260B/624	
DP17-03193	30-Mar-10 12:00	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-19
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°I	☐	☑	
	Total Containers:			4				
DP18-03195	30-Mar-10 10:25	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-20
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°I	☐	☑	
	Total Containers:			4				
DP18-03196	30-Mar-10 10:30	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-21
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°I	☐	☑	
	Total Containers:			4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	3/30/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		3/31/10 08:30

3/31/10

1.6°C

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:

Sample Custody
and
Janice Shilling

Report Copy to

Chain of Custody Record

COC Number: 33010P

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP18-03197	30-Mar-10 10:35	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP19-03198	30-Mar-10 9:15	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP19-03199	30-Mar-10 9:25	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			

1003254

-22

-23

-24

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Jones	3/30/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C 1.6°C

Chain of Custody Record

COC Number: 33010P

1003254

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP19-03200	30-Mar-10 8:53	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-25
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				
DP19-53200	30-Mar-10 9:15	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-26
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	3/30/10 1430
Relinquished by		
Received by		
Relinquished by		3/30/10
Received by		3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **33010W**

CH2MHILL 3/30/2010 11:26:02 AM Page 1 of 1

Project Name
Task Order **Location**
Project: 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A
EB-206	29-Mar-10 8:05	N	Water			
			Field Filtered: ☐	2 / 1	HNO4	☑
			Total Containers:	2 / 1		

1003254

-27

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jard	3/30/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **33010W**

CH2MHILL *3/30/2010 11:33:09 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1003254

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8260B/624	SW8270Sim	
EB-304	26-Mar-10 8:20	N	Water								
			Field Filtered: ☐	~~8~~ 2	4°C	✓ ☐	☐	☑	☐	☐	-28
			Field Filtered: ☐	2	4°C	✓ ☐	☑	☐	☐	☐	
			Total Containers:		10						
EB-305	29-Mar-10 12:40	N	Water								
			Field Filtered: ☐	~~2~~ 1	HNO4	✓ ☑	☐	☐	☐	☐	-29
			Total Containers:		2						
EB-307	30-Mar-10 7:40	N	Water								
			Field Filtered: ☐	~~2~~ 1	HNO4	✓ ☑	☐	☐	☐	☐	-30
			Field Filtered: ☐	~~8~~ 2	4°C	☐	☐	☐	☐	☑	
			Field Filtered: ☐	2	4°C	✓ ☐	☑	☐	☐	☐	
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☑	
			Total Containers:		15						

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jack	3/30/10 1100
Relinquished by		
Received by		
Relinquished by		3/31/10 08:30
Received by		

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8734 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1.6°C

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/30/2010 9:50:50 AM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/30/2010
COC Number: 33010

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-03036	3/29/2010 15:25 Soil		X ✓	X ✓	1003248-01	2	
DP01-03037	3/29/2010 15:30 Soil		X ✓	X ✓	-02	2	
DP01-03042	3/29/2010 10:20 Soil		X ✓	X ✓	-03	2	
DP01-03043	3/29/2010 10:25 Soil		X ✓	X ✓	-04	2	
DP01-03090	3/29/2010 14:40 Soil			X ✓	1003254-31	1	
DP01-03091	3/29/2010 14:45 Soil			X ✓	-32	1	
DP01-03102	3/29/2010 9:50 Soil			X ✓	-33	1	
DP01-03103	3/29/2010 9:55 Soil			X ✓	-34	1	
DP01-07092	3/29/2010 15:05 Soil	X ✓			-35	1	
DP01-07093	3/29/2010 15:10 Soil	X ✓			-36	1	
DP01-07094	3/29/2010 15:15 Soil	X ✓			-37	1	
DP01-07095	3/29/2010 15:20 Soil	X ✓			-38	1	
DP01-07100	3/29/2010 9:45 Soil	X ✓			-39	1	
DP01-07101	3/29/2010 9:50 Soil	X ✓			-40	1	

	Signatures	Date/Time
Approved by		
Sampled by		3/30/10
Relinquished by	Jamaica Jones	1100
Received by		
Relinquished by		
Received by		3/31/10

08:30 1.8C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/30/2010 9:50:51 AM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/30/2010
COC Number: 33010

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-07102	3/29/2010 10:00 Soil	x ✓			1003254-41	1	
DP01-07103	3/29/2010 10:05 Soil	x ✓			-42	1	
DP01-53090	3/29/2010 14:40 Soil			x ✓	-43	1	
DP01-57100	3/29/2010 9:45 Soil	x ✓			-44	1	
DP02-03045	3/29/2010 11:45 Soil		x ✓	x ✓	-45	2	
DP02-03046	3/29/2010 11:50 Soil		x ✓	x ✓	-46	2	
DP02-03093	3/29/2010 14:15 Soil			x ✓	-47	1	
DP02-03094	3/29/2010 14:20 Soil			x ✓	-48	1	
DP02-03105	3/29/2010 10:35 Soil			x ✓	-49	1	
DP02-03106	3/29/2010 10:41 Soil			x ✓	-50	1	
DP02-07104	3/29/2010 11:25 Soil	x ✓			-51	1	
DP02-07105	3/29/2010 11:30 Soil	x ✓			-52	1	
DP02-07106	3/29/2010 11:40 Soil	x ✓			-53	1	
DP02-07107	3/29/2010 11:35 Soil	x ✓			-54	1	

	Signatures	Date/Time
Approved by		
Sampled by		3/30/10
Relinquished by	[signature]	1100
Received by		
Relinquished by	[signature]	3/31/10
Received by		08:30

1.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 0989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

3/30/2010 9:50:51 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/30/2010
COC Number: 33010

	PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	Title 22 Metals (6010B/7470A)
Container:	4oz soil jar	Share 4oz jar	4oz soil jar
Preservatives:	4°C	4°C	4°C
Filtered:	NA	NA	NA
Holding Time:	14	14	28

DATE	TIME	Matrix	Number of Containers	COMMENTS
		TOTAL NUMBER OF CONTAINERS	34	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jink	3/30/10 1100
Received by		
Relinquished by		
Received by	[signature]	3/31/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.8°C

Chain of Custody Record

COC Number: **33010W**

CH2MHILL 3/30/2010 11:50:21 AM Page 1 of 2

Project Name | **Location**
Task Order | **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim
DP02-03506	30-Mar-10 9:15	N	Water							
	Field Filtered:☐			1	HNO4 ✓	☑	☐	☐	☐	☐
	Field Filtered:☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered:☐			2	4°C ✓	☐	☑	☐	☐	☐
	Field Filtered:☐			3	~~H2O,MeOH,4°C~~ pres HCl ✓	☐	☐	☐	☑	☐
	Total Containers:			8						
DP02-03507	30-Mar-10 10:35	N	Water							
	Field Filtered:☐			1	HNO4	☑	☐	☐	☐	☐
	Field Filtered:☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered:☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered:☐			3	~~H2O,MeOH,4°C~~ HCl	☐	☐	☐	☑	☐
	Total Containers:			8						

1003254

-55

-56

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	3/30/10 1130
Relinquished by		
Received by		
Relinquished by		3/31/10 0813
Received by	ws	3/31/10 15.5°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0065
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003248, 1003254 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature):

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 0837

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.4°C

Dates samples were logged-in: 3/31/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial) WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 3/31/10	Yes	(No)	N/A → NO for 1003254 only!
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all metals

If Non-Conformance issues were present, list by sample ID:

No Dry Weight containers recd for DP02-03039, DP02-03040, DP02-53040, CAR#:

1003254 only!

2 vials broken in shipment for DP02-03506, 3 L ambers broken for DP02-03507! These 2 samples DP02-03506 & 03507 all parameters on hold per hot cooler!

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0517

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1063254 Number of Coolers: 3 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0508

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.7c

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254 Number of Coolers: 4 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0848

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.9°C

~~Dates samples were logged-in:~~ ~~3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003248, 1003254 Number of Coolers: 5 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0826

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

1003248

LIMS Number: 1003254 Number of Coolers: 6 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 3/31/10 08:30 Date cooler(s) opened: 3/31/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0815

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.8°C

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 7

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254 Number of Coolers: 7 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **3/31/10 08:30** Date cooler(s) opened: **3/31/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 0065

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers? ..... 3/31/10 WS	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	~~Yes~~	(No)	N/A

All ice melted to H_2O

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 15.5oC

~~Dates samples were logged-in: 3/31/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 7

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

CH2MHILL **CHAIN OF CUSTODY RECORD** 3/31/2010 2:36:58 PM Page 1 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	DATE	TIME	Matrix	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
	Container:			4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar			
	Preservatives:			4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:			NA	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:			14	14	14	14	14	14	30	28	28			
DP01-03066	3/30/2010	12:05	Soil			X		X			X		1003254-05 ~~1003254~~	2 ~~3~~	
DP01-03067	3/30/2010	12:10	Soil			X		X			X		-06	2 ~~3~~	
DP01-03108	3/30/2010	16:00	Soil								X		1004007-26	1	
DP01-03109	3/30/2010	16:05	Soil								X		-27	1	
DP01-07132	3/30/2010	11:45	Soil	X									-28	1	
DP01-07133	3/30/2010	11:50	Soil	X									-29	1	
DP01-07134	3/30/2010	11:55	Soil	X									-30	1	
DP01-07135	3/30/2010	12:00	Soil	X									-31	1	
DP02-03039	3/30/2010	10:10	Soil			X					X		1003254-07	2	
DP02-03040	3/30/2010	10:15	Soil			X					X		-08	2	
DP02-03069	3/30/2010	14:30	Soil				X		X			X	MS/MSD -09	~~4~~ 8	
DP02-03070	3/30/2010	14:35	Soil			X		X			X		-10	2 ~~3~~	
DP02-03111	3/30/2010	15:50	Soil								X		1004007-32	1	
DP02-07096	3/30/2010	9:35	Soil	X									-33	1	

4/1/10 WS WS 4/1/10

Signatures		Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10

08:15 4.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** 3/31/2010 2:36:59 PM Page 2 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	DATE	TIME	Matrix	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	14	30	28	28			
✓ DP02-07097	3/30/2010	9:40	Soil	X									1004007-34 ~~1003~~	1	
✓ DP02-07098	3/30/2010	9:45	Soil	X									-35	1	
✓ DP02-07099	3/30/2010	9:50	Soil	X									-36	1	
✓ DP02-07136	3/30/2010	14:10	Soil	X									-37	1	
✓ DP02-07137	3/30/2010	14:15	Soil	X									-38	1	
✓ DP02-07138	3/30/2010	14:20	Soil	X									-39	1	
✓ DP02-07139	3/30/2010	14:25	Soil	X									-40	1	
✓ DP02-53040	3/30/2010	10:15	Soil			X					X		1003254-11	2	
✓ DP02-53070	3/30/2010	14:35	Soil			X		X			X		-12	~~2~~ 3	
✓ DP15-03186	3/30/2010	15:15	Soil			X				X	X		-13	3	
✓ DP15-03187	3/30/2010	15:20	Soil			X				X	X		-14	3	
✓ DP16-03189	3/30/2010	14:15	Soil			X				X	X		-15	3	
✓ DP16-03190	3/30/2010	14:30	Soil			X				X	X		-16	3	
✓ DP16-53190	3/30/2010	14:30	Soil			X				X	X		-17	3	

WS 4/1/10

Signatures		Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

4.0°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *3/31/2010 2:36:59 PM* Page 3 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	14	30	28	28				
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC				
	DATE	TIME	Matrix										Number of Containers	COMMENTS
✓ DP17-03192	3/30/2010	12:00	Soil			X				X	X		1003254 -18	3	
✓ DP17-03193	3/30/2010	12:00	Soil			X				X	X		-19	3	
✓ DP18-03195	3/30/2010	10:25	Soil			X				X	X		-20	3	
✓ DP18-03196	3/30/2010	10:30	Soil			X				X	X		-21	3	
✓ DP18-03197	3/30/2010	10:35	Soil			X				X	X		-22	3	
✓ DP19-03198	3/30/2010	9:15	Soil			X				X	X		-23	3	
✓ DP19-03199	3/30/2010	9:25	Soil			X				X	X		-24	3	
✓ DP19-03200	3/30/2010	8:53	Soil			X				X	X		-25	3	
✓ DP19-53200	3/30/2010	9:15	Soil			X				X	X		-26	3	
✓ DP01-03072	3/31/2010	11:25	Soil			X		X			X		1004007 - 41	~~2~~ 3	
✓ DP01-03073	3/31/2010	11:30	Soil			X		X			X		-42	~~2~~ 3	
✓ DP01-07140	3/31/2010	11:00	Soil	X									-43	1	
✓ DP01-07141	3/31/2010	11:05	Soil	X									-44	1	
✓ DP01-07142	3/31/2010	11:10	Soil	X									-45	1	

	Signatures	Date/Time
Approved by	C Schilling	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.0°C

Chain of Custody Record

COC Number: **33110W4**

CH2MHILL 3/31/2010 9:26:45 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8290
EB-207	30-Mar-10 7:45	N	Water					
				Field Filtered: ☐ 2 ✓	4°C	☐	☐	☑
				Field Filtered: ☐ ~~2~~ 1 ✓	HNO4	☑	☐	☐
				Field Filtered: ☐ 2 ✓	4°C	☐	☑	☐
				Total Containers: ~~6~~ 5				

1003254

-03

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schulz	3/31/10 10:00
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:
ATTN:
Sample Custody
and
Janice Shilling

Report Copy to

4.8°C

WS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254, 1004007 Number of Coolers: 1 of ~~8~~ 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0754

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.0°C

Dates samples were logged-in: **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

WS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007, 1003254 Number of Coolers: 2 of ~~89~~

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0745

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.1°C

~~Dates samples were logged in: 4/01/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page WS 4/1/10

1 of ~~89~~

JS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254, 1004007 Number of Coolers: 3 of 89

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 0054

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4-8°C

~~Dates samples were logged-in: 4/01/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 89 JS 4/1/10

Sonya Gordon

From: Mark.Fesler@CH2M.com
Sent: Wednesday, March 31, 2010 3:10 PM
To: sgordon@empirlabs.com
Subject: FW: Alameda samples received today

Sonya:

After speaking with Tamara Frank, please go ahead and proceed with the analyses for DP02-03506 and DP02-03507 as indicated on the COC. Let me know if you do not have enough sample volume to perform all of the tests.

Mark Fesler
Environmental Scientist
CH2M Hill
2525 Airpark Dr
Redding CA 96001
(530) 229-3273
mark.fesler@ch2m.com

From: Frank, Tamara/BAO
Sent: Wednesday, March 31, 2010 11:57 AM
To: Fesler, Mark/RDD
Subject: RE: Alameda samples received today

We are struggling to get out of this area by Friday. I'll put these at the bottom of the list, but I'd have them go ahead and run the remaining amber from DP02-03507 for PAH or TPH-e (or both, with a decreased PQL, if feasible). I always think that some data (even flagged for temperature – these are not volatiles) is better than no data. These are groundwaters, so we will have to recore the concrete, and redrill the well.

From: Fesler, Mark/RDD
Sent: Wednesday, March 31, 2010 11:26 AM
To: Frank, Tamara/BAO
Cc: sgordon@empirlabs.com
Subject: RE: Alameda samples received today

Tamara:

Based on the fact the cooler temperature exceeded the 6 deg C requirement (nearly ambient temperature) and a number of sample containers were broken, I suggest we should re-collect these two samples. Is that feasible?

Mark Fesler
Associate Scientist
#645 Ext. 3273

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Wednesday, March 31, 2010 11:12 AM
To: Fesler, Mark/RDD
Cc: Frank, Tamara/BAO
Subject: Alameda samples received today

we received one cooler today at 15.5°C (COC # 33010W). It contained samples DP02-03506 and DP02-03507. Also 3 of the I L ambers for sample DP02-03507 were broken. Please let me know what you want us to do.

Thanks,

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004007

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/29/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/01/2010 08:15, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/01/2010 13:22

Samples Received at: **3.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004007-01 DP01-03072 [Solid] Sampled 03/31/2010 11:25 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 13:25	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:25	
1004007-02 DP01-03073 [Solid] Sampled 03/31/2010 11:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:30	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 13:30	AP VIALS
1004007-03 DP01-03254 [Solid] Sampled 03/31/2010 16:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 18:05	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 18:05	AP VIALS
1004007-04 DP01-03255 [Solid] Sampled 03/31/2010 16:10 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 18:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 18:10	
1004007-05 DP02-03075 [Solid] Sampled 03/31/2010 10:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 12:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 12:00	
1004007-06 DP02-03076 [Solid] Sampled 03/31/2010 10:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 12:05	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 12:05	AP VIALS

1004007

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004007-07 DP03-03260 [Solid] Sampled 03/31/2010 16:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 18:35	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 18:35	AP VIALS
1004007-08 DP03-03261 [Solid] Sampled 03/31/2010 15:40 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 17:40	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 17:40	
1004007-09 DP03-53260 [Solid] Sampled 03/31/2010 15:35 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 17:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 17:35	
1004007-10 DP04-03263 [Solid] Sampled 03/31/2010 14:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 16:30	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 16:30	AP VIALS
1004007-11 DP04-03264 [Solid] Sampled 03/31/2010 14:35 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 16:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 16:35	
1004007-12 DP16-03302 [Solid] Sampled 03/31/2010 14:55 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 16:55	soil TAL + Mo
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 16:55	+MO
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 16:55	AP VIALS
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 16:55	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 16:55	
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 16:55	
1004007-13 DP17-03305 [Solid] Sampled 03/31/2010 14:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 16:00	AP VIALS
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 16:00	
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 16:00	soil TAL + Mo
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 16:00	+MO
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 16:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 16:00	

1004007

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004007-14 DP18-03308 [Solid] Sampled 03/31/2010 10:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 12:15	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 12:15	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 12:15	AP VIALS
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 12:15	AP VIALS
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 12:15	+MO
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 12:15	soil TAL + Mo
1004007-15 DP18-03309 [Solid] Sampled 03/31/2010 10:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 12:30	AP VIALS
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 12:30	AP VIALS
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 12:30	soil TAL + Mo
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 12:30	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 12:30	
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 12:30	+MO
1004007-16 EB-108 [Water] Sampled 03/31/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 09:40	
MET_ICP_6010B_FULL	04/22/2010 14:00	20	09/27/2010 09:40	water TAL + Mo
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/07/2010 09:40	+MO
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 09:40	
SGC_PCB8082A_3510	04/22/2010 14:00	20	04/07/2010 09:40	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/07/2010 09:40	
MET_7470_MERCURY	04/22/2010 14:00	20	04/28/2010 09:40	
1004007-17 TB-108 [Water] Sampled 03/31/2010 07:50 Pacific				**QSM4.1**
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 09:50	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 09:50	
1004007-18 EB-208 [Water] Sampled 03/31/2010 07:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/07/2010 09:30	LOW VOLUME!!!
MET_ICP_6010B_FULL	04/22/2010 14:00	20	09/27/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/07/2010 09:30	+MO. LOW VOLUME!!!
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 09:30	
MET_7470_MERCURY	04/22/2010 14:00	20	04/28/2010 09:30	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 09:30	

1004007

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004007-19 TB-208 [Water] Sampled 03/31/2010 07:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 09:30	
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 09:30	
1004007-20 DP02-03504 [Water] Sampled 03/30/2010 13:05 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/06/2010 15:05	+MO
MET_ICP_6010B_FULL_DIS	04/22/2010 14:00	20	09/26/2010 15:05	water TAL + Mo
MET_7470_DIS_MERCURY	04/22/2010 14:00	20	04/27/2010 15:05	
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/06/2010 15:05	
VOC_8260B_AP9	04/22/2010 14:00	20	04/13/2010 15:05	
1004007-21 DP02-03505 [Water] Sampled 03/30/2010 14:30 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	04/22/2010 14:00	20	09/26/2010 16:30	water TAL + Mo
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/06/2010 16:30	+MO
MET_7470_DIS_MERCURY	04/22/2010 14:00	20	04/27/2010 16:30	
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/06/2010 16:30	
VOC_8260B_AP9	04/22/2010 14:00	20	04/13/2010 16:30	
1004007-22 EB-308 [Water] Sampled 03/31/2010 08:20 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	04/22/2010 14:00	20	09/27/2010 10:20	water TAL + Mo
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/07/2010 10:20	+MO
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 10:20	
VGC_GRO_8015B	04/22/2010 14:00	20	04/14/2010 10:20	
MET_7470_MERCURY	04/22/2010 14:00	20	04/28/2010 10:20	
SGC_PCB8082A_3510	04/22/2010 14:00	20	04/07/2010 10:20	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/07/2010 10:20	
1004007-23 TB-306 [Water] Sampled 03/31/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	04/22/2010 14:00	20	04/14/2010 09:40	
1004007-24 DP02-03515 [Water] Sampled 03/30/2010 16:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/06/2010 18:45	
VOC_8260B_AP9	04/22/2010 14:00	20	04/13/2010 18:45	
MET_7470_DIS_MERCURY	04/22/2010 14:00	20	04/27/2010 18:45	
MET_ICP_6010B_FULL_DIS	04/22/2010 14:00	20	09/26/2010 18:45	water TAL + Mo
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/06/2010 18:45	+MO
SGC_PCB8082A_3510	04/22/2010 14:00	20	04/06/2010 18:45	+ Aroclor-1262 & 1268

1004007

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004007-25 DP02-03514 [Water] Sampled 03/30/2010 16:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/22/2010 14:00	20	04/06/2010 18:00	
SGC_PCB8082A_3510	04/22/2010 14:00	20	04/06/2010 18:00	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/22/2010 14:00	20	04/13/2010 18:00	
MET_ICP_6010B_FULL_DIS	04/22/2010 14:00	20	09/26/2010 18:00	water TAL + Mo
MET_7470_DIS_MERCURY	04/22/2010 14:00	20	04/27/2010 18:00	
SGC_DRO_8015B_3510	04/22/2010 14:00	20	04/06/2010 18:00	+MO
1004007-26 DP01-03108 [Solid] Sampled 03/30/2010 16:00 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/22/2010 14:00	20	04/27/2010 18:00	
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/26/2010 18:00	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 18:00	
1004007-27 DP01-03109 [Solid] Sampled 03/30/2010 16:05 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/26/2010 18:05	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 18:05	
MET_7471A_MERCURY	04/22/2010 14:00	20	04/27/2010 18:05	
1004007-28 DP01-07132 [Solid] Sampled 03/30/2010 11:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 13:45	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 13:45	
1004007-29 DP01-07133 [Solid] Sampled 03/30/2010 11:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 13:50	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 13:50	
1004007-30 DP01-07134 [Solid] Sampled 03/30/2010 11:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 13:55	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 13:55	
1004007-31 DP01-07135 [Solid] Sampled 03/30/2010 12:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 14:00	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 14:00	
1004007-32 DP02-03111 [Solid] Sampled 03/30/2010 15:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 17:50	
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/26/2010 17:50	soil TAL + Mo
MET_7471A_MERCURY	04/22/2010 14:00	20	04/27/2010 17:50	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004007-33 DP02-07096 [Solid] Sampled 03/30/2010 09:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 11:35	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 11:35	
1004007-34 DP02-07097 [Solid] Sampled 03/30/2010 09:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 11:40	
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 11:40	
1004007-35 DP02-07098 [Solid] Sampled 03/30/2010 09:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 11:45	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 11:45	
1004007-36 DP02-07099 [Solid] Sampled 03/30/2010 09:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 11:50	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 11:50	
1004007-37 DP02-07136 [Solid] Sampled 03/30/2010 14:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 16:10	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 16:10	
1004007-38 DP02-07137 [Solid] Sampled 03/30/2010 14:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 16:15	
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 16:15	
1004007-39 DP02-07138 [Solid] Sampled 03/30/2010 14:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 16:20	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 16:20	
1004007-40 DP02-07139 [Solid] Sampled 03/30/2010 14:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/13/2010 16:25	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/06/2010 16:25	
1004007-41 DP01-03072 [Solid] Sampled 03/31/2010 11:25 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/22/2010 14:00	20	04/14/2010 13:25	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:25	
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 13:25	
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 13:25	soil TAL + Mo
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 13:25	+MO

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004007-42 DP01-03073 [Solid] Sampled 03/31/2010 11:30 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 13:30	+MO
SGC_PCB8082A_3546	04/22/2010 14:00	20	04/14/2010 13:30	+ Aroclor-1262 & 1268
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 13:30	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:30	
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 13:30	
1004007-43 DP01-07140 [Solid] Sampled 03/31/2010 11:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 13:00	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:00	
1004007-44 DP01-07141 [Solid] Sampled 03/31/2010 11:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:05	
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 13:05	
1004007-45 DP01-07142 [Solid] Sampled 03/31/2010 11:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:10	
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 13:10	
1004007-46 DP01-07143 [Solid] Sampled 03/31/2010 11:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 13:15	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:15	
1004007-47 DP01-57040 [Solid] Sampled 03/31/2010 11:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 13:00	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 13:00	
1004007-48 DP02-03075 [Solid] Sampled 03/31/2010 10:00 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 12:00	
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 12:00	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 12:00	
SGC_PCB8082A_3546	04/22/2010 14:00	20	04/14/2010 12:00	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 12:00	+MO
1004007-49 DP02-03076 [Solid] Sampled 03/31/2010 10:05 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/22/2010 14:00	20	09/27/2010 12:05	soil TAL + Mo
MET_7471A_MERCURY	04/22/2010 14:00	20	04/28/2010 12:05	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 12:05	
SGC_DRO_8015B_3546	04/22/2010 14:00	20	04/14/2010 12:05	+MO
SGC_PCB8082A_3546	04/22/2010 14:00	20	04/14/2010 12:05	+ Aroclor-1262 & 1268

1004007

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004007-50 DP02-07144 [Solid] Sampled 03/31/2010 09:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 11:30	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 11:30	
1004007-51 DP02-07145 [Solid] Sampled 03/31/2010 09:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 11:35	
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 11:35	
1004007-52 DP02-07146 [Solid] Sampled 03/31/2010 09:40 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 11:40	MS/MSD.
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 11:40	MS/MSD.
1004007-53 DP02-07147 [Solid] Sampled 03/31/2010 09:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/22/2010 14:00	20	04/07/2010 11:45	
SMS_PAH_8270C_3546_LOW	04/22/2010 14:00	20	04/14/2010 11:45	

Reviewed By

Date

Chain of Custody Record

COC Number: **33110P**

CH2MHILL *3/31/2010 4:15:27 PM* Page 1 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP01-03072	31-Mar-10 11:25	N	Soil					-01
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	
			Total Containers:	3				
DP01-03073	31-Mar-10 11:30	N	Soil					-02
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	
			Total Containers:	3				
DP01-03254	31-Mar-10 16:05	N	Soil					-03
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	
			Total Containers:	3				
DP01-03255	31-Mar-10 16:10	N	Soil					-04
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	
			Total Containers:	3				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	C Schmoltz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	4/1/10 08:15	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.0°C

Chain of Custody Record

COC Number: **33110P**

CH2MHILL *3/31/2010 4:15:27 PM*

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP02-03075	31-Mar-10 10:00	N	Soil					-05
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°I			☐	☑	
	Total Containers:	3						
DP02-03076	31-Mar-10 10:05	N	Soil					-06
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°I			☐	☑	
	Total Containers:	3						
DP03-03260	31-Mar-10 16:35	N	Soil					-07
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°I			☐	☑	
	Total Containers:	3						
DP03-03261	31-Mar-10 15:40	N	Soil					-08
	Field Filtered: ☐	3	XH2O, 1XMeOH,4°I			☐	☑	
	Total Containers:	3						

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		4/1/10 08:15
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

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ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **33110P**

CH2MHILL *3/31/2010 4:15:27 PM* Page 3 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
✓ DP03-53260	31-Mar-10 15:35	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-09
			Total Containers:	3				
✓ DP04-03263	31-Mar-10 14:30	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-10
			Total Containers:	3				
✓ DP04-03264	31-Mar-10 14:35	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	-11
			Total Containers:	3				
✓ DP16-03302	31-Mar-10 14:55	N	Soil					
			Field Filtered: ☐	1 ✓	MeOH	☑	☐	-12
			Field Filtered: ☐	3 ✓	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:	4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	4/1/10 08:15	

4.0°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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COC Number: **33110P**

CH2MHILL *3/31/2010 4:15:28 PM* Page 4 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP17-03305	31-Mar-10 14:00	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	-13
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:	4				
DP18-03308	31-Mar-10 10:15	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	-14
				3	XH2O, 1XMEOH			
			Total Containers:	1				
DP18-03309	31-Mar-10 10:30	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	-15
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:	4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	C Schilling	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	Mwitthel	4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

QC Numb 33110W5 CH2MHILL 3/31/2010 9:34:04 AM Page 1 of 1

1004007

Project Name Location
Task Order Project: 2010-Alameda Point-Field QC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8081A	SW8082	SW8270Sim
EB-108	31-Mar-10 7:40	N	Water							
			Field Filtered: ☐	~~2~~ 1 ✓	HNO4	☑	☐	☐	☐	☐
			Field Filtered: ☐	~~8~~ 4 ✓	4°C	☐	☐	☑	☑	☑
			Field Filtered: ☐	2 ✓	4°C	☐	☑	☐	☐	☐
			Total Containers:	~~12~~ 7						

-16

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schultz	3-31-10 10:24
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.0°C

Chain of Custody Record

COC Number: **33110P**

CH2MHILL 3/31/2010 3:34:45 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-108	31-Mar-10 7:40	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	-16
			Total Containers:		5			
TB-108	31-Mar-10 7:50	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	-17
			Total Containers:		5			

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **33110P**

CH2MHILL *3/31/2010 3:32:39 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-208	31-Mar-10 7:30	N	Water					
			Field Filtered: ☐	2 ✓	MeOH	☑	☐	-18
			Field Filtered: ☐	3 ✓	H2O,MeOH,4°C	☐	☑	
			Total Containers:	5				
TB-208	31-Mar-10 7:30	N	Water					
			Field Filtered: ☐	2 ✓	MeOH	☑	☐	-19
			Field Filtered: ☐	3 ✓	H2O,MeOH,4°C	☐	☑	
			Total Containers:	5				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	4/1/10 08:15	

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0043
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **33110W3**

CH2MHILL 3/31/2010 8:38:11 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8260B/624	SW8270Sim
DP02-03504	30-Mar-10 13:05	N	Water						
			Field Filtered: ☐	1 ✓	HNO4	☑	☐	☐	☐
			Field Filtered: ☐	2 ✓	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2 ✓	4°C	☐	☑	☐	☐
			Field Filtered: ☐	✓ 3 ✓	H2O,MeOH,4°C	☐	☐	☑	☐
			Total Containers:	8 8					
DP02-03505	30-Mar-10 14:30	N	Water						
			Field Filtered: ☐	1 ✓	HNO4	☑	☐	☐	☐
			Field Filtered: ☐	2 ✓	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2 ✓	4°C	☐	☑	☐	☐
			Field Filtered: ☐	3 ✓	H2O,MeOH,4°C	☐	☐	☑	☐
			Total Containers:	8 8					

1004007

-20

-21

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signature	Date/Time
Approved by	C Schultz	3.31.10 0900
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **33110W7**

CH2MHILL 3/31/2010 10:01:54 AM Page 1 of 2

Project Name
Task Order
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Location
Project: 2010-AlamedaPoint-FieldQC-Team3

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim
EB-308	31-Mar-10 8:20	N	Water						
				Field Filtered: ☐ 1	HNO4	☑	☐	☐	☐
				Field Filtered: ☐ ~~1~~ 4	4°C	☐	☐	☑	☑
				Field Filtered: ☐ 2 ✓	4°C	☐	☑	☐	☐
				Total Containers: 7 ~~12~~					

1004007

-22

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schilling	3-31-10 10:11
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **33110W6**

CH2MHILL 3/31/2010 9:56:14 AM Page 2 of 2

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8260B/624
TB-306	31-Mar-10 7:40	N	Water			
			Field Filtered: ☐	3	H2O,MeOH,4°C	☑
			Total Containers:	3		

1004007

-23

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schultz	3/31/10 10:13
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **33110W1**

CH2MHILL *3/31/2010 8:16:58 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004007

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim
DP02-03515	30-Mar-10 16:45	N	Water							
		Field Filtered: ☐		1 ✓	HNO4	☑	☐	☐	☐	☐
		Field Filtered: ☐		4 ✓	4°C	☐	☐	☑	☐	☑
		Field Filtered: ☐		2 ✓	4°C	☐	☑	☐	☐	☐
		Field Filtered: ☐		3 ✓	H2O,MeOH,4°C	☐	☐	☐	☑	☐
		Total Containers:		10						

-24

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schultz	3.31.10 08:30
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.0°C

Chain of Custody Record

COC Number: **33110W2**

CH2MHILL 3/31/2010 8:26:54 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim
DP02-03514	30-Mar-10 16:00	N	Water							
			Field Filtered:☐	1 ✓	HNO4	☑	☐	☐	☐	☐
			Field Filtered:☐	4 ✓	4°C	☐	☐	☑	☐	☑
			Field Filtered:☐	2 ✓	4°C	☐	☑	☐	☐	☐
			Field Filtered:☐	3 ✓	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:		10					

1004007

-25

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	C Schultz	3-31-10 08:30
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** 3/31/2010 2:36:58 PM Page 1 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	DATE	TIME	Matrix	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC	4/1/10 WS 3/31 4/1/10	Number of Containers	COMMENTS
	Container:			4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar			
	Preservatives:			4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:			NA	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:			14	14	14	14	14	14	30	28	28			
DP01-03066	3/30/2010	12:05	Soil			X		X			X		1003254-05 ~~1003254~~	2 ~~3~~	
DP01-03067	3/30/2010	12:10	Soil			X		X			X		-06	2 ~~3~~	
DP01-03108	3/30/2010	16:00	Soil								X		1004007-26	1	
DP01-03109	3/30/2010	16:05	Soil								X		-27	1	
DP01-07132	3/30/2010	11:45	Soil	X									-28	1	
DP01-07133	3/30/2010	11:50	Soil	X									-29	1	
DP01-07134	3/30/2010	11:55	Soil	X									-30	1	
DP01-07135	3/30/2010	12:00	Soil	X									-31	1	
DP02-03039	3/30/2010	10:10	Soil			X					X		1003254-07	2	
DP02-03040	3/30/2010	10:15	Soil			X					X		-08	2	
DP02-03069	3/30/2010	14:30	Soil				X		X			X	MS/MSD -09	4 ~~6~~	
DP02-03070	3/30/2010	14:35	Soil			X		X			X		-10	2 ~~3~~	
DP02-03111	3/30/2010	15:50	Soil								X		1004007-32	1	
DP02-07096	3/30/2010	9:35	Soil	X									-33	1	

	Signatures	Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** 3/31/2010 2:36:59 PM Page 2 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	14	30	28	28		
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers
	DATE / TIME / Matrix										WS 4/1/10	
✓ DP02-07097	3/30/2010 9:40 Soil	x									1004007-34 ~~1003~~	1
✓ DP02-07098	3/30/2010 9:45 Soil	x									-35	1
✓ DP02-07099	3/30/2010 9:50 Soil	x									-36	1
✓ DP02-07136	3/30/2010 14:10 Soil	x									-37	1
✓ DP02-07137	3/30/2010 14:15 Soil	x									-38	1
✓ DP02-07138	3/30/2010 14:20 Soil	x									-39	1
✓ DP02-07139	3/30/2010 14:25 Soil	x									-40	1
✓ DP02-53040	3/30/2010 10:15 Soil			x					x		1003254-11	2
✓ DP02-53070	3/30/2010 14:35 Soil			x		x			x		-12	~~2~~
✓ DP15-03186	3/30/2010 15:15 Soil			x				x	x		-13	3
✓ DP15-03187	3/30/2010 15:20 Soil			x				x	x		-14	3
✓ DP16-03189	3/30/2010 14:15 Soil			x				x	x		-15	3
✓ DP16-03190	3/30/2010 14:30 Soil			x				x	x		-16	3
✓ DP16-53190	3/30/2010 14:30 Soil			x				x	x		-17	3

Signatures		Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	4/1/10 08:15	4.09c

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *3/31/2010 2:36:59 PM* Page 3 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	DATE	TIME	Matrix	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	14	30	28	28			
DP17-03192	3/30/2010	12:00	Soil			x				x	x		1003254 -18	3	
DP17-03193	3/30/2010	12:00	Soil			x				x	x		-19	3	
DP18-03195	3/30/2010	10:25	Soil			x				x	x		-20	3	
DP18-03196	3/30/2010	10:30	Soil			x				x	x		-21	3	
DP18-03197	3/30/2010	10:35	Soil			x				x	x		-22	3	
DP19-03198	3/30/2010	9:15	Soil			x				x	x		-23	3	
DP19-03199	3/30/2010	9:25	Soil			x				x	x		-24	3	
DP19-03200	3/30/2010	8:53	Soil			x				x	x		-25	3	
DP19-53200	3/30/2010	9:15	Soil			x				x	x		-26	3	
DP01-03072	3/31/2010	11:25	Soil			x		x			x		1004007 - 41	~~2~~ 3	
DP01-03073	3/31/2010	11:30	Soil			x		x			x		-42	~~2~~ 3	
DP01-07140	3/31/2010	11:00	Soil	x									-43	1	
DP01-07141	3/31/2010	11:05	Soil	x									-44	1	
DP01-07142	3/31/2010	11:10	Soil	x									-45	1	

Signatures		Date/Time
Approved by	C Schultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 8254 6989 0054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *3/31/2010 2:36:59 PM* Page 4 OF 4

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 3/31/2010
COC Number: 33110

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	14	30	28	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	PCBs (8082)	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Title 22 Metals (6010B/7470A)	Title 22 Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
DP01-07143	3/31/2010 11:15 Soil	X									1004007-46	1	
DP01-57040	3/31/2010 11:00 Soil	X									-47	1	
DP02-03075	3/31/2010 10:00 Soil			X		X			X		-48	23	
DP02-03076	3/31/2010 10:05 Soil			X		X			X		-49	23	
DP02-07144	3/31/2010 9:30 Soil	X									-50	1	
DP02-07145	3/31/2010 9:35 Soil	X									-51	1	
DP02-07146	3/31/2010 9:40 Soil		X								MS/MSD -52	1	
DP02-07147	3/31/2010 9:45 Soil	X									-53	1	
											TOTAL NUMBER OF CONTAINERS	99	

	Signatures	Date/Time
Approved by	CSchultz	3-31-10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/1/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469890054
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

4.0°C

WS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254, 1004007 Number of Coolers: 1 of ~~8~~ 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0734

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.0°C

Dates samples were logged-in: **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

WS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007, 1003254 Number of Coolers: 2 of 89

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0745

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.1°C

Dates ~~samples were logged in:~~ **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page WS 4/1/10 1 of 89

JS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1003254, 1004007 Number of Coolers: 3 of 89

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 0054

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.8°C

Dates samples were logged-in: ~~4/01/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 89 JS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

WS 4/1/10

LIMS Number: 1004007 Number of Coolers: 4 of ~~8~~ 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/01/10 08:15 Date cooler(s) opened: 4/01/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0043

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.8°C

~~Dates samples were logged in: 4/01/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

WS 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 5 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0767

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.8°C

Dates samples were logged-in: **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

ws 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 6 of ~~9~~

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/01/10 08:15 Date cooler(s) opened: 4/01/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6804

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.3°C

~~Dates samples~~ were logged-in: 4/01/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 7 of 7 a was 4/1/10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0789

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.7°C

Dates ~~samples were~~ logged-in: **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____			
10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

ws 4/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 3 of ~~3~~ 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0712

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.3C

Dates samples were logged-in: **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See case 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 9 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/01/10 08:15** Date cooler(s) opened: **4/01/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0790

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 3/31/10 Seal Initials: CS

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.5°C

Date~~s samples were~~ logged-in: **4/01/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/1/2010 1:06:36 PM* Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/1/2010
COC Number: 4110

	Container:	3 x 40 ml VOA	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	2XH2O, 1XMeOH, 4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	48HR	14	14	14	28			
		VOCs (8260B/624)	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP16-03302	3/31/2010	14:55	Soil				x		1004007-12	1	
DP16-03302	3/31/2010	14:55	Soil					x	↓	1	
DP16-07220	3/31/2010	15:35	Soil		x					1	
DP16-07221	3/31/2010	15:35	Soil		x					1	
DP16-07222	3/31/2010	15:40	Soil		x					1	
DP16-07223	3/31/2010	15:50	Soil		x					1	
DP16-57220	3/31/2010	15:35	Soil		x				↓ 4/2/10	1	
DP17-03305	3/31/2010	14:00	Soil				x	x	1004007-17-13	2	
DP17-07224	3/31/2010	12:00	Soil		x					1	
DP17-07225	3/31/2010	12:00	Soil		x					1	
DP17-07226	3/31/2010	12:00	Soil		x					1	
DP17-07227	3/31/2010	12:00	Soil		x					1	
DP18-03308	3/31/2010	10:15	Soil				x	x	-14	2	
DP18-03309	3/31/2010	10:30	Soil				x	x	-15	2	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/1/10 1300
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.9°C

Chain of Custody Record

COC Number: **4110W1**

CH2MHILL 4/1/2010 9:00:48 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-208	31-Mar-10 7:30	N	Water					
		Field Filtered: ☐		2 1	HNO4 ✓	☑	☐	☐
		Field Filtered: ☐		8 1	4°C ✓	☐	☐	☑
		Field Filtered: ☐		2	4°C ✓	☐	☑	☐
		Total Containers:		12				

1004007

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Ford	4/1/10 0900
Received by		
Relinquished by		
Received by		4/2/10 08:15

4.2°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: 4110W1

CH2MHILL 4/1/2010 9:15:14 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-308	31-Mar-10 8:20	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:		5		
TB-308	31-Mar-10 8:20	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:		5		

1004007
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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jost	4/1/10 0900
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

5.3°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0664

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1-9°C

Dates samples were logged-in: 04/02/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 2 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0697

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4-20C

~~Dates samples were logged-in:~~ ~~04/02/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0686

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.3°C

Dates samples were logged-in: 04/02/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

1004021

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/30/2010 16:00 (20 day TAT)
Received By: William Schwab
Date Received: 04/02/2010 08:15, 03/26/2010 09:00
Logged In By: William Schwab
Date Logged In: 04/02/2010 13:27

Samples Received at: **5.9°C**
Custody Seals Yes Received On Ice Yes
Containers Intact Yes
COC/Labels Agree Yes
Preservation Confirme Yes

Analysis	Due	TAT	Expires	Comments
1004021-01 DP16-07220 [Solid] Sampled 03/31/2010 15:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 17:35	
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 17:35	
1004021-02 DP16-07221 [Solid] Sampled 03/31/2010 15:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 17:35	
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 17:35	
1004021-03 DP16-07222 [Solid] Sampled 03/31/2010 15:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 17:40	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 17:40	
1004021-04 DP16-07223 [Solid] Sampled 03/31/2010 15:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 17:50	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 17:50	
1004021-05 DP16-57220 [Solid] Sampled 03/31/2010 15:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 17:35	
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 17:35	
1004021-06 DP17-07224 [Solid] Sampled 03/31/2010 12:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 14:00	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 14:00	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004021-07 DP17-07225 [Solid] Sampled 03/31/2010 12:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 14:00	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 14:00	
1004021-08 DP17-07226 [Solid] Sampled 03/31/2010 12:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 14:00	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 14:00	
1004021-09 DP17-07227 [Solid] Sampled 03/31/2010 12:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 14:00	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 14:00	
1004021-10 DP18-07228 [Solid] Sampled 03/31/2010 10:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 12:15	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 12:15	
1004021-11 DP18-07229 [Solid] Sampled 03/31/2010 10:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 12:15	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 12:15	
1004021-12 DP18-07230 [Solid] Sampled 03/31/2010 10:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 12:15	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 12:15	
1004021-13 DP18-07231 [Solid] Sampled 03/31/2010 10:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 12:30	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 12:30	
1004021-14 DP18-57230 [Solid] Sampled 03/31/2010 10:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/14/2010 12:15	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/07/2010 12:15	
1004021-15 DP02-03099 [Solid] Sampled 04/01/2010 11:55 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 13:55	+MO
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 13:55	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 13:55	AP VIALS
1004021-16 DP02-03100 [Solid] Sampled 04/01/2010 12:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 14:00	AP VIALS
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 14:00	+MO
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 14:00	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004021-17 DP02-07168 [Solid] Sampled 04/01/2010 11:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 13:25	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 13:25	
1004021-18 DP02-07169 [Solid] Sampled 04/01/2010 11:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 13:30	
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 13:30	
1004021-19 DP02-07170 [Solid] Sampled 04/01/2010 11:35 Pacific				**QSM4.1. MS/MSD**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 13:35	MS/MSD
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 13:35	MS/MSD
1004021-20 DP02-07171 [Solid] Sampled 04/01/2010 11:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 13:40	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 13:40	
1004021-21 DP02-53100 [Solid] Sampled 04/01/2010 12:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 14:00	+MO
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 14:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 14:00	
1004021-22 DP02-57170 [Solid] Sampled 04/01/2010 11:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 13:35	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 13:35	
1004021-23 DP15-03299 [Solid] Sampled 04/01/2010 09:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/23/2010 14:00	20	04/29/2010 11:30	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 11:30	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 11:30	AP VIALS
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 11:30	AP VIALS
MET_ICP_LOW6010B_FULL	04/23/2010 14:00	20	09/28/2010 11:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 11:30	+MO
1004021-24 DP15-07216 [Solid] Sampled 04/01/2010 09:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 11:30	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 11:30	
1004021-25 DP15-07217 [Solid] Sampled 04/01/2010 09:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 11:35	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 11:35	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004021-26 DP15-07218 [Solid] Sampled 04/01/2010 09:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 11:40	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 11:40	
1004021-27 DP15-07219 [Solid] Sampled 04/01/2010 09:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/23/2010 14:00	20	04/15/2010 11:45	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 11:45	
1004021-28 EB-109 [Water] Sampled 04/01/2010 07:00 Pacific				**QSM4.1**
MET_7470_MERCURY	04/23/2010 14:00	20	04/29/2010 09:00	
MET_ICP_6010B_FULL	04/23/2010 14:00	20	09/28/2010 09:00	water TAL + Mo
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/08/2010 09:00	+MO
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/08/2010 09:00	
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 09:00	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 09:00	
1004021-29 EB-309 [Water] Sampled 04/01/2010 13:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/08/2010 15:00	
MET_ICP_6010B_FULL	04/23/2010 14:00	20	09/28/2010 15:00	water TAL + Mo
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/08/2010 15:00	+MO
MET_7470_MERCURY	04/23/2010 14:00	20	04/29/2010 15:00	
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 15:00	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 15:00	
1004021-30 DP17-03558 [Water] Sampled 04/01/2010 09:05 Pacific				**QSM4.1**
MET_7470_DIS_MERCURY	04/23/2010 14:00	20	04/29/2010 11:05	
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/08/2010 11:05	
MET_ICP_6010B_FULL_DIS	04/23/2010 14:00	20	09/28/2010 11:05	water TAL + Mo
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/08/2010 11:05	+MO
1004021-31 DP17-03559 [Water] Sampled 04/01/2010 09:45 Pacific				**QSM4.1**
MET_7470_DIS_MERCURY	04/23/2010 14:00	20	04/29/2010 11:45	
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/08/2010 11:45	
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/08/2010 11:45	+MO
MET_ICP_6010B_FULL_DIS	04/23/2010 14:00	20	09/28/2010 11:45	water TAL + Mo

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004021-32 DP02-03516 [Water] Sampled 03/31/2010 10:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/07/2010 12:40	+MO
SGC_PCB8082A_3510	04/23/2010 14:00	20	04/07/2010 12:40	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/07/2010 12:40	
MET_7470_DIS_MERCURY	04/23/2010 14:00	20	04/28/2010 12:40	
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 12:40	
MET_ICP_6010B_FULL_DIS	04/23/2010 14:00	20	09/27/2010 12:40	water TAL + Mo
1004021-33 DP02-03517 [Water] Sampled 03/31/2010 11:30 Pacific				**QSM4.1**
SGC_PCB8082A_3510	04/23/2010 14:00	20	04/07/2010 13:30	+ Aroclor-1262 & 1268.
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/07/2010 13:30	+MO.
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/07/2010 13:30	
MET_7470_DIS_MERCURY	04/23/2010 14:00	20	04/28/2010 13:30	
MET_ICP_6010B_FULL_DIS	04/23/2010 14:00	20	09/27/2010 13:30	water TAL + Mo
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 13:30	
1004021-34 DP03-03528 [Water] Sampled 03/31/2010 16:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 18:30	
1004021-35 DP03-03529 [Water] Sampled 03/31/2010 16:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 18:45	
1004021-36 DP04-03530 [Water] Sampled 03/31/2010 15:20 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 17:20	
1004021-37 DP04-03531 [Water] Sampled 03/31/2010 15:50 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 17:50	
1004021-38 DP04-53530 [Water] Sampled 03/31/2010 15:20 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 17:20	
1004021-39 DP01-03096 [Solid] Sampled 04/01/2010 15:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 17:20	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 17:20	AP VIALS
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 17:20	+MO
MET_ICP_LOW6010B_FULL	04/23/2010 14:00	20	09/28/2010 17:20	soil TAL + Mo
MET_7471A_MERCURY	04/23/2010 14:00	20	04/29/2010 17:20	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004021-40 DP13-03293 [Solid] Sampled 04/01/2010 14:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 16:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 16:45	
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 16:45	AP VIALS
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 16:45	+MO
MET_7471A_MERCURY	04/23/2010 14:00	20	04/29/2010 16:45	
MET_ICP_LOW6010B_FULL	04/23/2010 14:00	20	09/28/2010 16:45	soil TAL + Mo
1004021-41 DP13-03294 [Solid] Sampled 04/01/2010 14:50 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 16:50	AP VIALS
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 16:50	AP VIALS
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 16:50	+MO
MET_7471A_MERCURY	04/23/2010 14:00	20	04/29/2010 16:50	
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 16:50	
MET_ICP_LOW6010B_FULL	04/23/2010 14:00	20	09/28/2010 16:50	soil TAL + Mo
1004021-42 DP14-03296 [Solid] Sampled 04/01/2010 13:20 Pacific				**QSM4.1**
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 15:20	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 15:20	
MET_7471A_MERCURY	04/23/2010 14:00	20	04/29/2010 15:20	
MET_ICP_LOW6010B_FULL	04/23/2010 14:00	20	09/28/2010 15:20	soil TAL + Mo
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 15:20	+MO
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 15:20	AP VIALS
1004021-43 DP14-03297 [Solid] Sampled 04/01/2010 13:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 15:30	AP VIALS
MET_ICP_LOW6010B_FULL	04/23/2010 14:00	20	09/28/2010 15:30	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/23/2010 14:00	20	04/08/2010 15:30	
MET_7471A_MERCURY	04/23/2010 14:00	20	04/29/2010 15:30	
SGC_DRO_8015B_3546	04/23/2010 14:00	20	04/15/2010 15:30	+MO
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 15:30	AP VIALS
1004021-44 TB-109 [Water] Sampled 04/01/2010 07:00 Pacific				**QSM4.1**
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 09:00	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 09:00	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004021-45 EB-209 [Water] Sampled 04/01/2010 12:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 14:30	
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 14:30	
MET_7470_MERCURY	04/23/2010 14:00	20	04/29/2010 14:30	
MET_ICP_6010B_FULL	04/23/2010 14:00	20	09/28/2010 14:30	water TAL + Mo
SMS_PAH_8270C_3510_LOW	04/23/2010 14:00	20	04/08/2010 14:30	
SGC_DRO_8015B_3510	04/23/2010 14:00	20	04/08/2010 14:30	+MO
1004021-46 TB-209 [Water] Sampled 04/01/2010 12:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/23/2010 14:00	20	04/15/2010 14:30	
VOC_8260B_AP9	04/23/2010 14:00	20	04/15/2010 14:30	
1004021-47 TB-308 [Water] Sampled 03/31/2010 08:20 Pacific				**QSM4.1**
VOC_8260B_AP9	04/23/2010 14:00	20	04/14/2010 10:20	
VGC_GRO_8015B	04/23/2010 14:00	20	04/14/2010 10:20	
SGS/Paradigm (SUB028)				
1004021-28 EB-109 [Water] Sampled 04/01/2010 07:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/23/2010 14:00	20	05/01/2010 09:00	sub to SGS - Wilmington. LOW VOLUME!!!
1004021-45 EB-209 [Water] Sampled 04/01/2010 12:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/23/2010 14:00	20	05/01/2010 14:30	sub to SGS - Wilmington. LOW VOLUME!!!!

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/1/2010 1:06:36 PM* Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/1/2010
COC Number: 4110

	Container:	3 x 40 ml VOA	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	2XH2O, 1XMeOH, 4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	48HR	14	14	14	28			
		VOCs (8260B/624)	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP16-03302	3/31/2010 14:55 Soil				X		1004007-17	1	
DP16-03302	3/31/2010 14:55 Soil					X	↓	1	
DP16-07220	3/31/2010 15:35 Soil		X				1004021-01	1	
DP16-07221	3/31/2010 15:35 Soil		X				-02	1	
DP16-07222	3/31/2010 15:40 Soil		X				-03	1	
DP16-07223	3/31/2010 15:50 Soil		X				-04	1	
DP16-57220	3/31/2010 15:35 Soil		X				-05	1	
DP17-03305	3/31/2010 14:00 Soil				X	X	1004007-13 ~~-17~~ 4/2/10	2	
DP17-07224	3/31/2010 12:00 Soil		X				1004021-06	1	
DP17-07225	3/31/2010 12:00 Soil		X				-07	1	
DP17-07226	3/31/2010 12:00 Soil		X				-08	1	
DP17-07227	3/31/2010 12:00 Soil		X				-09	1	
DP18-03308	3/31/2010 10:15 Soil				X	X	-14	2	
DP18-03309	3/31/2010 10:30 Soil				X	X	-15	2	

Signatures		Date/Time
Approved by		
Sampled by	Jamala Frank	4/1/10 1300
Relinquished by		
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CHAIN OF CUSTODY RECORD

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/1/2010
COC Number: 4110

	Container:	3 x 40 ml VOA	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar		
	Preservatives:	2XH2O, 1XMeOH, 4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA		
	Holding Time:	48HR	14	14	14	28		
		VOCs (8260B/624)	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		
	DATE / TIME / Matrix						Number of Containers	COMMENTS
DP18-07228	3/31/2010 10:15 Soil		X				1	
DP18-07229	3/31/2010 10:15 Soil		X				1	
DP18-07230	3/31/2010 10:15 Soil		X				1	
DP18-07231	3/31/2010 10:30 Soil		X				1	
DP18-57230	3/31/2010 10:15 Soil		X				1	
DP02-03099	4/1/2010 11:55 Soil	X			X		4	
DP02-03100	4/1/2010 12:00 Soil	X			X		4	
DP02-07168	4/1/2010 11:25 Soil		X				1	
DP02-07169	4/1/2010 11:30 Soil		X				1	
DP02-07170	4/1/2010 11:35 Soil			X			1	MS/MSD
DP02-07171	4/1/2010 11:40 Soil		X				1	
DP02-53100	4/1/2010 12:00 Soil	X			X		4	
DP02-57170	4/1/2010 11:35 Soil		X				1	
DP15-03299	4/1/2010 9:30 Soil				X		1	

1004021
1004007 -10 (3/31/10)
-11
-12
-13
-14
-15
-16
-17
-18
-19
-20
-21
-22
-23

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Hark	4/1/10
Relinquished by		1300
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.00

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/1/2010 1:06:37 PM Page 3 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 28 Days
Shipping Date: 4/1/2010
COC Number: 4110

	Container:	3 x 40 ml VOA	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	2XH2O, 1XMeOH, 4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	48HR	14	14	14	28			
		VOCs (8260B/624)	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP15-03299	4/1/2010 9:30 Soil					X	1004021-23 1004007-24	1	
DP15-07216	4/1/2010 9:30 Soil		X				-24 -25	1	
DP15-07217	4/1/2010 9:35 Soil		X				-25 -26	1	
DP15-07218	4/1/2010 9:40 Soil		X				-26 -27	1	
DP15-07219	4/1/2010 9:45 Soil		X				-27 -28	1	
							TOTAL NUMBER OF CONTAINERS	45	

4/2/10

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/1/10 1500
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.9°C

Chain of Custody Record

COC Number: **4110W3**

CH2MHILL 4/1/2010 2:33:45 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
EB-109	01-Apr-10 7:00	N	Water						
			Field Filtered: ☐	~~2~~ 1	4°C	☐	☐	☐	☑
			Field Filtered: ☐	~~2~~ 1	HNO4	☑	☐	☐	☐
			Field Filtered: ☐	~~2~~ 2	4°C	☐	☐	☑	☐
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐
			Total Containers:		14				

1004021

-28

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Franck	4/1/10 1400
Received by		
Relinquished by		
Received by		4/2/10 08:15

1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4110W4**

CH2MHILL 4/1/2010 2:35:58 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
EB-309	01-Apr-10 13:00	N	Water							
			Field Filtered: ☐	~~2~~ 1	HNO4	☑	☐	☐	☐	☐
			Field Filtered: ☐	~~2~~	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	2 ✓	4°C	☐	☑	☐	☐	☐
			Field Filtered: ☐	2 ✓	~~MeOH~~ HCl	☐	☐	☑	☐	☐
			Field Filtered: ☐	3 ✓	~~H2O,MeOH,4°C~~ HCl	☐	☐	☐	☑	☐
			Total Containers:	17						

1004021

-29

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Lark	4/1/10 1400
Received by		
Relinquished by		
Received by	[signature]	4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

Chain of Custody Record

COC Number: **4110W2**

CH2MHILL *4/1/2010 1:54:49 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004021

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP17-03558	01-Apr-10 9:05	N	Water					
	Field Filtered: ☒			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				
DP17-03559	01-Apr-10 9:45	N	Water					
	Field Filtered: ☒			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				

-30

-31

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Franck	4/1/10 1400
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.9°C

Chain of Custody Record

COC Number: **4110W1**

CH2MHILL *4/1/2010 9:07:45 AM* Page 1 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim
DP02-03516	31-Mar-10 10:40	N	Water							
	Field Filtered: ☒			1 ✓	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			4 ✓	4°C	☐	☐	☑	☐	☑
	Field Filtered: ☐			2 ✓	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			3 ✓	H2O,MeOH,4°C	☐	☐	☐	☑	☐
				Total Containers:	10					
DP02-03517	31-Mar-10 11:30	N	Water							
	Field Filtered: ☒			1 ✓	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			4 ✓	4°C	☐	☐	☑	☐	☑
	Field Filtered: ☐			2 ✓	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			3 ✓	H2O,MeOH,4°C	☐	☐	☐	☑	☐
				Total Containers:	10					

4/2/10 w 1603 100402

-32

-33

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/1/10 0900
Received by		
Relinquished by		
Received by		4/2/10 08:15

1.90C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0032
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4110W1**

CH2MHILL 4/1/2010 9:07:45 AM Page 2 of 3

Project Name Location
Task Order Project: 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim	
DP03-03528	31-Mar-10 16:30	N	Water								
			Field Filtered: ☐	3	✓ H2O,MeOH,4°C	☐	☐	☐	☑	☐	-34
			Total Containers:	3							
DP03-03529	31-Mar-10 16:45	N	Water								
			Field Filtered: ☐	3	✓ H2O,MeOH,4°C	☐	☐	☐	☑	☐	-35
			Total Containers:	3							
DP04-03530	31-Mar-10 15:20	N	Water								
			Field Filtered: ☐	3	✓ H2O,MeOH,4°C	☐	☐	☐	☑	☐	-36
			Total Containers:	3							
DP04-03531	31-Mar-10 15:50	N	Water								
			Field Filtered: ☐	3	✓ H2O,MeOH,4°C	☐	☐	☐	☑	☐	-37
			Total Containers:	3							

1004021

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Frank	4/1/10 0800
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

Chain of Custody Record

COC Number: **4110W1**

CH2MHILL *4/1/2010 9:07:45 AM* Page 3 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim
DP04-53530	31-Mar-10 15:20	N	Water							
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	3						

1004021

-38

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/1/10 0800
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/1/2010 4:04:04 PM* Page 1 OF 1

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/1/2010
COC Number: 4110P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP01-03096 ✓	4/1/2010 15:20 Soil	x		1604021 -39	3	
DP02-03099 ✓	4/1/2010 11:55 Soil	x		-15	3	
DP02-03100 ✓	4/1/2010 12:00 Soil	x		-16	3	
DP02-53100 ✓	4/1/2010 12:00 Soil	x		-21	3	
DP13-03293 ✓	4/1/2010 14:45 Soil	x	x	-40	4	
DP13-03294 ✓	4/1/2010 14:50 Soil	x	x	-41	4	
DP14-03296 ✓	4/1/2010 13:20 Soil	x	x	-42	4	
DP14-03297 ✓	4/1/2010 13:30 Soil	x	x	-43	4	
DP15-03299 ✓	4/1/2010 9:30 Soil	x	x	-23 ~~-24~~ 4/2/10	4	
				TOTAL NUMBER OF CONTAINERS	32	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	4/1/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.90C

Chain of Custody Record

COC Number: **4110P**

CH2MHILL 4/1/2010 4:06:54 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-109	01-Apr-10 7:00	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-109	01-Apr-10 7:00	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004021
-28
-44

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		4/1/10
Sampled by		
Relinquished by		1610
Received by		
Relinquished by		4/2/10 08:15
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.9°C

Chain of Custody Record

COC Number: **4110P**

CH2MHILL *4/1/2010 4:08:29 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004021

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-209	01-Apr-10 12:30	N	Water					
	Field Filtered: ☐			2	MeOH	☑	☐	-45
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	
	Total Containers:			5				
TB-209	01-Apr-10 12:30	N	Water					
	Field Filtered: ☐			2	MeOH	☑	☐	-46
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	
	Total Containers:			5				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jank	4/1/10 1610
Relinquished by		
Received by		
Relinquished by		
Received by		4/2/10 08:15

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.90c

Chain of Custody Record

COC Number: **4110W1**

CH2MHILL 4/1/2010 9:15:14 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-308	31-Mar-10 8:20	N	Water				
		Field Filtered: ☐		2	MeOH	☑	☐
		Field Filtered: ☐		3	H2O,MeOH,4°C	☐	☑
		Total Containers:		5			
TB-308	31-Mar-10 8:20	N	Water				
		Field Filtered: ☐		2	MeOH	☑	☐
		Field Filtered: ☐		3	H2O,MeOH,4°C	☐	☑
		Total Containers:		5			

1004007-72

1004021-47

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	4/1/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/2/10 08:15

5.3°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007, 1004021 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0664

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1-9°C

Dates samples were logged-in: 04/02/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers? ..... 4/2/10 WS	Yes	(No)	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

→ on 1004021 only

pH < 2 for metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

Sample DP15-03299 on COC has container labels as DP15-03229! CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007, 1004021 Number of Coolers: 2 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0697

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4-2°C

~~Dates samples were logged in: 04/02/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004007, 1004021 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0686

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.3°C

~~Dates samples were logged-in:~~ 04/02/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021 Number of Coolers: 4 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0675

2. Were custody seals on outside of cooler(s)? ..... Yes No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	Yes	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	Yes	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	Yes	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	Yes	No	N/A
7. Was project identifiable from custody papers?	Yes	No	N/A
8. If required, was enough ice present in the cooler(s)?	Yes	No	N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3-5C

~~Dates samples were logged in: 04/02/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021 Number of Coolers: 5 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/02/10 08:15 Date cooler(s) opened: 04/02/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0052

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-8°C

~~Dates samples were logged in:~~ 04/02/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021 Number of Coolers: 6 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/02/10 08:15** Date cooler(s) opened: **04/02/10**

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0701

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/1/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.7°C

Dates samples were logged-in: **04/02/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/2/2010 1:56:40 PM* Page 1 OF 2

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/2/2010
COC Number: 4210

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	28	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP01-03096	4/1/2010 15:20 Soil		x ✓		x ✓	1004021-39	2	
DP01-07164	4/1/2010 15:20 Soil	x ✓					1	
DP01-07165	4/1/2010 15:25 Soil	x ✓					1	
DP01-07166	4/1/2010 15:30 Soil	x ✓					1	
DP01-07167	4/1/2010 15:35 Soil	x ✓					1	
DP13-03293	4/1/2010 14:45 Soil		x ✓	x ✓		-40	2	
DP13-03294	4/1/2010 14:50 Soil		x ✓	x ✓		-41	2	
DP13-07208	4/1/2010 14:15 Soil	x ✓					1	
DP13-07209	4/1/2010 14:20 Soil	x ✓					1	
DP13-07210	4/1/2010 14:25 Soil	x ✓					1	
DP13-07211	4/1/2010 14:30 Soil	x ✓					1	
DP13-57210	4/1/2010 14:25 Soil	x ✓					1	
DP14-03296	4/1/2010 13:20 Soil		x ✓	x ✓		-42	2	
DP14-03297	4/1/2010 13:30 Soil		x ✓	x ✓		-43	2	

Signatures	Date/Time
Approved by	04/02/10
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

0.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4210W1**

CH2MHILL *4/2/2010 10:18:50 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

CC 04/02/10

1004021

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
EB-209	01-Apr-10 12:30	N	Water						
			Field Filtered:☐	~~2~~ 1	4°C	☐	☐	☐	☑
			Field Filtered:☐	2	HNO4	☑	☐	☐	☐
			Field Filtered:☐	~~2~~ 2	4°C	☐	☐	☑	☐
			Field Filtered:☐	2	4°C	☐	☑	☐	☐
			Total Containers:	14					

- 45

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	[signature]	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/5/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9c

N00236_003722
ALAMEDA POINT
SSIC NO. 5090.3.A

FOLDER 5 OF 5

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021 Number of Coolers: 1 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/05/10 09:00 Date cooler(s) opened: 4/05/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0021

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.9°C

Dates samples were logged-in: 4/05/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021 Number of Coolers: 2 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/05/10 09:00 Date cooler(s) opened: 4/05/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0631

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.9°C

Dates samples ~~were logged in~~: ~~4/05/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

Sonya Gordon

From: Sonya Gordon [sgordon@empirlabs.com]
Sent: Tuesday, April 06, 2010 11:02 AM
To: 'Tamara.Frank@ch2m.com'
Subject: RE: samples received 4/2/10 & 4/5/10

times on container matched the COC :)

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Monday, April 05, 2010 7:40 PM
To: sgordon@empirlabs.com
Subject: RE: samples received 4/2/10 & 4/5/10

The correct ID is DP-03299. What was the time reported on the container?

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 05, 2010 4:53 PM
To: Fesler, Mark/RDD; Frank, Tamara/BAO
Subject: samples received 4/2/10 & 4/5/10

This is for samples taken on 3/31/10 & 4/1/10. Everything looks good except there is one sample where the ID on the COC is DP15-03299 but the ID on the containers is DP15-03229. Please advise which is correct.

Thanks

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 238 I Toll free: 877.345.1113 I Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004022

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/12/2010 16:00 (5 day TAT) RUSH results, 05/03/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/05/2010 09:00 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/05/2010 12:33

Samples Received at: **3.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004022-04 DP03-03008 [Solid] Sampled 04/02/2010 09:05 Pacific				
[NO ANALYSES]				
1004022-01 DP03-03504 [Water] Sampled 04/02/2010 11:05 Pacific				**QSM4.1 RUSH results**
MET_ICP_6010B_FULL_DIS	04/09/2010 14:00	5	09/29/2010 13:05	water TAL + Mo. FF & Preserved!!
SGC_DRO_8015B_3510	04/09/2010 14:00	5	04/09/2010 13:05	+MO
SMS_PAH_8270C_3510_LOW	04/09/2010 14:00	5	04/09/2010 13:05	
VGC_GRO_8015B	04/09/2010 14:00	5	04/16/2010 13:05	
VOC_8260B_AP9	04/09/2010 14:00	5	04/16/2010 13:05	
MET_7470_DIS_MERCURY	04/09/2010 14:00	5	04/30/2010 13:05	FF & Preserved!!
1004022-02 DP03-03505 [Water] Sampled 04/02/2010 10:35 Pacific				**QSM4.1 RUSH results**
VGC_GRO_8015B	04/09/2010 14:00	5	04/16/2010 12:35	
MET_7470_DIS_MERCURY	04/09/2010 14:00	5	04/30/2010 12:35	FF & Preserved!!
MET_ICP_6010B_FULL_DIS	04/09/2010 14:00	5	09/29/2010 12:35	water TAL + Mo. FF & Preserved!!
SMS_PAH_8270C_3510_LOW	04/09/2010 14:00	5	04/09/2010 12:35	
VOC_8260B_AP9	04/09/2010 14:00	5	04/16/2010 12:35	
SGC_DRO_8015B_3510	04/09/2010 14:00	5	04/09/2010 12:35	+MO

1004022

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004022-03 DP03-03006 [Solid] Sampled 04/02/2010 09:05 Pacific				**QSM4.1 RUSH results**
WC_PERCENT_SOLIDS_2540B	04/09/2010 14:00	5	04/09/2010 11:05	
VOC_8260B_AP9	04/09/2010 14:00	5	04/16/2010 11:05	AP VIALS
VGC_GRO_8015B	04/09/2010 14:00	5	04/16/2010 11:05	AP VIALS
MET_7471A_MERCURY	04/09/2010 14:00	5	04/30/2010 11:05	
MET_ICP_LOW6010B_FULL	04/09/2010 14:00	5	09/29/2010 11:05	soil TAL + Mo
SGC_DRO_8015B_3546	04/09/2010 14:00	5	04/16/2010 11:05	+MO
1004022-05 DP19-03311 [Solid] Sampled 04/02/2010 11:45 Pacific				**QSM4.1**
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 13:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 13:45	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 13:45	soil TAL + Mo
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 13:45	
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 13:45	AP VIALS
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 13:45	+MO
1004022-06 DP19-03312 [Solid] Sampled 04/02/2010 11:56 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 13:56	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 13:56	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 13:56	
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 13:56	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 13:56	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 13:56	+MO
1004022-07 DP21-03317 [Solid] Sampled 04/02/2010 14:20 Pacific				**QSM4.1**
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 16:20	AP VIALS
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 16:20	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 16:20	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 16:20	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 16:20	+MO
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 16:20	AP VIALS
1004022-08 DP21-03318 [Solid] Sampled 04/02/2010 15:35 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 17:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 17:35	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 17:35	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 17:35	+MO
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 17:35	
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 17:35	AP VIALS

1004022

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004022-09 DP22-03320 [Solid] Sampled 04/02/2010 14:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 16:30	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 16:30	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 16:30	+MO
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 16:30	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 16:30	
1004022-10 DP22-03321 [Solid] Sampled 04/02/2010 14:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 16:35	
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 16:35	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 16:35	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 16:35	+MO
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 16:35	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 16:35	AP VIALS
1004022-11 DP22-53320 [Solid] Sampled 04/02/2010 14:30 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	09/29/2010 16:30	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/16/2010 16:30	+MO
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 16:30	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 16:30	
MET_7471A_MERCURY	05/03/2010 14:00	20	04/30/2010 16:30	
1004022-12 DP24-03326 [Solid] Sampled 04/02/2010 10:15 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 12:15	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 12:15	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 12:15	
1004022-13 DP24-03327 [Solid] Sampled 04/02/2010 10:20 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/16/2010 12:20	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/16/2010 12:20	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/09/2010 12:20	

Reviewed By

Date

Chain of Custody Record

COC Number: **4210P**

CH2MHILL *4/2/2010 3:33:27 PM* Page 1 of 1

Project Name **Location**
Task Order Project: 2010-FED1a-GW
Project Number 383512.FLDP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 7 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624																			
DP03-03504	02-Apr-10 11:05	N	Water																							
			Field Filtered:☐	2	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
	✓		Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:		5																					
DP03-03505	02-Apr-10 10:35	N	Water																							
			Field Filtered:☐	2	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:		5																					

1004022

-01

-02

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/2/10
Relinquished by	Tamara Jank	1630
Received by		
Relinquished by		
Received by		4/5/10 09:00

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:

Sample Custody
and
Janice Shilling

Report Copy to

5.8°C

Chain of Custody Record

COC Number: **4210W7**

CH2MHILL 4/2/2010 2:41:22 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 7 Days
PO Number TF

1 Day TAT

1004022

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP03-03504	02-Apr-10 11:05	N	Water					
	Field Filtered: ☐			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				
DP03-03505	02-Apr-10 10:35	N	Water					
	Field Filtered: ☐			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				

-01

-02

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jarvis	4/2/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.8°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/2/2010 3:38:21 PM* Page 1 OF 1

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 7 Days
Shipping Date: 4/2/2010
COC Number: 4210P

	DATE	TIME	Matrix	Container:	3 x 40 ml VOA	2 x 40 ml VOA	3 x 40 ml VOA	1 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives:	H2O,MeOH,4°C	MeOH	2XH2O, 1XMeOH, 4°C	MeOH			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	14	14	48HR	48HR			
					VOCs (8260B)	TPH-Purgable (SW8015B)	VOCs (8260B/624)	TPH-Purgable (SW8015B)			
DP03-03006	4/2/2010	9:05	Soil		x	x	x	x	1004022-03	4	
DP03-03008	4/2/2010	9:05	Soil		x	x	x	x	-04	4	
DP19-03311	4/2/2010	11:45	Soil		x	x	x	x	-05	4	
DP19-03312	4/2/2010	11:56	Soil		x	x	x	x	-06	4	
DP21-03317	4/2/2010	14:20	Soil		x	x	x	x	-07	4	
DP21-03318	4/2/2010	15:35	Soil		x	x	x	x	-08	4	
DP22-03320	4/2/2010	14:30	Soil		x	x	x	x	-09	4	
DP22-03321	4/2/2010	14:35	Soil		x	x	x	x	-10	4	
DP22-53320	4/2/2010	14:30	Soil		x	x	x	x	-11	4	
DP24-03326	4/2/2010	10:15	Soil		x	x	x	x	-12	4	
DP24-03327	4/2/2010	10:20	Soil		x	x	x	x	-13	4	
									TOTAL NUMBER OF CONTAINERS	44	

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.7°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004022 Number of Coolers: 3 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0620

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 1 Seal date: 4/2/10 Seal Initials: .

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.8°C

Dates samples were logged-in: **4/05/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... 4/5/10 WS	(Yes)	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

Sample DP03-03008 not rec'd in shipment! CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004022 Number of Coolers: 4 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0594

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 1 Seal date: 4/2/10 Seal Initials: .

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.7°C

~~Dates samples were logged-in:~~ **4/05/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 3 of 9

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/5/2010 1:09:41 PM* Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 7 Days
Shipping Date: 4/5/2010
COC Number: 4510

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP03-03006	4/2/2010 9:05 Soil			X	X	1004022-03	2	
DP03-07008	4/2/2010 9:05 Soil	X					1	
DP03-07009	4/2/2010 9:10 Soil	X					1	
DP03-07010	4/2/2010 9:15 Soil	X					1	
DP03-07011	4/2/2010 9:20 Soil	X					1	
DP03-57010	4/2/2010 9:15 Soil	X					1	
DP19-03311	4/2/2010 11:45 Soil			X	X	-05	2	
DP19-03312	4/2/2010 11:56 Soil			X	X	-06	2	
DP19-07232	4/2/2010 11:40 Soil	X					1	
DP19-07233	4/2/2010 11:45 Soil	X					1	
DP19-07234	4/2/2010 11:50 Soil		X			MS/MSD	~~1~~ 2	
DP19-07235	4/2/2010 11:55 Soil	X					1	
DP21-03317	4/2/2010 14:20 Soil			X	X	-07	2	
DP21-03318	4/2/2010 15:35 Soil			X	X	-08	2	

Signatures	Date/Time
Approved by	
Sampled by	4/5/10 1400
Relinquished by Tamara Frank	
Received by	
Relinquished by	
Received by	4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.2°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/5/2010 1:09:41 PM* Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/5/2010
COC Number: 4510

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	14	14	14	28		
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		
	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP21-07240	4/2/2010	14:40	Soil	X					1	
DP21-07241	4/2/2010	14:45	Soil	X					1	
DP21-07242	4/2/2010	14:50	Soil	X					1	
DP21-07243	4/2/2010	14:55	Soil	X					1	
DP21-57240	4/2/2010	14:40	Soil	X					1	
DP22-03320	4/2/2010	14:30	Soil			X	X	1004022 -09	2	
DP22-03321	4/2/2010	14:35	Soil			X	X	-10	2	
DP22-07244	4/2/2010	14:00	Soil	X					1	
DP22-07245	4/2/2010	14:05	Soil	X					1	
DP22-07246	4/2/2010	14:10	Soil	X					1	
DP22-07247	4/2/2010	14:15	Soil	X					1	
DP22-53320	4/2/2010	14:30	Soil			X	X	-11	2	
DP20-03314	4/5/2010	10:25	Soil			X	X		2	
DP20-03315	4/5/2010	10:30	Soil			X	X		2	

Signatures		Date/Time
Approved by		
Sampled by		4/5/10
Relinquished by	Jamie Jenk	1400
Received by		
Relinquished by		
Received by		4/6/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.2°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004022 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/06/10 08:30** Date cooler(s) opened: **4/06/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0010

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3-20C

Dates samples were logged-in: **4/06/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all Metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Monday, April 05, 2010 12:32 PM
To: sgordon@empirlabs.com; Mark.Fesler@CH2M.com
Subject: RE: Alameda samples shipped Friday

DP03-3008 was not sampled. Please mark it off the COC.
Tamara

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 05, 2010 10:20 AM
To: Fesler, Mark/RDD
Cc: Frank, Tamara/BAO
Subject: Alameda samples shipped Friday

It appears we had a FedEx issue this Saturday. According to what I'm being told, FedEx told the receiving group that we did not have anything to pick up on Saturday (we pick up our own shipments on Saturday since we had poor Saturday service).

Because of this, two of the coolers were received out of temp.

- DP13-03550, DP13-03551, & DP13-53550 were in a cooler at 11.6°C
- DP02-03522 & DP02-03523 were in a cooler at 15.0°C

Sample DP03-03008 was not received.

Also the following VOCs are now out of hold (not frozen within 48hours)... DP03-03006, DP19-03311, DP19-03312, DP21-03317, DP21-03318, DP22-03320, DP22-03321, DP22-53320, DP24-03326, DP24-03327. I had them put in the freezer as soon as I was notified... they are all less than double the holding time so the data could be reported as estimated & not rejectable (... and that's depending on how they will be evaluated).

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 238 I Toll free: 877.345.1113 I Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004023

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/03/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/05/2010 09:00, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/05/2010 13:12

Samples Received at: **5.9°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004023-01 DP02-03522 [Water] Sampled 04/01/2010 14:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/08/2010 16:00	+MO
MET_ICP_6010B_FULL_DIS	04/26/2010 14:00	20	09/28/2010 16:00	water TAL + Mo
MET_7470_DIS_MERCURY	04/26/2010 14:00	20	04/29/2010 16:00	
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/08/2010 16:00	
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 16:00	
1004023-02 DP02-03523 [Water] Sampled 04/01/2010 14:35 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/08/2010 16:35	+MO
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/08/2010 16:35	
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 16:35	
MET_7470_DIS_MERCURY	04/26/2010 14:00	20	04/29/2010 16:35	
MET_ICP_6010B_FULL_DIS	04/26/2010 14:00	20	09/28/2010 16:35	water TAL + Mo
1004023-03 EB-310 [Water] Sampled 04/02/2010 07:40 Pacific				**QSM4.1**
MET_7470_MERCURY	04/26/2010 14:00	20	04/30/2010 09:40	
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/09/2010 09:40	+MO
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/09/2010 09:40	
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 09:40	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 09:40	
MET_ICP_6010B_FULL	04/26/2010 14:00	20	09/29/2010 09:40	water TAL + Mo

1004023

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004023-04 TB-310 [Water] Sampled 04/02/2010 07:40 Pacific				**QSM4.1**
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 09:40	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 09:40	
1004023-05 EB-210 [Water] Sampled 04/02/2010 07:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 09:45	
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 09:45	
MET_7470_MERCURY	04/26/2010 14:00	20	04/30/2010 09:45	
MET_ICP_6010B_FULL	04/26/2010 14:00	20	09/29/2010 09:45	water TAL + Mo
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/09/2010 09:45	+MO
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/09/2010 09:45	
1004023-06 TB-210 [Water] Sampled 04/02/2010 07:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 09:30	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 09:30	
1004023-07 EB-110 [Water] Sampled 04/02/2010 07:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 09:30	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 09:30	
1004023-08 TB-110 [Water] Sampled 04/02/2010 07:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 09:30	
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 09:30	
1004023-09 EB-140 [Water] Sampled 04/01/2010 14:15 Pacific				**QSM4.1**
VGC_GRO_8015B	04/26/2010 14:00	20	04/15/2010 16:15	
LC_EXPL_8330A	04/26/2010 14:00	20	04/08/2010 16:15	LOW VOLUME!!!!
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/08/2010 16:15	
SGC_PEST8081A_3510	04/26/2010 14:00	20	04/08/2010 16:15	Tox LCS required
MET_7470_MERCURY	04/26/2010 14:00	20	04/29/2010 16:15	
MET_ICP_6010B_FULL	04/26/2010 14:00	20	09/28/2010 16:15	water TAL + Mo
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/08/2010 16:15	+MO. LOW VOLUME!!!!
SGC_PCB8082A_3510	04/26/2010 14:00	20	04/08/2010 16:15	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 16:15	
1004023-10 DP02-03524 [Water] Sampled 04/01/2010 11:00 Pacific				**QSM4.1. MS/MSD**
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 13:00	MS/MSD
1004023-11 DP02-03525 [Water] Sampled 04/01/2010 11:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 13:30	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004023-12 DP02-03526 [Water] Sampled 04/01/2010 16:25 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 18:25	
1004023-13 DP02-03527 [Water] Sampled 04/01/2010 16:35 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 18:35	
1004023-14 DP17-03558 [Water] Sampled 04/01/2010 09:05 Pacific				**QSM4.1**
VGC_GRO_8015B	04/26/2010 14:00	20	04/15/2010 11:05	
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 11:05	
1004023-15 DP17-03559 [Water] Sampled 04/01/2010 09:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 11:45	
VGC_GRO_8015B	04/26/2010 14:00	20	04/15/2010 11:45	
1004023-16 TB-309 [Water] Sampled 04/01/2010 07:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/26/2010 14:00	20	04/15/2010 09:00	
VGC_GRO_8015B	04/26/2010 14:00	20	04/15/2010 09:00	
1004023-17 EB-110 [Water] Sampled 04/02/2010 07:30 Pacific				**QSM4.1**
MET_7470_MERCURY	04/26/2010 14:00	20	04/30/2010 09:30	
MET_ICP_6010B_FULL	04/26/2010 14:00	20	09/29/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/09/2010 09:30	+MO
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/09/2010 09:30	
1004023-18 DP13-03550 [Water] Sampled 04/02/2010 08:50 Pacific				**QSM4.1**
MET_7470_DIS_MERCURY	04/26/2010 14:00	20	04/30/2010 10:50	
MET_ICP_6010B_FULL_DIS	04/26/2010 14:00	20	09/29/2010 10:50	water TAL + Mo
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/09/2010 10:50	+MO
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/09/2010 10:50	
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 10:50	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 10:50	
1004023-19 DP13-03551 [Water] Sampled 04/02/2010 09:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/09/2010 11:30	
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 11:30	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 11:30	
MET_ICP_6010B_FULL_DIS	04/26/2010 14:00	20	09/29/2010 11:30	water TAL + Mo
MET_7470_DIS_MERCURY	04/26/2010 14:00	20	04/30/2010 11:30	
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/09/2010 11:30	+MO

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004023-20 DP13-53550 [Water] Sampled 04/02/2010 08:50 Pacific				**QSM4.1**
VGC_GRO_8015B	04/26/2010 14:00	20	04/16/2010 10:50	
VOC_8260B_AP9	04/26/2010 14:00	20	04/16/2010 10:50	
SMS_PAH_8270C_3510_LOW	04/26/2010 14:00	20	04/09/2010 10:50	
SGC_DRO_8015B_3510	04/26/2010 14:00	20	04/09/2010 10:50	+MO
MET_ICP_6010B_FULL_DIS	04/26/2010 14:00	20	09/29/2010 10:50	water TAL + Mo
MET_7470_DIS_MERCURY	04/26/2010 14:00	20	04/30/2010 10:50	
1004023-21 DP01-07164 [Solid] Sampled 04/01/2010 15:20 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 17:20	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 17:20	
1004023-22 DP01-07165 [Solid] Sampled 04/01/2010 15:25 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 17:25	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 17:25	
1004023-23 DP01-07166 [Solid] Sampled 04/01/2010 15:30 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 17:30	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 17:30	
1004023-24 DP01-07167 [Solid] Sampled 04/01/2010 15:35 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 17:35	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 17:35	
1004023-25 DP13-07208 [Solid] Sampled 04/01/2010 14:15 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 16:15	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 16:15	
1004023-26 DP13-07209 [Solid] Sampled 04/01/2010 14:20 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 16:20	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 16:20	
1004023-27 DP13-07210 [Solid] Sampled 04/01/2010 14:25 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 16:25	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 16:25	
1004023-28 DP13-07211 [Solid] Sampled 04/01/2010 14:30 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 16:30	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 16:30	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004023-29 DP13-57210 [Solid] Sampled 04/01/2010 14:25 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 16:25	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 16:25	
1004023-30 DP14-07212 [Solid] Sampled 04/01/2010 13:20 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 15:20	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 15:20	
1004023-31 DP14-07213 [Solid] Sampled 04/01/2010 13:25 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 15:25	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 15:25	
1004023-32 DP14-07214 [Solid] Sampled 04/01/2010 13:30 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 15:30	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 15:30	
1004023-33 DP14-07215 [Solid] Sampled 04/01/2010 13:35 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/08/2010 15:35	
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/15/2010 15:35	
1004023-34 DP01-03108 [Solid] Sampled 04/02/2010 11:20 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 13:20	
MET_ICP_LOW6010B_FULL	04/26/2010 14:00	20	09/29/2010 13:20	soil TAL + Mo
MET_7471A_MERCURY	04/26/2010 14:00	20	04/30/2010 13:20	
1004023-35 DP01-03109 [Solid] Sampled 04/02/2010 11:25 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 13:25	
MET_ICP_LOW6010B_FULL	04/26/2010 14:00	20	09/29/2010 13:25	soil TAL + Mo
MET_7471A_MERCURY	04/26/2010 14:00	20	04/30/2010 13:25	
1004023-36 DP01-53109 [Solid] Sampled 04/02/2010 11:25 Pacific				
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 13:25	
MET_ICP_LOW6010B_FULL	04/26/2010 14:00	20	09/29/2010 13:25	soil TAL + Mo
MET_7471A_MERCURY	04/26/2010 14:00	20	04/30/2010 13:25	
1004023-37 DP24-03326 [Solid] Sampled 04/02/2010 10:15 Pacific				
MET_7471A_MERCURY	04/26/2010 14:00	20	04/30/2010 12:15	
MET_ICP_LOW6010B_FULL	04/26/2010 14:00	20	09/29/2010 12:15	soil TAL + Mo
SGC_DRO_8015B_3546	04/26/2010 14:00	20	04/16/2010 12:15	+MO
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 12:15	

1004023

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004023-38 DP24-03327 [Solid] Sampled 04/02/2010 10:20 Pacific				
SGC_DRO_8015B_3546	04/26/2010 14:00	20	04/16/2010 12:20	+MO
MET_ICP_LOW6010B_FULL	04/26/2010 14:00	20	09/29/2010 12:20	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 12:20	
MET_7471A_MERCURY	04/26/2010 14:00	20	04/30/2010 12:20	
1004023-39 DP24-07252 [Solid] Sampled 04/02/2010 09:45 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/16/2010 11:45	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 11:45	
1004023-40 DP24-07253 [Solid] Sampled 04/02/2010 09:50 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/16/2010 11:50	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 11:50	
1004023-41 DP24-07254 [Solid] Sampled 04/02/2010 09:55 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/16/2010 11:55	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 11:55	
1004023-42 DP24-07255 [Solid] Sampled 04/02/2010 10:00 Pacific				
SMS_PAH_8270C_3546_LOW	04/26/2010 14:00	20	04/16/2010 12:00	
WC_PERCENT_SOLIDS_2540B	04/26/2010 14:00	20	04/09/2010 12:00	
SGS/Paradigm (SUB028)				
1004023-09 EB-140 [Water] Sampled 04/01/2010 14:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/26/2010 14:00	20	05/01/2010 16:15	sub to SGS - Wilmington. LOW VOLUME!!!!!

Reviewed By

Date

Chain of Custody Record

COC Number: **4210W5**

CH2MHILL *4/2/2010 11:18:35 AM* Page 1 of 1

Project Name
Task Order **Location**
Project Number 383512.FI.DP **Project:** 2010-FED1a-GW
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004023

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	SW8015B-E	SW8270Sim
DP02-03522	01-Apr-10 14:00	N	Water					
	Field Filtered: ☐			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				
DP02-03523	01-Apr-10 14:35	N	Water					
	Field Filtered: ☐			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				

-01

-02

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	[signature]	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/5/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

ws 4/5/10 11:60

Chain of Custody Record

COC Number: **4210W2**

CH2MHILL 4/2/2010 10:24:39 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-310	02-Apr-10	7:40	N	Water				
				Field Filtered: ☐ 2~~1~~	HNO4	☑	☐	☐
				Field Filtered: ☐ ~~8~~2	4°C	☐	☐	☑
				Field Filtered: ☐ 2	4°C	☐	☑	☐
				Total Containers: ~~12~~5				

1004023

-03

CMC 04/02/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	[signature]	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0021

5 QC

Chain of Custody Record

COC Number: **4210P6**

CH2MHILL 4/2/2010 3:52:32 PM Page 1 of 1

Project Name | **Location**
Task Order | **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
TB-310	02-Apr-10 7:40	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004023

-04

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jones	4/2/10 1630
Received by		
Relinquished by		
Received by		4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210P**

CH2MHILL 4/2/2010 3:45:51 PM Page 1 of 1

Project Name
Task Order **Location**
Project: 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004023

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-210	02-Apr-10 7:45	N	Water					
			Field Filtered:☐	2	MeOH	☑	☐	-05
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:	5				
TB-210	02-Apr-10 7:30	N	Water					
			Field Filtered:☐	2	MeOH	☑	☐	-06
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:	5				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/2/10
Relinquished by	Tamara Jarrett	1630
Received by		
Relinquished by		
Received by		4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210P**

CH2MHILL 4/2/2010 3:43:33 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-110	02-Apr-10 7:30	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			
TB-110	02-Apr-10 7:30	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			

1004023

-07

-08

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jank	4/2/10 1630
Relinquished by		
Received by		
Relinquished by		
Received by		4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210W3**

CH2MHILL 4/2/2010 10:36:54 AM Page 1 of 1

1004023

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	8330	SW6010B/7470A	SW7199	SW8015B-E	SW8015B-P	SW8081A	SW8082	SW8260B/624	SW8270Sim	SW8290
EB-140	01-Apr-10 14:15	N	Water												
			Field Filtered:☐	~~2~~ 1	4°C	☐	☐	☐	☐	☐	☐	☐	☐	☐	☑
			Field Filtered:☐	1	None	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered:☐	~~2~~ 1	HNO4	☐	☑	☑	☐	☐	☐	☐	☐	☐	☐
			Field Filtered:☐	~~2~~ 1	4°C	☐	☐	☐	☐	☐	☑	☑	☐	☑	☐
			Field Filtered:☐	~~2~~ 1	4°C	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐
			Field Filtered:☐	2	MeOH	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☐	☐	☐	☐	☐	☐	☑	☐	☐
			Total Containers:	~~20~~ 10											

-09

CC 04/02/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	[signature]	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/5/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210W4**

CH2MHILL *4/2/2010 11:00:30 AM* Page 1 of 2

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP02-03522	01-Apr-10 14:00	N	Water				
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	3			
DP02-03523	01-Apr-10 14:35	N	Water				
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	3			
DP02-03524	01-Apr-10 11:00	N	Water				
LAB QC			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	~~3~~ 9			
DP02-03525	01-Apr-10 11:30	N	Water		cc 4/2/10		
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	3			

1004023

-01

-02

-10

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	Charlotte Ei	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	MWH	4/5/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210W4**

CH2MHILL 4/2/2010 11:00:30 AM Page 2 of 2

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP02-03526	01-Apr-10 16:25	N	Water					
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	
	Total Containers:			3				
DP02-03527	01-Apr-10 16:35	N	Water					
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	
	Total Containers:			3				
DP17-03558	01-Apr-10 9:05	N	Water					
	Field Filtered: ☐			2	MeOH	☑	☐	
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	
	Total Containers:			5				
DP17-03559	01-Apr-10 9:45	N	Water					
	Field Filtered: ☐			2	MeOH	☑	☐	
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑	
	Total Containers:			5				

1004023

-12

-13

-14

-15

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210W4**

CH2MHILL *4/2/2010 11:02:30 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-310	02-Apr-10 7:40	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-309	01-Apr-10 7:00	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004023
-03
-16

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	Charlotte Li	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	Mitchell	4/5/10 09:00
Received by		

5.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: **yes / no**
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4210W4**

CH2MHILL *4/2/2010 11:01:38 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-110	02-Apr-10 7:30	N	Water					
			Field Filtered:☐	2	HNO4	☑	☐	☐
			Field Filtered:☐	~~3~~ 2	4°C	☐	☐	☑
			Field Filtered:☐	2	4°C	☐	☑	☐
			Total Containers:	12				

1004023

-17

CC 04/02/10

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	[signature]	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/5/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.9°C

Chain of Custody Record

COC Number: **4210W6**

CH2MHILL *4/2/2010 2:32:02 PM*

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004023

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP13-03550	02-Apr-10 8:50	N	Water					
	Field Filtered: ☒			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				
DP13-03551	02-Apr-10 9:30	N	Water					
	Field Filtered: ☒			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				

-18

-19

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamala Frank	4/2/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by	4/5/10	09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

15.00

Chain of Custody Record

COC Number: **4210W6**

CH2MHILL *4/2/2010 2:32:02 PM* Page 2 of 2

Project Name Location
Task Order Project: 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP13-53550	02-Apr-10 8:50	N	Water					
			Field Filtered: ☐	1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	5				

1004023

-20

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/2/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/5/10 0900

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

15.0°C

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/2/2010 1:56:40 PM Page 1 OF 2

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/2/2010
COC Number: 4210

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	28	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP01-03096	4/1/2010 15:20 Soil		x ✓		x ✓	1004021-39	2	
DP01-07164	4/1/2010 15:20 Soil	x ✓				1004023-20 -21	1	
DP01-07165	4/1/2010 15:25 Soil	x ✓				-21 -22	1	
DP01-07166	4/1/2010 15:30 Soil	x ✓				-22 -23	1	
DP01-07167	4/1/2010 15:35 Soil	x ✓				sample 4/2/10 -23 -24	1	
DP13-03293	4/1/2010 14:45 Soil		x ✓	x ✓		1004021 4/5/10 -40	2	
DP13-03294	4/1/2010 14:50 Soil		x ✓	x ✓		-41	2	
DP13-07208	4/1/2010 14:15 Soil	x ✓				sample 4/1/10 1004023-24 -25	1	
DP13-07209	4/1/2010 14:20 Soil	x ✓				-25 -26	1	
DP13-07210	4/1/2010 14:25 Soil	x ✓				-26 -27	1	
DP13-07211	4/1/2010 14:30 Soil	x ✓				-27 -28	1	
DP13-57210	4/1/2010 14:25 Soil	x ✓				sample 4/1/10 -28 -29	1	
DP14-03296	4/1/2010 13:20 Soil		x ✓	x ✓		1004021 4/5/10 -42	2	
DP14-03297	4/1/2010 13:30 Soil		x ✓	x ✓		-43	2	

Signatures		Date/Time
Approved by	[signature]	04/02/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/5/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

0.9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/2/2010 1:56:40 PM* Page 2 OF 2

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/2/2010
COC Number: 4210

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar					
	Preservatives:	4°C	4°C	4°C	4°C					
	Filtered:	NA	NA	NA	NA					
	Holding Time:	14	14	28	28					
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)			Number of Containers	COMMENTS
	DATE	TIME	Matrix							
DP14-07212	4/1/2010	13:20	Soil	x ✓				-30	1004023-44	1	
DP14-07213	4/1/2010	13:25	Soil	x ✓				-31	-45	1	
DP14-07214	4/1/2010	13:30	Soil	x ✓				-32	-46	1	
DP14-07215	4/1/2010	13:35	Soil	x ✓				-33	-47	1	
DP01-03108	4/2/2010	11:20	Soil				x ✓	-34	-48	1	
DP01-03109	4/2/2010	11:25	Soil				x ✓	-35	-49	1	
DP01-53109	4/2/2010	11:25	Soil				x ✓	-36	-50	1	
DP24-03326	4/2/2010	10:15	Soil		x ✓	x ✓		-37	-51	2	
DP24-03327	4/2/2010	10:20	Soil		x ✓	x ✓		-38	-52	2	
DP24-07252	4/2/2010	9:45	Soil	x ✓				-39	-53	1	
DP24-07253	4/2/2010	9:50	Soil	x ✓				-40	-54	1	
DP24-07254	4/2/2010	9:55	Soil	x ✓				-41	-55	1	
DP24-07255	4/2/2010	10:00	Soil	x ✓				-42	-56	1	
									TOTAL NUMBER OF CONTAINERS	34	

ws. 4/5/10

Signatures **Date/Time**

Approved by Charlotte Li 04/02/10
Sampled by
Relinquished by
Received by
Relinquished by
Received by 4/5/10 0900

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

B. 9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021, 1004023 Number of Coolers: 1 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0021

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.9°C

Dates samples were logged-in: **4/05/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004021, 1004023 Number of Coolers: 2 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0631

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.9°C

~~Dates samples were logged in: 4/05/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004022, 1004023 Number of Coolers: 3 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0620

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.8°C

Dates samples were logged-in: **4/05/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... 4/5/10 WS	(Yes)	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

1004022 — Sample BP03-03008 not rec'd in shipment! CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004022, 1004023 Number of Coolers: 4 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0594

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.7°C

~~Dates samples were logged-in:~~ **4/05/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 3 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: 5 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/05/10 09:00 Date cooler(s) opened: 4/05/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0583

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: .

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.4°C

Dates samples were logged-in: 4/05/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: 6 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/05/10 09:00 Date cooler(s) opened: 4/05/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0610 0027 WS 4/5/10

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Hot!

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 11.6°C

Dates ~~samples~~ were logged-in: ~~4/05/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: 7 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/05/10 09:00** Date cooler(s) opened: **4/05/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0653

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Hot!

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 15.0°C

~~Dates samples were logged in:~~ **4/05/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: 8 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/05/10 09:00 Date cooler(s) opened: 4/05/10

Opened By (print): Will Schwat (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0642

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.2°C

~~Dates samples were logged-in: 4/05/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: 9 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/05/10 09:00 Date cooler(s) opened: 4/05/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0561

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/2/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0°C

Dates samples were logged-in: 4/05/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

Chain of Custody Record

COC Number: **4510B**

CH2MHILL 4/5/2010 10:01:14 AM Page 1 of 1

1004023

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-210	02-Apr-10 7:45	N	Water					
			Field Filtered: ☐	2	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	12				

-05

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		4/5/10
Sampled by	Jamara Grant	0930
Relinquished by		
Received by		
Relinquished by		4/6/10
Received by		08,30

1.6°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4510W2**

CH2MHILL 4/5/2010 11:10:21 AM Page 1 of 1

Project Name
Task Order **Location** **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP13-03550	02-Apr-10 8:50	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
DP13-03551	02-Apr-10 9:30	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
DP13-53550	02-Apr-10 8:50	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004023

-18

-19

-20

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		4/5/10
Sampled by	Jamara Frank	1130
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.6 °C

WS 4/6/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: ~~2~~ 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/06/10 08:30** Date cooler(s) opened: **4/06/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6696

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

Dates samples were logged-in: **4/06/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/6/10	~~Yes~~	(No)	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

Vial for ~~DP~~ DP13-03550 broke in shipment CAR#: _____

WS 4/6/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/06/10 08:30 Date cooler(s) opened: 4/06/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6663

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.6°C

~~Dates samples were logged in: 4/06/10~~

9. Initial this form to acknowledge login of sample(s). (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 7

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Wednesday, April 07, 2010 12:26 PM
To: sgordon@empirlabs.com
Subject: RE: Alameda - hexavalent chromium

That is a source blank that we prepared in the event that we happened to use this lot of water for a rinsate for hex chrome. It's not a problem that it didn't get analyzed. We will resubmit a source blank when we get to the area with hex chrome. I will be giving you a big heads up when these samples are collected.
I"ll have my database people change the method to SW7196.
Thanks,
Tamara

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Wednesday, April 07, 2010 10:21 AM
To: Fesler, Mark/RDD; Frank, Tamara/BAO; Jones, Bryan/RDD
Cc: rdavis@empirlabs.com
Subject: Alameda - hexavalent chromium

I was reviewing sample login & noticed a method SW7199 listed on EB-140 (04/01/10 14:15) - which is hexavalent chromium by IC. However, the bid was submitted for hexavalent chromium using method SW7196. We are not set up/certified to do SW7199.

For the future, can you please have the method code changed in your system to SW7196. Also, this method requires a 250mL unpreserved container and has a 24 hour holding time for waters. If at all possible, please let us know when you will be sending especially if shipping on a Friday (I know that EDC-12 has several).

As for this particular sample.. several things went wrong. First, it was part of the shipment that did not make it to us on Saturday. Then, for some reason, it was not caught at sample receipt &/or brought to my attention. At this point, it is not possible to do the test seeing as well are so far outside of the 24hr holding time. Seeing as this is just an equipment blank and we have not received any samples from EDC-12, are we ok? I will make sure that our receiving personnel are on the lookout for this in the future.

Thanks,

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 238 I Toll free: 877.345.1113 I Fax: 615.846.5426

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Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Monday, April 05, 2010 12:32 PM
To: sgordon@empirlabs.com; Mark.Fesler@CH2M.com
Subject: RE: Alameda samples shipped Friday

DP03-3008 was not sampled. Please mark it off the COC.
Tamara

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 05, 2010 10:20 AM
To: Fesler, Mark/RDD
Cc: Frank, Tamara/BAO
Subject: Alameda samples shipped Friday

It appears we had a FedEx issue this Saturday. According to what I'm being told, FedEx told the receiving group that we did not have anything to pick up on Saturday (we pick up our own shipments on Saturday since we had poor Saturday service).

Because of this, two of the coolers were received out of temp.

- DP13-03550, DP13-03551, & DP13-53550 were in a cooler at 11.6°C
- DP02-03522 & DP02-03523 were in a cooler at 15.0°C

Sample DP03-03008 was not received.

Also the following VOCs are now out of hold (not frozen within 48hours)... DP03-03006, DP19-03311, DP19-03312, DP21-03317, DP21-03318, DP22-03320, DP22-03321, DP22-53320, DP24-03326, DP24-03327. I had them put in the freezer as soon as I was notified... they are all less than double the holding time so the data could be reported as estimated & not rejectable (... and that's depending on how they will be evaluated).

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 238 I Toll free: 877.345.1113 I Fax: 615.846.5426

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1004030

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/04/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/06/2010 08:30RUSH results, 05/03

Logged In By: William Schwab
Date Logged In: 04/06/2010 14:48

Samples Received at: **3.2°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004030-01 DP20-03314 [Solid] Sampled 04/05/2010 10:25 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/02/2010 12:25	soil TAL + Mo
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/19/2010 12:25	+MO
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 12:25	AP VIALS
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 12:25	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 12:25	
MET_7471A_MERCURY	05/04/2010 14:00	20	05/03/2010 12:25	
1004030-02 DP20-03315 [Solid] Sampled 04/05/2010 10:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/03/2010 12:30	
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/02/2010 12:30	soil TAL + Mo
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 12:30	AP VIALS
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/19/2010 12:30	+MO
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 12:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 12:30	
1004030-03 DP20-03316 [Solid] Sampled 04/05/2010 10:35 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/02/2010 12:35	soil TAL + Mo
MET_7471A_MERCURY	05/04/2010 14:00	20	05/03/2010 12:35	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 12:35	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/19/2010 12:35	+MO
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 12:35	AP VIALS
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 12:35	AP VIALS

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004030-04 DP23-03323 [Solid] Sampled 04/05/2010 14:03 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 16:03	
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 16:03	+MO
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 16:03	
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 16:03	AP VIALS
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 16:03	soil TAL + Mo
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 16:03	AP VIALS
1004030-05 DP23-03324 [Solid] Sampled 04/05/2010 14:15 Pacific				**QSM4.1**
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 16:15	AP VIALS
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 16:15	AP VIALS
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	5	10/02/2010 16:15	soil TAL + Mo
SGC_DRO_8015B_3546	04/12/2010 14:00	5	04/19/2010 16:15	+MO
MET_7471A_MERCURY	04/12/2010 14:00	5	05/03/2010 16:15	
WC_PERCENT_SOLIDS_2540B	04/13/2010 14:00	5	04/12/2010 16:15	
1004030-06 DP23-03329 [Solid] Sampled 04/05/2010 10:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 12:30	AP VIALS
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 12:30	
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 12:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 12:30	
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 12:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 12:30	+MO
1004030-07 DP25-03330 [Solid] Sampled 04/05/2010 10:45 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 12:45	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 12:45	
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 12:45	
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 12:45	+MO
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 12:45	AP VIALS
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 12:45	AP VIALS
1004030-08 DP25-53330 [Solid] Sampled 04/05/2010 10:45 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 12:45	
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 12:45	soil TAL + Mo
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 12:45	+MO
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 12:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 12:45	
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 12:45	AP VIALS

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004030-09 DP26-03332 [Solid] Sampled 04/05/2010 15:05 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 17:05	soil TAL + Mo
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 17:05	+MO
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 17:05	AP VIALS
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 17:05	AP VIALS
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 17:05	
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 17:05	
1004030-10 DP26-03333 [Solid] Sampled 04/05/2010 15:10 Pacific				**QSM4.1**
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 17:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 17:10	
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 17:10	AP VIALS
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 17:10	soil TAL + Mo
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 17:10	
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 17:10	+MO
1004030-11 DP27-03335 [Solid] Sampled 04/05/2010 13:45 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 15:45	
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 15:45	
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 15:45	AP VIALS
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 15:45	+MO
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 15:45	soil TAL + Mo
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 15:45	AP VIALS
1004030-12 DP27-03336 [Solid] Sampled 04/05/2010 13:50 Pacific				**QSM4.1**
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 15:50	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 15:50	
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 15:50	
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 15:50	soil TAL + Mo
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 15:50	+MO
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 15:50	AP VIALS
1004030-13 DP27-03337 [Solid] Sampled 04/05/2010 13:55 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 15:55	soil TAL + Mo
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 15:55	AP VIALS
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 15:55	AP VIALS
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 15:55	+MO
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 15:55	
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 15:55	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004030-14 DP28-03338 [Solid] Sampled 04/05/2010 11:50 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 13:50	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 13:50	
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 13:50	AP VIALS
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 13:50	AP VIALS
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 13:50	
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 13:50	+MO
1004030-15 DP28-03339 [Solid] Sampled 04/05/2010 11:54 Pacific				**QSM4.1**
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 13:54	AP VIALS
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 13:54	AP VIALS
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 13:54	+MO
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 13:54	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 13:54	
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 13:54	
1004030-16 DP30-03231 [Solid] Sampled 04/05/2010 15:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/12/2010 17:25	
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 17:25	AP VIALS
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 17:25	AP VIALS
MET_7471A_MERCURY	04/12/2010 14:00	20	05/03/2010 17:25	
SGC_DRO_8015B_3546	04/12/2010 14:00	20	04/19/2010 17:25	+MO
MET_ICP_LOW6010B_FULL	04/12/2010 14:00	20	10/02/2010 17:25	soil TAL + Mo
1004030-17 EB-111 [Water] Sampled 04/05/2010 08:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/12/2010 10:00	+MO
MET_7470_MERCURY	05/04/2010 14:00	20	05/03/2010 10:00	
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/12/2010 10:00	
MET_ICP_6010B_FULL	05/04/2010 14:00	20	10/02/2010 10:00	water TAL + Mo
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 10:00	
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 10:00	
1004030-18 TB-111 [Water] Sampled 04/05/2010 08:10 Pacific				**QSM4.1**
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 10:10	
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 10:10	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004030-19 EB-211 [Water] Sampled 04/05/2010 09:10 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	10/02/2010 11:10	water TAL + Mo. FF and Preserved!
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 11:10	
SMS_PAH_8270C_3510_LOW	04/12/2010 14:00	20	04/12/2010 11:10	
SGC_DRO_8015B_3510	04/12/2010 14:00	20	04/12/2010 11:10	+MO
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 11:10	
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	05/03/2010 11:10	FF and Preserved!
1004030-20 TB-211 [Water] Sampled 04/05/2010 09:10 Pacific				**QSM4.1**
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 11:10	
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 11:10	
1004030-21 EB-311 [Water] Sampled 04/05/2010 07:45 Pacific				**QSM4.1**
VOC_8260B_AP9	05/04/2010 14:00	20	04/19/2010 09:45	
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/12/2010 09:45	+MO
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/12/2010 09:45	
VGC_GRO_8015B	05/04/2010 14:00	20	04/19/2010 09:45	
MET_ICP_6010B_FULL	05/04/2010 14:00	20	10/02/2010 09:45	water TAL + Mo
MET_7470_MERCURY	05/04/2010 14:00	20	05/03/2010 09:45	
1004030-22 DP24-03572 [Water] Sampled 04/02/2010 13:50 Pacific				**QSM4.1**
VOC_8260B_AP9	05/04/2010 14:00	20	04/16/2010 15:50	
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	04/30/2010 15:50	
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/09/2010 15:50	
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/09/2010 15:50	+MO
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	09/29/2010 15:50	water TAL + Mo
VGC_GRO_8015B	05/04/2010 14:00	20	04/16/2010 15:50	
1004030-23 DP24-03573 [Water] Sampled 04/02/2010 14:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/09/2010 16:10	
VOC_8260B_AP9	05/04/2010 14:00	20	04/16/2010 16:10	
VGC_GRO_8015B	05/04/2010 14:00	20	04/16/2010 16:10	
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	04/30/2010 16:10	
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	09/29/2010 16:10	water TAL + Mo
SGC_DRO_8015B_3510	04/12/2010 14:00	20	04/09/2010 16:10	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004030-24 DP22-03568 [Water] Sampled 04/02/2010 15:10 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/12/2010 14:00	20	04/09/2010 17:10	+MO
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/09/2010 17:10	
VGC_GRO_8015B	05/04/2010 14:00	20	04/16/2010 17:10	
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	04/30/2010 17:10	
VOC_8260B_AP9	05/04/2010 14:00	20	04/16/2010 17:10	
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	09/29/2010 17:10	water TAL + Mo
1004030-25 DP22-03569 [Water] Sampled 04/02/2010 15:35 Pacific				**QSM4.1**
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	04/30/2010 17:35	
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	09/29/2010 17:35	water TAL + Mo
SGC_DRO_8015B_3510	04/12/2010 14:00	20	04/09/2010 17:35	+MO
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/09/2010 17:35	
VGC_GRO_8015B	05/04/2010 14:00	20	04/16/2010 17:35	
VOC_8260B_AP9	05/04/2010 14:00	20	04/16/2010 17:35	
1004030-26 DP19-03562 [Water] Sampled 04/05/2010 10:30 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/12/2010 14:00	20	04/12/2010 12:30	+MO
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	05/03/2010 12:30	
SMS_PAH_8270C_3510_LOW	04/12/2010 14:00	20	04/12/2010 12:30	
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	10/02/2010 12:30	water TAL + Mo
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 12:30	
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 12:30	
1004030-27 DP19-03563 [Water] Sampled 04/05/2010 09:15 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/12/2010 14:00	20	04/12/2010 11:15	+MO
VGC_GRO_8015B	04/12/2010 14:00	20	04/19/2010 11:15	
MET_ICP_6010B_FULL_DIS	04/12/2010 14:00	20	10/02/2010 11:15	water TAL + Mo
MET_7470_DIS_MERCURY	04/12/2010 14:00	20	05/03/2010 11:15	
VOC_8260B_AP9	04/12/2010 14:00	20	04/19/2010 11:15	
SMS_PAH_8270C_3510_LOW	04/12/2010 14:00	20	04/12/2010 11:15	
1004030-28 DP03-07008 [Solid] Sampled 04/02/2010 09:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/09/2010 11:05	
SMS_PAH_8270C_3546_LOW	04/12/2010 14:00	20	04/16/2010 11:05	
1004030-29 DP03-07009 [Solid] Sampled 04/02/2010 09:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/12/2010 14:00	5	04/16/2010 11:10	
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	5	04/09/2010 11:10	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004030-30 DP03-07010 [Solid] Sampled 04/02/2010 09:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/12/2010 14:00	20	04/16/2010 11:15	
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/09/2010 11:15	
1004030-31 DP03-07011 [Solid] Sampled 04/02/2010 09:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/12/2010 14:00	20	04/16/2010 11:20	
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/09/2010 11:20	
1004030-32 DP03-57010 [Solid] Sampled 04/02/2010 09:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/12/2010 14:00	20	04/09/2010 11:15	
SMS_PAH_8270C_3546_LOW	04/12/2010 14:00	20	04/16/2010 11:15	
1004030-33 DP19-07232 [Solid] Sampled 04/02/2010 11:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 13:40	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 13:40	
1004030-34 DP19-07233 [Solid] Sampled 04/02/2010 11:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 13:45	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 13:45	
1004030-35 DP19-07234 [Solid] Sampled 04/02/2010 11:50 Pacific				**QSM4.1. MS/MSD.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 13:50	MS/MSD.
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 13:50	MS/MSD.
1004030-36 DP19-07235 [Solid] Sampled 04/02/2010 11:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 13:55	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 13:55	
1004030-37 DP21-07240 [Solid] Sampled 04/02/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:40	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:40	
1004030-38 DP21-07241 [Solid] Sampled 04/02/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:45	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:45	
1004030-39 DP21-07242 [Solid] Sampled 04/02/2010 14:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:50	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:50	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004030-40 DP21-07243 [Solid] Sampled 04/02/2010 14:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:55	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:55	
1004030-41 DP21-57240 [Solid] Sampled 04/02/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:40	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:40	
1004030-42 DP22-07244 [Solid] Sampled 04/02/2010 14:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:00	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:00	
1004030-43 DP22-07245 [Solid] Sampled 04/02/2010 14:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:05	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:05	
1004030-44 DP22-07246 [Solid] Sampled 04/02/2010 14:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:10	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:10	
1004030-45 DP22-07247 [Solid] Sampled 04/02/2010 14:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/16/2010 16:15	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/09/2010 16:15	
1004030-46 DP20-07236 [Solid] Sampled 04/05/2010 09:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 11:50	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/19/2010 11:50	
1004030-47 DP20-07237 [Solid] Sampled 04/05/2010 09:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/19/2010 11:55	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 11:55	
1004030-48 DP20-07238 [Solid] Sampled 04/05/2010 10:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/19/2010 12:00	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 12:00	
1004030-49 DP20-07239 [Solid] Sampled 04/05/2010 10:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/19/2010 12:05	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/12/2010 12:05	

SGS/Paradigm (SUB028)

Reviewed By

Date

1004030

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1004030-16 DP30-03231 [Solid] Sampled 04/05/2010 15:25 Pacific				**QSM4.1.**
SUB_DIOXINS_8290	04/12/2010 14:00	20	05/05/2010 17:25	sub to SGS - Wilmington

Reviewed By

Date

Chain of Custody Record

COC Number: **4510P**

CH2MHILL *4/5/2010 4:05:22 PM* Page 1 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP20-03314 ✓	05-Apr-10 10:25	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP20-03315 ✓	05-Apr-10 10:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP20-03316 ✓	05-Apr-10 10:35	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

1004030

-01

-02

-03

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		4/5/10
Sampled by		
Relinquished by	Tamara Frank	1600
Received by		
Relinquished by		
Received by		4/6/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510P**

CH2MHILL *4/5/2010 4:05:23 PM* Page 2 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004030

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP23-03323	05-Apr-10 14:03	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-04
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:		4			
DP23-03324	05-Apr-10 14:15	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-05
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:		4			
DP25-03329	05-Apr-10 10:30	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-06
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:		4			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jenk	4/5/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

1.6°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4510P**

CH2MHILL *4/5/2010 4:05:23 PM* Page 3 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP25-03330	05-Apr-10 10:45	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:		4		
DP25-53330	05-Apr-10 10:45	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:		4		
DP26-03332	05-Apr-10 15:05	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:		4		

1004030

-07

-08

-09

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/5/10
Relinquished by	Tamara Forde	1600
Received by		
Relinquished by		
Received by		4/6/10 08:30

1.6°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4510P**

CH2MHILL 4/5/2010 4:05:23 PM Page 4 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624																				
DP26-03333	05-Apr-10 15:10	N	Soil																								
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	4																							
DP27-03335	05-Apr-10 13:45	N	Soil																								
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	4																							
DP27-03336	05-Apr-10 13:50	N	Soil																								
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	4																							

1004030

-10

-11

-12

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jank	4/5/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6 °C

Chain of Custody Record

COC Number: **4510P**

CH2MHILL 4/5/2010 4:05:23 PM Page 5 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624																				
DP27-03337	05-Apr-10 13:55	N	Soil																								
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	4																							
DP28-03338	05-Apr-10 11:50	N	Soil																								
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	4																							
DP28-03339	05-Apr-10 11:54	N	Soil																								
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	4																							

1004030

-13

-14

-15

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/5/10
Relinquished by	Jamara Jark	1600
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510P**

CH2MHILL *4/5/2010 4:05:23 PM* Page 6 of 6

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
~~DP30-03231~~	05-Apr-10 15:25	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°(	☐	☑
			Total Containers:	4			

1004030

-16

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jorde	4/5/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 ~~10:22~~ 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510P**

CH2MHILL *4/5/2010 3:20:42 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-111	05-Apr-10 8:00	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-111	05-Apr-10 8:10	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004030

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	[signature]	4/6/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/6/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510B3**

CH2MHILL *4/5/2010 10:22:42 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8270Sim
EB-111	05-Apr-10 8:00	N	Water				
			Field Filtered: ☐	~~6~~ 2	4°C	☐	☑
			Field Filtered: ☐	2	4°C	☑	☐
			Total Containers:	~~10~~ 4			

1004030

-17

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		4/5/10
Sampled by		
Relinquished by	James Jank	1800
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4510B4**

CH2MHILL 4/5/2010 2:19:52 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A
EB-111	05-Apr-10 8:00	N	Water			
	Field Filtered: ☐			2	HNO4	☑
	Total Containers:			2		

1004030

-17

CMC 04/05/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	CMC	04/05/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510P**

CH2MHILL *4/5/2010 3:21:32 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004030

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-211	05-Apr-10 9:10	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	-19
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:	5				
TB-211	05-Apr-10 9:10	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	-20
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:	5				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by	[signature]	4/6/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/6/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4510B**

CH2MHILL 4/5/2010 9:54:42 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
EB-311	05-Apr-10 7:45	N	Water						
			Field Filtered: ☐	~~8~~ 2	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2	4°C	☑	☐	☐	☐
			Field Filtered: ☐	2	MeOH	☐	☑	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☑	☐
			Total Containers:	~~15~~ 9					

1004030

-21

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/5/10 0930
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469890010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510B5**

CH2MHILL 4/5/2010 2:21:35 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A
EB-311	05-Apr-10 7:45	N	Water			
			Field Filtered: ☐	1	HNO4	☑
			Total Containers:	1		

1004030

-21

CMC 04/05/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by	[signature]	04/05/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/6/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510W1**

CH2MHILL 4/5/2010 10:45:38 AM Page 2 of 2

1004030

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP24-03572	02-Apr-10 13:50	N	Water							
	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						
DP24-03573	02-Apr-10 14:10	N	Water							
	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						

-22

-23

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/5/10 1130
Received by		
Relinquished by	[signature]	9/6/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510W1**

CH2MHILL 4/5/2010 10:45:38 AM Page 1 of 2

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP22-03568	02-Apr-10 15:10	N	Water							
	Field Filtered:☐	1			HNO4	☑	☐	☐	☐	☐
	Field Filtered:☐	2			4°C	☐	☐	☐	☐	☑
	Field Filtered:☐	2			4°C	☐	☑	☐	☐	☐
	Field Filtered:☐	2			MeOH	☐	☐	☑	☐	☐
	Field Filtered:☐	3			H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:				10					
DP22-03569	02-Apr-10 15:35	N	Water							
	Field Filtered:☐	1			HNO4	☑	☐	☐	☐	☐
	Field Filtered:☐	2			4°C	☐	☐	☐	☐	☑
	Field Filtered:☐	2			4°C	☐	☑	☐	☐	☐
	Field Filtered:☐	2			MeOH	☐	☐	☑	☐	☐
	Field Filtered:☐	3			H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:				10					

1004030

-24

-25

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/5/10
Relinquished by	Tamara Jark	1130
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510W3**

CH2MHILL *4/5/2010 1:17:14 PM* Page 1 of 1

Project Name
Task Order **Location** **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP19-03562	05-Apr-10 10:30	N	Water					
	Field Filtered: ☐			1	HNO4	☑	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐
	Total Containers:			5				

1004030

-26

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/5/10 1400
Received by		
Relinquished by		
Received by	[signature]	4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

Chain of Custody Record

COC Number: **4510W4**

CH2MHILL *4/5/2010 2:12:39 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TD

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP19-03563	05-Apr-10 9:15	N	Water					
			Field Filtered: ☐	1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	5				

1004030

-27

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/5/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.6°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/5/2010 1:09:41 PM* Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 7 Days
Shipping Date: 4/5/2010
COC Number: 4510

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-03006	4/2/2010 9:05 Soil			X	X	1004022-03	2	
DP03-07008	4/2/2010 9:05 Soil	X				1004030-28	1	
DP03-07009	4/2/2010 9:10 Soil	X				-29	1	
DP03-07010	4/2/2010 9:15 Soil	X				-30	1	
DP03-07011	4/2/2010 9:20 Soil	X				-31	1	
DP03-57010	4/2/2010 9:15 Soil	X				-32	1	
DP19-03311	4/2/2010 11:45 Soil			X	X	-05	2	
DP19-03312	4/2/2010 11:56 Soil			X	X	-06	2	
DP19-07232	4/2/2010 11:40 Soil	X				-33	1	
DP19-07233	4/2/2010 11:45 Soil	X				-34	1	
DP19-07234	4/2/2010 11:50 Soil		X			MS/MSD -35	~~1~~ 2	
DP19-07235	4/2/2010 11:55 Soil	X				-36	1	
DP21-03317	4/2/2010 14:20 Soil			X	X	-07	2	
DP21-03318	4/2/2010 15:35 Soil			X	X	-08	2	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/5/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0010
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3-2°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/5/2010 1:09:41 PM* Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/5/2010
COC Number: 4510

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	14	14	14	28		
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
DP21-07240	4/2/2010 14:40 Soil	x				1004030-37 1	
DP21-07241	4/2/2010 14:45 Soil	x				-38 1	
DP21-07242	4/2/2010 14:50 Soil	x				-39 1	
DP21-07243	4/2/2010 14:55 Soil	x				-40 1	
DP21-57240	4/2/2010 14:40 Soil	x				-41 1	
DP22-03320	4/2/2010 14:30 Soil			x	x	1004022-09 2	
DP22-03321	4/2/2010 14:35 Soil			x	x	-10 2	
DP22-07244	4/2/2010 14:00 Soil	x				-42 1	
DP22-07245	4/2/2010 14:05 Soil	x				-43 1	
DP22-07246	4/2/2010 14:10 Soil	x				-44 1	
DP22-07247	4/2/2010 14:15 Soil	x				-45 1	
DP22-53320	4/2/2010 14:30 Soil			x	x	1004022-11 2	
DP20-03314	4/5/2010 10:25 Soil			x	x	1004030-01 2	
DP20-03315	4/5/2010 10:30 Soil			x	x	-62 2	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jenk	4/5/10
Relinquished by		HDC
Received by		
Relinquished by		
Received by		4/6/10

08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3.2°C

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/5/2010
COC Number: 4510

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP20-03316	4/5/2010 10:35 Soil			X	X	1004630-03	2	
DP20-07236	4/5/2010 9:50 Soil	X				-46	1	
DP20-07237	4/5/2010 9:55 Soil	X				-47	1	
DP20-07238	4/5/2010 10:00 Soil	X				-48	1	
DP20-07239	4/5/2010 10:05 Soil	X				-49	1	
						TOTAL NUMBER OF CONTAINERS	44	

	Signatures	Date/Time
Approved by		4/5/10
Sampled by	Jamie Jant	1400
Relinquished by		
Received by		
Relinquished by		
Received by		4/6/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.2°C

ws 4/6/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023, 1004030 Number of Coolers: ~~2~~ 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/06/10 08:30** Date cooler(s) opened: **4/06/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6696

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

Dates samples were logged-in: **4/06/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): ws

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... ws 4/6/10	Yes	(No)	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers? ..... ws 4/6/10	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

1 vial for ~~DP~~ DP13-03550 broke in shipment CAR#: _____
ws 4/6/10

DP30-03232 no dry weight container rec'd. Dry weight on hold?

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004023, 1004030 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/06/10 08:30 Date cooler(s) opened: 4/06/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6663

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.6°C

~~Dates samples were logged in: 4/06/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

see page 1 of 7

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 Number of Coolers: 3 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/06/10 08:30 Date cooler(s) opened: 4/06/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6674

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.6c

~~Dates samples~~ Date logged-in: 4/06/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 Number of Coolers: 4 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/06/10 08:30** Date cooler(s) opened: **4/06/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6700

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.2°C

~~Dates samples were logged-in:~~ **4/06/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

5 ws 4/6/10

LIMS Number: 1004030 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/06/10 08:30 Date cooler(s) opened: 4/06/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6685

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9°C

Dates samples were logged-in: 4/06/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004022, 1004030 Number of Coolers: 6 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/06/10 08:30** Date cooler(s) opened: **4/06/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0010

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.2°C

Dates samples were logged-in: **4/06/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 Number of Coolers: 7 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/06/10 08:30** Date cooler(s) opened: **4/06/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 7560

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/5/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.8°C

Dates ~~samples~~ were logged-in: **4/06/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/6/2010 10:15:14 AM* Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP23-03323	4/5/2010	14:03	Soil			x ✓	x ✓	1004030-04	2	
DP23-03324	4/5/2010	14:15	Soil			x ✓	x ✓	-05	2	
DP23-07248	4/5/2010	14:00	Soil	x ✓					1	
DP23-07249	4/5/2010	14:03	Soil	x ✓					1	
DP23-07250	4/5/2010	14:06	Soil	x ✓					1	
DP23-07251	4/5/2010	14:08	Soil	x ✓					1	
DP23-57250	4/5/2010	14:06	Soil	x ✓					1	
DP25-03329	4/5/2010	10:30	Soil			x ✓	x ✓	1004030-06	2	
DP25-03330	4/5/2010	10:45	Soil			x ✓	x ✓	-07	2	
DP25-07256	4/5/2010	10:30	Soil	x ✓					1	
DP25-07257	4/5/2010	10:35	Soil	x ✓					1	
DP25-07258	4/5/2010	10:40	Soil	x ✓					1	
DP25-07259	4/5/2010	10:45	Soil	x ✓					1	
DP25-53330	4/5/2010	10:45	Soil			x ✓	x ✓	1004030-08	2	

Signatures		Date/Time
Approved by		
Sampled by	Jamie Frank	4/6/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8258 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.4°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/6/2010 10:15:14 AM* Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP26-03332	4/5/2010	15:05	Soil			X ✓		X ✓	1004020-09	2	
DP26-03333	4/5/2010	15:10	Soil			X ✓		X ✓	-10	2	
DP26-07260	4/5/2010	14:35	Soil		X ✓				MS/MSD	~~1~~ 2	
DP26-07261	4/5/2010	14:40	Soil	X						1	
DP26-07262	4/5/2010	14:45	Soil	X ✓						1	
DP26-07263	4/5/2010	14:50	Soil	X ✓						1	
DP26-57260	4/5/2010	14:35	Soil	X ✓					1004030 - 11	1	
DP27-03335	4/5/2010	13:45	Soil			X ✓		X ✓	-12	2	
DP27-03336	4/5/2010	13:50	Soil			X ✓		X ✓	-13	2	
DP27-03337	4/5/2010	13:55	Soil			X ✓		X ✓		2	
DP27-07264	4/5/2010	13:20	Soil	X ✓						1	
DP27-07265	4/5/2010	13:25	Soil	X ✓						1	
DP27-07266	4/5/2010	13:30	Soil	X ✓						1	
DP27-07267	4/5/2010	13:35	Soil	X ✓						1	

LS 4/9/10

Signatures		Date/Time
Approved by		
Sampled by	Tamara Frank	4/6/10 1000
Relinquished by		
Received by		
Relinquished by		4/7/10 08:30
Received by		3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/6/2010 10:15:15 AM*

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP28-03338	4/5/2010 11:50 Soil			X ✓		X ✓	1004030-14	2	
DP28-03339	4/5/2010 11:54 Soil			X ✓		X ✓	-15	2	
DP28-07268	4/5/2010 11:50 Soil	X ✓						1	
DP28-07269	4/5/2010 11:52 Soil	X ✓						1	
DP28-07270	4/5/2010 11:54 Soil	X ✓						1	
DP28-07271	4/5/2010 11:56 Soil	X ✓						1	
DP28-57270	4/5/2010 11:54 Soil	X ✓						1	
DP30-03231	4/5/2010 15:25 Soil			X ✓	X ✓	X ✓	004030-16	3	
							TOTAL NUMBER OF CONTAINERS	50	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jarrett	4/6/10
Relinquished by		1000
Received by		
Relinquished by		
Received by		4/7/10 08:30

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4610W**

CH2MHILL 4/6/2010 8:42:48 AM Page 1 of 2

Project Name Location
Task Order Project: 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004030

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim	
DP19-03562	05-Apr-10 10:30	N	Water								
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐	-26
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐	
	Total Containers:			5							
DP19-03563	05-Apr-10 9:15	N	Water								
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐	-27
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐	
	Total Containers:			5							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Frank	4/6/10 830
Relinquished by		
Received by		
Relinquished by		
Received by	4/7/10 00:30	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.0°C

Chain of Custody Record

COC Number: **4610B2**

CH2MHILL 4/6/2010 8:58:18 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-211	05-Apr-10 9:10	N	Water					
			Field Filtered: ~~☐~~ ☑	2 1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	12				

1004030 - 19

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/6/10 0900
Received by		
Relinquished by	[signature]	4/7/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 0054 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.3°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schwab (signature): [redacted]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0000

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3-4°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A

11. Did all bottles arrive unbroken? ..... (Yes) No N/A

12. Was all required bottle label information complete? ..... (Yes) No N/A

13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A

14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A

15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)

17. Was sufficient amount of sample sent for the analyses required? ..... (Yes) No N/A

18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

pH ≤ 2 for all metals (H_2O).

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schrab (signature): [signature]

Circle response below as appropriate:

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 6620

2. Were custody seals on outside of cooler(s)? Yes No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.0c

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was residual chlorine present in any applicable sample containers? Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? Yes No N/A

18. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schrab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
FL Courier Other:

If applicable, enter airbill number here: 0630

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.2°C

Dates samples were logged in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: [redacted] Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schrab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6619

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

1004038

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/05/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/07/2010 08:30 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/07/2010 15:58

Samples Received at: **3.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004038-01 DP23-07248 [Solid] Sampled 04/05/2010 14:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:00	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:00	
1004038-02 DP23-07249 [Solid] Sampled 04/05/2010 14:03 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:03	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:03	
1004038-03 DP23-07250 [Solid] Sampled 04/05/2010 14:06 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:06	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:06	
1004038-04 DP23-07251 [Solid] Sampled 04/05/2010 14:08 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:08	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:08	
1004038-05 DP23-57250 [Solid] Sampled 04/05/2010 14:06 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:06	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:06	
1004038-06 DP25-07256 [Solid] Sampled 04/05/2010 10:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 12:30	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 12:30	

1004038

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004038-07 DP25-07257 [Solid] Sampled 04/05/2010 10:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 12:35	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 12:35	
1004038-08 DP25-07258 [Solid] Sampled 04/05/2010 10:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 12:40	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 12:40	
1004038-09 DP25-07259 [Solid] Sampled 04/05/2010 10:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 12:45	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 12:45	
1004038-10 DP26-07260 [Solid] Sampled 04/05/2010 14:35 Pacific				**QSM4.1. MS/MSD.**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:35	MS/MSD.
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:35	MS/MSD.
1004038-11 DP26-07261 [Solid] Sampled 04/05/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:40	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:40	
1004038-12 DP26-07262 [Solid] Sampled 04/05/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:45	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:45	
1004038-13 DP26-07263 [Solid] Sampled 04/05/2010 14:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:50	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:50	
1004038-14 DP26-57260 [Solid] Sampled 04/05/2010 14:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 16:35	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 16:35	
1004038-15 DP27-07264 [Solid] Sampled 04/05/2010 13:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 15:20	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 15:20	
1004038-16 DP27-07265 [Solid] Sampled 04/05/2010 13:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 15:25	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 15:25	

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004038-17 DP27-07266 [Solid] Sampled 04/05/2010 13:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 15:30	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 15:30	
1004038-18 DP27-07267 [Solid] Sampled 04/05/2010 13:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 15:35	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 15:35	
1004038-19 DP28-07268 [Solid] Sampled 04/05/2010 11:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 13:50	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 13:50	
1004038-20 DP28-07269 [Solid] Sampled 04/05/2010 11:52 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 13:52	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 13:52	
1004038-21 DP28-07270 [Solid] Sampled 04/05/2010 11:54 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 13:54	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 13:54	
1004038-22 DP28-07271 [Solid] Sampled 04/05/2010 11:56 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 13:56	
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 13:56	
1004038-23 DP28-57270 [Solid] Sampled 04/05/2010 11:54 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/28/2010 14:00	20	04/19/2010 13:54	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/12/2010 13:54	
1004038-24 DP01-03000 [Solid] Sampled 04/06/2010 10:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	5	04/13/2010 12:55	
MET_7471A_MERCURY	04/14/2010 14:00	5	05/04/2010 12:55	
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 12:55	AP VIALS
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 12:55	AP VIALS
SGC_DRO_8015B_3546	04/14/2010 14:00	5	04/20/2010 12:55	+MO
MET_ICP_LOW6010B_FULL	04/14/2010 14:00	5	10/03/2010 12:55	soil TAL + Mo

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004038-25 DP01-03001 [Solid] Sampled 04/06/2010 11:00 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/14/2010 14:00	5	05/04/2010 13:00	
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	5	04/13/2010 13:00	
SGC_DRO_8015B_3546	04/14/2010 14:00	5	04/20/2010 13:00	+MO
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 13:00	AP VIALS
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 13:00	AP VIALS
MET_ICP_LOW6010B_FULL	04/14/2010 14:00	5	10/03/2010 13:00	soil TAL + Mo
1004038-26 DP01-53000 [Solid] Sampled 04/06/2010 10:55 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 12:55	soil TAL + Mo
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 12:55	+MO
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 12:55	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 12:55	
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 12:55	AP VIALS
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 12:55	AP VIALS
1004038-27 DP02-03003 [Solid] Sampled 04/06/2010 14:05 Pacific				**QSM4.1. MS/MSD.**
MET_7471A_MERCURY	04/14/2010 14:00	5	05/04/2010 16:05	MS/MSD
SGC_DRO_8015B_3546	04/14/2010 14:00	5	04/20/2010 16:05	MS/MSD. +MO
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 16:05	MS/MSD. AP VIALS
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 16:05	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	5	04/13/2010 16:05	MS/MSD.
MET_ICP_LOW6010B_FULL	04/14/2010 14:00	5	10/03/2010 16:05	MS/MSD. soil TAL + Mo
1004038-28 DP02-03004 [Solid] Sampled 04/06/2010 14:10 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/14/2010 14:00	5	04/20/2010 16:10	+MO
WC_PERCENT_SOLIDS_2540B	04/14/2010 14:00	5	04/13/2010 16:10	
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 16:10	AP VIALS
MET_7471A_MERCURY	04/14/2010 14:00	5	05/04/2010 16:10	
MET_ICP_LOW6010B_FULL	04/14/2010 14:00	5	10/03/2010 16:10	soil TAL + Mo
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 16:10	AP VIALS
1004038-29 DP10-03284 [Solid] Sampled 04/06/2010 09:34 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 11:34	
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 11:34	
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 11:34	soil TAL + Mo
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 11:34	AP VIALS
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 11:34	AP VIALS
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 11:34	+MO

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004038-30 DP10-03285 [Solid] Sampled 04/06/2010 09:40 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 11:40	soil TAL + Mo
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 11:40	+MO
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 11:40	
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 11:40	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 11:40	AP VIALS
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 11:40	AP VIALS
1004038-31 DP11-03174 [Solid] Sampled 04/06/2010 09:50 Pacific				**QSM4.1**
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 11:50	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 11:50	
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 11:50	
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 11:50	soil TAL + Mo
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 11:50	+MO
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 11:50	AP VIALS
1004038-32 DP11-03175 [Solid] Sampled 04/06/2010 10:10 Pacific				**QSM4.1**
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 12:10	AP VIALS
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 12:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 12:10	
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 12:10	soil TAL + Mo
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 12:10	
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 12:10	+MO
1004038-33 DP11-03287 [Solid] Sampled 04/06/2010 15:05 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 17:05	soil TAL + Mo
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 17:05	AP VIALS
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 17:05	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 17:05	
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 17:05	+MO
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 17:05	
1004038-34 DP11-03288 [Solid] Sampled 04/06/2010 15:10 Pacific				**QSM4.1**
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 17:10	AP VIALS
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 17:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 17:10	
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 17:10	
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 17:10	+MO
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 17:10	soil TAL + Mo

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004038-35 DP12-03178 [Solid] Sampled 04/06/2010 11:15 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 13:15	soil TAL + Mo
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 13:15	
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 13:15	+MO
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 13:15	AP VIALS
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 13:15	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 13:15	
1004038-36 DP12-03180 [Solid] Sampled 04/06/2010 13:40 Pacific				**QSM4.1.**
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 15:40	
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 15:40	soil TAL + Mo
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 15:40	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 15:40	
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 15:40	+MO
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 15:40	AP VIALS
1004038-37 DP12-53180 [Solid] Sampled 04/06/2010 13:40 Pacific				
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 15:40	AP VIALS
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 15:40	AP VIALS
SGC_DRO_8015B_3546	04/28/2010 14:00	20	04/20/2010 15:40	+MO
MET_ICP_LOW6010B_FULL	04/28/2010 14:00	20	10/03/2010 15:40	soil TAL + Mo
MET_7471A_MERCURY	04/28/2010 14:00	20	05/04/2010 15:40	
WC_PERCENT_SOLIDS_2540B	04/28/2010 14:00	20	04/13/2010 15:40	
1004038-38 EB-112 [Water] Sampled 04/06/2010 07:40 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	04/28/2010 14:00	20	10/03/2010 09:40	water TAL + Mo
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 09:40	
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 09:40	+MO
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 09:40	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 09:40	
MET_7470_MERCURY	04/28/2010 14:00	20	05/04/2010 09:40	
1004038-39 TB-112 [Water] Sampled 04/06/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 09:40	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 09:40	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004038-40 EB-212 [Water] Sampled 04/06/2010 07:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 09:30	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 09:30	
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 09:30	
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 09:30	+MO
MET_ICP_6010B_FULL	04/28/2010 14:00	20	10/03/2010 09:30	water TAL + Mo
MET_7470_MERCURY	04/28/2010 14:00	20	05/04/2010 09:30	
1004038-41 TB-212 [Water] Sampled 04/06/2010 07:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 09:30	
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 09:30	
1004038-42 TB-311 [Water] Sampled 04/05/2010 07:45 Pacific				**QSM4.1**
VGC_GRO_8015B	04/28/2010 14:00	20	04/19/2010 09:45	
VOC_8260B_AP9	04/28/2010 14:00	20	04/19/2010 09:45	
1004038-43 DP21-03566 [Water] Sampled 04/05/2010 13:10 Pacific				**MS/MSD. QSM4.1**
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/03/2010 15:10	MS/MSD.
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/02/2010 15:10	MS/MSD water TAL + Mo
VGC_GRO_8015B	04/28/2010 14:00	20	04/19/2010 15:10	MS/MSD.
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/12/2010 15:10	MS/MSD.
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/12/2010 15:10	MS/MSD. +MO
VOC_8260B_AP9	04/28/2010 14:00	20	04/19/2010 15:10	MS/MSD.
1004038-44 DP21-03567 [Water] Sampled 04/05/2010 17:40 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/02/2010 19:40	water TAL + Mo
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/03/2010 19:40	
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/12/2010 19:40	
VGC_GRO_8015B	04/28/2010 14:00	20	04/19/2010 19:40	
VOC_8260B_AP9	04/28/2010 14:00	20	04/19/2010 19:40	
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/12/2010 19:40	+MO
1004038-45 EB-312 [Water] Sampled 04/06/2010 07:45 Pacific				**QSM4.1**
MET_7470_MERCURY	04/28/2010 14:00	20	05/04/2010 09:45	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 09:45	
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 09:45	+MO
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 09:45	
MET_ICP_6010B_FULL	04/28/2010 14:00	20	10/03/2010 09:45	water TAL + Mo
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 09:45	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004038-46 DP02-03900 [Water] Sampled 04/06/2010 08:50 Pacific				**QSM4.1**
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 10:50	
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 10:50	
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/03/2010 10:50	water TAL + Mo
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/04/2010 10:50	
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 10:50	+MO
1004038-47 DP02-03901 [Water] Sampled 04/06/2010 09:50 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 11:50	+MO
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/04/2010 11:50	
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/03/2010 11:50	water TAL + Mo
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 11:50	
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 11:50	
1004038-48 DP28-53580 [Water] Sampled 04/06/2010 10:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 12:30	
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/03/2010 12:30	water TAL + Mo
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 12:30	+MO
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 12:30	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 12:30	
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/04/2010 12:30	
1004038-49 DP28-03580 [Water] Sampled 04/06/2010 10:30 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/03/2010 12:30	water TAL + Mo
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 12:30	+MO
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 12:30	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 12:30	
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 12:30	
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/04/2010 12:30	
1004038-50 DP28-03581 [Water] Sampled 04/06/2010 11:15 Pacific				**QSM4.1**
MET_7470_DIS_MERCURY	04/28/2010 14:00	20	05/04/2010 13:15	
VOC_8260B_AP9	04/28/2010 14:00	20	04/20/2010 13:15	
VGC_GRO_8015B	04/28/2010 14:00	20	04/20/2010 13:15	
SMS_PAH_8270C_3510_LOW	04/28/2010 14:00	20	04/13/2010 13:15	
MET_ICP_6010B_FULL_DIS	04/28/2010 14:00	20	10/03/2010 13:15	water TAL + Mo
SGC_DRO_8015B_3510	04/28/2010 14:00	20	04/13/2010 13:15	+MO

SGS/Paradigm (SUB028)

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1004038-31 DP11-03174 [Solid] Sampled 04/06/2010 09:50 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/28/2010 14:00	20	05/06/2010 11:50	sub to SGS - Wilmington
1004038-32 DP11-03175 [Solid] Sampled 04/06/2010 10:10 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/28/2010 14:00	20	05/06/2010 12:10	sub to SGS - Wilmington
1004038-35 DP12-03178 [Solid] Sampled 04/06/2010 11:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/28/2010 14:00	20	05/06/2010 13:15	sub to SGS - Wilmington
1004038-36 DP12-03180 [Solid] Sampled 04/06/2010 13:40 Pacific				**QSM4.1.**
SUB_DIOXINS_8290	04/28/2010 14:00	20	05/06/2010 15:40	sub to SGS - Wilmington
1004038-37 DP12-53180 [Solid] Sampled 04/06/2010 13:40 Pacific				
SUB_DIOXINS_8290	04/28/2010 14:00	20	05/06/2010 15:40	sub to SGS - Wilmington

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/6/2010 10:15:14 AM* Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP23-03323	4/5/2010	14:03	Soil			x ✓	x ✓	1004030-04	2	
DP23-03324	4/5/2010	14:15	Soil			x ✓	x ✓	-05	2	
DP23-07248	4/5/2010	14:00	Soil	x ✓				1004038-01	1	
DP23-07249	4/5/2010	14:03	Soil	x ✓				-02	1	
DP23-07250	4/5/2010	14:06	Soil	x ✓				-03	1	
DP23-07251	4/5/2010	14:08	Soil	x ✓				-04	1	
DP23-57250	4/5/2010	14:06	Soil	x ✓				-05	1	
DP25-03329	4/5/2010	10:30	Soil			x ✓	x ✓	1004030-06	2	
DP25-03330	4/5/2010	10:45	Soil			x ✓	x ✓	-07	2	
DP25-07256	4/5/2010	10:30	Soil	x ✓				1004038-06	1	
DP25-07257	4/5/2010	10:35	Soil	x ✓				-07	1	
DP25-07258	4/5/2010	10:40	Soil	x ✓				-08	1	
DP25-07259	4/5/2010	10:45	Soil	x ✓				-09	1	
DP25-53330	4/5/2010	10:45	Soil			x ✓	x ✓	1004030-08	2	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	4/6/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8258 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** 4/6/2010 10:15:14 AM Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP26-03332	4/5/2010	15:05	Soil			x ✓		x ✓	1004030-09 4/9/10	2	
DP26-03333	4/5/2010	15:10	Soil			x ✓		x ✓	-10 4/9/10	2	
DP26-07260	4/5/2010	14:35	Soil		x ✓				MS/MSD 1004038 -11 -10	1	2
DP26-07261	4/5/2010	14:40	Soil	x					-12 -11	1	
DP26-07262	4/5/2010	14:45	Soil	x ✓					-13 -12	1	
DP26-07263	4/5/2010	14:50	Soil	x ✓					-14 -13 MS	1	
DP26-57260	4/5/2010	14:35	Soil	x ✓					1004038-14 1004038 MSD 4/9/10	1	
DP27-03335	4/5/2010	13:45	Soil			x ✓		x ✓	1004038 -11 -12	2	
DP27-03336	4/5/2010	13:50	Soil			x ✓		x ✓	-12 -13	2	
DP27-03337	4/5/2010	13:55	Soil			x ✓		x ✓	-13	2	
DP27-07264	4/5/2010	13:20	Soil	x ✓					1004038-15	1	
DP27-07265	4/5/2010	13:25	Soil	x ✓					-16	1	
DP27-07266	4/5/2010	13:30	Soil	x ✓					-17	1	
DP27-07267	4/5/2010	13:35	Soil	x ✓					1004038-18	1	

Signatures		Date/Time
Approved by		
Sampled by	Tamara Jones	4/6/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/7/10

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/6/2010 10:15:15 AM* Page 3 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP28-03338	4/5/2010	11:50	Soil			x ✓		x ✓	1004030-14	2	
DP28-03339	4/5/2010	11:54	Soil			x ✓		x ✓	-15	2	
DP28-07268	4/5/2010	11:50	Soil	x ✓					1004038 -19	1	
DP28-07269	4/5/2010	11:52	Soil	x ✓					-20	1	
DP28-07270	4/5/2010	11:54	Soil	x ✓					-21	1	
DP28-07271	4/5/2010	11:56	Soil	x ✓					-22	1	
DP28-57270	4/5/2010	11:54	Soil	x ✓					1004038-23	1	
DP30-03231	4/5/2010	15:25	Soil			x ✓	x ✓	x ✓	1004030-16	3	
								TOTAL NUMBER OF CONTAINERS		50	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/6/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/6/2010 3:54:29 PM* Page 1 OF 2

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 7 Days
Shipping Date: 4/6/2010
COC Number: 4610p

	Container:	3 x 40 ml VOA	3 x 40 ml VOA	1 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	2XH2O, 1XMeOH, 4°C	MeOH	MeOH			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	48HR	48HR	48HR	48HR			
		VOCs (8260B/624)	VOCs (8260B/624) LAB QC	TPH-Purgable (SW8015B)	TPH-Purgable (SW8015B) LAB QC		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP01-03000	4/6/2010 10:55 Soil	X		X		1004038-24	4	
DP01-03001	4/6/2010 11:00 Soil	X		X		-25	4	
DP01-53000	4/6/2010 10:55 Soil	X		X		-26	4	
DP02-03003	4/6/2010 14:05 Soil		X		X	MS/MSD -27	~~4~~ 8	
DP02-03004	4/6/2010 14:10 Soil	X		X		-28	4	
DP10-03284	4/6/2010 9:34 Soil	X		X		-29	4	
DP10-03285	4/6/2010 9:40 Soil	X		X		-30	4	
DP11-03174	4/6/2010 9:50 Soil	X		X		-31	4	
DP11-03175	4/6/2010 10:10 Soil	X		X		-32	4	
DP11-03287	4/6/2010 15:05 Soil	X		X		-33	4	
DP11-03288	4/6/2010 15:10 Soil	X		X		-34	4	
DP12-03178	4/6/2010 11:15 Soil	X		X		-35	4	
DP13-03180	4/6/2010 13:40 Soil	X		X		-36	4	
DP13-53180	4/6/2010 13:40 Soil	X		X		-37	4	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Janice Jarrett	4/6/10 1600
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/6/2010 3:54:29 PM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/6/2010
COC Number: 4610p

Container:	3 x 40 ml VOA	3 x 40 ml VOA	1 x 40 ml VOA	1 x 40 ml VOA
Preservatives:	2XH2O, 1XMeOH, 4°C	2XH2O, 1XMeOH, 4°C	MeOH	MeOH
Filtered:	NA	NA	NA	NA
Holding Time:	48HR	48HR	48HR	48HR
DATE / TIME / Matrix	VOCs (8260B/624)	VOCs (8260B/624) LAB QC	TPH-Purgable (SW8015B)	TPH-Purgable (SW8015B) LAB QC

Number of Containers

COMMENTS

TOTAL NUMBER OF CONTAINERS 56

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamana Jent	4/6/10 1600
Received by		
Relinquished by		
Received by	[signature]	4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4610P**

CH2MHILL *4/6/2010 3:56:17 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-112	06-Apr-10 7:40	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-112	06-Apr-10 7:40	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004038

-38

-39

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamara Jarvis	4/6/10 1600
Received by		
Relinquished by	Janice Shilling	4/7/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4610P**

CH2MHILL *4/6/2010 3:57:48 PM* Page 1 of 1

Project Name
Task Order **Location**
Project: 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8260B/624	SW8015B-P
EB-212	06-Apr-10 7:30	N	Water				
	Field Filtered: ☐		2	MeOH		☑	☐
	Field Filtered: ☐		3	H2O,MeOH,4°C		☐	☑
	Total Containers:		5				
TB-212	06-Apr-10 7:30	N	Water				
	Field Filtered: ☐		2	MeOH		☑	☐
	Field Filtered: ☐		3	H2O,MeOH,4°C		☐	☑
	Total Containers:		5				

100408

-40

-41

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamara Jones	4/6/10 1600
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4610W2**

CH2MHILL 4/6/2010 1:51:18 PM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-212	06-Apr-10 7:30	N	Water					
			Field Filtered: ☐	2	HNO4	☑	☐	☐
			Field Filtered: ☐	8	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	12				

1004038

-40

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		4/6/10 1400
Received by		
Relinquished by		
Received by		4/7/10 09:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4610B1**

CH2MHILL *4/6/2010 8:52:23 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624																		
TB-311	05-Apr-10 7:45	N	Water																						
			Field Filtered: ☐	2	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	5																					

1004038
-42

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Forrest	4/6/10 0900
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6e9890000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4610W**

CH2MHILL 4/6/2010 8:42:48 AM Page 2 of 2

1004038

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP21-03566	05-Apr-10 13:10	N	Water							
LAB QC			Field Filtered: ☐	~~1~~ 3	HNO4	☑	☐	☐	☐	☐
LAB QC			Field Filtered: ☐	~~2~~ 6	4°C	☐	☐	☐	☐	☑
LAB QC			Field Filtered: ☐	~~2~~ 6	4°C	☐	☑	☐	☐	☐
LAB QC			Field Filtered: ☐	~~2~~ 6	MeOH	☐	☐	☑	☐	☐
LAB QC			Field Filtered: ☐	~~3~~ 9	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	~~10~~ 30						
DP21-03567	05-Apr-10 17:40	N	Water							
			Field Filtered: ☐	1	HNO4	☑	☐	☐	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐	☐
			Field Filtered: ☐	2	MeOH	☐	☐	☑	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	10						

MS/MSD

-43

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/6/10 830
Relinquished by		
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4610B3**

CH2MHILL 4/6/2010 9:12:41 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
EB-312	06-Apr-10 7:45	N	Water							
	Field Filtered: ☐			~~2~~ 1	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			~~8~~ 2	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			~~17~~ 10						

1004038

-45

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/6/10
Relinquished by	Tamara Frank	0930
Received by		
Relinquished by		
Received by		4/7/10 02:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4610W2**

CH2MHILL 4/6/2010 1:48:10 PM Page 1 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	SW6010B/7470A	SW8015B-E	SW8270Sim
DP02-03900	06-Apr-10 8:50	N	Water						
RESAMPLED DP02-3506 - FEDEX LOST COOLER	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐
RESAMPLED DP02-3506 - FEDEX LOST COOLER	Field Filtered: ☐			2	4°C	☐	☐	☐	☑
RESAMPLED DP02-3506 - FEDEX LOST COOLER	Field Filtered: ☐			2	4°C	☐	☐	☑	☐
	Total Containers:			5					
DP02-03901	06-Apr-10 9:50	N	Water						
RESAMPLED DP02-3507 - FEDEX LOST COOLER	Field Filtered: ☐			1	HNO4	☑	☐	☐	☐
RESAMPLED DP02-3507 - FEDEX LOST COOLER	Field Filtered: ☐			2	4°C	☐	☐	☐	☑
RESAMPLED DP02-3507 - FEDEX LOST COOLER	Field Filtered: ☐			2	4°C	☐	☐	☑	☐
	Total Containers:			5					

1004038

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-47

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Tank	4/6/10 1400
Received by		
Relinquished by	Mitchell	4/7/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8758 6989 0000
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

Chain of Custody Record

COC Number: **4610W2**

CH2MHILL 4/6/2010 1:48:10 PM Page 3 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW6010B/7470A	SW8015B-E	SW8270Sim
DP28-53580	06-Apr-10 10:30	N	Water						
			Field Filtered: ☐	1	HNO4	☐	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☐	☑	☐
			Total Containers:	5					

1004038

-48

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Ford	4/6/10 1600
Received by		
Relinquished by		4/7/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

Chain of Custody Record

COC Number: **4610W2**

CH2MHILL 4/6/2010 1:48:10 PM

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW6010B/7470A	SW8015B-E	SW8270Sim
DP28-03580	06-Apr-10 10:30	N	Water						
			Field Filtered: ☐	1	HNO4	☐	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☐	☑	☐
			Total Containers:	5					
DP28-03581	06-Apr-10 11:15	N	Water						
			Field Filtered: ☐	1	HNO4	☐	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☐	☑	☐
			Total Containers:	5					

1004038

-49

-50

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jost	4/6/10 1800
Received by		
Relinquished by		
Received by		4/7/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004030 1004038 Number of Coolers: 1 of 8

Client: CH2M-Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaal (signature): [redacted]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

FL Courier Other:

If applicable, enter airbill number here: 0000

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaal (Initial): WS

10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A

11. Did all bottles arrive unbroken? ..... (Yes) No N/A

12. Was all required bottle label information complete? ..... (Yes) No N/A

13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A

14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A

15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)

17. Was sufficient amount of sample sent for the analyses required? ..... 4/12/10 Yes (No) N/A

18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

pH<2 for all metals (HCl). for 1004038 only!

If Non-Conformance issues were present, list by sample ID:

Samples DP13-03180 & 53180 no dry weight containers received in this project. CAR#:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004126[illegible] Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

FL Courier Other: [illegible]

If applicable, enter airbill number here: [illegible]

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): [illegible] (Initial): [illegible]

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: [illegible]

CAR#: [illegible]

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004050 1004038 Number of Coolers: 3 of 8

Client: CH2M-Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

FL Courier Other:

If applicable, enter airbill number here: 0830

2. Were custody seals on outside of cooler(s)? Yes No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 5.2°C

Dates samples were logged in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was residual chlorine present in any applicable sample containers? Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? Yes No N/A

18. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: _____ Number of Coolers: _____ of 8

Client: CH2M-Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaal (signature): _____

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 6614

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR# _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004038 Number of Coolers: 5 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/07/10 08:30** Date cooler(s) opened: **04/07/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6560

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: T

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9°C

~~Dates samples were logged-in:~~ **04/07/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100403 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate:

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other:

If applicable, enter airbill number here: 6641

2. Were custody seals on outside of cooler(s)? Yes No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? Yes No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? Yes No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? Yes No N/A

6. Did you sign custody papers in the appropriate place for acceptance? Yes No N/A

7. Was project identifiable from custody papers? Yes No N/A

8. If required, was enough ice present in the cooler(s)? Yes No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly? Yes No N/A

11. Did all bottles arrive unbroken? Yes No N/A

12. Was all required bottle label information complete? Yes No N/A

13. Did all bottle labels agree with custody papers? Yes No N/A

14. Were correct containers used for the analyses indicated? Yes No N/A

15. Were preservative levels correct in all applicable sample containers? Yes No N/A

16. Was residual chlorine present in any applicable sample containers? Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? Yes No N/A

18. Was headspace present in any included VOA vials? Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004038 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate.

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other:

If applicable, enter airbill number here: 6571

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.2°C

Dates samples were logged in: 04/07/10

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100456 Number of Coolers: 8 of 8

Client: CH2M-Hill Project: Alameda Point

Date/Time Received: 04/07/10 08:30 Date cooler(s) opened: 04/07/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 6652

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/6/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3°C

Dates samples were logged-in: 04/07/10

9. Initial this form to acknowledge login of sample(s). (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/7/2010 9:50:47 AM Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 7 Days
Shipping Date: 4/7/2010
COC Number: 4710

Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar												
Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C												
Filtered:	NA	NA	NA	NA	NA	NA	NA												
Holding Time:	14	14	14	14	30	28	28												
	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC												
	DATE	TIME	Matrix															Number of Containers	COMMENTS
DP01-03000	4/6/2010	10:55	Soil			X			X									2	
DP01-03001	4/6/2010	11:00	Soil			X			X									2	
DP01-07000	4/6/2010	10:20	Soil		X													~~1~~ 2	
DP01-07001	4/6/2010	10:25	Soil	X														1	
DP01-07002	4/6/2010	10:30	Soil	X														1	
DP01-07003	4/6/2010	10:35	Soil	X														1	
DP01-53000	4/6/2010	10:55	Soil			X			X									2	
DP01-57000	4/6/2010	10:20	Soil	X														1	
DP02-03003	4/6/2010	14:05	Soil				X			X								~~2~~ 4	
DP02-03004	4/6/2010	14:10	Soil			X			X									2	
DP02-07004	4/6/2010	13:40	Soil		X													~~1~~ 2	
DP02-07005	4/6/2010	13:45	Soil	X														1	
DP02-07006	4/6/2010	13:50	Soil	X														1	
DP02-07007	4/6/2010	13:55	Soil	X														1	

7 day TAT

1004038-24
-25
MS/MSD
1004038-26
MS/MSD 1004038-27
-28
MS/MSD

Signatures	Date/Time
Approved by	
Sampled by	4/7/10 1000
Relinquished by	Tamara Frank
Received by	
Relinquished by	
Received by	4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6988 9977
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
2.8°C

Special Instructions:
ATTN: Sample Custody and Janice Shilling

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/7/2010 9:50:48 AM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/7/2010
COC Number: 4710

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	30	28	28		
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
DP10-03284	4/6/2010 9:34 Soil			x			x		2	1004038-29 ✓
DP10-03285	4/6/2010 9:40 Soil			x			x		2	-30 ✓
DP10-07196	4/6/2010 9:10 Soil	x							1	✓
DP10-07197	4/6/2010 9:15 Soil	x							1	✓
DP10-07198	4/6/2010 9:20 Soil	x							1	✓
DP10-07199	4/6/2010 9:25 Soil	x							1	✓
DP11-03174	4/6/2010 9:50 Soil			x		x	x		3	1004038-31 ✓
DP11-03175	4/6/2010 10:10 Soil			x		x	x		3	-32 ✓
DP11-03287	4/6/2010 15:05 Soil			x			x		2	-33 ✓
DP11-03288	4/6/2010 15:10 Soil			x			x		2	-34 ✓
DP11-07200	4/6/2010 15:50 Soil	x							1	✓
DP11-07201	4/6/2010 15:55 Soil	x							1	✓
DP11-07202	4/6/2010 16:00 Soil	x							1	✓
DP11-07203	4/6/2010 16:05 Soil	x							1	✓

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jam	4/7/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

7.3°C

Special Instructions:

ATTN:
Sample Custody
and
Janice Shilling

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/7/2010 9:50:48 AM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/7/2010
COC Number: 4710

	DATE	TIME	Matrix	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar		
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C		
Filtered:				NA	NA	NA	NA	NA	NA	NA		
Holding Time:				14	14	14	14	30	28	28		
DP11-57200	4/6/2010	15:50	Soil	X							1	
DP12-03178	4/6/2010	11:15	Soil			X		X	X		3	
DP13-03180	4/6/2010	13:40	Soil			X		X	X		3	
DP13-53180	4/6/2010	13:40	Soil			X		X	X		3	
TOTAL NUMBER OF CONTAINERS											51	

ws 4/8/10
1004038-
1004038-35
-36
-37

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jack	4/7/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4710W**

CH2MHILL *4/7/2010 8:40:16 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-112	06-Apr-10 7:40	N	Water					
		Field Filtered: ☐		~~2~~ 1	HNO4	☑	☐	☐
		Field Filtered: ☐		~~2~~ 2	4°C	☐	☐	☑
		Field Filtered: ☐		2	4°C	☐	☑	☐
		Total Containers:		~~12~~ 5				

1004038

-38

C.C. 04/07/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		4/7/10
Sampled by	Tamara Frank	0930
Relinquished by		
Received by		
Relinquished by		4/8/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8054 6988 9977
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

2.8°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4710W3**

CH2MHILL *4/7/2010 9:04:19 AM* Page 1 of 2

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP02-03900	06-Apr-10 8:50	N	Water				
RESAMPLED DP02-3506 - FEDEX LOST COOLER		Field Filtered: ☐	3	H2O,MeOH,4°C		☐	☑
		Total Containers:	3				
DP02-03901	06-Apr-10 9:50	N	Water				
RESAMPLED DP02-3507 - FEDEX LOST COOLER		Field Filtered: ☐	3	H2O,MeOH,4°C		☐	☑
		Total Containers:	3				
DP28-03580	06-Apr-10 10:30	N	Water				
		Field Filtered: ☐	2	MeOH		☑	☐
		Field Filtered: ☐	3	H2O,MeOH,4°C		☐	☑
		Total Containers:	5				
DP28-03581	06-Apr-10 11:15	N	Water				
		Field Filtered: ☐	2	MeOH		☑	☐
		Field Filtered: ☐	3	H2O,MeOH,4°C		☐	☑
		Total Containers:	5				

1004058
- 46
- 47
4/8/10
ws
~~-48~~ 49
~~-49~~
ws
4/8/10
-50

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamara Frank	4/7/10 1000
Received by		
Relinquished by		
Received by		4/8/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8264 6988 9977
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-8°C

Chain of Custody Record

COC Number: **4710W3**

CH2MHILL *4/7/2010 9:04:19 AM* Page 2 of 2

1004038

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP28-53580	06-Apr-10 10:30	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Faust	4/7/10 1600
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.8°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004039 Number of Coolers: 1 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6549

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.2°C

Dates samples were logged-in: 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): WillSchwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (HCl)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004038 Number of Coolers: 2 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6479

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.3°C

~~Dates samples were logged in:~~ ~~04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004038 Number of Coolers: 3 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): Will Schwob (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6516

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.6°C

~~Dates samples were logged-in: 04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

1004053

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/06/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/08/2010 08:30 , 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/08/2010 16:57

Samples Received at: **1.1°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004053-01 DP01-07000 [Solid] Sampled 04/06/2010 10:20 Pacific				**MS/MSD. QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 12:20	MS/MSD
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 12:20	MS/MSD
1004053-02 DP01-07001 [Solid] Sampled 04/06/2010 10:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 12:25	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 12:25	
1004053-03 DP01-07002 [Solid] Sampled 04/06/2010 10:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 12:30	
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 12:30	
1004053-04 DP01-07003 [Solid] Sampled 04/06/2010 10:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 12:35	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 12:35	
1004053-05 DP01-57000 [Solid] Sampled 04/06/2010 10:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 12:20	
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 12:20	
1004053-06 DP02-07004 [Solid] Sampled 04/06/2010 13:40 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 15:40	MS/MSD
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 15:40	MS/MSD

1004053

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004053-07 DP02-07005 [Solid] Sampled 04/06/2010 13:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 15:45	
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 15:45	
1004053-08 DP02-07006 [Solid] Sampled 04/06/2010 13:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 15:50	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 15:50	
1004053-09 DP02-07007 [Solid] Sampled 04/06/2010 13:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/15/2010 14:00	5	04/20/2010 15:55	
WC_PERCENT_SOLIDS_2540B	04/15/2010 14:00	5	04/13/2010 15:55	
1004053-10 DP10-07196 [Solid] Sampled 04/06/2010 09:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 11:10	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 11:10	
1004053-11 DP10-07197 [Solid] Sampled 04/06/2010 09:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 11:15	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 11:15	
1004053-12 DP10-07198 [Solid] Sampled 04/06/2010 09:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 11:20	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 11:20	
1004053-13 DP10-07199 [Solid] Sampled 04/06/2010 09:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 11:25	
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 11:25	
1004053-14 DP11-07200 [Solid] Sampled 04/06/2010 15:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 17:50	
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 17:50	
1004053-15 DP11-07201 [Solid] Sampled 04/06/2010 15:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 17:55	
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 17:55	
1004053-16 DP11-07202 [Solid] Sampled 04/06/2010 16:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 18:00	
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 18:00	

1004053

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004053-17 DP11-07203 [Solid] Sampled 04/06/2010 16:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 18:05	
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 18:05	
1004053-18 DP11-57200 [Solid] Sampled 04/06/2010 15:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/13/2010 17:50	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/20/2010 17:50	
1004053-19 DP01-03009 [Solid] Sampled 04/07/2010 11:20 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/29/2010 14:00	20	04/21/2010 13:20	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 13:20	
1004053-20 DP01-03010 [Solid] Sampled 04/07/2010 11:25 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/29/2010 14:00	20	04/21/2010 13:25	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 13:25	
1004053-21 DP01-03011 [Solid] Sampled 04/07/2010 11:30 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/29/2010 14:00	20	04/21/2010 13:30	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 13:30	
1004053-22 DP01-53010 [Solid] Sampled 04/07/2010 11:25 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/29/2010 14:00	20	04/21/2010 13:25	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 13:25	
1004053-23 DP09-03169 [Solid] Sampled 04/07/2010 10:00 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 12:00	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 12:00	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 12:00	
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 12:00	+MO
1004053-24 DP09-53170 [Solid] Sampled 04/07/2010 10:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 12:00	
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 12:00	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 12:00	soil TAL + Mo
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 12:00	+MO
1004053-25 DP12-03290 [Solid] Sampled 04/07/2010 09:25 Pacific				**QSM4.1 potential oil**
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 11:25	+MO
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:25	
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 11:25	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 11:25	soil TAL + Mo

1004053

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004053-26 DP12-03291 [Solid] Sampled 04/07/2010 09:30 Pacific				**QSM4.1 potential oil**
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 11:30	+MO
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 11:30	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 11:30	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:30	
1004053-27 DP12-03292 [Solid] Sampled 04/07/2010 09:40 Pacific				**QSM4.1 potential oil**
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 11:40	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 11:40	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:40	
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 11:40	+MO
1004053-28 DP12-07204 [Solid] Sampled 04/07/2010 08:30 Pacific				**MS/MSD. QSM4.1 potential oil**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 10:30	MS/MSD
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/21/2010 10:30	MS/MSD
1004053-29 DP12-07205 [Solid] Sampled 04/07/2010 08:35 Pacific				**QSM4.1 potential oil**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 10:35	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/21/2010 10:35	
1004053-30 DP12-07206 [Solid] Sampled 04/07/2010 08:40 Pacific				**QSM4.1 potential oil**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 10:40	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/21/2010 10:40	
1004053-31 DP12-07207 [Solid] Sampled 04/07/2010 08:45 Pacific				**QSM4.1 potential oil**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 10:45	
SMS_PAH_8270C_3546_LOW	04/29/2010 14:00	20	04/21/2010 10:45	
1004053-32 DP12-53290 [Solid] Sampled 04/07/2010 09:25 Pacific				**QSM4.1 potential oil**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:25	
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 11:25	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 11:25	soil TAL + Mo
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 11:25	+MO

1004053

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004053-33 DP06-03159 [Solid] Sampled 04/07/2010 13:25 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 15:25	AP VIALS
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 15:25	+MO
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 15:25	AP VIALS
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 15:25	
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 15:25	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 15:25	soil TAL + Mo
1004053-34 DP06-03160 [Solid] Sampled 04/07/2010 13:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 15:30	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 15:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 15:30	
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 15:30	+MO
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 15:30	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 15:30	soil TAL + Mo
1004053-35 DP06-53160 [Solid] Sampled 04/07/2010 13:30 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 15:30	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 15:30	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 15:30	AP VIALS
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 15:30	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 15:30	soil TAL + Mo
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 15:30	+MO
1004053-36 DP07-03162 [Solid] Sampled 04/07/2010 14:20 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 16:20	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 16:20	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 16:20	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 16:20	AP VIALS
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 16:20	+MO
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 16:20	
1004053-37 DP07-03163 [Solid] Sampled 04/07/2010 14:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 16:30	
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 16:30	+MO
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 16:30	soil TAL + Mo
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 16:30	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 16:30	AP VIALS

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004053-38 DP09-03168 [Solid] Sampled 04/07/2010 09:45 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 11:45	+MO
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 11:45	soil TAL + Mo
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 11:45	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 11:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:45	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 11:45	AP VIALS
1004053-39 DP09-03169 [Solid] Sampled 04/07/2010 10:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 12:00	AP VIALS
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 12:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 12:00	
1004053-40 DP09-53170 [Solid] Sampled 04/07/2010 10:00 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 12:00	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 12:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 12:00	
1004053-41 DP10-03171 [Solid] Sampled 04/07/2010 10:55 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 12:55	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 12:55	soil TAL + Mo
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 12:55	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 12:55	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 12:55	
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 12:55	+MO
1004053-42 DP10-03172 [Solid] Sampled 04/07/2010 11:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/29/2010 14:00	20	05/05/2010 13:15	
MET_ICP_LOW6010B_FULL	04/29/2010 14:00	20	10/04/2010 13:15	soil TAL + Mo
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 13:15	AP VIALS
SGC_DRO_8015B_3546	04/29/2010 14:00	20	04/21/2010 13:15	+MO
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 13:15	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 13:15	AP VIALS
1004053-43 DP12-03290 [Solid] Sampled 04/07/2010 09:25 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 11:25	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 11:25	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:25	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004053-44 DP12-03291 [Solid] Sampled 04/07/2010 09:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:30	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 11:30	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 11:30	AP VIALS
1004053-45 DP12-03292 [Solid] Sampled 04/07/2010 09:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:40	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 11:40	AP VIALS. LOW VOLUME!! ONLY 1 DI H20 VIAL!!!
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 11:40	AP VIALS
1004053-46 DP12-53290 [Solid] Sampled 04/07/2010 09:25 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 11:25	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 11:25	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 11:25	
1004053-47 DP35-03247 [Solid] Sampled 04/07/2010 14:30 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 16:30	AP VIALS
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/29/2010 14:00	20	04/14/2010 16:30	
1004053-48 EB-213 [Water] Sampled 04/07/2010 07:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 09:30	
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 09:30	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 09:30	
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 09:30	+MO
MET_ICP_6010B_FULL	04/29/2010 14:00	20	10/04/2010 09:30	water TAL + Mo
MET_7470_MERCURY	04/29/2010 14:00	20	05/05/2010 09:30	
1004053-49 TB-213 [Water] Sampled 04/07/2010 07:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 09:30	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 09:30	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004053-50 EB-113 [Water] Sampled 04/07/2010 07:30 Pacific				**QSM4.1**
SGC_PCB8082A_3510	04/29/2010 14:00	20	04/14/2010 09:30	+ Aroclor-1262 & 1268
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 09:30	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 09:30	
MET_ICP_6010B_FULL	04/29/2010 14:00	20	10/04/2010 09:30	water TAL + Mo
SGC_PEST8081A_3510	04/29/2010 14:00	20	04/14/2010 09:30	Tox LCS required
MET_7470_MERCURY	04/29/2010 14:00	20	05/05/2010 09:30	
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 09:30	
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 09:30	+MO
1004053-51 TB-113 [Water] Sampled 04/07/2010 07:30 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 09:30	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 09:30	
1004053-52 EB-313 [Water] Sampled 04/07/2010 07:40 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	04/29/2010 14:00	20	10/04/2010 09:40	water TAL + Mo
MET_7470_MERCURY	04/29/2010 14:00	20	05/05/2010 09:40	
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 09:40	+MO
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 09:40	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 09:40	
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 09:40	
1004053-53 TB-313 [Water] Sampled 04/07/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 09:40	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 09:40	
1004053-54 TB-312 [Water] Sampled 04/06/2010 07:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/29/2010 14:00	20	04/20/2010 09:45	
VGC_GRO_8015B	04/29/2010 14:00	20	04/20/2010 09:45	
1004053-55 DP11-03546 [Water] Sampled 04/07/2010 08:30 Pacific				**MS/MSD. QSM4.1**
MET_7470_DIS_MERCURY	04/29/2010 14:00	20	05/05/2010 10:30	MS/MSD.
MET_ICP_6010B_FULL_DIS	04/29/2010 14:00	20	10/04/2010 10:30	MS/MSD water TAL + Mo
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 10:30	MS/MSD.
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 10:30	MS/MSD.
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 10:30	MS/MSD.
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 10:30	MS/MSD. +MO

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004053-56 DP11-03547 [Water] Sampled 04/07/2010 09:45 Pacific				**QSM4.1**
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 11:45	
MET_7470_DIS_MERCURY	04/29/2010 14:00	20	05/05/2010 11:45	
MET_ICP_6010B_FULL_DIS	04/29/2010 14:00	20	10/04/2010 11:45	water TAL + Mo
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 11:45	+MO
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 11:45	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 11:45	
1004053-57 DP12-03548 [Water] Sampled 04/07/2010 11:20 Pacific				**QSM4.1 potential oil**
MET_ICP_6010B_FULL_DIS	04/29/2010 14:00	20	10/04/2010 13:20	water TAL + Mo. FF & PRESERVED!
MET_7470_DIS_MERCURY	04/29/2010 14:00	20	05/05/2010 13:20	FF & PRESERVED!
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 13:20	
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 13:20	
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 13:20	+MO
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 13:20	
1004053-58 DP12-03549 [Water] Sampled 04/07/2010 11:50 Pacific				**QSM4.1 potential oil**
SMS_PAH_8270C_3510_LOW	04/29/2010 14:00	20	04/14/2010 13:50	
VGC_GRO_8015B	04/29/2010 14:00	20	04/21/2010 13:50	
VOC_8260B_AP9	04/29/2010 14:00	20	04/21/2010 13:50	
MET_7470_DIS_MERCURY	04/29/2010 14:00	20	05/05/2010 13:50	FF & PRESERVED!
SGC_DRO_8015B_3510	04/29/2010 14:00	20	04/14/2010 13:50	+MO
MET_ICP_6010B_FULL_DIS	04/29/2010 14:00	20	10/04/2010 13:50	water TAL + Mo. FF & PRESERVED!
SGS/Paradigm (SUB028)				
1004053-23 DP09-03169 [Solid] Sampled 04/07/2010 10:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 12:00	sub to SGS - Wilmington
1004053-24 DP09-53170 [Solid] Sampled 04/07/2010 10:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 12:00	sub to SGS - Wilmington
1004053-33 DP06-03159 [Solid] Sampled 04/07/2010 13:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 15:25	sub to SGS - Wilmington
1004053-34 DP06-03160 [Solid] Sampled 04/07/2010 13:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 15:30	sub to SGS - Wilmington
1004053-35 DP06-53160 [Solid] Sampled 04/07/2010 13:30 Pacific				**QSM4.1.**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 15:30	sub to SGS - Wilmington

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1004053-36 DP07-03162 [Solid] Sampled 04/07/2010 14:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 16:20	sub to SGS - Wilmington
1004053-37 DP07-03163 [Solid] Sampled 04/07/2010 14:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 16:30	sub to SGS - Wilmington
1004053-38 DP09-03168 [Solid] Sampled 04/07/2010 09:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 11:45	sub to SGS - Wilmington
1004053-41 DP10-03171 [Solid] Sampled 04/07/2010 10:55 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 12:55	sub to SGS - Wilmington
1004053-42 DP10-03172 [Solid] Sampled 04/07/2010 11:15 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/29/2010 14:00	20	05/07/2010 13:15	sub to SGS - Wilmington

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/7/2010 9:50:47 AM Page 1 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 7 Days
Shipping Date: 4/7/2010
COC Number: 4710

	DATE	TIME	Matrix	PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar		
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C		
Filtered:				NA	NA	NA	NA	NA	NA	NA		
Holding Time:				14	14	14	14	30	28	28		
DP01-03000	4/6/2010	10:55	Soil			X			X		2	
DP01-03001	4/6/2010	11:00	Soil			X			X		2	
DP01-07000	4/6/2010	10:20	Soil		X						1	
DP01-07001	4/6/2010	10:25	Soil	X							1	
DP01-07002	4/6/2010	10:30	Soil	X							1	
DP01-07003	4/6/2010	10:35	Soil	X							1	
DP01-53000	4/6/2010	10:55	Soil			X			X		2	
DP01-57000	4/6/2010	10:20	Soil	X							1	
DP02-03003	4/6/2010	14:05	Soil				X			X	2	
DP02-03004	4/6/2010	14:10	Soil			X			X		2	
DP02-07004	4/6/2010	13:40	Soil		X						1	
DP02-07005	4/6/2010	13:45	Soil	X							1	
DP02-07006	4/6/2010	13:50	Soil	X							1	
DP02-07007	4/6/2010	13:55	Soil	X							1	

7 day TAT

1004038-24
-25
MS/MSD 1004053-01
-02
-03
-04
1004038-26
1004053-05
MS/MSD 1004038-27
-28
MS/MSD 1004053-06
-07
-08
-09

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/7/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6988 9977
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

2.8°C

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/7/2010 9:50:48 AM* Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/7/2010
COC Number: 4710

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	30	28	28		
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC		
									Number of Containers	COMMENTS
DP10-03284	4/6/2010 9:34 Soil			x			x		1004038-29 ✓	2	
DP10-03285	4/6/2010 9:40 Soil			x			x		-30 ✓	2	
DP10-07196	4/6/2010 9:10 Soil	x							1004053-10 ✓	1	
DP10-07197	4/6/2010 9:15 Soil	x							-11 ✓	1	
DP10-07198	4/6/2010 9:20 Soil	x							-12 ✓	1	
DP10-07199	4/6/2010 9:25 Soil	x							-13 ✓	1	
DP11-03174	4/6/2010 9:50 Soil			x		x	x		1004038-31 ✓	3	
DP11-03175	4/6/2010 10:10 Soil			x		x	x		-32 ✓	3	
DP11-03287	4/6/2010 15:05 Soil			x			x		-33 ✓	2	
DP11-03288	4/6/2010 15:10 Soil			x			x		-34 ✓	2	
DP11-07200	4/6/2010 15:50 Soil	x							1004053-14 ✓	1	
DP11-07201	4/6/2010 15:55 Soil	x							-15 ✓	1	
DP11-07202	4/6/2010 16:00 Soil	x							-16 ✓	1	
DP11-07203	4/6/2010 16:05 Soil	x							-17 ✓	1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/7/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

2.8°C

Special Instructions:

ATTN:

Sample Custody and Janice Shilling

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/7/2010 9:50:48 AM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/7/2010
COC Number: 4710

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	30	28	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) LAB QC	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
	DATE / TIME / Matrix										
DP11-57200	4/6/2010 15:50 Soil	X							1004053-18 1004038- ✓	1	
DP12-03178	4/6/2010 11:15 Soil			X		X	X		1004038-35 ✓	3	
DP13-03180	4/6/2010 13:40 Soil			X		X	X		-36 ✓	3	
DP13-53180	4/6/2010 13:40 Soil			X		X	X		-37 ✓	3	
									TOTAL NUMBER OF CONTAINERS	51	

ws 4/8/10

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jarvis	4/7/10 1000
Received by		
Relinquished by	Mitchell	4/8/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/7/2010 2:40:40 PM* Page 1 OF 2

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/7/2010
COC Number: 4710S2

	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	30	28			
		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix									
DP01-03009 ✓	4/7/2010 11:20 Soil				X			1004053-19	1	
DP01-03010 ✓	4/7/2010 11:25 Soil				X			-20	1	
DP01-03011 ✓	4/7/2010 11:30 Soil				X			-21	1	
DP01-53010 ✓	4/7/2010 11:25 Soil				X			-22	1	
DP09-03169 ✓	4/7/2010 10:00 Soil			X		X	X	-23	3	
DP09-53170 ✓	4/7/2010 10:00 Soil			X		X	X	-24	3	
DP12-03290 ✓	4/7/2010 9:25 Soil			X			X	-25	2	
DP12-03291 ✓	4/7/2010 9:30 Soil			X			X	-26	2	
DP12-03292 ✓	4/7/2010 9:40 Soil			X			X	-27	2	
DP12-07204 ✓	4/7/2010 8:30 Soil		X					MS/MSD -28	2	~~1~~
DP12-07205 ✓	4/7/2010 8:35 Soil	X						-29	1	
DP12-07206 ✓	4/7/2010 8:40 Soil	X						-30	1	
DP12-07207 ✓	4/7/2010 8:45 Soil	X						-31	1	
DP12-53290 ✓	4/7/2010 9:25 Soil			X			X	-32	2	

	Signatures	Date/Time
Approved by		
Sampled by		4/7/10
Relinquished by	Jamie Jank	1400
Received by		
Relinquished by		
Received by		4/8/10

08:30 2.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL — CHAIN OF CUSTODY RECORD — 4/7/2010 2:40:40 PM

Project Name	Container:	4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	
Location	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	
Project Number 383512.FI.DP								
Project Manager Jamie Eby	Filtered:	NA	NA	NA	NA	NA	NA	
Sample Manager	Holding Time:	14	14	14	14	30	28	
Task Order Project 2010-FED1A-SOIL Turnaround Time 21 Days Shipping Date: 4/7/2010 COC Number: 4710S2		PAHs (SW8270Sim)	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Number of Containers
DATE TIME Matrix								COMMENTS
							TOTAL NUMBER OF CONTAINERS	22

	Signatures	Date/Time
Approved by		
Sampled by		4/7/10
Relinquished by	[signature]	1400
Received by		
Relinquished by		
Received by	[signature]	4/8/10 08:30

Shipping Details

Method of Shipment: FedEx

On Ice: yes / no

Airbill No:

Lab Name: Empirical Laboratories, LLC

Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:34:53 PM* Page 1 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP06-03159	07-Apr-10 13:25	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑
			Total Containers:	4			
DP06-03160	07-Apr-10 13:30	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑
			Total Containers:	4			
DP06-53160	07-Apr-10 13:30	N	Soil				
			Field Filtered: ☐	1	MeOH	☑	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑
			Total Containers:	4			

1004053

-33

-34

-35

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Ford	4/7/10 16:00
Received by		
Relinquished by	Mitchell	4/8/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:
ATTN:
Sample Custody
and
Janice Shilling

Report Copy to

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:34:53 PM*

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004053

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP07-03162	07-Apr-10 14:20	N	Soil					
		Field Filtered: ☐	1		MeOH	☑	☐	-36
		Field Filtered: ☐	3		XH2O, 1XMeOH,4°I	☐	☑	
		Total Containers:			**4**			
DP07-03163	07-Apr-10 14:30	N	Soil					
		Field Filtered: ☐	1		MeOH	☑	☐	-37
		Field Filtered: ☐	3		XH2O, 1XMeOH,4°I	☐	☑	
		Total Containers:			**4**			
DP09-03168	07-Apr-10 9:45	N	Soil					
		Field Filtered: ☐	1		MeOH	☑	☐	-38
		Field Filtered: ☐	3		XH2O, 1XMeOH,4°I	☐	☑	
		Total Containers:			**4**			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	James Jank	4/7/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:34:53 PM*

1004053

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP09-03169 ✓	07-Apr-10 10:00	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP09-53170 ✓	07-Apr-10 10:00	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP10-03171 ✓	07-Apr-10 10:55	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			

-39
-40
-41

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Janice Shilling	4/7/10 1603
Received by		
Relinquished by		
Received by		4/8/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:34:53 PM* Page 4 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP10-03172	07-Apr-10 11:15	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP12-03290	07-Apr-10 9:25	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			
DP12-03291	07-Apr-10 9:30	N	Soil				
		Field Filtered: ☐		1	MeOH	☑	☐
		Field Filtered: ☐		3	XH2O, 1XMeOH,4°C	☐	☑
		Total Containers:		4			

1004053

-42

-43

-44

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Jank	4/7/10 1600
Received by		
Relinquished by		
Received by		4/8/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:34:53 PM* Page 5 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP12-03292	07-Apr-10 9:40	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☐	☑	
			Total Containers:		4			
DP12-53290	07-Apr-10 9:25	N	Soil					
			Field Filtered: ☐	1	MeOH	☑	☐	
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°I	☐	☑	
			Total Containers:		4			

100403

-45

-46

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/7/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.8°C

Chain of Custody Record

COC Number: **4710P**

1004053

Project Name Location
Task Order Project: 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP12-03292	07-Apr-10 9:40	N	Soil					
	Field Filtered:			1	MeOH	☑	☐	-45
	Field Filtered:			3	XH2O, 1XMeOH,4°	☐	☑	
	Total Containers:			4				
DP12-53290	07-Apr-10 9:25	N	Soil					-46
	Field Filtered:			1	MeOH	☑	☐	
	Field Filtered:			3	XH2O, 1XMeOH,4°	☐	☑	
	Total Containers:			4				

P35 03247 7/Apr-10 1430 N Soil 1 X -47
3 X

TF 4/7/10
1600

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Janice Jan	4/7/10 1600
Relinquished by		
Received by		
Relinquished by		4/8/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:17:00 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-213	07-Apr-10 7:30	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-213	07-Apr-10 7:30	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004053

-47 -48

-48 -49

WS 4/8/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Grant	4/7/10 1430
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

2.8°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4710B**

CH2MHILL *4/7/2010 10:59:04 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-213	07-Apr-10 7:30	N	Water					
			Field Filtered: ☐	~~2~~ 1	HNO4	☑	☐	☐
			Field Filtered: ☐	~~2~~ 2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	12				

1004053

-47 -48
WS
4/8/10

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jarvis	4/7/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710P**

CH2MHILL *4/7/2010 3:15:33 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-113	07-Apr-10 7:30	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:		5		
TB-113	07-Apr-10 7:30	N	Water				
			Field Filtered: ☐	2	MeOH	☑	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:		5		

1004053

-50

-51

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/7/10
Relinquished by	Tamara Frank	1430
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710B**

CH2MHILL *4/7/2010 10:58:26 AM* Page 1 of 1

1004053

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8081A	SW8082	SW8270Sim
EB-113	07-Apr-10 7:30	N	Water							
			Field Filtered: ☐	21	HNO4	☑	☐	☐	☐	☐
			Field Filtered: ☐	6	4°C	☐	☐	☑	☑	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐	☐
			Total Containers:	12						

-50

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/8/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710B3**

CH2MHILL *4/7/2010 2:10:05 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-313	07-Apr-10 7:40	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-313	07-Apr-10 7:40	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

1004053
WS 4/8/10
-51 -52
WS 4/8/10
-52
-53

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamala Jarvis	4/7/10 1400
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4710B**

CH2MHILL *4/7/2010 10:59:50 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-313	07-Apr-10 7:40	N	Water					
			Field Filtered:☐	2 1	HNO4	☑	☐	☐
			Field Filtered:☐	8 2	4°C	☐	☐	☑
			Field Filtered:☐	2	4°C	☐	☑	☐
			Total Containers:	12				

1004053

- SL

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/7/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

2.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4710W**

CH2MHILL *4/7/2010 8:56:22 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
TB-312	06-Apr-10 7:45	N	Water				
		Field Filtered: ☐		2	MeOH	☑	☐
		Field Filtered: ☐		3	H2O,MeOH,4°C	☐	☑
		Total Containers:		5			

1004053

-54

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/7/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 8254 6988 9977
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.8°C

Chain of Custody Record

COC Number: **4710W5**

CH2MHILL 4/7/2010 2:01:45 PM Page 1 of 2

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP11-03546	07-Apr-10 8:30	N	Water							
LAB QC			Field Filtered: ☐	2	MeOH	☐	☐	☑	☐	☐
LAB QC			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	5						
DP11-03547	07-Apr-10 9:45	N	Water							
			Field Filtered: ☐	2	MeOH	☐	☐	☑	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	5						

1004053

MS/MSD

-55

-56

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/7/10
Relinquished by	Tamara Jank	1400
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.8°C

Chain of Custody Record

COC Number: **4710W4**

CH2MHILL *4/7/2010 1:38:16 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004053

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim
DP11-03546	07-Apr-10 8:30	N	Water					
LAB QC			Field Filtered: ☐	13	HNO4	☑	☐	☐
LAB QC			Field Filtered: ☐	2 6	4°C	☐	☐	☑
LAB QC			Field Filtered: ☐	2 6	4°C	☐	☑	☐
			Total Containers:	5 15				
DP11-03547	07-Apr-10 9:45	N	Water					
			Field Filtered: ☐	1	HNO4	☑	☐	☐
			Field Filtered: ☐	2	4°C	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐
			Total Containers:	5				

-55

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamora Frank	4/7/10 1400
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.8°C

Chain of Custody Record

COC Number: **4710W5**

CH2MHILL 4/7/2010 2:01:45 PM Page 2 of 2

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP12-03548	07-Apr-10 11:20	N	Water							
	Field Filtered: ☒			1	✓ HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	✓ 4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	✓ 4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	✓ MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	✓ H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						
DP12-03549	07-Apr-10 11:50	N	Water							
	Field Filtered: ☒			1	✓ HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	✓ 4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	✓ 4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	✓ MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	✓ H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						

1004057

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MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jones	4/7/10 1400
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-8°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004057 Number of Coolers: 1 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6490

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.3°C

Dates samples were logged-in: 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS
10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... 4/8/10 WS (Yes) (No) N/A
12. Was all required bottle label information complete? ..... (Yes) No N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... WS 4/8/10 (Yes) (No) N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

pH ≤ 2 for all metals

If Non-Conformance issues were present, list by sample ID: _____

No Dry weight containers rec'd for DP06-53160 CAR#: _____

1 Vial Broken in Shipment for DP12-03292

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004053 Number of Coolers: 2 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6505

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.4°C

~~Dates samples were logged in: 04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004053 Number of Coolers: 3 of 9

Client: CHLM Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwob (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6413

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.7°C

~~Dates samples were logged in: 04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

WS 4/8/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: ~~1005~~ 1004053 Number of Coolers: 4 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/08/10 08:30** Date cooler(s) opened: **04/08/10**

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____
   If applicable, enter airbill number here: 6750
2. Were custody seals on outside of cooler(s)? ..... (Yes) No
   How many: 2 Seal date: 4/7/10 Seal Initials: ?
3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4 | 0C

~~Dates samples were logged-in:~~ **04/08/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004053 Number of Coolers: 5 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature):

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 6468

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3-3C

~~Date samples were logged-in:~~ 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

SPE page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004052 Number of Coolers: 6 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/08/10 08:30** Date cooler(s) opened: **04/08/10**

Opened By (print): Will Schwob (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6480

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5|0c

~~Dates samples were logged in:~~ ~~04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

4/8/10 WS 4/9/10 WS

LIMS Number: 1004037, 1004053 Number of Coolers: 1 of 12 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6549

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8°C

Dates samples were logged-in: 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): WillSchwab (Initial): WS
10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... (Yes) No N/A
12. Was all required bottle label information complete? ..... (Yes) No N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... (Yes) No N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

pH<2 for all metals (HCl)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

8 WS 4/8/10 9 WS 4/8/10

LIMS Number: 1004038, 1004051 Number of Coolers: 8 of 12 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature):

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 6479

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.3°C

~~Dates samples were logged in:~~ ~~04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page WS 4/8/10 9 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

4/8/10 ws 4/8/10

LIMS Number: 1004038, 1004053 Number of Coolers: 9 ws of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwob (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6516

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.6°C

~~Dates samples were logged-in: 04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page ws 4/8/10 9 1 of 12

CH2MHILL

CHAIN OF CUSTODY RECORD

4/8/2010 1:17:53 PM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/8/2010
COC Number: 4810

	DATE	TIME	Matrix	PAHs (SW8270Sim) JB	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) JB	TPH-Extractable (8015B-E) LAB QC	Pesticides (SW8081A) JB	PCBs (8082)	PCBs (8082) JB	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Dioxins/Furans (8290) LAB QC	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	14	14	14	14	30	30	28	28			
DP02-03012	4/7/2010	13:30	Soil							X								1	
DP02-03013	4/7/2010	13:35	Soil							X								1	
DP03-03015	4/7/2010	15:10	Soil							X								1	
DP03-03016	4/7/2010	15:15	Soil							X								1	
DP04-03018	4/7/2010	14:30	Soil							X								1	
DP04-03019	4/7/2010	14:35	Soil							X								1	
DP05-03021	4/7/2010	15:45	Soil							X								1	
DP05-03022	4/7/2010	15:50	Soil							X								1	
DP06-03159	4/7/2010	13:25	Soil			X							X		X		1004053	3	-33
DP06-03160	4/7/2010	13:30	Soil			X							X		X			3	-34
DP06-53160	4/7/2010	13:30	Soil			X							X		X			3	-35
DP07-03162	4/7/2010	14:20	Soil			X							X		X			3	-36
DP07-03163	4/7/2010	14:30	Soil			X							X		X			3	-37
DP09-03168	4/7/2010	9:45	Soil			X							X		X			3	-38

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/8/10 1300
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 09:15 1.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/8/2010 1:17:54 PM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/8/2010
COC Number: 4810

	DATE	TIME	Matrix	PAHs (SW8270Sim) JK	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) JK	TPH-Extractable (8015B-E) LAB QC	Pesticides (SW8081A) JK	PCBs (8082)	PCBs (8082) JK	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Dioxins/Furans (8290) LAB QC	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC	Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar		
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
Holding Time:				14	14	14	14	14	14	14	14	14	30	30	28	28		
DP10-03171	4/7/2010	10:55	Soil			X							X		X		3	1004053-4
DP10-03172	4/7/2010	11:15	Soil			X							X		X		3	-42
DP01-03144 ✓	4/8/2010	10:40	Soil	MS/MSD				X						X		X	~~3~~ 6	
DP01-03145 ✓	4/8/2010	10:55	Soil			X							X		X		3	
DP02-03051 ✓	4/8/2010	11:40	Soil		MB/MSD			X				X					~~2~~ 4	
DP02-03052 ✓	4/8/2010	11:45	Soil				X				X						2	
DP02-03053 ✓	4/8/2010	11:50	Soil				X				X						2	
DP02-03147 ✓	4/8/2010	9:50	Soil			X							X		X		3	
DP02-03148 ✓	4/8/2010	10:00	Soil			X							X		X		3	
DP02-07112 ✓	4/8/2010	11:20	Soil	X													1	
DP02-07113 ✓	4/8/2010	11:25	Soil	X													1	
DP02-07114 ✓	4/8/2010	11:30	Soil		X		MS/MSD										~~1~~ 2	
DP02-07115 ✓	4/8/2010	11:35	Soil	X													1	
DP04-03153 ✓	4/8/2010	9:10	Soil			X							X		X		3	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/8/10 1300
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004053 Number of Coolers: 1 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/09/10 08:15 Date cooler(s) opened: 04/09/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6387

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

Dates samples were logged-in: 04/09/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100405 Number of Coolers: 2 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/09/10 08:15 Date cooler(s) opened: 04/09/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6398

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

Dates samples were logged-in: 04/09/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 5

Sonya Gordon

From: Tamara Frank [tamara.frank@e2.com]
Sent: Wednesday, April 07, 2010 6:22 PM
To: sgordon@empirlabs.com
Subject: 4/7/10 shipment

Sonya,
We shipped 11 coolers on fedex airbill 825469889977. I had to change the chain of custody 4710p (with the purgeables) at the last minute, and didn't get a chance to make a copy of the hand written addition on the copy enclosed with the second cooler. I know you will, but please use the original coc to check in the samples, not the copy.
Also, please note that samples DP12-07204 through DP12-07207, DP12-03290, DP12-53290, DP12-03291, DP12-03292, DP12-03548 (water) and DP12-03549 (water) came from a location that had a petroleum odor and a sheen on the surface of the water.
Thanks
Tamara

Tamara Frank
E2 Consulting Engineers
155 Grand Ave, Suite 702
Oakland, CA 94612
760-420-4546

1004054

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 04/15/2010 16:00 (5 day TAT)

Received By: William Schwab
Date Received: 04/08/2010 08:30

Logged In By: William Schwab
Date Logged In: 04/08/2010 18:19

Samples Received at: **3.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004054-01 DP01-03500 [Water] Sampled 04/06/2010 13:15 Pacific				**MS/MSD. QSM4.1**
MET_ICP_6010B_FULL_DIS	04/14/2010 14:00	5	10/03/2010 15:15	water TAL + Mo. FF & PRESERVED!
MET_7470_DIS_MERCURY	04/14/2010 14:00	5	05/04/2010 15:15	FF & PRESERVED!
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 15:15	MS/MSD.
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 15:15	MS/MSD.
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	5	04/13/2010 15:15	MS/MSD.
SGC_DRO_8015B_3510	04/14/2010 14:00	5	04/13/2010 15:15	MS/MSD. +MO
1004054-02 DP01-03501 [Water] Sampled 04/06/2010 14:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	5	04/13/2010 16:20	
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 16:20	
MET_7470_DIS_MERCURY	04/14/2010 14:00	5	05/04/2010 16:20	FF & PRESERVED!
MET_ICP_6010B_FULL_DIS	04/14/2010 14:00	5	10/03/2010 16:20	water TAL + Mo. FF & PRESERVED!
SGC_DRO_8015B_3510	04/14/2010 14:00	5	04/13/2010 16:20	+MO
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 16:20	
1004054-03 DP01-53500 [Water] Sampled 04/06/2010 13:15 Pacific				**QSM4.1**
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 15:15	
MET_7470_DIS_MERCURY	04/14/2010 14:00	5	05/04/2010 15:15	FF & PRESERVED!
MET_ICP_6010B_FULL_DIS	04/14/2010 14:00	5	10/03/2010 15:15	water TAL + Mo. FF & PRESERVED!
SGC_DRO_8015B_3510	04/14/2010 14:00	5	04/13/2010 15:15	+MO
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	5	04/13/2010 15:15	
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 15:15	

1004054

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004054-04 DP02-03502 [Water] Sampled 04/06/2010 15:00 Pacific				**QSM4.1**
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 17:00	
MET_7470_DIS_MERCURY	04/14/2010 14:00	5	05/04/2010 17:00	FF & PRESERVED!
MET_ICP_6010B_FULL_DIS	04/14/2010 14:00	5	10/03/2010 17:00	water TAL + Mo. FF & PRESERVED!
SGC_DRO_8015B_3510	04/14/2010 14:00	5	04/13/2010 17:00	+MO
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 17:00	
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	5	04/13/2010 17:00	
1004054-05 DP02-03503 [Water] Sampled 04/06/2010 15:20 Pacific				**QSM4.1**
MET_7470_DIS_MERCURY	04/14/2010 14:00	5	05/04/2010 17:20	FF & PRESERVED!
MET_ICP_6010B_FULL_DIS	04/14/2010 14:00	5	10/03/2010 17:20	water TAL + Mo. FF & PRESERVED!
SGC_DRO_8015B_3510	04/14/2010 14:00	5	04/13/2010 17:20	+MO
SMS_PAH_8270C_3510_LOW	04/14/2010 14:00	5	04/13/2010 17:20	
VGC_GRO_8015B	04/14/2010 14:00	5	04/20/2010 17:20	
VOC_8260B_AP9	04/14/2010 14:00	5	04/20/2010 17:20	

Reviewed By

Date

Chain of Custody Record

COC Number: **4710W**

CH2MHILL 4/7/2010 8:20:03 AM Page 1 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 7 Days
PO Number TF

This COC is all 7day TAT

1004004

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP01-03500	06-Apr-10 13:15	N	Water							
LAB QC			Field Filtered: ☒	x3	✓HNO4	☑	☐	☐	☐	☐
LAB QC			Field Filtered: ☐	2	✓4°C	☐	☐	☐	☐	☑
LAB QC			Field Filtered: ☐	2	✓4°C	☐	☑	☐	☐	☐
LAB QC			Field Filtered: ☐	2	✓MeOH	☐	☐	☑	☐	☐
LAB QC			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	~~10~~ 30						
DP01-03501	06-Apr-10 14:20	N	Water							
			Field Filtered: ☒	1	✓HNO4	☑	☐	☐	☐	☐
			Field Filtered: ☐	2	✓4°C	☐	☐	☐	☐	☑
			Field Filtered: ☐	2	✓4°C	☐	☑	☐	☐	☐
			Field Filtered: ☐	2	✓MeOH	☐	☐	☑	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
			Total Containers:	10						

MS/MSD

-01

-02

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		~~4/7/10~~
Sampled by		
Relinquished by	Tamara Frank	0900
Received by		
Relinquished by		
Received by		4/8/10 08:36

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889977
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.9°C

ST 56

Chain of Custody Record

COC Number: **4710W**

CH2MHILL 4/7/2010 8:20:04 AM Page 2 of 3

1004054

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 7 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP01-53500	06-Apr-10 13:15	N	Water							
	Field Filtered: ☒			1	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						
DP02-03502	06-Apr-10 15:00	N	Water							
	Field Filtered: ☒			1	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						

-03

-04

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Grant	4/7/10 0900
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

Chain of Custody Record

COC Number: **4710W**

CH2MHILL *4/7/2010 8:20:04 AM* Page 3 of 3

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 7 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8260B/624	SW8270Sim
DP02-03503	06-Apr-10 15:20	N	Water							
	Field Filtered: ☑			1	HNO4	☑	☐	☐	☐	☐
	Field Filtered: ☐			2	4°C	☐	☐	☐	☐	☑
	Field Filtered: ☐			2	4°C	☐	☑	☐	☐	☐
	Field Filtered: ☐			2	MeOH	☐	☐	☑	☐	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☐	☐	☑	☐
	Total Containers:			10						

1004054

-05

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jarvis	4/7/10 0900
Received by		
Relinquished by		
Received by		4/8/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.9°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004054 Number of Coolers: 1 of 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6538

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9c

Dates samples were logged-in: 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): WillSchwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004054 Number of Coolers: 2 of 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9977

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

~~Dates samples were logged-in:~~ 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 4

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004054 Number of Coolers: 1 of 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): WillSchwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6516

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.6°C

~~Dates samples were logged in: 04/08/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 4

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004054 Number of Coolers: 1 of 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/08/10 08:30 Date cooler(s) opened: 04/08/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6527

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/7/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.0C

Dates samples were ~~logged-in~~: 04/08/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 4

1004066

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/07/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/09/2010 08:15, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/09/2010 12:54

Samples Received at: **2.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004066-01 DP01-03048 [Solid] Sampled 04/08/2010 14:30 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 16:30	soil TAL + Mo
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 16:30	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 16:30	
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 16:30	
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 16:30	+MO
1004066-02 DP01-03049 [Solid] Sampled 04/08/2010 14:35 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 16:35	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 16:35	soil TAL + Mo
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 16:35	+MO
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 16:35	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 16:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 16:35	
1004066-03 DP01-03144 [Solid] Sampled 04/08/2010 10:40 Pacific				**MS/MSD. QSM4.1**
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 12:40	MS/MSD.
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:40	MS/MSD.
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 12:40	MS/MSD. AP VIALS
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 12:40	MS/MSD. AP VIALS
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 12:40	MS/MSD. soil TAL + Mo
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 12:40	MS/MSD. +MO

1004066

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004066-04 DP01-03145 [Solid] Sampled 04/08/2010 10:55 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 12:55	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 12:55	soil TAL + Mo
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 12:55	+MO
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 12:55	AP VIALS
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 12:55	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:55	
1004066-05 DP01-53049 [Solid] Sampled 04/08/2010 14:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 16:35	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 16:35	AP VIALS
1004066-06 DP02-03051 [Solid] Sampled 04/08/2010 11:40 Pacific				**MS/MSD. QSM4.1**
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 13:40	MS/MSD. +MO
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 13:40	MS/MSD. + Aroclor-1262 & 1268
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 13:40	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:40	MS/MSD.
1004066-07 DP02-03052 [Solid] Sampled 04/08/2010 11:45 Pacific				**QSM4.1**
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 13:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:45	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 13:45	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 13:45	+MO
1004066-08 DP02-03053 [Solid] Sampled 04/08/2010 11:50 Pacific				**QSM4.1**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 13:50	+ Aroclor-1262 & 1268
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 13:50	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:50	
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 13:50	+MO
1004066-09 DP02-03147 [Solid] Sampled 04/08/2010 09:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:50	
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 11:50	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 11:50	AP VIALS
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 11:50	AP VIALS
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 11:50	soil TAL + Mo
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 11:50	+MO

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004066-10 DP02-03148 [Solid] Sampled 04/08/2010 10:00 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 12:00	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 12:00	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:00	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 12:00	AP VIALS
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 12:00	+MO
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 12:00	AP VIALS
1004066-11 DP03-03150 [Solid] Sampled 04/08/2010 14:10 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 16:10	+MO
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 16:10	soil TAL + Mo
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 16:10	
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 16:10	AP VIALS
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 16:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 16:10	
1004066-12 DP03-03151 [Solid] Sampled 04/08/2010 14:30 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 16:30	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 16:30	soil TAL + Mo
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 16:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 16:30	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 16:30	AP VIALS
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 16:30	+MO
1004066-13 DP03-53150 [Solid] Sampled 04/08/2010 14:10 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 16:10	AP VIALS
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 16:10	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 16:10	soil TAL + Mo
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 16:10	+MO
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 16:10	
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 16:10	AP VIALS
1004066-14 DP04-03153 [Solid] Sampled 04/08/2010 09:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:10	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 11:10	soil TAL + Mo
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 11:10	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 11:10	AP VIALS
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 11:10	+MO
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 11:10	AP VIALS

1004066

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004066-15 DP04-03154 [Solid] Sampled 04/08/2010 09:35 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 11:35	+MO
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 11:35	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 11:35	soil TAL + Mo
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 11:35	AP VIALS
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 11:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:35	
1004066-16 DP14-03183 [Solid] Sampled 04/08/2010 15:30 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
SGC_DRO_8015B_3546	04/30/2010 14:00	20	04/22/2010 17:30	+MO
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 17:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 17:30	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 17:30	AP VIALS
MET_7471A_MERCURY	04/30/2010 14:00	20	05/06/2010 17:30	
MET_ICP_LOW6010B_FULL	04/30/2010 14:00	20	10/05/2010 17:30	soil TAL + Mo
1004066-17 DP16-03189 [Solid] Sampled 04/08/2010 11:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:25	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 13:25	AP VIALS
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 13:25	AP VIALS
1004066-18 DP02-03012 [Solid] Sampled 04/07/2010 13:30 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 15:30	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 15:30	
1004066-19 DP02-03013 [Solid] Sampled 04/07/2010 13:35 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 15:35	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 15:35	
1004066-20 DP03-03015 [Solid] Sampled 04/07/2010 15:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 17:10	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 17:10	+ Aroclor-1262 & 1268
1004066-21 DP03-03016 [Solid] Sampled 04/07/2010 15:15 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 17:15	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 17:15	
1004066-22 DP04-03018 [Solid] Sampled 04/07/2010 14:30 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 16:30	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 16:30	

1004066

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004066-23 DP04-03019 [Solid] Sampled 04/07/2010 14:35 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 16:35	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 16:35	
1004066-24 DP05-03021 [Solid] Sampled 04/07/2010 15:45 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 17:45	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 17:45	
1004066-25 DP05-03022 [Solid] Sampled 04/07/2010 15:50 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/21/2010 17:50	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/14/2010 17:50	
1004066-26 DP02-07112 [Solid] Sampled 04/08/2010 11:20 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	04/30/2010 14:00	20	04/22/2010 13:20	
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:20	
1004066-27 DP02-07113 [Solid] Sampled 04/08/2010 11:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:25	
SMS_PAH_8270C_3546_LOW	04/30/2010 14:00	20	04/22/2010 13:25	
1004066-28 DP02-07114 [Solid] Sampled 04/08/2010 11:30 Pacific				**MS/MSD. QSM4.1.**
SMS_PAH_8270C_3546_LOW	04/30/2010 14:00	20	04/22/2010 13:30	MS/MSD.
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:30	MS/MSD.
1004066-29 DP02-07115 [Solid] Sampled 04/08/2010 11:35 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 13:35	
SMS_PAH_8270C_3546_LOW	04/30/2010 14:00	20	04/22/2010 13:35	
1004066-30 DP06-03024 [Solid] Sampled 04/08/2010 09:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:00	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 11:00	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 11:00	Tox LCS required
1004066-31 DP06-03025 [Solid] Sampled 04/08/2010 09:05 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 11:05	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 11:05	Tox LCS required
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:05	

1004066

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004066-32 DP07-03027 [Solid] Sampled 04/08/2010 09:30 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 11:30	Tox LCS required
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:30	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 11:30	+ Aroclor-1262 & 1268
1004066-33 DP07-03028 [Solid] Sampled 04/08/2010 09:35 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 11:35	Tox LCS required
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 11:35	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 11:35	+ Aroclor-1262 & 1268
1004066-34 DP08-03030 [Solid] Sampled 04/08/2010 10:05 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 12:05	Tox LCS required
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:05	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 12:05	+ Aroclor-1262 & 1268
1004066-35 DP08-03031 [Solid] Sampled 04/08/2010 10:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:10	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 12:10	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 12:10	Tox LCS required
1004066-36 DP08-53030 [Solid] Sampled 04/08/2010 10:05 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 12:05	Tox LCS required
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:05	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 12:05	+ Aroclor-1262 & 1268
1004066-37 DP09-03033 [Solid] Sampled 04/08/2010 10:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:40	
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 12:40	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 12:40	Tox LCS required
1004066-38 DP09-03034 [Solid] Sampled 04/08/2010 10:45 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	04/30/2010 14:00	20	04/22/2010 12:45	Tox LCS required
SGC_PCB8082A_3546	04/30/2010 14:00	20	04/22/2010 12:45	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	04/30/2010 14:00	20	04/15/2010 12:45	

1004066

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004066-39 EB-114 [Water] Sampled 04/08/2010 07:40 Pacific				**QSM4.1**
SGC_PEST8081A_3510	04/30/2010 14:00	20	04/15/2010 09:40	Tox LCS required
MET_7470_MERCURY	04/30/2010 14:00	20	05/06/2010 09:40	
MET_ICP_6010B_FULL	04/30/2010 14:00	20	10/05/2010 09:40	water TAL + Mo
SGC_DRO_8015B_3510	04/30/2010 14:00	20	04/15/2010 09:40	+MO
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 09:40	
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 09:40	
SGC_PCB8082A_3510	04/30/2010 14:00	20	04/15/2010 09:40	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	04/30/2010 14:00	20	04/15/2010 09:40	
1004066-40 TB-114 [Water] Sampled 04/08/2010 07:40 Pacific				**QSM4.1**
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 09:40	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 09:40	
1004066-41 EB-214 [Water] Sampled 04/08/2010 07:45 Pacific				**QSM4.1**
MET_7470_MERCURY	04/30/2010 14:00	20	05/06/2010 09:45	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 09:45	
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 09:45	
SMS_PAH_8270C_3510_LOW	04/30/2010 14:00	20	04/15/2010 09:45	
SGC_DRO_8015B_3510	04/30/2010 14:00	20	04/15/2010 09:45	+MO
MET_ICP_6010B_FULL	04/30/2010 14:00	20	10/05/2010 09:45	water TAL + Mo
1004066-42 TB-214 [Water] Sampled 04/08/2010 07:45 Pacific				**QSM4.1**
VGC_GRO_8015B	04/30/2010 14:00	20	04/22/2010 09:45	
VOC_8260B_AP9	04/30/2010 14:00	20	04/22/2010 09:45	
SGS/Paradigm (SUB028)				
1004066-03 DP01-03144 [Solid] Sampled 04/08/2010 10:40 Pacific				**MS/MSD. QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 12:40	MS/MSD. sub to SGS - Wilmington
1004066-04 DP01-03145 [Solid] Sampled 04/08/2010 10:55 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 12:55	sub to SGS - Wilmington
1004066-09 DP02-03147 [Solid] Sampled 04/08/2010 09:50 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 11:50	sub to SGS - Wilmington
1004066-10 DP02-03148 [Solid] Sampled 04/08/2010 10:00 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 12:00	sub to SGS - Wilmington
1004066-11 DP03-03150 [Solid] Sampled 04/08/2010 14:10 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 16:10	sub to SGS - Wilmington

1004066

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
SGS/Paradigm (SUB028)				
1004066-12 DP03-03151 [Solid] Sampled 04/08/2010 14:30 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 16:30	sub to SGS - Wilmington
1004066-13 DP03-53150 [Solid] Sampled 04/08/2010 14:10 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 16:10	sub to SGS - Wilmington
1004066-14 DP04-03153 [Solid] Sampled 04/08/2010 09:10 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 11:10	sub to SGS - Wilmington
1004066-15 DP04-03154 [Solid] Sampled 04/08/2010 09:35 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 11:35	sub to SGS - Wilmington
1004066-16 DP14-03183 [Solid] Sampled 04/08/2010 15:30 Pacific				**QSM4.1. Dry Weight taken off hold on 4/12/10**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 17:30	sub to SGS - Wilmington
1004066-41 EB-214 [Water] Sampled 04/08/2010 07:45 Pacific				**QSM4.1**
SUB_DIOXINS_8290	04/30/2010 14:00	20	05/08/2010 09:45	sub to SGS - Wilmington

Reviewed By

Date

Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:52:16 PM* Page 1 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP01-03048 ✓	08-Apr-10 14:30	N	Soil				
			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	3			
DP01-03049 ✓	08-Apr-10 14:35	N	Soil				
			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	3			
DP01-03144 ✓	08-Apr-10 10:40	N	Soil				
LAB QC			Field Filtered:☐	1	MeOH	☑	☐
LAB QC			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			
DP01-03145 ✓	08-Apr-10 10:55	N	Soil				
			Field Filtered:☐	1	MeOH	☑	☐
			Field Filtered:☐	3	XH2O, 1XMeOH,4°C	☐	☑
			Total Containers:	4			

100406

-01 -02 -03 -04

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamara Jarvis	4/8/10 1000
Received by		
Relinquished by		
Received by	4/9/10	08:15

2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:
Sample Custody
and
Janice Shilling

Report Copy to

Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:52:17 PM* Page 2 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004066

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP01-53049 ✓	08-Apr-10 14:35	N	Soil					-05
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:	3				
DP02-03051 ✓	08-Apr-10 11:40	N	Soil					-06
LAB QC			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	MS/MSD
			Total Containers:	3				
DP02-03052 ✓	08-Apr-10 11:45	N	Soil					-07
JB			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:	3				
DP02-03053 ✓	08-Apr-10 11:50	N	Soil					-09
JB			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	
			Total Containers:	3				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Grant	4/8/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 08:15

2-10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:
Sample Custody
and
Janice Shilling

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Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:52:17 PM* Page 3 of 5

1004066

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP02-03147	08-Apr-10 9:50	N	Soil					
	Field Filtered:☐			1	MeOH	☑	☐	-09
	Field Filtered:☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				
DP02-03148	08-Apr-10 10:00	N	Soil					
	Field Filtered:☐			1	MeOH	☑	☐	-10
	Field Filtered:☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				
DP03-03150 ✓	08-Apr-10 14:10	N	Soil					
	Field Filtered:☐			1	MeOH	☑	☐	-11
	Field Filtered:☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/8/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 08:15

2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:52:17 PM* Page 4 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004066

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP03-03151 ✓	08-Apr-10 14:30	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-12
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				
DP03-53150 ✓	08-Apr-10 14:10	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-13
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				
DP04-03153 ✓	08-Apr-10 9:10	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-14
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
	Total Containers:			4				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Grant	4/8/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	4/9/10 08:15

2-10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:52:17 PM* Page 5 of 5

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004066

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP04-03154 ✓	08-Apr-10 9:35	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-15
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
				Total Containers:	4			
DP14-03183 ✓	08-Apr-10 15:30	N	Soil					
	Field Filtered: ☐			1	MeOH	☑	☐	-16
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
				Total Containers:	4			
DP16-03189 ✓	~~30-Mar-10 14:15~~ 4/8/10 1125	N	Soil					
resampled on 4/8/10 @ 11:25 - lost by lab	Field Filtered: ☐			1	MeOH	☑	☐	-17
resampled on 4/8/10 @ 11:25 - lost by lab	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑	
				Total Containers:	4			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jack	4/8/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 09:17

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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1.10C + 2.10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/8/2010 1:17:53 PM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/8/2010
COC Number: 4810

	DATE	TIME	Matrix	PAHs (SW8270Sim) JB	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) JB	TPH-Extractable (8015B-E) LAB QC	Pesticides (SW8081A) JB	PCBs (8082)	PCBs (8082) JB	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Dioxins/Furans (8290) LAB QC	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	14	14	14	14	30	30	28	28			
DP02-03012	4/7/2010	13:30	Soil							X							1004066	1	-18
DP02-03013	4/7/2010	13:35	Soil							X								1	-19
DP03-03015	4/7/2010	15:10	Soil							X								1	-20
DP03-03016	4/7/2010	15:15	Soil							X								1	-21
DP04-03018	4/7/2010	14:30	Soil							X								1	-22
DP04-03019	4/7/2010	14:35	Soil							X								1	-23
DP05-03021	4/7/2010	15:45	Soil							X								1	-24
DP05-03022	4/7/2010	15:50	Soil							X								1	-25
DP06-03159	4/7/2010	13:25	Soil			X							X		X		1004053	3	-33
DP06-03160	4/7/2010	13:30	Soil			X							X		X			3	-34
DP06-53160	4/7/2010	13:30	Soil			X							X		X			3	-35
DP07-03162	4/7/2010	14:20	Soil			X							X		X			3	-36
DP07-03163	4/7/2010	14:30	Soil			X							X		X			3	-37
DP09-03168	4/7/2010	9:45	Soil			X							X		X			3	-38

Signatures	Date/Time
Approved by	
Sampled by	4/8/10
Relinquished by Tamara Frank	1300
Received by	
Relinquished by	
Received by	4/9/10 09:15

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1.1°C

Special Instructions:

ATTN:

Sample Custody
and
Janice Shilling

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/8/2010 1:17:54 PM* Page 2 OF 3

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/8/2010
COC Number: 4810

	DATE	TIME	Matrix	PAHs (SW8270Sim) JB	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) JB	TPH-Extractable (8015B-E) LAB QC	Pesticides (SW8081A) JB	PCBs (8082)	PCBs (8082) JB	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Dioxins/Furans (8290) LAB QC	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	14	14	14	14	30	30	28	28			
DP10-03171	4/7/2010	10:55	Soil			X							X		X			3	1004053-4
DP10-03172	4/7/2010	11:15	Soil			X							X		X			3	-42
DP01-03144 ✓	4/8/2010	10:40	Soil	MS/MSD				X						X		X	1004066	~~3~~ 6	-03
DP01-03145 ✓	4/8/2010	10:55	Soil			X							X		X		↓	3	-04
DP02-03051 ✓	4/8/2010	11:40	Soil		MS/MSD			X				X					1004066	~~2~~ 4	-06
DP02-03052 ✓	4/8/2010	11:45	Soil				X				X							2	-07
DP02-03053 ✓	4/8/2010	11:50	Soil				X				X							2	-08
DP02-03147 ✓	4/8/2010	9:50	Soil			X							X		X			3	-09
DP02-03148 ✓	4/8/2010	10:00	Soil			X							X		X		↓	3	-10
DP02-07112 ✓	4/8/2010	11:20	Soil	X													1004066	1	-26
DP02-07113 ✓	4/8/2010	11:25	Soil	X														1	-27
DP02-07114 ✓	4/8/2010	11:30	Soil		X		MS/MSD											~~1~~ 2	-28
DP02-07115 ✓	4/8/2010	11:35	Soil	X													↓	1	-29
DP04-03153 ✓	4/8/2010	9:10	Soil			X							X		X		1004066	3	-14

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by Tamara Jones	4/8/10 1300
Received by	
Relinquished by	
Received by	4/9/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/8/2010 1:17:54 PM

Project Name
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/8/2010
COC Number: 4810

	DATE	TIME	Matrix	PAHs (SW8270Sim) JB ~~X~~	PAHs (SW8270Sim) LAB QC	TPH-Extractable (8015B-E)	TPH-Extractable (8015B-E) JB ~~X~~	TPH-Extractable (8015B-E) LAB QC	Pesticides (SW8081A) JB ~~X~~	PCBs (8082)	PCBs (8082) JB ~~X~~	PCBs (8082) LAB QC	Dioxins/Furans (8290)	Dioxins/Furans (8290) LAB QC	TAL Metals (6010B/7470A)	TAL Metals (6010B/7470A) LAB QC		Number of Containers	COMMENTS
Container:				4oz soil jar	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar	4oz soil jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	14	14	14	14	30	30	28	28			
DP04-03154 ✓	4/8/2010	9:35	Soil			X							X		X		1004066-	3	-15
DP06-03024 ✓	4/8/2010	9:00	Soil						X		X						1004066	2	-30
DP06-03025 ✓	4/8/2010	9:05	Soil						X		X							2	-31
DP07-03027 ✓	4/8/2010	9:30	Soil						X		X							2	-32
DP07-03028 ✓	4/8/2010	9:35	Soil						X		X							2	-33
DP08-03030 ✓	4/8/2010	10:05	Soil						X		X							2	-34
DP08-03031 ✓	4/8/2010	10:10	Soil						X		X							2	-35
DP08-53030 ✓	4/8/2010	10:05	Soil						X		X							2	-36
DP09-03033 ✓	4/8/2010	10:40	Soil						X		X							2	-37
DP09-03034 ✓	4/8/2010	10:45	Soil						X		X							2	-38
																	TOTAL NUMBER OF CONTAINERS	78	

	Signatures	Date/Time
Approved by		
Sampled by	Jamala Jones	4/8/10 1300
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 08:15 1.70c

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:03:14 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004066

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
EB-114	08-Apr-10 7:40	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	-39
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:		5			
TB-114	08-Apr-10 7:40	N	Water					
			Field Filtered: ☐	2	MeOH	☑	☐	-40
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☑	
			Total Containers:		5			

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Trant	4/8/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/9/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.1°C

Chain of Custody Record

COC Number: **4810B**

CH2MHILL *4/8/2010 9:10:57 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8081A	SW8082	SW8270Sim
EB-114	08-Apr-10 7:40	N	Water							
			Field Filtered:☐	2	HNO4	☑	☐	☐	☐	☐
			Field Filtered:☐	8	4°C	☐	☐	☑	☑	☑
			Field Filtered:☐	2	4°C	☐	☑	☐	☐	☐
			Total Containers:	12						

1004066

-39

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/8/10
Relinquished by	Jamera Jarvis	0900
Received by		
Relinquished by		
Received by		4/9/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.1°C

Chain of Custody Record

COC Number: **4810P**

CH2MHILL *4/8/2010 3:04:41 PM* Page 1 of 1

Project Name
Task Order **Location**
Project: 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-214	08-Apr-10 7:45	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			
TB-214	08-Apr-10 7:45	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			

1004066
-41
-42

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Jarvis	4/8/10 1600
Received by		
Relinquished by		
Received by		4/9/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-10°C

Chain of Custody Record

COC Number: **4810B**

CH2MHILL *4/8/2010 9:04:28 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
EB-214	08-Apr-10 7:45	N	Water						
			Field Filtered: ☐	2 DK	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2 1	HNO4	☑	☐	☐	☐
			Field Filtered: ☐	8 2	4°C	☐	☐	☑	☐
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐
			Total Containers:	14					

1004066

-41

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Jent	4/8/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/9/10 08:15

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.10C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004053, 1004066 Number of Coolers: 1 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/09/10 08:15 Date cooler(s) opened: 04/09/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6387

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

Dates samples were logged-in: 04/09/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004053, 1004066 Number of Coolers: 2 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/09/10 08:15 Date cooler(s) opened: 04/09/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6398

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

Dates samples were logged-in: 04/09/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 4 of 5

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004066 Number of Coolers: 3 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/09/10 08:15** Date cooler(s) opened: **04/09/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 6365

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: ~~~~

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4c

Dates samples were logged-in: ~~04/09/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 4H of 5

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

WS 4/9/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: ~~1004055~~ 1004066 Number of Coolers: 4 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/09/10 08:15 Date cooler(s) opened: 04/09/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6376

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.7°C

Dates samples were logged-in: 04/09/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	Yes	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

No Dry weight container rec'd for DP03-02150, CAR#: _____

WS 4/9/10

DP03-03151, DP03-53150, ~~DP03-03153, DP~~ DP-03183!

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004066 Number of Coolers: 5 of 5

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/09/10 08:15 Date cooler(s) opened: 04/09/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9966

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/8/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.1°C

Dates samples were logged-in: ~~04/09/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 & 4 of 5

Chain of Custody Record

COC Number: **4910**

CH2MHILL 4/9/2010 10:22:37 AM Page 3 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004066

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290	
DP03-03150 ✓	08-Apr-10 14:10	N	Soil								-11
	Field Filtered:☐			1	4°C	☐	☐	☐	☐	☑	
	Field Filtered:☐			1	4°C	☑	☐	☐	☐	☐	
	Field Filtered:☐			1	4°C	☐	☑	☐	☐	☐	
	Total Containers:			3							
DP03-03151 ✓	08-Apr-10 14:30	N	Soil								-12
	Field Filtered:☐			1	4°C	☐	☐	☐	☐	☑	
	Field Filtered:☐			1	4°C	☑	☐	☐	☐	☐	
	Field Filtered:☐			1	4°C	☐	☑	☐	☐	☐	
	Total Containers:			3							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jamie	4/9/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.8°C

Chain of Custody Record

COC Number: **4910**

CH2MHILL 4/9/2010 10:22:37 AM Page 4 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP03-53150 ✓	08-Apr-10 14:10	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						
DP14-03183 ✓	08-Apr-10 15:30	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☐	☑
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐
			Total Containers:	3						

1004066

-13

-16

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jane	4/9/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.8°C

Chain of Custody Record

COC Number: **4910**

CH2MHILL *4/9/2010 10:22:37 AM* Page 1 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004066

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290	
DP01-03048 ✓	08-Apr-10 14:30	N	Soil								-01
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐	
			Field Filtered:☐	1	4°C	☐	☑	☑	☐	☐	
			Total Containers:	2							
DP01-03049 ✓	08-Apr-10 14:35	N	Soil								-02
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐	
			Field Filtered:☐	1	4°C	☐	☑	☑	☐	☐	
			Total Containers:	2							
DP01-07108 ✓	08-Apr-10 15:10	N	Soil								
LAB QC			Field Filtered:☐	x2	4°C	☐	☐	☐	☑	☐	MS/MSD
			Total Containers:	x2							
DP01-07109 ✓	08-Apr-10 15:15	N	Soil								
			Field Filtered:☐	1	4°C	☐	☐	☐	☑	☐	
			Total Containers:	1							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10
Relinquished by	Jamara Jones	1000
Received by		
Relinquished by		
Received by		4/10/10 10:30

0-80C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004066 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6343

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.3°C

Dates samples were logged-in: 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

1004070

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/10/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/10/2010 10:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/12/2010 12:14

Samples Received at: **0.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004070-01 DP01-03078 [Solid] Sampled 04/09/2010 12:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:00	
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 14:00	
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 14:00	AP VIALS
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 14:00	+MO
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 14:00	soil TAL + Mo
1004070-02 DP01-03079 [Solid] Sampled 04/09/2010 12:05 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 14:05	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:05	
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 14:05	+MO
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 14:05	AP VIALS
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 14:05	
1004070-03 DP02-03081 [Solid] Sampled 04/09/2010 15:05 Pacific				**QSM4.1**
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 17:05	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 17:05	
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 17:05	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 17:05	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 17:05	+MO

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004070-04 DP02-03082 [Solid] Sampled 04/09/2010 15:10 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 17:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 17:10	
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 17:10	+MO
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 17:10	soil TAL + Mo
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 17:10	
1004070-05 DP05-03156 [Solid] Sampled 04/09/2010 10:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 12:25	
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 12:25	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 12:25	+MO
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 12:25	AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 12:25	AP VIALS
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 12:25	
1004070-06 DP05-03157 [Solid] Sampled 04/09/2010 10:30 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 12:30	+MO
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 12:30	soil TAL + Mo
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 12:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 12:30	
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 12:30	AP VIALS
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 12:30	
1004070-07 DP05-03269 [Solid] Sampled 04/09/2010 15:20 Pacific				**MS/MSD. QSM4.1**
MET_ICP_LOW6010B_FULL	04/19/2010 14:00	5	10/06/2010 17:20	MS/MSD. soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	5	04/16/2010 17:20	MS/MSD.
VOC_8260B_AP9	04/19/2010 14:00	5	04/23/2010 17:20	MS/MSD. AP VIALS
SGC_DRO_8015B_3546	04/19/2010 14:00	5	04/23/2010 17:20	MS/MSD. +MO
MET_7471A_MERCURY	04/19/2010 14:00	5	05/07/2010 17:20	MS/MSD
VGC_GRO_8015B	04/19/2010 14:00	5	04/23/2010 17:20	MS/MSD. AP VIALS
1004070-08 DP05-03270 [Solid] Sampled 04/09/2010 15:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	5	04/16/2010 17:25	
VOC_8260B_AP9	04/19/2010 14:00	5	04/23/2010 17:25	AP VIALS
VGC_GRO_8015B	04/19/2010 14:00	5	04/23/2010 17:25	AP VIALS
MET_7471A_MERCURY	04/19/2010 14:00	5	05/07/2010 17:25	
MET_ICP_LOW6010B_FULL	04/19/2010 14:00	5	10/06/2010 17:25	soil TAL + Mo
SGC_DRO_8015B_3546	04/19/2010 14:00	5	04/23/2010 17:25	+MO

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004070-09 DP05-53270 [Solid] Sampled 04/09/2010 15:25 Pacific				**QSM4.1**
MET_7471A_MERCURY	04/19/2010 14:00	5	05/07/2010 17:25	
SGC_DRO_8015B_3546	04/19/2010 14:00	5	04/23/2010 17:25	+MO
VOC_8260B_AP9	04/19/2010 14:00	5	04/23/2010 17:25	AP VIALS
WC_PERCENT_SOLIDS_2540B	04/19/2010 14:00	5	04/16/2010 17:25	
VGC_GRO_8015B	04/19/2010 14:00	5	04/23/2010 17:25	AP VIALS
MET_ICP_LOW6010B_FULL	04/19/2010 14:00	5	10/06/2010 17:25	soil TAL + Mo
1004070-10 DP08-03278 [Solid] Sampled 04/09/2010 08:45 Pacific				**MS/MSD. QSM4.1**
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 10:45	MS/MSD.
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 10:45	MS/MSD. soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 10:45	MS/MSD. +MO
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 10:45	MS/MSD. AP VIALS
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 10:45	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 10:45	MS/MSD.
1004070-11 DP08-03279 [Solid] Sampled 04/09/2010 09:10 Pacific				**QSM4.1**
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 11:10	AP VIALS
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/23/2010 11:10	+MO
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/06/2010 11:10	soil TAL + Mo
MET_7471A_MERCURY	05/03/2010 14:00	20	05/07/2010 11:10	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 11:10	
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 11:10	AP VIALS
1004070-12 DP01-03114 [Solid] Sampled 04/09/2010 08:40 Pacific				**MS/MSD. QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 10:40	MS/MSD.
1004070-13 DP01-03115 [Solid] Sampled 04/09/2010 08:45 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 10:45	
1004070-14 DP01-03116 [Solid] Sampled 04/09/2010 09:50 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 11:50	
1004070-15 DP01-07148 [Solid] Sampled 04/09/2010 12:00 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:00	MS/MSD.
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 14:00	MS/MSD.
1004070-16 DP01-07149 [Solid] Sampled 04/09/2010 12:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:00	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 14:00	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004070-17 DP01-07150 [Solid] Sampled 04/09/2010 12:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:00	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 14:00	
1004070-18 DP01-07151 [Solid] Sampled 04/09/2010 12:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 14:00	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:00	
1004070-19 DP01-57050 [Solid] Sampled 04/09/2010 12:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 14:00	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 14:00	
1004070-20 DP02-03117 [Solid] Sampled 04/09/2010 09:25 Pacific				**MS/MSD. QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 11:25	MS/MSD.
1004070-21 DP02-03118 [Solid] Sampled 04/09/2010 09:30 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 11:30	
1004070-22 DP02-03119 [Solid] Sampled 04/09/2010 09:35 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 11:35	
1004070-23 DP03-03120 [Solid] Sampled 04/09/2010 10:50 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 12:50	
1004070-24 DP03-03121 [Solid] Sampled 04/09/2010 10:55 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 12:55	
1004070-25 DP03-03122 [Solid] Sampled 04/09/2010 11:00 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 13:00	
1004070-26 DP03-53120 [Solid] Sampled 04/09/2010 10:50 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 12:50	
1004070-27 DP04-03123 [Solid] Sampled 04/09/2010 09:55 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 11:55	
1004070-28 DP04-03124 [Solid] Sampled 04/09/2010 10:00 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 12:00	
1004070-29 DP04-03125 [Solid] Sampled 04/09/2010 10:05 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 12:05	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004070-30 DP08-03135 [Solid] Sampled 04/09/2010 11:55 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 13:55	
1004070-31 DP08-03136 [Solid] Sampled 04/09/2010 12:00 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 14:00	
1004070-32 DP08-03137 [Solid] Sampled 04/09/2010 12:05 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 14:05	
1004070-33 DP08-07188 [Solid] Sampled 04/09/2010 08:44 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 10:44	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 10:44	
1004070-34 DP08-07189 [Solid] Sampled 04/09/2010 08:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 10:45	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 10:45	
1004070-35 DP08-07190 [Solid] Sampled 04/09/2010 08:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 10:50	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 10:50	
1004070-36 DP08-07191 [Solid] Sampled 04/09/2010 08:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 10:55	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 10:55	
1004070-37 DP08-57190 [Solid] Sampled 04/09/2010 08:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/16/2010 10:50	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/23/2010 10:50	
1004070-38 DP09-03138 [Solid] Sampled 04/09/2010 11:20 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 13:20	
1004070-39 DP09-03139 [Solid] Sampled 04/09/2010 11:25 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 13:25	
1004070-40 DP09-03140 [Solid] Sampled 04/09/2010 11:30 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 13:30	
1004070-41 DP09-53140 [Solid] Sampled 04/09/2010 11:30 Pacific				**QSM4.1**
LC_EXPL_8330A	05/03/2010 14:00	20	04/23/2010 13:30	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004070-42 DP01-07108 [Solid] Sampled 04/08/2010 15:10 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/15/2010 17:10	MS/MSD.
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/22/2010 17:10	MS/MSD.
1004070-43 DP01-07109 [Solid] Sampled 04/08/2010 15:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/15/2010 17:15	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/22/2010 17:15	
1004070-44 DP01-07110 [Solid] Sampled 04/08/2010 15:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/22/2010 17:20	
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/15/2010 17:20	
1004070-45 DP01-07111 [Solid] Sampled 04/08/2010 15:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/15/2010 17:25	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/22/2010 17:25	
1004070-46 DP01-53049 [Solid] Sampled 04/08/2010 14:35 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/03/2010 14:00	20	10/05/2010 16:35	soil TAL + Mo
SGC_DRO_8015B_3546	05/03/2010 14:00	20	04/22/2010 16:35	+MO
SGC_PCB8082A_3546	05/03/2010 14:00	20	04/22/2010 16:35	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/15/2010 16:35	
MET_7471A_MERCURY	05/03/2010 14:00	20	05/06/2010 16:35	
1004070-47 DP01-57110 [Solid] Sampled 04/08/2010 15:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/03/2010 14:00	20	04/15/2010 17:20	
SMS_PAH_8270C_3546_LOW	05/03/2010 14:00	20	04/22/2010 17:20	
1004070-48 EB-115 [Water] Sampled 04/09/2010 07:20 Pacific				**QSM4.1**
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 09:20	
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 09:20	
SMS_PAH_8270C_3510_LOW	05/03/2010 14:00	20	04/16/2010 09:20	LOW VOLUME!!
MET_ICP_6010B_FULL	05/03/2010 14:00	20	10/06/2010 09:20	water TAL + Mo
LC_EXPL_8330A	05/03/2010 14:00	20	04/16/2010 09:20	LOW VOLUME!!
SGC_DRO_8015B_3510	05/03/2010 14:00	20	04/16/2010 09:20	+MO., LOW VOLUME!!
MET_7470_MERCURY	05/03/2010 14:00	20	05/07/2010 09:20	
1004070-49 TB-115 [Water] Sampled 04/09/2010 07:30 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 09:30	
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 09:30	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004070-50 EB-215 [Water] Sampled 04/09/2010 07:50 Pacific				**QSM4.1**
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 09:50	
SMS_PAH_8270C_3510_LOW	05/03/2010 14:00	20	04/16/2010 09:50	
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 09:50	
MET_ICP_6010B_FULL	05/03/2010 14:00	20	10/06/2010 09:50	water TAL + Mo
SGC_DRO_8015B_3510	05/03/2010 14:00	20	04/16/2010 09:50	+MO
MET_7470_MERCURY	05/03/2010 14:00	20	05/07/2010 09:50	
1004070-51 TB-215 [Water] Sampled 04/09/2010 07:50 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/23/2010 09:50	
VOC_8260B_AP9	05/03/2010 14:00	20	04/23/2010 09:50	
1004070-52 EB-314 [Water] Sampled 04/08/2010 13:00 Pacific				**QSM4.1**
SGC_PCB8082A_3510	05/03/2010 14:00	20	04/15/2010 15:00	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3510	05/03/2010 14:00	20	04/15/2010 15:00	+MO
MET_ICP_6010B_FULL	05/03/2010 14:00	20	10/05/2010 15:00	water TAL + Mo
MET_7470_MERCURY	05/03/2010 14:00	20	05/06/2010 15:00	
SMS_BNA_8270C_3510_REG	05/03/2010 14:00	20	04/15/2010 15:00	
VOC_8260B_AP9	05/03/2010 14:00	20	04/22/2010 15:00	
VGC_GRO_8015B	05/03/2010 14:00	20	04/22/2010 15:00	
1004070-53 TB-314 [Water] Sampled 04/08/2010 13:00 Pacific				**QSM4.1**
VGC_GRO_8015B	05/03/2010 14:00	20	04/22/2010 15:00	
VOC_8260B_AP9	05/03/2010 14:00	20	04/22/2010 15:00	
1004070-54 DP02-03508 [Water] Sampled 04/08/2010 14:00 Pacific				**MS/MSD. QSM4.1**
MET_7470_DIS_MERCURY	05/03/2010 14:00	20	05/06/2010 16:00	MS/MSD. FF & PRESERVED.
SGC_DRO_8015B_3510	05/03/2010 14:00	20	04/15/2010 16:00	MS/MSD. +MO
MET_ICP_6010B_FULL_DIS	05/03/2010 14:00	20	10/05/2010 16:00	MS/MSD. water TAL + Mo. FF & PRESERVED!
SGC_PCB8082A_3510	05/03/2010 14:00	20	04/15/2010 16:00	MS/MSD. + Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	05/03/2010 14:00	20	04/15/2010 16:00	MS/MSD.
VOC_8260B_AP9	05/03/2010 14:00	20	04/22/2010 16:00	MS/MSD.

1004070

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004070-55 DP02-03509 [Water] Sampled 04/08/2010 15:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/03/2010 14:00	20	04/15/2010 17:40	+MO
SGC_PCB8082A_3510	05/03/2010 14:00	20	04/15/2010 17:40	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	05/03/2010 14:00	20	04/15/2010 17:40	
VOC_8260B_AP9	05/03/2010 14:00	20	04/22/2010 17:40	
MET_7470_DIS_MERCURY	05/03/2010 14:00	20	05/06/2010 17:40	FF & PRESERVED.
MET_ICP_6010B_FULL_DIS	05/03/2010 14:00	20	10/05/2010 17:40	water TAL + Mo. FF & PRESERVED!
SGS/Paradigm (SUB028)				
1004070-05 DP05-03156 [Solid] Sampled 04/09/2010 10:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/03/2010 14:00	20	05/09/2010 12:25	sub to SGS - Wilmington
1004070-06 DP05-03157 [Solid] Sampled 04/09/2010 10:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/03/2010 14:00	20	05/09/2010 12:30	sub to SGS - Wilmington
1004070-50 EB-215 [Water] Sampled 04/09/2010 07:50 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/03/2010 14:00	20	05/09/2010 09:50	sub to SGS - Wilmington

Reviewed By

Date

Chain of Custody Record

COC Number: **4910P**

CH2MHILL *4/9/2010 3:53:52 PM* Page 1 of 4

Project Name Location
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004078

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624	
DP01-03078 ✓	09-Apr-10 12:00	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	-01
			Total Containers:	3				
DP01-03079 ✓	09-Apr-10 12:05	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	-02
			Total Containers:	3				
DP02-03081 ✓	09-Apr-10 15:05	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	-03
			Total Containers:	3				
DP02-03082 ✓	09-Apr-10 15:10	N	Soil					
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°	☐	☑	-04
			Total Containers:	3				

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **4910P**

CH2MHILL 4/9/2010 3:53:52 PM Page 2 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP05-03156 ✓	09-Apr-10 10:25	N	Soil				
	Field Filtered: ☐	1			MeOH	☑	☐
	Field Filtered: ☐	3			XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP05-03157 ✓	09-Apr-10 10:30	N	Soil				
	Field Filtered: ☐	1			MeOH	☑	☐
	Field Filtered: ☐	3			XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP05-03269 ✓	09-Apr-10 15:20	N	Soil				
LAB QC	Field Filtered: ☐	1			MeOH	☑	☐
LAB QC	Field Filtered: ☐	3			XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			6			

MS/MSD

1004070

-05

-06

-07

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/9/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4910P**

CH2MHILL 4/9/2010 3:53:52 PM Page 3 of 4

Project Name Location
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
DP05-03270 ✓	09-Apr-10 15:25	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP05-53270 ✓	09-Apr-10 15:25	N	Soil				
	Field Filtered: ☐			1	MeOH	☑	☐
	Field Filtered: ☐			3	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			
DP08-03278 ✓	09-Apr-10 8:45	N	Soil				
LAB QC	Field Filtered: ☐			12	MeOH	☑	☐
LAB QC	Field Filtered: ☐			8	XH2O, 1XMeOH,4°C	☐	☑
	Total Containers:			4			

1004070

-09

-10

MS/MSD

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jones	4/9/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **4910P**

CH2MHILL *4/9/2010 3:53:53 PM* Page 4 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624																			
DP08-03279	09-Apr-10	9:10	N	Soil																						
			Field Filtered: ☐	1	MeOH	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Field Filtered: ☐	3	XH2O, 1XMeOH,4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:		4																					

1004070

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Jamona Jarrett	4/9/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by	[illegible]	4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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Chain of Custody Record

COC Number: **49102**

CH2MHILL *4/9/2010 2:56:57 PM* Page 1 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004070

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290	
DP01-03078 ✓	09-Apr-10 12:00	N	Soil									
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐	☐	-01
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐	☐	
			Total Containers:	2								
DP01-03079 ✓	09-Apr-10 12:05	N	Soil									
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐	☐	-02
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐	☐	
			Total Containers:	2								
DP01-03114 ✓	09-Apr-10 8:40	N	Soil								MS/MSD	
LAB QC			Field Filtered: ☐	~~1~~ 2	4°C	☐	☑	☐	☐	☐	☐	-13
			Total Containers:	~~1~~ 2								
DP01-03115 ✓	09-Apr-10 8:45	N	Soil									-13
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐	
			Total Containers:	1								

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		4/9/10
Sampled by	Jamie Frank	1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **49102**

CH2MHILL *4/9/2010 2:56:57 PM* Page 2 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004070

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A mitle 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290														
DP01-03116 ✓	09-Apr-10 9:50	N	Soil																						
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	1																					
DP01-07148	09-Apr-10 12:00	N	Soil																						
LAB QC			Field Filtered: ☐	+2	4°C	☐	☐	☐	☐	☑	☐	☐	MS/MSD												
			Total Containers:	+2																					
DP01-07149	09-Apr-10 12:00	N	Soil																						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	1																					
DP01-07150	09-Apr-10 12:00	N	Soil																						
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
			Total Containers:	1																					

-14
-15
-16
-17

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jark	4/9/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **49102**

CH2MHILL *4/9/2010 2:56:57 PM* Page 3 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP01-07151	09-Apr-10 12:00	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐
			Total Containers:	1							
DP01-57050	09-Apr-10 12:00	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐
			Total Containers:	1							
DP02-03117 ✓	09-Apr-10 9:25	N	Soil								
LAB QC			Field Filtered: ☐	12	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	12							
DP02-03118 ✓	09-Apr-10 9:30	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							

MS/MSD

1004070

-18 -19 -20 -21

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/9/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **49102**

CH2MHILL 4/9/2010 2:56:57 PM Page 4 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290	
DP02-03119 ✓	09-Apr-10	9:35	N	Soil								1004070
				Field Filtered: ☐ 1	4°C	☐	☑	☐	☐	☐	☐	-22
				Total Containers:	1							
DP03-03120 ✓	09-Apr-10	10:50	N	Soil								
				Field Filtered: ☐ 1	4°C	☐	☑	☐	☐	☐	☐	-23
				Total Containers:	1							
DP03-03121 ✓	09-Apr-10	10:55	N	Soil								
				Field Filtered: ☐ 1	4°C	☐	☑	☐	☐	☐	☐	-24
				Total Containers:	1							
DP03-03122 ✓	09-Apr-10	11:00	N	Soil								
				Field Filtered: ☐ 1	4°C	☐	☑	☐	☐	☐	☐	-25
				Total Containers:	1							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10
Relinquished by	Jamara Jones	1500
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **49102**

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4/9/2010 2:56:57 PM

Project Name
Task Order **Location** **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP03-53120 ✓	09-Apr-10 10:50	N	Soil								
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							
DP04-03123 ✓	09-Apr-10 9:55	N	Soil								
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							
DP04-03124 ✓	09-Apr-10 10:00	N	Soil								
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							
DP04-03125 ✓	09-Apr-10 10:05	N	Soil								
			Field Filtered:☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							

1004070

-26

-27

-28

-29

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Faust	4/9/10 1500
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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Chain of Custody Record

COC Number: **49102**

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1004070

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290	
DP05-03156 ✓	09-Apr-10 10:25	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☐	☑	-05
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐	☐	
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐	☐	
			Total Containers:		3							
DP05-03157 ✓	09-Apr-10 10:30	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☐	☑	-06
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐	☐	
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐	☐	
			Total Containers:		3							
DP08-03135 ✓	09-Apr-10 11:55	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐	-30
			Total Containers:		1							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10
Relinquished by	Tamara Franks	1500
Received by		
Relinquished by		
Received by		4/10/10

10:30

2.6°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **49102**

CH2MHILL 4/9/2010 2:56:57 PM Page 7 of 10

Project Name Location
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290	
DP08-03136 ✓	09-Apr-10 12:00	N	Soil									1004070
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐	-31
			Total Containers:		1							
DP08-03137 ✓	09-Apr-10 12:05	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐	-32
			Total Containers:		1							1004070
DP08-03278 ✓	09-Apr-10 8:45	N	Soil									
LAB QC			Field Filtered: ☐	x2	4°C	☐	☐	☑	☐	☐	☐	-10
LAB QC			Field Filtered: ☐	x2	4°C	☐	☐	☐	☑	☐	☐	MS/MSD
			Total Containers:		4							
DP08-03279 ✓	09-Apr-10 9:10	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☐	☑	☐	☐	☐	-11
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐	☐	
			Total Containers:		2							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/9/10 1500
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

Chain of Custody Record

COC Number: **49102**

CH2MHILL *4/9/2010 2:56:58 PM* Page 8 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290	
DP08-07188 ✓	09-Apr-10 8:44	N	Soil									1004070
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐	-33
			Total Containers:		1							
DP08-07189 ✓	09-Apr-10 8:45	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐	-34
			Total Containers:		1							
DP08-07190 ✓	09-Apr-10 8:50	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐	-35
			Total Containers:		1							
DP08-07191 ✓	09-Apr-10 8:55	N	Soil									
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐	-36
			Total Containers:		1							

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/9/10 1500
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

Chain of Custody Record

COC Number: **49102**

CH2MHILL 4/9/2010 2:56:58 PM Page 9 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP08-57190	09-Apr-10 8:50	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☐	☐	☐	☑	☐
			Total Containers:	1							
DP09-03138	09-Apr-10 11:20	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							
DP09-03139	09-Apr-10 11:25	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							
DP09-03140	09-Apr-10 11:30	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							

1004070

-37 -38 -39 -40

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/9/10 1500
Received by		
Relinquished by		
Received by	[illegible]	4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

Chain of Custody Record

COC Number: **49102**

CH2MHILL *4/9/2010 2:56:58 PM* Page 10 of 10

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470A Title 22	8330	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
DP09-53140	09-Apr-10 11:30	N	Soil								
			Field Filtered: ☐	1	4°C	☐	☑	☐	☐	☐	☐
			Total Containers:	1							

1004070

-41

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

Chain of Custody Record

COC Number: **4910**

CH2MHILL *4/9/2010 10:22:37 AM* Page 1 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP01-03048 ✓	08-Apr-10 14:30	N	Soil							
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☑	☐	☐
			Total Containers:	2						
DP01-03049 ✓	08-Apr-10 14:35	N	Soil							
			Field Filtered:☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered:☐	1	4°C	☐	☑	☑	☐	☐
			Total Containers:	2						
DP01-07108 ✓	08-Apr-10 15:10	N	Soil							
LAB QC			Field Filtered:☐	×2	4°C	☐	☐	☐	☑	☐
			Total Containers:	×2						
DP01-07109 ✓	08-Apr-10 15:15	N	Soil							
			Field Filtered:☐	1	4°C	☐	☐	☐	☑	☐
			Total Containers:	1						

1004066
-01
-02
1004070
-42 ↓
MS/MSD
-43

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		4/9/10
Sampled by	Tamara Jones	1000
Relinquished by		
Received by		
Relinquished by		4/10/10
Received by		10:30

0-80C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4910**

CH2MHILL 4/9/2010 10:22:37 AM Page 2 of 4

Project Name **Location**
Task Order **Project:** 2010-FED1a-Soil
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8082	SW8270Sim	SW8290
DP01-07110 ✓	08-Apr-10 15:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐
			Total Containers:	1						
DP01-07111 ✓	08-Apr-10 15:25	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐
			Total Containers:	1						
DP01-53049 ✓	08-Apr-10 14:35	N	Soil							
			Field Filtered: ☐	1	4°C	☑	☐	☐	☐	☐
			Field Filtered: ☐	1	4°C	☐	☑	☑	☐	☐
			Total Containers:	2						
DP01-57110 ✓	08-Apr-10 15:20	N	Soil							
			Field Filtered: ☐	1	4°C	☐	☐	☐	☑	☐
			Total Containers:	1						

1004066

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-45

-46

-47

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jamie	4/9/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

6.8°C

Chain of Custody Record

COC Number: **4910P**

CH2MHILL *4/9/2010 3:32:29 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-115	09-Apr-10 7:20	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			
TB-115	09-Apr-10 7:30	N	Water				
			Field Filtered:☐	2	MeOH	☑	☐
			Field Filtered:☐	3	H2O,MeOH,4°C	☐	☑
			Total Containers:	5			

4/12/10 ws ~~1004066~~ 1004070

-48

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MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10
Relinquished by	Jamara Frank	1530
Received by		
Relinquished by		
Received by		4/10/10 10:30

6.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Chain of Custody Record

COC Number: **4910W**

CH2MHILL *4/9/2010 8:48:19 AM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team1
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	8330	SW6010B/7470A	SW8015B-E	SW8270Sim
EB-115	09-Apr-10 7:20	N	Water						
			Field Filtered: ☐	1	None	☑	☐	☐	☐
			Field Filtered: ☐	~~2~~ 1	HNO4	☐	☑	☐	☐
			Field Filtered: ☐	~~8~~ 2	4°C	☐	☐	☐	☑
			Field Filtered: ☐	2	4°C	☐	☐	☑	☐
			Total Containers:	13					

1004066 GS 4/12/10
1004070
-48

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		4/9/10
Relinquished by	Tamara Frank	0900
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

6.8°C

Chain of Custody Record

COC Number: **4910P**

CH2MHILL *4/9/2010 3:33:15 PM* Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW8015B-P	SW8260B/624
EB-215	09-Apr-10 7:50	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			
TB-215	09-Apr-10 7:50	N	Water				
	Field Filtered: ☐			2	MeOH	☑	☐
	Field Filtered: ☐			3	H2O,MeOH,4°C	☐	☑
	Total Containers:			5			

1004070
-50
-51

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/9/10 1530
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

@ 8°C

Chain of Custody Record

COC Number: **4910W**

CH2MHILL 4/9/2010 8:36:47 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team2
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8270Sim	SW8290
EB-215	09-Apr-10 7:50	N	Water						
			Field Filtered: ☐	2	4°C	☐	☐	☐	☑
			Field Filtered: ☐	~~2~~ 1	HNO4	☑	☐	☐	☐
			Field Filtered: ☐	~~6~~ 2	4°C	☐	☐	☑	☐
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐
			Total Containers:	~~14~~ 7					

1004070

-50

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamala Frank	4/9/10 0900
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.8°C

Chain of Custody Record

COC Number: **4910W**

CH2MHILL 4/9/2010 8:20:26 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-AlamedaPoint-FieldQC-Team3
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	SW6010B/7470A	SW8015B-E	SW8015B-P	SW8082	SW8260B/624	SW8270C
EB-314	08-Apr-10 13:00	N	Water								
			Field Filtered: ☐	2 ~~1~~	HNO4	☑	☐	☐	☐	☐	☐
			Field Filtered: ☐	~~8~~ 4	4°C	☐	☐	☐	☑	☐	☑
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐	☐	☐
			Field Filtered: ☐	2	MeOH	☐	☐	☑	☐	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☐	☑	☐
			Total Containers:	~~11~~ 12							
TB-314	08-Apr-10 13:00	N	Water								
			Field Filtered: ☐	2	MeOH	☐	☐	☑	☐	☐	☐
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☐	☑	☐
			Total Containers:	5							

1004070

-52
~~-54~~ -53
ws 4/12/10

ws 4/12/10
~~-52~~ -53

MS = Matrix Spike SD = Matrix Spike Duplicate

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jones	4/9/10 0830
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.8°C

Chain of Custody Record

COC Number: **4910W**

CH2MHILL 4/9/2010 8:25:17 AM Page 1 of 1

Project Name **Location**
Task Order **Project:** 2010-FED1a-GW
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager
Turnaround Time 21 Days
PO Number TF

1004070

Sample ID	Sample Date/Time	Type	Matrix	# Containers	Preserv	6010B/7470ATitle 22	SW8015B-E	SW8082	SW8260B/624	SW8270Sim	
DP02-03508	08-Apr-10 14:00	N	Water								
LAB QC			Field Filtered: ☒	~~3~~ 3	HNO4	☑	☐	☐	☐	☐	
LAB QC LAB QC			Field Filtered: ☐	~~12~~ 12	4°C	☐	☐	☑	☐	☑	
LAB QC			Field Filtered: ☐	~~6~~ 6	4°C	☐	☑	☐	☐	☐	
LAB QC			Field Filtered: ☐	~~3~~ 6	H2O,MeOH,4°C	☐	☐	☐	☑	☐	
			Total Containers:	~~18~~ 30							
DP02-03509	08-Apr-10 15:40	N	Water								
			Field Filtered: ☒	1	HNO4	☑	☐	☐	☐	☐	
			Field Filtered: ☐	4	4°C	☐	☐	☑	☐	☑	
			Field Filtered: ☐	2	4°C	☐	☑	☐	☐	☐	
			Field Filtered: ☐	3	H2O,MeOH,4°C	☐	☐	☐	☑	☐	
			Total Containers:	10							

-54

-55

MS = Matrix Spike **SD = Matrix Spike Duplicate**

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/9/10 830
Received by		
Relinquished by		
Received by		4/10/10 10:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889955
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.8°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004066, 1004070 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6343

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.8°C

Dates samples were logged-in: 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers? ..... WS 4/12/10	Yes	(No)	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... WS 4/12/10	(Yes)	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

Samples DP02-03082 & DP05-05270 did CAR#: _____
not have dry weight containers rec'd in shipment (placed on hold)

Sample TB-215 not rec'd in shipment. However EB-215 received double volume; Tagged TB for VOC+6120 and placed on hold;

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004076 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6273

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3°C

~~Dates samples were logged in:~~ ~~04/12/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6354

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8oc

~~Dates samples were logged-in:~~ ~~04/12/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070 Number of Coolers: 4 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 6310

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4-8°C

Dates ~~samples were logged in:~~ 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070 Number of Coolers: 5 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6332

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6°C

~~Dates samples were logged-in:~~ 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070 Number of Coolers: 6 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9955

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.6°C

~~Dates samples were logged-in:~~ 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004040 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6321

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5c

~~Dates samples were logged in:~~ 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070 Number of Coolers: 8 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/10/10 10:30 Date cooler(s) opened: 04/10/10

Opened By (print): Will Schutt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6262

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/9/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6oC

Dates samples were logged-in: 04/12/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 1:08:11 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210

	DATE	TIME	Matrix	PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)	Number of Containers	COMMENTS
Container:				4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar		
Preservatives:				4°C	4°C	4°C	4°C	4°C		
Filtered:				NA	NA	NA	NA	NA		
Holding Time:				14	14	14	28	28		
DP02-03081	4/9/2010	15:05	Soil		X			X	2	
DP02-03082	4/9/2010	15:10	Soil		X			X	2	
DP02-07152	4/9/2010	14:50	Soil	X					1	
DP02-07153	4/9/2010	14:53	Soil	X					1	
DP02-07154	4/9/2010	14:55	Soil	X					1	
DP02-07155	4/9/2010	14:58	Soil	X					1	
DP05-03269	4/9/2010	15:20	Soil		X		X		~~2~~	LAB QC
DP05-03270	4/9/2010	15:25	Soil		X		X		2	
DP05-07176	4/9/2010	14:35	Soil	X					1	
DP05-07177	4/9/2010	14:40	Soil	X					1	
DP05-07178	4/9/2010	14:45	Soil	X					1	
DP05-07179	4/9/2010	14:50	Soil	X					1	
DP05-53270	4/9/2010	15:25	Soil		X		X		1	
DP01-03084	4/12/2010	11:05	Soil		X	X		X	~~3~~	LAB QC

1004070-03
-04
~~1004070-07~~ 4/13/10
1004070-07 MS/MSD ~~-08~~ 4/13/10
-08
1004070-09
MS/MSD 4/6

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/12/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00 5.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:
ATTN:
Sample Custody and Janice Shilling

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/13/10 09:00** Date cooler(s) opened: **04/13/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6230

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

Dates samples were logged-in: **04/13/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaad (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Monday, April 12, 2010 3:25 PM
To: sgordon@empirlabs.com; Mark.Fesler@CH2M.com
Subject: RE: 1004070!

We ran out of moisture containers, and had to use 4 oz jars. They probably didn't get added to the VOC cooler and are probably in another cooler. I think those two may be in a cooler that will be sent today.

The label for TB-215 was hand written over the EB-215 label. Please check and see if 5 of the EB215s are actually trip blanks (with your TB labels on them) and with the mark-through TB label smeared. If you peel our label off of one of the mystery TB/EB vials you'll be able to see your label underneath, and your labels have TB on them, whereas the EBs don't.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 12, 2010 1:18 PM
To: Frank, Tamara/BAO; Fesler, Mark/RDD
Subject: FW: 1004070!

Hi Tamara,

I'm forwarding the questions from sample receiving on what we received on Saturday. As for his 1st point, I'm assuming that it will be like usual & we will receive these in the shipment you send out today.

As for the 2nd, we received 10 vials for EB-215 and no vials for TB-215. Please let me know how you'd like to proceed.

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: William Schwab [mailto:wschwab@empirlabs.com]
Sent: Monday, April 12, 2010 1:02 PM
To: SGordon@EmpirLabs.com
Cc: rdavis@empirlabs.com
Subject: 1004070!

Samples DP02-03082, and DP05-03270 did not have a bulk container for dry weight to run out of. Therefore, dry weight placed on hold.

Also for sample TB-215. We should have received 5 HCL vials for this sample to run VOC and GRO out of. However, we received 10 HCL vials labeled as EB-215 and only 5 for this sample should have been received as well. Perhaps it is a typo, but we received additional

containers labeled EB-215 and no containers labeled TB-215. Due to same collection date/times we cannot differentiate to if actually TB-215 was received. Tagged and placed on hold pending what client would like to do.

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 237 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004086

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/11/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/13/2010 09:00, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/13/2010 13:45

Samples Received at: **4.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004086-01 DP01-03084 [Solid] Sampled 04/12/2010 11:05 Pacific				**MS/MSD. QSM4.1**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 13:05	MS/MSD
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 13:05	MS/MSD. soil TAL + Mo
SGC_PCB8082A_3546	05/04/2010 14:00	20	04/26/2010 13:05	MS/MSD. + Aroclor-1262 & 1268
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 13:05	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:05	MS/MSD
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 13:05	MS/MSD. +MO
1004086-02 DP01-03085 [Solid] Sampled 04/12/2010 11:15 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 13:15	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:15	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 13:15	+MO
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 13:15	soil TAL + Mo
SGC_PCB8082A_3546	05/04/2010 14:00	20	04/26/2010 13:15	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 13:15	AP VIALS
1004086-03 DP02-03087 [Solid] Sampled 04/12/2010 09:55 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 11:55	soil TAL + Mo
SGC_PCB8082A_3546	05/04/2010 14:00	20	04/26/2010 11:55	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 11:55	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:55	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 11:55	+MO
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 11:55	

1004086

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004086-04 DP02-03088 [Solid] Sampled 04/12/2010 10:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 12:00	+MO
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 12:00	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 12:00	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 12:00	AP VIALS
SGC_PCB8082A_3546	05/04/2010 14:00	20	04/26/2010 12:00	+ Aroclor-1262 & 1268
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 12:00	soil TAL + Mo
1004086-05 DP02-03089 [Solid] Sampled 04/12/2010 10:05 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 12:05	
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 12:05	soil TAL + Mo
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 12:05	+MO
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 12:05	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 12:05	
SGC_PCB8082A_3546	05/04/2010 14:00	20	04/26/2010 12:05	+ Aroclor-1262 & 1268
1004086-06 DP04-03266 [Solid] Sampled 04/12/2010 14:45 Pacific				**MS/MSD. QSM4.1.**
MET_7471A_MERCURY	04/20/2010 14:00	5	05/10/2010 16:45	MS/MSD.
MET_ICP_LOW6010B_FULL	04/20/2010 14:00	5	10/09/2010 16:45	MS/MSD. soil TAL + Mo
SGC_DRO_8015B_3546	04/20/2010 14:00	5	04/26/2010 16:45	MS/MSD. +MO
VGC_GRO_8015B	04/20/2010 14:00	5	04/26/2010 16:45	MS/MSD. AP VIALS
VOC_8260B_AP9	04/20/2010 14:00	5	04/26/2010 16:45	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/19/2010 16:45	MS/MSD
1004086-07 DP04-03267 [Solid] Sampled 04/12/2010 14:50 Pacific				**QSM4.1.**
VOC_8260B_AP9	04/20/2010 14:00	5	04/26/2010 16:50	AP VIALS
SGC_DRO_8015B_3546	04/20/2010 14:00	5	04/26/2010 16:50	+MO
MET_ICP_LOW6010B_FULL	04/20/2010 14:00	5	10/09/2010 16:50	soil TAL + Mo
MET_7471A_MERCURY	04/20/2010 14:00	5	05/10/2010 16:50	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/19/2010 16:50	
VGC_GRO_8015B	04/20/2010 14:00	5	04/26/2010 16:50	AP VIALS
1004086-08 DP04-03268 [Solid] Sampled 04/12/2010 14:55 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/19/2010 16:55	
VOC_8260B_AP9	04/20/2010 14:00	5	04/26/2010 16:55	AP VIALS
VGC_GRO_8015B	04/20/2010 14:00	5	04/26/2010 16:55	AP VIALS
SGC_DRO_8015B_3546	04/20/2010 14:00	5	04/26/2010 16:55	+MO
MET_7471A_MERCURY	04/20/2010 14:00	5	05/10/2010 16:55	
MET_ICP_LOW6010B_FULL	04/20/2010 14:00	5	10/09/2010 16:55	soil TAL + Mo

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004086-09 DP06-03272 [Solid] Sampled 04/12/2010 14:20 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 16:20	+MO
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 16:20	
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 16:20	soil TAL + Mo
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 16:20	AP VIALS
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 16:20	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 16:20	
1004086-10 DP06-03273 [Solid] Sampled 04/12/2010 14:25 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 16:25	+MO
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 16:25	AP VIALS
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 16:25	AP VIALS
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 16:25	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 16:25	
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 16:25	soil TAL + Mo
1004086-11 DP06-03274 [Solid] Sampled 04/12/2010 14:30 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 16:30	soil TAL + Mo
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 16:30	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 16:30	+MO
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 16:30	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 16:30	AP VIALS
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 16:30	AP VIALS
1004086-12 DP07-03275 [Solid] Sampled 04/12/2010 11:30 Pacific				**MS/MSD. QSM4.1.**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 13:30	MS/MSD.
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:30	MS/MSD.
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 13:30	MS/MSD. soil TAL + Mo
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 13:30	MS/MSD. +MO
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 13:30	MS/MSD. AP VIALS
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 13:30	MS/MSD. AP VIALS
1004086-13 DP07-03276 [Solid] Sampled 04/12/2010 11:30 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 13:30	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 13:30	+MO
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 13:30	soil TAL + Mo
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 13:30	AP VIALS
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 13:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:30	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004086-14 DP08-03910 [Solid] Sampled 04/12/2010 13:35 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 15:35	soil TAL + Mo
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 15:35	AP VIALS
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 15:35	+MO
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 15:35	
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 15:35	
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 15:35	AP VIALS
1004086-15 DP08-03911 [Solid] Sampled 04/12/2010 13:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 15:40	
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 15:40	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 15:40	+MO
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 15:40	AP VIALS
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 15:40	AP VIALS
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 15:40	soil TAL + Mo
1004086-16 DP09-03281 [Solid] Sampled 04/12/2010 09:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:40	
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 11:40	
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 11:40	+MO
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 11:40	AP VIALS
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 11:40	AP VIALS
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 11:40	soil TAL + Mo
1004086-17 DP09-03282 [Solid] Sampled 04/12/2010 09:45 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/04/2010 14:00	20	05/10/2010 11:45	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:45	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 11:45	AP VIALS
MET_ICP_LOW6010B_FULL	05/04/2010 14:00	20	10/09/2010 11:45	soil TAL + Mo
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 11:45	AP VIALS
SGC_DRO_8015B_3546	05/04/2010 14:00	20	04/26/2010 11:45	+MO
1004086-18 DP01-07156 [Solid] Sampled 04/12/2010 10:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 12:40	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 12:40	
1004086-19 DP01-07157 [Solid] Sampled 04/12/2010 10:43 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 12:43	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 12:43	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004086-20 DP01-07158 [Solid] Sampled 04/12/2010 10:46 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 12:46	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 12:46	
1004086-21 DP01-07159 [Solid] Sampled 04/12/2010 10:48 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 12:48	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 12:48	
1004086-22 DP02-07160 [Solid] Sampled 04/12/2010 09:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:15	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:15	
1004086-23 DP02-07161 [Solid] Sampled 04/12/2010 09:18 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:18	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:18	
1004086-24 DP02-07162 [Solid] Sampled 04/12/2010 09:20 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:20	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:20	
1004086-25 DP02-07163 [Solid] Sampled 04/12/2010 09:22 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:22	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:22	
1004086-26 DP02-57160 [Solid] Sampled 04/12/2010 09:15 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:15	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:15	
1004086-27 DP07-07184 [Solid] Sampled 04/12/2010 11:05 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 13:05	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:05	
1004086-28 DP07-07185 [Solid] Sampled 04/12/2010 11:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:10	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 13:10	
1004086-29 DP07-07186 [Solid] Sampled 04/12/2010 11:15 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 13:15	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:15	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004086-30 DP07-07187 [Solid] Sampled 04/12/2010 11:20 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 13:20	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 13:20	
1004086-31 DP09-07192 [Solid] Sampled 04/12/2010 09:20 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:20	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:20	
1004086-32 DP09-07193 [Solid] Sampled 04/12/2010 09:25 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:25	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:25	
1004086-33 DP09-07194 [Solid] Sampled 04/12/2010 09:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:30	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:30	
1004086-34 DP09-07195 [Solid] Sampled 04/12/2010 09:35 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/26/2010 11:35	
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/19/2010 11:35	
1004086-35 DP02-07152 [Solid] Sampled 04/09/2010 14:50 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/16/2010 16:50	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/23/2010 16:50	
1004086-36 DP02-07153 [Solid] Sampled 04/09/2010 14:53 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/16/2010 16:53	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/23/2010 16:53	
1004086-37 DP02-07154 [Solid] Sampled 04/09/2010 14:55 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/16/2010 16:55	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/23/2010 16:55	
1004086-38 DP02-07155 [Solid] Sampled 04/09/2010 14:58 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/04/2010 14:00	20	04/16/2010 16:58	
SMS_PAH_8270C_3546_LOW	05/04/2010 14:00	20	04/23/2010 16:58	
1004086-39 DP05-07176 [Solid] Sampled 04/09/2010 14:35 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	5	04/23/2010 16:35	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/16/2010 16:35	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004086-40 DP05-07177 [Solid] Sampled 04/09/2010 14:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/16/2010 16:40	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	5	04/23/2010 16:40	
1004086-41 DP05-07178 [Solid] Sampled 04/09/2010 14:45 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/16/2010 16:45	
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	5	04/23/2010 16:45	
1004086-42 DP05-07179 [Solid] Sampled 04/09/2010 14:50 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	04/20/2010 14:00	5	04/23/2010 16:50	
WC_PERCENT_SOLIDS_2540B	04/20/2010 14:00	5	04/16/2010 16:50	
1004086-43 DP02-03520 [Water] Sampled 04/12/2010 10:50 Pacific				**QSM4.1.**
MET_7470_DIS_MERCURY	05/04/2010 14:00	20	05/10/2010 12:50	
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/19/2010 12:50	+MO
SGC_PCB8082A_3510	05/04/2010 14:00	20	04/19/2010 12:50	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/19/2010 12:50	
MET_ICP_6010B_FULL_DIS	05/04/2010 14:00	20	10/09/2010 12:50	water TAL + Mo
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 12:50	
1004086-44 DP02-03521 [Water] Sampled 04/12/2010 11:35 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 13:35	
MET_ICP_6010B_FULL_DIS	05/04/2010 14:00	20	10/09/2010 13:35	water TAL + Mo
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/19/2010 13:35	+MO
SGC_PCB8082A_3510	05/04/2010 14:00	20	04/19/2010 13:35	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/19/2010 13:35	
MET_7470_DIS_MERCURY	05/04/2010 14:00	20	05/10/2010 13:35	
1004086-45 DP02-53520 [Water] Sampled 04/12/2010 10:50 Pacific				**QSM4.1.**
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/19/2010 12:50	+MO
MET_7470_DIS_MERCURY	05/04/2010 14:00	20	05/10/2010 12:50	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 12:50	
MET_ICP_6010B_FULL_DIS	05/04/2010 14:00	20	10/09/2010 12:50	water TAL + Mo
SGC_PCB8082A_3510	05/04/2010 14:00	20	04/19/2010 12:50	+ Aroclor-1262 & 1268
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/19/2010 12:50	

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004086-46 DP01-03518 [Water] Sampled 04/09/2010 14:15 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/16/2010 16:15	
VOC_8260B_AP9	05/04/2010 14:00	20	04/23/2010 16:15	
MET_ICP_6010B_FULL_DIS	05/04/2010 14:00	20	10/06/2010 16:15	water TAL + Mo
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/16/2010 16:15	+MO
MET_7470_DIS_MERCURY	05/04/2010 14:00	20	05/07/2010 16:15	
1004086-47 DP01-03519 [Water] Sampled 04/09/2010 15:00 Pacific				**QSM4.1.**
MET_7470_DIS_MERCURY	05/04/2010 14:00	20	05/07/2010 17:00	
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/16/2010 17:00	+MO
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/16/2010 17:00	
VOC_8260B_AP9	05/04/2010 14:00	20	04/23/2010 17:00	
MET_ICP_6010B_FULL_DIS	05/04/2010 14:00	20	10/06/2010 17:00	water TAL + Mo
1004086-48 DP05-03902 [Water] Sampled 04/09/2010 16:05 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	5	04/16/2010 18:05	
SGC_DRO_8015B_3510	04/20/2010 14:00	5	04/16/2010 18:05	+MO
MET_7470_DIS_MERCURY	04/20/2010 14:00	5	05/07/2010 18:05	
VOC_8260B_AP9	04/20/2010 14:00	5	04/23/2010 18:05	
VGC_GRO_8015B	04/20/2010 14:00	5	04/23/2010 18:05	
MET_ICP_6010B_FULL_DIS	04/20/2010 14:00	5	10/06/2010 18:05	water TAL + Mo
1004086-49 DP05-03903 [Water] Sampled 04/09/2010 16:25 Pacific				**QSM4.1.**
SGC_DRO_8015B_3510	04/20/2010 14:00	5	04/16/2010 18:25	+MO
VOC_8260B_AP9	04/20/2010 14:00	5	04/23/2010 18:25	
SMS_PAH_8270C_3510_LOW	04/20/2010 14:00	5	04/16/2010 18:25	
MET_7470_DIS_MERCURY	04/20/2010 14:00	5	05/07/2010 18:25	
MET_ICP_6010B_FULL_DIS	04/20/2010 14:00	5	10/06/2010 18:25	water TAL + Mo
VGC_GRO_8015B	04/20/2010 14:00	5	04/23/2010 18:25	
1004086-50 EB-216 [Water] Sampled 04/12/2010 08:00 Pacific				**QSM4.1.**
MET_ICP_6010B_FULL	05/04/2010 14:00	20	10/09/2010 10:00	water TAL + Mo
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/19/2010 10:00	+MO
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/19/2010 10:00	
MET_7470_MERCURY	05/04/2010 14:00	20	05/10/2010 10:00	
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 10:00	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 10:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004086-51 TB-216 [Water] Sampled 04/12/2010 08:00 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 10:00	
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 10:00	
1004086-52 EB-315 [Water] Sampled 04/09/2010 13:00 Pacific				**QSM4.1.**
MET_ICP_6010B_FULL	05/04/2010 14:00	20	10/06/2010 15:00	water TAL + Mo
MET_7470_MERCURY	05/04/2010 14:00	20	05/07/2010 15:00	
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/16/2010 15:00	+MO
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/16/2010 15:00	
VOC_8260B_AP9	05/04/2010 14:00	20	04/23/2010 15:00	
1004086-53 TB-315 [Water] Sampled 04/09/2010 13:00 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/04/2010 14:00	20	04/23/2010 15:00	
1004086-54 EB-316 [Water] Sampled 04/12/2010 08:20 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/19/2010 10:20	
MET_7470_MERCURY	05/04/2010 14:00	20	05/10/2010 10:20	
MET_ICP_6010B_FULL	05/04/2010 14:00	20	10/09/2010 10:20	water TAL + Mo
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/19/2010 10:20	+MO
SGC_PCB8082A_3510	05/04/2010 14:00	20	04/19/2010 10:20	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 10:20	
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 10:20	
1004086-55 EB-116 [Water] Sampled 04/12/2010 07:45 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/04/2010 14:00	20	04/19/2010 09:45	
MET_7470_MERCURY	05/04/2010 14:00	20	05/10/2010 09:45	
SGC_DRO_8015B_3510	05/04/2010 14:00	20	04/19/2010 09:45	+MO
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 09:45	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 09:45	
MET_ICP_6010B_FULL	05/04/2010 14:00	20	10/09/2010 09:45	water TAL + Mo
1004086-56 TB-116 [Water] Sampled 04/12/2010 07:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/04/2010 14:00	20	04/26/2010 09:40	
VOC_8260B_AP9	05/04/2010 14:00	20	04/26/2010 09:40	

SGS/Paradigm (SUB028)

1004086-50 EB-216 [Water] Sampled 04/12/2010 08:00 Pacific				**QSM4.1.**
SUB_DIOXINS_8290	05/04/2010 14:00	20	05/12/2010 10:00	sub to SGS - Wilmington. LOW VOLUME!!

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/12/2010 3:52:56 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210p

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP01-03084	4/12/2010 11:05 Soil	x		1004086-01 MS/MSD 6	~~3~~ 4	LAB QC
DP01-03085	4/12/2010 11:15 Soil	x		-02	3	
DP02-03087	4/12/2010 9:55 Soil	x		-03	3	
DP02-03088	4/12/2010 10:00 Soil	x		-04	3	
DP02-03089	4/12/2010 10:05 Soil	x		-05	3	
DP04-03266	4/12/2010 14:45 Soil	x	x	-06 MS/MSD 8	~~4~~ 4	LAB QC
DP04-03267	4/12/2010 14:50 Soil	x	x	-07	4	
DP04-03268	4/12/2010 14:55 Soil	x	x	-08	4	
DP06-03272	4/12/2010 14:20 Soil	x	x	-09	4	
DP06-03273	4/12/2010 14:25 Soil	x	x	-10	4	
DP06-03274	4/12/2010 14:30 Soil	x	x	-11	4	
DP07-03275	4/12/2010 11:30 Soil	x	x	-12 MS/MSD 8	~~4~~ 4	LAB QC
DP07-03276	4/12/2010 11:35 Soil	x	x	-13	4	
DP08-03910	4/12/2010 13:35 Soil	x	x	-14	4	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jank	4/12/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/12/2010 3:52:57 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210p

	DATE	TIME	Matrix	VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	1 x 40 ml VOA			
Preservatives:				2XH2O, 1XMeOH, 4°C	MeOH			
Filtered:				NA	NA			
Holding Time:				48HR	48HR			
DP08-03911	4/12/2010	13:40	Soil	X	X	1004086-15	4	
DP09-03281	4/12/2010	9:40	Soil	X	X	-16	4	
DP09-03282	4/12/2010	9:45	Soil	X	X	-17	4	
						TOTAL NUMBER OF CONTAINERS	63	

	Signatures	Date/Time
Approved by		
Sampled by		4/12/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 1:08:12 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210

	PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
Preservatives:	4°C	4°C	4°C	4°C	4°C			
Filtered:	NA	NA	NA	NA	NA			
Holding Time:	14	14	14	28	28			
DATE / TIME / Matrix								
DP01-03085 4/12/2010 11:15 Soil		X	X		X	1004086-02	3	
DP01-07156 4/12/2010 10:40 Soil	X					1004086-18	1	
DP01-07157 4/12/2010 10:43 Soil	X					-19	1	
DP01-07158 4/12/2010 10:46 Soil	X					-20	1	
DP01-07159 4/12/2010 10:48 Soil	X					-21	1	
DP02-03087 4/12/2010 9:55 Soil		X	X		X	1004086-03	3	
DP02-03088 4/12/2010 10:00 Soil		X	X		X	-04	3	
DP02-03089 4/12/2010 10:05 Soil		X	X		X	-05	3	
DP02-07160 4/12/2010 9:15 Soil	X					-22	1	
DP02-07161 4/12/2010 9:18 Soil	X					-23	1	
DP02-07162 4/12/2010 9:20 Soil	X					-24	1	
DP02-07163 4/12/2010 9:22 Soil	X					-25	1	
DP02-57160 4/12/2010 9:15 Soil	X					-26	1	
DP07-03275 4/12/2010 11:30 Soil		X		X		1004086-12 MS/MSD	4 / 2	LAB QC

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jont	4/12/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

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Special Instructions:

ATTN:
Sample Custody
and
Janice Shilling

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CHAIN OF CUSTODY RECORD

4/12/2010 1:08:12 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	28	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP07-03276	4/12/2010	11:35	Soil		X		X	1004086-13	2	
DP07-07184	4/12/2010	11:05	Soil	X				1004086-27	1	
DP07-07185	4/12/2010	11:10	Soil	X				-28	1	
DP07-07186	4/12/2010	11:15	Soil	X				-29	1	
DP07-07187	4/12/2010	11:20	Soil	X				-30	1	
DP09-03281	4/12/2010	9:40	Soil		X		X	-16	2	
DP09-03282	4/12/2010	9:45	Soil		X		X	-17	2	
DP09-07192	4/12/2010	9:20	Soil	X				-31	1	
DP09-07193	4/12/2010	9:25	Soil	X				-32	1	
DP09-07194	4/12/2010	9:30	Soil	X				-33	1	
DP09-07195	4/12/2010	9:35	Soil	X				-34	1	
								TOTAL NUMBER OF CONTAINERS	58	

	Signatures	Date/Time
Approved by		
Sampled by	Janice Shilling	4/12/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

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ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/12/2010 1:08:11 PM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210

				Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
				Preservatives:	4°C	4°C	4°C	4°C	4°C			
				Filtered:	NA	NA	NA	NA	NA			
				Holding Time:	14	14	14	28	28			
					PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	PCBs (8082)	TAL Metals (6010B/7470A)	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix									
DP02-03081	4/9/2010	15:05	Soil			X			X	1004070-03	2	
DP02-03082	4/9/2010	15:10	Soil			X			X	-04	2	
DP02-07152	4/9/2010	14:50	Soil		X					1004086-35	1	
DP02-07153	4/9/2010	14:53	Soil		X					-36	1	
DP02-07154	4/9/2010	14:55	Soil		X					-37	1	
DP02-07155	4/9/2010	14:58	Soil		X					-38 ~~1004070-07~~ MS 4/13/10	1	
DP05-03269	4/9/2010	15:20	Soil			X		X		1004070-67 MS/MSD ~~-68~~ 4/13/10	~~2~~	LAB QC
DP05-03270	4/9/2010	15:25	Soil			X		X		-68	2	
DP05-07176	4/9/2010	14:35	Soil		X					1004086-39	1	
DP05-07177	4/9/2010	14:40	Soil		X					-40	1	
DP05-07178	4/9/2010	14:45	Soil		X					-41	1	
DP05-07179	4/9/2010	14:50	Soil		X					-42	1	
DP05-53270	4/9/2010	15:25	Soil			X		X		1004070-09	2	
DP01-03084	4/12/2010	11:05	Soil			X	X		X	1004086-01 MS/MSD 4/6	~~3~~	LAB QC

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Frank	4/12/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00 5.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:
ATTN:
Sample Custody and Janice Shilling

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CHAIN OF CUSTODY RECORD

4/12/2010 2:34:10 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210W2

	DATE	TIME	Matrix	Container:	1 x 250 ml Poly	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber		Number of Containers	COMMENTS
				Preservatives:	HNO4	4°C	4°C	4°C			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	28	7	7	7			
					Title 22 Metals (6010B/7470A)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	PCBs (8082)			
DP02-03520	4/12/2010	10:50	Water		X	X	X	X	1004086-43	6	
DP02-03521	4/12/2010	11:35	Water		X	X	X	X	-44	6	
DP02-53520	4/12/2010	10:50	Water		X	X	X	X	-45	6	
									TOTAL NUMBER OF CONTAINERS	18	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/12/10
Relinquished by		1430
Received by		
Relinquished by		
Received by		4/13/10

09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 11:22:49 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210W

	DATE	TIME	Matrix	Container:	1 x 250 ml Poly	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		Number of Containers	COMMENTS
				Preservatives:	HNO4	HCl	HCl	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA	NA	NA	NA			
				Holding Time:	28	14	14	7	7	28			
					Title 22 Metals (6010B/7470A)	VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)			
DP01-03518	4/9/2010	14:15	Water		X	X		X	X		1004086 -46	8	
DP01-03519	4/9/2010	15:00	Water		X	X		X	X		-47	8	
DP05-03902	4/9/2010	16:05	Water			X	X	X	X	X	-48	10	
DP05-03903	4/9/2010	16:25	Water			X	X	X	X	X	-49	10	
											TOTAL NUMBER OF CONTAINERS	36	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jack	4/12/10
Relinquished by		1130
Received by		
Relinquished by	Mitchell	4/13/10
Received by		09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 3:48:45 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-216	4/12/2010	8:00	Water	X	X	1009086 -50	5	
TB-216	4/12/2010	8:00	Water	X	X	-51	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/12/10
Relinquished by	[signature]	1600
Received by		
Relinquished by	[signature]	4/13/10 09:00
Received by		5.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/12/2010 2:38:41 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210W2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	30	7	7	28			
		Dioxins (8290)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-216	4/12/2010 8:00 Water	X	X	X	X	1004086-50 6	~~9~~ 6	
						TOTAL NUMBER OF CONTAINERS	~~9~~ 6	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Ford	4/12/10 1430
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 11:31:09 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210W

	Container:	3 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	7	7	28			
		VOCs (8260B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-315 ✓	4/9/2010 13:00 Water	X	X	X	X	1004086 -52	10	
TB-315 ✓	4/9/2010 13:00 Water	X				-53	3	
EB-316 ✓	4/12/2010 8:20 Water		X	X	X	-54	7	
						TOTAL NUMBER OF CONTAINERS	20	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jank	4/12/10 1130
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

5.4°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CHAIN OF CUSTODY RECORD

4/12/2010 2:36:36 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210W2

	DATE	TIME	Matrix	Container:	Preservatives:	Filtered:	Holding Time:	PCBs (8082)	Number of Containers	COMMENTS
				2 x 1L Amber	4°C	NA	7			
EB-316	4/12/2010	8:20	Water					X	1	
									TOTAL NUMBER OF CONTAINERS 1	

1004076 - 54

2

2

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/12/10
Relinquished by		1430
Received by		
Relinquished by		
Received by		9/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 3:45:01 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly				
	Preservatives:	HCl	HCl	4°C	4°C	HNO4				
	Filtered:	NA	NA	NA	NA	NA				
	Holding Time:	14	14	7	7	28				
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-116	4/12/2010 7:45 Water	X	X	X	X	X	1004086-5T	12	
							TOTAL NUMBER OF CONTAINERS	12	

	Signatures	Date/Time
Approved by		
Sampled by		4/12/10
Relinquished by	Tamara Jones	1600
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889944
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/12/2010 3:46:26 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/12/2010
COC Number: 41210P

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
TB-116	4/12/2010 7:40 Water	X	X	1004086 - 56	5	
				TOTAL NUMBER OF CONTAINERS	5	

	Signatures	Date/Time
Approved by		
Sampled by		4/12/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/13/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004070, 1004086 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/13/10 09:00** Date cooler(s) opened: **04/13/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6230

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

Dates samples were logged-in: **04/13/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... 4/13/10 WS	(Yes)	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

On 1004086 - No dry weight containers CAR#: _____

rec'd for DP04-03266, DP04-03267, DP04-03268

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6240

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.8°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6251

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.3°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 4 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schaub (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6160

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.5°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 5 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6218

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 6 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6229

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9944

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.7°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086 Number of Coolers: 8 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/13/10 09:00 Date cooler(s) opened: 04/13/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6170

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/12/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.1°C

Dates samples were logged-in: 04/13/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 8:29:26 AM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar
	Preservatives:	4°C	4°C	4°C
	Filtered:	NA	NA	NA
	Holding Time:	14	14	28
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)

	DATE	TIME	Matrix					Number of Containers	COMMENTS
DP04-03266 ✓	4/12/2010	14:45	Soil		X	X	1004086-06 4 04/13/10 CMC	1	LAB QC
DP04-03267 ✓	4/12/2010	14:50	Soil		X	X	-07	2	
DP04-03268 ✓	4/12/2010	14:55	Soil		X	X	-08	2	
DP04-07172 ✓	4/12/2010	14:40	Soil	X			1004109-46	1	
DP04-07173 ✓	4/12/2010	14:43	Soil	X			-47	1	
DP04-07174 ✓	4/12/2010	14:46	Soil	X			MS/MSD -48 04/13/10 CMC 2	1	LAB QC
DP04-07175 ✓	4/12/2010	14:49	Soil	X			-49	1	
DP06-03272 ✓	4/12/2010	14:20	Soil		X	X	1004086-09	2	
DP06-03273 ✓	4/12/2010	14:25	Soil		X	X	-10	2	
DP06-03274 ✓	4/12/2010	14:30	Soil		X	X	-11	2	
DP06-07180 ✓	4/12/2010	13:50	Soil	X			1004109-50	1	
DP06-07181 ✓	4/12/2010	13:55	Soil	X			-51	1	
DP06-07182 ✓	4/12/2010	14:00	Soil	X			-52	1	
DP06-07183 ✓	4/12/2010	14:05	Soil	X			-53	1	

Signatures	Date/Time
Approved by	04/13/10
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/14/10

09:00 4.3°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 8:29:26 AM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP06-57180 ✓	4/12/2010 13:50 Soil	X			1004109-54	1	
DP08-03910 ✓	4/12/2010 13:35 Soil		X	X	1004086-14	2	
DP08-03911 ✓	4/12/2010 13:40 Soil		X	X	-15	2	
DP08-07900	4/12/2010 13:20 Soil	X			1004109-55	1	
DP08-07901	4/12/2010 13:25 Soil	X			-56	1	
DP08-07902	4/12/2010 13:30 Soil	X			-57	1	
DP08-07903	4/12/2010 13:35 Soil	X			-58	1	
					TOTAL NUMBER OF CONTAINERS	29	

Signatures	Date/Time
Approved by	04/13/10
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.8°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 10:22:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w

	DATE	TIME	Matrix	VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				HCl	HCl	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA			
Holding Time:				14	14	7	7	28			
DP02-03520	4/12/2010	10:50	Water	x					1004086-43	3	
DP02-03621	4/12/2010	11:35	Water	x					-44	3	
DP02-53520	4/12/2010	10:50	Water	x					-45	3	
DP07-03538	4/12/2010	15:25	Water	x	x	x	x	x	1004109-75	10	
DP07-03539	4/12/2010	15:55	Water	x	x	x	x	x	-76	10	
DP09-03542	4/12/2010	14:05	Water	x	x	x	x	x	-77	10	
DP09-03543	4/12/2010	14:30	Water	x	x	x	x	x	-78	10	
									TOTAL NUMBER OF CONTAINERS	49	

	Signatures	Date/Time
Approved by		04/13/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

4.1°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 10:25:51 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		Number of Containers	COMMENTS
				Preservatives: HCl	HCl	4°C	4°C	HNO4			
				Filtered: NA	NA	NA	NA	NA			
				Holding Time: 14	14	7	7	28			
				VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)			
EB-316	4/12/2010	8:20	Water	X	X				1004086-54	5	
TB-316	4/12/2010	8:20	Water	X	X				1004109-79	5	
EB-317	4/13/2010	7:40	Water			X	X	X	-80	~~7~~ 5	
									TOTAL NUMBER OF CONTAINERS	~~17~~ 15	

CMC
04/13/10

Signatures		Date/Time
Approved by		04/13/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4/14

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6176

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

Dates samples were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6137

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9c

~~Dates samples were logged-in:~~ 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9933

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-6°C

~~Dates samples~~ were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 4 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6115

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.8°C

~~Dates samples were logged in:~~ 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

Sonya Gordon

From: Tamara Frank [tamara.frank@e2.com]
Sent: Wednesday, April 14, 2010 11:37 AM
To: sgordon@empirlabs.com
Cc: Fesler, Mark/RDD; Quayle, Stephen/BAO
Subject: Change turn around time for samples DP04

Sonya,
Could you please change the turn around time to 7 days for the following samples (collected on April 12):

DP04-03266
DP04-03267
DP04-03268
DP04-07172
DP04-07173
DP04-07174
DP04-07175

So far my records show that we currently have 4 other groups of samples on a 7 day TAT, including samples with prefixes DP01, DP02, DP03, and DP05.
Could you please confirm this?
Thanks,
Tamara

Tamara Frank
E2 Consulting Engineers
155 Grand Ave, Suite 702
Oakland, CA 94612
760-420-4546

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

Sonya Gordon

From: Tamara Frank [tamara.frank@e2.com]
Sent: Monday, April 12, 2010 3:48 PM
To: sgordon@empirlabs.com; Fesler, Mark/RDD
Subject: Samples for 7 day TAT

Sonya,
Samples with the following Sample IDs require a 7 day TAT:
Soils
DP05-03269
DP05-03270
DP05-53270
DP05-07176
DP05-07177
DP05-07178
DP05-07179
GW
DP05-03902
DP05-03903

The VOC soils were shipped on Friday, and the remaining soils and groundwaters are shipping today. If you have any questions, please let me know.
Tamara

Tamara Frank
E2 Consulting Engineers
155 Grand Ave, Suite 702
Oakland, CA 94612
760-420-4546

1004109

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/12/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/14/2010 09:00, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/14/2010 16:19

Samples Received at: **1.7°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments

1004109-02 CC01a-03249 [Solid] Sampled 04/13/2010 09:25 Pacific

[NO ANALYSES]

1004109-03 CC01b-03249 [Solid] Sampled 04/13/2010 09:30 Pacific

[NO ANALYSES]

1004109-04 CC01c-03249 [Solid] Sampled 04/13/2010 09:35 Pacific

[NO ANALYSES]

1004109-05 CC01d-03249 [Solid] Sampled 04/13/2010 09:40 Pacific

[NO ANALYSES]

1004109-06 CC01e-03249 [Solid] Sampled 04/13/2010 09:45 Pacific

[NO ANALYSES]

1004109-07 CC01f-03249 [Solid] Sampled 04/13/2010 09:50 Pacific

[NO ANALYSES]

1004109-10 CC02a-03250 [Solid] Sampled 04/13/2010 10:03 Pacific

[NO ANALYSES]

1004109-11 CC02b-03250 [Solid] Sampled 04/13/2010 10:08 Pacific

[NO ANALYSES]

1004109-12 CC02c-03250 [Solid] Sampled 04/13/2010 10:12 Pacific

[NO ANALYSES]

1004109

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments

1004109-13 CC02d-03250 [Solid] Sampled 04/13/2010 10:17 Pacific

[NO ANALYSES]

1004109-14 CC02e-03250 [Solid] Sampled 04/13/2010 10:21 Pacific

[NO ANALYSES]

1004109-15 CC02f-03250 [Solid] Sampled 04/13/2010 10:27 Pacific

[NO ANALYSES]

1004109-16 CC02g-03250 [Solid] Sampled 04/13/2010 10:32 Pacific

[NO ANALYSES]

1004109-17 CC02h-03250 [Solid] Sampled 04/13/2010 10:36 Pacific

[NO ANALYSES]

1004109-18 CC02i-03250 [Solid] Sampled 04/13/2010 10:41 Pacific

[NO ANALYSES]

1004109-20 CC03a-04999 [Solid] Sampled 04/13/2010 10:54 Pacific

[NO ANALYSES]

1004109-21 CC03b-04999 [Solid] Sampled 04/13/2010 10:58 Pacific

[NO ANALYSES]

1004109-22 CC03c-04999 [Solid] Sampled 04/13/2010 11:02 Pacific

[NO ANALYSES]

1004109-23 CC03d-04999 [Solid] Sampled 04/13/2010 11:08 Pacific

[NO ANALYSES]

1004109-24 CC03e-04999 [Solid] Sampled 04/13/2010 11:12 Pacific

[NO ANALYSES]

1004109-25 CC03f-04999 [Solid] Sampled 04/13/2010 11:16 Pacific

[NO ANALYSES]

1004109-26 CC03g-04999 [Solid] Sampled 04/13/2010 11:20 Pacific

[NO ANALYSES]

1004109-27 CC03h-04999 [Solid] Sampled 04/13/2010 11:24 Pacific

[NO ANALYSES]

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments

1004109-28 CC03i-04999 [Solid] Sampled 04/13/2010 11:28 Pacific

[NO ANALYSES]

1004109-30 CC04a-03251 [Solid] Sampled 04/13/2010 11:57 Pacific

[NO ANALYSES]

1004109-31 CC04b-03251 [Solid] Sampled 04/13/2010 12:00 Pacific

[NO ANALYSES]

1004109-32 CC04c-03251 [Solid] Sampled 04/13/2010 12:08 Pacific

[NO ANALYSES]

1004109-33 CC04d-03251 [Solid] Sampled 04/13/2010 12:12 Pacific

[NO ANALYSES]

1004109-34 CC04e-03251 [Solid] Sampled 04/13/2010 12:15 Pacific

[NO ANALYSES]

1004109-35 CC04f-03251 [Solid] Sampled 04/13/2010 12:20 Pacific

[NO ANALYSES]

1004109-36 CC04g-03251 [Solid] Sampled 04/13/2010 12:25 Pacific

[NO ANALYSES]

1004109-37 CC04h-03251 [Solid] Sampled 04/13/2010 12:29 Pacific

[NO ANALYSES]

1004109-38 CC04i-03251 [Solid] Sampled 04/13/2010 12:32 Pacific

[NO ANALYSES]

1004109-40 CC05a-03252 [Solid] Sampled 04/13/2010 11:33 Pacific

[NO ANALYSES]

1004109-41 CC05b-03252 [Solid] Sampled 04/13/2010 11:36 Pacific

[NO ANALYSES]

1004109-42 CC05c-03252 [Solid] Sampled 04/13/2010 11:39 Pacific

[NO ANALYSES]

1004109-43 CC05d-03252 [Solid] Sampled 04/13/2010 11:45 Pacific

[NO ANALYSES]

1004109

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004109-44 CC05e-03252 [Solid] Sampled 04/13/2010 11:48 Pacific				
[NO ANALYSES]				
1004109-45 CC05f-03252 [Solid] Sampled 04/13/2010 11:51 Pacific				
[NO ANALYSES]				
1004109-01 CC01-03249 [Solid] Sampled 04/13/2010 09:52 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:52	
SGC_PCB8082A_3546	05/05/2010 14:00	20	04/27/2010 11:52	+ Aroclor-1262 & 1268
1004109-08 CC02-03250 [Solid] Sampled 04/13/2010 10:44 Pacific				**QSM4.1**
SGC_PCB8082A_3546	05/05/2010 14:00	20	04/27/2010 12:44	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 12:44	
1004109-09 CC02-53250 [Solid] Sampled 04/13/2010 10:43 Pacific				**QSM4.1**
SGC_PCB8082A_3546	05/05/2010 14:00	20	04/27/2010 12:43	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 12:43	
1004109-19 CC03-04999 [Solid] Sampled 04/13/2010 11:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 13:30	
SGC_PCB8082A_3546	05/05/2010 14:00	20	04/27/2010 13:30	+ Aroclor-1262 & 1268
1004109-29 CC04-03251 [Solid] Sampled 04/13/2010 12:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 14:35	
SGC_PCB8082A_3546	05/05/2010 14:00	20	04/27/2010 14:35	+ Aroclor-1262 & 1268
1004109-39 CC05-03252 [Solid] Sampled 04/13/2010 11:53 Pacific				**QSM4.1**
SGC_PCB8082A_3546	05/05/2010 14:00	20	04/27/2010 13:53	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 13:53	
1004109-46 DP04-07172 [Solid] Sampled 04/12/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	5	04/26/2010 16:40	
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	5	04/19/2010 16:40	
1004109-47 DP04-07173 [Solid] Sampled 04/12/2010 14:43 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	5	04/19/2010 16:43	
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	5	04/26/2010 16:43	
1004109-48 DP04-07174 [Solid] Sampled 04/12/2010 14:46 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	5	04/19/2010 16:46	MS/MSD.
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	5	04/26/2010 16:46	MS/MSD.

1004109

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004109-49 DP04-07175 [Solid] Sampled 04/12/2010 14:49 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	04/21/2010 14:00	5	04/19/2010 16:49	
SMS_PAH_8270C_3546_LOW	04/21/2010 14:00	5	04/26/2010 16:49	
1004109-50 DP06-07180 [Solid] Sampled 04/12/2010 13:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:50	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:50	
1004109-51 DP06-07181 [Solid] Sampled 04/12/2010 13:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:55	
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:55	
1004109-52 DP06-07182 [Solid] Sampled 04/12/2010 14:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 16:00	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 16:00	
1004109-53 DP06-07183 [Solid] Sampled 04/12/2010 14:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 16:05	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 16:05	
1004109-54 DP06-57180 [Solid] Sampled 04/12/2010 13:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:50	
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:50	
1004109-55 DP08-07900 [Solid] Sampled 04/12/2010 13:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:20	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:20	
1004109-56 DP08-07901 [Solid] Sampled 04/12/2010 13:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:25	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:25	
1004109-57 DP08-07902 [Solid] Sampled 04/12/2010 13:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:30	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:30	
1004109-58 DP08-07903 [Solid] Sampled 04/12/2010 13:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/26/2010 15:35	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/19/2010 15:35	

1004109

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004109-59 DP01-03359 [Solid] Sampled 04/13/2010 09:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:45	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 11:45	AP VIALS
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 11:45	AP VIALS
SGC_DRO_8015B_3546	05/05/2010 14:00	20	04/27/2010 11:45	+MO
MET_ICP_LOW6010B_FULL	05/05/2010 14:00	20	10/10/2010 11:45	soil TAL + Mo
MET_7471A_MERCURY	05/05/2010 14:00	20	05/11/2010 11:45	
1004109-60 DP01-03360 [Solid] Sampled 04/13/2010 09:50 Pacific				**QSM4.1**
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 11:50	AP VIALS
SGC_DRO_8015B_3546	05/05/2010 14:00	20	04/27/2010 11:50	+MO
MET_7471A_MERCURY	05/05/2010 14:00	20	05/11/2010 11:50	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 11:50	AP VIALS
MET_ICP_LOW6010B_FULL	05/05/2010 14:00	20	10/10/2010 11:50	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:50	
1004109-61 DP01-07296 [Solid] Sampled 04/13/2010 09:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:10	
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/27/2010 11:10	
1004109-62 DP01-07297 [Solid] Sampled 04/13/2010 09:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:15	
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/27/2010 11:15	
1004109-63 DP01-07298 [Solid] Sampled 04/13/2010 09:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/27/2010 11:20	
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:20	
1004109-64 DP01-07299 [Solid] Sampled 04/13/2010 09:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:25	
SMS_PAH_8270C_3546_LOW	05/05/2010 14:00	20	04/27/2010 11:25	
1004109-65 DP01-53360 [Solid] Sampled 04/13/2010 09:50 Pacific				**QSM4.1**
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 11:50	AP VIALS
MET_7471A_MERCURY	05/05/2010 14:00	20	05/11/2010 11:50	
SGC_DRO_8015B_3546	05/05/2010 14:00	20	04/27/2010 11:50	+MO
WC_PERCENT_SOLIDS_2540B	05/05/2010 14:00	20	04/20/2010 11:50	
MET_ICP_LOW6010B_FULL	05/05/2010 14:00	20	10/10/2010 11:50	soil TAL + Mo
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 11:50	AP VIALS

1004109

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004109-68 EB-117 [Water] Sampled 04/13/2010 07:40 Pacific				**QSM4.1**
MET_7470_MERCURY	05/05/2010 14:00	20	05/11/2010 09:40	
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 09:40	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 09:40	
MET_ICP_6010B_FULL	05/05/2010 14:00	20	10/10/2010 09:40	water TAL + Mo
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 09:40	
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 09:40	+MO
1004109-69 TB-117 [Water] Sampled 04/13/2010 07:40 Pacific				**QSM4.1**
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 09:40	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 09:40	
1004109-70 DP01-03904 [Water] Sampled 04/13/2010 11:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 13:00	
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/11/2010 13:00	
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/10/2010 13:00	water TAL + Mo
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 13:00	+MO
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 13:00	
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 13:00	
1004109-71 DP01-03905 [Water] Sampled 04/13/2010 11:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 13:50	
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 13:50	+MO
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 13:50	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 13:50	
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/11/2010 13:50	
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/10/2010 13:50	water TAL + Mo
1004109-72 EB-300 [Water] Sampled 04/13/2010 00:00 Pacific				**QSM4.1**
SGC_PCB8082A_3510	05/05/2010 14:00	20	04/20/2010 02:00	+ Aroclor-1262 & 1268
1004109-73 DP06-03536 [Water] Sampled 04/13/2010 08:55 Pacific				**QSM4.1**
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 10:55	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 10:55	
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/11/2010 10:55	
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/10/2010 10:55	water TAL + Mo
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 10:55	+MO
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 10:55	

1004109

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004109-74 DP06-03537 [Water] Sampled 04/13/2010 09:30 Pacific				**QSM4.1**
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/10/2010 11:30	water TAL + Mo
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/11/2010 11:30	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 11:30	
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 11:30	
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 11:30	
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 11:30	+MO
1004109-75 DP07-03538 [Water] Sampled 04/12/2010 15:25 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/19/2010 17:25	+MO
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/19/2010 17:25	
VGC_GRO_8015B	05/05/2010 14:00	20	04/26/2010 17:25	
VOC_8260B_AP9	05/05/2010 14:00	20	04/26/2010 17:25	
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/10/2010 17:25	
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/09/2010 17:25	water TAL + Mo
1004109-76 DP07-03539 [Water] Sampled 04/12/2010 15:55 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/19/2010 17:55	+MO
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/09/2010 17:55	water TAL + Mo
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/19/2010 17:55	
VGC_GRO_8015B	05/05/2010 14:00	20	04/26/2010 17:55	
VOC_8260B_AP9	05/05/2010 14:00	20	04/26/2010 17:55	
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/10/2010 17:55	
1004109-77 DP09-03542 [Water] Sampled 04/12/2010 14:05 Pacific				**QSM4.1**
VGC_GRO_8015B	05/05/2010 14:00	20	04/26/2010 16:05	
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/09/2010 16:05	water TAL + Mo
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/19/2010 16:05	+MO
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/19/2010 16:05	
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/10/2010 16:05	
VOC_8260B_AP9	05/05/2010 14:00	20	04/26/2010 16:05	
1004109-78 DP09-03543 [Water] Sampled 04/12/2010 14:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/19/2010 16:30	
VGC_GRO_8015B	05/05/2010 14:00	20	04/26/2010 16:30	
MET_ICP_6010B_FULL_DIS	05/05/2010 14:00	20	10/09/2010 16:30	water TAL + Mo
MET_7470_DIS_MERCURY	05/05/2010 14:00	20	05/10/2010 16:30	
VOC_8260B_AP9	05/05/2010 14:00	20	04/26/2010 16:30	
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/19/2010 16:30	+MO

1004109

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004109-79 TB-316 [Water] Sampled 04/12/2010 08:20 Pacific				**QSM4.1**
VGC_GRO_8015B	05/05/2010 14:00	20	04/26/2010 10:20	
VOC_8260B_AP9	05/05/2010 14:00	20	04/26/2010 10:20	
1004109-80 EB-317 [Water] Sampled 04/13/2010 07:40 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	05/05/2010 14:00	20	10/10/2010 09:40	water TAL + Mo
MET_7470_MERCURY	05/05/2010 14:00	20	05/11/2010 09:40	
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 09:40	+MO
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 09:40	
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 09:40	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 09:40	
1004109-81 EB-217 [Water] Sampled 04/13/2010 07:30 Pacific				**QSM4.1**
MET_7470_MERCURY	05/05/2010 14:00	20	05/11/2010 09:30	
MET_ICP_6010B_FULL	05/05/2010 14:00	20	10/10/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	05/05/2010 14:00	20	04/20/2010 09:30	+MO
SMS_PAH_8270C_3510_LOW	05/05/2010 14:00	20	04/20/2010 09:30	
VGC_GRO_8015B	05/05/2010 14:00	20	04/27/2010 09:30	
VOC_8260B_AP9	05/05/2010 14:00	20	04/27/2010 09:30	
SGS/Paradigm (SUB028)				
1004109-66 DP08-03165 [Solid] Sampled 04/13/2010 09:25 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/05/2010 14:00	20	05/13/2010 11:25	sub to SGS - Wilmington
1004109-67 DP08-03166 [Solid] Sampled 04/13/2010 09:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/05/2010 14:00	20	05/13/2010 11:30	sub to SGS - Wilmington
1004109-81 EB-217 [Water] Sampled 04/13/2010 07:30 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/05/2010 14:00	20	05/13/2010 09:30	sub to SGS - Wilmington. LOW VOLUME!!!

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 2:20:59 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310S1

	Container:	Share 4oz jar			
	Preservatives:	4°C			
	Filtered:	NA			
	Holding Time:	14			
DATE	TIME	Matrix	PCBs (8082)		Number of Containers	COMMENTS
CC01-03249	4/13/2010	9:52	Soil	X	1004109-01	1	
CC01a-03249	4/13/2010	9:25	Soil	X	-02	1	hold
CC01b-03249	4/13/2010	9:30	Soil	X	-03	1	hold
CC01c-03249	4/13/2010	9:35	Soil	X	-04	1	hold
CC01d-03249	4/13/2010	9:40	Soil	X	-05	1	hold
CC01e-03249	4/13/2010	9:45	Soil	X	-06	1	hold
CC01f-03249	4/13/2010	9:50	Soil	X	-07	1	hold
CC02-03250	4/13/2010	10:44	Soil	X	-08	1	
CC02-53250	4/13/2010	10:43	Soil	X	-09	1	
CC02a-03250	4/13/2010	10:03	Soil	X	-10	1	hold
CC02b-03250	4/13/2010	10:08	Soil	X	-11	1	hold
CC02c-03250	4/13/2010	10:12	Soil	X	-12	1	hold
CC02d-03250	4/13/2010	10:17	Soil	X	-13	1	hold
CC02e-03250	4/13/2010	10:21	Soil	X	-14	1	hold

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	4/13/10 1400
Relinquished by		
Received by		
Relinquished by	Submitted	4/14/10 09:00
Received by		4.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL CHAIN OF CUSTODY RECORD 4/13/2010 2:20:59 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 1E Days
Shipping Date: 4/13/2010
COC Number: 41310S1

	DATE	TIME	Matrix	Container: Share 4oz jar; Preservatives: 4°C; Filtered: NA; Holding Time: 14; PCBs (8082)		Number of Containers	COMMENTS
CC02f-03250	4/13/2010	10:27	Soil	x	1004109-15	1	hold
CC02g-03250	4/13/2010	10:32	Soil	x	-16	1	hold
CC02h-03250	4/13/2010	10:36	Soil	x	-17	1	hold
CC02i-03250	4/13/2010	10:41	Soil	x	-18	1	hold
CC03-04999	4/13/2010	11:30	Soil	x	-19	1	
CC03a-04999	4/13/2010	10:54	Soil	x	-20	1	hold
CC03b-04999	4/13/2010	10:58	Soil	x	-21	1	hold
CC03c-04999	4/13/2010	11:02	Soil	x	-22	1	hold
CC03d-04999	4/13/2010	11:08	Soil	x	-23	1	hold
CC03e-04999	4/13/2010	11:12	Soil	x	-24	1	hold
CC03f-04999	4/13/2010	11:16	Soil	x	-25	1	hold
CC03g-04999	4/13/2010	11:20	Soil	x	-26	1	hold
CC03h-04999	4/13/2010	11:24	Soil	x	-27	1	hold
CC03i-04999	4/13/2010	11:28	Soil	x	-28	1	hold

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/13/10 1400
Received by		
Relinquished by		
Received by	[illegible]	4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 2:20:59 PM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310S1

Container: Share 4oz jar
Preservatives: 4°C
Filtered: NA
Holding Time: 14

PCBs (8082)

	DATE	TIME	Matrix			Number of Containers	COMMENTS
CC04-03251	4/13/2010	12:35	Soil	X	1004109-29	1	
CC04a-03251	4/13/2010	11:57	Soil	X	-30	1	hold
CC04b-03251	4/13/2010	12:00	Soil	X	-31	1	hold
CC04c-03251	4/13/2010	12:08	Soil	X	-32	1	hold
CC04d-03251	4/13/2010	12:12	Soil	X	-33	1	hold
CC04e-03251	4/13/2010	12:15	Soil	X	-34	1	hold
CC04f-03251	4/13/2010	12:20	Soil	X	-35	1	hold
CC04g-03251	4/13/2010	12:25	Soil	X	-36	1	hold
CC04h-03251	4/13/2010	12:29	Soil	X	-37	1	hold
CC04i-03251	4/13/2010	12:32	Soil	X	-38	1	hold
CC05-03252	4/13/2010	11:53	Soil	X	-39	1	
CC05a-03252	4/13/2010	11:33	Soil	X	-40	1	hold
CC05b-03252	4/13/2010	11:36	Soil	X	-41	1	hold
CC05c-03252	4/13/2010	11:39	Soil	X	-42	1	hold

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jart	4/13/10 1400
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 2:21:00 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 1E Days
Shipping Date: 4/13/2010
COC Number: 41310S1

Container: Share 4oz jar
Preservatives: 4°C
Filtered: NA
Holding Time: 14

PCBs (8082)

	DATE	TIME	Matrix			Number of Containers	COMMENTS
CC05d-03252	4/13/2010	11:45	Soil	X	1004/09-43	1	hold
CC05e-03252	4/13/2010	11:48	Soil	X	-44	1	hold
CC05f-03252	4/13/2010	11:51	Soil	X	-45	1	hold
					TOTAL NUMBER OF CONTAINERS	45	

	Signatures	Date/Time
Approved by		
Sampled by		4/13/10
Relinquished by	Tamara Jank	1400
Received by		
Relinquished by		
Received by		4/14/10 0900 4.8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 8:29:26 AM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar
	Preservatives:	4°C	4°C	4°C
	Filtered:	NA	NA	NA
	Holding Time:	14	14	28
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)

	DATE	TIME	Matrix					Number of Containers	COMMENTS
DP04-03266 ✓	4/12/2010	14:45	Soil		X	X	1004086-06 4 04/13/10 CMC	1	LAB QC
DP04-03267 ✓	4/12/2010	14:50	Soil		X	X	-07	2	
DP04-03268 ✓	4/12/2010	14:55	Soil		X	X	-08	2	
DP04-07172 ✓	4/12/2010	14:40	Soil	X			1004109-46	1	
DP04-07173 ✓	4/12/2010	14:43	Soil	X			-47	1	
DP04-07174 ✓	4/12/2010	14:46	Soil	X			MS/MSD -48 04/13/10 CMC 2	1	LAB QC
DP04-07175 ✓	4/12/2010	14:49	Soil	X			-49	1	
DP06-03272 ✓	4/12/2010	14:20	Soil		X	X	1004086-09	2	
DP06-03273 ✓	4/12/2010	14:25	Soil		X	X	-10	2	
DP06-03274 ✓	4/12/2010	14:30	Soil		X	X	-11	2	
DP06-07180 ✓	4/12/2010	13:50	Soil	X			1004109-50	1	
DP06-07181 ✓	4/12/2010	13:55	Soil	X			-51	1	
DP06-07182 ✓	4/12/2010	14:00	Soil	X			-52	1	
DP06-07183 ✓	4/12/2010	14:05	Soil	X			-53	1	

Signatures	Date/Time
Approved by	04/13/10
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/14/10

09:00 4.3°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 8:29:26 AM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP06-57180 ✓	4/12/2010 13:50 Soil	X			1004109-54	1	
DP08-03910 ✓	4/12/2010 13:35 Soil		X	X	1004086-14	2	
DP08-03911 ✓	4/12/2010 13:40 Soil		X	X	-15	2	
DP08-07900	4/12/2010 13:20 Soil	X			1004109-55	1	
DP08-07901	4/12/2010 13:25 Soil	X			-56	1	
DP08-07902	4/12/2010 13:30 Soil	X			-57	1	
DP08-07903	4/12/2010 13:35 Soil	X			-58	1	
					TOTAL NUMBER OF CONTAINERS	29	

Signatures	Date/Time
Approved by	04/13/10
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 3:34:49 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310s2

	Container:	3 x 40 ml VOA	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	48HR	48HR	14	14	30	28			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-03359	4/13/2010 9:45 Soil	x	x		x		x	1004109-59	6	
DP01-03360	4/13/2010 9:50 Soil	x	x		x		x	-60	6	
DP01-07296	4/13/2010 9:10 Soil			x				-61	1	
DP01-07297	4/13/2010 9:15 Soil			x				-62	1	
DP01-07298	4/13/2010 9:20 Soil			x				-63	1	
DP01-07299	4/13/2010 9:25 Soil			x				-64	1	
DP01-53360	4/13/2010 9:50 Soil	x	x		x		x	-65	6	
DP08-03165	4/13/2010 9:25 Soil					x		-66	1	
DP08-03166	4/13/2010 9:30 Soil					x		-67	1	
								TOTAL NUMBER OF CONTAINERS	24	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/13/10
Relinquished by		1540
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4.8°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 3:39:20 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	HCl			
				Filtered: NA	NA			
				Holding Time: 14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-117	4/13/2010	7:40	Water	X	X	1004109-68	5	
TB-117	4/13/2010	7:40	Water	X	X	-69	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/13/10 1340
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 10:23:26 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w

				Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA			
				Holding Time:	7	7	28			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-117	4/13/2010	7:40	Water		X	X	X	1004109-68	5	
								TOTAL NUMBER OF CONTAINERS	5	

04/13/10
CMC

	Signatures	Date/Time
Approved by		04/13/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		4/14/10
Received by		09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4-8°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 2:53:42 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w2

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-03904	4/13/2010 11:00 Water	X	X	X	1004109-70 10040 WS 4/14/10	5	
DP01-03905	4/13/2010 11:50 Water	X	X	X	-71	5	
					TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/13/10 1430
Received by		
Relinquished by		
Received by	[signature]	4/14/10 09:00

4-8°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 2:51:41 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w2

	Container:	Preservatives:	Filtered:	Holding Time:					
	2 x 1L Amber	4°C	NA	7				Number of Containers	COMMENTS
				PCBs (8082)					
DATE	**TIME**	**Matrix**							
EB-300	4/13/2010		Water	X	1004109-72		2	1	
						TOTAL NUMBER OF CONTAINERS	2	1	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Frank	4/13/10 1430
Relinquished by		
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

C1.8°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 3:27:40 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w3

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				4°C	4°C	HNO4			
Filtered:				NA	NA	NA			
Holding Time:				7	7	28			
DP06-03536	4/13/2010	8:55	Water	X	X	X	1004109-73	5	
DP06-03537	4/13/2010	9:30	Water	X	X	X	-74	5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/13/10 1600
Received by		
Relinquished by	[signature]	4/14/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

4 80C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 10:22:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w

	DATE	TIME	Matrix	VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				HCl	HCl	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA			
Holding Time:				14	14	7	7	28			
DP02-03520	4/12/2010	10:50	Water	x					1004086-43	3	
DP02-03621	4/12/2010	11:35	Water	x					-44	3	
DP02-53520	4/12/2010	10:50	Water	x					-45	3	
DP07-03538	4/12/2010	15:25	Water	x	x	x	x	x	1004109-75	10	
DP07-03539	4/12/2010	15:55	Water	x	x	x	x	x	-76	10	
DP09-03542	4/12/2010	14:05	Water	x	x	x	x	x	-77	10	
DP09-03543	4/12/2010	14:30	Water	x	x	x	x	x	-78	10	
									TOTAL NUMBER OF CONTAINERS	49	

	Signatures	Date/Time
Approved by		04/13/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

4.1°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/13/2010 10:25:51 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		Number of Containers	COMMENTS
				Preservatives: HCl	HCl	4°C	4°C	HNO4			
				Filtered: NA	NA	NA	NA	NA			
				Holding Time: 14	14	7	7	28			
				VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)			
EB-316	4/12/2010	8:20	Water	X	X				1004086-54	5	
TB-316	4/12/2010	8:20	Water	X	X				1004109-79	5	
EB-317	4/13/2010	7:40	Water			X	X	X	-80	~~7~~ 5	
									TOTAL NUMBER OF CONTAINERS	~~17~~ 15	

CMC
04/13/10

Signatures		Date/Time
Approved by		04/13/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4/14

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/13/2010 10:24:09 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/13/2010
COC Number: 41310w

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-217	4/13/2010 7:30 Water	X	X	X	1004109-81	7	S
					TOTAL NUMBER OF CONTAINERS	7	S

04/13/10 CMC

	Signatures	Date/Time
Approved by		04/13/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/14/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889933
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

4/14/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6176

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

Dates samples were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 2 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6137

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9c

~~Dates samples were logged-in:~~ 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9933

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-6°C

~~Dates samples~~ were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004086, 1004109 Number of Coolers: 4 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6115

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.8°C

~~Dates samples were logged in:~~ 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 5 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6078

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

~~Dates samples~~ were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 6 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6154

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9°C

~~Dates samples~~ were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6067

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.7c

Date samples were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 8

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 8 of 8

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/14/10 09:00 Date cooler(s) opened: 04/14/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6148

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/13/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.8°C

~~Dates samples~~ were logged-in: 04/14/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 8

CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 3:54:58 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410P

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE / TIME / Matrix					
EB-217	4/13/2010 7:30 Water	X	X	1004109-21	5	
TB-217	4/14/2010 7:00 Water	X	X		5	
				TOTAL NUMBER OF CONTAINERS	10	

Signatures		Date/Time
Approved by		
Sampled by		4/14/10
Relinquished by	Jamie Jont	1600
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.9°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 8:40:55 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
Preservatives:				HCl	HCl			
Filtered:				NA	NA			
Holding Time:				14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-317	4/13/2010	7:40	Water	X	X	1004109-20	5	
TB-317	4/13/2010	7:40	Water	X	X		5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jane	4/14/10 0900
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

4/15/10 3902

CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 8:39:14 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14; VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14; TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP01-03904	4/13/2010	11:00	Water	X	X	1004109-70	5	
DP01-03905	4/13/2010	11:50	Water	X	X	-71	5	
DP06-03536	4/13/2010	8:55	Water	X	X	-73	5	
DP06-03537	4/13/2010	9:30	Water	X	X	-74	5	
						TOTAL NUMBER OF CONTAINERS	20	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/14/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/15/10

09 was 4/15/10
08:30

3.9°C

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 1:51:27 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W4

	Container:	Preservatives:	Filtered:	Holding Time:					
	2 x 1L Amber	4°C	NA	30				Number of Containers	COMMENTS
	DATE	TIME	Matrix	Dioxins (8290)					
EB-217	4/13/2010	7:30	Water	X			1004109-81 /	2	
							TOTAL NUMBER OF CONTAINERS	2	

1

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Jank	4/14/10 1400
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.9°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6056

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

Dates samples were logged-in: 04/15/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 2 of 6

Client: CH2M HILL Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6045

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-5°C

~~Dates samples were logged in:~~ ~~04/15/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100409 Number of Coolers: 3 of 6

Client: CH2M HILL Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6012

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.5°C

~~Dates samples were logged in: 04/15/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109 Number of Coolers: 4 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6034

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9c

~~Dates samples were logged-in:~~ 04/15/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

Sonya Gordon

From: Tamara Frank [tamara.frank@e2.com]
Sent: Wednesday, April 14, 2010 11:37 AM
To: sgordon@empirlabs.com
Cc: Fesler, Mark/RDD; Quayle, Stephen/BAO
Subject: Change turn around time for samples DP04

Sonya,
Could you please change the turn around time to 7 days for the following samples (collected on April 12):

DP04-03266
DP04-03267
DP04-03268
DP04-07172
DP04-07173
DP04-07174
DP04-07175

So far my records show that we currently have 4 other groups of samples on a 7 day TAT, including samples with prefixes DP01, DP02, DP03, and DP05.
Could you please confirm this?
Thanks,
Tamara

Tamara Frank
E2 Consulting Engineers
155 Grand Ave, Suite 702
Oakland, CA 94612
760-420-4546

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004127

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/13/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/15/2010 08:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/15/2010 16:27

Samples Received at: **4.5°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004127-01 DP01-01000 [Solid] Sampled 04/14/2010 10:30 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 12:30	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 12:30	AP VIALS
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 12:30	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 12:30	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 12:30	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 12:30	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 12:30	AP VIALS
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 12:30	+MO
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 12:30	soil TAL + Mo
1004127-02 DP01-01001 [Solid] Sampled 04/14/2010 10:35 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 12:35	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 12:35	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 12:35	
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 12:35	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 12:35	+MO
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 12:35	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 12:35	Tox LCS required
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 12:35	AP VIALS
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 12:35	AP VIALS

1004127

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-03 DP01-01002 [Solid] Sampled 04/14/2010 10:40 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 12:40	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 12:40	Tox LCS required
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 12:40	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 12:40	AP VIALS
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 12:40	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 12:40	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 12:40	+MO
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 12:40	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 12:40	
1004127-04 DP01-01170 [Solid] Sampled 04/14/2010 13:45 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 15:45	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 15:45	+MO
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 15:45	AP VIALS
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 15:45	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 15:45	soil TAL + Mo
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 15:45	AP VIALS
1004127-05 DP01-01171 [Solid] Sampled 04/14/2010 14:00 Pacific				**QSM4.1**
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 16:00	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 16:00	+MO
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 16:00	AP VIALS
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 16:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 16:00	
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 16:00	
1004127-06 DP01-01172 [Solid] Sampled 04/14/2010 14:10 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 16:10	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 16:10	AP VIALS
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 16:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 16:10	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 16:10	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 16:10	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-07 DP01-51000 [Solid] Sampled 04/14/2010 10:30 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 12:30	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 12:30	+MO
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 12:30	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 12:30	AP VIALS
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 12:30	AP VIALS
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 12:30	
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 12:30	+ Aroclor-1262 & 1268
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 12:30	soil TAL + Mo
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 12:30	Tox LCS required
1004127-08 DP01-51170 [Solid] Sampled 04/14/2010 13:45 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 15:45	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 15:45	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 15:45	soil TAL + Mo
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 15:45	AP VIALS
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 15:45	+MO
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 15:45	AP VIALS
1004127-09 DP02-01003 [Solid] Sampled 04/14/2010 12:05 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 14:05	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 14:05	AP VIALS
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 14:05	Tox LCS required
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 14:05	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 14:05	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 14:05	+MO
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 14:05	
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 14:05	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 14:05	AP VIALS

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-10 DP02-01004 [Solid] Sampled 04/14/2010 12:10 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 14:10	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 14:10	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 14:10	+ Aroclor-1262 & 1268
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 14:10	AP VIALS
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 14:10	+MO
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 14:10	AP VIALS
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 14:10	soil TAL + Mo
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 14:10	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 14:10	
1004127-11 DP03-01006 [Solid] Sampled 04/14/2010 09:40 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 11:40	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 11:40	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 11:40	AP VIALS
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 11:40	+MO
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 11:40	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 11:40	+ Aroclor-1262 & 1268
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 11:40	soil TAL + Mo
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 11:40	AP VIALS
1004127-12 DP03-01007 [Solid] Sampled 04/14/2010 09:45 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 11:45	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 11:45	AP VIALS
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 11:45	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 11:45	AP VIALS
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 11:45	Tox LCS required
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 11:45	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-13 DP03-01008 [Solid] Sampled 04/14/2010 09:50 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 11:50	+ Aroclor-1262 & 1268
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 11:50	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 11:50	
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 11:50	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 11:50	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 11:50	+MO
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 11:50	AP VIALS
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 11:50	Tox LCS required
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 11:50	
1004127-14 DP03-01018 [Solid] Sampled 04/14/2010 15:20 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 17:20	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:20	
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 17:20	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 17:20	Tox LCS required
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:20	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:20	soil TAL + Mo
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:20	AP VIALS. LOW VOLUME!!!
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:20	+MO
1004127-15 DP03-01019 [Solid] Sampled 04/14/2010 15:25 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 17:25	Tox LCS required
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:25	+MO
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 17:25	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:25	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:25	AP VIALS. LOW VOLUME!!!
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:25	soil TAL + Mo
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:25	
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 17:25	+ Aroclor-1262 & 1268

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Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004127-16 DP03-01020 [Solid] Sampled 04/14/2010 15:30 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:30	soil TAL + Mo
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 17:30	Tox LCS required
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:30	AP VIALS. LOW VOLUME!!!
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:30	
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 17:30	+ Aroclor-1262 & 1268
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 17:30	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:30	+MO
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:30	
1004127-17 DP03-01176 [Solid] Sampled 04/14/2010 15:00 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:00	+MO
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:00	soil TAL + Mo
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:00	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 17:00	AP VIALS
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:00	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:00	
1004127-18 DP03-01177 [Solid] Sampled 04/14/2010 15:10 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:10	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 17:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:10	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:10	AP VIALS
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:10	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:10	+MO
1004127-19 DP03-01178 [Solid] Sampled 04/14/2010 15:20 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:20	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:20	AP VIALS
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:20	+MO
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 17:20	AP VIALS
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:20	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:20	soil TAL + Mo

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-20 DP03-51020 [Solid] Sampled 04/14/2010 15:30 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 17:30	AP VIALS. LOW VOLUME!!!
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 17:30	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 17:30	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 17:30	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 17:30	+MO
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 17:30	soil TAL + Mo
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 17:30	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 17:30	
1004127-21 DP04-01009 [Solid] Sampled 04/14/2010 11:10 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 13:10	Tox LCS required
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 13:10	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 13:10	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 13:10	AP VIALS
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 13:10	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 13:10	+MO
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 13:10	AP VIALS
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 13:10	soil TAL + Mo
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 13:10	+ Aroclor-1262 & 1268
1004127-22 DP04-01010 [Solid] Sampled 04/14/2010 11:15 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 13:15	+ Aroclor-1262 & 1268
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 13:15	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 13:15	AP VIALS
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 13:15	AP VIALS
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 13:15	Tox LCS required
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 13:15	+MO
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 13:15	soil TAL + Mo
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 13:15	
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 13:15	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-23 DP04-01011 [Solid] Sampled 04/14/2010 11:20 Pacific				**QSM4.1.**
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 13:20	+ Aroclor-1262 & 1268
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 13:20	
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 13:20	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 13:20	AP VIALS
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 13:20	Tox LCS required
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 13:20	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 13:20	AP VIALS
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 13:20	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 13:20	+MO
1004127-24 DP04-01021 [Solid] Sampled 04/14/2010 14:20 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 16:20	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 16:20	soil TAL + Mo
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 16:20	AP VIALS. LOW VOLUME!!!
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 16:20	
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 16:20	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 16:20	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 16:20	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 16:20	+MO
1004127-25 DP04-01022 [Solid] Sampled 04/14/2010 14:25 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 16:25	AP VIALS. LOW VOLUME!!!
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 16:25	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 16:25	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 16:25	+MO
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 16:25	+ Aroclor-1262 & 1268
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 16:25	
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 16:25	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 16:25	Tox LCS required

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-26 DP04-01023 [Solid] Sampled 04/14/2010 14:30 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 16:30	
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 16:30	+MO
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 16:30	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 16:30	soil TAL + Mo
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 16:30	AP VIALS. LOW VOLUME!!!
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 16:30	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 16:30	+ Aroclor-1262 & 1268
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 16:30	
1004127-27 DP04-05010 [Solid] Sampled 04/14/2010 11:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/21/2010 13:15	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 13:15	AP VIALS
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 13:15	AP VIALS
MET_7471A_MERCURY	05/06/2010 14:00	20	05/12/2010 13:15	
MET_ICP_LOW6010B_FULL	05/06/2010 14:00	20	10/11/2010 13:15	soil TAL + Mo
SGC_DRO_8015B_3546	05/06/2010 14:00	20	04/28/2010 13:15	+MO
SMS_BNA_8270C_3546_REG	05/06/2010 14:00	20	04/28/2010 13:15	
SGC_PEST8081A_3546	05/06/2010 14:00	20	04/28/2010 13:15	Tox LCS required
SGC_PCB8082A_3546	05/06/2010 14:00	20	04/28/2010 13:15	+ Aroclor-1262 & 1268
1004127-28 DP01-09000 [Solid] Sampled 04/13/2010 16:20 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:20	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:20	
1004127-29 DP01-09001 [Solid] Sampled 04/13/2010 16:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:25	
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:25	
1004127-30 DP01-09002 [Solid] Sampled 04/13/2010 16:30 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:30	
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:30	
1004127-31 DP01-09003 [Solid] Sampled 04/13/2010 16:35 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:35	
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:35	
1004127-32 DP01-59000 [Solid] Sampled 04/13/2010 16:20 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:20	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:20	

1004127

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-33 DP04-09012 [Solid] Sampled 04/13/2010 15:50 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 17:50	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 17:50	
1004127-34 DP04-09013 [Solid] Sampled 04/13/2010 15:55 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 17:55	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 17:55	
1004127-35 DP04-09014 [Solid] Sampled 04/13/2010 16:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:00	
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:00	
1004127-36 DP04-09015 [Solid] Sampled 04/13/2010 16:05 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/06/2010 14:00	20	04/27/2010 18:05	
WC_PERCENT_SOLIDS_2540B	05/06/2010 14:00	20	04/20/2010 18:05	
1004127-37 TB-217 [Water] Sampled 04/14/2010 07:00 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 09:00	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 09:00	
1004127-38 TB-317 [Water] Sampled 04/13/2010 07:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/27/2010 09:40	
VOC_8260B_AP9	05/06/2010 14:00	20	04/27/2010 09:40	
1004127-39 DP03-01500 [Water] Sampled 04/14/2010 11:25 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 13:25	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 13:25	
1004127-40 DP03-01501 [Water] Sampled 04/14/2010 12:15 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 14:15	
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 14:15	
1004127-41 DP03-51500 [Water] Sampled 04/14/2010 11:25 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 13:25	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 13:25	

1004127

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-42 EB-318 [Water] Sampled 04/14/2010 10:15 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 12:15	
MET_7470_MERCURY	05/06/2010 14:00	20	05/12/2010 12:15	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 12:15	
MET_ICP_6010B_FULL	05/06/2010 14:00	20	10/11/2010 12:15	water TAL + Mo
SGC_DRO_8015B_3510	05/06/2010 14:00	20	04/21/2010 12:15	+MO
SMS_BNA_8270C_3510_REG	05/06/2010 14:00	20	04/21/2010 12:15	
SMS_PAH_8270C_3510_LOW	05/06/2010 14:00	20	04/21/2010 12:15	
1004127-43 TB-318 [Water] Sampled 04/14/2010 10:15 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 12:15	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 12:15	
1004127-44 EB-118 [Water] Sampled 04/14/2010 07:35 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 09:35	
SMS_BNA_8270C_3510_REG	05/06/2010 14:00	20	04/21/2010 09:35	LOW VOLUME!!!
SGC_PEST8081A_3510	05/06/2010 14:00	20	04/21/2010 09:35	Tox LCS required. LOW VOLUME!!
SGC_PCB8082A_3510	05/06/2010 14:00	20	04/21/2010 09:35	+ Aroclor-1262 & 1268. LOW VOLUME!!
SGC_DRO_8015B_3510	05/06/2010 14:00	20	04/21/2010 09:35	+MO. LOW VOLUME!!
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 09:35	
SMS_PAH_8270C_3510_LOW	05/06/2010 14:00	20	04/21/2010 09:35	LOW VOLUME!!!
MET_ICP_6010B_FULL	05/06/2010 14:00	20	10/11/2010 09:35	water TAL + Mo
MET_7470_MERCURY	05/06/2010 14:00	20	05/12/2010 09:35	
1004127-45 TB-118 [Water] Sampled 04/14/2010 07:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/06/2010 14:00	20	04/28/2010 09:40	
VOC_8260B_AP9	05/06/2010 14:00	20	04/28/2010 09:40	
1004127-46 DP01-02514 [Water] Sampled 04/13/2010 15:00 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/06/2010 14:00	20	04/27/2010 17:00	
1004127-47 DP01-02515 [Water] Sampled 04/13/2010 15:20 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/06/2010 14:00	20	04/27/2010 17:20	

1004127

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004127-48 DP03-01500 [Water] Sampled 04/14/2010 11:25 Pacific				**QSM4.1.**
SMS_BNA_8270C_3510_REG	05/06/2010 14:00	20	04/21/2010 13:25	
SGC_DRO_8015B_3510	05/06/2010 14:00	20	04/21/2010 13:25	+MO.
SGC_PEST8081A_3510	05/06/2010 14:00	20	04/21/2010 13:25	Tox LCS required.
MET_7470_DIS_MERCURY	05/06/2010 14:00	20	05/12/2010 13:25	
MET_ICP_6010B_FULL_DIS	05/06/2010 14:00	20	10/11/2010 13:25	water TAL + Mo
SMS_PAH_8270C_3510_LOW	05/06/2010 14:00	20	04/21/2010 13:25	
SGC_PCB8082A_3510	05/06/2010 14:00	20	04/21/2010 13:25	+ Aroclor-1262 & 1268.

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 3:46:56 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: 2XH2O, 1XMeOH, 4°C; Filtered: NA; Holding Time: 48HR — VOCs (8260B/624)	Container: 1 x 40 ml VOA; Preservatives: MeOH; Filtered: NA; Holding Time: 48HR — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP01-01000	4/14/2010	10:30	Soil	x	x	1004127-01	4	
DP01-01001	4/14/2010	10:35	Soil	x	x	-02	4	
DP01-01002	4/14/2010	10:40	Soil	x	x	-03	4	
DP01-01170	4/14/2010	13:45	Soil	x	x	-04	4	
DP01-01171	4/14/2010	14:00	Soil	x	x	-05	4	
DP01-01172	4/14/2010	14:10	Soil	x	x	-06	4	
DP01-51000	4/14/2010	10:30	Soil	x	x	-07	4	
DP01-51170	4/14/2010	13:45	Soil	x	x	-08	4	
DP02-01003	4/14/2010	12:05	Soil	x	x	-09	4	
DP02-01004	4/14/2010	12:10	Soil	x	x	-10	4	
DP03-01006	4/14/2010	9:40	Soil	x	x	-11	4	
DP03-01007	4/14/2010	9:45	Soil	x	x	-12	4	
DP03-01008	4/14/2010	9:50	Soil	x	x	-13	4	
DP03-01018	4/14/2010	15:20	Soil		x	-14	1	

Signatures	Date/Time
Approved by	
Sampled by	4/14/10
Relinquished by	1600
Received by	
Relinquished by	4/15/10
Received by	08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 3:46:57 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP03-01019 ✓	4/14/2010 15:25 Soil		X	1004127-15	1	
DP03-01020 ✓	4/14/2010 15:30 Soil		X	-16	1	
DP03-01176	4/14/2010 15:00 Soil	X	X	-17	4	
DP03-01177	4/14/2010 15:10 Soil	X	X	-18	4	
DP03-01178 ✓	4/14/2010 15:20 Soil	X	X	-19	4	
DP03-51020 ✓	4/14/2010 15:30 Soil		X	-20	1	
DP04-01009 ✓	4/14/2010 11:10 Soil	X	X	-21	4	
DP04-01010 ✓	4/14/2010 11:15 Soil	X	X	-22	4	
DP04-01011 ✓	4/14/2010 11:20 Soil	X	X	-23	4	
DP04-01021 ✓	4/14/2010 14:20 Soil		X	-24	1	
DP04-01022 ✓	4/14/2010 14:25 Soil		X	-25	1	
DP04-01023 ✓	4/14/2010 14:30 Soil		X	-26	1	
DP04-51010 ✓	4/14/2010 11:15 Soil	X	X	-27	4	
				TOTAL NUMBER OF CONTAINERS	87	

Signatures	Date/Time
Approved by	
Sampled by	4/14/10
Relinquished by	Jamie Frank 1600
Received by	
Relinquished by	
Received by	4/15/10 09:00 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 8:36:40 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410

	Container:	Preservatives:	Filtered:	Holding Time:					
	4oz soil jar	4°C	NA	14					
	DATE	TIME	Matrix	PAHs (SW8270Sim)				Number of Containers	COMMENTS
DP01-09000	4/13/2010	16:20	Soil	x	1004127 -28			1	
DP01-09001	4/13/2010	16:25	Soil	x	-29			1	
DP01-09002	4/13/2010	16:30	Soil	x	-30			1	
DP01-09003	4/13/2010	16:35	Soil	x	-31			1	
DP01-59000	4/13/2010	16:20	Soil	x	-32			1	
DP04-09012	4/13/2010	15:50	Soil	x	-33			1	
DP04-09013	4/13/2010	15:55	Soil	x	-34			1	
DP04-09014	4/13/2010	16:00	Soil	x	-35			1	
DP04-09015	4/13/2010	16:05	Soil	x	-36			1	
							TOTAL NUMBER OF CONTAINERS	9	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jank	4/14/10 0900
Received by		
Relinquished by		
Received by		4/15/10

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

08 WS 4/15/10 08:30 1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 3:54:58 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-217	4/13/2010	7:30	Water	x	x	1004109-81	5	
TB-217	4/14/2010	7:00	Water	x	x	1004127-37	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/14/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 8:40:55 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-317	4/13/2010 7:40 Water	X	X	1004109-30	5	
TB-317	4/13/2010 7:40 Water	X	X	1004127-38	5	
				TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/14/10
Relinquished by	Jamie Jane	0900
Received by		
Relinquished by		
Received by		4/15/10 08:30 4/15/10 3.90C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 2:43:59 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410VOC

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP03-01500	4/14/2010	11:25	Water		X	X	1004109-39	5	
DP03-01501	4/14/2010	12:15	Water		X	X	-40	5	
DP03-51500	4/14/2010	11:25	Water		X	X	-41	5	
							TOTAL NUMBER OF CONTAINERS	15	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/14/10 1500
Received by		
Relinquished by	[signature]	4/15/10
Received by		

08:30 3.9C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825869889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 2:42:25 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410VOC

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-318	4/14/2010	10:15	Water	X	X	1004109-42	5	
TB-318	4/14/2010	10:15	Water	X	X	-43	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		4/14/10
Sampled by	Jamie Ford	1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825869889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 1:49:59 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W4

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-318	4/14/2010 10:15 Water	X	X	X	X	1004109-42	11	
						TOTAL NUMBER OF CONTAINERS	11	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Jant	4/14/10 1400
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/14/2010 2:11:39 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14; VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14; TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-118	4/14/2010	7:35	Water	X	X	1004109-44	5	
TB-118	4/14/2010	7:40	Water	X	X	-45	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/14/10
Relinquished by	Tamara Jones	1600
Received by		
Relinquished by		
Received by		4/15/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 8:42:01 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	7	7	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-118	4/14/2010 7:35 Water	X	X	X	X	X	X	1004109-44	~~12~~ 11	
								TOTAL NUMBER OF CONTAINERS	~~12~~ 11	

CMC
04/14/10

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jard	4/14/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by	[signature]	4/15/10 08:30

3.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 8:43:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 7 Days
Shipping Date: 4/14/2010
COC Number: 41410W

	Container:	3 x 40 ml VOA
	Preservatives:	HCl
	Filtered:	NA
	Holding Time:	14
		VOCs (8260B)

	DATE	TIME	Matrix			Number of Containers	COMMENTS
DP01-02514	4/13/2010	15:00	Water	X	1004109-46	3	
DP01-02515	4/13/2010	15:20	Water	X	-47	3	
					TOTAL NUMBER OF CONTAINERS	6	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/14/10 0900
Received by		
Relinquished by	[signature]	4/15/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.9°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/14/2010 2:30:23 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/14/2010
COC Number: 41410W5

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	7	7	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-01500	4/14/2010 11:25 Water	X	X	X	X	X	X	1004109-40 8 7	~~13~~	
								TOTAL NUMBER OF CONTAINERS	~~13~~	

8 7
7F

	Signatures	Date/Time
Approved by		
Sampled by		4/14/10
Relinquished by	Tamara Frank	1500
Received by		
Relinquished by		
Received by		4/15/10

08:30 3.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109, 1004127 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6056

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

Dates samples were logged-in: 04/15/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/15/10	Yes	(No)*	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... WS 4/15/10	(Yes)	(No)	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH ≤ 2 for all metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

* 1004127 only - 1L amber broken in shipment CAR#: _____

for EB-118.

Pod/4 weight containers recd for: "DP01"-01001", "01002, 01170, 01172, 51000, DP02-01003, 01004, DP03-01006, 01007, 01008, 01018, 01019, 01020, 01176, 01177, 01178, 51020, DP04-01009, 01010, 01011, 01021, 01022, 01023, 51010

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109, 1004127 Number of Coolers: 2 of 6

Client: CH2M HILL Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6045

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-5°C

~~Dates samples were logged in:~~ ~~04/15/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109, 1004127 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schuck (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6012

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.5°C

~~Dates samples were logged in:~~ ~~04/15/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004109, 1004127 Number of Coolers: 4 of 6

Client: CH2M HILL Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwat (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6034

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9c

~~Dates samples were logged-in:~~ 04/15/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004127 Number of Coolers: 5 of 6

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 6023

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-0°C

~~Dates samples were logged-in:~~ 04/15/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004127 Number of Coolers: 6 of 6

Client: CH2M HILL Project: Alameda Point

Date/Time Received: 04/15/10 08:30 Date cooler(s) opened: 04/15/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 9422

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/14/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.3°C

~~Dates samples were logged-in:~~ 04/15/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 6

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 9:20:57 AM* Page 1 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix								
DP01-01000	4/14/2010	10:30	Soil		X	X	X	X	X	1004127-01	5	
DP01-01001	4/14/2010	10:35	Soil		X	X	X	X	X	-02	5	
DP01-01002	4/14/2010	10:40	Soil		X	X	X	X	X	-03	5	
DP01-01170	4/14/2010	13:45	Soil			X			X	-04	2	
DP01-01171	4/14/2010	14:00	Soil			X			X	-05	2	
DP01-01172	4/14/2010	14:10	Soil			X			X	-06	2	
DP01-51000	4/14/2010	10:30	Soil		X	X	X	X	X	-07	5	
DP01-51170	4/14/2010	13:45	Soil			X			X	-08	2	
DP02-01003	4/14/2010	12:05	Soil		X	X	X	X	X	-09	5	
DP02-01004	4/14/2010	12:10	Soil		X	X	X	X	X	-10	5	
DP02-09004	4/14/2010	11:45	Soil	X							1	
DP02-09005	4/14/2010	11:50	Soil	X							1	
DP02-09006	4/14/2010	11:55	Soil	X							1	
DP02-09007	4/14/2010	12:00	Soil	X							1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamora Frank	4/15/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.10C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 9:20:58 AM* Page 2 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-01006	4/14/2010	9:40	Soil			X	X	X	X	1004127-11	4	
DP03-01007	4/14/2010	9:45	Soil		X		X	X		-12	3	
DP03-01008	4/14/2010	9:50	Soil		X	X	X	X	X	-13	5	
DP03-01018	4/14/2010	15:20	Soil		X	X	X	X	X	-14	5	
DP03-01019	4/14/2010	15:25	Soil		X	X	X	X	X	-15	5	
DP03-01020	4/14/2010	15:30	Soil		X	X	X	X	X	-16	5	
DP03-01176	4/14/2010	15:00	Soil			X			X	-17	2	
DP03-01177	4/14/2010	15:10	Soil			X			X	-18	2	
DP03-01178	4/14/2010	15:20	Soil			X			X	-19	2	
DP03-09008	4/14/2010	9:00	Soil	X							1	
DP03-09009	4/14/2010	9:05	Soil	X							1	
DP03-09010	4/14/2010	9:10	Soil	X							1	
DP03-09011	4/14/2010	9:15	Soil	X							1	
DP03-09024	4/14/2010	15:00	Soil	X							1	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Tart	4/15/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.1°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 9:20:58 AM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-09025	4/14/2010	15:05	Soil	x							1	
DP03-09026	4/14/2010	15:10	Soil	x							1	
DP03-09027	4/14/2010	15:15	Soil	x							1	
DP03-51020	4/14/2010	15:30	Soil		x	x	x	x	x	1004127-20	5	
DP03-59010	4/14/2010	9:10	Soil	x							1	
DP04-01009	4/14/2010	11:10	Soil		x	x	x	x	x	1004127-21	5	
DP04-01010	4/14/2010	11:15	Soil		x	x	x	x	x	-22	5	
DP04-01011	4/14/2010	11:20	Soil		x	x	x	x	x	-23	5	
DP04-01021 ✓	4/14/2010	14:20	Soil		x	x	x	x	x	-24	5	
DP04-01022 ✓	4/14/2010	14:25	Soil		x	x	x	x	x	-25	5	
DP04-01023 ✓	4/14/2010	14:30	Soil		x	x	x	x	x	-26	5	
DP04-09028 ✓	4/14/2010	14:00	Soil	x							1	
DP04-09029 ✓	4/14/2010	14:05	Soil	x							1	
DP04-09030 ✓	4/14/2010	14:10	Soil	x							1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	4/15/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.0C

CHAIN OF CUSTODY RECORD

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		
DP04-09031 ✓	4/14/2010	14:15	Soil	x							1	
DP04-51010	4/14/2010	11:15	Soil		x	x	x	x	x	1004127 - 27	5	
DP04-59030 ✓	4/14/2010	14:10	Soil	x							1	
DP01-09152	4/15/2010	13:30	Soil	x							1	
DP01-09153	4/15/2010	13:33	Soil	x							1	
DP01-09154	4/15/2010	13:36	Soil	x							1	
DP01-09155	4/15/2010	13:39	Soil	x							1	
DP03-09160	4/15/2010	15:30	Soil	x							8	
DP03-09162	4/15/2010	15:30	Soil	x							1	
DP03-09163	4/15/2010	15:30	Soil	x							1	
DP03-59160	4/15/2010	15:30	Soil	x							1	
										TOTAL NUMBER OF CONTAINERS	144	

	Signatures	Date/Time
Approved by		
Sampled by		4/15/10
Relinquished by	Jamie Jones	1100
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.1°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004127 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5027

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

Dates samples were logged-in: **04/16/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH ok for all H_2O metals

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004127 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5016

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

~~Dates samples were logged in:~~ **04/16/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 7

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/14/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/16/2010 08:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/16/2010 14:40

Samples Received at: **5.4°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004133-01 DP01-01012 [Solid] Sampled 04/15/2010 13:55 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 15:55	LOW VOLUME!! AP VIALS.
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 15:55	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 15:55	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 15:55	+MO
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:55	
SGC_PCB8082A_3546	05/07/2010 14:00	20	04/29/2010 15:55	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/07/2010 14:00	20	04/29/2010 15:55	Tox LCS required
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 15:55	
1004133-02 DP01-01013 [Solid] Sampled 04/15/2010 14:00 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 16:00	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 16:00	LOW VOLUME!! AP VIALS.
SGC_PEST8081A_3546	05/07/2010 14:00	20	04/29/2010 16:00	Tox LCS required
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 16:00	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 16:00	+MO
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 16:00	soil TAL + Mo
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 16:00	
SGC_PCB8082A_3546	05/07/2010 14:00	20	04/29/2010 16:00	+ Aroclor-1262 & 1268

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-03 DP01-01014 [Solid] Sampled 04/15/2010 14:05 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 16:05	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 16:05	+MO
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 16:05	LOW VOLUME!! AP VIALS.
SGC_PEST8081A_3546	05/07/2010 14:00	20	04/29/2010 16:05	Tox LCS required
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 16:05	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 16:05	soil TAL + Mo
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 16:05	
SGC_PCB8082A_3546	05/07/2010 14:00	20	04/29/2010 16:05	+ Aroclor-1262 & 1268
1004133-04 DP01-01120 [Solid] Sampled 04/15/2010 13:35 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 15:35	+MO. LOW VOLUME!!!
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 15:35	AP VIALS.
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 15:35	LOW VOLUME!!!
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 15:35	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:35	
1004133-05 DP01-01121 [Solid] Sampled 04/15/2010 13:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:40	
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 15:40	LOW VOLUME!!!
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 15:40	AP VIALS.
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 15:40	AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 15:40	+MO. LOW VOLUME!!!
1004133-06 DP01-01122 [Solid] Sampled 04/15/2010 13:45 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 15:45	+MO. LOW VOLUME!!!
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 15:45	LOW VOLUME!!!
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 15:45	AP VIALS.
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 15:45	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:45	
1004133-07 DP01-51120 [Solid] Sampled 04/15/2010 14:30 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 16:30	AP VIALS.
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 16:30	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 16:30	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 16:30	+MO

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-08 DP02-01015 [Solid] Sampled 04/15/2010 15:05 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:05	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:05	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:05	+MO
SGC_PCB8082A_3546	05/07/2010 14:00	20	04/29/2010 17:05	+ Aroclor-1262 & 1268
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 17:05	
SGC_PEST8081A_3546	05/07/2010 14:00	20	04/29/2010 17:05	Tox LCS required
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:05	LOW VOLUME!! AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:05	
1004133-09 DP02-01016 [Solid] Sampled 04/15/2010 15:10 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:10	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:10	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:10	LOW VOLUME!! AP VIALS.
SGC_PEST8081A_3546	05/07/2010 14:00	20	04/29/2010 17:10	Tox LCS required
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:10	+MO
SGC_PCB8082A_3546	05/07/2010 14:00	20	04/29/2010 17:10	+ Aroclor-1262 & 1268
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:10	
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 17:10	
1004133-10 DP02-01017 [Solid] Sampled 04/15/2010 15:15 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	05/07/2010 14:00	20	04/29/2010 17:15	Tox LCS required
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:15	LOW VOLUME!! AP VIALS.
SMS_BNA_8270C_3546_REG	05/07/2010 14:00	20	04/29/2010 17:15	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:15	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:15	+MO
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:15	soil TAL + Mo
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:15	
SGC_PCB8082A_3546	05/07/2010 14:00	20	04/29/2010 17:15	+ Aroclor-1262 & 1268
1004133-11 DP04-01179 [Solid] Sampled 04/15/2010 15:30 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:30	
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 17:30	AP VIALS.
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:30	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:30	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:30	+MO
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:30	AP VIALS.

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004133-12 DP04-01180 [Solid] Sampled 04/15/2010 15:35 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 17:35	AP VIALS.
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:35	soil TAL + Mo
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:35	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:35	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:35	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:35	+MO
1004133-13 DP04-01181 [Solid] Sampled 04/15/2010 15:40 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 17:40	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:40	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:40	AP VIALS.
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:40	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:40	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:40	+MO
1004133-14 DP04-51180 [Solid] Sampled 04/15/2010 15:35 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 17:35	AP VIALS.
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 17:35	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 17:35	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:35	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 17:35	+MO
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 17:35	AP VIALS.
1004133-15 DP05-01024 [Solid] Sampled 04/15/2010 09:05 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 11:05	+MO
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 11:05	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 11:05	LOW VOLUME!! AP VIALS.
1004133-16 DP05-01025 [Solid] Sampled 04/15/2010 09:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 11:10	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 11:10	LOW VOLUME!! AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 11:10	+MO
1004133-17 DP05-01026 [Solid] Sampled 04/15/2010 09:15 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 11:15	LOW VOLUME!! AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 11:15	+MO
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 11:15	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004133-18 DP05-01182 [Solid] Sampled 04/15/2010 10:20 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:20	AP VIALS.
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 12:20	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:20	
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 12:20	
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 12:20	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:20	+MO
1004133-19 DP05-01183 [Solid] Sampled 04/15/2010 10:25 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 12:25	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:25	
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 12:25	AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:25	+MO
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 12:25	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:25	AP VIALS.
1004133-20 DP05-01184 [Solid] Sampled 04/15/2010 10:35 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 12:35	soil TAL + Mo
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:35	AP VIALS.
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 12:35	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:35	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:35	+MO
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 12:35	
1004133-21 DP06-01027 [Solid] Sampled 04/15/2010 09:45 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 11:45	+MO
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 11:45	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 11:45	LOW VOLUME!! AP VIALS.
1004133-22 DP06-01028 [Solid] Sampled 04/15/2010 09:50 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 11:50	+MO
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 11:50	LOW VOLUME!! AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 11:50	
1004133-23 DP06-01029 [Solid] Sampled 04/15/2010 09:55 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 11:55	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 11:55	LOW VOLUME!! AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 11:55	+MO

1004133

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-24 DP06-01185 [Solid] Sampled 04/15/2010 11:40 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 13:40	AP VIALS.
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 13:40	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 13:40	+MO
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 13:40	AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 13:40	
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 13:40	
1004133-25 DP06-01186 [Solid] Sampled 04/15/2010 11:50 Pacific				**QSM4.1.**
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 13:50	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 13:50	
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 13:50	AP VIALS.
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 13:50	AP VIALS.
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 13:50	soil TAL + Mo
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 13:50	+MO
1004133-26 DP06-01187 [Solid] Sampled 04/15/2010 12:00 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 14:00	AP VIALS.
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 14:00	AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 14:00	+MO
MET_ICP_LOW6010B_FULL	05/07/2010 14:00	20	10/12/2010 14:00	soil TAL + Mo
MET_7471A_MERCURY	05/07/2010 14:00	20	05/13/2010 14:00	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 14:00	
1004133-27 DP07-01030 [Solid] Sampled 04/15/2010 10:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:25	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:25	+MO
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:25	LOW VOLUME!! AP VIALS.
1004133-28 DP07-01031 [Solid] Sampled 04/15/2010 10:30 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:30	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:30	LOW VOLUME!! AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:30	+MO
1004133-29 DP07-01032 [Solid] Sampled 04/15/2010 10:35 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:35	LOW VOLUME!! AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:35	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:35	+MO

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-30 DP07-51030 [Solid] Sampled 04/15/2010 10:25 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 12:25	+MO
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 12:25	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 12:25	LOW VOLUME!! AP VIALS.
1004133-31 DP08-01033 [Solid] Sampled 04/15/2010 11:15 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 13:15	LOW VOLUME!! AP VIALS.
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 13:15	+MO
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 13:15	
1004133-32 DP08-01034 [Solid] Sampled 04/15/2010 11:20 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 13:20	LOW VOLUME!! AP VIALS.
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 13:20	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 13:20	+MO
1004133-33 DP08-01035 [Solid] Sampled 04/15/2010 11:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 13:25	
SGC_DRO_8015B_3546	05/07/2010 14:00	20	04/29/2010 13:25	+MO
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 13:25	LOW VOLUME!! AP VIALS.
1004133-34 EB-219 [Water] Sampled 04/15/2010 07:45 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 09:45	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 09:45	
SMS_PAH_8270C_3510_LOW	05/07/2010 14:00	20	04/22/2010 09:45	
MET_ICP_6010B_FULL	05/07/2010 14:00	20	10/12/2010 09:45	water TAL + Mo
SGC_DRO_8015B_3510	05/07/2010 14:00	20	04/22/2010 09:45	+MO
MET_7470_MERCURY	05/07/2010 14:00	20	05/13/2010 09:45	
1004133-35 TB-219 [Water] Sampled 04/15/2010 07:45 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 09:45	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 09:45	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-36 EB-119 [Water] Sampled 04/15/2010 07:40 Pacific				**QSM4.1.**
MET_7470_MERCURY	05/07/2010 14:00	20	05/13/2010 09:40	
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 09:40	
SMS_PAH_8270C_3510_LOW	05/07/2010 14:00	20	04/22/2010 09:40	
SMS_BNA_8270C_3510_REG	05/07/2010 14:00	20	04/22/2010 09:40	
SGC_PEST8081A_3510	05/07/2010 14:00	20	04/22/2010 09:40	Tox LCS required
SGC_PCB8082A_3510	05/07/2010 14:00	20	04/22/2010 09:40	+ Aroclor-1262 & 1268
MET_ICP_6010B_FULL	05/07/2010 14:00	20	10/12/2010 09:40	water TAL + Mo
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 09:40	
SGC_DRO_8015B_3510	05/07/2010 14:00	20	04/22/2010 09:40	+MO
1004133-37 TB-119 [Water] Sampled 04/15/2010 07:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/07/2010 14:00	20	04/29/2010 09:40	
VOC_8260B_AP9	05/07/2010 14:00	20	04/29/2010 09:40	
1004133-38 DP01-01550 [Water] Sampled 04/14/2010 15:00 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/07/2010 14:00	20	04/21/2010 17:00	LOW VOLUME!!
VOC_8260B_AP9	05/07/2010 14:00	20	04/28/2010 17:00	
MET_7470_DIS_MERCURY	05/07/2010 14:00	20	05/12/2010 17:00	
MET_ICP_6010B_FULL_DIS	05/07/2010 14:00	20	10/11/2010 17:00	water TAL + Mo
VGC_GRO_8015B	05/07/2010 14:00	20	04/28/2010 17:00	
SGC_DRO_8015B_3510	05/07/2010 14:00	20	04/21/2010 17:00	LOW VOLUME!! +MO
1004133-39 DP01-01551 [Water] Sampled 04/14/2010 16:10 Pacific				**QSM4.1.**
MET_7470_DIS_MERCURY	05/07/2010 14:00	20	05/12/2010 18:10	
SMS_PAH_8270C_3510_LOW	05/07/2010 14:00	20	04/21/2010 18:10	
MET_ICP_6010B_FULL_DIS	05/07/2010 14:00	20	10/11/2010 18:10	water TAL + Mo
SGC_DRO_8015B_3510	05/07/2010 14:00	20	04/21/2010 18:10	+MO
VOC_8260B_AP9	05/07/2010 14:00	20	04/28/2010 18:10	
VGC_GRO_8015B	05/07/2010 14:00	20	04/28/2010 18:10	
1004133-40 DP03-01501 [Water] Sampled 04/14/2010 12:15 Pacific				**QSM4.1.**
MET_7470_DIS_MERCURY	05/07/2010 14:00	20	05/12/2010 14:15	
MET_ICP_6010B_FULL_DIS	05/07/2010 14:00	20	10/11/2010 14:15	water TAL + Mo
SMS_PAH_8270C_3510_LOW	05/07/2010 14:00	20	04/21/2010 14:15	
SMS_BNA_8270C_3510_REG	05/07/2010 14:00	20	04/21/2010 14:15	
SGC_PEST8081A_3510	05/07/2010 14:00	20	04/21/2010 14:15	Tox LCS required
SGC_PCB8082A_3510	05/07/2010 14:00	20	04/21/2010 14:15	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3510	05/07/2010 14:00	20	04/21/2010 14:15	+MO

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-41 DP03-51500 [Water] Sampled 04/14/2010 11:25 Pacific				**QSM4.1.**
MET_7470_DIS_MERCURY	05/07/2010 14:00	20	05/12/2010 13:25	
MET_ICP_6010B_FULL_DIS	05/07/2010 14:00	20	10/11/2010 13:25	water TAL + Mo
SMS_PAH_8270C_3510_LOW	05/07/2010 14:00	20	04/21/2010 13:25	
SMS_BNA_8270C_3510_REG	05/07/2010 14:00	20	04/21/2010 13:25	
SGC_DRO_8015B_3510	05/07/2010 14:00	20	04/21/2010 13:25	+MO
SGC_PCB8082A_3510	05/07/2010 14:00	20	04/21/2010 13:25	+ Aroclor-1262 & 1268
SGC_PEST8081A_3510	05/07/2010 14:00	20	04/21/2010 13:25	Tox LCS required
1004133-42 DP02-09004 [Solid] Sampled 04/14/2010 11:45 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 13:45	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 13:45	
1004133-43 DP02-09005 [Solid] Sampled 04/14/2010 11:50 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 13:50	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 13:50	
1004133-44 DP02-09006 [Solid] Sampled 04/14/2010 11:55 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 13:55	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 13:55	
1004133-45 DP02-09007 [Solid] Sampled 04/14/2010 12:00 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 14:00	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 14:00	
1004133-46 DP03-09008 [Solid] Sampled 04/14/2010 09:00 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 11:00	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 11:00	
1004133-47 DP03-09009 [Solid] Sampled 04/14/2010 09:05 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 11:05	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 11:05	
1004133-48 DP03-09010 [Solid] Sampled 04/14/2010 09:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 11:10	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 11:10	
1004133-49 DP03-09011 [Solid] Sampled 04/14/2010 09:15 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 11:15	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 11:15	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-50 DP03-09024 [Solid] Sampled 04/14/2010 15:00 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 17:00	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 17:00	
1004133-51 DP03-09025 [Solid] Sampled 04/14/2010 15:05 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 17:05	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 17:05	
1004133-52 DP03-09026 [Solid] Sampled 04/14/2010 15:10 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 17:10	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 17:10	
1004133-53 DP03-09027 [Solid] Sampled 04/14/2010 15:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 17:15	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 17:15	
1004133-54 DP03-59010 [Solid] Sampled 04/14/2010 09:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 11:10	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 11:10	
1004133-55 DP04-09028 [Solid] Sampled 04/14/2010 14:00 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 16:00	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 16:00	
1004133-56 DP04-09029 [Solid] Sampled 04/14/2010 14:05 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 16:05	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 16:05	
1004133-57 DP04-09030 [Solid] Sampled 04/14/2010 14:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 16:10	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 16:10	
1004133-58 DP04-09031 [Solid] Sampled 04/14/2010 14:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 16:15	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 16:15	
1004133-59 DP04-59030 [Solid] Sampled 04/14/2010 14:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 16:10	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 16:10	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004133-60 DP01-09152 [Solid] Sampled 04/15/2010 13:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 15:30	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:30	
1004133-61 DP01-09153 [Solid] Sampled 04/15/2010 13:33 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:33	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 15:33	
1004133-62 DP01-09154 [Solid] Sampled 04/15/2010 13:36 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 15:36	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:36	
1004133-63 DP01-09155 [Solid] Sampled 04/15/2010 13:39 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 15:39	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 15:39	
1004133-64 DP03-09160 [Solid] Sampled 04/15/2010 15:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 17:30	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:30	
1004133-65 DP03-09162 [Solid] Sampled 04/15/2010 15:30 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:30	
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 17:30	
1004133-66 DP03-09163 [Solid] Sampled 04/15/2010 15:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 17:30	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:30	
1004133-67 DP03-59160 [Solid] Sampled 04/15/2010 15:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/29/2010 17:30	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/22/2010 17:30	
1004133-68 DP03-09161 [Solid] Sampled 04/14/2010 15:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3546_LOW	05/07/2010 14:00	20	04/28/2010 17:30	
WC_PERCENT_SOLIDS_2540B	05/07/2010 14:00	20	04/21/2010 17:30	

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 4:17:52 PM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE / TIME / Matrix					
DP01-01012	4/15/2010 13:55 Soil		x	1004133-01	1	
DP01-01013	4/15/2010 14:00 Soil		x	-02	1	
DP01-01014	4/15/2010 14:05 Soil		x	-03	1	
DP01-01120	4/15/2010 13:35 Soil	x	x	-04	4	
DP01-01121	4/15/2010 13:40 Soil	x	x	-05	4	
DP01-01122	4/15/2010 13:45 Soil	x	x	-06	4	
DP01-51120	4/15/2010 14:30 Soil	x	x	-07	4	
DP02-01015	4/15/2010 15:05 Soil		x	-08	1	
DP02-01016	4/15/2010 15:10 Soil		x	-09	1	
DP02-01017	4/15/2010 15:15 Soil		x	-10	1	
DP04-01179	4/15/2010 15:30 Soil	x	x	-11	4	
DP04-01180	4/15/2010 15:35 Soil	x	x	-12	4	
DP04-01181	4/15/2010 15:40 Soil	x	x	-13	4	
DP04-51180	4/15/2010 15:35 Soil	x	x	-14	4	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/15/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

5.4°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 4:17:53 PM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP05-01024	4/15/2010 9:05 Soil		X	1004133-15	1	
DP05-01025	4/15/2010 9:10 Soil		X	-16	1	
DP05-01026	4/15/2010 9:15 Soil		X	-17	1	
DP05-01182	4/15/2010 10:20 Soil	X	X	-18	4	
DP05-01183	4/15/2010 10:25 Soil	X	X	-19	4	
DP05-01184	4/15/2010 10:35 Soil	X	X	-20	4	
DP06-01027	4/15/2010 9:45 Soil		X	-21	1	
DP06-01028	4/15/2010 9:50 Soil		X	-22	1	
DP06-01029	4/15/2010 9:55 Soil		X	-23	1	
DP06-01185	4/15/2010 11:40 Soil	X	X	-24	4	
DP06-01186	4/15/2010 11:50 Soil	X	X	-25	4	
DP06-01187	4/15/2010 12:00 Soil	X	X	-26	4	
DP07-01030	4/15/2010 10:25 Soil		X	-27	1	
DP07-01031	4/15/2010 10:30 Soil		X	-28	1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Franz	4/15/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

5.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/15/2010 4:17:53 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA Preservatives: 2XH2O, 1XMeOH, 4°C Filtered: NA Holding Time: 48HR VOCs (8260B/624)	Container: 1 x 40 ml VOA Preservatives: MeOH Filtered: NA Holding Time: 48HR TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP07-01032	4/15/2010	10:35	Soil		x	1004133-29	1	
DP07-51030	4/15/2010	10:25	Soil		x	-30	1	
DP08-01033	4/15/2010	11:15	Soil		x	-31	1	
DP08-01034	4/15/2010	11:20	Soil		x	-32	1	
DP08-01035	4/15/2010	11:25	Soil		x	-33	1	
						TOTAL NUMBER OF CONTAINERS	75	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jont	4/15/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

5.4°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CHAIN OF CUSTODY RECORD

4/15/2010 2:30:41 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-219	4/15/2010	7:45	Water	X	X	1004133.34	5	
TB-219	4/15/2010	7:45	Water	X	X	-35	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/15/10 1600
Received by		
Relinquished by		
Received by		4/16/10 08:20

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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5.42

CH2MHILL

CHAIN OF CUSTODY RECORD

4/15/2010 10:31:59 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510B

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
DATE	TIME	Matrix	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-219	4/15/2010	7:45	Water	x2	x2	1x	1004133-34 5	7	
							TOTAL NUMBER OF CONTAINERS	7	

	Signatures	Date/Time
Approved by		
Sampled by		4/15/10
Relinquished by	Jamie Ebby	1130
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 2:29:06 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-119 ✓	4/15/2010	7:40	Water	X	X	1004133 -36	5	
TB-119 ✓	4/15/2010	7:40	Water	X	X	-37	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/15/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 10:29:42 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510b

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	7	7	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-119	4/15/2010 7:40 Water	x 2	x 2	x 2	x 2	x 2	x 1	1004133 - 36 11	~~13~~ 11	
								TOTAL NUMBER OF CONTAINERS	~~13~~ 11	

	Signatures	Date/Time
Approved by		
Sampled by		4/15/10
Relinquished by	Tamara Jones	1130
Received by		
Relinquished by		
Received by	[illegible]	4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889922
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

5.4°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/15/2010 9:35:05 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510W

	DATE	TIME	Matrix	VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		
Preservatives:				HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4		
Filtered:				NA	NA	NA	NA	NA	NA	NA	NA		
Holding Time:				14	14	7	7	7	7	7	28		
DP01-01550 ✓	4/14/2010	15:00	Water	x ✓	x ✓	x 2 ✓		x 2 ✓			1 x	1004133-37-38	10	
DP01-01551 ✓	4/14/2010	16:10	Water	x ✓	x ✓	x 2		x 2			1 x	-38-39	10	
DP03-01501 ✓	4/14/2010	12:15	Water			2x	2x	2x	1 x	x	1 x	-40 B	~~13~~ 8	
DP03-51500 ✓	4/14/2010	11:25	Water			2x	2x	2x	1 x	x	1 x	-41 B	~~13~~ 8	
												TOTAL NUMBER OF CONTAINERS	46	

4/16/10 WS

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/16/10 08:30

5.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 9:20:57 AM* Page 1 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-01000	4/14/2010	10:30	Soil		X	X	X	X	X	1004127-01	5	
DP01-01001	4/14/2010	10:35	Soil		X	X	X	X	X	-02	5	
DP01-01002	4/14/2010	10:40	Soil		X	X	X	X	X	-03	5	
DP01-01170	4/14/2010	13:45	Soil			X			X	-04	2	
DP01-01171	4/14/2010	14:00	Soil			X			X	-05	2	
DP01-01172	4/14/2010	14:10	Soil			X			X	-06	2	
DP01-51000	4/14/2010	10:30	Soil		X	X	X	X	X	-07	5	
DP01-51170	4/14/2010	13:45	Soil			X			X	-08	2	
DP02-01003	4/14/2010	12:05	Soil		X	X	X	X	X	-09	5	
DP02-01004	4/14/2010	12:10	Soil		X	X	X	X	X	-10	5	
DP02-09004	4/14/2010	11:45	Soil	X						1004133-42	1	
DP02-09005	4/14/2010	11:50	Soil	X						-43	1	
DP02-09006	4/14/2010	11:55	Soil	X						-44	1	
DP02-09007	4/14/2010	12:00	Soil	X						-45	1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamora Jones	4/15/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/15/2010 9:20:58 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		
	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP03-01006	4/14/2010	9:40	Soil			X	X	X	X	1004127-11	4	
DP03-01007	4/14/2010	9:45	Soil		X		X	X		-12	3	
DP03-01008	4/14/2010	9:50	Soil		X	X	X	X	X	-13	5	
DP03-01018	4/14/2010	15:20	Soil		X	X	X	X	X	-14	5	
DP03-01019	4/14/2010	15:25	Soil		X	X	X	X	X	-15	5	
DP03-01020	4/14/2010	15:30	Soil		X	X	X	X	X	-16	5	
DP03-01176	4/14/2010	15:00	Soil			X			X	-17	2	
DP03-01177	4/14/2010	15:10	Soil			X			X	-18	2	
DP03-01178	4/14/2010	15:20	Soil			X			X	-19	2	
DP03-09008	4/14/2010	9:00	Soil	X						1004133-46	1	
DP03-09009	4/14/2010	9:05	Soil	X						-47	1	
DP03-09010	4/14/2010	9:10	Soil	X						-48	1	
DP03-09011	4/14/2010	9:15	Soil	X						-49	1	
DP03-09024	4/14/2010	15:00	Soil	X						-50	1	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jank	4/15/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/15/2010 9:20:58 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix							
DP03-09025	4/14/2010	15:05	Soil	X					1004133 ~~1004127~~ -51	1	
DP03-09026	4/14/2010	15:10	Soil	X					-52	1	
DP03-09027	4/14/2010	15:15	Soil	X					-53	1	
DP03-51020	4/14/2010	15:30	Soil		X	X	X	X	X	1004127-20	5	
DP03-59010	4/14/2010	9:10	Soil	X						1004133-54 ~~1004127~~ WS 4/16/10	1	
DP04-01009	4/14/2010	11:10	Soil		X	X	X	X	X	1004127-21	5	
DP04-01010	4/14/2010	11:15	Soil		X	X	X	X	X	-22	5	
DP04-01011	4/14/2010	11:20	Soil		X	X	X	X	X	-23	5	
DP04-01021 ✓	4/14/2010	14:20	Soil		X	X	X	X	X	-24	5	
DP04-01022 ✓	4/14/2010	14:25	Soil		X	X	X	X	X	-25	5	
DP04-01023 ✓	4/14/2010	14:30	Soil		X	X	X	X	X	-26	5	
DP04-09028 ✓	4/14/2010	14:00	Soil	X						1004133-55	1	
DP04-09029 ✓	4/14/2010	14:05	Soil	X						-56	1	
DP04-09030 ✓	4/14/2010	14:10	Soil	X						-57	1	

WS 4/16/10

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaia Jork	4/15/10 1100
Received by		
Relinquished by		
Received by		4/16/10 08:30 1.10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/15/2010 9:20:59 AM* Page 4 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/15/2010
COC Number: 41510

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-09031 ✓	4/14/2010 14:15 Soil	X						1004133-58	1	
DP04-51010	4/14/2010 11:15 Soil		X	X	X	X	X	1004127 - 27	5	
DP04-59030 ✓	4/14/2010 14:10 Soil	X						1004133-59	1	
DP01-09152	4/15/2010 13:30 Soil	X						-60	1	
DP01-09153	4/15/2010 13:33 Soil	X						-61	1	
DP01-09154	4/15/2010 13:36 Soil	X						-62	1	
DP01-09155	4/15/2010 13:39 Soil	X						-63	1	
DP03-09160	4/15/2010 15:30 Soil	X						-64	8	
DP03-09162	4/15/2010 15:30 Soil	X						-65	1	
DP03-09163	4/15/2010 15:30 Soil	X						-66	1	
DP03-59160	4/15/2010 15:30 Soil	X						-67	1	
								TOTAL NUMBER OF CONTAINERS	144	

	Signatures	Date/Time
Approved by		
Sampled by		4/15/10
Relinquished by		1/0
Received by		
Relinquished by		
Received by		4/16/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889911
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004127, 1004133 Number of Coolers: 1 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5027

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1°C

Dates samples were logged-in: **04/16/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaal (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/16/10	Yes	(No) *	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... WS 4/16/10	(Yes)	No *	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

If Non-Conformance issues were present, list by sample ID: _____

* - 1004133 only 1L amber broken in shipment CAR#: _____
for DP01-01550 + DP01-01551.

pH LL for all H2O metals

Received sample DP03-0916 that is not on COC. Passed as -68.

* For 1004133 only - no dry weight containers recd for all terracore samples sent in shipment (all on COC pages 01→03. samples 1004133-01→33).

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004127, 1004133 Number of Coolers: 2 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5016

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.4°C

~~Dates samples were logged in: 04/16/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See Page 1 of 7

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 3 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5976

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-2°C

Dates samples ~~were logged in~~: ~~04/16/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 4 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5038

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 2 Seal date: 4/15/10 Seal Initials: .

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.7°C

~~Dates samples were~~ logged-in: **04/16/10**

9. Initial this form to acknowledge login of sample(s). (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 5 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5049

2. Were custody seals on outside of cooler(s)? ..... (Yes) No ?

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-9°C

~~Dates samples were logged in:~~ **04/16/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 6 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 04/16/10 08:30 Date cooler(s) opened: 04/16/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9911

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.0°C

~~Dates samples were logged in:~~ ~~04/16/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 7

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 7 of 7

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/16/10 08:30** Date cooler(s) opened: **04/16/10**

Opened By (print): Will Schaub (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5050

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/15/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1 °C

~~Dates samples were logged in:~~ ~~04/16/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 7

CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:00:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix							
DP01-01012	4/15/2010	13:55	Soil		X	X	X	X	X	1004133-01	5	
DP01-01013	4/15/2010	14:00	Soil		X	X	X	X	X	-02	5	
DP01-01014	4/15/2010	14:05	Soil		X	X	X	X	X	-03	5	
DP01-01120	4/15/2010	13:35	Soil		X	X				-04	2	
DP01-01121	4/15/2010	13:40	Soil		X	X				-05	2	
DP01-01122	4/15/2010	13:45	Soil		X	X				-06	2	
DP01-09016	4/15/2010	13:35	Soil	X						1004141-01	1	
DP01-09017	4/15/2010	13:40	Soil	X						-02	1	
DP01-09018	4/15/2010	13:45	Soil	X						-03	1	
DP01-09019	4/15/2010	13:50	Soil	X						-04	1	
DP01-09084	4/15/2010	13:55	Soil	X						-05	1	
DP01-09085	4/15/2010	13:56	Soil	X						-06	1	
DP01-09086	4/15/2010	14:00	Soil	X						-07	1	
DP01-09087	4/15/2010	14:04	Soil	X						-08	1	

Signatures		Date/Time
Approved by		
Sampled by		4/16/10
Relinquished by	[signature]	1000
Received by		
Relinquished by	[signature]	4/17/10
Received by	[signature]	9ca

3.10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/16/2010 9:00:38 AM Page 2 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix								
DP01-51120	4/15/2010	14:30	Soil			X				1004141-09 SW8260B 4/19/10 1004133-03 4/19/10	1	
DP02-01015	4/15/2010	15:05	Soil		X	X	X	X	X	1004133-07 -08	5	
DP02-01016	4/15/2010	15:10	Soil		X	X	X	X	X	-08 -09	5	
DP02-01017	4/15/2010	15:15	Soil		X	X	X	X	X	-09 -10	5	
DP02-09020	4/15/2010	14:45	Soil	X						1004141-10	1	
DP02-09021	4/15/2010	14:50	Soil	X						-11	1	
DP02-09022	4/15/2010	14:55	Soil	X						-12	1	
DP02-09023	4/15/2010	15:00	Soil	X						-13	1	
DP02-59020	4/15/2010	14:45	Soil	X						-14	1	
DP04-01179	4/15/2010	15:30	Soil			X			X	1004133-11	2	
DP04-01180	4/15/2010	15:35	Soil			X			X	-12	2	
DP04-01181	4/15/2010	15:40	Soil			X			X	-13	2	
DP04-09164	4/15/2010	14:15	Soil	X						1004141-15	1	
DP04-09165	4/15/2010	14:20	Soil	X						-16	1	

Signatures		Date/Time
Approved by		
Sampled by	Tamara Jarvis	4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.1°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/16/2010 9:00:39 AM* Page 3 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix									
DP04-09166	4/15/2010 14:25 Soil	X						1004141-17	1	
DP04-09167	4/15/2010 14:30 Soil	X						-18	1	
DP04-51180	4/15/2010 15:35 Soil			X			X	1004133-14	2	
DP05-01024	4/15/2010 9:05 Soil			X				-15	1	
DP05-01025	4/15/2010 9:10 Soil			X				-16	1	
DP05-01026	4/15/2010 9:15 Soil			X				-17	1	
DP05-01182	4/15/2010 10:20 Soil			X			X	-18	2	
DP05-01183	4/15/2010 10:25 Soil			X			X	-19	2	
DP05-01184	4/15/2010 10:35 Soil			X			X	-20	2	
DP05-09168	4/15/2010 8:40 Soil	X						1004141-19	1	
DP05-09169	4/15/2010 8:43 Soil	X						-20	1	
DP05-09170	4/15/2010 8:45 Soil	X						-21	1	
DP05-09171	4/15/2010 8:48 Soil	X						-22	1	
DP05-59170	4/15/2010 8:45 Soil	X						-23	1	

Signatures		Date/Time
Approved by		
Sampled by		4/16/10
Relinquished by	[signature]	1000
Received by		
Relinquished by	[signature]	4/17/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.1°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:00:39 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
DP06-01027	4/15/2010 9:45 Soil			X				1	1004141-24 → 1004133-21
DP06-01028	4/15/2010 9:50 Soil			X				1	1004141-25 → -22
DP06-01029	4/15/2010 9:55 Soil			X				1	1004141-26 → -23
DP06-01185	4/15/2010 11:40 Soil			X			X	2	1004133-24 WS 4/19/10
DP06-01186	4/15/2010 11:50 Soil			X			X	2	1004133-25
DP06-01187	4/15/2010 12:00 Soil			X			X	2	1004133-26
DP06-09172	4/15/2010 11:20 Soil	X						1	1004141-27
DP06-09173	4/15/2010 11:23 Soil	X						1	1004141-28
DP06-09174	4/15/2010 11:28 Soil	X						1	1004141-29
DP06-09175	4/15/2010 11:30 Soil	X						1	1004141-30
DP07-01030	4/15/2010 10:25 Soil			X				1	1004133-27
DP07-01031	4/15/2010 10:30 Soil			X				1	1004133-28
DP07-01032	4/15/2010 10:35 Soil			X				1	1004133-29
DP07-51030	4/15/2010 10:25 Soil			X				1	1004133-30

Signatures		Date/Time
Approved by		
Sampled by		4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.10c

CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:00:40 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP08-01033 ✓	4/15/2010	11:15	Soil			X				1	
DP08-01034 ✓	4/15/2010	11:20	Soil			X				1	
DP08-01035 ✓	4/15/2010	11:25	Soil			X				1	
								TOTAL NUMBER OF CONTAINERS		96	

1004133-31
4/24/10 -36 -32
-37 -33

	Signatures	Date/Time
Approved by		
Sampled by	James Gore	4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00 3.10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 9900

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.2°C

Dates samples were logged-in: 4/19/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schmid (Initial): WS
10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... WS 4/19/10 (Yes) (No) N/A
12. Was all required bottle label information complete? ..... (Yes) No N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses requested? ..... (Yes) No N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

If Non-Conformance issues were present, list by sample ID: CAR#:

sample DPOG-SB12 rec'd + not on COC. Tagged as -77.

pH<2 for all metals (H_2O)

On 1004141 - All vials for TB-220 broken in shipment could not tag for GRO+VOC. Also same for EB-120 + TB-120, + EB-221

3 vials broken for TB-220.

No bulk jars rec'd with any teracore samples; could not tag for dry weight

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 6 of 6

Client: CH2m Hill Project: Alameda Pom 7

Date/Time Received: 4/7/10 902 Date cooler(s) opened: 4/7/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5954

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1c

Dates ~~samples were logged in~~:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID:

CAR#:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 2 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5710

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1°C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5921

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 4 of 6

Client: C H2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5947

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 5 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5932

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 6

Sonya Gordon

From: William Schwab [wschwab@empirlabs.com]
Sent: Tuesday, April 20, 2010 5:27 PM
To: 'RushForms'
Subject: 1004133 / 1004141!!!!

DRO has been added to the following samples within WO 1004133: -07, -21-->23, -27-->33.

NOTE DRY WEIGHT has been TAKEN OFF HOLD for these samples as well!!!

DRO and DRY WEIGHT have been REMOVED from samples 1004141-09, -24-->26, and -31-->37.

Analysts, there was a mixup and these samples were tagged to the work order 1004141 and should have been tagged to 1004133. Note to all analysts (for DRO and dry weight), there will be no bulk containers for 1004133-07, -21-->23 and -27-->33. The bulk containers are tagged as 1004141. What this means is that this is how you will look for the accurate containers:

1004141-09 bulk jars should be used to report as 1004133-07
1004141-24 bulk jars should be used to report as 1004133-21
1004141-25 bulk jars should be used to report as 1004133-22
1004141-26 bulk jars should be used to report as 1004133-23
1004141-31 bulk jars should be used to report as 1004133-27
1004141-32 bulk jars should be used to report as 1004133-28
1004141-33 bulk jars should be used to report as 1004133-29
1004141-34 bulk jars should be used to report as 1004133-30
1004141-35 bulk jars should be used to report as 1004133-31
1004141-36 bulk jars should be used to report as 1004133-32
1004141-37 bulk jars should be used to report as 1004133-33

Sorry for all this confusion, as this is the first Alameda to come in that slipped right past me :[Thanks Sonya for catching.

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 237 I Toll free: 877.345.1113 I Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Wednesday, April 21, 2010 1:18 PM
To: sgordon@empirlabs.com
Subject: RE: 1004133!

That should be analyzed for PAH SIM only. I thought I sent an email about this, but I can't find it.
I can always go pick up the ambers if they can't deliver them today.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Wednesday, April 21, 2010 11:10 AM
To: Frank, Tamara/BAO
Subject: FW: 1004133!

I just discovered that I never asked about sample DP03-09161 (what I have in bold below). Can you confirm if we need to analyze & what parameters are needed?

Also, I've got an order for 20 cases of ambers submitted... and this time I've asked for confirmation of the order being placed. I've requested delivery today if possible & tomorrow AM if not. I'll let you know what I hear about delivery.

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: William Schwab [mailto:wschwab@empirlabs.com]
Sent: Friday, April 16, 2010 3:19 PM
To: SGordon@EmpirLabs.com
Cc: rdavis@empirlabs.com
Subject: 1004133!

samples -01-->33 has had dry weight placed on hold due to no bulk jars received.

Sonya, one issue on this. **We received sample DP03-09161 that was not listed on COC. Tagged as -68 and DID NOT place on hold for PAH SIM and dry weight. Please verify if client would like to run this!**

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 237 I Toll free: 877.345.1113 I Fax: 615.846.5426

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Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

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1004141

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/17/2010 16:00 (20 day TAT)

Received By: William Schwab
Logged In By: William Schwab

Date Received: 04/17/2010 09:00 , 04/20/2010 08:30
Date Logged In: 04/20/2010 09:30

Samples Received at: **2.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments

1004141-09 DP01-51120 [Solid] Sampled 04/15/2010 14:30 Pacific

[NO ANALYSES]

1004141-24 DP06-01027 [Solid] Sampled 04/15/2010 09:45 Pacific

[NO ANALYSES]

1004141-25 DP06-01028 [Solid] Sampled 04/15/2010 09:50 Pacific

[NO ANALYSES]

1004141-26 DP06-01029 [Solid] Sampled 04/15/2010 09:55 Pacific

[NO ANALYSES]

1004141-31 DP07-01030 [Solid] Sampled 04/15/2010 10:25 Pacific

[NO ANALYSES]

1004141-32 DP07-01031 [Solid] Sampled 04/15/2010 10:30 Pacific

[NO ANALYSES]

1004141-33 DP07-01032 [Solid] Sampled 04/15/2010 10:35 Pacific

[NO ANALYSES]

1004141-34 DP07-51030 [Solid] Sampled 04/15/2010 10:25 Pacific

[NO ANALYSES]

1004141-35 DP08-01033 [Solid] Sampled 04/15/2010 11:15 Pacific

[NO ANALYSES]

1004141

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004141-36 DP08-01034 [Solid] Sampled 04/15/2010 11:20 Pacific				
[NO ANALYSES]				
1004141-37 DP08-01035 [Solid] Sampled 04/15/2010 11:25 Pacific				
[NO ANALYSES]				
1004141-77 TB-320 [Water] Sampled 04/16/2010 07:40 Pacific				
[NO ANALYSES]				
1004141-81 TB-120 [Water] Sampled 04/16/2010 07:35 Pacific				
[NO ANALYSES]				
1004141-01 DP01-09016 [Solid] Sampled 04/15/2010 13:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 15:35	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 15:35	
1004141-02 DP01-09017 [Solid] Sampled 04/15/2010 13:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 15:40	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 15:40	
1004141-03 DP01-09018 [Solid] Sampled 04/15/2010 13:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 15:45	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 15:45	
1004141-04 DP01-09019 [Solid] Sampled 04/15/2010 13:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 15:50	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 15:50	
1004141-05 DP01-09084 [Solid] Sampled 04/15/2010 13:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 15:55	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 15:55	
1004141-06 DP01-09085 [Solid] Sampled 04/15/2010 13:56 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 15:56	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 15:56	
1004141-07 DP01-09086 [Solid] Sampled 04/15/2010 14:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:00	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:00	

1004141

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004141-08 DP01-09087 [Solid] Sampled 04/15/2010 14:04 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:04	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:04	
1004141-10 DP02-09020 [Solid] Sampled 04/15/2010 14:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:45	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:45	
1004141-11 DP02-09021 [Solid] Sampled 04/15/2010 14:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:50	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:50	
1004141-12 DP02-09022 [Solid] Sampled 04/15/2010 14:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:55	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:55	
1004141-13 DP02-09023 [Solid] Sampled 04/15/2010 15:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 17:00	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 17:00	
1004141-14 DP02-59020 [Solid] Sampled 04/15/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:45	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:45	
1004141-15 DP04-09164 [Solid] Sampled 04/15/2010 14:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:15	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:15	
1004141-16 DP04-09165 [Solid] Sampled 04/15/2010 14:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:20	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:20	
1004141-17 DP04-09166 [Solid] Sampled 04/15/2010 14:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:25	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:25	
1004141-18 DP04-09167 [Solid] Sampled 04/15/2010 14:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 16:30	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 16:30	

1004141

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004141-19 DP05-09168 [Solid] Sampled 04/15/2010 08:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 10:40	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 10:40	
1004141-20 DP05-09169 [Solid] Sampled 04/15/2010 08:43 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 10:43	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 10:43	
1004141-21 DP05-09170 [Solid] Sampled 04/15/2010 08:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 10:45	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 10:45	
1004141-22 DP05-09171 [Solid] Sampled 04/15/2010 08:48 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 10:48	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 10:48	
1004141-23 DP05-59170 [Solid] Sampled 04/15/2010 08:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 10:45	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 10:45	
1004141-27 DP06-09172 [Solid] Sampled 04/15/2010 11:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 13:20	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 13:20	
1004141-28 DP06-09173 [Solid] Sampled 04/15/2010 11:23 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 13:23	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 13:23	
1004141-29 DP06-09174 [Solid] Sampled 04/15/2010 11:28 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 13:28	
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 13:28	
1004141-30 DP06-09175 [Solid] Sampled 04/15/2010 11:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/10/2010 14:00	20	04/29/2010 13:30	
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/22/2010 13:30	
1004141-38 DP01-01036 [Solid] Sampled 04/16/2010 09:50 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 11:50	LOW VOLUME, ONLY 1 VIAL!!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 11:50	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 11:50	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004141-39 DP01-01037 [Solid] Sampled 04/16/2010 09:55 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 11:55	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 11:55	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 11:55	
1004141-40 DP01-01038 [Solid] Sampled 04/16/2010 10:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:00	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:00	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:00	+MO
1004141-41 DP02-01039 [Solid] Sampled 04/16/2010 11:20 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:20	+MO
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:20	LOW VOLUME, ONLY 1 VIAL!!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:20	
1004141-42 DP02-01040 [Solid] Sampled 04/16/2010 11:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:25	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:25	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:25	+MO
1004141-43 DP02-01041 [Solid] Sampled 04/16/2010 11:30 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:30	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:30	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:30	
1004141-44 DP02-01123 [Solid] Sampled 04/16/2010 09:20 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 11:20	
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 11:20	AP VIALS
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 11:20	+MO. LOW VOLUME!!
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 11:20	LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 11:20	AP VIALS
1004141-45 DP02-01124 [Solid] Sampled 04/16/2010 09:28 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 11:28	AP VIALS
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 11:28	AP VIALS
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 11:28	LOW VOLUME!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 11:28	+MO. LOW VOLUME!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 11:28	

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Analysis	Due	TAT	Expires	Comments
1004141-46 DP02-01125 [Solid] Sampled 04/16/2010 09:30 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 11:30	+MO. LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 11:30	AP VIALS
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 11:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 11:30	
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 11:30	LOW VOLUME!!
1004141-47 DP02-51040 [Solid] Sampled 04/16/2010 11:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:25	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:25	+MO
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:25	LOW VOLUME, ONLY 1 VIAL!!!
1004141-48 DP03-01042 [Solid] Sampled 04/16/2010 11:45 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:45	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:45	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:45	+MO
1004141-49 DP03-01043 [Solid] Sampled 04/16/2010 11:50 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:50	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:50	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:50	
1004141-50 DP03-01044 [Solid] Sampled 04/16/2010 11:55 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 13:55	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 13:55	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 13:55	+MO
1004141-51 DP03-01126 [Solid] Sampled 04/16/2010 10:20 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:20	
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 12:20	AP VIALS
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:20	AP VIALS
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 12:20	LOW VOLUME!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:20	+MO. LOW VOLUME!!
1004141-52 DP03-01127 [Solid] Sampled 04/16/2010 10:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:25	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:25	+MO. LOW VOLUME!!
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 12:25	LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:25	AP VIALS
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 12:25	AP VIALS

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Analysis	Due	TAT	Expires	Comments
1004141-53 DP03-01128 [Solid] Sampled 04/16/2010 10:30 Pacific				**QSM4.1**
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 12:30	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:30	
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 12:30	LOW VOLUME!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:30	+MO. LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:30	AP VIALS
1004141-54 DP04-01045 [Solid] Sampled 04/16/2010 10:45 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:45	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:45	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:45	
1004141-55 DP04-01046 [Solid] Sampled 04/16/2010 10:50 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:50	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:50	+MO
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:50	LOW VOLUME, ONLY 1 VIAL!!!
1004141-56 DP04-01047 [Solid] Sampled 04/16/2010 10:55 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 12:55	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 12:55	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 12:55	+MO
1004141-57 DP04-01129 [Solid] Sampled 04/16/2010 13:30 Pacific				**QSM4.1**
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 15:30	AP VIALS
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 15:30	AP VIALS
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 15:30	+MO. LOW VOLUME!!
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 15:30	LOW VOLUME!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 15:30	
1004141-58 DP04-01130 [Solid] Sampled 04/16/2010 13:35 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 15:35	LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 15:35	AP VIALS
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 15:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 15:35	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 15:35	+MO. LOW VOLUME!!

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Analysis	Due	TAT	Expires	Comments
1004141-59 DP04-01131 [Solid] Sampled 04/16/2010 13:45 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 15:45	LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 15:45	AP VIALS
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 15:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 15:45	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 15:45	+MO. LOW VOLUME!!
1004141-60 DP04-51130 [Solid] Sampled 04/16/2010 13:35 Pacific				**QSM4.1**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 15:35	AP VIALS
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 15:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 15:35	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 15:35	+MO. LOW VOLUME!!
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 15:35	LOW VOLUME!!
1004141-61 DP05-01132 [Solid] Sampled 04/16/2010 15:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:00	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:00	+MO. LOW VOLUME!!
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 17:00	AP VIALS
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:00	AP VIALS
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 17:00	LOW VOLUME!!
1004141-62 DP05-01133 [Solid] Sampled 04/16/2010 15:10 Pacific				**QSM4.1**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:10	AP VIALS
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 17:10	AP VIALS
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:10	+MO. LOW VOLUME!!
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 17:10	LOW VOLUME!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:10	
1004141-63 DP05-01134 [Solid] Sampled 04/16/2010 15:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:15	
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 17:15	AP VIALS
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:15	+MO. LOW VOLUME!!
SMS_BNA_8270C_3546_REG	05/10/2010 14:00	20	04/30/2010 17:15	LOW VOLUME!!
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:15	AP VIALS
1004141-64 DP09-01060 [Solid] Sampled 04/16/2010 14:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 16:25	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 16:25	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 16:25	+MO

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Analysis	Due	TAT	Expires	Comments
1004141-65 DP09-01061 [Solid] Sampled 04/16/2010 14:30 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 16:30	LOW VOLUME, ONLY 1 VIAL!!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 16:30	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 16:30	+MO
1004141-66 DP10-01063 [Solid] Sampled 04/16/2010 13:50 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 15:50	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 15:50	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 15:50	
1004141-67 DP10-01064 [Solid] Sampled 04/16/2010 13:55 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 15:55	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 15:55	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 15:55	LOW VOLUME, ONLY 1 VIAL!!!
1004141-68 DP11-01066 [Solid] Sampled 04/16/2010 15:25 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:25	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:25	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:25	+MO
1004141-69 DP11-01067 [Solid] Sampled 04/16/2010 15:30 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:30	+MO
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:30	LOW VOLUME, ONLY 1 VIAL!!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:30	
1004141-70 DP12-01069 [Solid] Sampled 04/16/2010 15:05 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:05	LOW VOLUME, ONLY 1 VIAL!!!
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:05	+MO
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:05	
1004141-71 DP12-01070 [Solid] Sampled 04/16/2010 15:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:10	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:10	+MO
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:10	LOW VOLUME, ONLY 1 VIAL!!!
1004141-72 DP12-51070 [Solid] Sampled 04/16/2010 15:10 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 17:10	+MO
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 17:10	LOW VOLUME, ONLY 1 VIAL!!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 17:10	

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Analysis	Due	TAT	Expires	Comments
1004141-73 DP09-51060 [Solid] Sampled 04/16/2010 14:25 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 16:25	LOW VOLUME, ONLY 1 VIAL!!!
WC_PERCENT_SOLIDS_2540B	05/10/2010 14:00	20	04/23/2010 16:25	
SGC_DRO_8015B_3546	05/10/2010 14:00	20	04/30/2010 16:25	+MO
1004141-74 EB-319 [Water] Sampled 04/15/2010 13:55 Pacific				**QSM4.1.**
SGC_DRO_8015B_3510	05/10/2010 14:00	20	04/22/2010 15:55	+MO
MET_ICP_6010B_FULL	05/10/2010 14:00	20	10/12/2010 15:55	water TAL + Mo
VGC_GRO_8015B	05/10/2010 14:00	20	04/29/2010 15:55	
SMS_PAH_8270C_3510_LOW	05/10/2010 14:00	20	04/22/2010 15:55	
VOC_8260B_AP9	05/10/2010 14:00	20	04/29/2010 15:55	
MET_7470_MERCURY	05/10/2010 14:00	20	05/13/2010 15:55	
1004141-75 TB-319 [Water] Sampled 04/15/2010 13:55 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/10/2010 14:00	20	04/29/2010 15:55	
VGC_GRO_8015B	05/10/2010 14:00	20	04/29/2010 15:55	
1004141-76 EB-320 [Water] Sampled 04/16/2010 07:40 Pacific				**QSM4.1.**
MET_ICP_6010B_FULL	05/10/2010 14:00	20	10/13/2010 09:40	water TAL + Mo
SGC_DRO_8015B_3510	05/10/2010 14:00	20	04/23/2010 09:40	+MO
SMS_BNA_8270C_3510_REG	05/10/2010 14:00	20	04/23/2010 09:40	
SMS_PAH_8270C_3510_LOW	05/10/2010 14:00	20	04/23/2010 09:40	
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 09:40	
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 09:40	
MET_7470_MERCURY	05/10/2010 14:00	20	05/14/2010 09:40	
1004141-78 DP05-01558 [Water] Sampled 04/15/2010 13:55 Pacific				**QSM4.1.**
MET_7470_DIS_MERCURY	05/10/2010 14:00	20	05/13/2010 15:55	
VOC_8260B_AP9	05/10/2010 14:00	20	04/29/2010 15:55	
VGC_GRO_8015B	05/10/2010 14:00	20	04/29/2010 15:55	
SMS_PAH_8270C_3510_LOW	05/10/2010 14:00	20	04/22/2010 15:55	
MET_ICP_6010B_FULL_DIS	05/10/2010 14:00	20	10/12/2010 15:55	water TAL + Mo
SGC_DRO_8015B_3510	05/10/2010 14:00	20	04/22/2010 15:55	+MO

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Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004141-79 DP05-01559 [Water] Sampled 04/15/2010 14:45 Pacific				**QSM4.1.**
MET_ICP_6010B_FULL_DIS	05/10/2010 14:00	20	10/12/2010 16:45	water TAL + Mo
MET_7470_DIS_MERCURY	05/10/2010 14:00	20	05/13/2010 16:45	
SMS_PAH_8270C_3510_LOW	05/10/2010 14:00	20	04/22/2010 16:45	
VGC_GRO_8015B	05/10/2010 14:00	20	04/29/2010 16:45	
VOC_8260B_AP9	05/10/2010 14:00	20	04/29/2010 16:45	
SGC_DRO_8015B_3510	05/10/2010 14:00	20	04/22/2010 16:45	+MO
1004141-80 EB-120 [Water] Sampled 04/16/2010 07:35 Pacific				**QSM4.1. ALL VIALS BROKEN IN SHIPMENT**
MET_7470_MERCURY	05/10/2010 14:00	20	05/14/2010 09:35	
SGC_DRO_8015B_3510	05/10/2010 14:00	20	04/23/2010 09:35	+MO
SMS_PAH_8270C_3510_LOW	05/10/2010 14:00	20	04/23/2010 09:35	
MET_ICP_6010B_FULL	05/10/2010 14:00	20	10/13/2010 09:35	water TAL + Mo
1004141-82 EB-220 [Water] Sampled 04/16/2010 07:30 Pacific				**QSM4.1. ALL VIALS BROKEN IN SHIPMENT**
MET_ICP_6010B_FULL	05/10/2010 14:00	20	10/13/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	05/10/2010 14:00	20	04/23/2010 09:30	+MO
SMS_PAH_8270C_3510_LOW	05/10/2010 14:00	20	04/23/2010 09:30	
MET_7470_MERCURY	05/10/2010 14:00	20	05/14/2010 09:30	
1004141-83 TB-220 [Water] Sampled 04/16/2010 07:30 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/10/2010 14:00	20	04/30/2010 09:30	LOW VOLUME ONLY 1 VIAL!!!
VOC_8260B_AP9	05/10/2010 14:00	20	04/30/2010 09:30	LOW VOLUME ONLY 1 VIAL!!!

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:00:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix							
DP01-01012	4/15/2010	13:55	Soil		X	X	X	X	X	1004133-01	5	
DP01-01013	4/15/2010	14:00	Soil		X	X	X	X	X	-02	5	
DP01-01014	4/15/2010	14:05	Soil		X	X	X	X	X	-03	5	
DP01-01120	4/15/2010	13:35	Soil		X	X				-04	2	
DP01-01121	4/15/2010	13:40	Soil		X	X				-05	2	
DP01-01122	4/15/2010	13:45	Soil		X	X				-06	2	
DP01-09016	4/15/2010	13:35	Soil	X						1004141-01	1	
DP01-09017	4/15/2010	13:40	Soil	X						-02	1	
DP01-09018	4/15/2010	13:45	Soil	X						-03	1	
DP01-09019	4/15/2010	13:50	Soil	X						-04	1	
DP01-09084	4/15/2010	13:55	Soil	X						-05	1	
DP01-09085	4/15/2010	13:56	Soil	X						-06	1	
DP01-09086	4/15/2010	14:00	Soil	X						-07	1	
DP01-09087	4/15/2010	14:04	Soil	X						-08	1	

Signatures		Date/Time
Approved by		
Sampled by		4/16/10
Relinquished by	[signature]	1000
Received by		
Relinquished by	[signature]	4/17/10
Received by	[signature]	9ca

3.10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/16/2010 9:00:38 AM Page 2 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix								
DP01-51120	4/15/2010	14:30	Soil			X				1004141-09 SW8260B 4/19/10 1004133-03 4/19/10	1	
DP02-01015	4/15/2010	15:05	Soil		X	X	X	X	X	1004133-07 -08	5	
DP02-01016	4/15/2010	15:10	Soil		X	X	X	X	X	-08 -09	5	
DP02-01017	4/15/2010	15:15	Soil		X	X	X	X	X	-09 -10	5	
DP02-09020	4/15/2010	14:45	Soil	X						1004141-10	1	
DP02-09021	4/15/2010	14:50	Soil	X						-11	1	
DP02-09022	4/15/2010	14:55	Soil	X						-12	1	
DP02-09023	4/15/2010	15:00	Soil	X						-13	1	
DP02-59020	4/15/2010	14:45	Soil	X						-14	1	
DP04-01179	4/15/2010	15:30	Soil			X			X	1004133-11	2	
DP04-01180	4/15/2010	15:35	Soil			X			X	-12	2	
DP04-01181	4/15/2010	15:40	Soil			X			X	-13	2	
DP04-09164	4/15/2010	14:15	Soil	X						1004141-15	1	
DP04-09165	4/15/2010	14:20	Soil	X						-16	1	

Signatures		Date/Time
Approved by		
Sampled by	Tamara Jarvis	4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/16/2010 9:00:39 AM* Page 3 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix									
DP04-09166	4/15/2010 14:25 Soil	X						1004141-17	1	
DP04-09167	4/15/2010 14:30 Soil	X						-18	1	
DP04-51180	4/15/2010 15:35 Soil			X			X	1004133-14	2	
DP05-01024	4/15/2010 9:05 Soil			X				-15	1	
DP05-01025	4/15/2010 9:10 Soil			X				-16	1	
DP05-01026	4/15/2010 9:15 Soil			X				-17	1	
DP05-01182	4/15/2010 10:20 Soil			X			X	-18	2	
DP05-01183	4/15/2010 10:25 Soil			X			X	-19	2	
DP05-01184	4/15/2010 10:35 Soil			X			X	-20	2	
DP05-09168	4/15/2010 8:40 Soil	X						1004141-19	1	
DP05-09169	4/15/2010 8:43 Soil	X						-20	1	
DP05-09170	4/15/2010 8:45 Soil	X						-21	1	
DP05-09171	4/15/2010 8:48 Soil	X						-22	1	
DP05-59170	4/15/2010 8:45 Soil	X						-23	1	

Signatures		Date/Time
Approved by		
Sampled by		4/16/10
Relinquished by	[signature]	1000
Received by		
Relinquished by	[signature]	4/17/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:00:39 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
DP06-01027	4/15/2010 9:45 Soil			X				1	1004141-24 → 1004133-21
DP06-01028	4/15/2010 9:50 Soil			X				1	1004141-25 → -22
DP06-01029	4/15/2010 9:55 Soil			X				1	1004141-26 → -23
DP06-01185	4/15/2010 11:40 Soil			X			X	2	1004133-24 WS 4/19/10
DP06-01186	4/15/2010 11:50 Soil			X			X	2	1004133-25
DP06-01187	4/15/2010 12:00 Soil			X			X	2	1004133-26
DP06-09172	4/15/2010 11:20 Soil	X						1	1004141-27
DP06-09173	4/15/2010 11:23 Soil	X						1	1004141-28
DP06-09174	4/15/2010 11:28 Soil	X						1	1004141-29
DP06-09175	4/15/2010 11:30 Soil	X						1	1004141-30
DP07-01030	4/15/2010 10:25 Soil			X				1	1004133-27
DP07-01031	4/15/2010 10:30 Soil			X				1	1004133-28
DP07-01032	4/15/2010 10:35 Soil			X				1	1004133-29
DP07-51030	4/15/2010 10:25 Soil			X				1	1004133-30

Signatures		Date/Time
Approved by		
Sampled by		4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:00:40 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP08-01033 ✓	4/15/2010	11:15	Soil			X				1	
DP08-01034 ✓	4/15/2010	11:20	Soil			X				1	
DP08-01035 ✓	4/15/2010	11:25	Soil			X				1	
								TOTAL NUMBER OF CONTAINERS		96	

1004133-31
4/24/10 -36 -32
-37 -33

	Signatures	Date/Time
Approved by		
Sampled by	James Gore	4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00 3.10C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/16/2010 4:04:58 PM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP01-01036	4/16/2010	9:50	Soil		X	1004141-38	1	
DP01-01037	4/16/2010	9:55	Soil		X	-39	1	
DP01-01038	4/16/2010	10:00	Soil		X	-40	1	
DP02-01039	4/16/2010	11:20	Soil		X	-41	1	
DP02-01040	4/16/2010	11:25	Soil		X	-42	1	
DP02-01041	4/16/2010	11:30	Soil		X	-43	1	
DP02-01123	4/16/2010	9:20	Soil	X	X	-44	4	
DP02-01124	4/16/2010	9:28	Soil	X	X	-45	4	
DP02-01125	4/16/2010	9:30	Soil	X	X	-46	4	
DP02-51040	4/16/2010	11:25	Soil		X	-47	1	
DP03-01042	4/16/2010	11:45	Soil		X	-48	1	
DP03-01043	4/16/2010	11:50	Soil		X	-49	1	
DP03-01044	4/16/2010	11:55	Soil		X	-50	1	
DP03-01126	4/16/2010	10:20	Soil	X	X	-51	4	

	Signatures	Date/Time
Approved by		
Sampled by		4/16/10
Relinquished by	Jamie Eby	1600
Received by		
Relinquished by		
Received by		4/17/10 09:20

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: 2XH2O, 1XMeOH, 4°C; Filtered: NA; Holding Time: 48HR — VOCs (8260B/624)	Container: 1 x 40 ml VOA; Preservatives: MeOH; Filtered: NA; Holding Time: 48HR — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP03-01127	4/16/2010	10:25	Soil	X	X	1004141-52	4	
DP03-01128	4/16/2010	10:30	Soil	X	X	-53	4	
DP04-01045	4/16/2010	10:45	Soil		X	-54	1	
DP04-01046	4/16/2010	10:50	Soil		X	-55	1	
DP04-01047	4/16/2010	10:55	Soil		X	-56	1	
DP04-01129	4/16/2010	13:30	Soil	X	X	-57	4	
DP04-01130	4/16/2010	13:35	Soil	X	X	-58	4	
DP04-01131	4/16/2010	13:45	Soil	X	X	-59	4	
DP04-51130	4/16/2010	13:35	Soil	X	X	-60	4	
DP05-01132	4/16/2010	15:00	Soil	X	X	-61	4	
DP05-01133	4/16/2010	15:10	Soil	X	X	-62	4	
DP05-01134	4/16/2010	15:15	Soil	X	X	-63	4	
DP09-01060	4/16/2010	14:25	Soil		X	-64	1	
DP09-01061	4/16/2010	14:30	Soil		X	-65	1	

	Signatures	Date/Time
Approved by		
Sampled by	James Jack	4/16/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/16/2010 4:04:59 PM* Page 3 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP10-01063	4/16/2010	13:50	Soil		X	1004141-66	1	
DP10-01064	4/16/2010	13:55	Soil		X	-67	1	
DP11-01066	4/16/2010	15:25	Soil		X	-68	1	
DP11-01067	4/16/2010	15:30	Soil		X	-69	1	
DP12-01069	4/16/2010	15:05	Soil		X	-70	1	
DP12-01070	4/16/2010	15:10	Soil		X	-71	1	
DP12-51070	4/16/2010	15:10	Soil		X	-72	1	
						TOTAL NUMBER OF CONTAINERS	74	

	Signatures	Date/Time
Approved by		
Sampled by	James Ward	4/16/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:55:18 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly	2x1L Amber
	Preservatives:	HCl	HCl	4°C	4°C	HNO4	4°C
	Filtered:	NA	NA	NA	NA	NA	
	Holding Time:	14	14	7	7	28	
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)	

CMC 04/16/10

8270C

LS 4/19/10

	DATE	TIME	Matrix							Number of Containers	COMMENTS
EB-319	4/15/2010	13:55	Water	x ✓	x ✓	x ✓	x ✓	x ✓		12	
TB-319	4/15/2010	13:55	Water	x ✓	x ✓					5	
EB-320	4/16/2010	7:40	Water			x ✓	x ✓	x ✓	X ✓	7	
TB-320	4/16/2010	7:40	Water	x ✓	x ✓					5	
									TOTAL NUMBER OF CONTAINERS	29	

1004141 -73 -74
-77 -75
-78 -76
-79 -77

	Signatures	Date/Time
Approved by		4/16/10
Sampled by		
Relinquished by	James Ford	1100
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 9:58:14 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP05-01558	4/15/2010 13:55 Water	X	X	X	X	X	1004141-78	10	
DP05-01559	4/15/2010 14:45 Water	X	X	X	X	X	-79	10	
							TOTAL NUMBER OF CONTAINERS	20	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Front	4/16/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.1°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 4:07:32 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610P

	Container:	2 x 40 ml VOA
	Preservatives:	HCl
	Filtered:	NA
	Holding Time:	14

	DATE	TIME	Matrix	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-120	4/16/2010	7:35	Water	X	1004141-80	2	
TB-120	4/16/2010	7:35	Water	X	-81	2	
					TOTAL NUMBER OF CONTAINERS	4	

9/ 2.2°C

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/16/10
Relinquished by		1600
Received by		
Relinquished by		9:00
Received by		4/17/10

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/16/2010 9:52:20 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610W

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-120	4/16/2010 7:35 Water	X	X	X	1004141-80	7	
					TOTAL NUMBER OF CONTAINERS	7	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/16/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.20C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/16/2010 2:56:15 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-220	4/16/2010	7:30	Water	X	X	1004141-82	5	
TB-220	4/16/2010	7:30	Water	X	X	-83	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/16/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/17/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/16/2010 9:53:55 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/16/2010
COC Number: 41610W

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-220	4/16/2010 7:30 Water	X	X	X		7	
					TOTAL NUMBER OF CONTAINERS	7	

	Signatures	Date/Time
Approved by		
Sampled by		4/16/10
Relinquished by		1100
Received by		
Relinquished by		4/17/10
Received by		900

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889900
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.3°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 1 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 9900

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.2°C

Dates samples were logged-in: 4/19/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schmid (Initial): WS
10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... WS 4/19/10 (Yes) (No) N/A
12. Was all required bottle label information complete? ..... (Yes) No N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses requested? ..... (Yes) No N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

If Non-Conformance issues were present, list by sample ID: CAR#:

sample DP09-SS02 rec'd + not on COC. Tagged as -77.

pH<2 for all metals (H_2O)

On 1004141 - All vials for TB-320 broken in shipment. Could not tag for GRO+VOC. Also same for EB-120 + TB-120, + EB-221

3 vials broken for TB-220.

No bulk jars rec'd with any teracore samples; could not tag for dry weight

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 6 of 6

Client: CH2m Hill Project: Alameda Pom 7

Date/Time Received: 4/7/10 902 Date cooler(s) opened: 4/7/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5954

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1c

Dates ~~samples were logged in~~:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID:

CAR#:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 2 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5710

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1°C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 3 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5921

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 4 of 6

Client: C H2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5947

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4°C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004133 Number of Coolers: 5 of 6

Client: CH2M Hill Project: Alameda Pom 7

Date/Time Received: 4/17/10 09:00 Date cooler(s) opened: 4/17/10

Opened By (print): Frank River (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other:

If applicable, enter airbill number here: 5932

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/16/10 Seal Initials:

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): (Initial):
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID:

CAR#:

See page 1 of 6

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:35:04 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar
	Preservatives:	MeOH	4°C	4°C	4°C
	Filtered:	NA	NA	NA	NA
	Holding Time:	48HR	14	14	14
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)

	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP01-01036	4/16/2010	9:50	Soil				x ✓	1004141-38 ~~1004152-01~~ SMG 4/21/10	1	
DP01-01037	4/16/2010	9:55	Soil				x ✓	-39 -02	1	
DP01-01038	4/16/2010	10:00	Soil				x ✓	-40 -03	1	
DP02-01039	4/16/2010	11:20	Soil				x ✓	-41 -04	1	
DP02-01040	4/16/2010	11:25	Soil				x ✓	-42 -05	1	
DP02-01041	4/16/2010	11:30	Soil				x ✓	-43 ✓ -06	1	
DP02-01123	4/16/2010	9:20	Soil			x ✓	x ✓	1004141-44	2	
DP02-01124	4/16/2010	9:28	Soil			x ✓	x ✓	-45	2	
DP02-01125	4/16/2010	9:30	Soil			x ✓	x ✓	-46	2	
DP02-09088	4/16/2010	8:55	Soil		x ✓			1004152-07	1	
DP02-09089	4/16/2010	9:00	Soil		x ✓			-08	1	
DP02-09090	4/16/2010	9:05	Soil		x ✓			-09	1	
DP02-09091	4/16/2010	9:10	Soil		x ✓			-10	1	
DP02-51040	4/16/2010	11:25	Soil				x ✓	1004141-47 ✓ ~~-11~~ SMG 4/21/10	1	

Signatures		Date/Time
Approved by		
Sampled by		4/19/10 1130
Relinquished by		
Received by		
Relinquished by		4/20/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-8°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:35:05 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar		
	Preservatives:	MeOH	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	48HR	14	14	14		
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Number of Containers	COMMENTS
DP02-59090	4/16/2010 9:05 Soil		x ✓			1	
DP03-01042	4/16/2010 11:45 Soil				x ✓	1	
DP03-01043	4/16/2010 11:50 Soil				x ✓	1	
DP03-01044	4/16/2010 11:55 Soil				x ✓	1	
DP03-01126	4/16/2010 10:20 Soil			x ✓	x ✓	2	
DP03-01127	4/16/2010 10:25 Soil			x ✓	x ✓	2	
DP03-01128	4/16/2010 10:30 Soil			x ✓	x ✓	2	
DP03-09092	4/16/2010 10:05 Soil		x ✓			1	
DP03-09093	4/16/2010 10:05 Soil		x ✓			1	
DP03-09094	4/16/2010 10:03 Soil		x ✓			1	
DP03-09095	4/16/2010 10:05 Soil		x ✓			1	
DP04-01045	4/16/2010 10:45 Soil				x ✓	1	
DP04-01046	4/16/2010 10:50 Soil				x ✓	1	
DP04-01047	4/16/2010 10:55 Soil				x ✓	1	

1004152-12
1004141-48 ~~-13~~ SMD 4/22/10
-49 ~~-14~~
-50 ~~-15~~
1004141-51
-52
-53
1004152-16
-17
-18
-19
1004141-54 ~~-20~~ SMD 4/22/10
-55 -21
~~-56~~ ~~-22~~

Signatures	Date/Time
Approved by	
Sampled by	4/19/10
Relinquished by	1130
Received by	
Relinquished by	4/20/10 08:30
Received by	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.8°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 8:35:05 AM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar				
	Preservatives:	MeOH	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA				
	Holding Time:	48HR	14	14	14				
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)			Number of Containers	COMMENTS
	DATE / TIME / Matrix								
DP04-01129	4/16/2010 13:30 Soil			x ✓	x ✓	1004141-57		2	
DP04-01130	4/16/2010 13:35 Soil			x ✓	x ✓		-58	2	
DP04-01131	4/16/2010 13:45 Soil			x ✓	x ✓		-59	2	
DP04-09096	4/16/2010 13:00 Soil		x ✓			1004152-23		1	
DP04-09097	4/16/2010 13:03 Soil		x ✓				-24	1	
DP04-09098	4/16/2010 13:05 Soil		x ✓				-25	1	
DP04-09099	4/16/2010 13:07 Soil		x ✓				-26	1	
DP04-51130	4/16/2010 13:35 Soil			x ✓	x ✓	1004141-60		2	
DP05-01132	4/16/2010 15:00 Soil			x ✓	x ✓		-61	2	
DP05-01133	4/16/2010 15:10 Soil			x ✓	x ✓		-62	2	
DP05-01134	4/16/2010 15:15 Soil			x ✓	x ✓		-63	2	
DP05-09100	4/16/2010 14:35 Soil		x ✓			1004152-27		1	
DP05-09101	4/16/2010 14:38 Soil		x ✓				-28	1	
DP05-09102	4/16/2010 14:40 Soil		x ✓				-29	1	

Signatures		Date/Time
Approved by		
Sampled by	Jamie Jhird	4/19/10 1130
Relinquished by		
Received by		
Relinquished by	[illegible]	4/20/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 8:35:05 AM* Page 4 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar
	Preservatives:	MeOH	4°C	4°C	4°C
	Filtered:	NA	NA	NA	NA
	Holding Time:	48HR	14	14	14
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)

	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP05-09103	4/16/2010	14:45	Soil		x ✓			1004152-30	1	
DP05-59100	4/16/2010	14:35	Soil		x ✓			-31	1	
DP09-01060	4/16/2010	14:25	Soil				x ✓	~~-32~~ 1004141-64	1	
DP09-01061	4/16/2010	14:30	Soil				x ✓	-33 ↓ -65	1	
DP09-51060	4/16/2010	14:25	Soil				x ✓	-34 ↓ -73	2	
DP10-01063	4/16/2010	13:50	Soil				x ✓	35 1004141-66	1	
DP10-01064	4/16/2010	13:55	Soil				x ✓	36 -67	1	
DP11-01066	4/16/2010	15:25	Soil				x ✓	-37 -68	1	
DP11-01067	4/16/2010	15:30	Soil				x ✓	SMS -38 -69	1	
DP12-01069	4/16/2010	15:05	Soil				x ✓	-39 -70	1	
DP12-01070	4/16/2010	15:10	Soil				x ✓	-40 -71	1	
DP12-51070	4/16/2010	15:10	Soil				x ✓	~~-41~~ ↓ -72	1	
								TOTAL NUMBER OF CONTAINERS	68	

4/19/10 TF

	Signatures	Date/Time
Approved by		
Sampled by	James Ford	4/19/10 1130
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.8°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 9:16:21 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-320 ✓	4/16/2010	7:40	Water	X	X	1004176	5	
TB-320 ✓	4/16/2010	7:40	Water	X	X	1004152 -84	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		4/19/10
Sampled by		
Relinquished by		1100
Received by		
Relinquished by		4/20/10
Received by		0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.8°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004141, 1004152 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4980

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.1 °C

Dates samples were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schuck (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/20/10	(Yes)	(No)	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

For 1004152 - sample DP02-01521 had 1 vial CAR#: _____
+ 1 1L amber broken in shipment.

No bulk jars rec'd w/ terracore samples.

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004141, 1004152 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Almeda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 4969

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8°C

Dates ~~samples were logged in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

Sonya Gordon

From: William Schwab [wschwab@empirlabs.com]
Sent: Tuesday, April 20, 2010 5:27 PM
To: 'RushForms'
Subject: 1004133 / 1004141!!!!

DRO has been added to the following samples within WO 1004133: -07, -21-->23, -27-->33.

NOTE DRY WEIGHT has been TAKEN OFF HOLD for these samples as well!!!

DRO and DRY WEIGHT have been REMOVED from samples 1004141-09, -24-->26, and -31-->37.

Analysts, there was a mixup and these samples were tagged to the work order 1004141 and should have been tagged to 1004133. Note to all analysts (for DRO and dry weight), there will be no bulk containers for 1004133-07, -21-->23 and -27-->33. The bulk containers are tagged as 1004141. What this means is that this is how you will look for the accurate containers:

1004141-09 bulk jars should be used to report as 1004133-07
1004141-24 bulk jars should be used to report as 1004133-21
1004141-25 bulk jars should be used to report as 1004133-22
1004141-26 bulk jars should be used to report as 1004133-23
1004141-31 bulk jars should be used to report as 1004133-27
1004141-32 bulk jars should be used to report as 1004133-28
1004141-33 bulk jars should be used to report as 1004133-29
1004141-34 bulk jars should be used to report as 1004133-30
1004141-35 bulk jars should be used to report as 1004133-31
1004141-36 bulk jars should be used to report as 1004133-32
1004141-37 bulk jars should be used to report as 1004133-33

Sorry for all this confusion, as this is the first Alameda to come in that slipped right past me :[Thanks Sonya for catching.

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 237 I Toll free: 877.345.1113 I Fax: 615.846.5426

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Sonya Gordon

From: William Schwab [wschwab@empirlabs.com]
Sent: Wednesday, April 21, 2010 5:36 PM
To: 'RushForms'
Subject: 1004141 / 1004152!!!!!

DRO has been added to the following samples within WO 1004141: -38-->43, -47-->50, -54-->56, -64-->73.

NOTE DRY WEIGHT has been TAKEN OFF HOLD for these samples as well!!!

DRO and DRY WEIGHT have been REMOVED from samples 1004152-01-->06, -11, -13-->15, -20-->22, -32-->33, -34-->41.

Analysts, there was a mixup and these samples were tagged to the work order 1004152 and should have been tagged to 1004141. Note to all analysts (for DRO and dry weight), there will be no bulk containers for 1004152-01-->06, -11, -13-->15, -20-->22, -32-->34, and -35-->41. The bulk containers are tagged as 1004141. What this means is that this is how you will look for the accurate containers:

1004152-01 bulk jars should be used to report as 1004141-38
1004152-02 bulk jars should be used to report as 1004141-39
1004152-03 bulk jars should be used to report as 1004141-40
1004152-04 bulk jars should be used to report as 1004141-41
1004152-05 bulk jars should be used to report as 1004141-42
1004152-06 bulk jars should be used to report as 1004141-43
1004152-11 bulk jars should be used to report as 1004141-47
1004152-13 bulk jars should be used to report as 1004141-48
1004152-14 bulk jars should be used to report as 1004141-49
1004152-15 bulk jars should be used to report as 1004141-50
1004152-20 bulk jars should be used to report as 1004141-54
1004152-21 bulk jars should be used to report as 1004141-55
1004152-22 bulk jars should be used to report as 1004141-56
1004152-32 bulk jars should be used to report as 1004141-64
1004152-33 bulk jars should be used to report as 1004141-65
1004152-35 bulk jars should be used to report as 1004141-66
1004152-36 bulk jars should be used to report as 1004141-67
1004152-37 bulk jars should be used to report as 1004141-68
1004152-38 bulk jars should be used to report as 1004141-69
1004152-39 bulk jars should be used to report as 1004141-70
1004152-40 bulk jars should be used to report as 1004141-71
1004152-41 bulk jars should be used to report as 1004141-72
1004152-34 bulk jars should be used to report as 1004141-73
Sorry for all this confusion, Thanks to Sonya for catching.

William Schwab
Sample Receiving Group Leader / Safety Coordinator

Empirical Laboratories, LLC
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Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Tuesday, April 20, 2010 9:17 AM
To: sgordon@empirlabs.com
Subject: RE: sample confirmation
Follow Up Flag: Follow up
Due By: Wednesday, April 21, 2010 8:30 AM
Flag Status: Red

No, only TPH-g for this set of samples.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Tuesday, April 20, 2010 7:09 AM
To: Frank, Tamara/BAO
Subject: RE: sample confirmation

Do we need to split the one vial for both VOC & TPH-p? Or would one test be preferable over the other?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Tuesday, April 20, 2010 9:04 AM
To: sgordon@empirlabs.com
Subject: RE: sample confirmation

Thanks, please add it to the CofC.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Tuesday, April 20, 2010 6:56 AM
To: Frank, Tamara/BAO
Subject: RE: sample confirmation

Sample receiving sent me an email this morning to let me know that we received one methanol vial for this sample.

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]

Sent: Monday, April 19, 2010 5:21 PM
To: sgordon@empirlabs.com
Subject: sample confirmation

Sonya,
Could you confirm that you received sample DP09-51060 TPH-p and VOC on Saturday? I've got a little confusion in my database for that sample.
Thanks,
Tamara

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 19, 2010 2:17 PM
To: Frank, Tamara/BAO
Subject: hexavalent chromium

Hi Tamara,

I know you'll be sampling the sites that require hexavalent chromium sometime soon. Can you let me know when you are shipping water samples. I want to make sure that they are highest priority in sample receiving due to the extremely short holding time.

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

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Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
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621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

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1004152

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/18/2010 16:00 (20 day TAT)

Received By: William Schwab
Logged In By: William Schwab

Date Received: 04/20/2010 08:30 , 03/26/2010 09:00
Date Logged In: 04/20/2010 14:44

Samples Received at: **2.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments

1004152-01 DP01-01036 [Solid] Sampled 04/16/2010 09:50 Pacific

[NO ANALYSES]

1004152-02 DP01-01037 [Solid] Sampled 04/16/2010 09:55 Pacific

[NO ANALYSES]

1004152-03 DP01-01038 [Solid] Sampled 04/16/2010 10:00 Pacific

[NO ANALYSES]

1004152-04 DP02-01039 [Solid] Sampled 04/16/2010 11:20 Pacific

[NO ANALYSES]

1004152-05 DP02-01040 [Solid] Sampled 04/16/2010 11:25 Pacific

[NO ANALYSES]

1004152-06 DP02-01041 [Solid] Sampled 04/16/2010 11:30 Pacific

[NO ANALYSES]

1004152-11 DP02-51040 [Solid] Sampled 04/16/2010 11:25 Pacific

[NO ANALYSES]

1004152-13 DP03-01042 [Solid] Sampled 04/16/2010 11:45 Pacific

[NO ANALYSES]

1004152-14 DP03-01043 [Solid] Sampled 04/16/2010 11:50 Pacific

[NO ANALYSES]

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments

1004152-15 DP03-01044 [Solid] Sampled 04/16/2010 11:55 Pacific

[NO ANALYSES]

1004152-20 DP04-01045 [Solid] Sampled 04/16/2010 10:45 Pacific

[NO ANALYSES]

1004152-21 DP04-01046 [Solid] Sampled 04/16/2010 10:50 Pacific

[NO ANALYSES]

1004152-22 DP04-01047 [Solid] Sampled 04/16/2010 10:55 Pacific

[NO ANALYSES]

1004152-32 DP09-01060 [Solid] Sampled 04/16/2010 14:25 Pacific

[NO ANALYSES]

1004152-33 DP09-01061 [Solid] Sampled 04/16/2010 14:30 Pacific

[NO ANALYSES]

1004152-34 DP09-51060 [Solid] Sampled 04/16/2010 14:25 Pacific

[NO ANALYSES]

1004152-35 DP10-01063 [Solid] Sampled 04/16/2010 13:50 Pacific

[NO ANALYSES]

1004152-36 DP10-01064 [Solid] Sampled 04/16/2010 13:55 Pacific

[NO ANALYSES]

1004152-37 DP11-01066 [Solid] Sampled 04/16/2010 15:25 Pacific

[NO ANALYSES]

1004152-38 DP11-01067 [Solid] Sampled 04/16/2010 15:30 Pacific

[NO ANALYSES]

1004152-39 DP12-01069 [Solid] Sampled 04/16/2010 15:05 Pacific

[NO ANALYSES]

1004152-40 DP12-01070 [Solid] Sampled 04/16/2010 15:10 Pacific

[NO ANALYSES]

1004152-41 DP12-51070 [Solid] Sampled 04/16/2010 15:10 Pacific

[NO ANALYSES]

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-07 DP02-09088 [Solid] Sampled 04/16/2010 08:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 10:55	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 10:55	
1004152-08 DP02-09089 [Solid] Sampled 04/16/2010 09:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:00	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:00	
1004152-09 DP02-09090 [Solid] Sampled 04/16/2010 09:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:05	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:05	
1004152-10 DP02-09091 [Solid] Sampled 04/16/2010 09:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:10	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:10	
1004152-12 DP02-59090 [Solid] Sampled 04/16/2010 09:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:05	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:05	
1004152-16 DP03-09092 [Solid] Sampled 04/16/2010 10:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:05	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:05	
1004152-17 DP03-09093 [Solid] Sampled 04/16/2010 10:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:05	
1004152-18 DP03-09094 [Solid] Sampled 04/16/2010 10:03 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:03	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:03	
1004152-19 DP03-09095 [Solid] Sampled 04/16/2010 10:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:05	
1004152-23 DP04-09096 [Solid] Sampled 04/16/2010 13:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:00	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:00	

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-24 DP04-09097 [Solid] Sampled 04/16/2010 13:03 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:03	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:03	
1004152-25 DP04-09098 [Solid] Sampled 04/16/2010 13:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:05	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:05	
1004152-26 DP04-09099 [Solid] Sampled 04/16/2010 13:07 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:07	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:07	
1004152-27 DP05-09100 [Solid] Sampled 04/16/2010 14:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:35	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:35	
1004152-28 DP05-09101 [Solid] Sampled 04/16/2010 14:38 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:38	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:38	
1004152-29 DP05-09102 [Solid] Sampled 04/16/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:40	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:40	
1004152-30 DP05-09103 [Solid] Sampled 04/16/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:45	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:45	
1004152-31 DP05-59100 [Solid] Sampled 04/16/2010 14:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:35	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:35	
1004152-42 DP05-01048 [Solid] Sampled 04/19/2010 14:30 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:30	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:30	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:30	
1004152-43 DP05-01049 [Solid] Sampled 04/19/2010 14:35 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:35	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:35	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:35	AP VIAL! LOW VOLUME!!!!

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-44 DP05-01050 [Solid] Sampled 04/19/2010 14:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:40	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:40	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:40	
1004152-45 DP05-51050 [Solid] Sampled 04/19/2010 14:40 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:40	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:40	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:40	
1004152-46 DP06-01051 [Solid] Sampled 04/19/2010 15:05 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:05	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:05	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:05	+MO
1004152-47 DP06-01052 [Solid] Sampled 04/19/2010 15:10 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:10	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:10	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:10	
1004152-48 DP06-01053 [Solid] Sampled 04/19/2010 15:15 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:15	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:15	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:15	
1004152-49 DP06-01135 [Solid] Sampled 04/19/2010 09:35 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 11:35	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 11:35	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 11:35	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 11:35	+MO
1004152-50 DP06-01136 [Solid] Sampled 04/19/2010 09:50 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 11:50	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 11:50	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 11:50	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 11:50	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-51 DP06-01137 [Solid] Sampled 04/19/2010 10:00 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 12:00	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 12:00	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 12:00	+MO
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 12:00	AP VIALS!
1004152-52 DP07-01054 [Solid] Sampled 04/19/2010 13:20 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 15:20	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 15:20	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 15:20	AP VIAL! LOW VOLUME!!!!
1004152-53 DP07-01055 [Solid] Sampled 04/19/2010 13:25 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 15:25	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 15:25	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 15:25	
1004152-54 DP07-01056 [Solid] Sampled 04/19/2010 13:30 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 15:30	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 15:30	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 15:30	
1004152-55 DP07-01138 [Solid] Sampled 04/19/2010 11:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:00	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:00	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:00	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:00	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:00	+MO
1004152-56 DP07-01139 [Solid] Sampled 04/19/2010 11:05 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:05	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:05	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:05	
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:05	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:05	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-57 DP07-01140 [Solid] Sampled 04/19/2010 11:15 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:15	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:15	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:15	
1004152-58 DP07-51140 [Solid] Sampled 04/19/2010 11:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:15	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:15	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:15	+MO
1004152-59 DP08-01057 [Solid] Sampled 04/19/2010 14:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:00	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:00	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:00	AP VIAL! LOW VOLUME!!!!
1004152-60 DP08-01058 [Solid] Sampled 04/19/2010 14:05 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:05	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:05	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:05	
1004152-61 DP08-01059 [Solid] Sampled 04/19/2010 14:10 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:10	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:10	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:10	+MO
1004152-62 DP08-01141 [Solid] Sampled 04/19/2010 14:20 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 16:20	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:20	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 16:20	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:20	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:20	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-63 DP08-01142 [Solid] Sampled 04/19/2010 14:25 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 16:25	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:25	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:25	+MO
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 16:25	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:25	
1004152-64 DP08-01143 [Solid] Sampled 04/19/2010 14:30 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:30	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 16:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:30	AP VIALS!
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 16:30	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:30	
1004152-65 DP09-01144 [Solid] Sampled 04/19/2010 15:03 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:03	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:03	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 17:03	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:03	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 17:03	
1004152-66 DP09-01145 [Solid] Sampled 04/19/2010 15:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:15	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:15	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 17:15	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
1004152-67 DP09-01146 [Solid] Sampled 04/19/2010 15:15 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:15	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 17:15	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:15	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-68 DP01-01518 [Water] Sampled 04/17/2010 08:30 Pacific				**QSM4.1**
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 10:30	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 10:30	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 10:30	+MO
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 10:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 10:30	
1004152-69 DP01-01519 [Water] Sampled 04/17/2010 09:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 11:40	+MO
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 11:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 11:40	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 11:40	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 11:40	
1004152-70 DP02-01520 [Water] Sampled 04/17/2010 10:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 12:55	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 12:55	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 12:55	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 12:55	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 12:55	+MO
1004152-71 DP02-01521 [Water] Sampled 04/17/2010 14:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 16:00	+MO. LOW VOLUME!!!
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 16:00	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 16:00	LOW VOLUME!!!
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 16:00	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 16:00	LOW VOLUME!!!
1004152-72 DP02-51520 [Water] Sampled 04/17/2010 14:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 16:00	+MO
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 16:00	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 16:00	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 16:00	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 16:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-73 DP03-01522 [Water] Sampled 04/17/2010 15:40 Pacific				**QSM4.1**
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 17:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 17:40	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 17:40	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 17:40	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 17:40	+MO
1004152-74 DP03-01523 [Water] Sampled 04/17/2010 15:50 Pacific				**QSM4.1**
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 17:50	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 17:50	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 17:50	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 17:50	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 17:50	+MO
1004152-75 DP04-01524 [Water] Sampled 04/19/2010 08:40 Pacific				**QSM4.1**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 10:40	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 10:40	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 10:40	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 10:40	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 10:40	+MO
1004152-76 DP04-01525 [Water] Sampled 04/19/2010 09:05 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 11:05	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 11:05	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 11:05	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 11:05	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 11:05	
1004152-77 DP05-01526 [Water] Sampled 04/19/2010 10:55 Pacific				**QSM4.1**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 12:55	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 12:55	+MO
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 12:55	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 12:55	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 12:55	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-78 DP05-01527 [Water] Sampled 04/19/2010 11:50 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 13:50	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 13:50	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 13:50	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:50	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:50	
1004152-79 EB-321 [Water] Sampled 04/19/2010 07:30 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	05/11/2010 14:00	20	10/16/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 09:30	+MO. LOW VOLUME!!!
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 09:30	LOW VOLUME!!!
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 09:30	LOW VOLUME!!!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:30	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:30	
MET_7470_MERCURY	05/11/2010 14:00	20	05/17/2010 09:30	
1004152-80 EB-121 [Water] Sampled 04/19/2010 07:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 09:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:30	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 09:30	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 09:30	+MO
MET_ICP_6010B_FULL	05/11/2010 14:00	20	10/16/2010 09:30	water TAL + Mo
MET_7470_MERCURY	05/11/2010 14:00	20	05/17/2010 09:30	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:30	
1004152-81 TB-121 [Water] Sampled 04/19/2010 07:40 Pacific				**QSM4.1**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:40	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:40	
1004152-82 EB-221 [Water] Sampled 04/19/2010 07:37 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 09:37	LOW VOLUME!!!
MET_7470_MERCURY	05/11/2010 14:00	20	05/17/2010 09:37	
MET_ICP_6010B_FULL	05/11/2010 14:00	20	10/16/2010 09:37	water TAL + Mo
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 09:37	+MO. LOW VOLUME!!!
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 09:37	LOW VOLUME!!!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:37	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:37	

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-83 TB-221 [Water] Sampled 04/19/2010 07:30 Pacific				**QSM4.1**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:30	
1004152-84 TB-320 [Water] Sampled 04/19/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:40	

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:35:04 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar
	Preservatives:	MeOH	4°C	4°C	4°C
	Filtered:	NA	NA	NA	NA
	Holding Time:	48HR	14	14	14
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)

	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP01-01036	4/16/2010	9:50	Soil				x ✓	1004141-38 ~~1004152-01~~ SMG 4/21/10	1	
DP01-01037	4/16/2010	9:55	Soil				x ✓	-39 -02	1	
DP01-01038	4/16/2010	10:00	Soil				x ✓	-40 -03	1	
DP02-01039	4/16/2010	11:20	Soil				x ✓	-41 -04	1	
DP02-01040	4/16/2010	11:25	Soil				x ✓	-42 -05	1	
DP02-01041	4/16/2010	11:30	Soil				x ✓	-43 ✓ -06	1	
DP02-01123	4/16/2010	9:20	Soil			x ✓	x ✓	1004141-44	2	
DP02-01124	4/16/2010	9:28	Soil			x ✓	x ✓	-45	2	
DP02-01125	4/16/2010	9:30	Soil			x ✓	x ✓	-46	2	
DP02-09088	4/16/2010	8:55	Soil		x ✓			1004152-07	1	
DP02-09089	4/16/2010	9:00	Soil		x ✓			-08	1	
DP02-09090	4/16/2010	9:05	Soil		x ✓			-09	1	
DP02-09091	4/16/2010	9:10	Soil		x ✓			-10	1	
DP02-51040	4/16/2010	11:25	Soil				x ✓	1004141-47 ✓ ~~-11~~ SMG 4/21/10	1	

Signatures		Date/Time
Approved by		
Sampled by		4/19/10 1130
Relinquished by		
Received by		
Relinquished by		4/20/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-8°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:35:05 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar		
	Preservatives:	MeOH	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	48HR	14	14	14		
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Number of Containers	COMMENTS
DP02-59090	4/16/2010 9:05 Soil		x ✓			1	
DP03-01042	4/16/2010 11:45 Soil				x ✓	1	
DP03-01043	4/16/2010 11:50 Soil				x ✓	1	
DP03-01044	4/16/2010 11:55 Soil				x ✓	1	
DP03-01126	4/16/2010 10:20 Soil			x ✓	x ✓	2	
DP03-01127	4/16/2010 10:25 Soil			x ✓	x ✓	2	
DP03-01128	4/16/2010 10:30 Soil			x ✓	x ✓	2	
DP03-09092	4/16/2010 10:05 Soil		x ✓			1	
DP03-09093	4/16/2010 10:05 Soil		x ✓			1	
DP03-09094	4/16/2010 10:03 Soil		x ✓			1	
DP03-09095	4/16/2010 10:05 Soil		x ✓			1	
DP04-01045	4/16/2010 10:45 Soil				x ✓	1	
DP04-01046	4/16/2010 10:50 Soil				x ✓	1	
DP04-01047	4/16/2010 10:55 Soil				x ✓	1	

1004152-12
1004141-48 ~~-13~~ SMD 4/22/10
-49 ~~-14~~
-50 ~~-15~~
1004141-51
-52
-53
1004152-16
-17
-18
-19
1004141-54 ~~-20~~ SMD 4/22/10
-55 -21
~~-56~~ ~~-22~~

Signatures	Date/Time
Approved by	
Sampled by	4/19/10
Relinquished by	1130
Received by	
Relinquished by	4/20/10 08:30
Received by	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 8:35:05 AM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar				
	Preservatives:	MeOH	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA				
	Holding Time:	48HR	14	14	14				
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)			Number of Containers	COMMENTS
	DATE / TIME / Matrix								
DP04-01129	4/16/2010 13:30 Soil			x ✓	x ✓	1004141-57		2	
DP04-01130	4/16/2010 13:35 Soil			x ✓	x ✓		-58	2	
DP04-01131	4/16/2010 13:45 Soil			x ✓	x ✓		-59	2	
DP04-09096	4/16/2010 13:00 Soil		x ✓			1004152-23		1	
DP04-09097	4/16/2010 13:03 Soil		x ✓				-24	1	
DP04-09098	4/16/2010 13:05 Soil		x ✓				-25	1	
DP04-09099	4/16/2010 13:07 Soil		x ✓				-26	1	
DP04-51130	4/16/2010 13:35 Soil			x ✓	x ✓	1004141-60		2	
DP05-01132	4/16/2010 15:00 Soil			x ✓	x ✓		-61	2	
DP05-01133	4/16/2010 15:10 Soil			x ✓	x ✓		-62	2	
DP05-01134	4/16/2010 15:15 Soil			x ✓	x ✓		-63	2	
DP05-09100	4/16/2010 14:35 Soil		x ✓			1004152-27		1	
DP05-09101	4/16/2010 14:38 Soil		x ✓				-28	1	
DP05-09102	4/16/2010 14:40 Soil		x ✓				-29	1	

Signatures		Date/Time
Approved by		
Sampled by	Jamie Jhird	4/19/10 1130
Relinquished by		
Received by		
Relinquished by	[illegible]	4/20/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 8:35:05 AM* Page 4 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar
	Preservatives:	MeOH	4°C	4°C	4°C
	Filtered:	NA	NA	NA	NA
	Holding Time:	48HR	14	14	14
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)

	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP05-09103	4/16/2010	14:45	Soil		x ✓			1004152-30	1	
DP05-59100	4/16/2010	14:35	Soil		x ✓			-31	1	
DP09-01060	4/16/2010	14:25	Soil				x ✓	~~-32~~ 1004141-64	1	
DP09-01061	4/16/2010	14:30	Soil				x ✓	-33 ↓ -65	1	
DP09-51060	4/16/2010	14:25	Soil				x ✓	-34 ↓ -73	2	
DP10-01063	4/16/2010	13:50	Soil				x ✓	35 1004141-66	1	
DP10-01064	4/16/2010	13:55	Soil				x ✓	36 -67	1	
DP11-01066	4/16/2010	15:25	Soil				x ✓	-37 -68	1	
DP11-01067	4/16/2010	15:30	Soil				x ✓	SMS -38 -69	1	
DP12-01069	4/16/2010	15:05	Soil				x ✓	-39 -70	1	
DP12-01070	4/16/2010	15:10	Soil				x ✓	-40 -71	1	
DP12-51070	4/16/2010	15:10	Soil				x ✓	~~-41~~ ↓ -72	1	
								TOTAL NUMBER OF CONTAINERS	68	

4/19/10 TF

	Signatures	Date/Time
Approved by		
Sampled by	James Ford	4/19/10 1130
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 3:50:41 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP05-01048	4/19/2010	14:30	Soil		X	1004152 42	1	
DP05-01049	4/19/2010	14:35	Soil		X	-43	1	
DP05-01050	4/19/2010	14:40	Soil		X	-44	1	
DP05-51050	4/19/2010	14:40	Soil		X	-45	1	
DP06-01051	4/19/2010	15:05	Soil		X	-46	1	
DP06-01052	4/19/2010	15:10	Soil		X	-47	1	
DP06-01053	4/19/2010	15:15	Soil		X	-48	1	
DP06-01135	4/19/2010	9:35	Soil	X	X	-49	4	
DP06-01136	4/19/2010	9:50	Soil	X	X	-50	4	
DP06-01137	4/19/2010	10:00	Soil	X	X	-51	4	
DP07-01054	4/19/2010	13:20	Soil		X	-52	1	
DP07-01055	4/19/2010	13:25	Soil		X	-53	1	
DP07-01056	4/19/2010	13:30	Soil		X	-54	1	
DP07-01138	4/19/2010	11:00	Soil	X	X	-55	4	

	Signatures	Date/Time
Approved by		
Sampled by		4/19/10
Relinquished by	James Jard	1600
Received by		
Relinquished by		
Received by		4/20/10

08:30
2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 3:50:42 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910p

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP07-01139 ✓	4/19/2010	11:05	Soil	X	X	1004152-56	4	
DP07-01140 ✓	4/19/2010	11:15	Soil	X	X	-57	4	
DP07-51140 ✓	4/19/2010	11:15	Soil	X	X	-58	4	
DP08-01057 ✓	4/19/2010	14:00	Soil		X	-59	1	LAB QC
DP08-01058 ✓	4/19/2010	14:05	Soil		X	-60	1	
DP08-01059 ✓	4/19/2010	14:10	Soil		X	-61	1	
DP08-01141 ✓	4/19/2010	14:20	Soil	X	X	-62	4	
DP08-01142 ✓	4/19/2010	14:25	Soil	X	X	-63	4	
DP08-01143 ✓	4/19/2010	14:30	Soil	X	X	-64	4	
DP09-01144 ✓	4/19/2010	15:03	Soil	X	X	-65	4	
DP09-01145 ✓	4/19/2010	15:15	Soil	X	X	-66	4	
DP09-01146 ✓	4/19/2010	15:15	Soil	X	X	-67	4	
						TOTAL NUMBER OF CONTAINERS	65	

	Signatures	Date/Time
Approved by		
Sampled by	James Jones	4/19/10 1000
Relinquished by		
Received by		
Relinquished by	Janice Shilling	4/20/10 08:30
Received by		2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:54:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	HCl	HCl	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP01-01518	4/17/2010	8:30	Water	X	X	2X	2X	2X	1004152-68	15	
DP01-01519	4/17/2010	9:40	Water	X	X	2X	2X	2X	-69	15	
DP02-01520	4/17/2010	10:55	Water	X	X	2X	2X	2X	-70	15	
DP02-01521	4/17/2010	14:00	Water	X	X	2X	2X	2X	-71	15	
DP02-51520	4/17/2010	14:00	Water	X	X	2X	2X	2X	-72	15	
DP03-01522	4/17/2010	15:40	Water	X	X	X	X	X	-73	15	
DP03-01523	4/17/2010	15:50	Water	X	X	X	X	X	-74	15	
								TOTAL NUMBER OF CONTAINERS		105	

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	4/19/10
Relinquished by		1160
Received by		
Relinquished by		
Received by		4/20/10

0830 2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 2:49:53 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	7			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
DP04-01524	DATE 4/19/2010 TIME 8:40 Matrix Water	x 2	x 2	x 2	1004152-75 6	~~10~~	
DP04-01525	4/19/2010 9:05 Water	x	x	x	-76 6	~~10~~	
DP05-01526	4/19/2010 10:55 Water	x	x	x	-77 6	~~10~~	
DP05-01527	4/19/2010 11:50 Water	x	x	x	-78 6	~~10~~	
					TOTAL NUMBER OF CONTAINERS	~~40~~ 24	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/19/10 1730
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 2:32:17 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-321	4/19/2010 7:30 Water	x 2	x 1	x 1	x 1	1004152-79 5	11	
						TOTAL NUMBER OF CONTAINERS	11	

5

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/19/10
Relinquished by	[signature]	1400
Received by		
Relinquished by	[signature]	
Received by	[signature]	4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 3:37:08 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910p

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-121	4/19/2010	7:30	Water		X	X	1004152-80	5	
TB-121	4/19/2010	7:40	Water		X	X	-81	5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/19/10
Relinquished by		1540
Received by		
Relinquished by		4/20/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 2:11:17 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		
Preservatives:				4°C	4°C	4°C	HNO4		
Filtered:				NA	NA	NA	NA		
Holding Time:				7	7	7	28		
EB-121	4/19/2010	7:30	Water	x [2]	x [2]	x [2]	x 1	1004152-80 7 ~~11~~ 7	
								TOTAL NUMBER OF CONTAINERS ~~11~~ 7	

Signatures		Date/Time
Approved by		
Sampled by	Tamara Jank	4/19/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 3:55:42 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910P

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-221	4/19/2010 7:37 Water	X	X	1004152 -82	5	
TB-221	4/19/2010 7:30 Water	X	X	-83	5	
				TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/19/10
Relinquished by		1600
Received by		
Relinquished by	[signature]	4/20/10
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

08130 2.10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 2:19:22 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

				Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	4°C	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	7	7	7	28			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-221	4/19/2010	7:37	Water		x 2	x	x 2	x 1	1004152-82	5 ~~11~~	
									TOTAL NUMBER OF CONTAINERS	~~11~~ 5	

	Signatures	Date/Time
Approved by		
Sampled by		4/19/10
Relinquished by		1400
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-1°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 9:16:21 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-320 ✓	4/16/2010	7:40	Water	X	X	1004176	5	
TB-320 ✓	4/16/2010	7:40	Water	X	X	1004152 -84	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		4/19/10
Sampled by		
Relinquished by		1100
Received by		
Relinquished by		4/20/10
Received by		0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.8°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004141, 1004152 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4980

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.1 °C

Dates samples were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schuck (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/20/10	(Yes)	(No)	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

For 1004152 - sample DP02-01521 had 1 vial CAR#: _____
+ 1 1L amber broken in shipment.

No bulk jars rec'd w/ terracore samples.

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004141, 1004152 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Almeda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 4969

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8°C

Dates ~~samples were logged in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 3 of 10

Client: CH2M Hill Project: Ala Mesa Point

Date/Time Received: 04/20/10 08:30 Date cooler(s) opened: 04/20/10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9896

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

~~Dates samples were logged in: 04/20/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 4 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5895

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1°C

Dates samples were ~~logged-in~~: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 5 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5873

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.8 °C

Dates samples were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 6 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5884

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.8°C

Dates ~~samples were logged-in~~: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 7 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5862

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

~~Dates samples were logged-in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 8 of 10

Client: CH2M HILL Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4991

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

Dates ~~samples~~ were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 9 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4970

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.8° C

~~Dates samples were logged in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 10 of 10

Client: CHAM HILL Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5005

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

~~Dates samples were logged-in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 3:00:40 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010W

	DATE	TIME	Matrix	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber		Number of Containers	COMMENTS
				Preservatives:	HCl	HCl	4°C	4°C			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	14	14	7	7			
					VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)			
EB-321	4/19/2010	7:30	Water		X	X			1004152-79	5	
TB-321	4/19/2010	7:50	Water		X	X				5	
EB-322	4/20/2010		Water				X	X		~~8~~ 4	
									TOTAL NUMBER OF CONTAINERS	~~16~~ 14	

CMC
04/20/10

	Signatures	Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:17:39 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	HCl	HCl	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP04-01524	4/19/2010	8:40	Water	X	X				1004152-75 5
DP04-01525	4/19/2010	9:05	Water	X	X				-76 5
DP05-01526	4/19/2010	10:55	Water	X	X				-77 5
DP05-01527	4/19/2010	11:50	Water	X	X				-78 5
DP06-01528	4/19/2010	13:30	Water	X	X	X	X	X	~~15~~ 9
DP06-01529	4/19/2010	15:10	Water	X	X	X	X	X	~~15~~ 9
DP07-01530	4/19/2010	15:45	Water	X	X	X	X	X	~~15~~ 9
DP07-01531	4/19/2010	16:15	Water	X	X	X	X	X	~~15~~ 9
DP07-51530	4/19/2010	15:45	Water	X	X	X	X	X	~~15~~ 9
								TOTAL NUMBER OF CONTAINERS	~~95~~ 65

CMC 4/20/10

Signatures		Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/20/2010 7:24:08 AM Page 1 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP05-01048	4/19/2010 14:30 Soil			X		1004152-42	1	
DP05-01049	4/19/2010 14:35 Soil			X		-43	1	
DP05-01050	4/19/2010 14:40 Soil			X		-44	1	
DP05-51050	4/19/2010 14:40 Soil			X		-45	1	
DP06-01051	4/19/2010 15:05 Soil			X		-46	1	
DP06-01052	4/19/2010 15:10 Soil			X		-47	1	
DP06-01053	4/19/2010 15:15 Soil			X		-48	1	
DP06-01135	4/19/2010 9:35 Soil		X	X		-49	~~2~~ 1	
DP06-01136	4/19/2010 9:50 Soil		X	X		-50	~~2~~ 1	
DP06-01137	4/19/2010 10:00 Soil		X	X		-51	~~2~~ 1	
DP06-09104	4/19/2010 9:25 Soil	X					1	
DP06-09105	4/19/2010 9:27 Soil	X					1	
DP06-09106	4/19/2010 9:30 Soil	X					1	
DP06-09107	4/19/2010 9:33 Soil	X					1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/20/10 0700
Received by		
Relinquished by		
Received by		4/21/10 08:30 1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:08 AM* Page 2 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP07-01054	4/19/2010 13:20 Soil			X		1004152-52	1	
DP07-01055	4/19/2010 13:25 Soil			X		-53	1	
DP07-01056	4/19/2010 13:30 Soil			X		-54	1	
DP07-01138	4/19/2010 11:00 Soil		X	X		1004152-55 i	~~2~~	
DP07-01139	4/19/2010 11:05 Soil		X	X		-56 i	~~2~~	
DP07-01140	4/19/2010 11:15 Soil		X	X		-57 i	~~2~~	
DP07-09108	4/19/2010 10:40 Soil	X					1	
DP07-09109	4/19/2010 10:42 Soil	X					1	
DP07-09110	4/19/2010 10:45 Soil	X					1	
DP07-09111	4/19/2010 10:50 Soil	X					1	
DP07-51140	4/19/2010 11:15 Soil		X	X		1004152-58	~~2~~ 1	
DP07-59110	4/19/2010 10:45 Soil	X					1	
DP08-01057	4/19/2010 14:00 Soil			X		1004152-59	1	
DP08-01058	4/19/2010 14:05 Soil			X		-60	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/20/10 0900
Received by		
Relinquished by		
Received by	[signature]	4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:09 AM* Page 3 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
DP08-01059	4/19/2010 14:10 Soil			X		1004152-61	1	
DP08-01141	4/19/2010 14:20 Soil		X	X		-62	2	
DP08-01142	4/19/2010 14:25 Soil		X	X		-63	~~2~~ 1	
DP08-01143	4/19/2010 14:30 Soil		X	X		-64	~~2~~ 1	
DP08-09112	4/19/2010 14:05 Soil	X				MS / MSD	1	LAB QC
DP08-09113	4/19/2010 14:07 Soil	X					1	
DP08-09114	4/19/2010 14:09 Soil	X					1	
DP08-09115	4/19/2010 14:13 Soil	X					1	
DP09-01144	4/19/2010 15:03 Soil		X	X		1004152-65	~~2~~ 1	
DP09-01145	4/19/2010 15:15 Soil		X	X		-66	~~2~~ 1	
DP09-01146	4/19/2010 15:15 Soil		X	X		-67	~~2~~ 1	
DP09-09116	4/19/2010 14:55 Soil	X					1	
DP09-09117	4/19/2010 14:57 Soil	X					1	
DP09-09118	4/19/2010 15:00 Soil	X					1	

	Signatures	Date/Time
Approved by		
Sampled by		4/20/10
Relinquished by	James Jones	0900
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.90C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 1 of 6

Client: CH2M Hill Project: 2010 - EDC 12 - GW ALAMEDA POINT

Date/Time Received: 4.21.10 8:30 Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5325

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9 °C

Dates samples were logged-in: 4/21/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 2 of 6

Client: CH2M HILL Project: 2010-Alameda Point-Field Ex-Team 1

Date/Time Received: 4-21-10 8:30 Date cooler(s) opened: 4/21/10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5358

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 3 of 6

Client: CH2M HILL Project: 2010-EDC-12-GW ALAMEDA Point

Date/Time Received: 4.21.10 8:30 AM Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9874

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

Sonya Gordon

From: William Schwab [wschwab@empirlabs.com]
Sent: Wednesday, April 21, 2010 5:36 PM
To: 'RushForms'
Subject: 1004141 / 1004152!!!!!

DRO has been added to the following samples within WO 1004141: -38-->43, -47-->50, -54-->56, -64-->73.

NOTE DRY WEIGHT has been TAKEN OFF HOLD for these samples as well!!!

DRO and DRY WEIGHT have been REMOVED from samples 1004152-01-->06, -11, -13-->15, -20-->22, -32-->33, -34-->41.

Analysts, there was a mixup and these samples were tagged to the work order 1004152 and should have been tagged to 1004141. Note to all analysts (for DRO and dry weight), there will be no bulk containers for 1004152-01-->06, -11, -13-->15, -20-->22, -32-->34, and -35-->41. The bulk containers are tagged as 1004141. What this means is that this is how you will look for the accurate containers:

1004152-01 bulk jars should be used to report as 1004141-38
1004152-02 bulk jars should be used to report as 1004141-39
1004152-03 bulk jars should be used to report as 1004141-40
1004152-04 bulk jars should be used to report as 1004141-41
1004152-05 bulk jars should be used to report as 1004141-42
1004152-06 bulk jars should be used to report as 1004141-43
1004152-11 bulk jars should be used to report as 1004141-47
1004152-13 bulk jars should be used to report as 1004141-48
1004152-14 bulk jars should be used to report as 1004141-49
1004152-15 bulk jars should be used to report as 1004141-50
1004152-20 bulk jars should be used to report as 1004141-54
1004152-21 bulk jars should be used to report as 1004141-55
1004152-22 bulk jars should be used to report as 1004141-56
1004152-32 bulk jars should be used to report as 1004141-64
1004152-33 bulk jars should be used to report as 1004141-65
1004152-35 bulk jars should be used to report as 1004141-66
1004152-36 bulk jars should be used to report as 1004141-67
1004152-37 bulk jars should be used to report as 1004141-68
1004152-38 bulk jars should be used to report as 1004141-69
1004152-39 bulk jars should be used to report as 1004141-70
1004152-40 bulk jars should be used to report as 1004141-71
1004152-41 bulk jars should be used to report as 1004141-72
1004152-34 bulk jars should be used to report as 1004141-73
Sorry for all this confusion, Thanks to Sonya for catching.

William Schwab
Sample Receiving Group Leader / Safety Coordinator

Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 237 l Toll free: 877.345.1113 l Fax: 615.846.5426

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1004152

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/18/2010 16:00 (20 day TAT)

Received By: William Schwab
Logged In By: William Schwab

Date Received: 04/20/2010 08:30 , 03/26/2010 09:00
Date Logged In: 04/20/2010 14:44

Samples Received at: **2.8°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments

1004152-01 DP01-01036 [Solid] Sampled 04/16/2010 09:50 Pacific

[NO ANALYSES]

1004152-02 DP01-01037 [Solid] Sampled 04/16/2010 09:55 Pacific

[NO ANALYSES]

1004152-03 DP01-01038 [Solid] Sampled 04/16/2010 10:00 Pacific

[NO ANALYSES]

1004152-04 DP02-01039 [Solid] Sampled 04/16/2010 11:20 Pacific

[NO ANALYSES]

1004152-05 DP02-01040 [Solid] Sampled 04/16/2010 11:25 Pacific

[NO ANALYSES]

1004152-06 DP02-01041 [Solid] Sampled 04/16/2010 11:30 Pacific

[NO ANALYSES]

1004152-11 DP02-51040 [Solid] Sampled 04/16/2010 11:25 Pacific

[NO ANALYSES]

1004152-13 DP03-01042 [Solid] Sampled 04/16/2010 11:45 Pacific

[NO ANALYSES]

1004152-14 DP03-01043 [Solid] Sampled 04/16/2010 11:50 Pacific

[NO ANALYSES]

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments

1004152-15 DP03-01044 [Solid] Sampled 04/16/2010 11:55 Pacific

[NO ANALYSES]

1004152-20 DP04-01045 [Solid] Sampled 04/16/2010 10:45 Pacific

[NO ANALYSES]

1004152-21 DP04-01046 [Solid] Sampled 04/16/2010 10:50 Pacific

[NO ANALYSES]

1004152-22 DP04-01047 [Solid] Sampled 04/16/2010 10:55 Pacific

[NO ANALYSES]

1004152-32 DP09-01060 [Solid] Sampled 04/16/2010 14:25 Pacific

[NO ANALYSES]

1004152-33 DP09-01061 [Solid] Sampled 04/16/2010 14:30 Pacific

[NO ANALYSES]

1004152-34 DP09-51060 [Solid] Sampled 04/16/2010 14:25 Pacific

[NO ANALYSES]

1004152-35 DP10-01063 [Solid] Sampled 04/16/2010 13:50 Pacific

[NO ANALYSES]

1004152-36 DP10-01064 [Solid] Sampled 04/16/2010 13:55 Pacific

[NO ANALYSES]

1004152-37 DP11-01066 [Solid] Sampled 04/16/2010 15:25 Pacific

[NO ANALYSES]

1004152-38 DP11-01067 [Solid] Sampled 04/16/2010 15:30 Pacific

[NO ANALYSES]

1004152-39 DP12-01069 [Solid] Sampled 04/16/2010 15:05 Pacific

[NO ANALYSES]

1004152-40 DP12-01070 [Solid] Sampled 04/16/2010 15:10 Pacific

[NO ANALYSES]

1004152-41 DP12-51070 [Solid] Sampled 04/16/2010 15:10 Pacific

[NO ANALYSES]

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-07 DP02-09088 [Solid] Sampled 04/16/2010 08:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 10:55	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 10:55	
1004152-08 DP02-09089 [Solid] Sampled 04/16/2010 09:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:00	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:00	
1004152-09 DP02-09090 [Solid] Sampled 04/16/2010 09:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:05	
1004152-10 DP02-09091 [Solid] Sampled 04/16/2010 09:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:10	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:10	
1004152-12 DP02-59090 [Solid] Sampled 04/16/2010 09:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 11:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 11:05	
1004152-16 DP03-09092 [Solid] Sampled 04/16/2010 10:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:05	
1004152-17 DP03-09093 [Solid] Sampled 04/16/2010 10:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:05	
1004152-18 DP03-09094 [Solid] Sampled 04/16/2010 10:03 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:03	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:03	
1004152-19 DP03-09095 [Solid] Sampled 04/16/2010 10:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 12:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 12:05	
1004152-23 DP04-09096 [Solid] Sampled 04/16/2010 13:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:00	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-24 DP04-09097 [Solid] Sampled 04/16/2010 13:03 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:03	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:03	
1004152-25 DP04-09098 [Solid] Sampled 04/16/2010 13:05 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:05	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:05	
1004152-26 DP04-09099 [Solid] Sampled 04/16/2010 13:07 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 15:07	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 15:07	
1004152-27 DP05-09100 [Solid] Sampled 04/16/2010 14:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:35	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:35	
1004152-28 DP05-09101 [Solid] Sampled 04/16/2010 14:38 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:38	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:38	
1004152-29 DP05-09102 [Solid] Sampled 04/16/2010 14:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:40	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:40	
1004152-30 DP05-09103 [Solid] Sampled 04/16/2010 14:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:45	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:45	
1004152-31 DP05-59100 [Solid] Sampled 04/16/2010 14:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/23/2010 16:35	
SMS_PAH_8270C_3546_LOW	05/11/2010 14:00	20	04/30/2010 16:35	
1004152-42 DP05-01048 [Solid] Sampled 04/19/2010 14:30 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:30	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:30	AP VIAL! LOW VOLUME!!!!
1004152-43 DP05-01049 [Solid] Sampled 04/19/2010 14:35 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:35	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:35	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:35	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
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Analysis	Due	TAT	Expires	Comments
1004152-44 DP05-01050 [Solid] Sampled 04/19/2010 14:40 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:40	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:40	+MO
1004152-45 DP05-51050 [Solid] Sampled 04/19/2010 14:40 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:40	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:40	AP VIAL! LOW VOLUME!!!!
1004152-46 DP06-01051 [Solid] Sampled 04/19/2010 15:05 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:05	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:05	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:05	AP VIAL! LOW VOLUME!!!!
1004152-47 DP06-01052 [Solid] Sampled 04/19/2010 15:10 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:10	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:10	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:10	+MO
1004152-48 DP06-01053 [Solid] Sampled 04/19/2010 15:15 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:15	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:15	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:15	
1004152-49 DP06-01135 [Solid] Sampled 04/19/2010 09:35 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 11:35	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 11:35	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 11:35	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 11:35	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 11:35	AP VIALS!
1004152-50 DP06-01136 [Solid] Sampled 04/19/2010 09:50 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 11:50	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 11:50	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 11:50	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 11:50	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 11:50	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
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Analysis	Due	TAT	Expires	Comments
1004152-51 DP06-01137 [Solid] Sampled 04/19/2010 10:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 12:00	
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 12:00	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 12:00	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 12:00	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 12:00	AP VIALS!
1004152-52 DP07-01054 [Solid] Sampled 04/19/2010 13:20 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 15:20	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 15:20	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 15:20	
1004152-53 DP07-01055 [Solid] Sampled 04/19/2010 13:25 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 15:25	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 15:25	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 15:25	+MO
1004152-54 DP07-01056 [Solid] Sampled 04/19/2010 13:30 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 15:30	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 15:30	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 15:30	
1004152-55 DP07-01138 [Solid] Sampled 04/19/2010 11:00 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:00	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:00	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:00	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:00	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:00	+MO
1004152-56 DP07-01139 [Solid] Sampled 04/19/2010 11:05 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:05	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:05	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:05	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:05	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:05	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-57 DP07-01140 [Solid] Sampled 04/19/2010 11:15 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:15	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:15	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:15	+MO
1004152-58 DP07-51140 [Solid] Sampled 04/19/2010 11:15 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 13:15	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 13:15	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 13:15	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:15	AP VIALS!
1004152-59 DP08-01057 [Solid] Sampled 04/19/2010 14:00 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:00	+MO
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:00	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:00	
1004152-60 DP08-01058 [Solid] Sampled 04/19/2010 14:05 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:05	AP VIAL! LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:05	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:05	+MO
1004152-61 DP08-01059 [Solid] Sampled 04/19/2010 14:10 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:10	AP VIAL! LOW VOLUME!!!!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:10	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:10	
1004152-62 DP08-01141 [Solid] Sampled 04/19/2010 14:20 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 16:20	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:20	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 16:20	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:20	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:20	AP VIALS!

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-63 DP08-01142 [Solid] Sampled 04/19/2010 14:25 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 16:25	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:25	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:25	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 16:25	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:25	
1004152-64 DP08-01143 [Solid] Sampled 04/19/2010 14:30 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 16:30	
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 16:30	+MO
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 16:30	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 16:30	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 16:30	AP VIALS!
1004152-65 DP09-01144 [Solid] Sampled 04/19/2010 15:03 Pacific				**QSM4.1.**
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:03	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 17:03	AP VIALS!
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 17:03	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:03	AP VIALS!
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:03	+MO
1004152-66 DP09-01145 [Solid] Sampled 04/19/2010 15:15 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:15	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 17:15	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:15	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
1004152-67 DP09-01146 [Solid] Sampled 04/19/2010 15:15 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/11/2010 14:00	20	05/03/2010 17:15	+MO
SMS_BNA_8270C_3546_REG	05/11/2010 14:00	20	05/03/2010 17:15	
WC_PERCENT_SOLIDS_2540B	05/11/2010 14:00	20	04/26/2010 17:15	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 17:15	AP VIALS!

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-68 DP01-01518 [Water] Sampled 04/17/2010 08:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 10:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 10:30	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 10:30	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 10:30	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 10:30	
1004152-69 DP01-01519 [Water] Sampled 04/17/2010 09:40 Pacific				**QSM4.1**
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 11:40	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 11:40	+MO
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 11:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 11:40	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 11:40	
1004152-70 DP02-01520 [Water] Sampled 04/17/2010 10:55 Pacific				**QSM4.1**
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 12:55	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 12:55	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 12:55	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 12:55	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 12:55	
1004152-71 DP02-01521 [Water] Sampled 04/17/2010 14:00 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 16:00	+MO. LOW VOLUME!!!
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 16:00	LOW VOLUME!!!
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 16:00	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 16:00	LOW VOLUME!!!
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 16:00	
1004152-72 DP02-51520 [Water] Sampled 04/17/2010 14:00 Pacific				**QSM4.1**
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 16:00	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 16:00	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 16:00	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 16:00	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 16:00	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-73 DP03-01522 [Water] Sampled 04/17/2010 15:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 17:40	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 17:40	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 17:40	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 17:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 17:40	
1004152-74 DP03-01523 [Water] Sampled 04/17/2010 15:50 Pacific				**QSM4.1**
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/24/2010 17:50	
VOC_8260B_AP9	05/11/2010 14:00	20	05/01/2010 17:50	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/24/2010 17:50	+MO
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/24/2010 17:50	
VGC_GRO_8015B	05/11/2010 14:00	20	05/01/2010 17:50	
1004152-75 DP04-01524 [Water] Sampled 04/19/2010 08:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 10:40	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 10:40	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 10:40	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 10:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 10:40	
1004152-76 DP04-01525 [Water] Sampled 04/19/2010 09:05 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 11:05	+MO
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 11:05	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 11:05	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 11:05	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 11:05	
1004152-77 DP05-01526 [Water] Sampled 04/19/2010 10:55 Pacific				**QSM4.1**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 12:55	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 12:55	+MO
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 12:55	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 12:55	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 12:55	

1004152

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Analysis	Due	TAT	Expires	Comments
1004152-78 DP05-01527 [Water] Sampled 04/19/2010 11:50 Pacific				**QSM4.1**
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 13:50	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 13:50	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 13:50	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 13:50	
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 13:50	+MO
1004152-79 EB-321 [Water] Sampled 04/19/2010 07:30 Pacific				**QSM4.1**
MET_7470_MERCURY	05/11/2010 14:00	20	05/17/2010 09:30	
MET_ICP_6010B_FULL	05/11/2010 14:00	20	10/16/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 09:30	+MO. LOW VOLUME!!!
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 09:30	LOW VOLUME!!!
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 09:30	LOW VOLUME!!!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:30	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:30	
1004152-80 EB-121 [Water] Sampled 04/19/2010 07:30 Pacific				**QSM4.1**
MET_7470_MERCURY	05/11/2010 14:00	20	05/17/2010 09:30	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:30	
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 09:30	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 09:30	
MET_ICP_6010B_FULL	05/11/2010 14:00	20	10/16/2010 09:30	water TAL + Mo
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 09:30	+MO
1004152-81 TB-121 [Water] Sampled 04/19/2010 07:40 Pacific				**QSM4.1**
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:40	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:40	
1004152-82 EB-221 [Water] Sampled 04/19/2010 07:37 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/11/2010 14:00	20	04/26/2010 09:37	+MO. LOW VOLUME!!!
MET_ICP_6010B_FULL	05/11/2010 14:00	20	10/16/2010 09:37	water TAL + Mo
MET_7470_MERCURY	05/11/2010 14:00	20	05/17/2010 09:37	
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:37	
SMS_BNA_8270C_3510_REG	05/11/2010 14:00	20	04/26/2010 09:37	LOW VOLUME!!!
SMS_PAH_8270C_3510_LOW	05/11/2010 14:00	20	04/26/2010 09:37	LOW VOLUME!!!
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:37	

1004152

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004152-83 TB-221 [Water] Sampled 04/19/2010 07:30 Pacific				**QSM4.1**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:30	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:30	
1004152-84 TB-320 [Water] Sampled 04/19/2010 07:40 Pacific				**QSM4.1**
VOC_8260B_AP9	05/11/2010 14:00	20	05/03/2010 09:40	
VGC_GRO_8015B	05/11/2010 14:00	20	05/03/2010 09:40	

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:35:04 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar
	Preservatives:	MeOH	4°C	4°C	4°C
	Filtered:	NA	NA	NA	NA
	Holding Time:	48HR	14	14	14
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)

	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP01-01036	4/16/2010	9:50	Soil				x ✓	1004141-38 ~~1004152-01~~ SMG 4/21/10	1	
DP01-01037	4/16/2010	9:55	Soil				x ✓	-39 -02	1	
DP01-01038	4/16/2010	10:00	Soil				x ✓	-40 -03	1	
DP02-01039	4/16/2010	11:20	Soil				x ✓	-41 -04	1	
DP02-01040	4/16/2010	11:25	Soil				x ✓	-42 -05	1	
DP02-01041	4/16/2010	11:30	Soil				x ✓	-43 ✓ -06	1	
DP02-01123	4/16/2010	9:20	Soil			x ✓	x ✓	1004141-44	2	
DP02-01124	4/16/2010	9:28	Soil			x ✓	x ✓	-45	2	
DP02-01125	4/16/2010	9:30	Soil			x ✓	x ✓	-46	2	
DP02-09088	4/16/2010	8:55	Soil		x ✓			1004152-07	1	
DP02-09089	4/16/2010	9:00	Soil		x ✓			-08	1	
DP02-09090	4/16/2010	9:05	Soil		x ✓			-09	1	
DP02-09091	4/16/2010	9:10	Soil		x ✓			-10	1	
DP02-51040	4/16/2010	11:25	Soil				x ✓	1004141-47 ✓ ~~-11~~ SMG 4/21/10	1	

Signatures		Date/Time
Approved by		
Sampled by		4/19/10 1130
Relinquished by		
Received by		
Relinquished by		4/20/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-8°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:35:05 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar		
	Preservatives:	MeOH	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	48HR	14	14	14		
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Number of Containers	COMMENTS
DP02-59090	4/16/2010 9:05 Soil		x ✓			1	
DP03-01042	4/16/2010 11:45 Soil				x ✓	1	
DP03-01043	4/16/2010 11:50 Soil				x ✓	1	
DP03-01044	4/16/2010 11:55 Soil				x ✓	1	
DP03-01126	4/16/2010 10:20 Soil			x ✓	x ✓	2	
DP03-01127	4/16/2010 10:25 Soil			x ✓	x ✓	2	
DP03-01128	4/16/2010 10:30 Soil			x ✓	x ✓	2	
DP03-09092	4/16/2010 10:05 Soil		x ✓			1	
DP03-09093	4/16/2010 10:05 Soil		x ✓			1	
DP03-09094	4/16/2010 10:03 Soil		x ✓			1	
DP03-09095	4/16/2010 10:05 Soil		x ✓			1	
DP04-01045	4/16/2010 10:45 Soil				x ✓	1	
DP04-01046	4/16/2010 10:50 Soil				x ✓	1	
DP04-01047	4/16/2010 10:55 Soil				x ✓	1	

1004152-12
1004141-48 ~~-13~~ SMD 4/22/10
-49 ~~-14~~
-50 ~~-15~~
1004141-51
-52
-53
1004152-16
-17
-18
-19
1004141-54 ~~-20~~ SMD 4/22/10
-55 -21
~~-56~~ ~~-22~~

Signatures	Date/Time
Approved by	
Sampled by	4/19/10
Relinquished by	1130
Received by	
Relinquished by	4/20/10 08:30
Received by	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 8:35:05 AM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar				
	Preservatives:	MeOH	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA				
	Holding Time:	48HR	14	14	14				
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)			Number of Containers	COMMENTS
	DATE / TIME / Matrix								
DP04-01129	4/16/2010 13:30 Soil			x ✓	x ✓	1004141-57		2	
DP04-01130	4/16/2010 13:35 Soil			x ✓	x ✓		-58	2	
DP04-01131	4/16/2010 13:45 Soil			x ✓	x ✓		-59	2	
DP04-09096	4/16/2010 13:00 Soil		x ✓			1004152-23		1	
DP04-09097	4/16/2010 13:03 Soil		x ✓				-24	1	
DP04-09098	4/16/2010 13:05 Soil		x ✓				-25	1	
DP04-09099	4/16/2010 13:07 Soil		x ✓				-26	1	
DP04-51130	4/16/2010 13:35 Soil			x ✓	x ✓	1004141-60		2	
DP05-01132	4/16/2010 15:00 Soil			x ✓	x ✓		-61	2	
DP05-01133	4/16/2010 15:10 Soil			x ✓	x ✓		-62	2	
DP05-01134	4/16/2010 15:15 Soil			x ✓	x ✓		-63	2	
DP05-09100	4/16/2010 14:35 Soil		x ✓			1004152-27		1	
DP05-09101	4/16/2010 14:38 Soil		x ✓				-28	1	
DP05-09102	4/16/2010 14:40 Soil		x ✓				-29	1	

Signatures		Date/Time
Approved by		
Sampled by	Jamie Jhird	4/19/10 1130
Relinquished by		
Received by		
Relinquished by	[illegible]	4/20/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 8:35:05 AM* Page 4 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910

	Container:	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	Share 4oz jar
	Preservatives:	MeOH	4°C	4°C	4°C
	Filtered:	NA	NA	NA	NA
	Holding Time:	48HR	14	14	14
		TPH-Purgable (SW8015B)	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)

	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP05-09103	4/16/2010	14:45	Soil		x ✓			1004152-30	1	
DP05-59100	4/16/2010	14:35	Soil		x ✓			-31	1	
DP09-01060	4/16/2010	14:25	Soil				x ✓	~~-32~~ 1004141-64	1	
DP09-01061	4/16/2010	14:30	Soil				x ✓	-33 ↓ -65	1	
DP09-51060	4/16/2010	14:25	Soil				x ✓	-34 ↓ -73	2	
DP10-01063	4/16/2010	13:50	Soil				x ✓	35 1004141-66	1	
DP10-01064	4/16/2010	13:55	Soil				x ✓	36 -67	1	
DP11-01066	4/16/2010	15:25	Soil				x ✓	-37 -68	1	
DP11-01067	4/16/2010	15:30	Soil				x ✓	SMS -38 -69	1	
DP12-01069	4/16/2010	15:05	Soil				x ✓	-39 -70	1	
DP12-01070	4/16/2010	15:10	Soil				x ✓	-40 -71	1	
DP12-51070	4/16/2010	15:10	Soil				x ✓	~~-41~~ ↓ -72	1	
								TOTAL NUMBER OF CONTAINERS	68	

4/19/10 TF

	Signatures	Date/Time
Approved by		
Sampled by	James Ford	4/19/10 1130
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 3:50:41 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP05-01048	4/19/2010	14:30	Soil		X	1004152 42	1	
DP05-01049	4/19/2010	14:35	Soil		X	-43	1	
DP05-01050	4/19/2010	14:40	Soil		X	-44	1	
DP05-51050	4/19/2010	14:40	Soil		X	-45	1	
DP06-01051	4/19/2010	15:05	Soil		X	-46	1	
DP06-01052	4/19/2010	15:10	Soil		X	-47	1	
DP06-01053	4/19/2010	15:15	Soil		X	-48	1	
DP06-01135	4/19/2010	9:35	Soil	X	X	-49	4	
DP06-01136	4/19/2010	9:50	Soil	X	X	-50	4	
DP06-01137	4/19/2010	10:00	Soil	X	X	-51	4	
DP07-01054	4/19/2010	13:20	Soil		X	-52	1	
DP07-01055	4/19/2010	13:25	Soil		X	-53	1	
DP07-01056	4/19/2010	13:30	Soil		X	-54	1	
DP07-01138	4/19/2010	11:00	Soil	X	X	-55	4	

	Signatures	Date/Time
Approved by		
Sampled by		4/19/10
Relinquished by	James Jard	1600
Received by		
Relinquished by		
Received by		4/20/10

08:30
2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 3:50:42 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910p

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP07-01139 ✓	4/19/2010	11:05	Soil	X	X	1004152-56	4	
DP07-01140 ✓	4/19/2010	11:15	Soil	X	X	-57	4	
DP07-51140 ✓	4/19/2010	11:15	Soil	X	X	-58	4	
DP08-01057 ✓	4/19/2010	14:00	Soil		X	-59	1	LAB QC
DP08-01058 ✓	4/19/2010	14:05	Soil		X	-60	1	
DP08-01059 ✓	4/19/2010	14:10	Soil		X	-61	1	
DP08-01141 ✓	4/19/2010	14:20	Soil	X	X	-62	4	
DP08-01142 ✓	4/19/2010	14:25	Soil	X	X	-63	4	
DP08-01143 ✓	4/19/2010	14:30	Soil	X	X	-64	4	
DP09-01144 ✓	4/19/2010	15:03	Soil	X	X	-65	4	
DP09-01145 ✓	4/19/2010	15:15	Soil	X	X	-66	4	
DP09-01146 ✓	4/19/2010	15:15	Soil	X	X	-67	4	
						TOTAL NUMBER OF CONTAINERS	65	

	Signatures	Date/Time
Approved by		
Sampled by	James Jones	4/19/10 1000
Relinquished by		
Received by		
Relinquished by	Janice Shilling	4/20/10 08:30
Received by		2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 8:54:38 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	HCl	HCl	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP01-01518	4/17/2010	8:30	Water	X	X	2X	2X	2X	1004152-68	15	
DP01-01519	4/17/2010	9:40	Water	X	X	2X	2X	2X	-69	15	
DP02-01520	4/17/2010	10:55	Water	X	X	2X	2X	2X	-70	15	
DP02-01521	4/17/2010	14:00	Water	X	X	2X	2X	2X	-71	15	
DP02-51520	4/17/2010	14:00	Water	X	X	2X	2X	2X	-72	15	
DP03-01522	4/17/2010	15:40	Water	X	X	X	X	X	-73	15	
DP03-01523	4/17/2010	15:50	Water	X	X	X	X	X	-74	15	
								TOTAL NUMBER OF CONTAINERS		105	

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Frank	4/19/10
Relinquished by		1160
Received by		
Relinquished by		
Received by		4/20/10

0830 2.1°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 2:49:53 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	7			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
DP04-01524	DATE 4/19/2010 TIME 8:40 Matrix Water	x 2	x 2	x 2	1004152-75 6	~~10~~	
DP04-01525	4/19/2010 9:05 Water	x	x	x	-76 6	~~10~~	
DP05-01526	4/19/2010 10:55 Water	x	x	x	-77 6	~~10~~	
DP05-01527	4/19/2010 11:50 Water	x	x	x	-78 6	~~10~~	
					TOTAL NUMBER OF CONTAINERS	~~40~~ 24	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/19/10 1730
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2-10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 2:32:17 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-321	4/19/2010 7:30 Water	x 2	x 1	x 1	x 1	1004152-79 5	11	
						TOTAL NUMBER OF CONTAINERS	11	

5

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/19/10
Relinquished by	[signature]	1400
Received by		
Relinquished by	[signature]	
Received by	[signature]	4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-1°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 3:37:08 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910p

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-121	4/19/2010	7:30	Water		X	X	1004152-80	5	
TB-121	4/19/2010	7:40	Water		X	X	-81	5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/19/10
Relinquished by		1540
Received by		
Relinquished by		4/20/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 2:11:17 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		
Preservatives:				4°C	4°C	4°C	HNO4		
Filtered:				NA	NA	NA	NA		
Holding Time:				7	7	7	28		
EB-121	4/19/2010	7:30	Water	x [2]	x [2]	x [2]	x 1	1004152-80 7 ~~11~~ 7	
								TOTAL NUMBER OF CONTAINERS ~~11~~ 7	

Signatures		Date/Time
Approved by		
Sampled by	Tamara Jank	4/19/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 3:55:42 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910P

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-221	4/19/2010 7:37 Water	X	X	1004152 -82	5	
TB-221	4/19/2010 7:30 Water	X	X	-83	5	
				TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/19/10
Relinquished by		1600
Received by		
Relinquished by	[signature]	4/20/10
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

08130 2.10C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/19/2010 2:19:22 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

				Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	4°C	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	7	7	7	28			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-221	4/19/2010	7:37	Water		x 2	x	x 2	x 1	1004152-82	5 ~~11~~	
									TOTAL NUMBER OF CONTAINERS	~~11~~ 5	

	Signatures	Date/Time
Approved by		
Sampled by		4/19/10
Relinquished by		1400
Received by		
Relinquished by		
Received by		4/20/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-1°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/19/2010 9:16:21 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 41910W

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-320 ✓	4/16/2010	7:40	Water	X	X	1004176	5	
TB-320 ✓	4/16/2010	7:40	Water	X	X	1004152 -84	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		4/19/10
Sampled by		
Relinquished by		1100
Received by		
Relinquished by		4/20/10
Received by		0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889896
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.8°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004141, 1004152 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4980

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.1 °C

Dates samples were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schuck (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/20/10	(Yes)	(No)	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

For 1004152 - sample DP02-01521 had 1 vial CAR#: _____
+ 1 1L amber broken in shipment.

No bulk jars rec'd w/ terracore samples.

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004141, 1004152 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Almeda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 4969

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.8°C

Dates ~~samples were logged in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 3 of 10

Client: CH2M Hill Project: Ala Mesa Point

Date/Time Received: 04/20/10 08:30 Date cooler(s) opened: 04/20/10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9896

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9°C

~~Dates samples were logged in: 04/20/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 4 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5895

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1°C

Dates samples were ~~logged-in~~: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 5 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5873

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.8 °C

Dates samples were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 6 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5884

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.8°C

Dates ~~samples were logged-in~~: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 7 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5862

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

~~Dates samples were logged-in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 8 of 10

Client: CH2M HILL Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4991

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1°C

Dates ~~samples~~ were logged-in: **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 9 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 4970

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.8° C

~~Dates samples were logged in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 10 of 10

Client: CHAM HILL Project: Alameda Point

Date/Time Received: **04/20/10 08:30** Date cooler(s) opened: **04/20/10**

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5005

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-19-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: WET DRY BLUE NONE Temperature of Samples upon Receipt: 3.9°C

~~Dates samples were logged-in:~~ **04/20/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 3:00:40 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010W

	DATE	TIME	Matrix	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber		Number of Containers	COMMENTS
				Preservatives:	HCl	HCl	4°C	4°C			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	14	14	7	7			
					VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)			
EB-321	4/19/2010	7:30	Water		X	X			1004152-79	5	
TB-321	4/19/2010	7:50	Water		X	X				5	
EB-322	4/20/2010		Water				X	X		~~8~~ 4	
									TOTAL NUMBER OF CONTAINERS	~~16~~ 14	

CMC
04/20/10

	Signatures	Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:17:39 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	HCl	HCl	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
	DATE	TIME	Matrix						
DP04-01524	4/19/2010	8:40	Water	X	X				1004152-75 5
DP04-01525	4/19/2010	9:05	Water	X	X				-76 5
DP05-01526	4/19/2010	10:55	Water	X	X				-77 5
DP05-01527	4/19/2010	11:50	Water	X	X				-78 5
DP06-01528	4/19/2010	13:30	Water	X	X	X	X	X	~~15~~ 9
DP06-01529	4/19/2010	15:10	Water	X	X	X	X	X	~~15~~ 9
DP07-01530	4/19/2010	15:45	Water	X	X	X	X	X	~~15~~ 9
DP07-01531	4/19/2010	16:15	Water	X	X	X	X	X	~~15~~ 9
DP07-51530	4/19/2010	15:45	Water	X	X	X	X	X	~~15~~ 9
								TOTAL NUMBER OF CONTAINERS	~~95~~ 65

CMC 4/20/10

Signatures		Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/20/2010 7:24:08 AM Page 1 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP05-01048	4/19/2010 14:30 Soil			X		1004152-42	1	
DP05-01049	4/19/2010 14:35 Soil			X		-43	1	
DP05-01050	4/19/2010 14:40 Soil			X		-44	1	
DP05-51050	4/19/2010 14:40 Soil			X		-45	1	
DP06-01051	4/19/2010 15:05 Soil			X		-46	1	
DP06-01052	4/19/2010 15:10 Soil			X		-47	1	
DP06-01053	4/19/2010 15:15 Soil			X		-48	1	
DP06-01135	4/19/2010 9:35 Soil		X	X		-49	~~2~~ 1	
DP06-01136	4/19/2010 9:50 Soil		X	X		-50	~~2~~ 1	
DP06-01137	4/19/2010 10:00 Soil		X	X		-51	~~2~~ 1	
DP06-09104	4/19/2010 9:25 Soil	X					1	
DP06-09105	4/19/2010 9:27 Soil	X					1	
DP06-09106	4/19/2010 9:30 Soil	X					1	
DP06-09107	4/19/2010 9:33 Soil	X					1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/20/10 0700
Received by		
Relinquished by		
Received by		4/21/10 08:30 1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:08 AM* Page 2 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP07-01054	4/19/2010 13:20 Soil			X		1004152-52	1	
DP07-01055	4/19/2010 13:25 Soil			X		-53	1	
DP07-01056	4/19/2010 13:30 Soil			X		-54	1	
DP07-01138	4/19/2010 11:00 Soil		X	X		1004152-55 i	~~2~~	
DP07-01139	4/19/2010 11:05 Soil		X	X		-56 i	~~2~~	
DP07-01140	4/19/2010 11:15 Soil		X	X		-57 i	~~2~~	
DP07-09108	4/19/2010 10:40 Soil	X					1	
DP07-09109	4/19/2010 10:42 Soil	X					1	
DP07-09110	4/19/2010 10:45 Soil	X					1	
DP07-09111	4/19/2010 10:50 Soil	X					1	
DP07-51140	4/19/2010 11:15 Soil		X	X		1004152-58	~~2~~ 1	
DP07-59110	4/19/2010 10:45 Soil	X					1	
DP08-01057	4/19/2010 14:00 Soil			X		1004152-59	1	
DP08-01058	4/19/2010 14:05 Soil			X		-60	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/20/10 0900
Received by		
Relinquished by		
Received by	[signature]	4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:09 AM* Page 3 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
DP08-01059	4/19/2010 14:10 Soil			X		1004152-61	1	
DP08-01141	4/19/2010 14:20 Soil		X	X		-62	2	
DP08-01142	4/19/2010 14:25 Soil		X	X		-63	~~2~~ 1	
DP08-01143	4/19/2010 14:30 Soil		X	X		-64	~~2~~ 1	
DP08-09112	4/19/2010 14:05 Soil	X				MS / MSD	1	LAB QC
DP08-09113	4/19/2010 14:07 Soil	X					1	
DP08-09114	4/19/2010 14:09 Soil	X					1	
DP08-09115	4/19/2010 14:13 Soil	X					1	
DP09-01144	4/19/2010 15:03 Soil		X	X		1004152-65	~~2~~ 1	
DP09-01145	4/19/2010 15:15 Soil		X	X		-66	~~2~~ 1	
DP09-01146	4/19/2010 15:15 Soil		X	X		-67	~~2~~ 1	
DP09-09116	4/19/2010 14:55 Soil	X					1	
DP09-09117	4/19/2010 14:57 Soil	X					1	
DP09-09118	4/19/2010 15:00 Soil	X					1	

	Signatures	Date/Time
Approved by		
Sampled by		4/20/10
Relinquished by	James Jones	0900
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.90C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 1 of 6

Client: CH2M Hill Project: 2010 - EDC 12 - GW ALAMEDA POINT

Date/Time Received: 4.21.10 8:30 Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5325

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9 °C

Dates samples were logged-in: 4/21/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 2 of 6

Client: CH2M HILL Project: 2010-Alameda Point-Field Ex-Team 1

Date/Time Received: 4-21-10 8:30 Date cooler(s) opened: 4/21/10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5358

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152 Number of Coolers: 3 of 6

Client: CH2M HILL Project: 2010-EDC-12-GW ALAMEDA Point

Date/Time Received: 4.21.10 8:30 AM Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9874

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

Sonya Gordon

From: William Schwab [wschwab@empirlabs.com]
Sent: Wednesday, April 21, 2010 5:36 PM
To: 'RushForms'
Subject: 1004141 / 1004152!!!!!

DRO has been added to the following samples within WO 1004141: -38-->43, -47-->50, -54-->56, -64-->73.

NOTE DRY WEIGHT has been TAKEN OFF HOLD for these samples as well!!!

DRO and DRY WEIGHT have been REMOVED from samples 1004152-01-->06, -11, -13-->15, -20-->22, -32-->33, -34-->41.

Analysts, there was a mixup and these samples were tagged to the work order 1004152 and should have been tagged to 1004141. Note to all analysts (for DRO and dry weight), there will be no bulk containers for 1004152-01-->06, -11, -13-->15, -20-->22, -32-->34, and -35-->41. The bulk containers are tagged as 1004141. What this means is that this is how you will look for the accurate containers:

1004152-01 bulk jars should be used to report as 1004141-38
1004152-02 bulk jars should be used to report as 1004141-39
1004152-03 bulk jars should be used to report as 1004141-40
1004152-04 bulk jars should be used to report as 1004141-41
1004152-05 bulk jars should be used to report as 1004141-42
1004152-06 bulk jars should be used to report as 1004141-43
1004152-11 bulk jars should be used to report as 1004141-47
1004152-13 bulk jars should be used to report as 1004141-48
1004152-14 bulk jars should be used to report as 1004141-49
1004152-15 bulk jars should be used to report as 1004141-50
1004152-20 bulk jars should be used to report as 1004141-54
1004152-21 bulk jars should be used to report as 1004141-55
1004152-22 bulk jars should be used to report as 1004141-56
1004152-32 bulk jars should be used to report as 1004141-64
1004152-33 bulk jars should be used to report as 1004141-65
1004152-35 bulk jars should be used to report as 1004141-66
1004152-36 bulk jars should be used to report as 1004141-67
1004152-37 bulk jars should be used to report as 1004141-68
1004152-38 bulk jars should be used to report as 1004141-69
1004152-39 bulk jars should be used to report as 1004141-70
1004152-40 bulk jars should be used to report as 1004141-71
1004152-41 bulk jars should be used to report as 1004141-72
1004152-34 bulk jars should be used to report as 1004141-73
Sorry for all this confusion, Thanks to Sonya for catching.

William Schwab
Sample Receiving Group Leader / Safety Coordinator

Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 237 l Toll free: 877.345.1113 l Fax: 615.846.5426

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1004170

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/19/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/21/2010 08:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/21/2010 16:01

Samples Received at: **2.7°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004170-01 DP06-09104 [Solid] Sampled 04/19/2010 09:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:25	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:25	
1004170-02 DP06-09105 [Solid] Sampled 04/19/2010 09:27 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:27	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:27	
1004170-03 DP06-09106 [Solid] Sampled 04/19/2010 09:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:30	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:30	
1004170-04 DP06-09107 [Solid] Sampled 04/19/2010 09:33 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:33	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:33	
1004170-05 DP07-09108 [Solid] Sampled 04/19/2010 10:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:40	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:40	
1004170-06 DP07-09109 [Solid] Sampled 04/19/2010 10:42 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:42	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:42	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-07 DP07-09110 [Solid] Sampled 04/19/2010 10:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:45	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:45	
1004170-08 DP07-09111 [Solid] Sampled 04/19/2010 10:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:50	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:50	
1004170-09 DP07-59110 [Solid] Sampled 04/19/2010 10:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:45	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:45	
1004170-10 DP08-09112 [Solid] Sampled 04/19/2010 14:05 Pacific				**QSM4.1. MS/MSD**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 16:05	MS/MSD
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 16:05	MS/MSD
1004170-11 DP08-09113 [Solid] Sampled 04/19/2010 14:07 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 16:07	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 16:07	
1004170-12 DP08-09114 [Solid] Sampled 04/19/2010 14:09 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 16:09	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 16:09	
1004170-13 DP08-09115 [Solid] Sampled 04/19/2010 14:13 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 16:13	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 16:13	
1004170-14 DP09-09116 [Solid] Sampled 04/19/2010 14:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 16:55	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 16:55	
1004170-15 DP09-09117 [Solid] Sampled 04/19/2010 14:57 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 16:57	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 16:57	
1004170-16 DP09-09118 [Solid] Sampled 04/19/2010 15:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 17:00	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 17:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-17 DP09-09119 [Solid] Sampled 04/19/2010 15:03 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 17:03	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 17:03	
1004170-18 DP14-01075 [Solid] Sampled 04/19/2010 16:20 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 18:20	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 18:20	
1004170-19 DP14-01076 [Solid] Sampled 04/19/2010 16:25 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 18:25	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 18:25	
1004170-20 DP14-01077 [Solid] Sampled 04/19/2010 16:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 18:30	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 18:30	
1004170-21 DP14-09036 [Solid] Sampled 04/19/2010 15:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 17:55	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 17:55	
1004170-22 DP14-09037 [Solid] Sampled 04/19/2010 16:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 18:00	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 18:00	
1004170-23 DP14-09038 [Solid] Sampled 04/19/2010 16:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 18:05	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 18:05	
1004170-24 DP14-09039 [Solid] Sampled 04/19/2010 16:10 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 18:10	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 18:10	
1004170-25 DP15-01078 [Solid] Sampled 04/19/2010 11:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 13:05	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 13:05	
1004170-26 DP15-01079 [Solid] Sampled 04/19/2010 11:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 13:10	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 13:10	

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Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-27 DP15-01080 [Solid] Sampled 04/19/2010 11:15 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 13:15	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 13:15	
1004170-28 DP15-09040 [Solid] Sampled 04/19/2010 10:45 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:45	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:45	
1004170-29 DP15-09041 [Solid] Sampled 04/19/2010 10:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:50	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:50	
1004170-30 DP15-09042 [Solid] Sampled 04/19/2010 10:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:55	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:55	
1004170-31 DP15-09043 [Solid] Sampled 04/19/2010 11:00 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 13:00	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 13:00	
1004170-32 DP15-51080 [Solid] Sampled 04/19/2010 11:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 13:15	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 13:15	
1004170-33 DP15-59040 [Solid] Sampled 04/19/2010 10:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:45	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 12:45	
1004170-34 DP16-01081 [Solid] Sampled 04/19/2010 09:55 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 11:55	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:55	
1004170-35 DP16-01082 [Solid] Sampled 04/19/2010 10:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:00	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 12:00	
1004170-36 DP16-01083 [Solid] Sampled 04/19/2010 10:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 12:05	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/03/2010 12:05	

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Analysis	Due	TAT	Expires	Comments
1004170-37 DP16-09044 [Solid] Sampled 04/19/2010 09:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:25	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:25	
1004170-38 DP16-09045 [Solid] Sampled 04/19/2010 09:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:30	
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:30	
1004170-39 DP16-09046 [Solid] Sampled 04/19/2010 09:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:35	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:35	
1004170-40 DP16-09047 [Solid] Sampled 04/19/2010 09:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/12/2010 14:00	20	05/03/2010 11:40	
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/26/2010 11:40	
1004170-41 DP01-01111 [Solid] Sampled 04/20/2010 09:35 Pacific				**MS/MSD. QSM4.1.**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:35	MS/MSD. AP VIALS
SGC_PCB8082A_3546	05/12/2010 14:00	20	05/04/2010 11:35	MS/MSD. + Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/12/2010 14:00	20	05/04/2010 11:35	MS/MSD. Tox LCS required
MET_ICP_LOW6010B_FULL	05/12/2010 14:00	20	10/17/2010 11:35	MS/MSD. soil TAL + Mo
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 11:35	MS/MSD. +MO
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:35	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 11:35	MS/MSD.
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 11:35	MS/MSD.
MET_7471A_MERCURY	05/12/2010 14:00	20	05/18/2010 11:35	MS/MSD.
1004170-42 DP01-01112 [Solid] Sampled 04/20/2010 09:40 Pacific				**QSM4.1**
SGC_PCB8082A_3546	05/12/2010 14:00	20	05/04/2010 11:40	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/12/2010 14:00	20	05/04/2010 11:40	Tox LCS required
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:40	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 11:40	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:40	AP VIALS
MET_7471A_MERCURY	05/12/2010 14:00	20	05/18/2010 11:40	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 11:40	
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 11:40	+MO
MET_ICP_LOW6010B_FULL	05/12/2010 14:00	20	10/17/2010 11:40	soil TAL + Mo

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Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-43 DP01-01113 [Solid] Sampled 04/20/2010 09:45 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/12/2010 14:00	20	05/18/2010 11:45	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 11:45	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:45	AP VIALS
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:45	AP VIALS
MET_ICP_LOW6010B_FULL	05/12/2010 14:00	20	10/17/2010 11:45	soil TAL + Mo
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 11:45	
SGC_PCB8082A_3546	05/12/2010 14:00	20	05/04/2010 11:45	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/12/2010 14:00	20	05/04/2010 11:45	Tox LCS required
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 11:45	+MO
1004170-44 DP09-01087 [Solid] Sampled 04/20/2010 14:05 Pacific				**MS/MSD. QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:05	MS/MSD. +MO
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:05	MS/MSD. AP VIALS. LOW VOLUME
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:05	MS/MSD.
1004170-45 DP09-01088 [Solid] Sampled 04/20/2010 14:10 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:10	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:10	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:10	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
1004170-46 DP09-01089 [Solid] Sampled 04/20/2010 14:15 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:15	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:15	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:15	
1004170-47 DP10-01090 [Solid] Sampled 04/20/2010 13:30 Pacific				**MS/MSD. QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 15:30	MS/MSD. +MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 15:30	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 15:30	MS/MSD. AP VIALS. LOW VOLUME
1004170-48 DP10-01091 [Solid] Sampled 04/20/2010 13:35 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 15:35	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 15:35	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 15:35	
1004170-49 DP10-01092 [Solid] Sampled 04/20/2010 13:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 15:40	+MO
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 15:40	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 15:40	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-50 DP10-51090 [Solid] Sampled 04/20/2010 13:30 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 15:30	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 15:30	
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 15:30	+MO
1004170-51 DP11-01093 [Solid] Sampled 04/20/2010 14:35 Pacific				**MS/MSD. QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:35	MS/MSD. +MO
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:35	MS/MSD. AP VIALS. LOW VOLUME
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:35	MS/MSD.
1004170-52 DP11-01094 [Solid] Sampled 04/20/2010 14:40 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:40	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:40	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:40	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
1004170-53 DP11-01095 [Solid] Sampled 04/20/2010 14:45 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:45	AP VIALS. LOW VOLUME, ONLY 1 MeOH VIAL!!
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:45	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:45	
1004170-54 DP10-01147 [Solid] Sampled 04/20/2010 09:05 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 11:05	+MO
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:05	AP VIALS
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:05	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 11:05	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 11:05	
1004170-55 DP10-01148 [Solid] Sampled 04/20/2010 09:10 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 11:10	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:10	AP VIALS
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 11:10	+MO
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 11:10	
1004170-56 DP10-01149 [Solid] Sampled 04/20/2010 09:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 11:20	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 11:20	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:20	AP VIALS
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:20	AP VIALS
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 11:20	+MO

1004170

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-57 DP11-01150 [Solid] Sampled 04/20/2010 11:35 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 13:35	+MO
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 13:35	AP VIALS
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 13:35	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 13:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 13:35	
1004170-58 DP11-01151 [Solid] Sampled 04/20/2010 11:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 13:40	
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 13:40	+MO
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 13:40	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 13:40	AP VIALS
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 13:40	AP VIALS
1004170-59 DP11-01152 [Solid] Sampled 04/20/2010 11:45 Pacific				**QSM4.1**
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 13:45	AP VIALS
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 13:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 13:45	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 13:45	
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 13:45	+MO
1004170-60 DP11-51150 [Solid] Sampled 04/20/2010 11:35 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 13:35	+MO
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 13:35	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 13:35	AP VIALS
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 13:35	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 13:35	
1004170-61 DP12-01153 [Solid] Sampled 04/20/2010 13:55 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 15:55	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 15:55	AP VIALS
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 15:55	+MO
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 15:55	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 15:55	AP VIALS

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-62 DP12-01154 [Solid] Sampled 04/20/2010 13:59 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 15:59	AP VIALS
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 15:59	+MO
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 15:59	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 15:59	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 15:59	
1004170-63 DP12-01155 [Solid] Sampled 04/20/2010 14:02 Pacific				**QSM4.1**
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 16:02	AP VIALS
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 16:02	AP VIALS
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 16:02	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 16:02	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 16:02	
1004170-64 DP13-01156 [Solid] Sampled 04/20/2010 15:10 Pacific				**QSM4.1**
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 17:10	
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 17:10	+MO
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 17:10	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 17:10	AP VIALS
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 17:10	AP VIALS
1004170-65 DP13-01157 [Solid] Sampled 04/20/2010 15:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 17:15	
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 17:15	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 17:15	AP VIALS
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 17:15	AP VIALS
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 17:15	+MO
1004170-66 DP13-01158 [Solid] Sampled 04/20/2010 15:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/12/2010 14:00	20	04/27/2010 17:20	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 17:20	AP VIALS
SMS_BNA_8270C_3546_REG	05/12/2010 14:00	20	05/04/2010 17:20	
SGC_DRO_8015B_3546	05/12/2010 14:00	20	05/04/2010 17:20	+MO
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 17:20	AP VIALS

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-67 DP06-01528 [Water] Sampled 04/19/2010 13:30 Pacific				**QSM4.1**
VOC_8260B_AP9	05/12/2010 14:00	20	05/03/2010 15:30	
VGC_GRO_8015B	05/12/2010 14:00	20	05/03/2010 15:30	
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/26/2010 15:30	LOW VOLUME!!
SMS_BNA_8270C_3510_REG	05/12/2010 14:00	20	04/26/2010 15:30	LOW VOLUME!!
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/26/2010 15:30	+MO
1004170-68 DP06-01529 [Water] Sampled 04/19/2010 15:10 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/03/2010 17:10	
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/26/2010 17:10	LOW VOLUME!!
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/26/2010 17:10	+MO
SMS_BNA_8270C_3510_REG	05/12/2010 14:00	20	04/26/2010 17:10	LOW VOLUME!!
VOC_8260B_AP9	05/12/2010 14:00	20	05/03/2010 17:10	
1004170-69 DP07-01530 [Water] Sampled 04/19/2010 15:45 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/03/2010 17:45	
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/26/2010 17:45	+MO
SMS_BNA_8270C_3510_REG	05/12/2010 14:00	20	04/26/2010 17:45	LOW VOLUME!!
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/26/2010 17:45	LOW VOLUME!!
VOC_8260B_AP9	05/12/2010 14:00	20	05/03/2010 17:45	
1004170-70 DP07-01531 [Water] Sampled 04/19/2010 16:15 Pacific				**QSM4.1**
VOC_8260B_AP9	05/12/2010 14:00	20	05/03/2010 18:15	
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/26/2010 18:15	LOW VOLUME!!
SMS_BNA_8270C_3510_REG	05/12/2010 14:00	20	04/26/2010 18:15	LOW VOLUME!!
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/26/2010 18:15	+MO
VGC_GRO_8015B	05/12/2010 14:00	20	05/03/2010 18:15	
1004170-71 DP07-51530 [Water] Sampled 04/19/2010 15:45 Pacific				**QSM4.1**
SMS_BNA_8270C_3510_REG	05/12/2010 14:00	20	04/26/2010 17:45	LOW VOLUME!!
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/26/2010 17:45	LOW VOLUME!!
VGC_GRO_8015B	05/12/2010 14:00	20	05/03/2010 17:45	
VOC_8260B_AP9	05/12/2010 14:00	20	05/03/2010 17:45	
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/26/2010 17:45	+MO
1004170-72 TB-321 [Water] Sampled 04/19/2010 07:50 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/03/2010 09:50	
VOC_8260B_AP9	05/12/2010 14:00	20	05/03/2010 09:50	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004170-73 EB-322 [Water] Sampled 04/20/2010 00:00 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 02:00	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 02:00	
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/27/2010 02:00	+MO
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/27/2010 02:00	
1004170-74 EB-222 [Water] Sampled 04/20/2010 07:25 Pacific				**QSM4.1**
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/27/2010 09:25	+MO
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 09:25	
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/27/2010 09:25	
MET_ICP_6010B_FULL	05/12/2010 14:00	20	10/17/2010 09:25	water TAL + Mo
MET_7470_MERCURY	05/12/2010 14:00	20	05/18/2010 09:25	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 09:25	
1004170-75 TB-222 [Water] Sampled 04/20/2010 07:25 Pacific				**QSM4.1**
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 09:25	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 09:25	
1004170-76 EB-122 [Water] Sampled 04/20/2010 09:30 Pacific				**QSM4.1**
MET_ICP_6010B_FULL	05/12/2010 14:00	20	10/17/2010 11:30	water TAL + Mo
SGC_DRO_8015B_3510	05/12/2010 14:00	20	04/27/2010 11:30	+MO
MET_7470_MERCURY	05/12/2010 14:00	20	05/18/2010 11:30	
SMS_PAH_8270C_3510_LOW	05/12/2010 14:00	20	04/27/2010 11:30	
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 11:30	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 11:30	
1004170-77 TB-122 [Water] Sampled 04/20/2010 07:30 Pacific				**QSM4.1**
VGC_GRO_8015B	05/12/2010 14:00	20	05/04/2010 09:30	
VOC_8260B_AP9	05/12/2010 14:00	20	05/04/2010 09:30	
SGS/Paradigm (SUB028)				
1004170-18 DP14-01075 [Solid] Sampled 04/19/2010 16:20 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/12/2010 14:00	20	05/19/2010 18:20	sub to SGS - Wilmington
1004170-25 DP15-01078 [Solid] Sampled 04/19/2010 11:05 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/12/2010 14:00	20	05/19/2010 13:05	sub to SGS - Wilmington
1004170-34 DP16-01081 [Solid] Sampled 04/19/2010 09:55 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/12/2010 14:00	20	05/19/2010 11:55	sub to SGS - Wilmington

Reviewed By

Date

1004170

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:08 AM* Page 1 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
DP05-01048	4/19/2010 14:30 Soil			X		1004152-42	1	
DP05-01049	4/19/2010 14:35 Soil			X		-43	1	
DP05-01050	4/19/2010 14:40 Soil			X		-44	1	
DP05-51050	4/19/2010 14:40 Soil			X		-45	1	
DP06-01051	4/19/2010 15:05 Soil			X		-46	1	
DP06-01052	4/19/2010 15:10 Soil			X		-47	1	
DP06-01053	4/19/2010 15:15 Soil			X		-48	1	
DP06-01135	4/19/2010 9:35 Soil		X	X		-49	~~2~~ 1	
DP06-01136	4/19/2010 9:50 Soil		X	X		-50	~~2~~ 1	
DP06-01137	4/19/2010 10:00 Soil		X	X		-51	~~2~~ 1	
DP06-09104	4/19/2010 9:25 Soil	X				1004170-01	1	
DP06-09105	4/19/2010 9:27 Soil	X				-02	1	
DP06-09106	4/19/2010 9:30 Soil	X				-03	1	
DP06-09107	4/19/2010 9:33 Soil	X				-04	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/20/10 0900
Received by		
Relinquished by		
Received by	[signature]	4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:08 AM* Page 2 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
DP07-01054	4/19/2010 13:20 Soil			X		1004152-52	1	
DP07-01055	4/19/2010 13:25 Soil			X		-53	1	
DP07-01056	4/19/2010 13:30 Soil			X		-54	1	
DP07-01138	4/19/2010 11:00 Soil		X	X		1004152-55	~~2~~ 1	
DP07-01139	4/19/2010 11:05 Soil		X	X		-56	~~2~~ 1	
DP07-01140	4/19/2010 11:15 Soil		X	X		-57	~~2~~ 1	
DP07-09108	4/19/2010 10:40 Soil	X				1004170-05	1	
DP07-09109	4/19/2010 10:42 Soil	X				-06	1	
DP07-09110	4/19/2010 10:45 Soil	X				-07	1	
DP07-09111	4/19/2010 10:50 Soil	X				-08	1	
DP07-51140	4/19/2010 11:15 Soil		X	X		1004152-58	~~2~~ 1	
DP07-59110	4/19/2010 10:45 Soil	X				1004170-09	1	
DP08-01057	4/19/2010 14:00 Soil			X		1004152-59	1	
DP08-01058	4/19/2010 14:05 Soil			X		-60	1	

	Signatures	Date/Time
Approved by		
Sampled by	Janice Jarl	4/20/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** 4/20/2010 7:24:09 AM Page 3 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA				
	Holding Time:	14	14	14	30				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)			Number of Containers	COMMENTS
DP08-01059	4/19/2010 14:10 Soil			X		1004152-61		1	
DP08-01141	4/19/2010 14:20 Soil		X	X		-62		2	
DP08-01142	4/19/2010 14:25 Soil		X	X		-63		~~2~~ 1	
DP08-01143	4/19/2010 14:30 Soil		X	X		-64		~~2~~ 1	
DP08-09112	4/19/2010 14:05 Soil	X				MS / MSD 1004170-10		1	LAB QC
DP08-09113	4/19/2010 14:07 Soil	X				-11		1	
DP08-09114	4/19/2010 14:09 Soil	X				-12		1	
DP08-09115	4/19/2010 14:13 Soil	X				-13		1	
DP09-01144	4/19/2010 15:03 Soil		X	X		1004152-65		~~2~~ 1	
DP09-01145	4/19/2010 15:15 Soil		X	X		-66		~~2~~ 1	
DP09-01146	4/19/2010 15:15 Soil		X	X		-67		~~2~~ 1	
DP09-09116	4/19/2010 14:55 Soil	X				1004170-14		1	
DP09-09117	4/19/2010 14:57 Soil	X				-15		1	
DP09-09118	4/19/2010 15:00 Soil	X				-16		1	

Signatures	Date/Time
Approved by	
Sampled by	4/20/10
Relinquished by	0900
Received by	
Relinquished by	
Received by	4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 7:24:09 AM* Page 4 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	30			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
DP09-09119	4/19/2010 15:03 Soil	X				1004170-17	1	
DP14-01075	4/19/2010 16:20 Soil		X		X	-18	2	
DP14-01076	4/19/2010 16:25 Soil		X			-19	1	
DP14-01077	4/19/2010 16:30 Soil		X			-20	1	
DP14-09036	4/19/2010 15:55 Soil	X				-21	1	
DP14-09037	4/19/2010 16:00 Soil	X				-22	1	
DP14-09038	4/19/2010 16:05 Soil	X				-23	1	
DP14-09039	4/19/2010 16:10 Soil	X				-24	1	
DP15-01078	4/19/2010 11:05 Soil		X		X	-25	2	
DP15-01079	4/19/2010 11:10 Soil		X			-26	1	
DP15-01080	4/19/2010 11:15 Soil		X			-27	1	
DP15-09040	4/19/2010 10:45 Soil	X				-28	1	
DP15-09041	4/19/2010 10:50 Soil	X				-29	1	
DP15-09042	4/19/2010 10:55 Soil	X				-30	1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	4/20/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/20/2010 7:24:09 AM Page 5 OF 5

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/19/2010
COC Number: 42010

				Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
				Preservatives:	4°C	4°C	4°C	4°C			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	14	14	14	30			
	DATE	TIME	Matrix		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Dioxins/Furans (8290)		Number of Containers	COMMENTS
DP15-09043	4/19/2010	11:00	Soil		X				1004170-31	1	
DP15-51080	4/19/2010	11:15	Soil			X			-32	1	
DP15-59040	4/19/2010	10:45	Soil		X				-33	1	
DP16-01081	4/19/2010	9:55	Soil			X		X	-34	2	
DP16-01082	4/19/2010	10:00	Soil			X			-35	1	
DP16-01083	4/19/2010	10:05	Soil			X			-36	1	
DP16-09044	4/19/2010	9:25	Soil		X				-37	1	
DP16-09045	4/19/2010	9:30	Soil		X				-38	1	
DP16-09046	4/19/2010	9:35	Soil		X				-39	1	
DP16-09047	4/19/2010	9:40	Soil		X				-40	1	
									TOTAL NUMBER OF CONTAINERS	82	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jones	4/20/10 0900
Relinquished by		
Received by		
Relinquished by	Ashley Hall	4/21/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889698
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:02:02 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010p2

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE / TIME / Matrix					
DP01-01111	4/20/2010 9:35 Soil	X	X	1004170-41	4	LAB QC
DP01-01112	4/20/2010 9:40 Soil	X	X	-42	4	
DP01-01113	4/20/2010 9:45 Soil	X	X	-43	4	
DP09-01087	4/20/2010 14:05 Soil		X	-44	1	LAB QC
DP09-01088	4/20/2010 14:10 Soil		X	-45	1	
DP09-01089	4/20/2010 14:15 Soil		X	-46	1	
DP10-01090	4/20/2010 13:30 Soil		X	-47	1	LAB QC
DP10-01091	4/20/2010 13:35 Soil		X	-48	1	
DP10-01092	4/20/2010 13:40 Soil		X	-49	1	
DP10-51090	4/20/2010 13:30 Soil		X	-50	1	
DP11-01093	4/20/2010 14:35 Soil		X	-51	1	LAB QC
DP11-01094	4/20/2010 14:40 Soil		X	-52	1	
DP11-01095	4/20/2010 14:45 Soil		X	-53	1	
				TOTAL NUMBER OF CONTAINERS	22	

	Signatures	Date/Time
Approved by		
Sampled by		4/20/10
Relinquished by		1600
Received by		
Relinquished by		
Received by	4/21/10	08:30

1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 3:46:19 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE	TIME	Matrix			
DP10-01147 ✓	4/20/2010	9:05	Soil	x x	1004170-54	4	
DP10-01148 ✓	4/20/2010	9:10	Soil	x x	-55	4	
DP10-01149 ✓	4/20/2010	9:20	Soil	x x	-56	4	
DP11-01150 ✓	4/20/2010	11:35	Soil	x x	-57	4	
DP11-01151 ✓	4/20/2010	11:40	Soil	x x	-58	4	
DP11-01152 ✓	4/20/2010	11:45	Soil	x x	-59	4	
DP11-51150 ✓	4/20/2010	11:35	Soil	x x	-60	4	
DP12-01153 ✓	4/20/2010	13:55	Soil	x x	-61	4	
DP12-01154 ✓	4/20/2010	13:59	Soil	x x	-62	4	
DP12-01155 ✓	4/20/2010	14:02	Soil	x x	-63	4	
DP13-01156 ✓	4/20/2010	15:10	Soil	x x	-64	4	
DP13-01157 ✓	4/20/2010	15:15	Soil	x x	-65	4	
DP13-01158 ✓	4/20/2010	15:20	Soil	x x	-66	4	
					TOTAL NUMBER OF CONTAINERS	52	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/20/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1-9°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 7:17:39 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	HCl	HCl	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
	DATE / TIME / Matrix								
DP04-01524	4/19/2010 8:40 Water	X	X				1004152-75	5	
DP04-01525	4/19/2010 9:05 Water	X	X				-76	5	
DP05-01526	4/19/2010 10:55 Water	X	X				-77	5	
DP05-01527	4/19/2010 11:50 Water	X	X				-78	5	
DP06-01528	4/19/2010 13:30 Water	X	X	X	X	X	1004170--67	~~15~~	9
DP06-01529	4/19/2010 15:10 Water	X	X	X	X	X	-68	~~15~~	9
DP07-01530	4/19/2010 15:45 Water	X	X	X	X	X	-69	~~15~~	9
DP07-01531	4/19/2010 16:15 Water	X	X	X	X	X	-70	~~15~~	9
DP07-51530	4/19/2010 15:45 Water	X	X	X	X	X	-71	~~15~~	9
							TOTAL NUMBER OF CONTAINERS	~~95~~	65

CMC 4/20/10

	Signatures	Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		4/21/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 3:00:40 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010W

				Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber			
				Preservatives:	HCl	HCl	4°C	4°C			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	14	14	7	7			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
EB-321	4/19/2010	7:30	Water		X	X			1004152-79	5	
TB-321	4/19/2010	7:50	Water		X	X			1004170-71	5	
EB-322	4/20/2010		Water				X	X	-73	~~8~~ 4	
									TOTAL NUMBER OF CONTAINERS	~~18~~ 14	

CMC
04/20/10

	Signatures	Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

1.9°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CHAIN OF CUSTODY RECORD

4/20/2010 3:51:23 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010P

	DATE	TIME	Matrix	Container:	Preservatives:	Filtered:	Holding Time:		Number of Containers	COMMENTS
				3 x 40 ml VOA	2 x 40 ml VOA					
				HCl	HCl					
				NA	NA					
				14	14					
				VOCs (8260B)	TPH-Purgable (SW8015B)					
EB-222	4/20/2010	7:25	Water	X	X			1004170-74	5	
TB-222	4/20/2010	7:25	Water	X	X			-75	5	
								TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	James Frank	4/20/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.9°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 2:59:46 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010W

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-222	4/20/2010 7:25 Water	X	X	X	1004170-74	7	
					TOTAL NUMBER OF CONTAINERS	7	5

CMC
04/20/10

	Signatures	Date/Time
Approved by		4/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 2:58:54 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010W

				Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA			
				Holding Time:	7	7	28			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-122	4/20/2010	9:30	Water		X	X	X	1004170 -76	1	5
								TOTAL NUMBER OF CONTAINERS	1	5

CMC
04/20/10

	Signatures	Date/Time
Approved by		04/20/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1-GVC

CH2MHILL

CHAIN OF CUSTODY RECORD

4/20/2010 4:04:24 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42010P

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
TB-122	4/20/2010	7:30	Water		X	X		5	
							-77		
							TOTAL NUMBER OF CONTAINERS	5	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/21/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889874
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152, 1004170 Number of Coolers: 1 of 6

Client: CH2M Hill Project: 2010-EDC12-GW ALAMEDA POINT

Date/Time Received: 4-21-10 8:30 Date cooler(s) opened: 4-21-10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5325

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9 °C

Dates samples were logged-in: 4/21/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

EB-222 VOC's vials not rec'd. CAR#: _____

No bulk jars rec'd with any terracore samples! Dry weight placed on hold!
Rec'd vials for EB-122, but no analyses marked! Tagged for VOC & GRO & placed on hold!

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152, 1004170 Number of Coolers: 2 of 6

Client: CH2M HILL Project: 2010-Alameda Point-Field Ex-Team 1

Date/Time Received: 4-21-10 8:30 Date cooler(s) opened: 4/21/10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5358

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004152, 1004170 Number of Coolers: 3 of 6

Client: CH2M HILL Project: 2010-EDC-12-GW ALAMEDA Point

Date/Time Received: 4.21.10 8:30 am Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9874

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170 Number of Coolers: 4 of 6

Client: CH2M Hill Project: 2010 - EOC12 - SOIL ALAMEDA POINT

Date/Time Received: 4.21.10 8:30 Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5336

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.6 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 6

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170 Number of Coolers: 5 of 6

Client: CH2M Hill Project: ALAMEDA Point

Date/Time Received: 4.21.10 8:30 Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5314

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170 Number of Coolers: 6 of 6

Client: CH2M HILL Project: 210-EDC12-SOIL ALAMEDA POINT

Date/Time Received: 4.21.10 8:30 Date cooler(s) opened: 4.21.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5347

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-20-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.2 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 6

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:00 PM* Page 1 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix							
DP01-01111 ✓	4/20/2010	9:35	Soil		x ✓	x ✓	x ✓	x ✓	x ✓	1004170-41 MS/MSD 4	5 ~~5~~	LAB QC
DP01-01112 ✓	4/20/2010	9:40	Soil		x	x	x	x	x	-42 2	5 ~~5~~	
DP01-01113 ✓	4/20/2010	9:45	Soil		x	x	x	x	x	-43 2	5 ~~5~~	
DP01-09072 ✓	4/20/2010	9:10	Soil	x						MS/MSD 2	1 ~~1~~	LAB QC
DP01-09073	4/20/2010	9:15	Soil	x							1	
DP01-09074 ✓	4/20/2010	9:20	Soil	x							1	
DP01-09075 ✓	4/20/2010	9:25	Soil	x							1	
DP09-01087 ✓	4/20/2010	14:05	Soil			x				1004170-44 MS/MSD 2	1 ~~1~~	LAB QC
DP09-01088 ✓	4/20/2010	14:10	Soil			x				-45	1	
DP09-01089 ✓	4/20/2010	14:15	Soil			x				-46	1	
DP10-01090 ✓	4/20/2010	13:30	Soil			x				-47 MS/MSD 2	1 ~~1~~	LAB QC
DP10-01091 ✓	4/20/2010	13:35	Soil			x				-48	1	
DP10-01092 ✓	4/20/2010	13:40	Soil			x				-49	1	
DP10-01147 ✓	4/20/2010	9:05	Soil		x	x				-54 1	2 ~~2~~	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jack	4/21/10 1000
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

7.7°C

Special Instructions:
ATTN:
Sample Custody and Janice Shilling

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:01 PM*

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP10-01148	4/20/2010	9:10	Soil		X	X				1004170-55	1 ~~2~~	
DP10-01149	4/20/2010	9:20	Soil		X	X				↓ -56	1 ~~2~~	
DP10-09120	4/20/2010	8:40	Soil	X							1	
DP10-09121	4/20/2010	8:44	Soil	X							1	
DP10-09122	4/20/2010	8:46	Soil	X							1	
DP10-09123	4/20/2010	8:49	Soil	X							1	
DP10-51090	4/20/2010	13:30	Soil			X				1004170-50	1	
DP10-59120	4/20/2010	8:40	Soil	X							1	
DP11-01093	4/20/2010	14:35	Soil			X				1004170 MS/MSD -51	~~2~~ 1	LAB QC
DP11-01094	4/20/2010	14:40	Soil			X				-52	1	
DP11-01095	4/20/2010	14:45	Soil			X				↓ -53	1	
DP11-01150	4/20/2010	11:35	Soil		X	X				1004170 -57	1 ~~2~~	
DP11-01151	4/20/2010	11:40	Soil		X	X				-58	1 ~~2~~	
DP11-01152	4/20/2010	11:45	Soil		X	X				↓ -59	1 ~~2~~	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jack	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:01 PM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP11-09124	4/20/2010	11:20	Soil	x						2	1	LAB QC
DP11-09125	4/20/2010	11:23	Soil	x							1	
DP11-09126	4/20/2010	11:26	Soil	x							1	
DP11-09127	4/20/2010	11:30	Soil	x							1	
DP11-51150	4/20/2010	11:35	Soil		x	x				1004170-60 2	2	
DP12-01153	4/20/2010	13:55	Soil		x	x				-61 1	2	
DP12-01154	4/20/2010	13:59	Soil		x	x				-62 1	2	
DP12-01155	4/20/2010	14:02	Soil		x	x				-63 1	2	
DP12-09128	4/20/2010	13:30	Soil	x							1	
DP12-09129	4/20/2010	13:33	Soil	x							1	
DP12-09130	4/20/2010	13:35	Soil	x							1	
DP12-09131	4/20/2010	13:55	Soil	x							1	
DP12-59130	4/20/2010	13:35	Soil	x							1	
DP13-01156	4/20/2010	15:10	Soil		x	x				1004170 -64	2	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jark	4/21/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
2.70C

Special Instructions:
ATTN:
Sample Custody and Janice Shilling

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:02 PM* Page 4 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)			Number of Containers	COMMENTS
	DATE	TIME	Matrix								
DP13-01157	4/20/2010	15:15	Soil		X	X				1004170-65 1	2
DP13-01158	4/20/2010	15:20	Soil		X	X				-66 1	2
DP13-09132	4/20/2010	13:55	Soil	X						MS/MSD 2	1 LAB QC
DP13-09133	4/20/2010	13:57	Soil	X							1
DP13-09134	4/20/2010	13:59	Soil	X							1
DP13-09135	4/20/2010	14:03	Soil	X							1
										TOTAL NUMBER OF CONTAINERS	73

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.2°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 9:41:47 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110b

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-322 ✓	4/20/2010	7:45	Water	X	X	1004170-73	5	
TB-322 ✓	4/20/2010	7:40	Water	X	X		5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Jarvis	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3.4°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 9:42:40 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110b

	Container:	3 x 40 ml VOA			
	Preservatives:	HCl			
	Filtered:	NA			
	Holding Time:	14			
		VOCs (8260B)			Number of Containers
DATE	TIME	Matrix			
EB-222 4/20/2010	7:25	Water	X	1004170-74	3
				TOTAL NUMBER OF CONTAINERS	3

COMMENTS

Signatures		Date/Time
Approved by		
Sampled by	James Grant	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5829

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.7 °C

Dates samples were logged-in: 4/22/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schenk (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH <2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5770

2. Were custody seals on outside of cooler(s)? ..... Yes (No)

How many: ____ Seal date: ____ Seal Initials: ____

3. Were custody seals unbroken and intact at the date and time of arrival? ..... Yes No (N/A)

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170 Number of Coolers: 3 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5781

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.4 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Wednesday, April 21, 2010 5:34 PM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt

Yes

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Wednesday, April 21, 2010 3:31 PM
To: Frank, Tamara/BAO
Subject: Alameda sample receipt

Hi Tamara,
Confirming that EB-122 received today should be analyzed for GRO &/or VOC?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: William Schwab [mailto:wschwab@empirlabs.com]
Sent: Wednesday, April 21, 2010 5:01 PM
To: SGordon@EmpirLabs.com
Cc: rdavis@empirlabs.com
Subject: 1004170-76!

This is EB-122. We received 5 HCL vials but no GRO or VOC is on any COC to tag these for. Therefore, tagged for VOC and GRO and placed on hold pending client verification!!

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 237 I Toll free: 877.345.1113 I Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004189

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/20/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/22/2010 08:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/22/2010 17:25

Samples Received at: **2.9°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Analysis	Due	TAT	Expires	Comments
1004189-01 DP01-09072 [Solid] Sampled 04/20/2010 09:10 Pacific				**QSM4.1. MS/MSD**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 11:10	MS/MSD. LOW VOLUME!!!!
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 11:10	MS/MSD. LOW VOLUME!!!!
1004189-02 DP01-09073 [Solid] Sampled 04/20/2010 09:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 11:15	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 11:15	
1004189-03 DP01-09074 [Solid] Sampled 04/20/2010 09:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 11:20	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 11:20	
1004189-04 DP01-09075 [Solid] Sampled 04/20/2010 09:25 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 11:25	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 11:25	
1004189-05 DP10-09120 [Solid] Sampled 04/20/2010 08:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 10:40	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 10:40	
1004189-06 DP10-09121 [Solid] Sampled 04/20/2010 08:44 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 10:44	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 10:44	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004189-07 DP10-09122 [Solid] Sampled 04/20/2010 08:46 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 10:46	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 10:46	
1004189-08 DP10-09123 [Solid] Sampled 04/20/2010 08:49 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 10:49	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 10:49	
1004189-09 DP10-59120 [Solid] Sampled 04/20/2010 08:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 10:40	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 10:40	
1004189-10 DP11-09124 [Solid] Sampled 04/20/2010 11:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 13:20	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 13:20	
1004189-11 DP11-09125 [Solid] Sampled 04/20/2010 11:23 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 13:23	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 13:23	
1004189-12 DP11-09126 [Solid] Sampled 04/20/2010 11:26 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 13:26	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 13:26	
1004189-13 DP11-09127 [Solid] Sampled 04/20/2010 11:30 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 13:30	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 13:30	
1004189-14 DP12-09128 [Solid] Sampled 04/20/2010 13:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:30	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:30	
1004189-15 DP12-09129 [Solid] Sampled 04/20/2010 13:33 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:33	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:33	
1004189-16 DP12-09130 [Solid] Sampled 04/20/2010 13:35 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:35	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:35	

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Analysis	Due	TAT	Expires	Comments
1004189-17 DP12-09131 [Solid] Sampled 04/20/2010 13:55 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:55	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:55	
1004189-18 DP12-59130 [Solid] Sampled 04/20/2010 13:35 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:35	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:35	
1004189-19 DP13-09132 [Solid] Sampled 04/20/2010 13:55 Pacific				**QSM4.1. MS/MSD**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:55	MS/MSD
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:55	MS/MSD
1004189-20 DP13-09133 [Solid] Sampled 04/20/2010 13:57 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:57	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:57	
1004189-21 DP13-09134 [Solid] Sampled 04/20/2010 13:59 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 15:59	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 15:59	
1004189-22 DP13-09135 [Solid] Sampled 04/20/2010 14:03 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/04/2010 16:03	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/27/2010 16:03	
1004189-23 DP02-01114 [Solid] Sampled 04/21/2010 09:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:40	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 11:40	
SGC_PEST8081A_3546	05/13/2010 14:00	20	05/05/2010 11:40	Tox LCS required
SGC_PCB8082A_3546	05/13/2010 14:00	20	05/05/2010 11:40	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 11:40	AP VIALS
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 11:40	soil TAL + Mo
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 11:40	AP VIALS
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 11:40	
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 11:40	+MO

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Analysis	Due	TAT	Expires	Comments
1004189-24 DP02-01115 [Solid] Sampled 04/21/2010 09:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:45	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 11:45	AP VIALS
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 11:45	AP VIALS
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 11:45	soil TAL + Mo
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 11:45	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 11:45	
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 11:45	+MO
SGC_PCB8082A_3546	05/13/2010 14:00	20	05/05/2010 11:45	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/13/2010 14:00	20	05/05/2010 11:45	Tox LCS required
1004189-25 DP02-01116 [Solid] Sampled 04/21/2010 09:50 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:50	
SGC_PCB8082A_3546	05/13/2010 14:00	20	05/05/2010 11:50	+ Aroclor-1262 & 1268
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 11:50	+MO
SGC_PEST8081A_3546	05/13/2010 14:00	20	05/05/2010 11:50	Tox LCS required
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 11:50	AP VIALS
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 11:50	AP VIALS
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 11:50	
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 11:50	soil TAL + Mo
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 11:50	
1004189-26 DP02-01173 [Solid] Sampled 04/21/2010 12:12 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 14:12	+MO
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:12	
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 14:12	
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 14:12	soil TAL + Mo
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 14:12	AP VIALS
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 14:12	AP VIALS
1004189-27 DP02-01174 [Solid] Sampled 04/21/2010 12:15 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:15	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 14:15	AP VIALS
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 14:15	AP VIALS
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 14:15	+MO
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 14:15	
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 14:15	soil TAL + Mo

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Analysis	Due	TAT	Expires	Comments
1004189-28 DP02-01175 [Solid] Sampled 04/21/2010 12:20 Pacific				**QSM4.1**
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 14:20	
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 14:20	soil TAL + Mo
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 14:20	+MO
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 14:20	AP VIALS
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 14:20	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:20	
1004189-29 DP02-09076 [Solid] Sampled 04/21/2010 09:05 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:05	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:05	
1004189-30 DP02-09077 [Solid] Sampled 04/21/2010 09:10 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:10	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:10	
1004189-31 DP02-09078 [Solid] Sampled 04/21/2010 09:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:15	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:15	
1004189-32 DP02-09079 [Solid] Sampled 04/21/2010 09:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:20	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:20	
1004189-33 DP02-09156 [Solid] Sampled 04/21/2010 12:00 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:00	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 14:00	
1004189-34 DP02-09157 [Solid] Sampled 04/21/2010 12:03 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 14:03	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:03	
1004189-35 DP02-09158 [Solid] Sampled 04/21/2010 12:06 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:06	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 14:06	
1004189-36 DP02-09159 [Solid] Sampled 04/21/2010 12:09 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 14:09	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 14:09	

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Analysis	Due	TAT	Expires	Comments
1004189-37 DP14-01159 [Solid] Sampled 04/21/2010 09:45 Pacific				**QSM4.1. MS/MSD.**
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 11:45	MS/MSD. AP VIALS
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 11:45	MS/MSD. +MO
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:45	MS/MSD.
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 11:45	MS/MSD. AP VIALS
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 11:45	MS/MSD.
1004189-38 DP14-01160 [Solid] Sampled 04/21/2010 10:05 Pacific				**QSM4.1**
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 12:05	+MO
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 12:05	AP VIALS
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 12:05	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 12:05	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 12:05	
1004189-39 DP14-01161 [Solid] Sampled 04/21/2010 10:10 Pacific				**QSM4.1**
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 12:10	AP VIALS
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 12:10	+MO
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 12:10	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 12:10	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 12:10	
1004189-40 DP14-09136 [Solid] Sampled 04/21/2010 09:30 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:30	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:30	
1004189-41 DP14-09137 [Solid] Sampled 04/21/2010 09:34 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:34	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:34	
1004189-42 DP14-09138 [Solid] Sampled 04/21/2010 09:37 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:37	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:37	
1004189-43 DP14-09139 [Solid] Sampled 04/21/2010 09:40 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 11:40	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 11:40	

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Analysis	Due	TAT	Expires	Comments
1004189-44 DP14-51160 [Solid] Sampled 04/21/2010 10:05 Pacific				**QSM4.1**
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 12:05	AP VIALS
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 12:05	
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 12:05	+MO
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 12:05	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 12:05	
1004189-45 DP17-01084 [Solid] Sampled 04/21/2010 11:40 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:40	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 13:40	
1004189-46 DP17-01085 [Solid] Sampled 04/21/2010 11:45 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:45	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 13:45	
1004189-47 DP17-09048 [Solid] Sampled 04/21/2010 11:10 Pacific				**MS/MSD. QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:10	MS/MSD. LOW VOLUME!!!!
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 13:10	MS/MSD. LOW VOLUME!!!!
1004189-48 DP17-09049 [Solid] Sampled 04/21/2010 11:15 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 13:15	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:15	
1004189-49 DP17-09050 [Solid] Sampled 04/21/2010 11:20 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 13:20	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:20	
1004189-50 DP17-09051 [Solid] Sampled 04/21/2010 11:25 Pacific				**QSM4.1**
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 13:25	
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:25	
1004189-51 DP17-59050 [Solid] Sampled 04/21/2010 11:20 Pacific				**QSM4.1**
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 13:20	
SMS_PAH_8270C_3546_LOW	05/13/2010 14:00	20	05/05/2010 13:20	
1004189-52 DP15-01162 [Solid] Sampled 04/21/2010 14:15 Pacific				**QSM4.1. MS/MSD.**
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 16:15	MS/MSD.
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 16:15	MS/MSD. AP VIALS
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 16:15	MS/MSD. AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 16:15	MS/MSD.
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 16:15	MS/MSD. +MO

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Analysis	Due	TAT	Expires	Comments
1004189-53 DP15-01163 [Solid] Sampled 04/21/2010 14:20 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 16:20	+MO
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 16:20	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 16:20	AP VIALS
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 16:20	AP VIALS
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 16:20	
1004189-54 DP15-01164 [Solid] Sampled 04/21/2010 14:25 Pacific				**QSM4.1.**
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 16:25	
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 16:25	AP VIALS
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 16:25	AP VIALS
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 16:25	+MO
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 16:25	
1004189-55 DP05-01099 [Solid] Sampled 04/21/2010 14:40 Pacific				**QSM4.1.**
SGC_PEST8081A_3546	05/13/2010 14:00	20	05/05/2010 16:40	Tox LCS required
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 16:40	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 16:40	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 16:40	AP VIALS
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 16:40	+MO
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 16:40	soil TAL + Mo
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 16:40	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 16:40	
SGC_PCB8082A_3546	05/13/2010 14:00	20	05/05/2010 16:40	+ Aroclor-1262 & 1268
1004189-56 DP05-01100 [Solid] Sampled 04/21/2010 14:45 Pacific				**QSM4.1.**
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 16:45	soil TAL + Mo
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 16:45	
SGC_PCB8082A_3546	05/13/2010 14:00	20	05/05/2010 16:45	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/13/2010 14:00	20	05/05/2010 16:45	Tox LCS required
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 16:45	
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 16:45	AP VIALS
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 16:45	+MO
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 16:45	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 16:45	AP VIALS

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004189-57 DP05-51100 [Solid] Sampled 04/21/2010 14:45 Pacific				**QSM4.1.**
SGC_DRO_8015B_3546	05/13/2010 14:00	20	05/05/2010 16:45	+MO
MET_ICP_LOW6010B_FULL	05/13/2010 14:00	20	10/18/2010 16:45	soil TAL + Mo
SGC_PCB8082A_3546	05/13/2010 14:00	20	05/05/2010 16:45	+ Aroclor-1262 & 1268
SGC_PEST8081A_3546	05/13/2010 14:00	20	05/05/2010 16:45	Tox LCS required
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 16:45	AP VIALS
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 16:45	AP VIALS
WC_PERCENT_SOLIDS_2540B	05/13/2010 14:00	20	04/28/2010 16:45	
MET_7471A_MERCURY	05/13/2010 14:00	20	05/19/2010 16:45	
SMS_BNA_8270C_3546_REG	05/13/2010 14:00	20	05/05/2010 16:45	
1004189-58 EB-223 [Water] Sampled 04/21/2010 07:30 Pacific				**QSM4.1. Cr6+ CANCELLED PER CLIENT!!**
MET_7470_MERCURY	05/13/2010 14:00	20	05/19/2010 09:30	
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 09:30	
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 09:30	+MO
MET_ICP_6010B_FULL	05/13/2010 14:00	20	10/18/2010 09:30	water TAL + Mo
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 09:30	
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 09:30	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 09:30	
1004189-59 TB-223 [Water] Sampled 04/21/2010 07:30 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 09:30	
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 09:30	
1004189-60 EB-123 [Water] Sampled 04/21/2010 07:30 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 09:30	
SGC_PEST8081A_3510	05/13/2010 14:00	20	04/28/2010 09:30	Tox LCS required
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 09:30	
SGC_PCB8082A_3510	05/13/2010 14:00	20	04/28/2010 09:30	+ Aroclor-1262 & 1268
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 09:30	
MET_ICP_6010B_FULL	05/13/2010 14:00	20	10/18/2010 09:30	water TAL + Mo
MET_7470_MERCURY	05/13/2010 14:00	20	05/19/2010 09:30	
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 09:30	
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 09:30	+MO
1004189-61 TB-123 [Water] Sampled 04/21/2010 07:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 09:40	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 09:40	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004189-62 TB-322 [Water] Sampled 04/20/2010 07:40 Pacific				**QSM4.1.**
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 09:40	
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 09:40	
1004189-63 EB-323 [Water] Sampled 04/21/2010 07:35 Pacific				**QSM4.1.**
MET_ICP_6010B_FULL	05/13/2010 14:00	20	10/18/2010 09:35	water TAL + Mo
SGC_PEST8081A_3510	05/13/2010 14:00	20	04/28/2010 09:35	Tox LCS required. LOW VOLUME!!!
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 09:35	LOW VOLUME!!!
SGC_PCB8082A_3510	05/13/2010 14:00	20	04/28/2010 09:35	+ Aroclor-1262 & 1268. LOW VOLUME!!!
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 09:35	
MET_7470_MERCURY	05/13/2010 14:00	20	05/19/2010 09:35	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 09:35	
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 09:35	+MO. LOW VOLUME!!
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 09:35	LOW VOLUME!!!
1004189-64 DP10-01536 [Water] Sampled 04/21/2010 09:15 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 11:15	
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 11:15	LOW VOLUME!!
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 11:15	LOW VOLUME!!
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 11:15	+MO
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 11:15	
1004189-65 DP01-01502 [Water] Sampled 04/20/2010 11:15 Pacific				**QSM4.1.**
SGC_PCB8082A_3510	05/13/2010 14:00	20	04/27/2010 13:15	LOW VOLUME!! + Aroclor-1262 & 1268
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/27/2010 13:15	LOW VOLUME!! +MO
SGC_PEST8081A_3510	05/13/2010 14:00	20	04/27/2010 13:15	LOW VOLUME!! Tox LCS required
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/27/2010 13:15	LOW VOLUME!!
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 13:15	
MET_ICP_6010B_FULL_DIS	05/13/2010 14:00	20	10/17/2010 13:15	water TAL + Mo
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 13:15	
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/27/2010 13:15	LOW VOLUME!!
MET_7470_DIS_MERCURY	05/13/2010 14:00	20	05/18/2010 13:15	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004189-66 DP01-01503 [Water] Sampled 04/20/2010 15:00 Pacific				**QSM4.1.**
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/27/2010 17:00	LOW VOLUME!! +MO
SGC_PCB8082A_3510	05/13/2010 14:00	20	04/27/2010 17:00	LOW VOLUME!! + Aroclor-1262 & 1268
SGC_PEST8081A_3510	05/13/2010 14:00	20	04/27/2010 17:00	LOW VOLUME!! Tox LCS required
MET_ICP_6010B_FULL_DIS	05/13/2010 14:00	20	10/17/2010 17:00	water TAL + Mo
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 17:00	
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 17:00	
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/27/2010 17:00	LOW VOLUME!!
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/27/2010 17:00	LOW VOLUME!!
MET_7470_DIS_MERCURY	05/13/2010 14:00	20	05/18/2010 17:00	
1004189-67 DP08-01532 [Water] Sampled 04/20/2010 08:25 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/27/2010 10:25	LOW VOLUME!!
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 10:25	
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/27/2010 10:25	+MO
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/27/2010 10:25	LOW VOLUME!!
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 10:25	
1004189-68 DP08-01533 [Water] Sampled 04/20/2010 09:30 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 11:30	
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 11:30	
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/27/2010 11:30	LOW VOLUME!!
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/27/2010 11:30	+MO
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/27/2010 11:30	LOW VOLUME!!
1004189-69 DP09-01534 [Water] Sampled 04/20/2010 15:40 Pacific				**QSM4.1.**
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/27/2010 17:40	LOW VOLUME!!
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/27/2010 17:40	+MO
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 17:40	
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/27/2010 17:40	LOW VOLUME!!
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 17:40	
1004189-70 DP09-01535 [Water] Sampled 04/20/2010 16:05 Pacific				**QSM4.1.**
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/27/2010 18:05	LOW VOLUME!!
VOC_8260B_AP9	05/13/2010 14:00	20	05/04/2010 18:05	
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/27/2010 18:05	LOW VOLUME!!
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/27/2010 18:05	+MO
VGC_GRO_8015B	05/13/2010 14:00	20	05/04/2010 18:05	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Analysis	Due	TAT	Expires	Comments
1004189-71 DP11-01538 [Water] Sampled 04/21/2010 09:50 Pacific				**QSM4.1.**
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 11:50	
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 11:50	+MO
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 11:50	LOW VOLUME!!
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 11:50	LOW VOLUME!!
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 11:50	
1004189-72 DP11-01539 [Water] Sampled 04/21/2010 08:50 Pacific				**QSM4.1.**
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 10:50	+MO
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 10:50	LOW VOLUME!!
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 10:50	LOW VOLUME!!
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 10:50	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 10:50	
1004189-73 DP12-01541 [Water] Sampled 04/21/2010 10:50 Pacific				**QSM4.1.**
SMS_PAH_8270C_3510_LOW	05/13/2010 14:00	20	04/28/2010 12:50	LOW VOLUME!!
VGC_GRO_8015B	05/13/2010 14:00	20	05/05/2010 12:50	
VOC_8260B_AP9	05/13/2010 14:00	20	05/05/2010 12:50	
SMS_BNA_8270C_3510_REG	05/13/2010 14:00	20	04/28/2010 12:50	LOW VOLUME!!
SGC_DRO_8015B_3510	05/13/2010 14:00	20	04/28/2010 12:50	+MO
SGS/Paradigm (SUB028)				
1004189-45 DP17-01084 [Solid] Sampled 04/21/2010 11:40 Pacific				**QSM4.1**
SUB_DIOXINS_8290	05/13/2010 14:00	20	05/21/2010 13:40	sub to SGS - Wilmington
1004189-60 EB-123 [Water] Sampled 04/21/2010 07:30 Pacific				**QSM4.1.**
SUB_DIOXINS_8290	05/13/2010 14:00	20	05/21/2010 09:30	sub to SGS - Wilmington

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:00 PM* Page 1 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)			Number of Containers	COMMENTS
	DATE	TIME	Matrix								
DP01-01111	4/20/2010	9:35	Soil		x	x	x	x	x	1004170-41 MS/MSD 4	5 LAB QC
DP01-01112	4/20/2010	9:40	Soil		x	x	x	x	x	-42 3	5
DP01-01113	4/20/2010	9:45	Soil		x	x	x	x	x	-43 3	5
DP01-09072	4/20/2010	9:10	Soil	x						1004189-01 MS/MSD 2	1 LAB QC
DP01-09073	4/20/2010	9:15	Soil	x						-02	1
DP01-09074	4/20/2010	9:20	Soil	x						-03	1
DP01-09075	4/20/2010	9:25	Soil	x						-04	1
DP09-01087	4/20/2010	14:05	Soil			x				1004170-44 MS/MSD 2	1 LAB QC
DP09-01088	4/20/2010	14:10	Soil			x				-45	1
DP09-01089	4/20/2010	14:15	Soil			x				-46	1
DP10-01090	4/20/2010	13:30	Soil			x				-47 MS/MSD 2	1 LAB QC
DP10-01091	4/20/2010	13:35	Soil			x				-48	1
DP10-01092	4/20/2010	13:40	Soil			x				-49	1
DP10-01147	4/20/2010	9:05	Soil		x	x				-54	2

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Frank	4/21/10 1000
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

7.7°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		
	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP10-01148	4/20/2010	9:10	Soil		x	x			1004170-55	2	
DP10-01149	4/20/2010	9:20	Soil		x	x			-56	2	
DP10-09120	4/20/2010	8:40	Soil	x					1004189-05	1	
DP10-09121	4/20/2010	8:44	Soil	x					-06	1	
DP10-09122	4/20/2010	8:46	Soil	x					-07	1	
DP10-09123	4/20/2010	8:49	Soil	x					-08	1	
DP10-51090	4/20/2010	13:30	Soil			x			1004170-50	1	
DP10-59120	4/20/2010	8:40	Soil	x					1004189-09	1	
DP11-01093	4/20/2010	14:35	Soil			x			1004170 MS/MSD -51	2	LAB QC
DP11-01094	4/20/2010	14:40	Soil			x			-52	1	
DP11-01095	4/20/2010	14:45	Soil			x			-53	1	
DP11-01150	4/20/2010	11:35	Soil		x	x			1004170 -57	2	
DP11-01151	4/20/2010	11:40	Soil		x	x			-58	2	
DP11-01152	4/20/2010	11:45	Soil		x	x			-59	2	

Signatures		Date/Time
Approved by		
Sampled by	Tamara Frank	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:01 PM* Page 3 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	DATE	TIME	Matrix	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA	NA	NA			
Holding Time:				14	14	14	14	14	28			
DP11-09124	4/20/2010	11:20	Soil	x						1004189-10	1	LAB QC
DP11-09125	4/20/2010	11:23	Soil	x						-11	1	
DP11-09126	4/20/2010	11:26	Soil	x						-12	1	
DP11-09127	4/20/2010	11:30	Soil	x						-13	1	
DP11-51150	4/20/2010	11:35	Soil		x	x				1004170-60	2	
DP12-01153	4/20/2010	13:55	Soil		x	x				-61	2	
DP12-01154	4/20/2010	13:59	Soil		x	x				-62	2	
DP12-01155	4/20/2010	14:02	Soil		x	x				-63	2	
DP12-09128	4/20/2010	13:30	Soil	x						1004189-14	1	
DP12-09129	4/20/2010	13:33	Soil	x						-15	1	
DP12-09130	4/20/2010	13:35	Soil	x						-16	1	
DP12-09131	4/20/2010	13:55	Soil	x						-17	1	
DP12-59130	4/20/2010	13:35	Soil	x						-18	1	
DP13-01156	4/20/2010	15:10	Soil		x	x				1004170-64	2	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Jark	4/21/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

2.70C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/20/2010 4:46:02 PM* Page 4 OF 4

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/20/2010
COC Number: 42110

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP13-01157	4/20/2010	15:15	Soil		X	X				1004170-65 1	2	
DP13-01158	4/20/2010	15:20	Soil		X	X				-66 1	2	
DP13-09132	4/20/2010	13:55	Soil	X						1004189-19 MS/MSD 2	1	LAB QC
DP13-09133	4/20/2010	13:57	Soil	X						-20	1	
DP13-09134	4/20/2010	13:59	Soil	X						-21	1	
DP13-09135	4/20/2010	14:03	Soil	X						-22	1	
									TOTAL NUMBER OF CONTAINERS		73	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30 2.2°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

Special Instructions:

ATTN:
Sample Custody and Janice Shilling

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 3:14:41 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE / TIME / Matrix					
DP02-01114 ✓	4/21/2010 9:40 Soil	x	x	1004189-23	4	
DP02-01115 ✓	4/21/2010 9:45 Soil	x	x	-24	4	
DP02-01116 ✓	4/21/2010 9:50 Soil	x	x	-25	4	
DP02-01173 ✓	4/21/2010 12:12 Soil	x	x	-26	4	
DP02-01174 ✓	4/21/2010 12:15 Soil	x	x	-27	4	
DP02-01175 ✓	4/21/2010 12:20 Soil	x	x	-28	4	
DP14-01159 ✓	4/21/2010 9:45 Soil	x	x	MS/MSD -37	8 ~~4~~	LAB QC
DP14-01160 ✓	4/21/2010 10:05 Soil	x	x	-38	4	
DP14-01161 ✓	4/21/2010 10:10 Soil	x	x	-39	4	
DP14-51160 ✓	4/21/2010 10:05 Soil	x	x	-44	4	
DP15-01162 ✓	4/21/2010 14:15 Soil	x	x	MS/MSD 1004189-52	8 ~~4~~	LAB QC
DP15-01163 ✓	4/21/2010 14:20 Soil	x	x	-53	4	
DP15-01164 ✓	4/21/2010 14:25 Soil	x	x	-54	4	
				TOTAL NUMBER OF CONTAINERS	52	

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115
2.7°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 3:57:46 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110p2

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP05-01099	4/21/2010 14:40 Soil	X	X	1004189-55	4	
DP05-01100	4/21/2010 14:45 Soil	X	X	-56	4	
DP05-51100	4/21/2010 14:45 Soil	X	X	-57	4	
				TOTAL NUMBER OF CONTAINERS	12	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Frank	4/21/10 1600
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-70C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 3:05:36 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 421102

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	30	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP02-01114	4/21/2010 9:40 Soil		X	X	X	X		X	1004189- -23 2	5	
DP02-01115	4/21/2010 9:45 Soil		X	X	X	X		X	-24 2	5	
DP02-01116	4/21/2010 9:50 Soil		X	X	X	X		X	-25 2	5	
DP02-01173	4/21/2010 12:12 Soil			X				X	-26	2	
DP02-01174	4/21/2010 12:15 Soil			X				X	-27	2	
DP02-01175	4/21/2010 12:20 Soil			X				X	-28	2	
DP02-09076	4/21/2010 9:05 Soil	X							-29	1	
DP02-09077	4/21/2010 9:10 Soil	X							-30	1	
DP02-09078	4/21/2010 9:15 Soil	X							-31	1	
DP02-09079	4/21/2010 9:20 Soil	X							-32	1	
DP02-09156	4/21/2010 12:00 Soil	X							-33	1	
DP02-09157	4/21/2010 12:03 Soil	X							-34	1	
DP02-09158	4/21/2010 12:06 Soil	X							-35	1	
DP02-09159	4/21/2010 12:09 Soil	X							-36	1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/21/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 3:05:37 PM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 421102

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA	NA	NA	NA		
	Holding Time:	14	14	14	14	14	30	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
DP14-01159	4/21/2010 9:45 Soil		x	x					2	LAB QC
DP14-01160	4/21/2010 10:05 Soil		x	x					2	
DP14-01161	4/21/2010 10:10 Soil		x	x					2	
DP14-09136	4/21/2010 9:30 Soil	x							1	
DP14-09137	4/21/2010 9:34 Soil	x							1	
DP14-09138	4/21/2010 9:37 Soil	x							1	
DP14-09139	4/21/2010 9:40 Soil	x							1	
DP14-51160	4/21/2010 10:05 Soil		x	x					2	
DP17-01084	4/21/2010 11:40 Soil		x				x		2	
DP17-01085	4/21/2010 11:45 Soil		x						1	
DP17-09048	4/21/2010 11:10 Soil	x							1	LAB QC
DP17-09049	4/21/2010 11:15 Soil	x							1	
DP17-09050	4/21/2010 11:20 Soil	x							1	
DP17-09051	4/21/2010 11:25 Soil	x							1	

MS/MSD 1004189-37
-38
-39
-40
-41
-42
-43
-44
-45
-46
MS/MSD -47
-48
-49
-50

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/21/10 1500
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.70C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 3:05:37 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 421102

	DATE	TIME	Matrix	Container:	Preservatives:	Filtered:	Holding Time:	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
				4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar							
				4°C	4°C	4°C	4°C	4°C	4°C	4°C							
				NA	NA	NA	NA	NA	NA	NA							
				14	14	14	14	14	30	28							
DP17-59050 ✓	4/21/2010	11:20	Soil	X											1004189-51	1	
															TOTAL NUMBER OF CONTAINERS	49	

	Signatures	Date/Time
Approved by		
Sampled by	Janice Frost	4/21/10
Relinquished by		1500
Received by		
Relinquished by		
Received by		4/22/10

08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2-7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 11:33:21 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110W

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)	Hexavalent Chromium (SW7196)	Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly	1 x 250 ml Poly		
Preservatives:				4°C	4°C	4°C	HNO4	None		
Filtered:				NA	NA	NA	NA	NA		
Holding Time:				7	7	7	28	24HR		
EB-223	4/21/2010	7:30	Water	x2	x2	x2	1x	1x	~~12~~ 8	
									TOTAL NUMBER OF CONTAINERS ~~12~~ 8	

1004189-58

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/21/10 11[illegible]
Relinquished by		
Received by		
Relinquished by		4/22/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

7.20C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 3:21:31 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-223	4/21/2010	7:30	Water	X	X	1004189 - 58	5	
TB-223	4/21/2010	7:30	Water	X	X	-59	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/21/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 3:59:49 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110P2

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-123	4/21/2010	7:30	Water		X	X	1004189-60	5	
TB-123	4/21/2010	7:40	Water		X	X	-61	5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Jarvis	4/21/10 1600
Received by		
Relinquished by		
Received by		4/22/10 08:30

2.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 9:41:47 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110b

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-322 ✓	4/20/2010	7:45	Water	X	X	1004170-73	5	
TB-322 ✓	4/20/2010	7:40	Water	X	X	1604189-62	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/21/10 1000
Received by		
Relinquished by	[signature]	4/22/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 12:07:46 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110W

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	7			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
EB-323	4/21/2010 7:35 Water	X	X	X	1004170-63 6	~~10~~	
					TOTAL NUMBER OF CONTAINERS ~~10~~ 6	~~10~~	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jost	4/21/10 1200
Received by		
Relinquished by		
Received by		4/22/10 0810

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 3:35:30 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110w2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	7			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
DP10-01536	4/21/2010 9:15 Water	x2	x 2 x		1004170-64	~~4~~ ~~10~~	
					TOTAL NUMBER OF CONTAINERS	~~4~~ ~~10~~	

	Signatures	Date/Time
Approved by		
Sampled by		4/21/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/22/10 0830

3.4°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/21/2010 9:00:45 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-01502	4/20/2010	11:15	Water	x ✓	x ✓	x2	x 2	x	x 1	x	x ✓	1004189-65	~~18~~ 11	
DP01-01503	4/20/2010	15:00	Water	x	x	x2	x 2	x	x 1	x	x ✓	-66	~~18~~ 11	
DP08-01532	4/20/2010	8:25	Water	x	x	x2	x 2	x				-67	~~15~~ 9	
DP08-01533	4/20/2010	9:30	Water	x	x	x2	x 2	x				-68	~~15~~ 9	
DP09-01534	4/20/2010	15:40	Water	x ✓	x ✓	x2	x 2	x				-69	~~15~~ 9	
DP09-01535	4/20/2010	16:05	Water	x ✓	x ✓	x2	x 2	x				-70	~~15~~ 9	
											TOTAL NUMBER OF CONTAINERS		~~96~~	

	Signatures	Date/Time
Approved by		
Sampled by	Jamaca Jare	4/21/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/22/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.4°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170, 1004189 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5829

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.7 °C

Dates samples were logged-in: 4/22/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

If Non-Conformance issues were present, list by sample ID: _____

1004189 - Rec'd 11 ambers w/ EB-123 & nothing CAR#: _____
on COC to run these with! NO bulk jars rec'd with DP15-01162, 01163, 01164, 01099, 01100, & 51100

Cr6+ cancelled on EB-223! Did not tag per client!

Rec'd DP11-01538 & 01539 & DP12-01541 but not on COC anywhere!

pH <2 for metals (H2O)

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170, 1004189 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5770

2. Were custody seals on outside of cooler(s)? ..... Yes (No)

How many: — Seal date: — Seal Initials: —

3. Were custody seals unbroken and intact at the date and time of arrival?	Yes	No	(N/A)
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004170, 1004189 Number of Coolers: 3 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5781

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.4 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

ws 4/22/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: ~~1009170~~ 1004189 Number of Coolers: 4 of 10

Client: CH2M Hill Project: Alameda

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5851

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.3 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

1004139 WS 4/22/10

LIMS Number: ~~1004170~~ Number of Coolers: 5 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5840

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: _____ Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

1004189

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: ~~1004170~~ WS 4/22/10 Number of Coolers: 6 of 10

Client: CH2M HILL Project: ALAMEDA POINT

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5830

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TE

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.5 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100489 Number of Coolers: 7 of 10

Client: CH2M Hill Project: Alameda

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5792

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9 °C

~~Dates samples~~ were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

8 WS 4/22/10

LIMS Number: 1004189 Number of Coolers: 7 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5818

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.2 °C

Dates samples ~~were logged-in~~:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 10 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189 Number of Coolers: 9 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive? (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9863

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.8 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): 4

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189 Number of Coolers: 10 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4.22.10 8:30 Date cooler(s) opened: 4.22.10

Opened By (print): Russ Townsend (signature): Russ Townsend

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5760

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4-21-10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 10

CH2MHILL

CHAIN OF CUSTODY RECORD

4/22/2010 8:27:51 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly
	Preservatives:	HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA
	Holding Time:	14	14	7	7	7	7	7	28
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)

	DATE	TIME	Matrix									Number of Containers	COMMENTS
DP02-01504 ✓	4/21/2010	13:30	Water	x 3	x 2	x2	x 2 x		x / x	x1	11	~~18~~	
DP02-01505 ✓	4/21/2010	14:30	Water			x2	x 2 x		x / x	x1	6	~~13~~	
DP02-01505 ✓	4/21/2010	14:30	Water	x3	x 2							5	scent - bubbles p
DP10-01536 ✓	4/21/2010	9:15	Water	~~x~~ 3	x 2						1004189-64	5	
DP10-01537 ✓	4/21/2010	8:30	Water	x	x 4						MS/MSD	5	LAB QC
DP11-01538 ✓	4/21/2010	9:50	Water	x 3	x 2						1004189-71	5	
DP11-01539 ✓	4/21/2010	8:50	Water	x 3	x 2						-72	5	
DP12-01540 ✓	4/21/2010	11:50	Water	x3	x2	x2	x 2 x				9	~~15~~	
DP12-01541 ✓	4/21/2010	10:50	Water	x 3	x 2						1004189-73	5	
DP12-51540 ✓	4/21/2010	10:50	Water	x3	x2	x2	x 2 x				9	~~15~~	to 20 foot sampi
DP13-01542 ✓	4/21/2010	15:20	Water			x4	x 4 x				MS/MSD 8	~~10~~	LAB QC
DP13-01542 ✓	4/21/2010	15:20	Water	x6	x4						MS/MSD 10	~~5~~	ervescent - bubb
DP13-01543 ✓	4/21/2010	16:50	Water	x 3	x 2							5	scent - bubbles p
											TOTAL NUMBER OF CONTAINERS	~~111~~	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/22/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:
effervescent during sampling

Report Copy to

0-3°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 10:41:03 AM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	30	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix								
DP13-09032	4/21/2010	13:30	Soil	x						1	
DP13-09033	4/21/2010	13:35	Soil	x						1	
DP13-09034	4/21/2010	13:40	Soil	x						1	
DP13-09035	4/21/2010	13:45	Soil	x						1	
DP15-01162	4/21/2010	14:15	Soil		x	x			1004189-52	2	LAB QC
DP15-01163	4/21/2010	14:20	Soil		x	x			-53	2 / 1	cmc 04/22
DP15-01164	4/21/2010	14:25	Soil		x	x			-54	2 / 1	cmc 04/22
DP15-09140	4/21/2010	14:00	Soil	x						1	
DP15-09141	4/21/2010	14:05	Soil	x						1	
DP15-09142	4/21/2010	14:10	Soil	x						1	
DP15-09143	4/21/2010	14:15	Soil	x						1	
DP15-59140	4/21/2010	14:00	Soil	x						1	
									TOTAL NUMBER OF CONTAINERS	42	

	Signatures	Date/Time
Approved by	[signature]	04/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by	[signature]	4/23/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

6.30C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/22/2010 10:41:02 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	30	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS	
	DATE	TIME	Matrix									
DP02-09148	4/21/2010	11:10	Soil	X							1	2 LAB QC
DP02-09149	4/21/2010	11:15	Soil	X							1	
DP02-09150	4/21/2010	11:20	Soil	X							1	
DP02-09151	4/21/2010	11:25	Soil	X							1	
DP02-59150	4/21/2010	11:20	Soil	X							1	
DP05-01099	4/21/2010	14:40	Soil		X	X	X	X		X	5	2
DP05-01100	4/21/2010	14:45	Soil		X	X	X	X		X	5	2
DP05-09056	4/21/2010	15:20	Soil	X							1	2 LAB QC
DP05-09057	4/21/2010	15:25	Soil	X							1	
DP05-09058	4/21/2010	15:30	Soil	X							1	
DP05-09059	4/21/2010	15:30	Soil	X							1	
DP05-51100	4/21/2010	14:45	Soil		X	X	X	X		X	5	2
DP13-01072	4/21/2010	13:50	Soil		X				X		2	
DP13-01073	4/21/2010	13:55	Soil		X						1	

1004200-36
-37
-38
-39
-40
1004189-55 ~~-47~~ SMD 4/28/10
~~-56, -42~~
1004200-43
-44
-45
-46
1004189-57 ~~-43~~ SMD 4/28/10
1004200-48
-49

CMC 04/2
CMC 04/2
CMC 04/2

Signatures		Date/Time
Approved by		04/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.7°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189 Number of Coolers: 1 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5667

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.3 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189 Number of Coolers: 2 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwob (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5277

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.2 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189 Number of Coolers: 3 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/23/10** **08:30** Date cooler(s) opened: **4/23/10**

Opened By (print): Will Schaeb (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9852

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.4 °C

Dates samples were ~~logged-in:~~ **~~4/23/10~~**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Wednesday, April 21, 2010 6:47 PM
To: sgordon@empirlabs.com
Subject: please disregard the hex chrom EB-223

They didn't get to the hex chrome location in time to make the fedex shipment.
We will be sampling hex chrome in soil tomorrow.
tamara

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Wednesday, April 21, 2010 6:10 PM
To: sgordon@empirlabs.com
Subject: EB-323 analyses change

Sonya,
We submitted 4 1L ambers today for SVOC/PAH analyses. Could you please change 2 of those to pest/PCBs? It slipped by me, that they were sampling pest/PCBs today.
Thanks,
Tamara

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

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Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Monday, April 26, 2010 12:36 PM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

No, there's no way the two were mixed up here. I am forwarding the CofC for the EB323 VOC/purgeables/metals, that somehow got left out of the cooler.
I show that EB123 metals was shipped on 4/21. I think it would be ok to transfer water from one of the other containers to a preserved metals container, but we should let Mark Fesler chime in on this.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 10:15 AM
To: Frank, Tamara/BAO
Subject: RE: Alameda sample receipt 4/22/10

the mystery deepens... on EB-323, the only COC received list TPH-E, SVOC, & PAH (also your email concerning pest/PCB). However, we received metals, VOC, & TPH-P volume on these (trying to find out why I wasn't notified on this part)... Any way, could the information between EB-123 & EB-323 have been mixed?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 11:32 AM
To: 'Tamara.Frank@ch2m.com'
Cc: 'Mark.Fesler@CH2M.com'
Subject: RE: Alameda sample receipt 4/22/10

If it's not found it in the refrigerator today.. would be acceptable to take volume from one of the unpreserved ambers for preservation/analysis (& noted in the narrative)?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Monday, April 26, 2010 10:30 AM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

Very odd. My refer is pretty full, right now, anticipating the arrival of the coolers, but I'll empty it out

today and if I find it I'll send it along.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 8:29 AM
To: sgordon@empirlabs.com; Frank, Tamara/BAO
Subject: RE: Alameda sample receipt 4/22/10

My search didn't find anything. All the other waters received that day were accounted for. :(

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 10:14 AM
To: 'Tamara.Frank@ch2m.com'
Subject: RE: Alameda sample receipt 4/22/10

I'll go on a search in the cooler & see if I can find anything misnumbered...

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Monday, April 26, 2010 10:12 AM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

No, it should have been in the shipment, but might have been sharing a Ziploc with other samples. I continually confuse the EBs 1s, 2s, and 3s…

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 7:31 AM
To: Frank, Tamara/BAO
Subject: FW: Alameda sample receipt 4/22/10

Hi Tamara,

When going back to add these samples, I discovered that we did not receive metals volume on EB-123. Any chance it was sent in a later shipment... or that it's hiding out in the trailer?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Friday, April 23, 2010 10:26 AM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

Here are my copy of the CofC for these samples. I don't know how the original didn't make it into the coolers. Since I can't scan, I can't send you the signed and notated copies, but I could fax them, if necessary.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Friday, April 23, 2010 8:18 AM
To: Frank, Tamara/BAO
Subject: Alameda sample receipt 4/22/10

Hi Tamara,
I was just notified that the following samples were not on the COCs yesterday. I just need to confirm what analysis are needed.

Thanks,
Sonya

Received these samples DP11-01538, DP11-01539 and DP12-01541 (4 1L ambers per sample) that were NOT listed on a COC. Tagged for BNA, PAH SIM, and DRO per container labels and PLACED ON HOLD! Please verify if client would like to proceed with these.....

ALSO, client sent 11 ambers with EB-123 and NO COC for these ambers. Tagged for PAH SIM, BNA, Dioxins, PCB/PEST, and DRO per container labels and PLACED ON HOLD! Please verify if client would like to run these!!!

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 238 I Toll free: 877.345.1113 I Fax: 615.846.5426

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 10:39:55 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110w

				Dioxins (8290)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				4°C	4°C	4°C	4°C	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA	NA	NA			
Holding Time:				30	7	7	7	7	7	28			
	DATE	**TIME**	**Matrix**										
EB-123	4/21/2010	7:30	Water	X	X	X	X	X	X	X		15	
											TOTAL NUMBER OF CONTAINERS	15	

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889863
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/21/2010 3:53:05 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/21/2010
COC Number: 42110w3

				Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
				Preservatives:	4°C	4°C	4°C			
				Filtered:	NA	NA	NA			
				Holding Time:	7	7	7			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
DP11-01538	4/21/2010	9:50	Water		x	x	x		10	
DP11-01539	4/21/2010	8:50	Water		x	x	x		10	
DP12-01541	4/21/2010	10:50	Water		x	x	x		10	
								TOTAL NUMBER OF CONTAINERS	30	

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	
Received by	
Relinquished by	
Received by	

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/26/2010 10:34:46 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	1 x 250 ml Poly				
	Preservatives:	HCl	HCl	HNO4				
	Filtered:	NA	NA	NA				
	Holding Time:	14	14	28				
		VOCs (8260B)	TPH-Purgable (SW8015B)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-323	4/21/2010 7:35 Water	X	X	X		6	
TB-323	4/21/2010 7:30 Water	X	X			5	
					TOTAL NUMBER OF CONTAINERS	11	

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1004200

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/21/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/23/2010 08:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/23/2010 14:24

Samples Received at: **5.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1004200-41	**DP05-01099 [Solid] Sampled 04/21/2010 14:40 Pacific**				
	[NO ANALYSES]				
1004200-42	**DP05-01100 [Solid] Sampled 04/21/2010 14:45 Pacific**				
	[NO ANALYSES]				
1004200-47	**DP05-51110 [Solid] Sampled 04/21/2010 14:45 Pacific**				
	[NO ANALYSES]				
1004200-01	**DP03-01117 [Solid] Sampled 04/22/2010 14:20 Pacific**				**QSM4.1. MS/MSD.**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 16:20	MS/MSD. AP VIALS
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 16:20	MS/MSD. Tox LCS required
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 16:20	MS/MSD. + Aroclor-1262 & 1268
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 16:20	MS/MSD.
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 16:20	MS/MSD. AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 16:20	MS/MSD. +MO
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 16:20	MS/MSD. soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 16:20	MS/MSD.
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 16:20	MS/MSD.

1004200

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-02 DP03-01118 [Solid] Sampled 04/22/2010 14:25 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 16:25	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 16:25	
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 16:25	+MO
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 16:25	+ Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 16:25	Tox LCS required
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 16:25	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 16:25	AP VIALS
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 16:25	AP VIALS
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 16:25	
1004200-03 DP06-01102 [Solid] Sampled 04/22/2010 15:15 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:15	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:15	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:15	+MO
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 17:15	+ Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 17:15	Tox LCS required
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:15	AP VIALS
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:15	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 17:15	
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:15	
1004200-04 DP06-01103 [Solid] Sampled 04/22/2010 15:20 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:20	AP VIALS
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:20	AP VIALS
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 17:20	Tox LCS required
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 17:20	
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:20	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:20	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:20	+MO
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 17:20	+ Aroclor-1262 & 1268
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:20	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-05 DP06-01104 [Solid] Sampled 04/22/2010 15:25 Pacific					**QSM4.1.**
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 17:25	Tox LCS required
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 17:25	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:25	AP VIALS
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 17:25	+ Aroclor-1262 & 1268
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:25	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:25	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:25	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:25	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:25	
1004200-06 DP08-01108 [Solid] Sampled 04/22/2010 10:20 Pacific					**MS/MSD. QSM4.1.**
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:20	MS/MSD.
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 12:20	MS/MSD. Tox LCS required
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 12:20	MS/MSD. + Aroclor-1262 & 1268
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:20	MS/MSD.
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 12:20	MS/MSD. AP VIALS
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 12:20	MS/MSD. AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:20	MS/MSD. soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:20	MS/MSD.
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 12:20	MS/MSD. +MO
1004200-07 DP08-01109 [Solid] Sampled 04/22/2010 10:25 Pacific					**QSM4.1.**
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 12:25	Tox LCS required
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 12:25	+ Aroclor-1262 & 1268
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:25	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:25	
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:25	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 12:25	AP VIALS
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 12:25	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:25	
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 12:25	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-08 DP08-01110 [Solid] Sampled 04/22/2010 10:30 Pacific					**QSM4.1.**
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 12:30	+ Aroclor-1262 & 1268
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 12:30	AP VIALS
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 12:30	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:30	
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 12:30	Tox LCS required
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:30	
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 12:30	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:30	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:30	
1004200-09 DP08-51110 [Solid] Sampled 04/22/2010 10:30 Pacific					**QSM4.1.**
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:30	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 12:30	+MO
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 12:30	AP VIALS
SW8082A	SGC_PCB8082A_3546	05/14/2010 14:00	20	05/06/2010 12:30	+ Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3546	05/14/2010 14:00	20	05/06/2010 12:30	Tox LCS required
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:30	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 12:30	AP VIALS
1004200-10 DP01-02009 [Solid] Sampled 04/22/2010 14:10 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 16:10	
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 16:10	+MO
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 16:10	AP VIALS. LOW VOLUME!!!!
1004200-11 DP01-02010 [Solid] Sampled 04/22/2010 14:15 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 16:15	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 16:15	AP VIALS. LOW VOLUME!!!!
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 16:15	+MO
1004200-12 DP01-02011 [Solid] Sampled 04/22/2010 14:25 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 16:25	+MO
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 16:25	AP VIALS. LOW VOLUME!!!!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 16:25	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004200-13 DP01-52010 [Solid] Sampled 04/22/2010 14:15 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 16:15	AP VIALS. LOW VOLUME!!!!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 16:15	
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 16:15	+MO
1004200-14 DP02-02012 [Solid] Sampled 04/22/2010 15:30 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:30	+MO
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:30	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:30	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:30	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:30	AP VIALS
1004200-15 DP02-02013 [Solid] Sampled 04/22/2010 15:35 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:35	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:35	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:35	+MO
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:35	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:35	
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:35	
1004200-16 DP02-02014 [Solid] Sampled 04/22/2010 15:35 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:35	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:35	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:35	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:35	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:35	AP VIALS
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:35	AP VIALS
1004200-17 DP03-02015 [Solid] Sampled 04/22/2010 15:00 Pacific					**QSM4.1.**
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:00	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:00	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:00	+MO
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:00	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:00	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-18 DP03-02016 [Solid] Sampled 04/22/2010 15:05 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:05	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:05	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:05	AP VIALS
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:05	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:05	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:05	+MO
1004200-19 DP03-02017 [Solid] Sampled 04/22/2010 15:10 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/14/2010 14:00	20	05/06/2010 17:10	+MO
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 17:10	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 17:10	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 17:10	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 17:10	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 17:10	
1004200-20 DP01-01165 [Solid] Sampled 04/22/2010 09:30 Pacific					**QSM4.1.**
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 11:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:30	
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 11:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 11:30	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 11:30	
1004200-21 DP01-01166 [Solid] Sampled 04/22/2010 09:35 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 11:35	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 11:35	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:35	
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 11:35	
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 11:35	
1004200-22 DP01-01167 [Solid] Sampled 04/22/2010 09:40 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 11:40	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 11:40	soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 11:40	
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 11:40	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:40	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004200-23 DP01-09144 [Solid] Sampled 04/22/2010 09:20 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:20	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:20	
1004200-24 DP01-09145 [Solid] Sampled 04/22/2010 09:22 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:22	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:22	
1004200-25 DP01-09146 [Solid] Sampled 04/22/2010 09:24 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:24	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:24	
1004200-26 DP01-09147 [Solid] Sampled 04/22/2010 09:26 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:26	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:26	
1004200-27 DP02-01168 [Solid] Sampled 04/22/2010 10:10 Pacific					**MS/MSD. QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:10	MS/MSD.
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:10	MS/MSD.
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:10	MS/MSD. soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:10	MS/MSD.
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 12:10	MS/MSD.
1004200-28 DP02-01169 [Solid] Sampled 04/22/2010 10:20 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:20	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:20	soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:20	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:20	
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 12:20	
1004200-29 DP02-01170 [Solid] Sampled 04/22/2010 10:30 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:30	
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:30	soil TAL + Mo
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 12:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:30	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-30 DP02-51170 [Solid] Sampled 04/22/2010 10:30 Pacific					**QSM4.1.**
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/06/2010 12:30	
SW7471A	MET_7471A_MERCURY	05/14/2010 14:00	20	05/20/2010 12:30	
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	05/20/2010 12:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/14/2010 14:00	20	10/19/2010 12:30	soil TAL + Mo
1004200-31 DP08-09068 [Solid] Sampled 04/22/2010 09:45 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:45	
1004200-32 DP08-09069 [Solid] Sampled 04/22/2010 09:50 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:50	
1004200-33 DP08-09070 [Solid] Sampled 04/22/2010 09:55 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:55	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:55	
1004200-34 DP08-09071 [Solid] Sampled 04/22/2010 10:00 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 12:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 12:00	
1004200-35 DP08-59070 [Solid] Sampled 04/22/2010 09:55 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/06/2010 11:55	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/29/2010 11:55	
1004200-36 DP02-09148 [Solid] Sampled 04/21/2010 11:10 Pacific					**MS/MSD. QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 13:10	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 13:10	MS/MSD.
1004200-37 DP02-09149 [Solid] Sampled 04/21/2010 11:15 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 13:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 13:15	
1004200-38 DP02-09150 [Solid] Sampled 04/21/2010 11:20 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 13:20	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 13:20	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-39 DP02-09151 [Solid] Sampled 04/21/2010 11:25 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 13:25	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 13:25	
1004200-40 DP02-59150 [Solid] Sampled 04/21/2010 11:20 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 13:20	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 13:20	
1004200-43 DP05-09056 [Solid] Sampled 04/21/2010 15:20 Pacific					**MS/MSD. QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 17:20	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 17:20	MS/MSD.
1004200-44 DP05-09057 [Solid] Sampled 04/21/2010 15:25 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 17:25	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 17:25	
1004200-45 DP05-09058 [Solid] Sampled 04/21/2010 15:30 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 17:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 17:30	
1004200-46 DP05-09059 [Solid] Sampled 04/21/2010 15:30 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 17:30	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 17:30	
1004200-48 DP13-01072 [Solid] Sampled 04/21/2010 13:50 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 15:50	
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/05/2010 15:50	
1004200-49 DP13-01073 [Solid] Sampled 04/21/2010 13:55 Pacific					**QSM4.1.**
SW8270C	SMS_BNA_8270C_3546_REG	05/14/2010 14:00	20	05/05/2010 15:55	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 15:55	
1004200-50 DP13-09032 [Solid] Sampled 04/21/2010 13:30 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 15:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 15:30	
1004200-51 DP13-09033 [Solid] Sampled 04/21/2010 13:35 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 15:35	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 15:35	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004200-52 DP13-09034 [Solid] Sampled 04/21/2010 13:40 Pacific					**MS/MSD. QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 15:40	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 15:40	MS/MSD.
1004200-53 DP13-09035 [Solid] Sampled 04/21/2010 13:45 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 15:45	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 15:45	
1004200-54 DP15-09140 [Solid] Sampled 04/21/2010 14:00 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 16:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 16:00	
1004200-55 DP15-09141 [Solid] Sampled 04/21/2010 14:05 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 16:05	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 16:05	
1004200-56 DP15-09142 [Solid] Sampled 04/21/2010 14:10 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 16:10	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 16:10	
1004200-57 DP15-09143 [Solid] Sampled 04/21/2010 14:15 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 16:15	
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 16:15	
1004200-58 DP15-59140 [Solid] Sampled 04/21/2010 14:00 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/14/2010 14:00	20	05/05/2010 16:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/14/2010 14:00	20	04/28/2010 16:00	
1004200-59 EB-124 [Water] Sampled 04/22/2010 07:30 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!! +MO
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 09:30	
SW8082A	SGC_PCB8082A_3510	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!! + Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3510	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!! Tox LCS required
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/19/2010 09:30	water TAL + Mo
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 09:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!!
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/20/2010 09:30	
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!!

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-60	**TB-124 [Water] Sampled 04/22/2010 07:30 Pacific**				**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 09:30	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 09:30	
1004200-61	**EB-224 [Water] Sampled 04/22/2010 07:30 Pacific**				**QSM4.1**
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!!
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!! +MO
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 09:30	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 09:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 09:30	LOW VOLUME!!!!
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/19/2010 09:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/20/2010 09:30	
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	04/23/2010 09:30	
1004200-62	**TB-224 [Water] Sampled 04/22/2010 07:30 Pacific**				**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 09:30	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 09:30	
1004200-63	**EB-324 [Water] Sampled 04/22/2010 07:40 Pacific**				**QSM4.1**
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/20/2010 09:40	
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/19/2010 09:40	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 09:40	LOW VOLUME!!!!
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 09:40	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 09:40	
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	04/23/2010 09:40	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 09:40	LOW VOLUME!!!! +MO
SW8082A	SGC_PCB8082A_3510	05/14/2010 14:00	20	04/29/2010 09:40	LOW VOLUME!!!! + Aroclor-1262 & 1268
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 09:40	LOW VOLUME!!!!
SW8081A	SGC_PEST8081A_3510	05/14/2010 14:00	20	04/29/2010 09:40	LOW VOLUME!!!! Tox LCS required
1004200-64	**DP10-01537 [Water] Sampled 04/21/2010 08:30 Pacific**				**MS/MSD. QSM4.1**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 10:30	MS/MSD.
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 10:30	MS/MSD. LOW VOLUME!!!! +MO
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 10:30	MS/MSD.
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 10:30	MS/MSD. LOW VOLUME!!!!
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 10:30	MS/MSD. LOW VOLUME!!!!

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004200-65 DP13-01543 [Water] Sampled 04/21/2010 16:50 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 18:50	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 18:50	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 18:50	LOW VOLUME!!!! +MO
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 18:50	LOW VOLUME!!!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 18:50	LOW VOLUME!!!!
1004200-66 DP14-01544 [Water] Sampled 04/22/2010 08:30 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 10:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 10:30	LOW VOLUME!!!!
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 10:30	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 10:30	LOW VOLUME!!!! +MO
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 10:30	LOW VOLUME!!!!
1004200-67 DP14-01545 [Water] Sampled 04/22/2010 08:55 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 10:55	LOW VOLUME!!!!
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 10:55	LOW VOLUME!!!!
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 10:55	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 10:55	LOW VOLUME!!!! +MO
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 10:55	
1004200-68 DP15-01546 [Water] Sampled 04/22/2010 09:40 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 11:40	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 11:40	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 11:40	LOW VOLUME!!!!
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 11:40	LOW VOLUME!!!! +MO
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 11:40	LOW VOLUME!!!!
1004200-69 DP15-01547 [Water] Sampled 04/22/2010 10:10 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/06/2010 12:10	
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/06/2010 12:10	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/29/2010 12:10	LOW VOLUME!!!! +MO
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 12:10	LOW VOLUME!!!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 12:10	LOW VOLUME!!!!

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004200-70	**DP02-01548 [Water] Sampled 04/22/2010 14:00 Pacific**				**QSM4.1**
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	04/23/2010 16:00	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 16:00	
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 16:00	
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/20/2010 16:00	
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/19/2010 16:00	water TAL + Mo
1004200-71	**DP02-01549 [Water] Sampled 04/22/2010 14:20 Pacific**				**QSM4.1**
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/29/2010 16:20	
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/20/2010 16:20	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/29/2010 16:20	
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/19/2010 16:20	water TAL + Mo
SW7196A	WC_HEX_CHROM_SW7196A	05/14/2010 14:00	20	04/23/2010 16:20	
1004200-72	**DP02-01504 [Water] Sampled 04/21/2010 13:30 Pacific**				**QSM4.1**
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 15:30	LOW VOLUME!!!!
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 15:30	
SW8082A	SGC_PCB8082A_3510	05/14/2010 14:00	20	04/28/2010 15:30	LOW VOLUME!!!! + Aroclor-1262 & 1268
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 15:30	LOW VOLUME!!!! +MO
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/18/2010 15:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/19/2010 15:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 15:30	LOW VOLUME!!!!
SW8081A	SGC_PEST8081A_3510	05/14/2010 14:00	20	04/28/2010 15:30	LOW VOLUME!!!! Tox LCS required
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 15:30	
1004200-73	**DP02-01505 [Water] Sampled 04/21/2010 14:30 Pacific**				**QSM4.1**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 16:30	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 16:30	LOW VOLUME!!!! +MO
SW6010B	MET_ICP_6010B_FULL	05/14/2010 14:00	20	10/18/2010 16:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/14/2010 14:00	20	05/19/2010 16:30	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 16:30	effervescent during sampling
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 16:30	LOW VOLUME!!!!
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 16:30	LOW VOLUME!!!!
SW8081A	SGC_PEST8081A_3510	05/14/2010 14:00	20	04/28/2010 16:30	LOW VOLUME!!!! Tox LCS required
SW8082A	SGC_PCB8082A_3510	05/14/2010 14:00	20	04/28/2010 16:30	LOW VOLUME!!!! + Aroclor-1262 & 1268

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004200-74 DP12-01540 [Water] Sampled 04/21/2010 11:50 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 13:50	LOW VOLUME!!!! +MO
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 13:50	LOW VOLUME!!!!
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 13:50	VERY LOW VOLUME!! ONLY 1 VIAL!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 13:50	LOW VOLUME!!!!
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 13:50	VERY LOW VOLUME!! ONLY 1 VIAL!!
1004200-75 DP12-51540 [Water] Sampled 04/21/2010 10:50 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 12:50	
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 12:50	LOW VOLUME!!!! +MO
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 12:50	LOW VOLUME!!!!
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 12:50	
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 12:50	LOW VOLUME!!!!
1004200-76 DP13-01542 [Water] Sampled 04/21/2010 15:20 Pacific					**MS/MSD. QSM4.1**
SW8015B	SGC_DRO_8015B_3510	05/14/2010 14:00	20	04/28/2010 17:20	MS/MSD. LOW VOLUME!!!! +MO
SW8270C	SMS_BNA_8270C_3510_REG	05/14/2010 14:00	20	04/28/2010 17:20	MS/MSD. LOW VOLUME!!!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/14/2010 14:00	20	04/28/2010 17:20	MS/MSD. LOW VOLUME!!!!
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 17:20	MS/MSD.
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 17:20	MS/MSD. effervescent during sampling
1004200-77 TB-323 [Water] Sampled 04/21/2010 07:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/14/2010 14:00	20	05/05/2010 09:30	
SW8260B	VOC_8260B_AP9	05/14/2010 14:00	20	05/05/2010 09:30	

SGS/Paradigm (SUB028)

1004200-48 DP13-01072 [Solid] Sampled 04/21/2010 13:50 Pacific					**QSM4.1.**
SW8290	SUB_DIOXINS_8290	05/14/2010 14:00	20	05/21/2010 15:50	sub to SGS - Wilmington

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 3:42:15 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210p

				Container:	3 x 40 ml VOA	1 x 40 ml VOA			
				Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
				Filtered:	NA	NA			
				Holding Time:	48HR	48HR			
	DATE	TIME	Matrix		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP03-01117	4/22/2010	14:20	Soil		X	X	1004200-01	4	LAB QC
DP03-01118	4/22/2010	14:25	Soil		X	X	-02	4	
DP06-01102	4/22/2010	15:15	Soil		X	X	-03	4	
DP06-01103	4/22/2010	15:20	Soil		X	X	-04	4	
DP06-01104	4/22/2010	15:25	Soil		X	X	-05	4	
DP08-01108	4/22/2010	10:20	Soil		X	X	-06	4	LAB QC
DP08-01109	4/22/2010	10:25	Soil		X	X	-07	4	
DP08-01110	4/22/2010	10:30	Soil		X	X	-08	4	
DP08-51110	4/22/2010	10:30	Soil		X	X	-09	4	
							TOTAL NUMBER OF CONTAINERS	36	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/22/10
Received by		
Relinquished by	[signature]	4/23/10 08:30
Received by		0.30C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 3:59:49 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210p2

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE / TIME / Matrix					
DP01-02009	4/22/2010 14:10 Soil		X	1004200-10	1	
DP01-02010	4/22/2010 14:15 Soil		X	-11	1	
DP01-02011	4/22/2010 14:25 Soil		X	-12	1	
DP01-52010	4/22/2010 14:15 Soil		X	-13	1	
DP02-02012	4/22/2010 15:30 Soil	X	X	-14	4	
DP02-02013	4/22/2010 15:35 Soil	X	X	-15	4	
DP02-02014	4/22/2010 15:35 Soil	X	X	-16	4	
DP03-02015	4/22/2010 15:00 Soil	X	X	-17	4	
DP03-02016	4/22/2010 15:05 Soil	X	X	-18	4	
DP03-02017	4/22/2010 15:10 Soil	X	X	-19	4	
				TOTAL NUMBER OF CONTAINERS	28	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	04/22/10
Received by		
Relinquished by		
Received by	[signature]	4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 2:52:26 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210s2

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar					
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	None					
	Filtered:	NA	NA	NA	NA	NA	NA	NA					
	Holding Time:	14	14	14	14	14	28	24HR					
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)	Hexavalent Chromium (SW7196)			Number of Containers	COMMENTS
	DATE	TIME	Matrix									
~~DP01-01165~~ ✓	4/22/2010	9:30	Soil		X				X	X		6	
~~DP01-01166~~ ✓	4/22/2010	9:35	Soil		X				X	X		6	
~~DP01-01167~~ ✓	4/22/2010	9:40	Soil		X				X	X		6	
~~DP01-09144~~ ✓	4/22/2010	9:20	Soil	X								1	
~~DP01-09145~~ ✓	4/22/2010	9:22	Soil	X								1	
~~DP01-09146~~ ✓	4/22/2010	9:24	Soil	X								1	
~~DP01-09147~~ ✓	4/22/2010	9:26	Soil	X								1	
~~DP02-01168~~ ✓	4/22/2010	10:10	Soil		X				X	X		6	LAB QC
~~DP02-01169~~ ✓	4/22/2010	10:20	Soil		X				X	X		6	
~~DP02-01170~~ ✓	4/22/2010	10:30	Soil		X				X	X		6	
~~DP02-51170~~ ✓	4/22/2010	10:30	Soil		X				X	X		6	
~~DP08-01108~~ ✓	4/22/2010	10:20	Soil		X	X	X	X	X			5	LAB QC
~~DP08-01109~~ ✓	4/22/2010	10:25	Soil		X	X	X	X	X			5	
~~DP08-01110~~ ✓	4/22/2010	10:30	Soil		X	X	X	X	X			5	

1004200-20 3 6
-21 3 6
-22 3 6
-23 1
-24 1
-25 1
-26 1
MS/MSD -27 6
-28 3 6
-29 3 6
-30 3 6
1004200-06 MS/MSD 4 ~~5~~ 6
-07 2 5
-08 2 5

	Signatures	Date/Time
Approved by		
Sampled by		4/22/10
Relinquished by	James Ford	1600
Received by		
Relinquished by		
Received by		4/23/10 08:30

0.3°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 2:52:26 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210s2

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	None			
	Filtered:	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28	24HR			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)	Hexavalent Chromium (SW7196)		Number of Containers	COMMENTS
DP08-09068 ✓	4/22/2010 9:45 Soil	X							1004200-31	1	
DP08-09069 ✓	4/22/2010 9:50 Soil	X							-32	1	
DP08-09070 ✓	4/22/2010 9:55 Soil	X							-33	1	
DP08-09071 ✓	4/22/2010 10:00 Soil	X							-34	1	
DP08-51110 ✓	4/22/2010 10:30 Soil		X	X	X	X	X		1004200-05 2	5	
DP08-59070 ✓	4/22/2010 9:55 Soil	X							1004200-35	1	
									TOTAL NUMBER OF CONTAINERS	71	

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by Jamie Eby	4/22/10 1000
Received by	
Relinquished by	
Received by	4/23/10 08:30

0.3°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

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CHAIN OF CUSTODY RECORD

4/22/2010 10:41:02 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	30	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS	
	DATE	TIME	Matrix									
DP02-09148	4/21/2010	11:10	Soil	X							1	2 LAB QC
DP02-09149	4/21/2010	11:15	Soil	X							1	
DP02-09150	4/21/2010	11:20	Soil	X							1	
DP02-09151	4/21/2010	11:25	Soil	X							1	
DP02-59150	4/21/2010	11:20	Soil	X							1	
DP05-01099	4/21/2010	14:40	Soil		X	X	X	X		X	5	2
DP05-01100	4/21/2010	14:45	Soil		X	X	X	X		X	5	2
DP05-09056	4/21/2010	15:20	Soil	X							1	2 LAB QC
DP05-09057	4/21/2010	15:25	Soil	X							1	
DP05-09058	4/21/2010	15:30	Soil	X							1	
DP05-09059	4/21/2010	15:30	Soil	X							1	
DP05-51100	4/21/2010	14:45	Soil		X	X	X	X		X	5	2
DP13-01072	4/21/2010	13:50	Soil		X				X		2	
DP13-01073	4/21/2010	13:55	Soil		X						1	

1004200-36
-37
-38
-39
-40
1004189-55 ~~-47~~ SMD 4/28/10
~~-56, -42~~
1004200-43
-44
-45
-46
1004189-57 ~~-43~~ SMD 4/28/10
1004200-48
-49

CMC 04/2
CMC 04/2
CMC 04/2

Signatures		Date/Time
Approved by		04/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** 4/22/2010 10:41:03 AM Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar	4oz soil jar					
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C	4°C					
	Filtered:	NA	NA	NA	NA	NA	NA	NA					
	Holding Time:	14	14	14	14	14	30	28					
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	Dioxins/Furans (8290)	TAL Metals (6010B/7470A)			Number of Containers	COMMENTS	
	DATE	TIME	Matrix										
DP13-09032	4/21/2010	13:30	Soil	x							1004200-50	1	
DP13-09033	4/21/2010	13:35	Soil	x							-51	1	
DP13-09034	4/21/2010	13:40	Soil	x							-52	1	
DP13-09035	4/21/2010	13:45	Soil	x							-53	1	
DP15-01162	4/21/2010	14:15	Soil		x	x					1004189-52	2	LAB QC
DP15-01163	4/21/2010	14:20	Soil		x	x					-53	~~2~~ 1	cmc 04/22
DP15-01164	4/21/2010	14:25	Soil		x	x					-54	~~2~~ 1	cmc 04/22
DP15-09140	4/21/2010	14:00	Soil	x							1004200-54	1	
DP15-09141	4/21/2010	14:05	Soil	x							-55	1	
DP15-09142	4/21/2010	14:10	Soil	x							-56	1	
DP15-09143	4/21/2010	14:15	Soil	x							-57	1	
DP15-59140	4/21/2010	14:00	Soil	x							-58	1	
											TOTAL NUMBER OF CONTAINERS	42	

	Signatures	Date/Time
Approved by		04/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 3:43:31 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-124	4/22/2010	7:30	Water	X	X	1004200-59	5	
TB-124	4/22/2010	7:30	Water	X	X	-66	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/22/10
Received by		
Relinquished by	[signature]	4/23/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 1:50:34 PM* Page 1 OF 1

Project Name AlamedaPoint
Location

Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210eb

	Container:	2 x 1L Amber 4°C	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	7	7	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-124	4/22/2010 7:30 Water	X	X	X	X	X	X	1004200-54	~~12~~ 7	
								TOTAL NUMBER OF CONTAINERS	~~12~~ 7	

CMC
04/22/10

	Signatures	Date/Time
Approved by		04/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

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ATTN:
Sample Custody
and
Janice Shilling

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 1:51:20 PM* Page 1 OF 1

Project Name AlamedaPoint
Location

Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly	1 x 250 ml Poly
Filtered:	NA	NA	NA	NA	NA
Holding Time:	7	7	7	28	24HR
	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)	Hexavalent Chromium (SW7196)

Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210EB

	DATE	TIME	Matrix							Number of Containers	COMMENTS
EB-224	4/22/2010		Water	X	X	X	X	X	1004200-61	~~12~~ 6	
									TOTAL NUMBER OF CONTAINERS	~~12~~ 6	

CMC
4/22/10

	Signatures	Date/Time
Approved by		4/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 3:47:18 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-224	4/22/2010		Water	X	X	1004200 -61	5	
TB-224	4/22/2010	7:30	Water	X	X	-62	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		04/22/10
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

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CHAIN OF CUSTODY RECORD

4/22/2010 1:52:15 PM

Project Name AlamedaPoint
Location
Project Number 383512.P1.EB
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210EB

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)	Hexavalent Chromium (SW7196)	Number of Containers	COMMENTS
Container				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly	1 x 250 ml Poly		
Filtered:				NA	NA	NA	NA	NA	NA	NA		
Holding Time:				7	7	7	7	7	28	24HR		
EB-324	4/22/2010	7:40	Water	X	X	X	X	X	X	X	~~14~~ 8	
TOTAL NUMBER OF CONTAINERS											~~14~~ 8	

1004200 -63

CMC
04/22/10

Signatures		Date/Time
Approved by		04/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:20

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 8:51:37 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210w2

	DATE	TIME	Matrix	Container:	Preservatives:	Filtered:	Holding Time:		Number of Containers	COMMENTS
				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber				
				4°C	4°C	4°C				
				NA	NA	NA				
				7	7	7				
				TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)				
DP10-01537	4/21/2010	8:30	Water	x ~~2~~ 4	x ~~2~~ 4	x	MS/MSD	1004200-64 &3	~~10~~	LAB QC
DP13-01543	4/21/2010	16:50	Water	x ~~4~~ 2	x ~~4~~ 2	x		-65 4	~~10~~	
								TOTAL NUMBER OF CONTAINERS	20	

	Signatures	Date/Time
Approved by		4/22/10
Sampled by	Janice Shilling	1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10

08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

0.30C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 11:19:32 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210W3

				Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber			
				Preservatives:	4°C	4°C	4°C			
				Filtered:	NA	NA	NA			
				Holding Time:	7	7	7			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
DP14-01544	4/22/2010	8:30	Water		x	x	x	1004200-66	~~10~~	4
DP14-01545	4/22/2010	8:55	Water		x	x	x	-67	~~10~~	4
DP15-01546	4/22/2010	9:40	Water		x	x	x	-68	~~10~~	4
DP15-01547	4/22/2010	10:10	Water		x	x	x	-64	~~10~~	4
								TOTAL NUMBER OF CONTAINERS	~~40~~	16

CMC
04/22/10

	Signatures	Date/Time
Approved by		4/22/10
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

6.7°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 3:15:26 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 1 Days
Shipping Date: 4/22/2010
COC Number: 42210W4

	Container:	1 x 250 ml Poly			
	Preservatives:	None			
	Filtered:	NA			
	Holding Time:	24HR			
		Hexavalent Chromium (SW7196)		Number of Containers	COMMENTS
DATE	TIME	Matrix			
DP02-01548	4/22/2010	14:00	Water	X	1004200-70	1	
DP02-01549	4/22/2010	14:20	Water	X	-71	1	LAB QC
					TOTAL NUMBER OF CONTAINERS	2	

	Signatures	Date/Time
Approved by		
Sampled by		4/22/10
Relinquished by	Tamara Frank	1530
Received by		
Relinquished by		
Received by		4/23/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

0.30C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/22/2010 8:27:51 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210W

				Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA	NA	NA	NA	NA	NA			
				Holding Time:	14	14	7	7	7	7	7	28			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP02-01504 ✓	4/21/2010	13:30	Water		x 3	x 2	x2	x 2 x		x 1 x		x1	1004200-72 11	~~15~~	
DP02-01505 ✓	4/21/2010	14:30	Water				x2	x 2 x		x 1 x		x1	-73 6	~~15~~	
DP02-01505 ✓	4/21/2010	14:30	Water		x3	x2							-73 -~~74~~ ws 4/23/10	5	scent - bubbles p
DP10-01536 ✓	4/21/2010	9:15	Water		x3	x2							1004189-64	5	
DP10-01537 ✓	4/21/2010	8:30	Water		x~~6~~	x~~4~~							10042064 MS/MSD 1004~~200~~ ws 4/23/10	5	LAB QC
DP11-01538 ✓	4/21/2010	9:50	Water		x3	x2							1004189-71	5	
DP11-01539 ✓	4/21/2010	8:50	Water		x3	x2							ws 4/23/10 -72	5	
DP12-01540 ✓	4/21/2010	11:50	Water		x3	x2	x2	x 2 x					1004200-~~75~~-74 9	~~15~~	
DP12-01541 ✓	4/21/2010	10:50	Water		x3	x2							1004189-73	5	
DP12-51540 ✓	4/21/2010	10:50	Water		x3	x2	x2	x 2 x					1004200-~~76~~-75-~~76~~ ws 4/23/10 9	~~15~~	to 20 foot sampl
DP13-01542 ✓	4/21/2010	15:20	Water				x4	x 4 x					~~76~~ -77 MS/MSD 8	~~10~~	LAB QC
DP13-01542 ✓	4/21/2010	15:20	Water		x6	x4							-78 MS/MSD ws 4/23/10 10	~~5~~	ervescent - bubb
DP13-01543 ✓	4/21/2010	16:50	Water		x 3	x 2							ws 4/23/10 1004200-~~64~~-65	5	scent - bubbles p
													TOTAL NUMBER OF CONTAINERS	~~111~~	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/22/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/23/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

0.3°C

ATTN:
Sample Custody and Janice Shilling

Special Instructions:
effervescent during sampling

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189, 1004200 Number of Coolers: 1 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schuyt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5667

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.3 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schuyt (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/23/10	(Yes)	(No)	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

If Non-Conformance issues were present, list by sample ID: _____

No bulk jars rec'd w/ terracores! CAR#: _____

Rec'd TB-323 + not on any COC. Tagged as -72.

pH<2 for all metals (H2O)

WS 4/23/10
DP13-~~01543~~ -~~HCl~~ 01543 1 liter broken in shipment
WS 4/23/10

3 vials broken in shipment for DP12-01540

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189, 1004200 Number of Coolers: 2 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schuck (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5277

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.2 °C

~~Dates samples were logged-in:~~ 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004189, 1004200 Number of Coolers: 3 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/23/10** **08:30** Date cooler(s) opened: **4/23/10**

Opened By (print): Will Schaab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9852

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.4 °C

Dates samples were logged-in: ~~4/23/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 4 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5222

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.7 °C

~~Dates samples were logged in:~~ 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 5 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schuck (signature):

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5233

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.0 °C

Dates samples were ~~logged in~~: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 12

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 6 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5211

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.6 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 12

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100420 Number of Coolers: 7 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5288

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.0 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See case 1 of 12

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 8 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5299

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.3 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 9 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schuel (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5266

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 10 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/23/10** **08:30** Date cooler(s) opened: **4/23/10**

Opened By (print): Will Schutz (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5244

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.5 °C

Dates samples were ~~logged in~~: **4/23/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 11 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5255

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.3 °C

Dates samples were logged in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 10 of 12

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 12 of 12

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/23/10 08:30 Date cooler(s) opened: 4/23/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5303

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/22/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.0 °C

Dates samples were logged-in: 4/23/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 12

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 10:39:40 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE	TIME	Matrix							
DP03-01117 ✓	4/22/2010	14:20	Soil		X	X	X	X	X	1004200-61 MS/MSD 4	5	LAB QC
DP03-01118 ✓	4/22/2010	14:25	Soil		X	X	X	X	X	-02 2	5	
DP03-09080 ✓	4/22/2010	13:45	Soil	X							1	
DP03-09081 ✓	4/22/2010	13:50	Soil	X							1	
DP03-09082 ✓	4/22/2010	13:55	Soil	X							1	
DP03-09083 ✓	4/22/2010	14:00	Soil	X							1	
DP03-59080 ✓	4/22/2010	13:45	Soil	X							1	
DP06-01102 ✓	4/22/2010	15:15	Soil		X	X	X	X	X	1004200-03 2	5	
DP06-01103 ✓	4/22/2010	15:20	Soil		X	X	X	X	X	-04 2	5	
DP06-01104 ✓	4/22/2010	15:25	Soil		X	X	X	X	X	-05 2	5	
DP06-09060 ✓	4/22/2010	15:45	Soil	X							1	
DP06-09061 ✓	4/22/2010	15:50	Soil	X							1	
DP06-09062 ✓	4/22/2010	15:55	Soil	X							1	
DP06-09063 ✓	4/22/2010	16:00	Soil	X							1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Frank	4/23/10 1200
Relinquished by		
Received by		
Relinquished by		730
Received by		4-24-10

AM HW 4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

4. 9°C

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 12:14:16 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02009	4/22/2010 14:10 Soil		X		1004200-10	1	
DP01-02010	4/22/2010 14:15 Soil		X		-11	1	
DP01-02011	4/22/2010 14:25 Soil		X		-12	1	
DP01-52010	4/22/2010 14:15 Soil		X		-13	1	
DP02-02012	4/22/2010 15:30 Soil		X	X	-14	2	
DP02-02013	4/22/2010 15:35 Soil		X	X	-15	2	
DP02-02014	4/22/2010 15:35 Soil		X	X	-16	2	
DP02-08016	4/22/2010 15:35 Soil	X				1	
DP02-08017	4/22/2010 15:37 Soil	X				1	
DP02-08018	4/22/2010 15:40 Soil	X				1	
DP02-08019	4/22/2010 15:55 Soil	X				1	
DP03-02015	4/22/2010 15:00 Soil		X	X	1004200-17	2	
DP03-02016	4/22/2010 15:05 Soil		X	X	-18	2	
DP03-02017	4/22/2010 15:10 Soil		X	X	-19	2	

	Signatures	Date/Time
Approved by		
Sampled by		4/23/10
Relinquished by	Tamara Jank	1200
Received by		
Relinquished by		73-
Received by		4-24-10
		4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to 4.8 dc

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 10:21:55 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310W

	DATE	TIME	Matrix	Container:	3 x 40 ml VOA	2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
					VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-324	4/22/2010	7:40	Water		X	X	1009200-63	5	
TB-324	4/22/2010	7:30	Water		X	X		5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		04/23/10
Received by		4/24/10 07:30
Relinquished by		730
Received by		4-24-10

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to 1, 2 cc

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/23/2010 10:22:55 AM Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP02-01548	4/22/2010 14:00 Water				X	X			X	1004200-70	~~9~~ 3	
DP02-01549	4/22/2010 14:20 Water				X	X				-71	~~8~~ 2	
DP02-01549	4/22/2010 14:20 Water								X	↓	~~1~~	~~LAB QC~~
DP05-01510	4/22/2010 11:30 Water	X	X	X	X	X	X	X	X		~~18~~	11
DP05-01511	4/22/2010 12:00 Water	X	X	X	X	X	X	X	X		~~18~~	11
DP05-51510	4/22/2010 11:30 Water	X	X	X	X	X	X	X	X		~~18~~	11
DP08-01517	4/22/2010 15:15 Water	X	X	X	X	X	X	X	X		~~18~~	22 LAB QC
DP14-01544	4/22/2010 8:30 Water	X	X							1004200-66	5	
DP14-01545	4/22/2010 8:55 Water	X	X							-67	5	
DP15-01546	4/22/2010 9:40 Water	X	X							-68	5	
DP15-01547	4/22/2010 10:10 Water	X	X							-69	5	
										TOTAL NUMBER OF CONTAINERS	~~110~~	80

CMC
04/23/10

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/23/10
Received by		
Relinquished by		730 4-24-10
Received by	[signature]	4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
Report Copy to 1, 2 °C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004100 Number of Coolers: 1 of 3

Client: CH2M HILL Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5715

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.7 °C

Dates samples were logged-in: 4/26/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schmidt (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all Metals

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 2 of 2

Client: CH2M HILL Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): ~~Frank Rice~~ Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9841

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.2 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 3 of 8

Client: CH2M Hill Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5726

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200 Number of Coolers: 4 of 8

Client: Chris Mitt Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): ~~Frank Rice~~ Will Schwab 4/24/10 (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5623

2. Were custody seals on outside of cooler(s)? ..... Yes No

How many: 1 Seal date: ?? Seal Initials: JA

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.2 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

Sonya Gordon

From: William Schwab [wschwab@empirlabs.com]
Sent: Monday, April 26, 2010 8:34 AM
To: sgordon@empirlabs.com
Cc: 'RushForms'
Subject: RE: 1004189 & 1004200

See below pertinent to these two WO's.

For samples 1004200-41-->42 and -47; metals + Hg, DRO, PCB/Pest, BNA and Dry Weight have been REMOVED (none were batched). These tests have been added to samples 1004189-55-->57!!!

Analysts - You will be looking for containers 1004200-41 to report as 1004189-55, 1004200-42 to report as 1004189-56, and 1004200-47 to report as 1004189-57. ~~The client had a typo on the original COC and~~ the samples were tagged twice and should have been tagged only once! Please see me for questions or if you need help finding samples.

SMG 4/27/10

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 237 I Fax: 615.846.5426

-----Original Message-----
From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Sunday, April 25, 2010 1:39 PM
To: wschwab@empirlabs.com
Subject: 1004189 & 1004200

There was a typo for the IDs on 1004189-55, 56, & 57. Because of that, the following were logged in 2 work orders. I've fixed the IDs, can you take care of the rest?

1004189-55	DP05-01099	1004200-41
1004189-56	DP05-01100	1004200-42
1004189-57	DP05-51100	1004200-47

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 I Nashville, TN 37228 I www.empirlabs.com
Main: 615.345.1115 ext. 238 I Toll free: 877.345.1113 I Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Monday, April 26, 2010 12:36 PM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

No, there's no way the two were mixed up here. I am forwarding the CofC for the EB323 VOC/purgeables/metals, that somehow got left out of the cooler.
I show that EB123 metals was shipped on 4/21. I think it would be ok to transfer water from one of the other containers to a preserved metals container, but we should let Mark Fesler chime in on this.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 10:15 AM
To: Frank, Tamara/BAO
Subject: RE: Alameda sample receipt 4/22/10

the mystery deepens... on EB-323, the only COC received list TPH-E, SVOC, & PAH (also your email concerning pest/PCB). However, we received metals, VOC, & TPH-P volume on these (trying to find out why I wasn't notified on this part)... Any way, could the information between EB-123 & EB-323 have been mixed?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 11:32 AM
To: 'Tamara.Frank@ch2m.com'
Cc: 'Mark.Fesler@CH2M.com'
Subject: RE: Alameda sample receipt 4/22/10

If it's not found it in the refrigerator today.. would be acceptable to take volume from one of the unpreserved ambers for preservation/analysis (& noted in the narrative)?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Monday, April 26, 2010 10:30 AM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

Very odd. My refer is pretty full, right now, anticipating the arrival of the coolers, but I'll empty it out

today and if I find it I'll send it along.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 8:29 AM
To: sgordon@empirlabs.com; Frank, Tamara/BAO
Subject: RE: Alameda sample receipt 4/22/10

My search didn't find anything. All the other waters received that day were accounted for. :(

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 10:14 AM
To: 'Tamara.Frank@ch2m.com'
Subject: RE: Alameda sample receipt 4/22/10

I'll go on a search in the cooler & see if I can find anything misnumbered...

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Monday, April 26, 2010 10:12 AM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

No, it should have been in the shipment, but might have been sharing a Ziploc with other samples. I continually confuse the EBs 1s, 2s, and 3s…

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 7:31 AM
To: Frank, Tamara/BAO
Subject: FW: Alameda sample receipt 4/22/10

Hi Tamara,

When going back to add these samples, I discovered that we did not receive metals volume on EB-123. Any chance it was sent in a later shipment... or that it's hiding out in the trailer?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: Tamara.Frank@ch2m.com [mailto:Tamara.Frank@ch2m.com]
Sent: Friday, April 23, 2010 10:26 AM
To: sgordon@empirlabs.com
Subject: RE: Alameda sample receipt 4/22/10

Here are my copy of the CofC for these samples. I don't know how the original didn't make it into the coolers. Since I can't scan, I can't send you the signed and notated copies, but I could fax them, if necessary.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Friday, April 23, 2010 8:18 AM
To: Frank, Tamara/BAO
Subject: Alameda sample receipt 4/22/10

Hi Tamara,
I was just notified that the following samples were not on the COCs yesterday. I just need to confirm what analysis are needed.

Thanks,
Sonya

Received these samples DP11-01538, DP11-01539 and DP12-01541 (4 1L ambers per sample) that were NOT listed on a COC. Tagged for BNA, PAH SIM, and DRO per container labels and PLACED ON HOLD! Please verify if client would like to proceed with these.....

ALSO, client sent 11 ambers with EB-123 and NO COC for these ambers. Tagged for PAH SIM, BNA, Dioxins, PCB/PEST, and DRO per container labels and PLACED ON HOLD! Please verify if client would like to run these!!!

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
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Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

CH2MHILL

CHAIN OF CUSTODY RECORD

4/26/2010 10:34:46 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/22/2010
COC Number: 42210W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	1 x 250 ml Poly				
	Preservatives:	HCl	HCl	HNO4				
	Filtered:	NA	NA	NA				
	Holding Time:	14	14	28				
		VOCs (8260B)	TPH-Purgable (SW8015B)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-323	4/21/2010 7:35 Water	X	X	X		6	
TB-323	4/21/2010 7:30 Water	X	X			5	
					TOTAL NUMBER OF CONTAINERS	11	

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889852
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1004215

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/24/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/24/2010 07:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/26/2010 11:12

Samples Received at: **3.7°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1004215-01 DP03-09080 [Solid] Sampled 04/22/2010 13:45 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 15:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 15:45	
1004215-02 DP03-09081 [Solid] Sampled 04/22/2010 13:50 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 15:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 15:50	
1004215-03 DP03-09082 [Solid] Sampled 04/22/2010 13:55 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 15:55	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 15:55	
1004215-04 DP03-09083 [Solid] Sampled 04/22/2010 14:00 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 16:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 16:00	
1004215-05 DP03-59080 [Solid] Sampled 04/22/2010 13:45 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 15:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 15:45	
1004215-06 DP06-09060 [Solid] Sampled 04/22/2010 15:45 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:45	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:45	

1004215

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-07 DP06-09061 [Solid] Sampled 04/22/2010 15:50 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:50	
1004215-08 DP06-09062 [Solid] Sampled 04/22/2010 15:55 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:55	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:55	
1004215-09 DP06-09063 [Solid] Sampled 04/22/2010 16:00 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 18:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 18:00	
1004215-10 DP02-08016 [Solid] Sampled 04/22/2010 15:35 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:35	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:35	
1004215-11 DP02-08017 [Solid] Sampled 04/22/2010 15:37 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:37	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:37	
1004215-12 DP02-08018 [Solid] Sampled 04/22/2010 15:40 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:40	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:40	
1004215-13 DP02-08019 [Solid] Sampled 04/22/2010 15:55 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:55	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:55	
1004215-14 DP04-01096 [Solid] Sampled 04/23/2010 10:05 Pacific					**QSM4.1**
SW8270C	SMS_BNA_8270C_3546_REG	05/17/2010 14:00	20	05/07/2010 12:05	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 12:05	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 12:05	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 12:05	+MO
SW8082A	SGC_PCB8082A_3546	05/17/2010 14:00	20	05/07/2010 12:05	+ Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3546	05/17/2010 14:00	20	05/07/2010 12:05	Tox LCS required
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 12:05	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 12:05	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:05	

1004215

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-15 DP04-01097 [Solid] Sampled 04/23/2010 10:10 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 12:10	
SW8270C	SMS_BNA_8270C_3546_REG	05/17/2010 14:00	20	05/07/2010 12:10	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 12:10	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:10	
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 12:10	+MO
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 12:10	AP VIALS
SW8082A	SGC_PCB8082A_3546	05/17/2010 14:00	20	05/07/2010 12:10	+ Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3546	05/17/2010 14:00	20	05/07/2010 12:10	Tox LCS required
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 12:10	soil TAL + Mo
1004215-16 DP07-01105 [Solid] Sampled 04/23/2010 11:45 Pacific					**QSM4.1**
SW8081A	SGC_PEST8081A_3546	05/17/2010 14:00	20	05/07/2010 13:45	Tox LCS required
SW8082A	SGC_PCB8082A_3546	05/17/2010 14:00	20	05/07/2010 13:45	+ Aroclor-1262 & 1268
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 13:45	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 13:45	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 13:45	
SW8270C	SMS_BNA_8270C_3546_REG	05/17/2010 14:00	20	05/07/2010 13:45	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:45	AP VIALS
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:45	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:45	
1004215-17 DP07-01106 [Solid] Sampled 04/23/2010 11:50 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:50	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:50	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:50	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/17/2010 14:00	20	05/07/2010 13:50	
SW8082A	SGC_PCB8082A_3546	05/17/2010 14:00	20	05/07/2010 13:50	+ Aroclor-1262 & 1268
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 13:50	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 13:50	+MO
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 13:50	
SW8081A	SGC_PEST8081A_3546	05/17/2010 14:00	20	05/07/2010 13:50	Tox LCS required

1004215

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-18	**DP07-01107 [Solid] Sampled 04/23/2010 11:55 Pacific**				**QSM4.1**
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:55	AP VIALS
SW8081A	SGC_PEST8081A_3546	05/17/2010 14:00	20	05/07/2010 13:55	Tox LCS required
SW8082A	SGC_PCB8082A_3546	05/17/2010 14:00	20	05/07/2010 13:55	+ Aroclor-1262 & 1268
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 13:55	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 13:55	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:55	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:55	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/17/2010 14:00	20	05/07/2010 13:55	
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 13:55	
1004215-19	**DP04-09052 [Solid] Sampled 04/23/2010 09:45 Pacific**				**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:45	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:45	
1004215-20	**DP04-09053 [Solid] Sampled 04/23/2010 09:50 Pacific**				**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:50	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:50	
1004215-21	**DP04-09054 [Solid] Sampled 04/23/2010 09:55 Pacific**				**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:55	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:55	
1004215-22	**DP04-09055 [Solid] Sampled 04/23/2010 10:00 Pacific**				**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 12:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:00	
1004215-23	**DP07-09064 [Solid] Sampled 04/23/2010 11:20 Pacific**				**MS/MSD. QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:20	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:20	MS/MSD.
1004215-24	**DP07-09065 [Solid] Sampled 04/23/2010 11:25 Pacific**				**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:25	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:25	
1004215-25	**DP07-09066 [Solid] Sampled 04/23/2010 11:30 Pacific**				**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:30	

1004215

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004215-26 DP07-09067 [Solid] Sampled 04/23/2010 11:35 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:35	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:35	
1004215-27 DP04-02018 [Solid] Sampled 04/23/2010 08:55 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 10:55	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 10:55	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 10:55	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 10:55	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 10:55	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 10:55	AP VIALS!
1004215-28 DP04-02019 [Solid] Sampled 04/23/2010 09:00 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:00	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:00	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 11:00	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:00	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 11:00	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 11:00	soil TAL + Mo
1004215-29 DP04-02020 [Solid] Sampled 04/23/2010 09:05 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:05	
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 11:05	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 11:05	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:05	AP VIALS!
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:05	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 11:05	+MO
1004215-30 DP04-08024 [Solid] Sampled 04/23/2010 08:40 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 10:40	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 10:40	
1004215-31 DP04-08025 [Solid] Sampled 04/23/2010 08:43 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 10:43	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 10:43	
1004215-32 DP04-08026 [Solid] Sampled 04/23/2010 08:46 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 10:46	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 10:46	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-33 DP04-08027 [Solid] Sampled 04/23/2010 08:50 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 10:50	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 10:50	
1004215-34 DP04-52020 [Solid] Sampled 04/23/2010 09:05 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:05	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:05	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 11:05	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 11:05	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 11:05	+MO
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:05	AP VIALS!
1004215-35 DP05-02021 [Solid] Sampled 04/23/2010 09:40 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 11:40	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 11:40	+MO
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 11:40	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:40	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:40	AP VIALS!
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:40	AP VIALS!
1004215-36 DP05-02022 [Solid] Sampled 04/23/2010 09:45 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 11:45	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:45	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 11:45	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:45	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 11:45	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:45	AP VIALS!
1004215-37 DP05-02023 [Solid] Sampled 04/23/2010 09:50 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:50	
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 11:50	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 11:50	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:50	AP VIALS!
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:50	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 11:50	+MO
1004215-38 DP05-08028 [Solid] Sampled 04/23/2010 09:25 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:25	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:25	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004215-39 DP05-08029 [Solid] Sampled 04/23/2010 09:27 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:27	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:27	
1004215-40 DP05-08030 [Solid] Sampled 04/23/2010 09:30 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:30	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:30	
1004215-41 DP05-08031 [Solid] Sampled 04/23/2010 09:34 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:34	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:34	
1004215-42 DP05-58030 [Solid] Sampled 04/23/2010 09:30 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 11:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 11:30	
1004215-43 DP06-02024 [Solid] Sampled 04/23/2010 10:36 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 12:36	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 12:36	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 12:36	+MO
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 12:36	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:36	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 12:36	AP VIALS!
1004215-44 DP06-02025 [Solid] Sampled 04/23/2010 10:44 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 12:44	+MO
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 12:44	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 12:44	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 12:44	AP VIALS!
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 12:44	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:44	
1004215-45 DP06-02026 [Solid] Sampled 04/23/2010 10:55 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:55	
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 12:55	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 12:55	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 12:55	+MO
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 12:55	AP VIALS!
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 12:55	AP VIALS!

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004215-46 DP06-08032 [Solid] Sampled 04/23/2010 10:24 Pacific					**MS/MSD. QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 12:24	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:24	MS/MSD.
1004215-47 DP06-08033 [Solid] Sampled 04/23/2010 10:26 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:26	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 12:26	
1004215-48 DP06-08034 [Solid] Sampled 04/23/2010 10:27 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:27	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 12:27	
1004215-49 DP06-08035 [Solid] Sampled 04/23/2010 10:30 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 12:30	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 12:30	
1004215-50 DP07-02027 [Solid] Sampled 04/23/2010 11:45 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 13:45	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 13:45	+MO
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:45	AP VIALS!
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:45	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 13:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:45	
1004215-51 DP07-02028 [Solid] Sampled 04/23/2010 11:50 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:50	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 13:50	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 13:50	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:50	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:50	
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 13:50	+MO
1004215-52 DP07-02029 [Solid] Sampled 04/23/2010 11:55 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/17/2010 14:00	20	05/21/2010 13:55	
SW8015B	SGC_DRO_8015B_3546	05/17/2010 14:00	20	05/07/2010 13:55	+MO
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:55	AP VIALS!
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:55	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:55	
SW6010B	MET_ICP_LOW6010B_FULL	05/17/2010 14:00	20	10/20/2010 13:55	soil TAL + Mo

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004215-53 DP07-08036 [Solid] Sampled 04/23/2010 11:30 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:30	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:30	
1004215-54 DP07-08037 [Solid] Sampled 04/23/2010 11:33 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:33	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:33	
1004215-55 DP07-08038 [Solid] Sampled 04/23/2010 11:36 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:36	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:36	
1004215-56 DP07-08039 [Solid] Sampled 04/23/2010 11:39 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/30/2010 13:39	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/07/2010 13:39	
1004215-57 DP03-08020 [Solid] Sampled 04/22/2010 14:45 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 16:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 16:45	
1004215-58 DP03-08021 [Solid] Sampled 04/22/2010 14:47 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 16:47	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 16:47	
1004215-59 DP03-08022 [Solid] Sampled 04/22/2010 14:50 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 16:50	
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 16:50	
1004215-60 DP03-08023 [Solid] Sampled 04/22/2010 14:57 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 16:57	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 16:57	
1004215-61 DP03-58020 [Solid] Sampled 04/22/2010 14:45 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 16:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 16:45	
1004215-62 DP06-59060 [Solid] Sampled 04/22/2010 15:45 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/17/2010 14:00	20	05/06/2010 17:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/17/2010 14:00	20	04/29/2010 17:45	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-63 DP03-01506 [Water] Sampled 04/23/2010 09:05 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:05	
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/20/2010 11:05	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/21/2010 11:05	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:05	
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/30/2010 11:05	LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/30/2010 11:05	LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/30/2010 11:05	LOW VOLUME!! + Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/30/2010 11:05	LOW VOLUME!! Tox LCS required
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/30/2010 11:05	LOW VOLUME!! +MO
1004215-64 DP03-01507 [Water] Sampled 04/23/2010 09:25 Pacific					**QSM4.1**
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/30/2010 11:25	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 11:25	
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/30/2010 11:25	LOW VOLUME!! + Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/30/2010 11:25	LOW VOLUME!! Tox LCS required
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/20/2010 11:25	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/30/2010 11:25	LOW VOLUME!! +MO
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/21/2010 11:25	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 11:25	
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/30/2010 11:25	LOW VOLUME!!
1004215-65 DP08-01516 [Water] Sampled 04/23/2010 08:00 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/30/2010 10:00	LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/30/2010 10:00	LOW VOLUME!! + Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/30/2010 10:00	LOW VOLUME!! Tox LCS required
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/30/2010 10:00	LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/20/2010 10:00	water TAL + Mo
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 10:00	
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/30/2010 10:00	LOW VOLUME!! +MO
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/21/2010 10:00	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 10:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-66 DP04-01508 [Water] Sampled 04/23/2010 11:00 Pacific					**QSM4.1**
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/21/2010 13:00	
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/30/2010 13:00	LOW VOLUME!! +MO
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/30/2010 13:00	LOW VOLUME!! Tox LCS required
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 13:00	
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/30/2010 13:00	LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/30/2010 13:00	LOW VOLUME!! + Aroclor-1262 & 1268
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 13:00	
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/20/2010 13:00	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/30/2010 13:00	LOW VOLUME!!
1004215-67 DP05-01510 [Water] Sampled 04/22/2010 11:30 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/06/2010 13:30	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/06/2010 13:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/20/2010 13:30	
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!! +MO
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!! Tox LCS required
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!! + Aroclor-1262 & 1268
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/19/2010 13:30	water TAL + Mo
1004215-68 DP05-01511 [Water] Sampled 04/22/2010 12:00 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/29/2010 14:00	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/06/2010 14:00	
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/29/2010 14:00	LOW VOLUME!! + Aroclor-1262 & 1268
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/06/2010 14:00	
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/20/2010 14:00	
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/29/2010 14:00	LOW VOLUME!! Tox LCS required
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/29/2010 14:00	LOW VOLUME!! +MO
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/19/2010 14:00	water TAL + Mo
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/29/2010 14:00	LOW VOLUME!!

1004215

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004215-69 DP05-51510 [Water] Sampled 04/22/2010 11:30 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/06/2010 13:30	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/06/2010 13:30	
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!! +MO
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/19/2010 13:30	water TAL + Mo
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!! + Aroclor-1262 & 1268
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/20/2010 13:30	
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!!
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!! Tox LCS required
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/29/2010 13:30	LOW VOLUME!!
1004215-70 DP08-01517 [Water] Sampled 04/22/2010 15:15 Pacific					**MS/MSD. QSM4.1**
SW6010B	MET_ICP_6010B_FULL_DIS	05/17/2010 14:00	20	10/19/2010 17:15	MS/MSD. water TAL + Mo
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/06/2010 17:15	MS/MSD.
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/06/2010 17:15	MS/MSD.
SW7470A	MET_7470_DIS_MERCURY	05/17/2010 14:00	20	05/20/2010 17:15	MS/MSD.
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/29/2010 17:15	MS/MSD. LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/29/2010 17:15	MS/MSD. LOW VOLUME!! +MO
SW8082A	SGC_PCB8082A_3510	05/17/2010 14:00	20	04/29/2010 17:15	MS/MSD. LOW VOLUME!! + Aroclor-1262 & 1268
SW8081A	SGC_PEST8081A_3510	05/17/2010 14:00	20	04/29/2010 17:15	MS/MSD. LOW VOLUME!! Tox LCS required
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/29/2010 17:15	MS/MSD. LOW VOLUME!!
1004215-71 EB-125 [Water] Sampled 04/23/2010 07:30 Pacific					**QSM4.1**
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/30/2010 09:30	
SW6010B	MET_ICP_6010B_FULL	05/17/2010 14:00	20	10/20/2010 09:30	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/30/2010 09:30	+MO
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/30/2010 09:30	
SW7470A	MET_7470_MERCURY	05/17/2010 14:00	20	05/21/2010 09:30	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 09:30	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 09:30	
1004215-72 TB-125 [Water] Sampled 04/23/2010 07:30 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 09:30	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 09:30	

1004215

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004215-73 EB-225 [Water] Sampled 04/23/2010 07:30 Pacific					**QSM4.1**
SW7470A	MET_7470_MERCURY	05/17/2010 14:00	20	05/21/2010 09:30	
SW6010B	MET_ICP_6010B_FULL	05/17/2010 14:00	20	10/20/2010 09:30	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/17/2010 14:00	20	04/30/2010 09:30	+MO
SW8270C	SMS_BNA_8270C_3510_REG	05/17/2010 14:00	20	04/30/2010 09:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/17/2010 14:00	20	04/30/2010 09:30	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 09:30	
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 09:30	
1004215-74 TB-225 [Water] Sampled 04/23/2010 07:30 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/07/2010 09:30	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/07/2010 09:30	
1004215-75 TB-324 [Water] Sampled 04/22/2010 07:30 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/17/2010 14:00	20	05/06/2010 09:30	
SW8260B	VOC_8260B_AP9	05/17/2010 14:00	20	05/06/2010 09:30	

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 10:39:40 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-01117 ✓	4/22/2010	14:20	Soil		X	X	X	X	X	1004200-01 MS/MSD 4	5	LAB QC
DP03-01118 ✓	4/22/2010	14:25	Soil		X	X	X	X	X	-02 2	5	
DP03-09080 ✓	4/22/2010	13:45	Soil	X						1004215-01	1	
DP03-09081 ✓	4/22/2010	13:50	Soil	X						-02	1	
DP03-09082 ✓	4/22/2010	13:55	Soil	X						-03	1	
DP03-09083 ✓	4/22/2010	14:00	Soil	X						-04	1	
DP03-59080 ✓	4/22/2010	13:45	Soil	X						-05	1	
DP06-01102 ✓	4/22/2010	15:15	Soil		X	X	X	X	X	1004200-03 2	5	
DP06-01103 ✓	4/22/2010	15:20	Soil		X	X	X	X	X	-04 2	5	
DP06-01104 ✓	4/22/2010	15:25	Soil		X	X	X	X	X	-05 2	5	
DP06-09060 ✓	4/22/2010	15:45	Soil	X						1004215-06	1	
DP06-09061 ✓	4/22/2010	15:50	Soil	X						-07	1	
DP06-09062 ✓	4/22/2010	15:55	Soil	X						-08	1	
DP06-09063 ✓	4/22/2010	16:00	Soil	X						-09	1	

	Signatures	Date/Time
Approved by		
Sampled by		4/23/10
Relinquished by	Tamara Frank	1200
Received by		
Relinquished by		730
Received by		4-24-10

Received by 4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
4.8°C

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 12:14:16 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310

				Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
				Preservatives:	4°C	4°C	4°C			
				Filtered:	NA	NA	NA			
				Holding Time:	14	14	28			
	DATE	TIME	Matrix		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02009	4/22/2010	14:10	Soil			x		1004200-10	1	
DP01-02010	4/22/2010	14:15	Soil			x		-11	1	
DP01-02011	4/22/2010	14:25	Soil			x		-12	1	
DP01-52010	4/22/2010	14:15	Soil			x		-13	1	
DP02-02012	4/22/2010	15:30	Soil			x	x	-14	2	
DP02-02013	4/22/2010	15:35	Soil			x	x	-15	2	
DP02-02014	4/22/2010	15:35	Soil			x	x	-16	2	
DP02-08016	4/22/2010	15:35	Soil		x			1004215-10	1	
DP02-08017	4/22/2010	15:37	Soil		x			-11	1	
DP02-08018	4/22/2010	15:40	Soil		x			-12	1	
DP02-08019	4/22/2010	15:55	Soil		x			-13	1	
DP03-02015	4/22/2010	15:00	Soil			x	x	1004200-17	2	
DP03-02016	4/22/2010	15:05	Soil			x	x	-18	2	
DP03-02017	4/22/2010	15:10	Soil			x	x	-19	2	

	Signatures	Date/Time
Approved by		
Sampled by		4/23/10
Relinquished by	Tamara Ward	1200
Received by		
Relinquished by		73-
Received by		4-24-10

4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to 4, 8 dc

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 2:37:25 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310p

	Container:	3 x 40 ml VOA	1 x 40 ml VOA
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH
	Filtered:	NA	NA
	Holding Time:	48HR	48HR
		VOCs (8260B/624)	TPH-Purgable (SW8015B)

w 4/26/10

	DATE	TIME	Matrix				Number of Containers	COMMENTS
DP04-01096 ✓	4/23/2010	10:05	Soil	x	x	~~1004275~~ = 1004215-14	4	
DP04-01097 ✓	4/23/2010	10:10	Soil	x	x	-15	4	
DP07-01105 ✓	4/23/2010	11:45	Soil	x	x	-16	4	
DP07-01106 ✓	4/23/2010	11:50	Soil	x	x	-17	4	
DP07-01107 ✓	4/23/2010	11:55	Soil	x	x	-18	4	
						TOTAL NUMBER OF CONTAINERS	20	

	Signatures	Date/Time
Approved by		
Sampled by		4/23/10
Relinquished by		1600
Received by		
Relinquished by		730
Received by		4-24-10
		4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 3:40:48 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310s4

Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar						
Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C						
Filtered:	NA	NA	NA	NA	NA	NA						
Holding Time:	14	14	14	14	14	28						
	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)						
DATE	**TIME**	**Matrix**									**Number of Containers**	**COMMENTS**
DP04-01096	4/23/2010	10:05	Soil		X	X	X	X	X	1604215-14	5	
DP04-01097	4/23/2010	10:10	Soil		X	X	X	X	X	-15	5	
DP04-09052	4/23/2010	9:45	Soil	X						-19	1	
DP04-09053	4/23/2010	9:50	Soil	X						-20	1	
DP04-09054	4/23/2010	9:55	Soil	X						-21	1	
DP04-09055	4/23/2010	10:00	Soil	X						-22	1	
DP07-01105	4/23/2010	11:45	Soil		X	X	X	X	X	-16	5	
DP07-01106	4/23/2010	11:50	Soil		X	X	X	X	X	-17	5	
DP07-01107	4/23/2010	11:55	Soil		X	X	X	X	X	-18	5	
DP07-09064	4/23/2010	11:20	Soil	X						-23	1	LAB QC
DP07-09065	4/23/2010	11:25	Soil	X						-24	1	
DP07-09066	4/23/2010	11:30	Soil	X						-25	1	
DP07-09067	4/23/2010	11:35	Soil	X						-26	1	
										TOTAL NUMBER OF CONTAINERS	33	

	Signatures	Date/Time
Approved by		
Sampled by	James Frank	4/23/10 1600
Relinquished by		
Received by		
Relinquished by		T30
Received by		4-24-10

4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
2 2oz

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 3:21:55 PM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-02018 ✓	4/23/2010 8:55 Soil		X	X	1004215-27	2	
DP04-02019 ✓	4/23/2010 9:00 Soil		X	X	-28	2	
DP04-02020 ✓	4/23/2010 9:05 Soil		X	X	-24	2	
DP04-08024 ✓	4/23/2010 8:40 Soil	X			-30	1	
DP04-08025 ✓	4/23/2010 8:43 Soil	X			-31	1	
DP04-08026 ✓	4/23/2010 8:46 Soil	X			-32	1	
DP04-08027 ✓	4/23/2010 8:50 Soil	X			-33	1	
DP04-52020 ✓	4/23/2010 9:05 Soil		X	X	-34	2	
DP05-02021 ✓	4/23/2010 9:40 Soil		X	X	-35	2	
DP05-02022 ✓	4/23/2010 9:45 Soil		X	X	-36	2	
DP05-02023 ✓	4/23/2010 9:50 Soil		X	X	-37	2	
DP05-08028 ✓	4/23/2010 9:25 Soil	X			-38	1	
DP05-08029 ✓	4/23/2010 9:27 Soil	X			-39	1	
DP05-08030 ✓	4/23/2010 9:30 Soil	X			-40	1	

	Signatures	Date/Time
Approved by		
Sampled by		4/23/10
Relinquished by	Tamara Jarvis	1600
Received by		
Relinquished by		730
Received by		4-24-10
	4/24/10	07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
3.2°C

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 3:21:56 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP05-08031 ✓	4/23/2010 9:34 Soil	x			1004125-41	1	
DP05-58030 ✓	4/23/2010 9:30 Soil	x			-42	1	
DP06-02024 ✓	4/23/2010 10:36 Soil		x	x	-43	2	
DP06-02025 ✓	4/23/2010 10:44 Soil		x	x	-44	2	
DP06-02026 ✓	4/23/2010 10:55 Soil		x	x	-45	2	
DP06-08032 ✓	4/23/2010 10:24 Soil	x			-46	1	LAB QC
DP06-08033 ✓	4/23/2010 10:26 Soil	x			-47	1	
DP06-08034 ✓	4/23/2010 10:27 Soil	x			-48	1	
DP06-08035 ✓	4/23/2010 10:30 Soil	x			-49	1	
DP07-02027 ✓	4/23/2010 11:45 Soil		x	x	-50	2	
DP07-02028 ✓	4/23/2010 11:50 Soil		x	x	-51	2	
DP07-02029 ✓	4/23/2010 11:55 Soil		x	x	-52	2	
DP07-08036 ✓	4/23/2010 11:30 Soil	x			-53	1	
DP07-08037 ✓	4/23/2010 11:33 Soil	x			-54	1	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/23/10 1600
Relinquished by		
Received by		
Relinquished by		736
Received by		4-24-10

Received 4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
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Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 3:21:56 PM* Page 3 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP07-08038 ✓	4/23/2010 11:36 Soil	X			1004215-55	1	
DP07-08039 ✓	4/23/2010 11:39 Soil	X			-56	1	
					TOTAL NUMBER OF CONTAINERS	43	

	Signatures	Date/Time
Approved by		
Sampled by	James Frank	4/23/10 1600
Relinquished by		
Received by		
Relinquished by		730
Received by		4-24-K

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:
3.2°C

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4/24/10 07:30

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 12:14:16 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-08020	4/22/2010 14:45 Soil	x			1004215-57	1	
DP03-08021	4/22/2010 14:47 Soil	x			-58	1	
DP03-08022	4/22/2010 14:50 Soil	x			-59	1	
DP03-08023	4/22/2010 14:57 Soil	x			-60	1	
DP03-58020	4/22/2010 14:45 Soil	x			-61	1	
					TOTAL NUMBER OF CONTAINERS	25	

	Signatures	Date/Time
Approved by		
Sampled by		4/23/10
Relinquished by		1200
Received by		
Relinquished by		730
Received by		4-24-10

4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
4.9°C
Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 10:39:41 AM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	Share 4oz jar	4oz soil jar				
	Preservatives:	4°C	4°C	4°C	4°C	4°C	4°C				
	Filtered:	NA	NA	NA	NA	NA	NA				
	Holding Time:	14	14	14	14	14	28				
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	Pesticides (SW8081A)	PCBs (8082)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP06-59060 ✓	4/22/2010 15:45 Soil	X						1004215-62	1	
								TOTAL NUMBER OF CONTAINERS	35	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Trout	4/22/10 1300
Relinquished by		
Received by		
Relinquished by		730
Received by		4-24-10
	Archibald	4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:
Report Copy to 4. pcc

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 1:45:26 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310w2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly
	Preservatives:	4°C	4°C	4°C	4°C	4°C	HNO4
	Filtered:	NA	NA	NA	NA	NA	NA
	Holding Time:	7	7	7	7	7	28
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)

	DATE	TIME	Matrix												Number of Containers	COMMENTS
DP03-01506	4/23/2010	9:05	Water	x	2	x	2	x	x	1	x	1	x	1004215-63	6	~~13~~
DP03-01507	4/23/2010	9:25	Water	x	2	x	2	x	x	1	x	1	x	-64	6	~~13~~
DP08-01516 ✓	4/23/2010	8:00	Water	x	2	x	2	x	x	1	x	1	x	-65	6	~~13~~
														TOTAL NUMBER OF CONTAINERS	39	

	Signatures	Date/Time
Approved by		
Sampled by	James Jank	4/23/10 1400
Relinquished by		
Received by		730
Relinquished by		
Received by		4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6 °C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 1:58:44 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310w3

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				4°C	4°C	4°C	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA	NA			
Holding Time:				7	7	7	7	7	28			
DP04-01508	4/23/2010	11:00	Water	X	X	X	X	X	X	1004215-66	13	
										TOTAL NUMBER OF CONTAINERS	13	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jean	4/23/10 1400
Relinquished by		
Received by		
Relinquished by		23c 4-24-10
Received by		4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
2.6 °C

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 10:22:55 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP02-01548	4/22/2010	14:00	Water				x	x			x	10042200-70	~~9~~ 3	
DP02-01549	4/22/2010	14:20	Water				x	x				-71	~~8~~ 2	
DP02-01549	4/22/2010	14:20	Water								x	↓	~~1~~	~~LAB QC~~
DP05-01510	4/22/2010	11:30	Water	x	x	x	x	x	x	x	x	10042215-67	~~18~~ 11	
DP05-01511	4/22/2010	12:00	Water	x	x	x	x	x	x	x	x	-68	~~18~~ 11	
DP05-51510	4/22/2010	11:30	Water	x	x	x	x	x	x	x	x	-69	~~18~~ 11	
DP08-01517	4/22/2010	15:15	Water	x	x	x	x	x	x	x	x	-70	~~18~~ 22	LAB QC
DP14-01544	4/22/2010	8:30	Water	x	x							10042200-66	5	
DP14-01545	4/22/2010	8:55	Water	x	x							-67	5	
DP15-01546	4/22/2010	9:40	Water	x	x							-68	5	
DP15-01547	4/22/2010	10:10	Water	x	x							-69	5	
												TOTAL NUMBER OF CONTAINERS	~~110~~	80

CMC
04/23/10

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by		4/23/10
Received by		
Relinquished by		730 4-24-10
Received by		4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to 1, 2 EC

CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 2:41:58 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
Preservatives:				HCl	HCl			
Filtered:				NA	NA			
Holding Time:				14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-125 ✓	4/23/2010	7:30	Water	X	X	1004215-71	5	
TB-125 ✓	4/23/2010	7:30	Water	X	X	-72	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/23/10
Relinquished by		1600
Received by		
Relinquished by		730
Received by	[signature]	4/24/10
	[signature]	4/24/10 07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to L. Ly

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 2:42:50 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310p

	DATE	TIME	Matrix	Containers: 3 x 40 ml VOA	2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	HCl			
				Filtered: NA	NA			
				Holding Time: 14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-225 ✓	4/23/2010	7:30	Water	X	X	1004215-73	5	
TB-225 ✓	4/23/2010	7:30	Water	X	X	-74	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamie Eby	4/23/10
Received by		1600
Relinquished by		23-
Received by		4/24/10
		07:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
2. 9c

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/23/2010 10:21:55 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-324	4/22/2010 7:40 Water	X	X	1004200-63	5	
TB-324	4/22/2010 7:30 Water	X	X	1004215-75	5	
				TOTAL NUMBER OF CONTAINERS	10	

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	04/23/10
Received by	4/24/10 07:30
Relinquished by	730
Received by	4-24-10

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) / no
Airbill No: 825469889841
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:
Report Copy to 1, 2 cc

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004100, 1004215 Number of Coolers: 1 of 8

Client: CH2M Hill Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): _____

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS ~~DHL~~ Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5715

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9 °C

Dates samples were logged-in: 4/26/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schmidt (Initial): ws

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all metals

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200, 1004215 Number of Coolers: 2 of 2

Client: CH2M Hill Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): ~~Frank Rice~~ Will Schaad 4/24/10 (signature):

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9841

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.2 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200, 1004215 Number of Coolers: 3 of 8

Client: Chem Mill Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5726

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004200, 1004215 Number of Coolers: 4 of 8

Client: Chris Mitt Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): ~~Frank Rice~~ will schwab (signature): [signature] 4/24/10

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5623

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.2 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004215 Number of Coolers: 5 of 8

Client: CH2M Hill Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: B 5759

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6 °C

~~Dates samples~~ were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004215 Number of Coolers: 6 of 7

Client: CH2M HILL Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5748

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1 °C

Dates samples were logged-in:

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004215 Number of Coolers: 7 of 8

Client: CH2M Hill Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5737

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.1 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004215 Number of Coolers: 8 of 8

Client: Chem Mit Project: Alameda PT

Date/Time Received: 4-24-10 730 Date cooler(s) opened: 4-24-10

Opened By (print): Frank Rice (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: (FedEx) UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5412

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: ?? Seal Initials: ??

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 7.9 °C

~~Dates samples were logged in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 8

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 12:00:43 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610p

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP03-01506 ✓	4/23/2010	9:05	Water		x3	x2	1004215-63	5	
DP03-01507 ✓	4/23/2010	9:25	Water		x3	x2	-64	5	
DP04-01508 ✓	4/23/2010	11:00	Water		x3	x2	-66	5	
DP04-01509 ✓	4/23/2010	11:20	Water		x3	x2	-	5	
DP08-01516 ✓	4/23/2010	8:00	Water		x3	x2	-65	5	
							TOTAL NUMBER OF CONTAINERS	25	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/26/10
Relinquished by		
Received by		
Relinquished by		
Received by		4/27/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1- 7oc

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 10:43:40 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610W

				Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	4°C	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	7	7	7	28			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-125	4/23/2010	7:30	Water		2x	x 4 x		1x	1004215-71	11	
EB-126	4/26/2010	7:30	Water		2x	x 2 x		1x		11	
									TOTAL NUMBER OF CONTAINERS	22	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/26/10 1000
Received by		
Relinquished by	[signature]	4/27/10 00:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

1.7c

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 10:45:01 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610W

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				4°C	4°C	4°C	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA	NA			
Holding Time:				7	7	7	7	7	28			
EB-225	4/23/2010	7:30	Water	x2	x 2 x				1 x	10042/5-73	11	
EB-226	4/26/2010	7:35	Water	x2	x 2 x		x 1 x		1 x		13	
										TOTAL NUMBER OF CONTAINERS	24	

	Signatures	Date/Time
Approved by		
Sampled by		4/26/10
Relinquished by		1200
Received by		
Relinquished by		
Received by		4/27/10 08:30

1.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100421T Number of Coolers: 1 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/27/10** **08:30** Date cooler(s) opened: **4/27/10**

Opened By (print): Will Schutt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5601

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.7 °C

Dates samples were logged-in: **4/27/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schutt (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004215 Number of Coolers: 2 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/27/10** **08:30** Date cooler(s) opened: **4/27/10**

Opened By (print): Will Schwal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5520

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.7 °C

~~Dates samples were logged-in:~~ **4/27/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Monday, April 26, 2010 1:13 PM
To: sgordon@empirlabs.com
Subject: RE: Saturday sample receipt

If they have the CoC for DP04-01096 and DP04-01097 they have the coc for DP07-01105, 01106 and 01107, since they're on the same COC. But here's a copy of both the Cocs.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Monday, April 26, 2010 11:03 AM
To: Frank, Tamara/BAO
Subject: Saturday sample receipt

Looks like we might be missing another COC. See below... he's referencing the following samples

DP04-02018
DP04-02019
DP04-02020
DP04-52020
DP05-02021
DP05-02022
DP05-02023
DP06-02024
DP06-02025
DP06-02026
DP07-01105
DP07-01106
DP07-01107
DP07-02027
DP07-02028
DP07-02029

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
Main: 615.345.1115 ext. 238 I Fax: 615.846.5426

From: William Schwab [mailto:wschwab@empirlabs.com]
Sent: Monday, April 26, 2010 12:42 PM
To: SGordon@EmpirLabs.com
Subject: 1004215!!

Samples -27, -28, -29, -34, -35-->37, -43-->45, -16->18 and -50-->52 all received terracores that are not on any COC to run for VOC and GRO. Tagged for both and DID NOT put on hold per short hold status. Please verify that the client would like to run these.

William Schwab
Sample Receiving Group Leader / Safety Coordinator
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 237 l Toll free: 877.345.1113 l Fax: 615.846.5426

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/23/2010 2:40:37 PM Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310p

			Container:	3 x 40 ml VOA	1 x 40 ml VOA			
			Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
			Filtered:	NA	NA			
			Holding Time:	48HR	48HR			
				VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	
	DATE	**TIME**	**Matrix**					**COMMENTS**
DP04-02018	4/23/2010	8:55	Soil	x	x		4	
DP04-02019	4/23/2010	9:00	Soil	x	x		4	
DP04-02020	4/23/2010	9:05	Soil	x	x		4	
DP04-52020	4/23/2010	9:05	Soil	x	x		4	
DP05-02021	4/23/2010	9:40	Soil	x	x		4	
DP05-02022	4/23/2010	9:45	Soil	x	x		4	
DP05-02023	4/23/2010	9:50	Soil	x	x		4	
DP06-02024	4/23/2010	10:36	Soil	x	x		4	
DP06-02025	4/23/2010	10:44	Soil	x	x		4	
DP06-02026	4/23/2010	10:55	Soil	x	x		4	
DP07-02027	4/23/2010	11:45	Soil	x	x		4	
DP07-02028	4/23/2010	11:50	Soil	x	x		4	
DP07-02029	4/23/2010	11:55	Soil	x	x		4	
						TOTAL NUMBER OF CONTAINERS	52	

Signatures		**Date/Time**
Approved by		
Sampled by		
Relinquished by		
Received by		
Relinquished by		
Received by		

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

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1004245

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/25/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/27/2010 08:30, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/27/2010 16:36

Samples Received at: **1.1°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1004245-01 DP01-02000 [Solid] Sampled 04/26/2010 11:30 Pacific					**MS/MSD. QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:30	MS/MSD.
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 13:30	MS/MSD.
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 13:30	MS/MSD. soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 13:30	MS/MSD. +MO
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 13:30	MS/MSD. AP VIALS
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 13:30	MS/MSD. AP VIALS
1004245-02 DP01-02001 [Solid] Sampled 04/26/2010 11:30 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 13:30	+MO
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 13:30	AP VIALS
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 13:30	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 13:30	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 13:30	

1004245

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004245-03 DP01-02030 [Solid] Sampled 04/26/2010 14:10 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 16:10	AP VIALS
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 16:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 16:10	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 16:10	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 16:10	soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 16:10	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 16:10	+MO
1004245-04 DP01-02031 [Solid] Sampled 04/26/2010 14:30 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 16:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 16:30	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 16:30	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 16:30	
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 16:30	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 16:30	AP VIALS
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 16:30	AP VIALS
1004245-05 DP01-02032 [Solid] Sampled 04/26/2010 14:40 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 16:40	soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 16:40	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 16:40	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 16:40	+MO
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 16:40	AP VIALS
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 16:40	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 16:40	
1004245-06 DP01-52000 [Solid] Sampled 04/26/2010 11:30 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 13:30	+MO
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 13:30	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 13:30	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 13:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:30	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 13:30	AP VIALS

1004245

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004245-07 DP01-52030 [Solid] Sampled 04/26/2010 14:10 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 16:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 16:10	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 16:10	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 16:10	+MO
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 16:10	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 16:10	AP VIALS
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 16:10	AP VIALS
1004245-08 DP02-02003 [Solid] Sampled 04/26/2010 09:50 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 11:50	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 11:50	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 11:50	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 11:50	+MO
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 11:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:50	
1004245-09 DP02-02004 [Solid] Sampled 04/26/2010 09:55 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:55	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 11:55	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 11:55	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 11:55	+MO
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 11:55	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 11:55	soil TAL + Mo
1004245-10 DP02-02005 [Solid] Sampled 04/26/2010 10:00 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 12:00	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 12:00	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 12:00	+MO
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:00	AP VIALS
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:00	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 12:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004245-11 DP02-02033 [Solid] Sampled 04/26/2010 09:10 Pacific					**QSM4.1 MS/MSD.**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 11:10	MS/MSD.
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 11:10	MS/MSD. +MO
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 11:10	MS/MSD. soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 11:10	MS/MSD. AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:10	MS/MSD.
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 11:10	MS/MSD.
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 11:10	MS/MSD. AP VIALS
1004245-12 DP02-02034 [Solid] Sampled 04/26/2010 09:15 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 11:15	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 11:15	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:15	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 11:15	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 11:15	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 11:15	+MO
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 11:15	
1004245-13 DP02-02035 [Solid] Sampled 04/26/2010 09:20 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 11:20	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 11:20	+MO
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 11:20	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 11:20	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 11:20	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:20	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 11:20	AP VIALS
1004245-14 DP03-02006 [Solid] Sampled 04/26/2010 15:00 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 17:00	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 17:00	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 17:00	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 17:00	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 17:00	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 17:00	+MO

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004245-15 DP03-02007 [Solid] Sampled 04/26/2010 15:05 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 17:05	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 17:05	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 17:05	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 17:05	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 17:05	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 17:05	AP VIALS
1004245-16 DP03-02008 [Solid] Sampled 04/26/2010 15:10 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 17:10	AP VIALS
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 17:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 17:10	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 17:10	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 17:10	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 17:10	+MO
1004245-17 DP03-02036 [Solid] Sampled 04/26/2010 15:10 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 17:10	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 17:10	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 17:10	+MO
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 17:10	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 17:10	
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 17:10	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 17:10	
1004245-18 DP03-02037 [Solid] Sampled 04/26/2010 15:20 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 17:20	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 17:20	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 17:20	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 17:20	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 17:20	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 17:20	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 17:20	soil TAL + Mo

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-19 DP03-02038 [Solid] Sampled 04/26/2010 15:25 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 17:25	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 17:25	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 17:25	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 17:25	+MO
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 17:25	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 17:25	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 17:25	AP VIALS
1004245-20 DP04-02039 [Solid] Sampled 04/26/2010 10:00 Pacific					**QSM4.1**
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 12:00	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:00	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 12:00	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:00	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 12:00	soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 12:00	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 12:00	+MO
1004245-21 DP04-02040 [Solid] Sampled 04/26/2010 10:10 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 12:10	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 12:10	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 12:10	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:10	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:10	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 12:10	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 12:10	+MO
1004245-22 DP04-02041 [Solid] Sampled 04/26/2010 10:10 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 12:10	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:10	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:10	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 12:10	+MO
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 12:10	
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 12:10	soil TAL + Mo
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 12:10	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-23 DP04-52040 [Solid] Sampled 04/26/2010 10:10 Pacific					**QSM4.1**
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 12:10	
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 12:10	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:10	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 12:10	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 12:10	+MO
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:10	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 12:10	soil TAL + Mo
1004245-24 DP06-02045 [Solid] Sampled 04/26/2010 11:25 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 13:25	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:25	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 13:25	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 13:25	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 13:25	+MO
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 13:25	
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 13:25	
1004245-25 DP06-02046 [Solid] Sampled 04/26/2010 11:25 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 13:25	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 13:25	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:25	
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 13:25	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 13:25	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 13:25	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 13:25	
1004245-26 DP06-02047 [Solid] Sampled 04/26/2010 11:30 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:30	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 13:30	AP VIALS
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 13:30	AP VIALS
SW8270C	SMS_BNA_8270C_3546_REG	05/18/2010 14:00	20	05/10/2010 13:30	
SW8015B	SGC_DRO_8015B_3546	05/18/2010 14:00	20	05/10/2010 13:30	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/18/2010 14:00	20	10/23/2010 13:30	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/18/2010 14:00	20	05/24/2010 13:30	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-27 DP01-08000 [Solid] Sampled 04/26/2010 11:00 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:00	
1004245-28 DP01-08001 [Solid] Sampled 04/26/2010 11:05 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:05	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:05	
1004245-29 DP01-08002 [Solid] Sampled 04/26/2010 11:10 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:10	
1004245-30 DP01-08003 [Solid] Sampled 04/26/2010 11:15 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:15	
1004245-31 DP01-58000 [Solid] Sampled 04/26/2010 11:00 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:00	
1004245-32 DP02-08005 [Solid] Sampled 04/26/2010 09:25 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:25	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:25	
1004245-33 DP02-08006 [Solid] Sampled 04/26/2010 09:30 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:30	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:30	
1004245-34 DP02-08007 [Solid] Sampled 04/26/2010 09:35 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:35	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:35	
1004245-35 DP02-08044 [Solid] Sampled 04/26/2010 08:55 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 10:55	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 10:55	
1004245-36 DP02-08045 [Solid] Sampled 04/26/2010 08:57 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 10:57	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 10:57	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-37 DP02-08046 [Solid] Sampled 04/26/2010 09:00 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:00	
1004245-38 DP02-08047 [Solid] Sampled 04/26/2010 09:03 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:03	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:03	
1004245-39 DP04-08052 [Solid] Sampled 04/26/2010 09:50 Pacific					**MS/MSD. QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:50	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:50	MS/MSD.
1004245-40 DP04-08053 [Solid] Sampled 04/26/2010 09:53 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:53	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:53	
1004245-41 DP04-08054 [Solid] Sampled 04/26/2010 09:56 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:56	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:56	
1004245-42 DP04-08055 [Solid] Sampled 04/26/2010 10:00 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 12:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 12:00	
1004245-43 DP06-08060 [Solid] Sampled 04/26/2010 11:11 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:11	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:11	
1004245-44 DP06-08061 [Solid] Sampled 04/26/2010 11:13 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:13	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:13	
1004245-45 DP06-08062 [Solid] Sampled 04/26/2010 11:15 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:15	
1004245-46 DP06-08063 [Solid] Sampled 04/26/2010 11:18 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:18	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:18	

1004245

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-47 DP06-58060 [Solid] Sampled 04/26/2010 11:11 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 13:11	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 13:11	
1004245-48 DP02-08004 [Solid] Sampled 04/26/2010 09:20 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/18/2010 14:00	20	05/03/2010 11:20	
SW8270C	SMS_PAH_8270C_3546_LOW	05/18/2010 14:00	20	05/10/2010 11:20	
1004245-49 DP04-01509 [Water] Sampled 04/23/2010 11:20 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	04/30/2010 13:20	LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/07/2010 13:20	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/07/2010 13:20	
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	04/30/2010 13:20	+MO. LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/21/2010 13:20	
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	04/30/2010 13:20	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	04/30/2010 13:20	LOW VOLUME!!
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	04/30/2010 13:20	Tox LCS required. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/20/2010 13:20	water TAL + Mo
1004245-50 DP07-02506 [Water] Sampled 04/23/2010 15:05 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/07/2010 17:05	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/07/2010 17:05	
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/21/2010 17:05	
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/20/2010 17:05	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	04/30/2010 17:05	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	04/30/2010 17:05	LOW VOLUME!!
1004245-51 DP07-02507 [Water] Sampled 04/23/2010 15:50 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	04/30/2010 17:50	LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/21/2010 17:50	
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/20/2010 17:50	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	04/30/2010 17:50	+MO. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/07/2010 17:50	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/07/2010 17:50	

1004245

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-52 EB-226 [Water] Sampled 04/26/2010 07:35 Pacific					**QSM4.1.**
SW6010B	MET_ICP_6010B_FULL	05/18/2010 14:00	20	10/23/2010 09:35	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 09:35	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 09:35	+MO. LOW VOLUME!!
SW7470A	MET_7470_MERCURY	05/18/2010 14:00	20	05/24/2010 09:35	
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	05/03/2010 09:35	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	05/03/2010 09:35	Tox LCS required. LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 09:35	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 09:35	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 09:35	
1004245-53 TB-226 [Water] Sampled 04/26/2010 07:30 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 09:30	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 09:30	
1004245-54 EB-126 [Water] Sampled 04/26/2010 07:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 09:30	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 09:30	
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 09:30	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 09:30	LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL	05/18/2010 14:00	20	10/23/2010 09:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/18/2010 14:00	20	05/24/2010 09:30	
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 09:30	LOW VOLUME!!
1004245-55 TB-126 [Water] Sampled 04/26/2010 07:40 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 09:40	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 09:40	
1004245-56 DP06-01512 [Water] Sampled 04/26/2010 08:45 Pacific					**QSM4.1.**
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	05/03/2010 10:45	Tox LCS required. LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 10:45	
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 10:45	LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 10:45	
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/24/2010 10:45	
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/23/2010 10:45	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 10:45	+MO. LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	05/03/2010 10:45	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 10:45	LOW VOLUME!!

1004245

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-57 DP06-01513 [Water] Sampled 04/26/2010 09:15 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 11:15	
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	05/03/2010 11:15	Tox LCS required. LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 11:15	
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 11:15	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/23/2010 11:15	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/24/2010 11:15	
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 11:15	LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	05/03/2010 11:15	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 11:15	LOW VOLUME!!
1004245-58 DP07-01514 [Water] Sampled 04/26/2010 10:00 Pacific					**QSM4.1.**
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	05/03/2010 12:00	Tox LCS required. LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	05/03/2010 12:00	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:00	
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 12:00	LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/24/2010 12:00	
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/23/2010 12:00	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 12:00	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:00	
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 12:00	+MO. LOW VOLUME!!
1004245-59 DP07-01515 [Water] Sampled 04/26/2010 10:45 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 12:45	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 12:45	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 12:45	
SW7470A	MET_7470_DIS_MERCURY	05/18/2010 14:00	20	05/24/2010 12:45	
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	05/03/2010 12:45	Tox LCS required. LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	05/03/2010 12:45	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 12:45	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/18/2010 14:00	20	10/23/2010 12:45	water TAL + Mo
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 12:45	LOW VOLUME!!

1004245

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004245-60 EB-325 [Water] Sampled 04/22/2010 13:30 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	04/29/2010 15:30	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	04/29/2010 15:30	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL	05/18/2010 14:00	20	10/19/2010 15:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/18/2010 14:00	20	05/20/2010 15:30	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/06/2010 15:30	
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/06/2010 15:30	
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	04/29/2010 15:30	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	04/29/2010 15:30	LOW VOLUME!!
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	04/29/2010 15:30	Tox LCS required. LOW VOLUME!!
1004245-61 TB-325 [Water] Sampled 04/23/2010 13:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/07/2010 15:30	
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/07/2010 15:30	
1004245-62 EB-326 [Water] Sampled 04/26/2010 07:35 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/18/2010 14:00	20	05/10/2010 09:35	
SW6010B	MET_ICP_6010B_FULL	05/18/2010 14:00	20	10/23/2010 09:35	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/18/2010 14:00	20	05/03/2010 09:35	+MO. LOW VOLUME!!
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	05/03/2010 09:35	+ Aroclor-1262 & 1268. LOW VOLUME!!
SW8081A	SGC_PEST8081A_3510	05/18/2010 14:00	20	05/03/2010 09:35	Tox LCS required. LOW VOLUME!!
SW7470A	MET_7470_MERCURY	05/18/2010 14:00	20	05/24/2010 09:35	
SW8270C	SMS_PAH_8270C_3510_LOW	05/18/2010 14:00	20	05/03/2010 09:35	LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/18/2010 14:00	20	05/10/2010 09:35	
SW8270C	SMS_BNA_8270C_3510_REG	05/18/2010 14:00	20	05/03/2010 09:35	LOW VOLUME!!
1004245-63 DP02-03508 [Water] Sampled 04/23/2010 14:00 Pacific					**QSM4.1.**
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	04/30/2010 16:00	+ Aroclor-1262 & 1268
1004245-64 DP02-03509 [Water] Sampled 04/23/2010 15:40 Pacific					**QSM4.1.**
SW8082A	SGC_PCB8082A_3510	05/18/2010 14:00	20	04/30/2010 17:40	+ Aroclor-1262 & 1268

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/26/2010 3:47:02 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH
	Filtered:	NA	NA
	Holding Time:	48HR	48HR
		VOCs (8260B/624)	TPH-Purgable (SW8015B)

	DATE	TIME	Matrix				Number of Containers	COMMENTS
DP01-02000	4/26/2010	11:30	Soil	X	X	MS/MSD 1004245-01	8	LAB QC
DP01-02001	4/26/2010	11:30	Soil	X	X	-02	4	
DP01-02030	4/26/2010	14:10	Soil	X	X	-03	4	
DP01-02031	4/26/2010	14:30	Soil	X	X	-04	4	
DP01-02032	4/26/2010	14:40	Soil	X	X	-05	4	
DP01-52000	4/26/2010	11:30	Soil	X	X	-06	4	
DP01-52030	4/26/2010	14:10	Soil	X	X	-07	4	
DP02-02003	4/26/2010	9:50	Soil	X	X	-08	4	
DP02-02004	4/26/2010	9:55	Soil	X	X	-09	4	
DP02-02005	4/26/2010	10:00	Soil	X	X	-10	4	
DP02-02033	4/26/2010	9:10	Soil	X	X	MS/MSD -11	4	LAB QC
DP02-02034	4/26/2010	9:15	Soil	X	X	-12	4	
DP02-02035	4/26/2010	9:20	Soil	X	X	-13	4	
DP03-02006	4/26/2010	15:00	Soil	X	X	-14	4	

	Signatures	Date/Time
Approved by		
Sampled by		4/26/10
Relinquished by	Janice Jose	1600
Received by		
Relinquished by		
Received by		4/27/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.20C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 3:47:03 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH
	Filtered:	NA	NA
	Holding Time:	48HR	48HR
		VOCs (8260B/624)	TPH-Purgable (SW8015B)

	DATE	TIME	Matrix				Number of Containers	COMMENTS
DP03-02007	4/26/2010	15:05	Soil	X	X	-15	4	
DP03-02008	4/26/2010	15:10	Soil	X	X	-16	4	
DP03-02036	4/26/2010	15:10	Soil	X	X	-17	4	
DP03-02037	4/26/2010	15:20	Soil	X	X	-18	4	
DP03-02038	4/26/2010	15:25	Soil	X	X	-19	4	
DP04-02039	4/26/2010	10:00	Soil	X	X	-20	4	
DP04-02040	4/26/2010	10:10	Soil	X	X	-21	4	
DP04-02041	4/26/2010	10:10	Soil	X	X	-22	4	
DP04-52040	4/26/2010	10:10	Soil	X	X	-23	4	
DP06-02045	4/26/2010	11:25	Soil	X	X	-24	4	
DP06-02046	4/26/2010	11:25	Soil	X	X	-25	4	
DP06-02047	4/26/2010	11:30	Soil	X	X	-26	4	
						TOTAL NUMBER OF CONTAINERS	104	

	Signatures	Date/Time
Approved by		4/26/10
Sampled by		
Relinquished by		1600
Received by		
Relinquished by		4/27/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.2C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 3:19:31 PM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610s

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02000	4/26/2010 11:30 Soil			X	X	MS/MSD 1004245-01	2	LAB QC
DP01-02001	4/26/2010 11:30 Soil			X	X	-02	2	
DP01-08000	4/26/2010 11:00 Soil	X				-27	1	
DP01-08001	4/26/2010 11:05 Soil	X				-28	1	
DP01-08002	4/26/2010 11:10 Soil	X				-29	1	
DP01-08003	4/26/2010 11:15 Soil	X				-30	1	
DP01-52000	4/26/2010 11:30 Soil			X	X	-06	2	
DP01-58000	4/26/2010 11:00 Soil	X				-31	1	
DP02-02003	4/26/2010 9:50 Soil			X	X	-08	2	
DP02-02004	4/26/2010 9:55 Soil			X	X	-09	2	
DP02-02005	4/26/2010 10:00 Soil			X	X	-10	2	
DP02-02033	4/26/2010 9:10 Soil		X	X	X	MS/MSD -11	3	LAB QC
DP02-02034	4/26/2010 9:15 Soil		X	X	X	-12	3	
DP02-02035	4/26/2010 9:20 Soil		X	X	X	-13	3	

Signatures	Date/Time
Approved by	
Sampled by	4/26/10
Relinquished by	1400
Received by	
Relinquished by	4/27/10
Received by	08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

1.1°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 3:19:31 PM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610s

	DATE	TIME	Matrix	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
Preservatives:				4°C	4°C	4°C	4°C			
Filtered:				NA	NA	NA	NA			
Holding Time:				14	14	14	28			
DP02-08004	4/26/2010	9:20	Soil	X				-48 1004245	1	
DP02-08005	4/26/2010	9:25	Soil	X				-32	1	
DP02-08006	4/26/2010	9:30	Soil	X				-33	1	
DP02-08007	4/26/2010	9:35	Soil	X				-34	1	
DP02-08044	4/26/2010	8:55	Soil	X				-35	1	
DP02-08045	4/26/2010	8:57	Soil	X				-36	1	
DP02-08046	4/26/2010	9:00	Soil	X				-37	1	
DP02-08047	4/26/2010	9:03	Soil	X				-38	1	
DP04-02039	4/26/2010	10:00	Soil		X	X	X	-20	3	
DP04-02040	4/26/2010	10:10	Soil		X	X	X	-21	3	
DP04-02041	4/26/2010	10:10	Soil		X	X	X	-22	3	
DP04-08052	4/26/2010	9:50	Soil	X				MS/MSD -39	1	LAB QC
DP04-08053	4/26/2010	9:53	Soil	X				-40	1	
DP04-08054	4/26/2010	9:56	Soil	X				-41	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Jeeb	4/26/10 1400
Received by		
Relinquished by		
Received by		4/27/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 3:19:31 PM* Page 3 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610s

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-08055	4/26/2010 10:00 Soil	X				1004245-42	1	
DP04-52040	4/26/2010 10:10 Soil		X	X	X	-23	3	
DP06-02045	4/26/2010 11:25 Soil		X	X	X	-24	3	
DP06-02046	4/26/2010 11:25 Soil		X	X	X	-25	3	
DP06-02047	4/26/2010 11:30 Soil		X	X	X	-26	3	
DP06-08060	4/26/2010 11:11 Soil	X				-43 -42	1	
DP06-08061	4/26/2010 11:13 Soil	X				-44 -43	1	
DP06-08062	4/26/2010 11:15 Soil	X				-45 -44	1	
DP06-08063	4/26/2010 11:18 Soil	X				-46 -45	1	
DP06-58060	4/26/2010 11:11 Soil	X				-47 4/27/10 -46	1	
						TOTAL NUMBER OF CONTAINERS	64	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jones	4/26/10
Relinquished by		1400
Received by		
Relinquished by		4/27/10
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 12:00:43 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
DP03-01506 ✓	4/23/2010	9:05	Water	x3	x2 ✓	1004215-63	5	
DP03-01507 ✓	4/23/2010	9:25	Water	x3	x2	-64	5	
DP04-01508 ✓	4/23/2010	11:00	Water	x3	x2	-66	5	
DP04-01509 ✓	4/23/2010	11:20	Water	x3	x2 ✓	-49 1004245 -48 w/ 4/27/10	5	
DP08-01516 ✓	4/23/2010	8:00	Water	x3	x2	-65	5	
						TOTAL NUMBER OF CONTAINERS	25	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/26/10
Relinquished by	[signature]	1200
Received by		
Relinquished by	[signature]	4/27/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/26/2010 1:13:50 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610w2

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	7	7	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-01509	4/23/2010 11:20 Water	x2	x 2 x		x 1 x		x 1	WS 4/27/10 -49 1004245 ~~48~~ 6	~~13~~ 6	
								TOTAL NUMBER OF CONTAINERS	~~13~~ 6	

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/26/10 1400
Received by		
Relinquished by	[signature]	4/27/10 08:30
Received by		1:70C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 12:01:34 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610p

	Container:	3 x 40 ml VOA	2 x 40 ml VOA						
	Preservatives:	HCl	HCl						
	Filtered:	NA	NA						
	Holding Time:	14	14						
		VOCs (8260B)	TPH-Purgable (SW8015B)					Number of Containers	COMMENTS
DP07-02506 ✓	4/23/2010	15:05	Water	x3	x2	1004245 -50		5	
DP07-02507 ✓	4/23/2010	15:50	Water	x3	x2	-51		5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Trout	4/24/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		4/27/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 12:11:14 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610W

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP07-02506	4/23/2010 15:05 Water	x	2x	1 x	1004245-50	5	
DP07-02507	4/23/2010 15:50 Water	x2	x2	1x	-51	5	
					TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jank	4/26/10 12a
Received by		
Relinquished by		
Received by		4/27/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 4:05:05 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA; Preservatives: HCl; Filtered: NA; Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-226	4/26/2010	7:35	Water	X	X	1004245-52	5	
TB-226	4/26/2010	7:30	Water	X	X	-53	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/26/10 1600
Relinquished by		
Received by		
Relinquished by	[signature]	4/27/10 0830
Received by		1.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 10:45:01 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610W

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				4°C	4°C	4°C	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA	NA			
Holding Time:				7	7	7	7	7	28			
EB-225	4/23/2010	7:30	Water	x2	x 2	x			1 x	1004215-73	11	
EB-226	4/26/2010	7:35	Water	x2	x 2	x	x 1	x	1 x	1004245-52	13	
										TOTAL NUMBER OF CONTAINERS	24	

	Signatures	Date/Time
Approved by		
Sampled by		4/26/10
Relinquished by		1200
Received by		
Relinquished by		4/27/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1.7°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 4:03:19 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	HCl			
				Filtered: NA	NA			
				Holding Time: 14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-126	4/26/2010	7:30	Water	X	X	1004245 -54	5	
TB-126	4/26/2010	7:40	Water	X	X	-55	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	James Jeed	4/26/10 16:00
Received by		
Relinquished by		
Received by		4/27/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 10:43:40 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610W

	DATE	TIME	Matrix	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		Number of Containers	COMMENTS
				Preservatives:	4°C	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA	NA			
				Holding Time:	7	7	7	28			
					TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)			
EB-125	4/23/2010	7:30	Water		2X	X 4	X	1X	1004215-71	11	
EB-126	4/26/2010	7:30	Water		2X	X 2	X	1X	1004245-51	11	
									TOTAL NUMBER OF CONTAINERS	22	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/26/10 1200
Received by		
Relinquished by	[signature]	4/27/10 00:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 2:30:10 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610w3

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	7	7	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP06-01512	4/26/2010 8:45 Water	x	x	x	x	x	1 x	1004245 -56	13	
DP06-01513	4/26/2010 9:15 Water	x	x	x	x	x	1 x	-57	13	
DP07-01514	4/26/2010 10:00 Water	x 2	x 2	x	x 1	x	1 x	-58	13	
DP07-01515	4/26/2010 10:45 Water	x 2	x 2	x	x 1	x	1 x	-59	13	
								TOTAL NUMBER OF CONTAINERS	52	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/26/10 1600
Received by		
Relinquished by	[signature]	4/27/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

1.70C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 10:46:12 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/26/2010
COC Number: 42610W

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	PCBs (8082)	Pesticides (SW8081A)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-325	4/22/2010 13:30 Water	x 3	x 2	x2	x 2 x		x 2 x		/x	1004245 -60	18	
TB-325	4/23/2010 13:30 Water	x3	x2							-61	5	
EB-326	4/26/2010 7:35 Water			x2	x 2 x		x	x	x	-62	13	
										TOTAL NUMBER OF CONTAINERS	36	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Jamaica Jank	4/26/10 1200
Received by		
Relinquished by	Arlene Del	4/27/10 0830
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889830
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/26/2010 1:06:22 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/23/2010
COC Number: 42310R

					Container:	Preservatives:	Filtered:	Holding Time:			
					2 x 1L Amber	4°C	NA	7			
	DATE		TIME	Matrix	PCBs (8082)					Number of Containers	COMMENTS
DP02-03508	4/23/10	~~4/8/2010~~	14:00	Water	X	1004245 -63				1	4/23/10 - lab los
DP02-03509	4/23/10	~~4/8/2010~~	15:40	Water	X	-64				1	Resample
									TOTAL NUMBER OF CONTAINERS	2	lab analyzed past HT

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/26/10 1400
Received by		
Relinquished by	[signature]	4/27/10 08.30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004217, 1004245 Number of Coolers: 1 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schutt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5601

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.7 °C

Dates samples were logged-in: 4/27/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schutt (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004215, 1004245 Number of Coolers: 2 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/27/10** **08:30** Date cooler(s) opened: **4/27/10**

Opened By (print): Will Schwal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5520

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.7 °C

~~Dates samples were logged-in:~~ **4/27/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 3 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schwat (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5564

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.2 °C

Dates samples were logged-in: 4/27/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 4 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9830

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.2 °C

~~Dates samples were logged-in: 4/27/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 5 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5586

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.0 °C

Dates samples were logged-in: 4/27/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1069

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 6 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5531

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.8 °C

Dates samples were logged-in: 4/27/10

9. Initial this form to acknowledge login of sample(s). (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 7 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schwal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5510

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1 °C

~~Dates samples were logged in: 4/27/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See Page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 3 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5597

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.2 °C

Dates samples were logged-in: 4/27/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 9

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245 Number of Coolers: 9 of 9

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/27/10 08:30 Date cooler(s) opened: 4/27/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5375

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/26/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.9 °C

~~Dates samples were logged-in:~~ ~~4/27/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 9

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 9:55:59 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC12-GW
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	HCl	HCl			
	Filtered:	NA	NA			
	Holding Time:	14	14			
		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
DP06-01512	4/26/2010 8:45 Water	X	X	1004295-56	5	
DP06-01513	4/26/2010 9:15 Water	X	X	-57	5	
DP07-01514	4/26/2010 10:00 Water	X	X	-58	5	
DP07-01515	4/26/2010 10:45 Water	X	X	-59	5	
				TOTAL NUMBER OF CONTAINERS	20	

	Signatures	Date/Time
Approved by		
Sampled by		4/27/10
Relinquished by	Jamie Jant	1200
Received by		
Relinquished by		
Received by	4/28/10 09:00	

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/27/2010 11:28:31 AM Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710s

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		
	DATE / TIME / Matrix					Number of Containers	COMMENTS
DP01-02030	4/26/2010 14:10 Soil		X	X	X	1004245-03 ~~3~~	2
DP01-02031	4/26/2010 14:30 Soil		X	X	X	-04 ~~3~~	2
DP01-02032	4/26/2010 14:40 Soil		X	X	X	-05 ~~3~~	2
DP01-08040	4/26/2010 13:55 Soil	X				1004270-38 1	
DP01-08041	4/26/2010 13:59 Soil	X				-39 1	
DP01-08042	4/26/2010 14:01 Soil	X				-40 1	
DP01-08043	4/26/2010 14:04 Soil	X				4/28/10 WS ~~1004245-07~~ 1	
DP01-52030	4/26/2010 14:10 Soil		X	X	X	1004245-07 ~~3~~	2
DP01-58040	4/26/2010 13:55 Soil	X				1004270-41 1	
DP03-02006	4/26/2010 15:00 Soil			X	X	1004245-14 2	
DP03-02007	4/26/2010 15:05 Soil			X	X	-15 2	
DP03-02008	4/26/2010 15:10 Soil			X	X	-16 2	
DP03-02036	4/26/2010 15:10 Soil		X	X	X	-17 ~~3~~	2
DP03-02037	4/26/2010 15:20 Soil		X	X	X	-18 ~~3~~	2

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	04/27/10
Received by	
Relinquished by	
Received by	4/28/10 09:00

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

2.7°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/27/2010 11:28:31 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710s

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-02038	4/26/2010 15:25 Soil		X	X	X	1004245 -19	~~3~~ 2	
DP03-08008	4/26/2010 14:35 Soil	X				1004270-43	~~1~~ 2	LAB QC
DP03-08009	4/26/2010 14:40 Soil	X				-44	1	
DP03-08010	4/26/2010 14:45 Soil	X				-45	1	
DP03-08011	4/26/2010 14:50 Soil	X				-46	1	
DP03-08048	4/26/2010 15:00 Soil	X				-47	1	
DP03-08049	4/26/2010 15:00 Soil	X				-48	1	
DP03-08050	4/26/2010 15:00 Soil	X				-49	1	
DP03-08051	4/26/2010 15:00 Soil	X				-50	1	
DP03-58010	4/26/2010 14:45 Soil	X				-51	1	
DP03-58050	4/26/2010 15:00 Soil	X				-52	1	
						TOTAL NUMBER OF CONTAINERS	~~42~~ 36	

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	04/27/10
Received by		
Relinquished by	[signature]	4/28/10 09:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.20r-

CH2MHILL

CHAIN OF CUSTODY RECORD

4/27/2010 10:07:58 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-326	4/26/2010 7:35 Water	x 3	x 2				1004245-62	5	
TB-326	4/26/2010 7:30 Water	x3	x2				1004270 -62	5	
EB-327	4/27/2010 7:40 Water			x 2	x 2	x2	-63 5	~~7~~	
							TOTAL NUMBER OF CONTAINERS	~~17~~ 15	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/27/10
Relinquished by		1000
Received by		
Relinquished by		
Received by		4/28/10 0820

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

7.2010

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245, 1004270 Number of Coolers: 1 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5483

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.7 °C

Dates samples were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaad (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/28/10	Yes	(No) *	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

* 1004270 - 1 vial broken in shipment CAR#: _____

for DP02-02503

4/28/10 LS

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: ~~10624~~ 1004245, 1004270 Number of Coolers: 2 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9819

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.1 °C

~~Dates samples were logged-in:~~ ~~4/28/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004270

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/26/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/28/2010 09:00, 03/26/2010 09:00

Logged In By: William Schwab
Date Logged In: 04/28/2010 17:21

Samples Received at: **1.2°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1004270-01 DP04-02048 [Solid] Sampled 04/27/2010 15:00 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:00	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:00	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:00	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:00	
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:00	+MO
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:00	AP VIALS!
1004270-02 DP04-02049 [Solid] Sampled 04/27/2010 15:05 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:05	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:05	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:05	+MO
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:05	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:05	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:05	AP VIALS!
1004270-03 DP04-02050 [Solid] Sampled 04/27/2010 15:10 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:10	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:10	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:10	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:10	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:10	AP VIALS!

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-04 DP05-02042 [Solid] Sampled 04/27/2010 09:50 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 11:50	AP VIALS!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 11:50	AP VIALS!
SW8270C	SMS_BNA_8270C_3546_REG	05/19/2010 14:00	20	05/11/2010 11:50	
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 11:50	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 11:50	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 11:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:50	
1004270-05 DP05-02043 [Solid] Sampled 04/27/2010 09:55 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:55	
SW8270C	SMS_BNA_8270C_3546_REG	05/19/2010 14:00	20	05/11/2010 11:55	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 11:55	AP VIALS!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 11:55	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 11:55	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 11:55	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 11:55	+MO
1004270-06 DP05-02044 [Solid] Sampled 04/27/2010 10:10 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 12:10	AP VIALS!
SW8270C	SMS_BNA_8270C_3546_REG	05/19/2010 14:00	20	05/11/2010 12:10	
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 12:10	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 12:10	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 12:10	
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 12:10	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 12:10	AP VIALS!
1004270-07 DP05-02051 [Solid] Sampled 04/27/2010 12:00 Pacific					**QSM4.1.**
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 14:00	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 14:00	
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 14:00	+MO
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 14:00	AP VIALS!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 14:00	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 14:00	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-08 DP05-02052 [Solid] Sampled 04/27/2010 12:05 Pacific					**QSM4.1.**
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 14:05	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 14:05	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 14:05	
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 14:05	+MO
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 14:05	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 14:05	AP VIALS!
1004270-09 DP05-02053 [Solid] Sampled 04/27/2010 12:10 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 14:10	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 14:10	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 14:10	AP VIALS!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 14:10	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 14:10	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 14:10	
1004270-10 DP06-02054 [Solid] Sampled 04/27/2010 11:00 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 13:00	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 13:00	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 13:00	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 13:00	+MO
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 13:00	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:00	
1004270-11 DP06-02055 [Solid] Sampled 04/27/2010 11:05 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 13:05	+MO
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 13:05	AP VIALS!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 13:05	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:05	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 13:05	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 13:05	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-12 DP06-02056 [Solid] Sampled 04/27/2010 11:10 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 13:10	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:10	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 13:10	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 13:10	+MO
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 13:10	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 13:10	AP VIALS!
1004270-13 DP07-02057 [Solid] Sampled 04/27/2010 09:20 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:20	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 11:20	AP VIALS!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 11:20	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 11:20	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 11:20	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 11:20	
1004270-14 DP07-02058 [Solid] Sampled 04/27/2010 09:25 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 11:25	AP VIALS!
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 11:25	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 11:25	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:25	
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 11:25	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 11:25	AP VIALS!
1004270-15 DP09-02063 [Solid] Sampled 04/27/2010 14:02 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 16:02	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 16:02	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 16:02	AP VIALS!
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 16:02	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 16:02	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 16:02	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-16 DP09-02064 [Solid] Sampled 04/27/2010 14:08 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 16:08	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 16:08	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 16:08	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 16:08	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 16:08	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 16:08	AP VIALS!
1004270-17 DP09-02065 [Solid] Sampled 04/27/2010 14:10 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 16:10	AP VIALS!
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 16:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 16:10	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 16:10	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 16:10	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 16:10	+MO
1004270-18 DP10-02066 [Solid] Sampled 04/27/2010 14:45 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 16:45	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 16:45	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 16:45	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 16:45	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 16:45	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 16:45	AP VIALS!
1004270-19 DP10-02067 [Solid] Sampled 04/27/2010 14:50 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 16:50	+MO
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 16:50	
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 16:50	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 16:50	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 16:50	AP VIALS!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 16:50	AP VIALS!

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004270-20 DP10-02068 [Solid] Sampled 04/27/2010 14:55 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 16:55	AP VIALS!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 16:55	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 16:55	
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 16:55	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 16:55	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 16:55	
1004270-21 DP05-08056 [Solid] Sampled 04/27/2010 09:35 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:35	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:35	
1004270-22 DP05-08057 [Solid] Sampled 04/27/2010 09:38 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:38	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:38	
1004270-23 DP05-08058 [Solid] Sampled 04/27/2010 09:41 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:41	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:41	
1004270-24 DP05-08059 [Solid] Sampled 04/27/2010 09:45 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:45	
1004270-25 DP05-08068 [Solid] Sampled 04/27/2010 11:43 Pacific					**MS/MSD. QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 13:43	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:43	MS/MSD.
1004270-26 DP05-08069 [Solid] Sampled 04/27/2010 11:45 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:45	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 13:45	
1004270-27 DP05-08070 [Solid] Sampled 04/27/2010 11:47 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:47	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 13:47	
1004270-28 DP05-08071 [Solid] Sampled 04/27/2010 11:50 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 13:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:50	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-29 DP05-58070 [Solid] Sampled 04/27/2010 11:47 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 13:47	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 13:47	
1004270-30 DP06-08072 [Solid] Sampled 04/27/2010 10:05 Pacific					**MS/MSD. QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 12:05	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 12:05	MS/MSD.
1004270-31 DP06-08073 [Solid] Sampled 04/27/2010 10:10 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 12:10	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 12:10	
1004270-32 DP06-08074 [Solid] Sampled 04/27/2010 10:15 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 12:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 12:15	
1004270-33 DP06-08075 [Solid] Sampled 04/27/2010 10:20 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 12:20	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 12:20	
1004270-34 DP07-08076 [Solid] Sampled 04/27/2010 09:00 Pacific					**MS/MSD. QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:00	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:00	MS/MSD.
1004270-35 DP07-08077 [Solid] Sampled 04/27/2010 09:05 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:05	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:05	
1004270-36 DP07-08078 [Solid] Sampled 04/27/2010 09:10 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:10	
1004270-37 DP07-08079 [Solid] Sampled 04/27/2010 09:15 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/11/2010 11:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 11:15	
1004270-38 DP01-08040 [Solid] Sampled 04/26/2010 13:55 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 15:55	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 15:55	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-39 DP01-08041 [Solid] Sampled 04/26/2010 13:59 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 15:59	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 15:59	
1004270-40 DP01-08042 [Solid] Sampled 04/26/2010 14:01 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:01	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:01	
1004270-41 DP01-08043 [Solid] Sampled 04/26/2010 14:04 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:04	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:04	
1004270-42 DP01-58040 [Solid] Sampled 04/26/2010 13:55 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 15:55	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 15:55	
1004270-43 DP03-08008 [Solid] Sampled 04/26/2010 14:35 Pacific					**MS/MSD. QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:35	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:35	MS/MSD.
1004270-44 DP03-08009 [Solid] Sampled 04/26/2010 14:40 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:40	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:40	
1004270-45 DP03-08010 [Solid] Sampled 04/26/2010 14:45 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:45	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:45	
1004270-46 DP03-08011 [Solid] Sampled 04/26/2010 14:50 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:50	
1004270-47 DP03-08048 [Solid] Sampled 04/26/2010 15:00 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 17:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 17:00	
1004270-48 DP03-08049 [Solid] Sampled 04/26/2010 15:00 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 17:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 17:00	

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-49	**DP03-08050 [Solid] Sampled 04/26/2010 15:00 Pacific**				**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 17:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 17:00	
1004270-50	**DP03-08051 [Solid] Sampled 04/26/2010 15:00 Pacific**				**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 17:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 17:00	
1004270-51	**DP03-58010 [Solid] Sampled 04/26/2010 14:45 Pacific**				**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 16:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 16:45	
1004270-52	**DP03-58050 [Solid] Sampled 04/26/2010 15:00 Pacific**				**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/03/2010 17:00	
SW8270C	SMS_PAH_8270C_3546_LOW	05/19/2010 14:00	20	05/10/2010 17:00	
1004270-53	**DP11-02069 [Solid] Sampled 04/27/2010 15:40 Pacific**				**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:40	AP VIALS!
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:40	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:40	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:40	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:40	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:40	
1004270-54	**DP11-02070 [Solid] Sampled 04/27/2010 15:45 Pacific**				**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:45	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:45	
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:45	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:45	AP VIALS!
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:45	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:45	AP VIALS!
1004270-55	**DP11-02071 [Solid] Sampled 04/27/2010 15:45 Pacific**				**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:45	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:45	AP VIALS!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:45	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:45	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:45	soil TAL + Mo

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Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004270-56 DP11-52070 [Solid] Sampled 04/27/2010 15:45 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/19/2010 14:00	20	05/25/2010 17:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/19/2010 14:00	20	05/04/2010 17:45	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 17:45	AP VIALS!
SW6010B	MET_ICP_LOW6010B_FULL	05/19/2010 14:00	20	10/24/2010 17:45	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 17:45	AP VIALS!
SW8015B	SGC_DRO_8015B_3546	05/19/2010 14:00	20	05/11/2010 17:45	+MO
1004270-57 DP01-02500 [Water] Sampled 04/26/2010 12:35 Pacific					**QSM4.1.**
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/24/2010 14:35	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/10/2010 14:35	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/03/2010 14:35	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/03/2010 14:35	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/23/2010 14:35	water TAL + Mo
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/10/2010 14:35	
1004270-58 DP01-02501 [Water] Sampled 04/26/2010 13:20 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/10/2010 15:20	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/03/2010 15:20	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/03/2010 15:20	LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/23/2010 15:20	water TAL + Mo
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/10/2010 15:20	
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/24/2010 15:20	
1004270-59 DP01-52500 [Water] Sampled 04/26/2010 13:35 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/10/2010 15:35	
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/23/2010 15:35	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/03/2010 15:35	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/03/2010 15:35	LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/24/2010 15:35	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/10/2010 15:35	

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Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004270-60 DP02-02502 [Water] Sampled 04/26/2010 14:40 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/10/2010 16:40	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/10/2010 16:40	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/03/2010 16:40	+MO. LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/24/2010 16:40	
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/23/2010 16:40	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/03/2010 16:40	LOW VOLUME!!
1004270-61 DP02-02503 [Water] Sampled 04/26/2010 15:00 Pacific					**QSM4.1.**
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/23/2010 17:00	water TAL + Mo
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/10/2010 17:00	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/03/2010 17:00	LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/10/2010 17:00	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/03/2010 17:00	+MO. LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/24/2010 17:00	
1004270-62 TB-326 [Water] Sampled 04/26/2010 07:30 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/10/2010 09:30	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/10/2010 09:30	
1004270-63 EB-327 [Water] Sampled 04/27/2010 07:40 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 09:40	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 09:40	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 09:40	
SW6010B	MET_ICP_6010B_FULL	05/19/2010 14:00	20	10/24/2010 09:40	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/19/2010 14:00	20	05/25/2010 09:40	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 09:40	
1004270-64 EB-127 [Water] Sampled 04/27/2010 07:30 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 09:30	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 09:30	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 09:30	
SW6010B	MET_ICP_6010B_FULL	05/19/2010 14:00	20	10/24/2010 09:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/19/2010 14:00	20	05/25/2010 09:30	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 09:30	+MO. LOW VOLUME!!
1004270-65 TB-127 [Water] Sampled 04/27/2010 07:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 09:30	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 09:30	

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Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004270-66 EB-227 [Water] Sampled 04/27/2010 07:30 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 09:30	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 09:30	
SW7470A	MET_7470_MERCURY	05/19/2010 14:00	20	05/25/2010 09:30	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 09:30	+MO. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 09:30	
SW6010B	MET_ICP_6010B_FULL	05/19/2010 14:00	20	10/24/2010 09:30	water TAL + Mo
1004270-67 TB-227 [Water] Sampled 04/27/2010 07:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 09:30	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 09:30	
1004270-68 DP01-02508 [Water] Sampled 04/27/2010 11:20 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 13:20	
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 13:20	
SW8270C	SMS_BNA_8270C_3510_REG	05/19/2010 14:00	20	05/04/2010 13:20	LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 13:20	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 13:20	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 13:20	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 13:20	water TAL + Mo
1004270-69 DP01-02509 [Water] Sampled 04/27/2010 11:45 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 13:45	
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 13:45	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 13:45	LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/19/2010 14:00	20	05/04/2010 13:45	LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 13:45	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 13:45	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 13:45	+MO. LOW VOLUME!!
1004270-70 DP03-02504 [Water] Sampled 04/27/2010 10:10 Pacific					**QSM4.1.**
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 12:10	
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 12:10	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 12:10	+MO. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 12:10	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 12:10	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 12:10	LOW VOLUME!!

1004270

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004270-71 DP03-02505 [Water] Sampled 04/27/2010 10:40 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 12:40	
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 12:40	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 12:40	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 12:40	
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 12:40	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 12:40	water TAL + Mo
1004270-72 DP03-02510 [Water] Sampled 04/27/2010 08:10 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 10:10	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 10:10	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 10:10	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 10:10	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 10:10	
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 10:10	
SW8270C	SMS_BNA_8270C_3510_REG	05/19/2010 14:00	20	05/04/2010 10:10	LOW VOLUME!!
1004270-73 DP03-02511 [Water] Sampled 04/27/2010 09:10 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 11:10	
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 11:10	
SW8270C	SMS_BNA_8270C_3510_REG	05/19/2010 14:00	20	05/04/2010 11:10	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 11:10	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 11:10	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 11:10	
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 11:10	LOW VOLUME!!
1004270-74 DP03-52510 [Water] Sampled 04/27/2010 08:10 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/19/2010 14:00	20	05/11/2010 10:10	
SW6010B	MET_ICP_6010B_FULL_DIS	05/19/2010 14:00	20	10/24/2010 10:10	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/19/2010 14:00	20	05/04/2010 10:10	+MO. LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/19/2010 14:00	20	05/04/2010 10:10	LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/19/2010 14:00	20	05/04/2010 10:10	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/19/2010 14:00	20	05/11/2010 10:10	
SW7470A	MET_7470_DIS_MERCURY	05/19/2010 14:00	20	05/25/2010 10:10	

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 3:55:27 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710p

	Container:	3 x 40 ml VOA	1 x 40 ml VOA					
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH					
	Filtered:	NA	NA					
	Holding Time:	48HR	48HR					
		VOCs (8260B/624)	TPH-Purgable (SW8015B)				Number of Containers	COMMENTS
	DATE	TIME	Matrix					
DP04-02048	4/27/2010	15:00	Soil	x	x	1004270-01	4	
DP04-02049	4/27/2010	15:05	Soil	x	x	-02	4	
DP04-02050	4/27/2010	15:10	Soil	x	x	-03	4	
DP05-02042	4/27/2010	9:50	Soil	x	x	-04	4	
DP05-02043	4/27/2010	9:55	Soil	x	x	-05	4	
DP05-02044	4/27/2010	10:10	Soil	x	x	-06	4	
DP05-02051	4/27/2010	12:00	Soil	x	x	-07	4	
DP05-02052	4/27/2010	12:05	Soil	x	x	-08	4	
DP05-02053	4/27/2010	12:10	Soil	x	x	-09	4	
DP06-02054	4/27/2010	11:00	Soil	x	x	-10	4	
DP06-02055	4/27/2010	11:05	Soil	x	x	-11	4	
DP06-02056	4/27/2010	11:10	Soil	x	x	-12	4	
DP07-02057	4/27/2010	9:20	Soil	x	x	-13	4	
DP07-02058	4/27/2010	9:25	Soil	x	x	-14	4	

	Signatures	Date/Time
Approved by		
Sampled by		4/27/10
Relinquished by	Janice Shilling	1600
Received by		
Relinquished by		
Received by		4/28/10

08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 3:55:28 PM* Page 2 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710p

	DATE	TIME	Matrix	VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	1 x 40 ml VOA			
Preservatives:				2XH2O, 1XMeOH, 4°C	MeOH			
Filtered:				NA	NA			
Holding Time:				48HR	48HR			
DP09-02063	4/27/2010	14:02	Soil	X	X	1004270 · 15	4	
DP09-02064	4/27/2010	14:08	Soil	X	X	-16	4	
DP09-02065	4/27/2010	14:10	Soil	X	X	-17	4	
DP10-02066	4/27/2010	14:45	Soil	X	X	-18	4	
DP10-02067	4/27/2010	14:50	Soil	X	X	-19	4	
DP10-02068	4/27/2010	14:55	Soil	X	X	-20	4	
						TOTAL NUMBER OF CONTAINERS	80	

	Signatures	Date/Time
Approved by		4/27/10
Sampled by		
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/28/10

08:30

3.70C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 3:09:11 PM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710S2

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix							
DP05-02042	4/27/2010 9:50 Soil		X	X	X	1004270-04	~~3~~ 2	
DP05-02043	4/27/2010 9:55 Soil		X	X	X	-05	~~3~~ 2	
DP05-02044	4/27/2010 10:10 Soil		X	X	X	-06	~~3~~ 2	
DP05-02051	4/27/2010 12:00 Soil			X	X	-07	2	
DP05-02052	4/27/2010 12:05 Soil			X	X	-08	2	
DP05-02053	4/27/2010 12:10 Soil			X	X	-09	2	
DP05-08056	4/27/2010 9:35 Soil	X				1004270-21	1	
DP05-08057	4/27/2010 9:38 Soil	X				-22	1	
DP05-08058	4/27/2010 9:41 Soil	X				-23	1	
DP05-08059	4/27/2010 9:45 Soil	X				-24	1	
DP05-08068	4/27/2010 11:43 Soil	X				MS/MSD -25	1	LAB QC
DP05-08069	4/27/2010 11:45 Soil	X				-26	1	
DP05-08070	4/27/2010 11:47 Soil	X				-27	1	
DP05-08071	4/27/2010 11:50 Soil	X				-28	1	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jank	4/27/10
Relinquished by		1515
Received by		
Relinquished by		
Received by		4/28/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3.7°C

ATTN: Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 3:09:11 PM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710S2

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C	4°C		
	Filtered:	NA	NA	NA	NA		
	Holding Time:	14	14	14	28		
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
DP05-58070	4/27/2010 11:47 Soil	x				1	
DP06-02054	4/27/2010 11:00 Soil			x	x	2	
DP06-02055	4/27/2010 11:05 Soil			x	x	2	
DP06-02056	4/27/2010 11:10 Soil			x	x	2	
DP06-08072	4/27/2010 10:05 Soil	x				2 ~~1~~	LAB QC
DP06-08073	4/27/2010 10:10 Soil	x				1	
DP06-08074	4/27/2010 10:15 Soil	x				1	
DP06-08075	4/27/2010 10:20 Soil	x				1	
DP07-02057	4/27/2010 9:20 Soil			x	x	2	
DP07-02058	4/27/2010 9:25 Soil			x	x	2	
DP07-08076	4/27/2010 9:00 Soil	x				2 ~~1~~	LAB QC
DP07-08077	4/27/2010 9:05 Soil	x				1	
DP07-08078	4/27/2010 9:10 Soil	x				1	
DP07-08079	4/27/2010 9:15 Soil	x				1	

100[illegible]270-29
-10
-11
-12
-30 MS/MSD
-31
-32
-33
-13
-14
-34 MS/MSD
-35
-36
-37

Signatures	Date/Time
Approved by	
Sampled by	4/27/10
Relinquished by	1515
Received by	
Relinquished by	4/28/10
Received by	08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL CHAIN OF CUSTODY RECORD *4/27/2010 3:09:12 PM*

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710S2

Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar	
Preservatives:	4°C	4°C	4°C	4°C	
Filtered:	NA	NA	NA	NA	
Holding Time:	14	14	14	28	
DATE / TIME / Matrix	PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Number of Containers / COMMENTS
TOTAL NUMBER OF CONTAINERS					42

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/27/10 1513
Received by		
Relinquished by		
Received by	[signature]	4/28/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL

CHAIN OF CUSTODY RECORD

4/27/2010 11:28:31 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710s

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02030	4/26/2010 14:10 Soil		X	X	X	1004245-03	~~3~~	2
DP01-02031	4/26/2010 14:30 Soil		X	X	X	-04	~~3~~	2
DP01-02032	4/26/2010 14:40 Soil		X	X	X	-05	~~3~~	2
DP01-08040	4/26/2010 13:55 Soil	X				1004270-38	1	
DP01-08041	4/26/2010 13:59 Soil	X				-39	1	
DP01-08042	4/26/2010 14:01 Soil	X				-40	1	
DP01-08043	4/26/2010 14:04 Soil	X				4/28/10 WS ~~1004245-07~~ 1004270-41	1	
DP01-52030	4/26/2010 14:10 Soil		X	X	X	1004245-07	~~3~~	2
DP01-58040	4/26/2010 13:55 Soil	X				1004270-4142 SRM 4/30/10	1	
DP03-02006	4/26/2010 15:00 Soil			X	X	1004245-14	2	
DP03-02007	4/26/2010 15:05 Soil			X	X	-15	2	
DP03-02008	4/26/2010 15:10 Soil			X	X	-16	2	
DP03-02036	4/26/2010 15:10 Soil		X	X	X	-17	~~3~~	2
DP03-02037	4/26/2010 15:20 Soil		X	X	X	-18	~~3~~	2

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	04/27/10
Received by		
Relinquished by	[signature]	4/28/10 09:00
Received by		2.70C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 11:28:31 AM*

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710s

	Container:	4oz soil jar	Share 4oz jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	14	28			
		PAHs (SW8270Sim)	SVOC (8270C)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP03-02038	4/26/2010 15:25 Soil		X	X	X	1004245 -19	~~3~~ 2	
DP03-08008	4/26/2010 14:35 Soil	X				1004270-43	~~1~~ 2	LAB QC
DP03-08009	4/26/2010 14:40 Soil	X				-44	1	
DP03-08010	4/26/2010 14:45 Soil	X				-45	1	
DP03-08011	4/26/2010 14:50 Soil	X				-46	1	
DP03-08048	4/26/2010 15:00 Soil	X				-47	1	
DP03-08049	4/26/2010 15:00 Soil	X				-48	1	
DP03-08050	4/26/2010 15:00 Soil	X				-49	1	
DP03-08051	4/26/2010 15:00 Soil	X				-50	1	
DP03-58010	4/26/2010 14:45 Soil	X				-51	1	
DP03-58050	4/26/2010 15:00 Soil	X				-52	1	
						TOTAL NUMBER OF CONTAINERS	~~42~~ 36	

Signatures		Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	04/27/10
Received by		
Relinquished by		
Received by	[signature]	4/28/10 09:00

3.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 4:04:33 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710p2

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)			Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP11-02069	4/27/2010	15:40	Soil	X	X	1004270 -53	4	
DP11-02070	4/27/2010	15:45	Soil	X	X	-54	4	
DP11-02071	4/27/2010	15:45	Soil	X	X	-55	4	
DP11-52070	4/27/2010	15:45	Soil	X	X	-56	4	
						TOTAL NUMBER OF CONTAINERS	16	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/27/10 1600
Received by		
Relinquished by	[signature]	4/28/10 08:30
Received by		

3.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 9:56:49 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02500	4/26/2010 12:35 Water	X	X	X	X	X	-57	10	
DP01-02501	4/26/2010 13:20 Water	X	X	X	X	X	-58	10	
DP01-52500	4/26/2010 13:35 Water	X	X	X	X	X	-59	10	
DP02-02502	4/26/2010 14:40 Water	X	X	X	X	X	-60	10	
DP02-02503	4/26/2010 15:00 Water	X	X	X	X	X	-61	10	
							TOTAL NUMBER OF CONTAINERS	50	

	Signatures	Date/Time
Approved by		
Sampled by		4/27/10
Relinquished by	Jamie Jart	1000
Received by		
Relinquished by		
Received by		4/28/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 10:07:58 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-326 ✓	4/26/2010	7:35	Water	x 3	x 2				1004245-62	5	
TB-326 ✓	4/26/2010	7:30	Water	x3	x2				1004270 -62	5	
EB-327 ✓	4/27/2010	7:40	Water			x 2	x 2	x2	-63 5	~~7~~	
								TOTAL NUMBER OF CONTAINERS		~~17~~ 15	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/27/10
Relinquished by		1000
Received by		
Relinquished by		
Received by		4/28/10 08:70

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 3:57:23 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710P

				Container:	3 x 40 ml VOA	2 x 40 ml VOA			
				Preservatives:	HCl	HCl			
				Filtered:	NA	NA			
				Holding Time:	14	14			
	DATE	TIME	Matrix		VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-127	4/27/2010	7:30	Water		X	X	1004270-64	5	
TB-127	4/27/2010	7:30	Water		X	X	-65	5	
							TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/27/10
Relinquished by		1600
Received by		
Relinquished by		
Received by		4/28/10

08-30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3-70C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 9:53:28 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710w

				Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
				Preservatives:	4°C	4°C	HNO4			
				Filtered:	NA	NA	NA			
				Holding Time:	7	7	28			
	DATE	TIME	Matrix		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-127	4/27/2010	7:30	Water		x2	x2	1x	1000270-64 5	7	
								TOTAL NUMBER OF CONTAINERS	7	

5

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/27/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/28/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/27/2010 3:58:36 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
Preservatives:				HCl	HCl			
Filtered:				NA	NA			
Holding Time:				14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-227	4/27/2010	7:30	Water	x	x	-66	5	
TB-227	4/27/2010	7:30	Water	x	x	-67	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/27/10
Relinquished by	[signature]	1600
Received by		
Relinquished by	[signature]	4/28/10
Received by		0830

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.7°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/27/2010 9:54:18 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710w

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-227	4/27/2010 7:30 Water	x 2	x 2	1 x	1004270-66 5	7	
					TOTAL NUMBER OF CONTAINERS	7	

5

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jamison	4/27/10 1000
Relinquished by		
Received by		
Relinquished by	Michael	4/28/10 08:30
Received by		

3-7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/27/2010 1:57:03 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/27/2010
COC Number: 42710W2

	DATE	TIME	Matrix	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
Container:				2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly		
Preservatives:				4°C	4°C	4°C	HNO4		
Filtered:				NA	NA	NA	NA		
Holding Time:				7	7	7	28		
DP01-02508	4/27/2010	11:20	Water	x2	x 2 x		✓x	5	
DP01-02509	4/27/2010	11:45	Water	x2	x 2 x		✓x	5	
DP03-02504	4/27/2010	10:10	Water	x2		x2	✓x	5	
DP03-02505	4/27/2010	10:40	Water	x2		x2	✓x	5	
DP03-02510	4/27/2010	8:10	Water	x2	x 2 x		✓x	5	
DP03-02511	4/27/2010	9:10	Water	x2	x 2 x		✓x	11	
DP03-52510	4/27/2010	8:10	Water	x2	x 2 x		✓x	11	
							TOTAL NUMBER OF CONTAINERS	65	

1004270 -68 5
-69 5
-70
-71
-72 5
-73
-74

Signatures		Date/Time
Approved by		
Sampled by	Jamala Jones	4/27/10 1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/28/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3-7°C

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004245, 1004270 Number of Coolers: 1 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5483

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.7 °C

Dates samples were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS
10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A
11. Did all bottles arrive unbroken? ..... WS 4/28/10 (Yes)* (No) N/A
12. Was all required bottle label information complete? ..... (Yes) No N/A
13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A
14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A
15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)
17. Was sufficient amount of sample sent for the analyses required? ..... (Yes) No N/A
18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

plt cz for all metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

* 1004270-1 vial broken in shipment CAR#: _____

for DP02-02503

4/28/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: ~~10024~~ 1004245, 1004270 Number of Coolers: 2 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 9819

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.1 °C

~~Dates samples were logged-in:~~ ~~4/28/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 3 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5440

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 0.6 °C

Dates samples were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 4 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5450

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.9 °C

~~Dates samples were logged in: 4/28/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 5 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5509

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.4 °C

~~Dates samples~~ were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 6 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5428

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4.1 °C

Dates ~~samples~~ were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 7 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 5461

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.9 °C

~~Dates samples~~ were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 8 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5494

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.3 °C

Dates samples were logged-in: **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See case

1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 9 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5472

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.7 °C

~~Dates samples were logged-in:~~ **~~4/28/10~~**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 10 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5439

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-6 °C

Dates samples ~~were logged in:~~ ~~4/28/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 11 of 11

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/28/10** **09:00** Date cooler(s) opened: **4/28/10**

Opened By (print): Will Schaad (signature):

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5417

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/27/10 Seal Initials: _____

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1-2 °C

~~Dates samples were logged in:~~ **4/28/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 11

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 9:49:37 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810W2

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
Preservatives:				HCl	HCl			
Filtered:				NA	NA			
Holding Time:				14	14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-327	4/27/2010	7:40	Water	X	X	1004270-63	5	
TB-327	4/27/2010	7:40	Water	X	X		5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/28/10
Relinquished by		1000
Received by		4/29/10
Relinquished by		4/29/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.4°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/28/2010 9:30:25 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02508	4/27/2010 11:20 Water	x3	x2					1004270-68	5	
DP01-02509	4/27/2010 11:45 Water	x3	x2					-69	5	
DP03-02510	4/27/2010 8:10 Water	x3	x2					-72	5	
DP03-02511	4/27/2010 9:10 Water	x3	x2					-73	5	
DP03-52510	4/27/2010 8:10 Water	x3	x2					-74	5	
DP05-02512	4/27/2010 13:50 Water	x3	x2	x2	x 2 x		1 x	10	~~16~~	
DP05-02513	4/27/2010 14:15 Water	x9	x6	x6	x 6 x		3 x	MS/MSD 30	~~18~~	LAB QC
								TOTAL NUMBER OF CONTAINERS	57	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jank	4/28/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889808
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

08:30

3.4°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 10:49:29 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w2

	DATE	TIME	Matrix	VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				HCl	HCl	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA			
Holding Time:				14	14	7	7	28			
DP03-02504	4/27/2010	10:10	Water	x3	x2				1004270-70	5	
DP03-02505	4/27/2010	10:40	Water	x3	x2				↓ -71	5	
DP06-02526	4/27/2010	15:30	Water	x3	x2	x2	x2	x1		10	
DP06-02527	4/27/2010	16:00	Water	x3	x2	x2	x2	x1		10	
									TOTAL NUMBER OF CONTAINERS	30	

	Signatures	Date/Time
Approved by		
Sampled by		4/28/10
Relinquished by	Tamara Jack	1100
Received by		
Relinquished by		
Received by		4/29/10

08:30

3.7C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schwal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 9808

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.4 °C

Dates samples were logged-in: 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwal (Initial): WS

10. Were all bottle lids intact and sealed tightly? ..... (Yes) No N/A

11. Did all bottles arrive unbroken? ..... (Yes) No N/A

12. Was all required bottle label information complete? ..... (Yes) No N/A

13. Did all bottle labels agree with custody papers? ..... (Yes) No N/A

14. Were correct containers used for the analyses indicated? ..... (Yes) No N/A

15. Were preservative levels correct in all applicable sample containers? ..... (Yes) No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No (N/A)

17. Was sufficient amount of sample sent for the analyses required? ..... (Yes) No N/A

18. Was headspace present in any included VOA vials? ..... Yes (No) N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

plt c2 for all metals (H_2O)

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0360

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3-7 °C

Dates ~~samples were logged in:~~ 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 3 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/29/10** **08:30** Date cooler(s) opened: **4/29/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0348

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0 °C

~~Dates samples were logged in:~~ **4/29/10**

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 4 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0326

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

~~Dates samples were logged-in:~~ 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 11:53:18 AM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-02048	4/27/2010 15:00 Soil		X	X	1004270-01	2	
DP04-02049	4/27/2010 15:05 Soil		X	X	-02	2	
DP04-02050	4/27/2010 15:10 Soil		X	X	-03	2	
DP04-08064	4/27/2010 14:45 Soil	X				1	LAB QC
DP04-08065	4/27/2010 14:47 Soil	X				1	
DP04-08066	4/27/2010 14:50 Soil	X				1	
DP04-08067	4/27/2010 14:54 Soil	X				1	
DP09-02063	4/27/2010 14:02 Soil		X	X	1004270-15	2	
DP09-02064	4/27/2010 14:08 Soil		X	X	-16	2	
DP09-02065	4/27/2010 14:10 Soil		X	X	-17	2	
DP09-08084	4/27/2010 13:50 Soil	X				1	LAB QC
DP09-08085	4/27/2010 13:55 Soil	X				1	
DP09-08086	4/27/2010 14:00 Soil	X				1	
DP09-08087	4/27/2010 14:05 Soil	X				1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		04/28/10
Received by		
Relinquished by		4/30/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.3°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 11:53:19 AM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C		
	Filtered:	NA	NA	NA		
	Holding Time:	14	14	28		
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		
	DATE / TIME / Matrix				Number of Containers	COMMENTS
DP10-02066	4/27/2010 14:45 Soil		X	X	2	
DP10-02067	4/27/2010 14:50 Soil		X	X	2	
DP10-02068	4/27/2010 14:55 Soil		X	X	2	
DP10-08088	4/27/2010 14:05 Soil	X			1	LAB QC
DP10-08089	4/27/2010 14:10 Soil	X			1	
DP10-08090	4/27/2010 14:15 Soil	X			1	
DP10-08091	4/27/2010 14:20 Soil	X			1	
DP11-02069	4/27/2010 15:40 Soil		X	X	2	
DP11-02070	4/27/2010 15:45 Soil		X	X	2	
DP11-02071	4/27/2010 15:45 Soil		X	X	2	
DP11-08092	4/27/2010 16:10 Soil	X			1	LAB QC
DP11-08093	4/27/2010 16:15 Soil	X			1	
DP11-08094	4/27/2010 16:20 Soil	X			1	
DP11-08095	4/27/2010 16:25 Soil	X			1	

1004270-18
-19
-20
1004270-53
-54
-55

Signatures	Date/Time
Approved by	
Sampled by	
Relinquished by	04/28/10
Received by	
Relinquished by	
Received by	4/30/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

3.3°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 11:53:19 AM* Page 3 OF 3

Project Name AlamedaPoint			**Container:**	4oz soil jar	Share 4oz jar	4oz soil jar					
Location			**Preservatives:**	4°C	4°C	4°C					
Project Number 383512.FI.DP											
Project Manager Jamie Eby			**Filtered:**	NA	NA	NA					
Sample Manager			**Holding Time:**	14	14	28					
Task Order				PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)				Number of Containers	
Project 2010-EDC17-SOIL											
Turnaround Time 21 Days											
Shipping Date: 4/28/2010											
COC Number: 42810s											
	DATE	**TIME**	**Matrix**								**COMMENTS**
DP11-52070	4/27/2010	15:45	Soil		X	X			1004270-56	2	
									TOTAL NUMBER OF CONTAINERS	42	

	Signatures	**Date/Time**
Approved by		
Sampled by		
Relinquished by		04/28/10
Received by		
Relinquished by		4/30/10 08:30
Received by		3.30C

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270 Number of Coolers: 1 of 1

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/30/10** **08:30** Date cooler(s) opened: **4/30/10**

Opened By (print): Will Schuch (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 5174

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3 °C

Dates samples were logged-in: **4/30/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schuch (Initial): ws

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	(N/A)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004288

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/27/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/29/2010 08:30

Logged In By: William Schwab
Date Logged In: 04/29/2010 17:36

Samples Received at: **3.3°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1004288-01 DP05-02512 [Water] Sampled 04/27/2010 13:50 Pacific					**QSM4.1.**
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/25/2010 15:50	
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/04/2010 15:50	+MO. LOW VOLUME!!
SW8270C	SMS_BNA_8270C_3510_REG	05/20/2010 14:00	20	05/04/2010 15:50	LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/04/2010 15:50	LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/24/2010 15:50	water TAL + Mo
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/11/2010 15:50	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/11/2010 15:50	
1004288-02 DP05-02513 [Water] Sampled 04/27/2010 14:15 Pacific					**MS/MSD. QSM4.1.**
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/04/2010 16:15	MS/MSD. +MO. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/11/2010 16:15	MS/MSD.
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/11/2010 16:15	MS/MSD.
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/25/2010 16:15	
SW8270C	SMS_BNA_8270C_3510_REG	05/20/2010 14:00	20	05/04/2010 16:15	MS/MSD. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/24/2010 16:15	water TAL + Mo
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/04/2010 16:15	MS/MSD. LOW VOLUME!!

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-03 DP06-02526 [Water] Sampled 04/27/2010 15:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/11/2010 17:30	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/04/2010 17:30	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/04/2010 17:30	+MO. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/11/2010 17:30	
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/24/2010 17:30	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/25/2010 17:30	
1004288-04 DP06-02527 [Water] Sampled 04/27/2010 16:00 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/11/2010 18:00	
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/04/2010 18:00	+MO. LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/25/2010 18:00	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/04/2010 18:00	LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/11/2010 18:00	
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/24/2010 18:00	water TAL + Mo
1004288-05 DP04-02524 [Water] Sampled 04/28/2010 09:45 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 11:45	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 11:45	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 11:45	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 11:45	
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 11:45	
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 11:45	water TAL + Mo
1004288-06 DP04-02525 [Water] Sampled 04/28/2010 10:10 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 12:10	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 12:10	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 12:10	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 12:10	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 12:10	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 12:10	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-07 DP10-02528 [Water] Sampled 04/28/2010 08:15 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 10:15	+MO. LOW VOLUME!!
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 10:15	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 10:15	LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 10:15	water TAL + Mo
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 10:15	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 10:15	
1004288-08 DP10-02529 [Water] Sampled 04/28/2010 08:40 Pacific					**QSM4.1.**
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 10:40	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 10:40	+MO. LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 10:40	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 10:40	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 10:40	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 10:40	LOW VOLUME!!
1004288-09 DP12-02530 [Water] Sampled 04/28/2010 11:15 Pacific					**QSM4.1.**
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 13:15	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 13:15	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 13:15	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 13:15	LOW VOLUME!!
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 13:15	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 13:15	water TAL + Mo
1004288-10 DP12-02531 [Water] Sampled 04/28/2010 12:10 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 14:10	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 14:10	
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 14:10	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 14:10	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 14:10	LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 14:10	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-11 DP12-52530 [Water] Sampled 04/28/2010 11:15 Pacific					**QSM4.1.**
SW6010B	MET_ICP_6010B_FULL_DIS	05/20/2010 14:00	20	10/25/2010 13:15	water TAL + Mo
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 13:15	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 13:15	
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 13:15	+MO. LOW VOLUME!!
SW7470A	MET_7470_DIS_MERCURY	05/20/2010 14:00	20	05/26/2010 13:15	
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 13:15	LOW VOLUME!!
1004288-12 EB-128 [Water] Sampled 04/28/2010 07:30 Pacific					**QSM4.1.**
SW8270C	SMS_BNA_8270C_3510_REG	05/20/2010 14:00	20	05/05/2010 09:30	LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 09:30	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 09:30	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 09:30	
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 09:30	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL	05/20/2010 14:00	20	10/25/2010 09:30	water TAL + Mo
SW7470A	MET_7470_MERCURY	05/20/2010 14:00	20	05/26/2010 09:30	
1004288-13 TB-128 [Water] Sampled 04/28/2010 07:30 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 09:30	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 09:30	
1004288-14 EB-228 [Water] Sampled 04/28/2010 07:30 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 09:30	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 09:30	
SW8270C	SMS_BNA_8270C_3510_REG	05/20/2010 14:00	20	05/05/2010 09:30	LOW VOLUME!!
SW7470A	MET_7470_MERCURY	05/20/2010 14:00	20	05/26/2010 09:30	
SW6010B	MET_ICP_6010B_FULL	05/20/2010 14:00	20	10/25/2010 09:30	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 09:30	+MO. LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 09:30	LOW VOLUME!!
1004288-15 TB-228 [Water] Sampled 04/28/2010 07:40 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 09:40	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 09:40	

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Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-16 EB-328 [Water] Sampled 04/28/2010 07:30 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 09:30	
SW7470A	MET_7470_MERCURY	05/20/2010 14:00	20	05/26/2010 09:30	
SW8270C	SMS_BNA_8270C_3510_REG	05/20/2010 14:00	20	05/05/2010 09:30	LOW VOLUME!!
SW8270C	SMS_PAH_8270C_3510_LOW	05/20/2010 14:00	20	05/05/2010 09:30	LOW VOLUME!!
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 09:30	
SW8015B	SGC_DRO_8015B_3510	05/20/2010 14:00	20	05/05/2010 09:30	+MO. LOW VOLUME!!
SW6010B	MET_ICP_6010B_FULL	05/20/2010 14:00	20	10/25/2010 09:30	water TAL + Mo
1004288-17 TB-328 [Water] Sampled 04/28/2010 07:30 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 09:30	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 09:30	
1004288-18 TB-327 [Water] Sampled 04/27/2010 07:40 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/11/2010 09:40	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/11/2010 09:40	
1004288-19 DP02-03112 [Solid] Sampled 04/28/2010 15:33 Pacific					**QSM4.1.**
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 17:33	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 17:33	
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 17:33	
1004288-20 DP02-03113 [Solid] Sampled 04/28/2010 15:30 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 17:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 17:30	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 17:30	
1004288-21 DP08-02060 [Solid] Sampled 04/28/2010 08:50 Pacific					**QSM4.1.**
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 10:50	AP VIALS
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 10:50	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:50	
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 10:50	
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 10:50	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 10:50	+MO

1004288

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-22 DP08-02061 [Solid] Sampled 04/28/2010 08:55 Pacific					**QSM4.1.**
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 10:55	+MO
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 10:55	AP VIALS
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 10:55	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 10:55	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:55	
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 10:55	
1004288-23 DP08-02062 [Solid] Sampled 04/28/2010 09:00 Pacific					**QSM4.1.**
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 11:00	
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 11:00	soil TAL + Mo
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 11:00	AP VIALS
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 11:00	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 11:00	
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 11:00	+MO
1004288-24 DP08-52060 [Solid] Sampled 04/28/2010 08:50 Pacific					**QSM4.1.**
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 10:50	AP VIALS
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:50	
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 10:50	
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 10:50	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 10:50	+MO
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 10:50	AP VIALS
1004288-25 DP12-02072 [Solid] Sampled 04/28/2010 10:05 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 12:05	
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 12:05	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 12:05	+MO
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 12:05	
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 12:05	soil TAL + Mo
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 12:05	AP VIALS

1004288

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-26	**DP12-02073 [Solid] Sampled 04/28/2010 10:10 Pacific**				**QSM4.1.**
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 12:10	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 12:10	
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 12:10	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 12:10	AP VIALS
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 12:10	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 12:10	+MO
1004288-27	**DP12-02074 [Solid] Sampled 04/28/2010 10:15 Pacific**				**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 12:15	
SW8260B	VOC_8260B_AP9	05/20/2010 14:00	20	05/12/2010 12:15	AP VIALS
SW8015B	VGC_GRO_8015B	05/20/2010 14:00	20	05/12/2010 12:15	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/20/2010 14:00	20	05/12/2010 12:15	+MO
SW6010B	MET_ICP_LOW6010B_FULL	05/20/2010 14:00	20	10/25/2010 12:15	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/20/2010 14:00	20	05/26/2010 12:15	
1004288-28	**DP08-08080 [Solid] Sampled 04/28/2010 08:40 Pacific**				**MS/MSD. QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:40	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 10:40	MS/MSD.
1004288-29	**DP08-08081 [Solid] Sampled 04/28/2010 08:43 Pacific**				**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:43	
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 10:43	
1004288-30	**DP08-08082 [Solid] Sampled 04/28/2010 08:46 Pacific**				**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:46	
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 10:46	
1004288-31	**DP08-08083 [Solid] Sampled 04/28/2010 08:49 Pacific**				**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:49	
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 10:49	
1004288-32	**DP08-58080 [Solid] Sampled 04/28/2010 08:40 Pacific**				**MS/MSD. QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 10:40	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 10:40	MS/MSD.
1004288-33	**DP12-08096 [Solid] Sampled 04/28/2010 09:35 Pacific**				**MS/MSD. QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 11:35	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 11:35	MS/MSD.

1004288

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1004288-34 DP12-08097 [Solid] Sampled 04/28/2010 09:40 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 11:40	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 11:40	
1004288-35 DP12-08098 [Solid] Sampled 04/28/2010 09:45 Pacific					**QSM4.1.**
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 11:45	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 11:45	
1004288-36 DP12-08099 [Solid] Sampled 04/28/2010 09:50 Pacific					**QSM4.1.**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/20/2010 14:00	20	05/05/2010 11:50	
SW8270C	SMS_PAH_8270C_3546_LOW	05/20/2010 14:00	20	05/12/2010 11:50	

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** 4/28/2010 9:30:25 AM Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	HCl	HCl	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA			
	Holding Time:	14	14	7	7	7	28			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP01-02508	4/27/2010 11:20 Water	x3	x2					1004270-68	5	
DP01-02509	4/27/2010 11:45 Water	x3	x2					-69	5	
DP03-02510	4/27/2010 8:10 Water	x3	x2					-72	5	
DP03-02511	4/27/2010 9:10 Water	x3	x2					-73	5	
DP03-52510	4/27/2010 8:10 Water	x3	x2					-74	5	
DP05-02512	4/27/2010 13:50 Water	x3	x2	x2	x 2 x		1 x✓	1004278-01	10	~~15~~
DP05-02513	4/27/2010 14:15 Water	x9	x6	x6	x 6 x		3 x✓	-02 MS/MSD	30	~~45~~ LAB QC
								TOTAL NUMBER OF CONTAINERS	57	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Jank	4/28/10 1000
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889808
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 10:49:29 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w2

	DATE	TIME	Matrix	VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
Preservatives:				HCl	HCl	4°C	4°C	HNO4			
Filtered:				NA	NA	NA	NA	NA			
Holding Time:				14	14	7	7	28			
DP03-02504	4/27/2010	10:10	Water	x3	x2				1004270-70	5	
DP03-02505	4/27/2010	10:40	Water	x3	x2				-71	5	
DP06-02526	4/27/2010	15:30	Water	x3	x2	x2	x2	x1	1004288-03	10	
DP06-02527	4/27/2010	16:00	Water	x3	x2	x2	x2	x1	-04	10	
									TOTAL NUMBER OF CONTAINERS	30	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jack	4/28/10
Relinquished by		1100
Received by		
Relinquished by		
Received by		4/29/10

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

08:30

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 2:42:18 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA	3 x 40 ml VOA	2 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4C	MeOH	HCl	HCl			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	48HR	48HR	14	14			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)	VOCs (8260B)	TPH-Purgable (SW8015B)			
	DATE	TIME	Matrix						Number of Containers	COMMENTS
DP04-02524	4/28/2010	9:45	Water	X	X	X	X	1004288-05	5	
DP04-02525	4/28/2010	10:10	Water	X	X	X	X	-06	5	
DP10-02528	4/28/2010	8:15	Water	X	X	X	X	-07	5	
DP10-02529	4/28/2010	8:40	Water	X	X	X	X	-08	5	
DP12-02530	4/28/2010	11:15	Water	X	X	X	X	-09	5	
DP12-02531	4/28/2010	12:10	Water	X	X	X	X	-10	5	
DP12-52530	4/28/2010	11:15	Water	X	X	X	X	-11	5	
								TOTAL NUMBER OF CONTAINERS	35	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		04/28/10
Received by		
Relinquished by		4/29/10 08:30
Received by		3.7°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/28/2010 12:12:33 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w3

	Container:	3 x 40 ml VOA	1 x 40 ml VOA	4oz soil jar	Share 4oz jar	4oz soil jar	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH	4°C	4°C	4°C	HCl	HCl	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA			
	Holding Time:	48HR	48HR	14	14	28	14	14	7	7	28			
		~~VOCs (8260B/624)~~	~~TPH-Purgable (SW8015B)~~	~~PAHs (SW8270Sim)~~	~~TPH-Extractable (8015B-E)~~	~~TAL Metals (6010B/7470A)~~	~~VOCs (8260B)~~	~~TPH-Purgable (SW8015B)~~	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-02524	4/28/2010	9:45	Water	X	X	X	X	X	X	X	X	X	X	X	1004288-05	~~10~~	5
DP04-02525	4/28/2010	10:10	Water	X	X	X	X	X	X	X	X	X	X	X	-06	~~10~~	5
DP10-02528	4/28/2010	8:15	Water	X	X	X	X	X	X	X	X	X	X	X	-07	~~10~~	5
DP10-02529	4/28/2010	8:40	Water	X	X	X	X	X	X	X	X	X	X	X	-08	~~10~~	5
													TOTAL NUMBER OF CONTAINERS			~~40~~	20

CMC
04/28/10

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		04/28/10
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: (yes) no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL 1 Lander 2500 poly **CHAIN OF CUSTODY RECORD** 4/28/2010 2:57:12 PM Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-GW
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810W4

				Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
				Preservatives:	4°C	4°C	4°C HNO3			
				Filtered:	NA	NA	NA			
				Holding Time:	~~14~~ 7	14 7	28			
	DATE	TIME	Matrix		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP12-02530	4/28/2010	11:15	Water		2 X	2 X	1 X	1004288 -12 -09 5	~~5~~	
DP12-02531	4/28/2010	12:10	Water		2 X	2 X	1 X	-13 -10 5	~~5~~	
DP12-52530	4/28/2010	11:15	Water		~~2 X~~	~~2 X~~	1 X	-14 -11 5	~~5~~	
								TOTAL NUMBER OF CONTAINERS	15	

ws 4/29/10

	Signatures	Date/Time
Approved by		4/28/10
Sampled by	Jamie Eby	1500
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 0830

Shipping Details
Method of Shipment: FedEx
On Ice: (yes / no)
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 2:25:03 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-128	4/28/2010	7:30	Water	X	X	1004288-12	5	
TB-128	4/28/2010	7:30	Water	X	X	-13	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		4/28/10
Relinquished by		1200
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 10:54:37 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-128	4/28/2010 7:30 Water	x2	x 2 x		1x	1004288-12 5	~~11~~	
						TOTAL NUMBER OF CONTAINERS	~~11~~ 5	

	Signatures	Date/Time
Approved by		4/28/10
Sampled by	Jamara Jones	1100
Relinquished by		
Received by		
Relinquished by	Rebekah Hall	4/29/10
Received by		08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889808
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3.7°C

ATTN: Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 10:55:20 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810w

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-228	4/28/2010 7:30 Water	x 2	x 2	x	x 1	600488-14	5 ~~11~~	
						TOTAL NUMBER OF CONTAINERS	5 ~~11~~	

	Signatures	Date/Time
Approved by		
Sampled by	Jamaica Foote	4/28/10 1100
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889808
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 2:25:54 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM2
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810p

	DATE	TIME	Matrix	VOCs (8260B)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
Container:				3 x 40 ml VOA	2 x 40 ml VOA			
Preservatives:				HCl	HCl			
Filtered:				NA	NA			
Holding Time:				14	14			
EB-228	4/28/2010	7:30	Water	X	X	1064228-14	5	
TB-228	4/28/2010	7:40	Water	X	X	-15	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	Jamara Frank	4/28/10 1200
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 2:26:30 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810P

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-328	4/28/2010	7:30	Water	X	X	1004228 -16	5	
TB-328	4/28/2010	7:30	Water	X	X	-17	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/28/10 1700
Received by		
Relinquished by	[signature]	4/29/10 08:30
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 10:55:55 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810W

	Container:	2 x 1L Amber	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	7	7	7	28			
		TPH-Extractable (8015B-E)	SVOC (8270C)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-328	4/28/2010 7:30 Water	x2	x 2 x		1 x	1004228 -16	5 ~~11~~	
						TOTAL NUMBER OF CONTAINERS	5 ~~11~~	

	Signatures	Date/Time
Approved by		
Sampled by		4/28/10
Relinquished by	Tamara Jann	1100
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889808
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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3.7°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 9:49:37 AM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810W2

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-327	4/27/2010	7:40	Water	X	X	1004270-63	5	
TB-327	4/27/2010	7:40	Water	X	X	1004228 -18	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/27/10
Relinquished by	[signature]	1000
Received by		
Relinquished by	[signature]	4/29/10 WS
Received by	[signature]	4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

3.4°C

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 3:59:32 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810s5

	Container:	4oz soil jar
	Preservatives:	4°C
	Filtered:	NA
	Holding Time:	28

	DATE	TIME	Matrix	Title 22 Metals (6010B/7470A)		Number of Containers	COMMENTS
DP02-03112	4/28/2010	15:33	Soil	X	1004228-19	1	
DP02-03113	4/28/2010	15:30	Soil	X	-20	1	
					TOTAL NUMBER OF CONTAINERS	2	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Frank	4/28/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 08:50

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No:
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 2:20:14 PM* Page 1 OF 1

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810P

	Container:	3 x 40 ml VOA	1 x 40 ml VOA			
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH			
	Filtered:	NA	NA			
	Holding Time:	48HR	48HR			
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE / TIME / Matrix					
DP08-02060 ✓	4/28/2010 8:50 Soil	x	x	1004288 1004228 -21 (ws 4/29/10)	4	
DP08-02061 ✓	4/28/2010 8:55 Soil	x	x	-22	4	
DP08-02062 ✓	4/28/2010 9:00 Soil	x	x	-23	4	
DP08-52060 ✓	4/28/2010 8:50 Soil	x	x	-24	4	
DP12-02072 ✓	4/28/2010 10:05 Soil	x	x	-25	4	
DP12-02073 ✓	4/28/2010 10:10 Soil	x	x	-26	4	
DP12-02074 ✓	4/28/2010 10:15 Soil	x	x	-27	4	
				TOTAL NUMBER OF CONTAINERS	28	

	Signatures	Date/Time
Approved by		
Sampled by	James Jank	4/28/10 1420
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

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CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 1:58:09 PM* Page 1 OF 2

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810S2

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
	DATE / TIME / Matrix						
DP08-02060	4/28/2010 8:50 Soil		X	X	1004288-21	2	
DP08-02061	4/28/2010 8:55 Soil		X	X	-22	2	
DP08-02062	4/28/2010 9:00 Soil		X	X	-23	2	
DP08-08080	4/28/2010 8:40 Soil	X			-28	1	LAB QC
DP08-08081	4/28/2010 8:43 Soil	X			-29	1	
DP08-08082	4/28/2010 8:46 Soil	X			-30	1	
DP08-08083	4/28/2010 8:49 Soil	X			-31	1	
DP08-52060	4/28/2010 8:50 Soil		X	X	-24	2	
DP08-58080	4/28/2010 8:40 Soil	X			-32	1	LAB QC
DP12-02072	4/28/2010 10:05 Soil		X	X	-25	2	
DP12-02073	4/28/2010 10:10 Soil		X	X	-26	2	
DP12-02074	4/28/2010 10:15 Soil		X	X	-27	2	
DP12-08096	4/28/2010 9:35 Soil	X			-33	1	LAB QC
DP12-08097	4/28/2010 9:40 Soil	X			-34	1	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jank	4/28/10
Relinquished by		HDV
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN: Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.4°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/28/2010 1:58:09 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810s2

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP12-08098	4/28/2010 9:45 Soil	x			1604288 -35	1	
DP12-08099	4/28/2010 9:50 Soil	x			-36	1	
					TOTAL NUMBER OF CONTAINERS	23	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jones	4/28/10 1400
Relinquished by		
Received by		
Relinquished by		
Received by		4/29/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

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EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270, 1004288 Number of Coolers: 1 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered

EL Courier Other: _____

If applicable, enter airbill number here: 9808

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.4 °C

Dates samples were logged-in: 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schwab (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken? ..... WS 4/29/10	* (Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH<2 for all metals (H2O)

If Non-Conformance issues were present, list by sample ID: _____

* 1004288 - 1 vial Broken in shipment for CAR#: _____

DP10-0252A. 1 Amber liter broken for DP12-0255I. 1 Liter broken for EB-1281

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270, 1004288 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0360

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3-7 °C

Dates ~~samples were logged-in:~~ 4/29/10

9. Initial this form to acknowledge login of sample(s): ~~(Name)~~: _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270, 1004288 Number of Coolers: 3 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/29/10** **08:30** Date cooler(s) opened: **4/29/10**

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0348

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.0 °C

~~Dates samples were logged in:~~ 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270, 1004288 Number of Coolers: 4 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0326

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.9 °C

~~Dates samples were logged-in:~~ 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004288 Number of Coolers: 5 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schuge (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0290

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5-3 °C

Dates samples were logged-in: 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004288 Number of Coolers: 6 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): [illegible] (signature): Will Schwab

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0304

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3-5 °C

~~Dates samples were logged-in:~~ 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004288 Number of Coolers: 8 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0315

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 5.0 °C

Dates samples were logged-in: 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 10

ws 4/29/10 **EMPIRICAL LABORATORIES** ws 4/29/10
COOLER RECEIPT FORM

LIMS Number: ~~1004288~~ 1004288 Number of Coolers: 2 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schuge (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0337

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.2 °C

~~Dates samples were logged-in: 4/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 1 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004288 Number of Coolers: 7 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened 4/29/10

Opened By (print): Will Schmidt (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0289

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2-9 °C

Dates ~~samples were logged in~~: 4/29/10

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See Page 1 of 10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004287 Number of Coolers: 9 of 10

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 4/29/10 08:30 Date cooler(s) opened: 4/29/10

Opened By (print): Will Schmid (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 0370

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 4-5 °C

~~Dates samples were logged in: 4/29/10~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

See page 10 of 10

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

Sonya Gordon

From: Tamara.Frank@ch2m.com
Sent: Thursday, April 01, 2010 1:00 PM
To: sgordon@empirlabs.com
Subject: RE: metals sampling

All metals are field filtered. EBs are not field filtered, since all the filtering equipment is disposable.

From: Sonya Gordon [mailto:sgordon@empirlabs.com]
Sent: Thursday, April 01, 2010 9:50 AM
To: Frank, Tamara/BAO
Subject: metals sampling

Hi Tamara,
I just got off the phone with Mark & wanted to confirm something. He said all waters are being field filtered? Is that correct and if so does it also apply to EB samples?

Sonya Gordon
Project Manager
Empirical Laboratories, LLC
"Your National Small Business Partner"
621 Mainstream Drive, Suite 270 l Nashville, TN 37228 l www.empirlabs.com
Main: 615.345.1115 ext. 238 l Toll free: 877.345.1113 l Fax: 615.846.5426

Celebrating over 40 years of excellence, Empirical Laboratories is certified as a Woman-Owned Small Business and a Small Disadvantaged Business. Come visit our website at www.empirlabs.com today.

1004299

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/28/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 04/30/2010 08:30

Logged In By: William Schwab
Date Logged In: 04/30/2010 15:43

Samples Received at: **3.3°C**
Custody Seals Yes Received On Ice Yes
Containers Intact Yes
COC/Labels Agree Yes
Preservation Confirme Yes

Method	Test Code	Due	TAT	Expires	Comments
1004299-01 DP04-08064 [Solid] Sampled 04/27/2010 14:45 Pacific					**MS/MSD. QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:45	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:45	MS/MSD.
1004299-02 DP04-08065 [Solid] Sampled 04/27/2010 14:47 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:47	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:47	
1004299-03 DP04-08066 [Solid] Sampled 04/27/2010 14:50 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:50	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:50	
1004299-04 DP04-08067 [Solid] Sampled 04/27/2010 14:54 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:54	
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:54	
1004299-05 DP09-08084 [Solid] Sampled 04/27/2010 13:50 Pacific					**MS/MSD. QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 15:50	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 15:50	MS/MSD.
1004299-06 DP09-08085 [Solid] Sampled 04/27/2010 13:55 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 15:55	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 15:55	

1004299

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0
Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1004299-07 DP09-08086 [Solid] Sampled 04/27/2010 14:00 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:00	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:00	
1004299-08 DP09-08087 [Solid] Sampled 04/27/2010 14:05 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:05	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:05	
1004299-09 DP10-08088 [Solid] Sampled 04/27/2010 14:05 Pacific					**MS/MSD. QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:05	MS/MSD.
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:05	MS/MSD.
1004299-10 DP10-08089 [Solid] Sampled 04/27/2010 14:10 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:10	
1004299-11 DP10-08090 [Solid] Sampled 04/27/2010 14:15 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:15	
1004299-12 DP10-08091 [Solid] Sampled 04/27/2010 14:20 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 16:20	
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 16:20	
1004299-13 DP11-08092 [Solid] Sampled 04/27/2010 16:10 Pacific					**MS/MSD. QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 18:10	MS/MSD.
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 18:10	MS/MSD.
1004299-14 DP11-08093 [Solid] Sampled 04/27/2010 16:15 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 18:15	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 18:15	
1004299-15 DP11-08094 [Solid] Sampled 04/27/2010 16:20 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 18:20	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 18:20	
1004299-16 DP11-08095 [Solid] Sampled 04/27/2010 16:25 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/21/2010 14:00	20	05/04/2010 18:25	
SW8270C	SMS_PAH_8270C_3546_LOW	05/21/2010 14:00	20	05/11/2010 18:25	

Reviewed By

Date

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 11:53:18 AM* Page 1 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810s

				Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
				Preservatives:	4°C	4°C	4°C			
				Filtered:	NA	NA	NA			
				Holding Time:	14	14	28			
	DATE	TIME	Matrix		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP04-02048	4/27/2010	15:00	Soil			X	X	1004270-01	2	
DP04-02049	4/27/2010	15:05	Soil			X	X	-02	2	
DP04-02050	4/27/2010	15:10	Soil			X	X	-03	2	
DP04-08064	4/27/2010	14:45	Soil		X			1004299-01	1	LAB QC
DP04-08065	4/27/2010	14:47	Soil		X			-02	1	
DP04-08066	4/27/2010	14:50	Soil		X			-03	1	
DP04-08067	4/27/2010	14:54	Soil		X			-04	1	
DP09-02063	4/27/2010	14:02	Soil			X	X	1004270-15	2	
DP09-02064	4/27/2010	14:08	Soil			X	X	-16	2	
DP09-02065	4/27/2010	14:10	Soil			X	X	-17	2	
DP09-08084	4/27/2010	13:50	Soil		X			1004299-05	1	LAB QC
DP09-08085	4/27/2010	13:55	Soil		X			-06	1	
DP09-08086	4/27/2010	14:00	Soil		X			-07	1	
DP09-08087	4/27/2010	14:05	Soil		X			-08	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by		04/28/10
Received by		
Relinquished by		
Received by		4/30/10 08:30

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody and Janice Shilling

Special Instructions:

Report Copy to

3.3°C

CH2MHILL **CHAIN OF CUSTODY RECORD** *4/28/2010 11:53:19 AM* Page 2 OF 3

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-EDC17-SOIL
Turnaround Time 21 Days
Shipping Date: 4/28/2010
COC Number: 42810s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar			
	Preservatives:	4°C	4°C	4°C			
	Filtered:	NA	NA	NA			
	Holding Time:	14	14	28			
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
DP10-02066	4/27/2010	14:45	Soil		x	x	1004270-18	2	
DP10-02067	4/27/2010	14:50	Soil		x	x	-19	2	
DP10-02068	4/27/2010	14:55	Soil		x	x	-20	2	
DP10-08088	4/27/2010	14:05	Soil	x			1004299-09	1	LAB QC
DP10-08089	4/27/2010	14:10	Soil	x			-10	1	
DP10-08090	4/27/2010	14:15	Soil	x			-11	1	
DP10-08091	4/27/2010	14:20	Soil	x			-12	1	
DP11-02069	4/27/2010	15:40	Soil		x	x	1004270-53	2	
DP11-02070	4/27/2010	15:45	Soil		x	x	-54	2	
DP11-02071	4/27/2010	15:45	Soil		x	x	-55	2	
DP11-08092	4/27/2010	16:10	Soil	x			1004299-13	1	LAB QC
DP11-08093	4/27/2010	16:15	Soil	x			-14	1	
DP11-08094	4/27/2010	16:20	Soil	x			-15	1	
DP11-08095	4/27/2010	16:25	Soil	x			-16	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	04/28/10
Received by		
Relinquished by	[signature]	4/30/10
Received by		

08:30

3.3°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889819
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1004270, 1004299 Number of Coolers: 1 of 1

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **4/30/10** **08:30** Date cooler(s) opened: **4/30/10**

Opened By (print): Will Schuch (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
   EL Courier Other: _____

If applicable, enter airbill number here: 5174

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/28/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 3.3 °C

Dates samples were logged-in: **4/30/10**

9. Initial this form to acknowledge login of sample(s): (Name): Will Schuch (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	(N/A)
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	(N/A)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

1005018

Empirical Laboratories, LLC

Client: CH2M Hill, Inc.
Project: Alameda Point CTO-FZN0

Project Manager: Sonya Gordon
Project Number: CH2_Alameda

Report To:
CH2M Hill, Inc.
Bryan Jones
2525 Airpark Drive
Redding, CA 96001
Phone: (530) 229-3350
Fax: (530) 339-3350

Invoice To:
CH2M Hill, Inc.
Accounts Payable
P.O.Box 241329
Denver, CO 80224-____
Phone :(303) 771-0952
Fax: (303) 771-0952

Date Due: 05/31/2010 16:00 (20 day TAT)

Received By: William Schwab
Date Received: 05/01/2010 11:00

Logged In By: William Schwab
Date Logged In: 05/07/2010 09:41

Samples Received at: **2.6°C**

Custody Seals	Yes	Received On Ice	Yes
Containers Intact	Yes		
COC/Labels Agree	Yes		
Preservation Confirme	Yes		

Method	Test Code	Due	TAT	Expires	Comments
1005018-01 DP30-03344 [Solid] Sampled 04/30/2010 13:20 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 15:20	
SW7471A	MET_7471A_MERCURY	05/24/2010 14:00	20	05/28/2010 15:20	
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 15:20	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/24/2010 14:00	20	10/27/2010 15:20	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/24/2010 14:00	20	05/14/2010 15:20	+MO
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 15:20	AP VIALS
1005018-02 DP30-03345 [Solid] Sampled 04/30/2010 13:25 Pacific					**QSM4.1**
SW6010B	MET_ICP_LOW6010B_FULL	05/24/2010 14:00	20	10/27/2010 15:25	soil TAL + Mo
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 15:25	
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 15:25	AP VIALS
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 15:25	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/24/2010 14:00	20	05/14/2010 15:25	+MO
SW7471A	MET_7471A_MERCURY	05/24/2010 14:00	20	05/28/2010 15:25	
1005018-03 DP31-03347 [Solid] Sampled 04/30/2010 11:20 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:20	
SW7471A	MET_7471A_MERCURY	05/24/2010 14:00	20	05/28/2010 13:20	
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 13:20	AP VIALS
SW6010B	MET_ICP_LOW6010B_FULL	05/24/2010 14:00	20	10/27/2010 13:20	soil TAL + Mo
SW8015B	SGC_DRO_8015B_3546	05/24/2010 14:00	20	05/14/2010 13:20	+MO
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 13:20	AP VIALS

1005018

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1005018-04 DP31-03348 [Solid] Sampled 04/30/2010 11:30 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 13:30	AP VIALS
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 13:30	AP VIALS
SW8015B	SGC_DRO_8015B_3546	05/24/2010 14:00	20	05/14/2010 13:30	+MO
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:30	
SW6010B	MET_ICP_LOW6010B_FULL	05/24/2010 14:00	20	10/27/2010 13:30	soil TAL + Mo
SW7471A	MET_7471A_MERCURY	05/24/2010 14:00	20	05/28/2010 13:30	
1005018-05 DP30-07276 [Solid] Sampled 04/30/2010 12:25 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 14:25	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 14:25	
1005018-06 DP30-07277 [Solid] Sampled 04/30/2010 12:30 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 14:30	
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 14:30	
1005018-07 DP30-07278 [Solid] Sampled 04/30/2010 12:32 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 14:32	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 14:32	
1005018-08 DP30-07279 [Solid] Sampled 04/30/2010 12:37 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 14:37	
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 14:37	
1005018-09 DP31-07280 [Solid] Sampled 04/30/2010 11:10 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 13:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:10	
1005018-10 DP31-07281 [Solid] Sampled 04/30/2010 11:15 Pacific					**QSM4.1**
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:15	
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 13:15	
1005018-11 DP31-07282 [Solid] Sampled 04/30/2010 11:14 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 13:14	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:14	
1005018-12 DP31-07283 [Solid] Sampled 04/30/2010 11:16 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 13:16	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:16	

1005018

Empirical Laboratories, LLC

Client: CH2M Hill, Inc. **Project Manager:** Sonya Gordon
Project: Alameda Point CTO-FZN0 **Project Number:** CH2_Alameda

Method	Test Code	Due	TAT	Expires	Comments
1005018-13 DP31-57280 [Solid] Sampled 04/30/2010 11:10 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3546_LOW	05/24/2010 14:00	20	05/14/2010 13:10	
SM2540B	WC_PERCENT_SOLIDS_2540B	05/24/2010 14:00	20	05/07/2010 13:10	
1005018-14 DP30-03582 [Water] Sampled 04/30/2010 15:00 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 17:00	
SW8270C	SMS_PAH_8270C_3510_LOW	05/24/2010 14:00	20	05/07/2010 17:00	
SW8015B	SGC_DRO_8015B_3510	05/24/2010 14:00	20	05/07/2010 17:00	+MO
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 17:00	
1005018-15 DP30-03583 [Water] Sampled 04/30/2010 15:20 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 17:20	
SW8015B	SGC_DRO_8015B_3510	05/24/2010 14:00	20	05/07/2010 17:20	+MO
SW8270C	SMS_PAH_8270C_3510_LOW	05/24/2010 14:00	20	05/07/2010 17:20	
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 17:20	
1005018-16 DP31-03584 [Water] Sampled 04/30/2010 14:00 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 16:00	
SW8015B	SGC_DRO_8015B_3510	05/24/2010 14:00	20	05/07/2010 16:00	+MO
SW8270C	SMS_PAH_8270C_3510_LOW	05/24/2010 14:00	20	05/07/2010 16:00	
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 16:00	
1005018-17 DP31-03585 [Water] Sampled 04/30/2010 13:30 Pacific					**QSM4.1**
SW8270C	SMS_PAH_8270C_3510_LOW	05/24/2010 14:00	20	05/07/2010 15:30	
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 15:30	
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 15:30	
SW8015B	SGC_DRO_8015B_3510	05/24/2010 14:00	20	05/07/2010 15:30	+MO
1005018-18 EB-129 [Water] Sampled 04/30/2010 07:30 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 09:30	
SW7470A	MET_7470_MERCURY	05/24/2010 14:00	20	05/28/2010 09:30	
SW6010B	MET_ICP_6010B_FULL	05/24/2010 14:00	20	10/27/2010 09:30	water TAL + Mo
SW8015B	SGC_DRO_8015B_3510	05/24/2010 14:00	20	05/07/2010 09:30	+MO
SW8270C	SMS_PAH_8270C_3510_LOW	05/24/2010 14:00	20	05/07/2010 09:30	
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 09:30	
1005018-19 TB-129 [Water] Sampled 04/30/2010 07:30 Pacific					**QSM4.1**
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 09:30	
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 09:30	

1005018

Empirical Laboratories, LLC

Client:	**CH2M Hill, Inc.**	**Project Manager:**	**Sonya Gordon**
Project:	**Alameda Point CTO-FZN0**	**Project Number:**	**CH2_Alameda**

Method	Test Code	Due	TAT	Expires	Comments
1005018-20 EB-329 [Water] Sampled 04/30/2010 08:15 Pacific					**QSM4.1**
SW8015B	SGC_DRO_8015B_3510	05/24/2010 14:00	20	05/07/2010 10:15	+MO
SW8270C	SMS_PAH_8270C_3510_LOW	05/24/2010 14:00	20	05/07/2010 10:15	
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 10:15	
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 10:15	
1005018-21 TB-329 [Water] Sampled 04/30/2010 08:15 Pacific					**QSM4.1**
SW8015B	VGC_GRO_8015B	05/24/2010 14:00	20	05/14/2010 10:15	
SW8260B	VOC_8260B_AP9	05/24/2010 14:00	20	05/14/2010 10:15	

Reviewed By

Date

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 3:07:52 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010p

	Container:	3 x 40 ml VOA	1 x 40 ml VOA				
	Preservatives:	2XH2O, 1XMeOH, 4°C	MeOH				
	Filtered:	NA	NA				
	Holding Time:	48HR	48HR				
		VOCs (8260B/624)	TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
	DATE	TIME	Matrix				
DP30-03344 ✓	4/30/2010	13:20	Soil	X	X	1005018-01	4	
DP30-03345 ✓	4/30/2010	13:25	Soil	X	X	-02	4	
DP31-03347 ✓	4/30/2010	11:20	Soil	X	X	-03	4	
DP31-03348 ✓	4/30/2010	11:30	Soil	X	X	-04	4	
						TOTAL NUMBER OF CONTAINERS	16	

	Signatures	Date/Time
Approved by		
Sampled by	James Frank	4/30/10 1550
Relinquished by		
Received by		
Relinquished by	Anthet	5/1/10 11:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889727
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 4:01:09 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-SOIL
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010s

	Container:	4oz soil jar	Share 4oz jar	4oz soil jar		
	Preservatives:	4°C	4°C	4°C		
	Filtered:	NA	NA	NA		
	Holding Time:	14	14	28		
		PAHs (SW8270Sim)	TPH-Extractable (8015B-E)	TAL Metals (6010B/7470A)	Number of Containers	COMMENTS
DP30-03344 ✓	4/30/2010 13:20 Soil		X	X	2	1005018-01
DP30-03345 ✓	4/30/2010 13:25 Soil		X	X	2	-02
DP30-07276 ✓	4/30/2010 12:25 Soil	X			1	-05
DP30-07277 ✓	4/30/2010 12:30 Soil	X			1	-06
DP30-07278 ✓	4/30/2010 12:32 Soil	X			1	-07
DP30-07279 ✓	4/30/2010 12:37 Soil	X			1	-08
DP31-03347 ✓	4/30/2010 11:20 Soil		X	X	2	-03
DP31-03348 ✓	4/30/2010 11:30 Soil		X	X	2	-04
DP31-07280 ✓	4/30/2010 11:10 Soil	X			1	-09
DP31-07281 ✓	4/30/2010 11:15 Soil	X			1	-10
DP31-07282 ✓	4/30/2010 11:14 Soil	X			1	-11
DP31-07283 ✓	4/30/2010 11:16 Soil	X			1	-12
DP31-57280 ✓	4/30/2010 11:10 Soil	X			1	-13
					17	TOTAL NUMBER OF CONTAINERS

	Signatures	Date/Time
Approved by		
Sampled by		4/30/10 1600
Relinquished by		
Received by		
Relinquished by		
Received by		5/1/10 11:00

2.6°C

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889827
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 4:17:30 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-FED1A-GW
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010w2

	Container:	3 x 40 ml VOA	2 x 40 ml VOA	2 x 1L Amber	2 x 1L Amber			
	Preservatives:	HCl	HCl	4°C	4°C			
	Filtered:	NA	NA	NA	NA			
	Holding Time:	14	14	7	7			
		VOCs (8260B)	TPH-Purgable (SW8015B)	TPH-Extractable (8015B-E)	PAHs (SW8270Sim)		Number of Containers	COMMENTS
DP30-03582	4/30/2010 15:00 Water	x ✓	x ✓	x ✓	x ✓	1005018 -14	9	
DP30-03583	4/30/2010 15:20 Water	x ✓	x ✓	x ✓	x ✓	-15	9	
DP31-03584	4/30/2010 14:00 Water	x ✓	x ✓	x ✓	x ✓	-16	9	
DP31-03585	4/30/2010 13:30 Water	x ✓	x ✓	x ✓	x ✓	-17	9	
						TOTAL NUMBER OF CONTAINERS	36	

	Signatures	Date/Time
Approved by		
Sampled by	[signature]	4/30/10
Relinquished by		1600
Received by		
Relinquished by	[signature]	5/1/10
Received by		11:06

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889827
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 3:14:48 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA	Container: 2 x 40 ml VOA		Number of Containers	COMMENTS
				Preservatives: HCl	Preservatives: HCl			
				Filtered: NA	Filtered: NA			
				Holding Time: 14	Holding Time: 14			
				VOCs (8260B)	TPH-Purgable (SW8015B)			
EB-129	4/30/2010	7:30	Water	X	X	1005018-18	5	
TB-129	4/30/2010	7:30	Water	X	X	-19	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by	Tamara Jonte	4/30/10
Relinquished by		1530
Received by		
Relinquished by		
Received by		5/1/10 11:00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889727
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.60C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 9:03:16 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM1
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010w

	Container:	2 x 1L Amber	2 x 1L Amber	1 x 250 ml Poly			
	Preservatives:	4°C	4°C	HNO4			
	Filtered:	NA	NA	NA			
	Holding Time:	7	7	28			
		TPH-Extractable (8015B-E)	PAHs (SW8270Sim)	TAL Metals (6010B/7470A)		Number of Containers	COMMENTS
EB-129	4/30/2010 7:30 Water	2x	2x	1 x	1005018-18 5	1	
					TOTAL NUMBER OF CONTAINERS 5	1	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	Tamara Jank	4/30/10 0900
Received by		
Relinquished by		
Received by		5/1/10 11.00

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889727
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 3:15:56 PM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010p

	DATE	TIME	Matrix	Container: 3 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — VOCs (8260B)	Container: 2 x 40 ml VOA / Preservatives: HCl / Filtered: NA / Holding Time: 14 — TPH-Purgable (SW8015B)		Number of Containers	COMMENTS
EB-329	4/30/2010	8:15	Water	X	X	1005018-20	5	
TB-329	4/30/2010	8:15	Water	X	X	-21	5	
						TOTAL NUMBER OF CONTAINERS	10	

	Signatures	Date/Time
Approved by		
Sampled by		
Relinquished by	[signature]	4/30/10 1550
Received by		
Relinquished by	[signature]	5/1/10 11:00
Received by		

Shipping Details
Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889727
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:
Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

2.6°C

CH2MHILL

CHAIN OF CUSTODY RECORD

4/30/2010 9:04:09 AM

Project Name AlamedaPoint
Location
Project Number 383512.FI.DP
Project Manager Jamie Eby
Sample Manager

Task Order
Project 2010-ALAMEDAPOINT-FIELDQC-TEAM3
Turnaround Time 21 Days
Shipping Date: 4/30/2010
COC Number: 43010w

	DATE	TIME	Matrix	Container:	2 x 1L Amber	2 x 1L Amber		Number of Containers	COMMENTS
				Preservatives:	4°C	4°C			
				Filtered:	NA	NA			
				Holding Time:	7	7			
					TPH-Extractable (8015B-E)	PAHs (SW8270Sim)			
EB-329	4/30/2010	8:15	Water		2x	2x	100508-20	4 ~~6~~	
							TOTAL NUMBER OF CONTAINERS	4 ~~6~~	

	Signatures	Date/Time
Approved by		
Sampled by	Jamie Eby	4/30/10 0900
Relinquished by		
Received by		
Relinquished by		
Received by		5/1/10 11:00

2.6°C

Shipping Details

Method of Shipment: FedEx
On Ice: yes / no
Airbill No: 825469889727
Lab Name: Empirical Laboratories, LLC
Lab Phone: (615) 345-1115

ATTN:

Sample Custody
and
Janice Shilling

Special Instructions:

Report Copy to

WS 5/11/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1005018 Number of Coolers: 1 of 3 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 5/01/10 11:00 Date cooler(s) opened: 5/01/10

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 3065

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.3 °C

Dates samples were logged-in: 5/7/10

9. Initial this form to acknowledge login of sample(s): (Name): Will Schaad (Initial): WS

10. Were all bottle lids intact and sealed tightly?	(Yes)	No	N/A
11. Did all bottles arrive unbroken?	(Yes)	No	N/A
12. Was all required bottle label information complete?	(Yes)	No	N/A
13. Did all bottle labels agree with custody papers?	(Yes)	No	N/A
14. Were correct containers used for the analyses indicated?	(Yes)	No	N/A
15. Were preservative levels correct in all applicable sample containers?	(Yes)	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	(N/A)
17. Was sufficient amount of sample sent for the analyses required?	(Yes)	No	N/A
18. Was headspace present in any included VOA vials?	Yes	(No)	N/A

pH < 2 for metals (H_2O)

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

ws 5/1/10

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 100500 Number of Coolers: 2 of 3 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: 5/01/10 11:00 Date cooler(s) opened: 5/01/10

Opened By (print): Will Schwab (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 9727

2. Were custody seals on outside of cooler(s)? ..... (Yes) No
How many: 1 Seal date: 4/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A

4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A

5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A

6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A

7. Was project identifiable from custody papers? ..... (Yes) No N/A

8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 1.1 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A

11. Did all bottles arrive unbroken? ..... Yes No N/A

12. Was all required bottle label information complete? ..... Yes No N/A

13. Did all bottle labels agree with custody papers? ..... Yes No N/A

14. Were correct containers used for the analyses indicated? ..... Yes No N/A

15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A

16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A

17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A

18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 4

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

WS 5/1/10

LIMS Number: 1005018 Number of Coolers: 3 of 3 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **5/01/10** **11:00** Date cooler(s) opened: **5/01/10**

Opened By (print): Will Schaal (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 3076

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 1 Seal date: 4/30/10 Seal Initials: ?

3. Were custody seals unbroken and intact at the date and time of arrival?	(Yes)	No	N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler?	(Yes)	No	N/A
5. Were custody papers filled out properly (ink, signed, etc.)?	(Yes)	No	N/A
6. Did you sign custody papers in the appropriate place for acceptance?	(Yes)	No	N/A
7. Was project identifiable from custody papers?	(Yes)	No	N/A
8. If required, was enough ice present in the cooler(s)?	(Yes)	No	N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____

10. Were all bottle lids intact and sealed tightly?	Yes	No	N/A
11. Did all bottles arrive unbroken?	Yes	No	N/A
12. Was all required bottle label information complete?	Yes	No	N/A
13. Did all bottle labels agree with custody papers?	Yes	No	N/A
14. Were correct containers used for the analyses indicated?	Yes	No	N/A
15. Were preservative levels correct in all applicable sample containers?	Yes	No	N/A
16. Was residual chlorine present in any applicable sample containers?	Yes	No	N/A
17. Was sufficient amount of sample sent for the analyses required?	Yes	No	N/A
18. Was headspace present in any included VOA vials?	Yes	No	N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

See page 1 of 4

EMPIRICAL LABORATORIES
COOLER RECEIPT FORM

LIMS Number: 1005018 Number of Coolers: 4 of 4

Client: CH2M Hill Project: Alameda Point

Date/Time Received: **5/01/10** **11:00** Date cooler(s) opened: **5/01/10**

Opened By (print): Will Schaad (signature): [signature]

Circle response below as appropriate

1. How did the samples arrive?: FedEx UPS DHL Hand Delivered
EL Courier Other: _____

If applicable, enter airbill number here: 3054

2. Were custody seals on outside of cooler(s)? ..... (Yes) No

How many: 2 Seal date: 4/30/10 Seal Initials: TF

3. Were custody seals unbroken and intact at the date and time of arrival? ..... (Yes) No N/A
4. Were custody papers sealed in a plastic bag included in the sample cooler? ..... (Yes) No N/A
5. Were custody papers filled out properly (ink, signed, etc.)? ..... (Yes) No N/A
6. Did you sign custody papers in the appropriate place for acceptance? ..... (Yes) No N/A
7. Was project identifiable from custody papers? ..... (Yes) No N/A
8. If required, was enough ice present in the cooler(s)? ..... (Yes) No N/A

Type of Coolant: (WET) DRY BLUE NONE Temperature of Samples upon Receipt: 2.6 °C

~~Dates samples were logged-in:~~

9. Initial this form to acknowledge login of sample(s): (Name): _____ (Initial): _____
10. Were all bottle lids intact and sealed tightly? ..... Yes No N/A
11. Did all bottles arrive unbroken? ..... Yes No N/A
12. Was all required bottle label information complete? ..... Yes No N/A
13. Did all bottle labels agree with custody papers? ..... Yes No N/A
14. Were correct containers used for the analyses indicated? ..... Yes No N/A
15. Were preservative levels correct in all applicable sample containers? ..... Yes No N/A
16. Was residual chlorine present in any applicable sample containers? ..... Yes No N/A
17. Was sufficient amount of sample sent for the analyses required? ..... Yes No N/A
18. Was headspace present in any included VOA vials? ..... Yes No N/A

If Non-Conformance issues were present, list by sample ID: _____

_____ CAR#: _____

see Page 1 of 4

Attachment E4
Photographs

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Photograph 1: Surveying at DP32

Photograph 2: WD-259 Sampling location AP1A259-DP02 being surveyed at ≈68 feet along WD-259 trench.

Photograph 3: Pressure washing trench at location WD-259.

Photograph 4: WD-259 Trench. Crack observed along bottom at +57 feet.

Photograph 5: WD-259 trench. Bottom crack at +59 most obvious crack, sub mm scale.

Photograph 6: WD-259 trench. Proposed location of APAW259-DP02. At +67 feet crack observed in trench.

Photograph 7: WD-259 Trench Close-up of sidewall =67 sidewall crack meets bottom crack

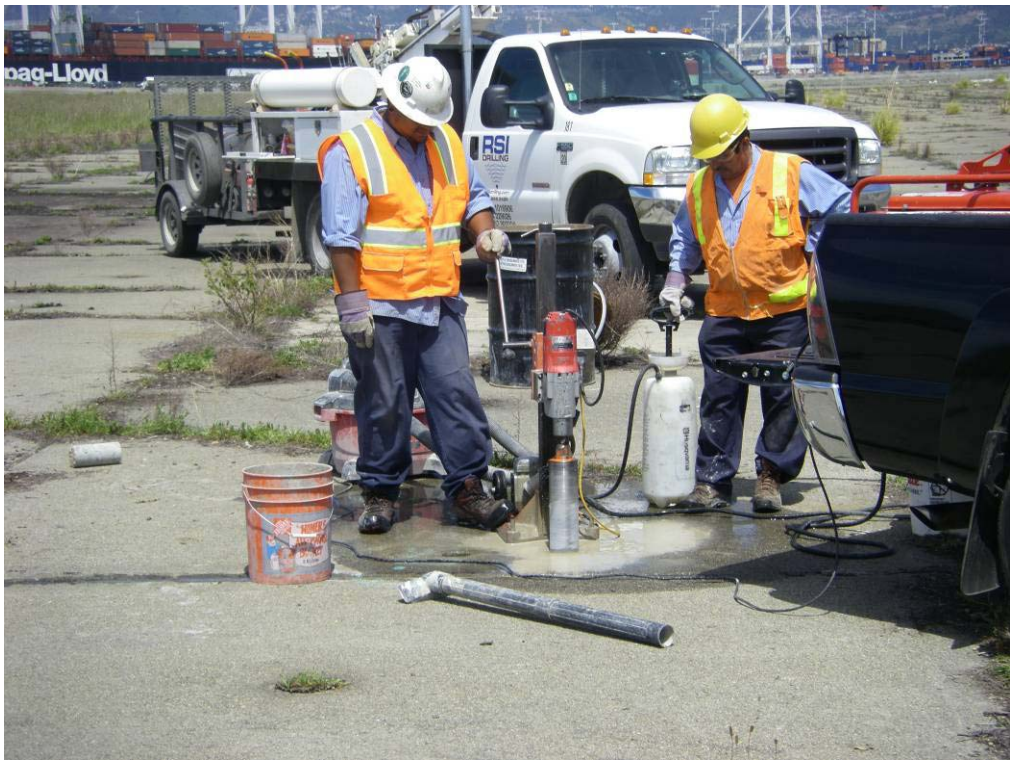
Photograph 8: WD-259 Trench West sidewall at +67 feet. Sidewall stress crack meets bottom crack at +67.

Photograph 9: WD-259 trench. Crack along bottom of trench at +70 ft.

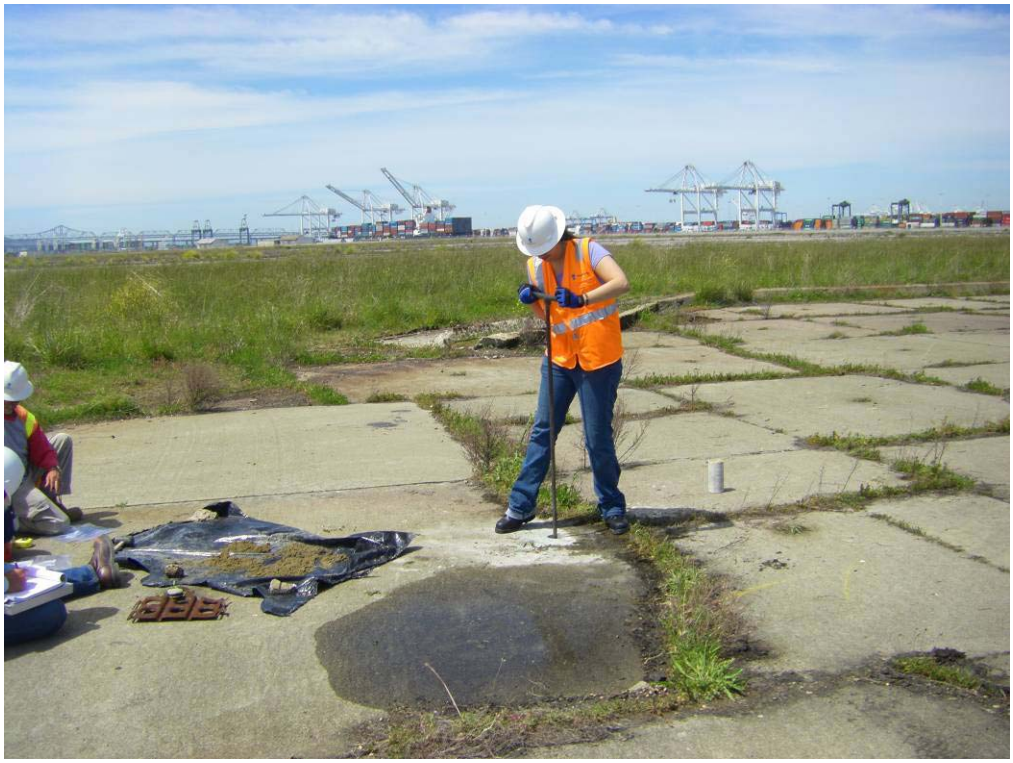
Photograph 10: WD-259 Trench Several mm scale cracks between +73 and +75 ft

Photograph 11: WD-259 Trench End of trench at +97'8", crack sub mm scale, 8" end plug

Photograph 12: WD-259 Trench Close-up of 8" plug at north end of WD-259 Trench.



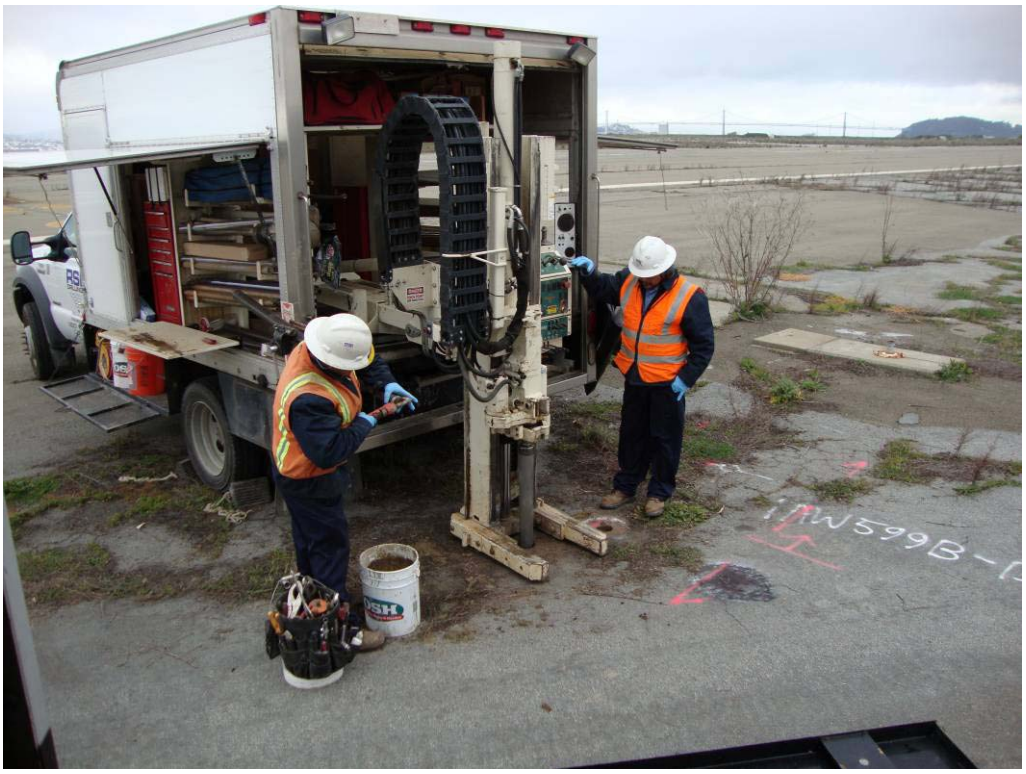
Photograph 13: Concrete coring at AP1AAPS-DP80



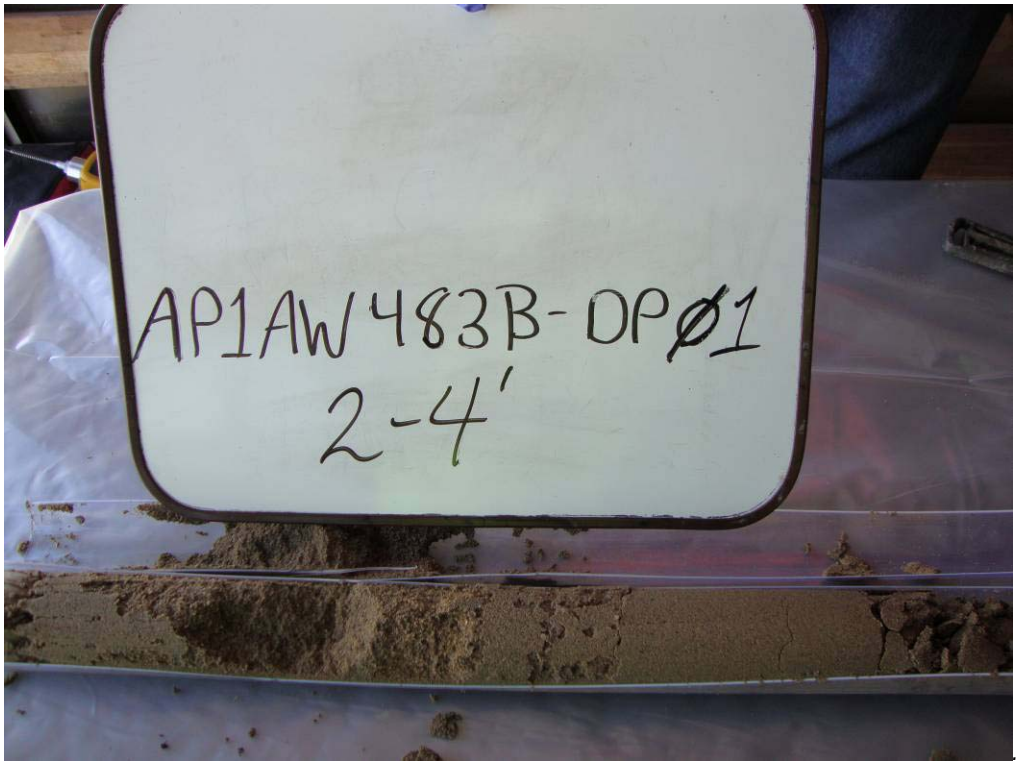
Photograph 14: Hand auger AP1AAPS-DP12, Stepout location J.

Photograph 15: Hand auguring boring AP1A259-DP03

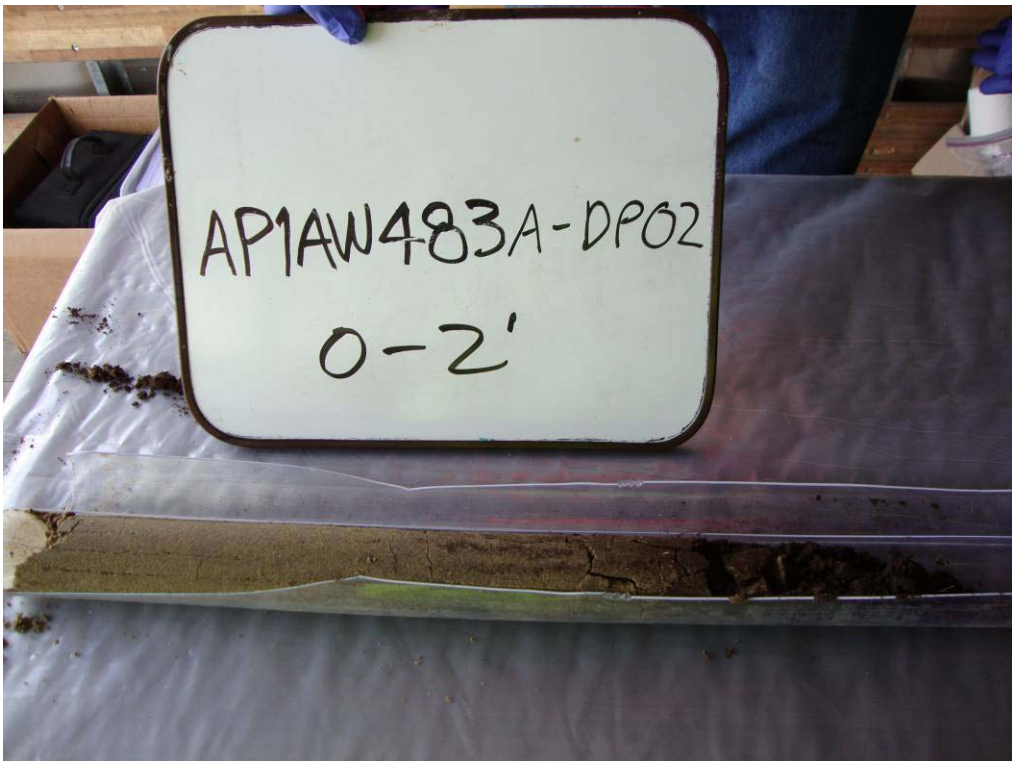
Photograph 16: Two Co-located Cores completed at AP1A259-DP02. One location is for hand augering to 5 feet and the second location is for sampling.



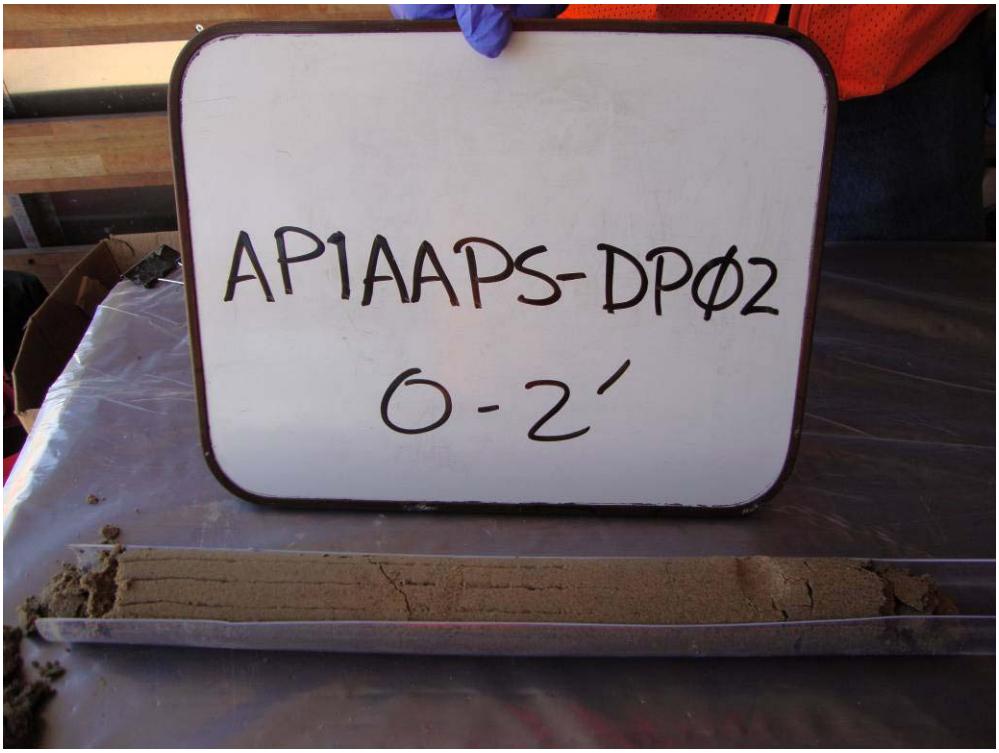
Photograph 17: Drillers advancing drill rods at location AP1AW599B-DP01.



Photograph 18: Boring AP1AW483B–DP01 2-4 ft bgs soil sample.

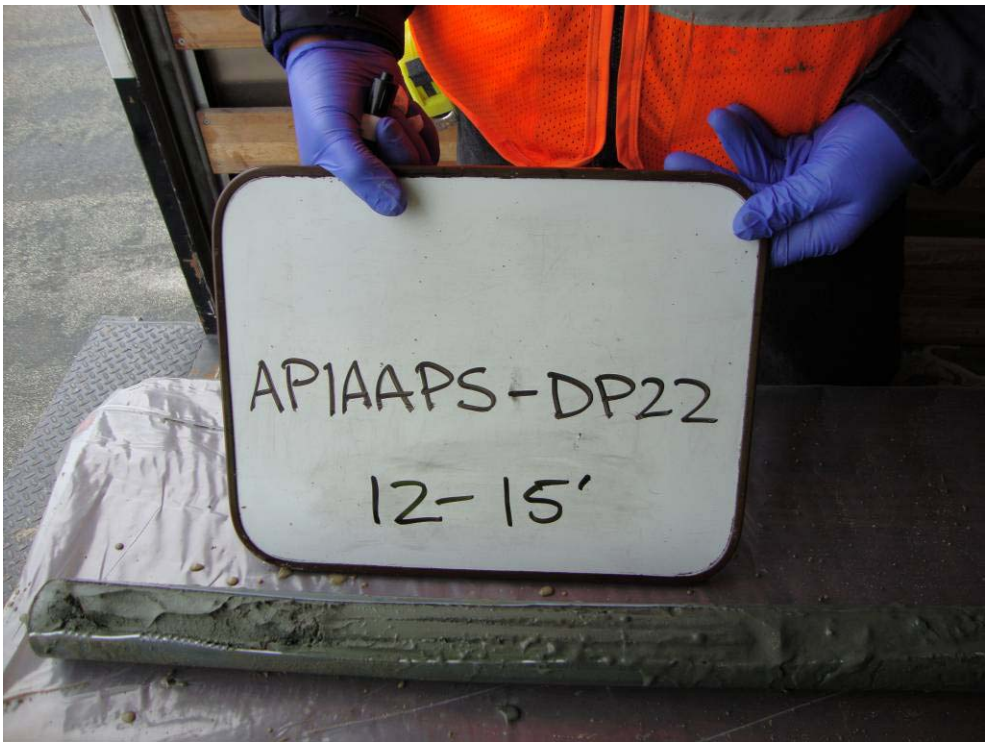


Photograph 19: Boring AP1AW483A-DP02 0-2 feet bgs soil sample.



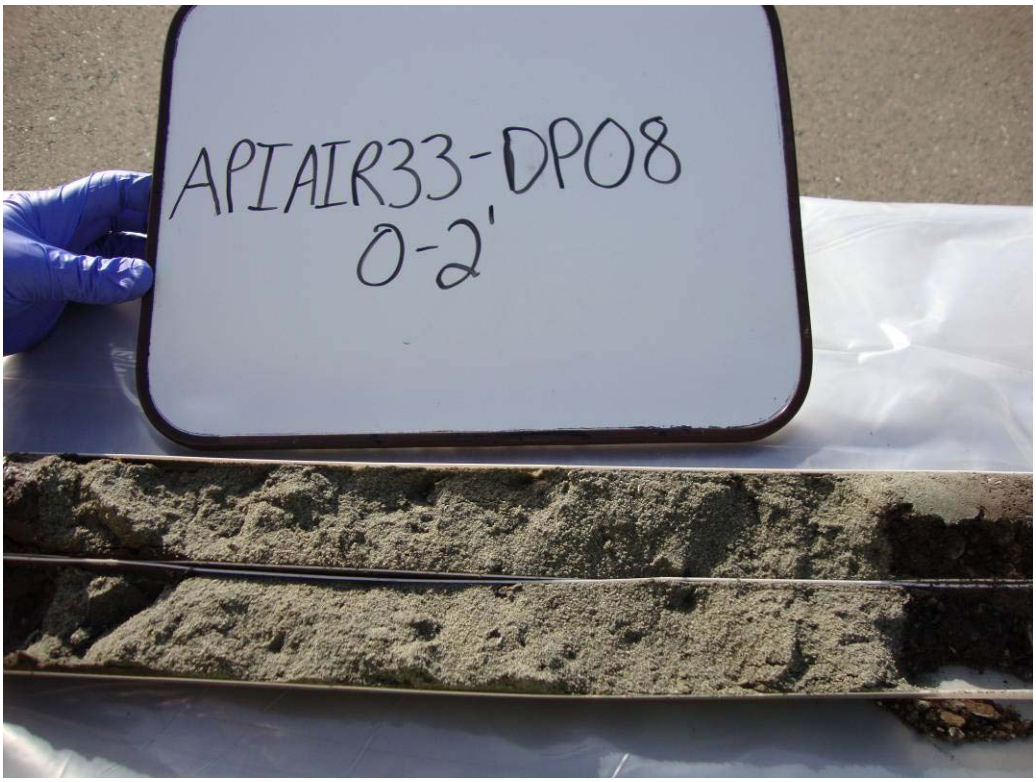
Photograph 20: Boring at AP1AAPS-DP02 0-2 feet bgs soil sample.

Photograph 21: Boring at AP1AAPS-DP10 0-2 feet bgs soil sample.



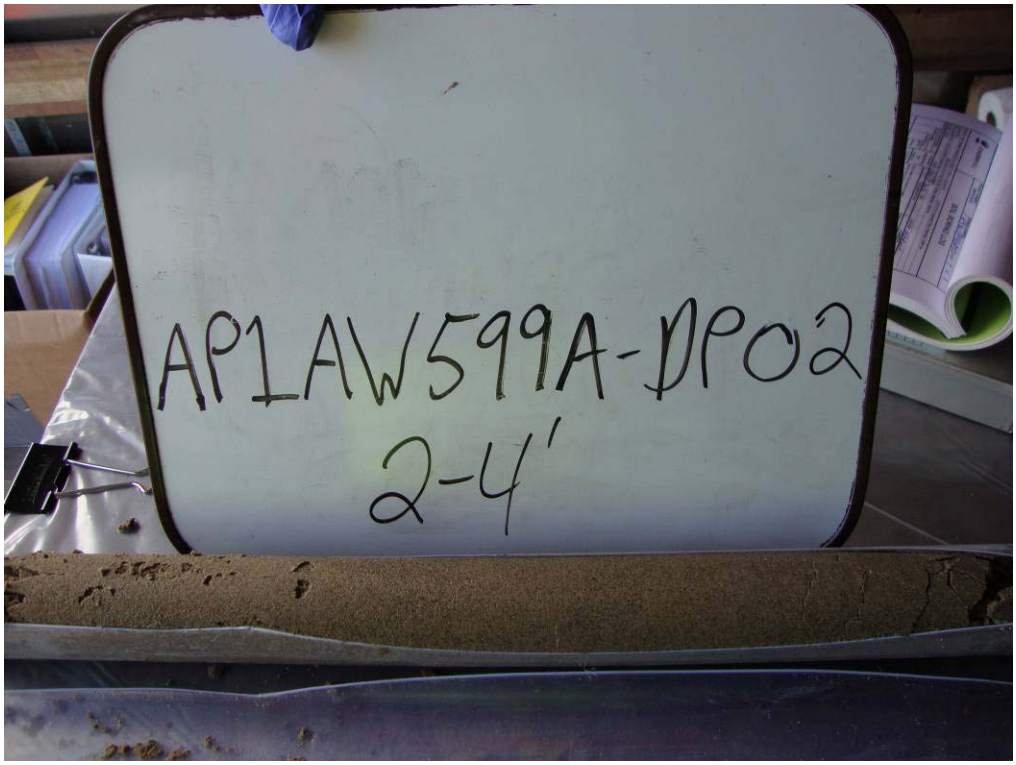
Photograph 22: Boring at AP1AAPS-DP22 12-15 feet bgs soil sample.

Photograph 23: AP1AAPS-DP82 0-4 feet bgs soil sample.

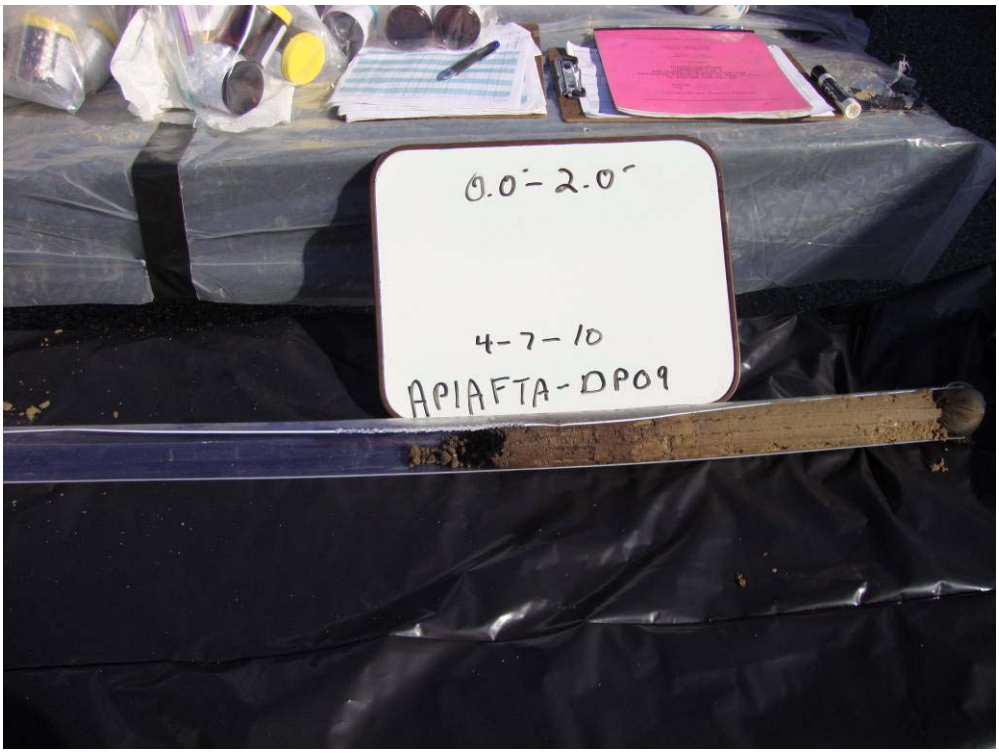


Photograph 24: Boring AP1AIR33-DP08 0-2 feet bgs soil sample.

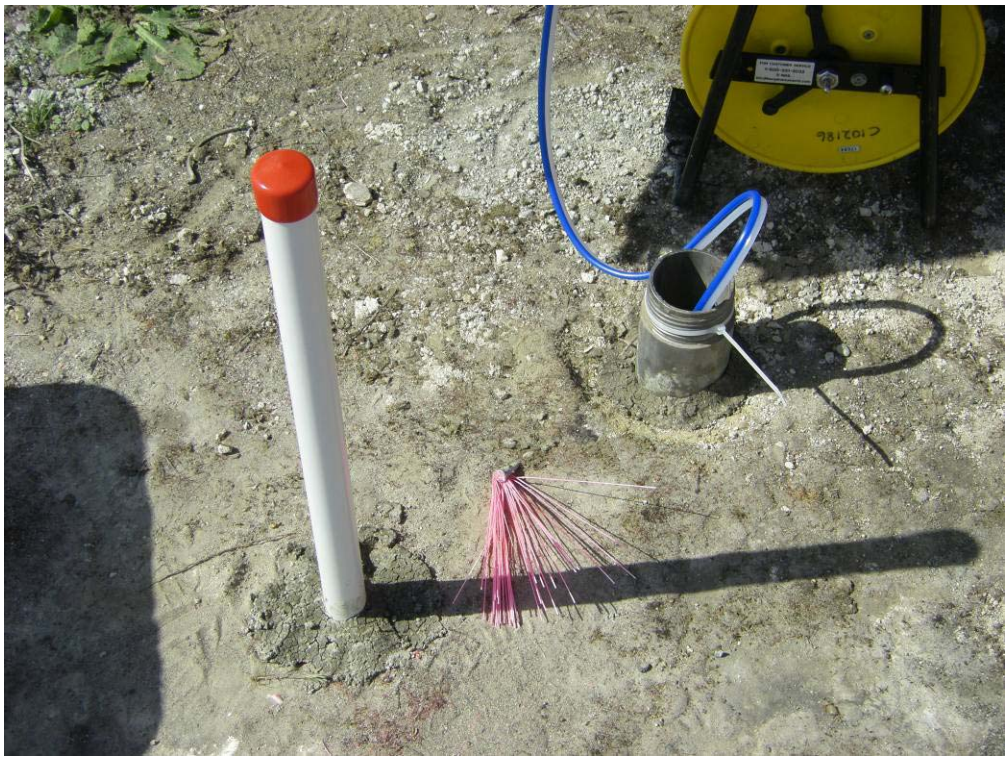
Photograph 25: Boring AP1AW599A-DP01 4-6 feet bgs soil sample.



Photograph 26: AP1AW599A-DP02 2-4 feet bgs soil sample.



Photograph 27: AP1AAFTA-DP09 0-2 feet bgs soil sample.



Photograph 28: Discrete groundwater sampling points AP1467B-DP02. Shallow point set at 7 feet bgs (red-capped PVC). Deeper point with drill casing and PVC set at 15 feet bgs.

Photograph 29: Building 100 PCB sample locations.

Photograph 30: Building 100 PCB sample locations.

Photograph 31: Building 100 PCB sample locations; in front door, looking west.

Photograph 32: Building 100 PCB sample locations; adjacent room, looking south.

Photograph 33: Building 100 PCB sample locations; adjacent room, looking north.

Photograph 34: Building 100 PCB sampling close-up.

Photograph 35: Site walk in Least Turn Area. Concrete (red) structure observed in Area.

Photograph 36: Site walk in Least Turn Area. Photographs of electric vault in Least Turn Area.

Photograph 37: Site walk in Least Turn Area. Close-up photograph of electric vault in Least Turn Area.

Photograph 38: Site walk in Least Turn Area. Electric vault near red concrete block in Least Turn Area.

Photograph 39: Site walk in Least Turn Area. Close-up of electric vault near red concrete block in LT Area.

Photograph 40: Resurvey at moved location AP1407B-DP02.

Attachment E5
Disposition of Investigation-Derived Waste

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NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	CA2170023236		800-575-1055	925021-052110 ~1

GENERATOR

5. Generator's Name and Mailing Address
US NAVY BRAC PMO-W (Alameda Point)
1 Ave of the Palms, Suite 161
San Francisco, CA 94130-1307 USA

Generator's Site Address (if different than mailing address)
2231 Orion St.
Alameda, CA 94501 USA

Generator's Phone: 415-743-4713

6. Transporter 1 Company Name: DILLARD ENVIRONMENTAL SERVICES — U.S. EPA ID Number: CAD982523435

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address
[illegible]
1105 Airport Rd
Rio Vista, CA 94571
Facility's Phone: 530-753-1629 — U.S. EPA ID Number

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non Hazardous Water (rinse water)	01	TT	5,000	G	
	2.					
	3.					
	4.					

13. Special Handling Instructions and Additional Information
DES Job #925-021
Profile # - N/A
Trucking # A-7315 VTL-03

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Douglas Delong — Signature — Month 7 Day 6 Year 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Richard R. Cohen — Signature — Month 7 Day 8 Year 10

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a

Printed/Typed Name: Matt Belcher — Signature — Month 7 Day 8 Year 10

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
CA2170023235	1	800-575-1065	926721-052110 - 2

GENERATOR

5. Generator's Name and Mailing Address

US NAVY BRAC PMO-W (Alameda Point)
1 Ave of the Palms, Suite 161
San Francisco, CA 94130-1307 USA

Generator's Phone: 415-743-4713

Generator's Site Address (if different than mailing address)

2231 Orion St.
Alameda, CA 94501 USA

6. Transporter 1 Company Name — U.S. EPA ID Number

DILLARD ENVIRONMENTAL SERVICES — CAD982523433

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Instrat Inc
1105 Airport Rd
Rio Vista, CA 94571

Facility's Phone: 530-753-1829

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous Water (Rinse Water)	01	TT	3900	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

OES Job #925-021
Profile # N/A
Tracking # A-7312 VTL-2

14. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: Donna Tolent — Signature — Month: 7 Day: 8 Year: 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Richard K. Clayton — Signature — Month: 7 Day: 8 Year: 10

Transporter 2 Printed/Typed Name — Signature — Month — Day — Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month — Day — Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: Robert Bolton — Signature — Month: 7 Day: 9 Year: 10

NON-HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
	CA2170023235		800-575-1055	925021-052110

GENERATOR

5. Generator's Name and Mailing Address

US NAVY BRAC PMO-W (Alameda Point)
1 Ave of the Palms, Suite 161
San Francisco, CA 94130-1807 USA
Generator's Phone: [illegible]

Generator's Site Address (if different than mailing address)

2231 Orion St.
Alameda, CA 94501 USA

6. Transporter 1 Company Name — U.S. EPA ID Number

DILLARD ENVIRONMENTAL SERVICES — CAD982523433

7. Transporter 2 Company Name — U.S. EPA ID Number

8. Designated Facility Name and Site Address — U.S. EPA ID Number

Cleanharbors - Buttonwillow
2500 West Lokern Rd.
Buttonwillow, CA 93206 USA
Facility's Phone: 661-762-6000

CAD980675275

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
1.	Non Hazardous Sludge	03	DM	150	G	
2.						
3.						
4.						

13. Special Handling Instructions and Additional Information

DES Job #925-021
Profile # - CH440393 - 3X55gDM
SO# DJ3004458 Trucking # A 7313

8K45039

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: K Douglas Delong — Signature — Month 7 Day 8 Year 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:

Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Richard K. Craighead — Signature — Month 7 Day 8 Year 10

Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

17. Discrepancy

17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

17b. Alternate Facility (or Generator) — U.S. EPA ID Number

Facility's Phone:

17c. Signature of Alternate Facility (or Generator) — Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in item 17a

Printed/Typed Name: Charles Terry — Signature — Month 08 Day 09 Year 10

NON-HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Waste Tracking Number
CA2170023236		800-675-1066	925021-062110 3

GENERATOR

5. Generator's Name and Mailing Address
US NAVY BRAC PMO-W (Alameda Point)
1 Ave of the Palms, Suite 161
San Francisco, CA 94130-1807 USA
Generator's Phone: 415-743-4713

Generator's Site Address (if different than mailing address)
2231 Orion St.
Alameda, CA 94501 USA

6. Transporter 1 Company Name
DILLARD ENVIRONMENTAL SERVICES
U.S. EPA ID Number
CAD982523433

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clearwaters - Buttonwillow
2500 West Lokern Rd.
Buttonwillow, CA 93206 USA
U.S. EPA ID Number
CAD980675276
Facility's Phone: 661-762-6200

	9. Waste Shipping Name and Description	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	
	1. Non Hazardous Soil (soil cuttings)	1	CM	20	Y	
	2. Non Hazardous Debris (PPE)	1	CM	20	Y	
	3.					
	4.					

13. Special Handling Instructions and Additional Information
DES Job #925-021
Profile #- CH440394B (line 9a)
Profile #- CH440395B (line 9b)
Bin 00274/0 SO# DJ 2986904
Bin 00757 SO# DJ 2986974
TRACK A-7314

14. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and governmental regulations.

Generator's/Offeror's Printed/Typed Name: DOUGLAS DELONG
Signature:
Month 7 Day 8 Year 10

INT'L

15. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter Signature (for exports only): Date leaving U.S.:

TRANSPORTER

16. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Richard K. Crayhead
Signature:
Month 7 Day 8 Year 10

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

17. Discrepancy
17a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
17b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
17c. Signature of Alternate Facility (or Generator)
Month Day Year

18. Designated Facility Owner or Operator: Certification of receipt of materials covered by the manifest except as noted in Item 17a
Printed/Typed Name: Ronald E Johns
Signature:
Month 07 Day 23 Year 10

Appendix F
2010 Aircraft Parking and Staining Evaluation

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Contents

Acronyms and Abbreviations ..... F-v

Appendix F: 2010 Aircraft Parking and Staining Evaluation F-1

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F1.1 Aerial Photograph and Data Review F-1
F1.2 Site Reconnaissance F-1
F1.3 Sample Location Selection and Analyses F-1
F2 Results of Evaluation F-2
F2.1 Volatile Organic Compounds F-2
F2.2 Metals F-2
F2.3 Polycyclic Aromatic Hydrocarbons F-3
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Attachments

F-1 Aerial Photograph Review
Figure F1-1: Potential Aircraft Parking and Runway Staining – 1947
Figure F1-2: Potential Aircraft Parking and Runway Staining – 1957
Figure F1-3: Potential Aircraft Parking and Runway Staining – 1963
Figure F1-4: Potential Aircraft Parking and Runway Staining – 1968
Figure F1-5: Potential Aircraft Parking and Runway Staining – 1969
Figure F1-6: Potential Aircraft Parking and Runway Staining – 1988
Figure F1-7: Potential Aircraft Parking and Runway Staining – 1991
Figure F1-8: Potential Aircraft Parking and Runway Staining – 1992
Figure F1-9: Aircraft Parking and Staining Areas of Interest

F-2 Site Reconnaissance Photographs

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Acronyms and Abbreviations

µg/L	micrograms per liter
µg/kg	micrograms per kilogram
B(a)P	benzo(a)pyrene
BEI	Bechtel Environmental, Inc.
ESL	environmental screening level
FED	Federal Agency
FID	flame ionization detector
FS	Feasibility Study
FSP	Field Sampling Plan
FWBZ	First Water-Bearing Zone
MCL	maximum contaminant level
PAH	polycyclic aromatic hydrocarbon
PID	photoionization detector
TPH	total petroleum hydrocarbon
TPH-d	total petroleum hydrocarbon as diesel
TPH-e	total extractable petroleum hydrocarbon
TPH-p	total purgeable petroleum hydrocarbon
TPH-mo	total petroleum hydrocarbon as motor oil
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

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APPENDIX F

2010 Aircraft Parking and Staining Evaluation

The draft site inspection (SI) report recommended an evaluation of Aircraft Parking and Staining Areas across Transfer Parcels Federal Agency (FED)-1A, FED-2B, and FED-2C to assess whether these areas have been impacted by aircraft parking, maintenance, and washdown activities.

F1 Summary of Analytical Methods

F1.1 Aerial Photograph and Data Review

Aerial photographs taken from 1947 to 1992 were reviewed for evidence of aircraft parking maintenance and washdown activities. The aerial photographs reviewed can be found in Attachment F1. If staining was present in three of more of the aerial photographs reviewed, that area was identified as an area of interest. Based on the review of aerial photographs, 15 areas of interest were identified for further investigation. Figure F1-9 shows the 15 aircraft parking and staining areas of interest in Transfer Parcels FED-1A, FED-2A, and FED-2C. Previously collected soil and groundwater data near the areas of interest was to be analyzed; however, no sampling had been conducted in these areas of significant staining.

F1.2 Site Reconnaissance

A site walk was performed looking for current visual evidence of aircraft parking maintenance, and washdown activities in the areas identified in the aerial photograph and data review. Site reconnaissance photographs can be found in Attachment F2. No current visual evidence of aircraft parking maintenance, and washdown activities were observed.

F1.3 Sample Location Selection and Analyses

Proposed sampling locations were selected based on results of aerial photograph review and interpretation only since no current evidence of visual staining was observed during the site reconnaissance. For each selected area of aircraft parking, maintenance, and washdown activities, the number of samples in a given area was based on the density of one sample location per acre and biased towards observed surface cracking/seams. Thirty- nine sample locations were proposed throughout Transfer Parcels FED-1A and FED-2C. Seven of the 39 samples were associated with the firefighter training area evaluation (AP1AFTA-DP16, AP1AFTA-DP19, AP1AFTA-DP22, AP1AFTA-DP24, AP1AFTA-DP28, AP1AFTA-DP31, and AP1AFTA-DP32) and soil and groundwater sample results from these locations were used to assess historical aircraft parking and staining; however, sample results from these locations are discussed separately in the main text and are not addressed in this appendix. Results from the remaining 32 sample locations are discussed in this appendix. During the aerial photographs and data review, no historical evidence of aircraft parking, maintenance, and washdown activities were observed to have occurred in FED-2B; therefore, no sample location were included in this parcel.

Soil samples were collected from each borehole at specific depth intervals, or where contamination is observed or identified by field screening, which includes visual observations, olfactory observations, and flameionization/photoionization detector (FID/PID) results. In addition, soil samples were collected for polycyclic aromatic hydrocarbons (PAH) analysis from an adjacent borehole following the Alameda Point PAH collection guidelines as outlined in the *Draft Final Work Plan for PAH Background Determination and PAH-specific SIs for Alameda Point* (BEI, 2002). According to the Alameda Point PAH collection guidelines, soil from each depth interval (0 to 0.5, 0.5 to 2, 2 to 4, and 4 to 8 feet below ground surface [bgs]) at each borehole were field homogenized. Two discrete direct-push groundwater samples from the First Water Bearing Zone (FWBZ), one at the groundwater table (approximately 7 feet bgs) and one deeper sample (approximately 15 feet bgs) were collected from each of the boreholes. Soil and groundwater samples were analyzed for the following:

- Volatile organic compounds (VOCs) using United States Environmental protection Agency (USEPA) Method 8260B/624
- Metals using USEPA Method 6010B/7470A Title 22
- PAHs using USEPA Method 8270 SIM
- Total petroleum hydrocarbons (TPH)-e using USEPA Method 8015B-E
- TPH-p using USEPA Method 8015B-P

F2 Results of Evaluation

F2.1 Volatile Organic Compounds

Analysis for VOCs in soil and groundwater samples collected in Transfer Parcels FED-1A and FED-2C reported no results that exceeded the regulatory screening criteria.

F2.2 Metals

Soil Results

Analysis for metals in soil samples collected in Transfer Parcels FED-1A, FED-2B and FED-2C returned no results that exceeded the screening criteria.

Groundwater Results

Arsenic was reported at concentrations exceeding background levels in groundwater (20.27 micrograms per liter [µ/L]) and California and Federal maximum contaminant levels (MCLs) (10 µg/L). The maximum arsenic concentration was detected in AP1AAPS-DP21 Iron, manganese and vanadium were reported at concentrations exceeding background levels in groundwater, but did not have California or Federal MCLs or tap water screening levels. The maximum iron concentration reported was detected between 13 and 15 feet bgs in AP1CAPS-DP01 at 22,100 µg/L, well above the background level of 6,586 µg/L. The maximum manganese concentration reported was detected in AP1AAPS-DP22 at 3,020 µg/L, the background level is 1,741 µg/L. The maximum vanadium was detected in AP1AAPS-DP24 at 43.2 µg/L, which is almost twice the background level of 26.27 µg/L.

F2.3 Polycyclic Aromatic Hydrocarbons

Soil Results

PAHs in soil were evaluated based on a benzo(a)pyrene (B(a)P) equivalent concentration as described in Section 4.3.4., and there were no results returned in which the concentration exceeded Alameda Point–specific screening criterion for residential use of 620 micrograms per kilogram (µg/kg).

Groundwater Results

PAH concentrations in groundwater exceeded their respective environmental screening levels (ESLs) from the Petroleum Strategy Plan in several locations in the Aircraft Parking and Staining Evaluation Areas. There were seven sampling locations in the Aircraft Parking and Staining Evaluation Areas that returned levels of various PAHs compounds that exceeded ESLs. None of these various compounds have established Federal and California Modified MCLs. Three locations that had concentrations that exceeded Federal and California Modified MCLs of 0.2 µg/L for benzo(a)pyrene were AP1AAPS-DP17, AP1AAPS-DP24 and AP2CAPS-DP01. The highest of these concentrations was found in at location AP2CAPS-DP01 Transfer Parcel FED-2C at 0.296 µg/L, which was slightly greater than the MCL of 0.2 µg/L.

F2.4 Total Petroleum Hydrocarbons

Soil Results

There were exceedances of at least one form of TPH at 13 of the 37 sampling locations within the Aircraft Parking and Staining evaluation areas. The maximum concentration of TPH as diesel (TPH-d) was reported in a surface sample from AP1AAPS-DP22 at a concentration of 1,740 mg/kg, above the Petroleum Strategy Plan ESL of 83 mg/kg. The maximum concentration of TPH as motor oil (TPH-mo) was reported in a surface sample from AP1AAPS-DP27 at a concentration of 1,910 mg/kg, above the Petroleum Strategy Plan ESL of 370 mg/kg. No exceedances of TPH as gasoline were reported.

Groundwater Results

There were exceedances of at least one form of TPH at 8 of the 37 sampling locations within the Aircraft Parking and Staining Evaluation Areas. The maximum concentration of TPH as diesel was returned from APS-DP12 at 1,730 µg/L, well above the ESL from the Petroleum Strategy Plan of 100 µg/L. The maximum concentration of TPH as motor oil was reported in a sample collected between 13 and 15 feet bgs in location A1AAPS-DP01 at 546 µg/L, above the Petroleum Strategy Plan ESL of 100 µg/L. No exceedances of TPH as gasoline were reported.

F3 Evaluation Conclusions

In soil, VOCs, metals, B(a)P equivalent, and TPH-gasoline concentrations were not reported above regulatory screening criteria. TPH-d and TPH-mo were reported above the Petroleum Strategy Plan ESL of 83 mg/kg. The maximum concentration of TPH as diesel was reported in a surface sample from AP1AAPS-DP22 at a concentration of 1,740 mg/kg. The maximum concentration of TPH-mo was reported in a surface sample from AP1AAPS-DP27 at a concentration of 1,910 mg/kg. TPH was not found to be a risk driver in soil; therefore, no

further evaluation is recommended for the Aircraft Parking and Staining Evaluation Areas for soil in FED-1A, and 2C Parcels.

In groundwater, VOCs were not reported above regulatory screening criteria. Arsenic, iron, manganese, vanadium, benzo(a)pyrene, TPH-mo, and TPH-d were detected above their respective regulatory screening criteria. Arsenic was reported at concentrations exceeding background levels in groundwater (20.27 µg/L) and California and Federal MCLs (10 µg/L). Iron, manganese and vanadium were detected above their respective background levels; however, there metals do not have an established California or Federal MCL. B(a)P concentrations were reported that exceeded Federal and California Modified MCLs of 0.2 µg/L at locations AP1AAPS-DP17, AP1AAPS-DP24 and AP2CAPS-DP01. The maximum concentration of TPH -d was reported in location A1APS-DP12 at 1,730 µg/L, both well above the ESL from the Petroleum Strategy Plan of 100 µg/L. The maximum concentration of TPH -mo was reported in a sample collected between 13 and 15 feet bgs in location AP1AAPS-DP01 at 546 µg/L, above the Petroleum Strategy Plan ESL of 100 µg/L. No exceedances of TPH as gasoline (TPH-g) were reported. TPH was not found to be a risk driver in groundwater at FED-1A and 2C. Although arsenic and B(a)P were determined to be risk drivers in ground water at FED-1A, and 2C, the groundwater below these parcels should not be considered a potential drinking water source. Additional discussions regarding beneficial uses of groundwater is included in Section 2.4.3 of this SI Report. Therefore, no further evaluation is recommended for the Aircraft Parking and Staining Evaluation for groundwater in parcels FED-1A and FED-2C.

F4 References

Bechtel Environmental, Inc. (BEI). 2002. *Draft Final Work Plan for PAH Background Determination and PAH-specific SIs for Alameda Point*.

Attachment F1
Aerial Photograph Review

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N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURES F1-1 THROUGH F1-9

FOR ADDITIONAL INFORMATION, CONTACT:

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SAN DIEGO, CA 92132

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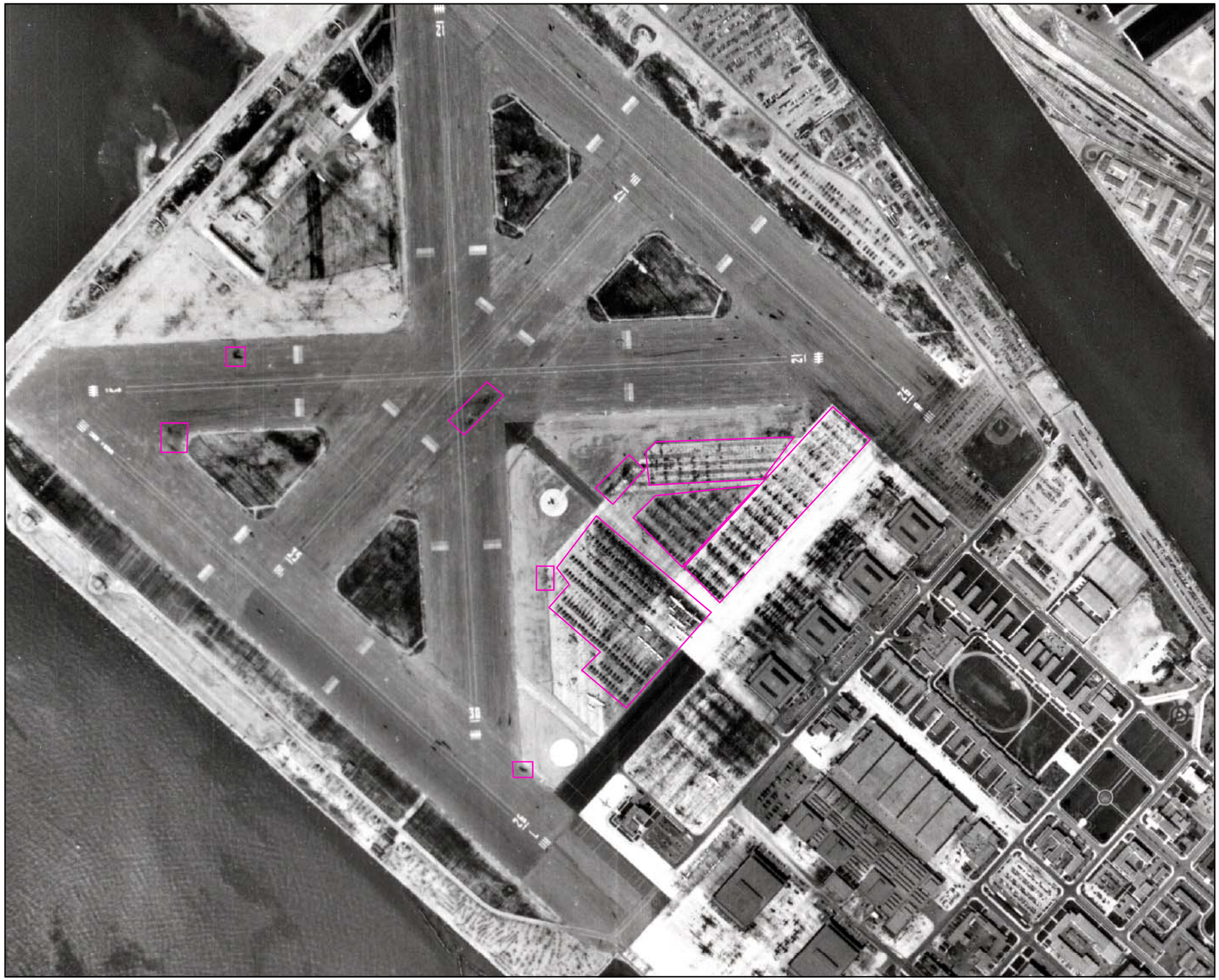
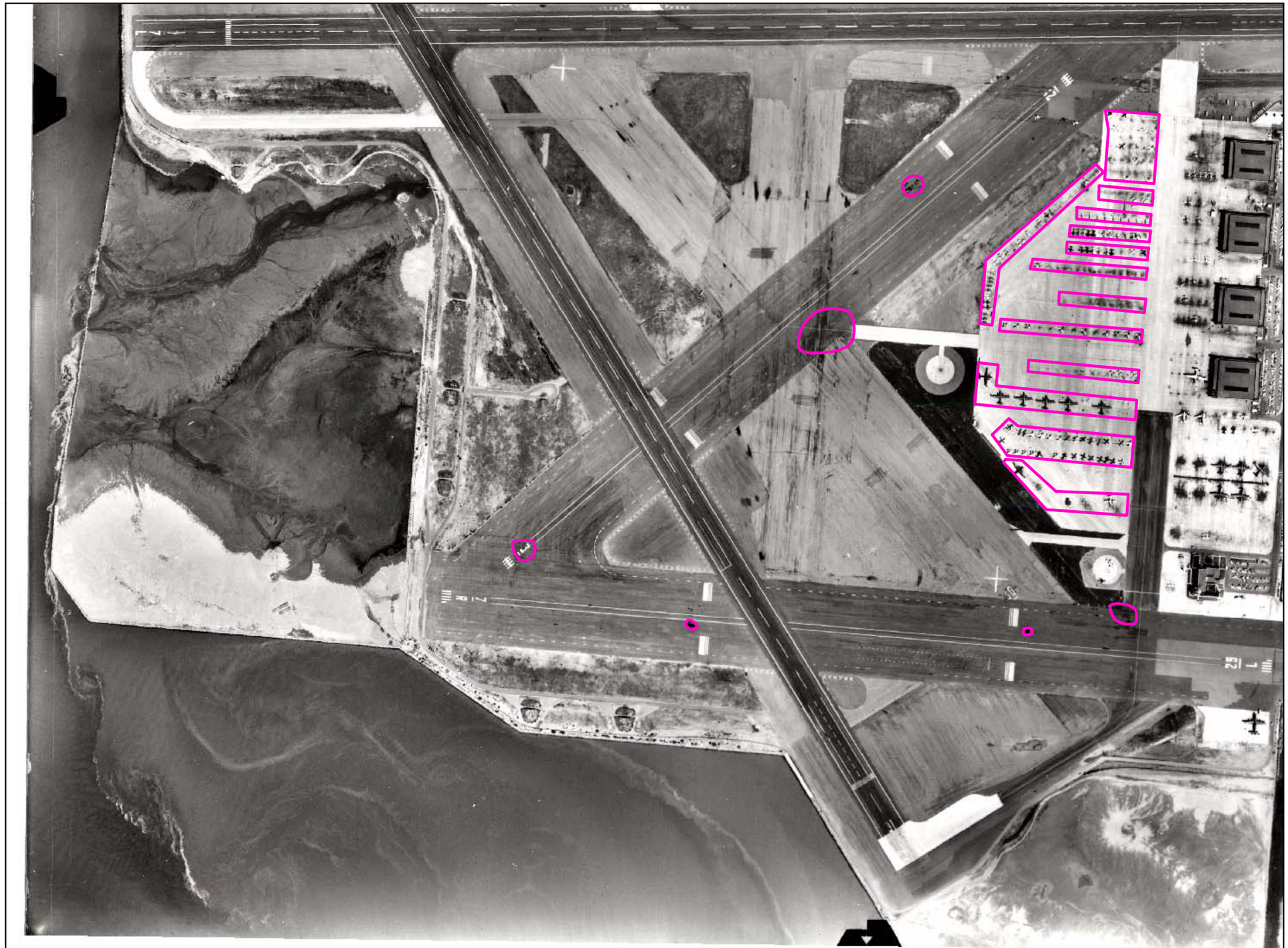


LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-1
Potential Aircraft Parking and Runway Staining - 1947
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

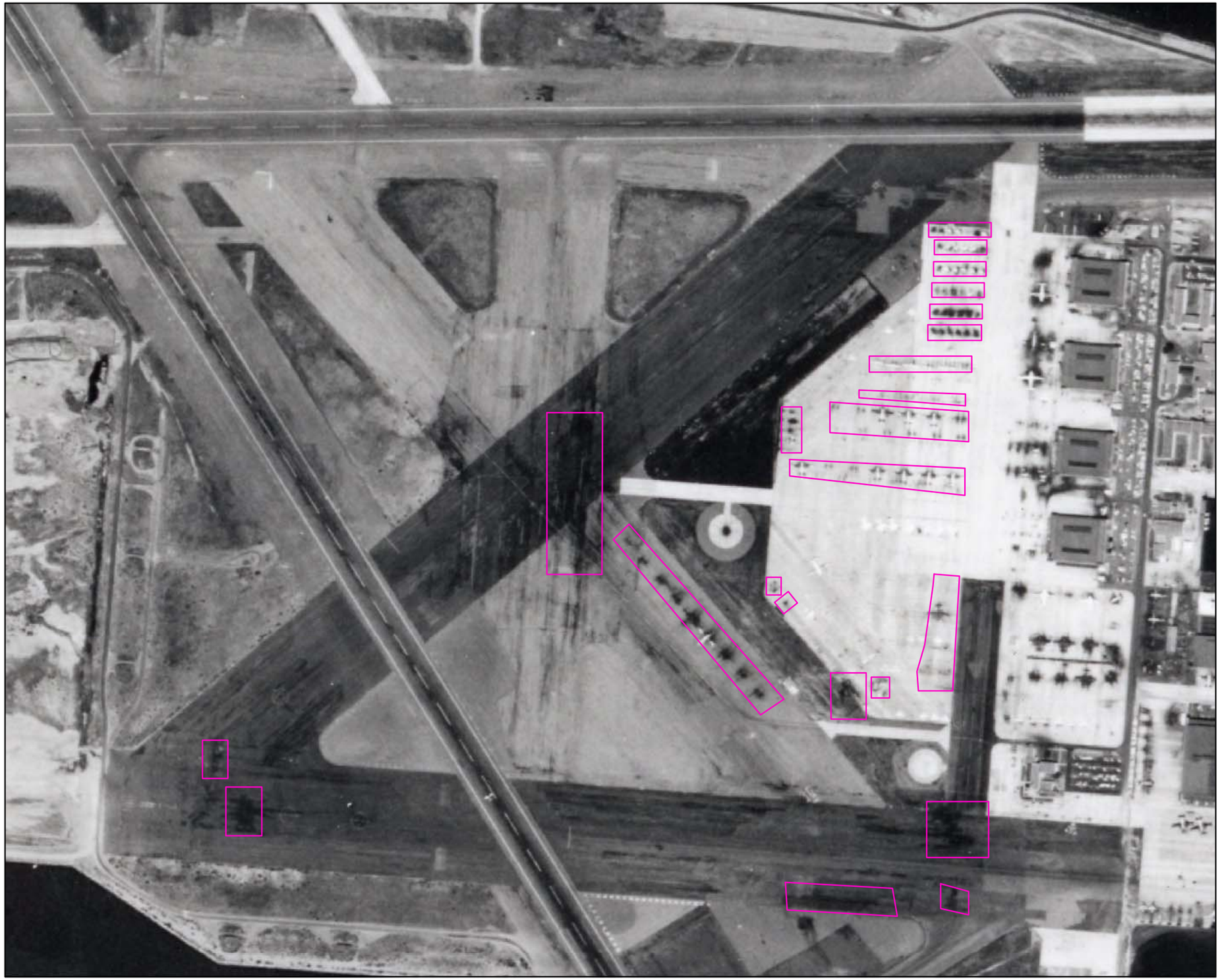


LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-2
Potential Aircraft Parking and Runway Staining - 1957
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

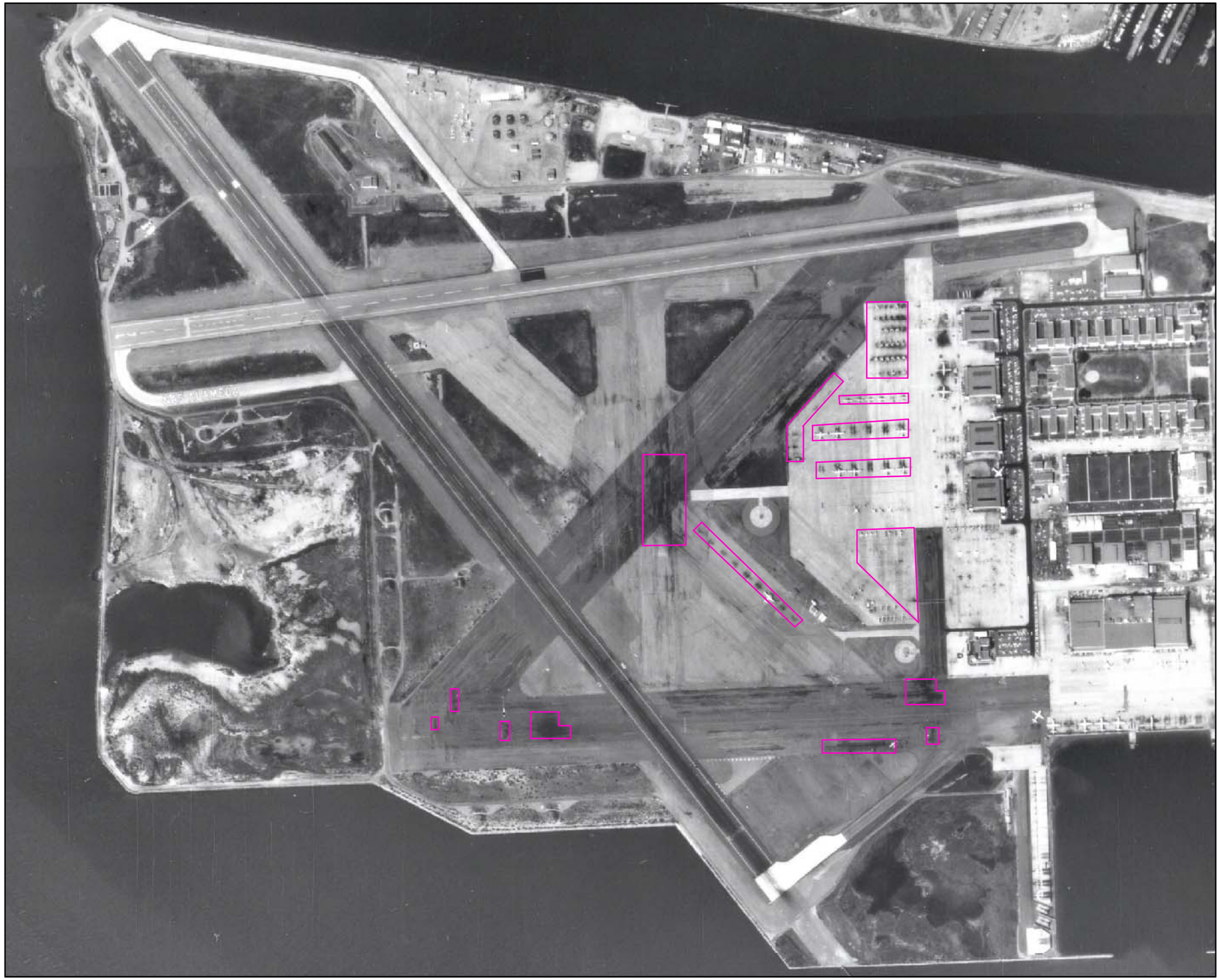


LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-3
Potential Aircraft Parking and Runway Staining - 1963 Transfer Parcels FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California



LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-4
Potential Aircraft Parking and Runway Staining - 1968
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Work Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

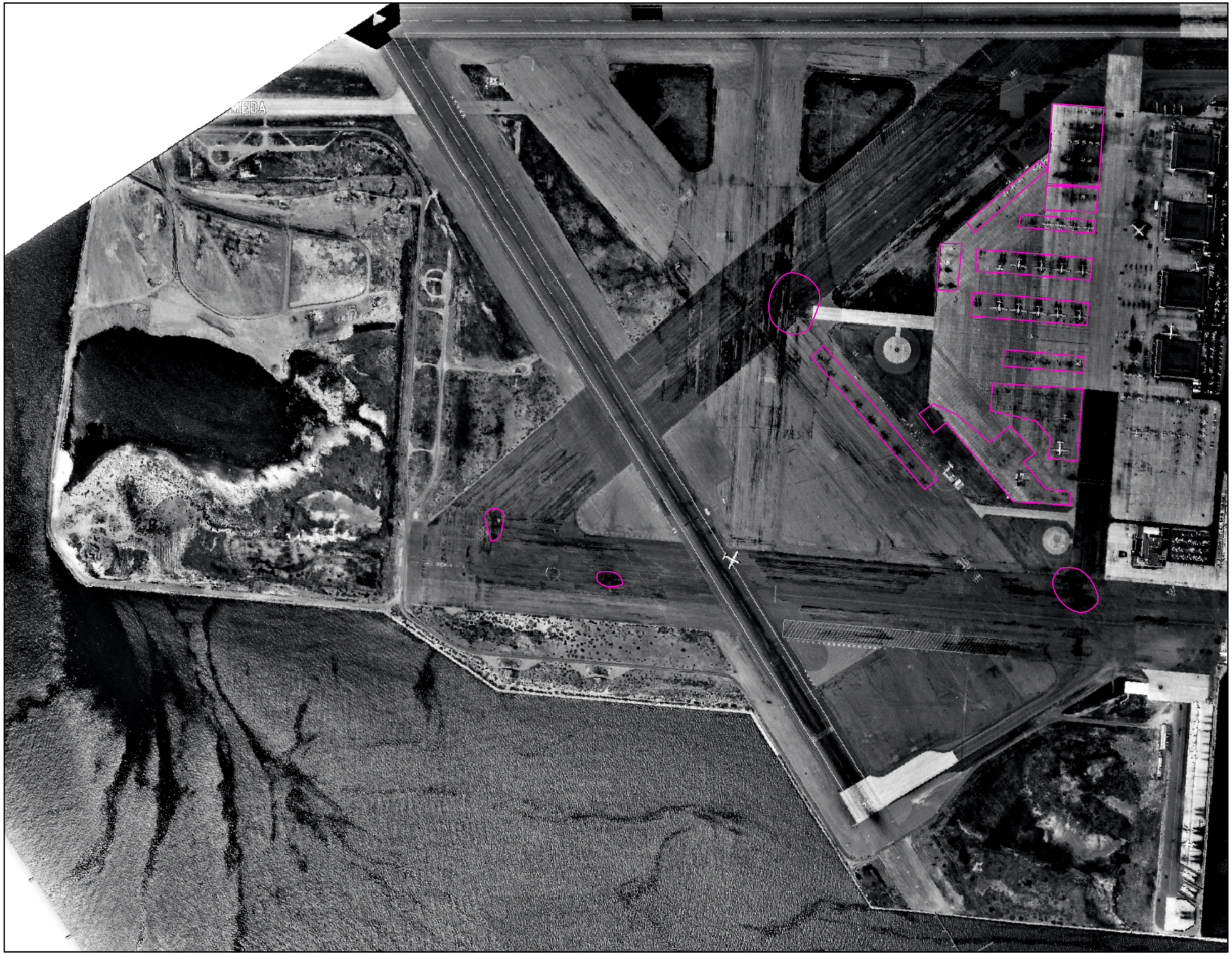
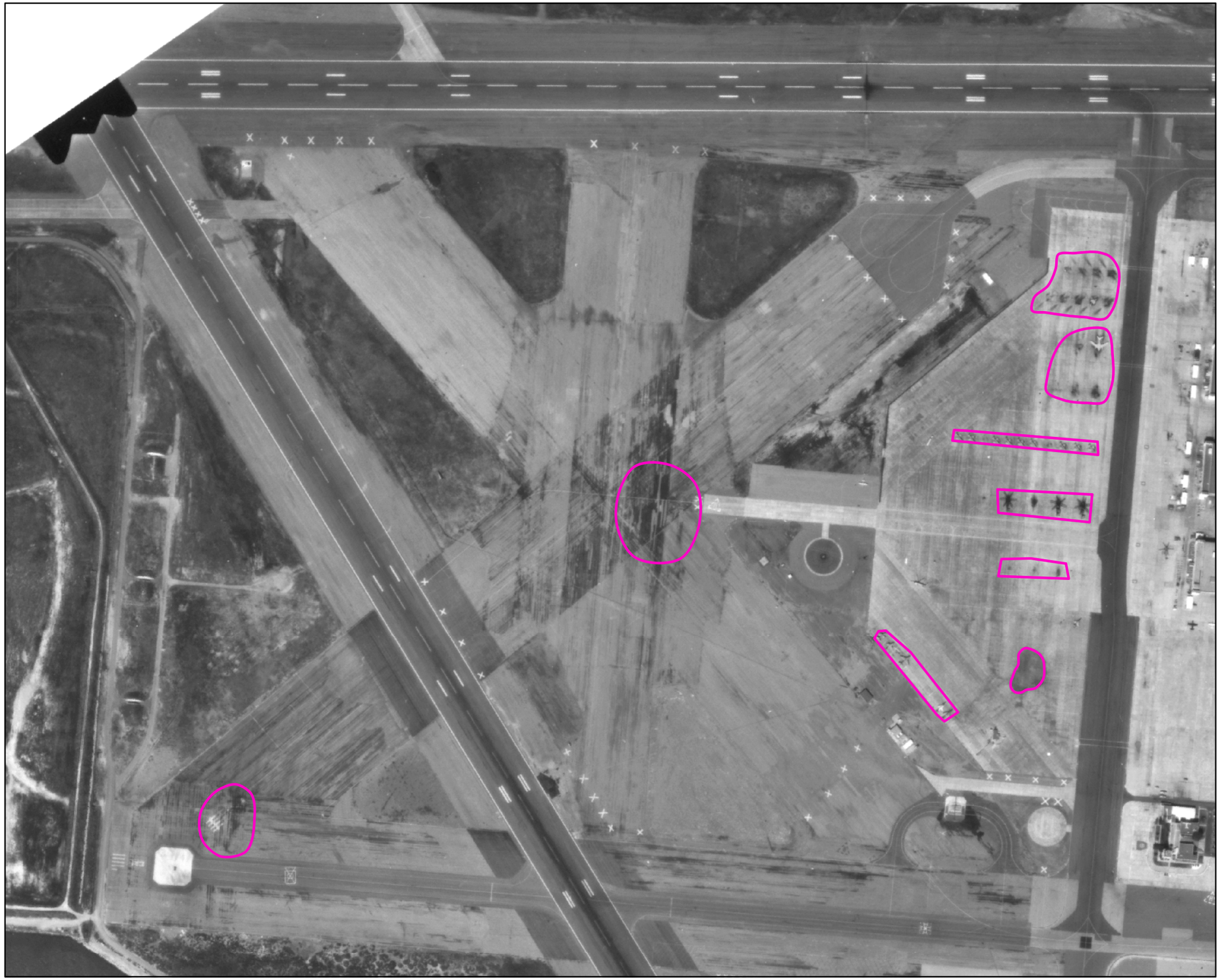


FIGURE F1-5
Potential Aircraft Parking and Runway Staining - 1969
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL



LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-6
Potential Aircraft Parking and Runway Staining - 1988
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-7
Potential Aircraft Parking and Runway Staining - 1991
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Uknown
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

LEGEND

Potential Aircraft Parking and Runway Staining

N

FIGURE F1-8
Potential Aircraft Parking and Runway Staining - 1992
Transfer Parcels
FED-1A, FED-2B, and FED-2C
Scale: Unknown
Source: Unknown
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

AOC 1

FED-2A

FED-1A

FED-1B

FED-2C

EDC-3

PBC-1A

CAA-6

FUEL LINE CAA A

EDC-5

EDC-15

CAA-10

AOC 3

Arresting Gear Structure

Arresting Gear Structure

Arresting Gear Structure

Arresting Gear Structure

AP1AFTA-DP16

AP1AAPS-DP19

AP1AFTA-DP19

AP1AAPS-DP20

AP1AFTA-DP22

AP1AAPS-DP21

AP1AFTA-DP24

AP1AAPS-DP26

AP1AAPS-DP25

AP1AAPS-DP28

AP1AAPS-DP27

AP1AAPS-DP24

AP2CAPS-DP01

AP1AAPS-DP04

AP1AAPS-DP05

AP1AAPS-DP01

AP1AAPS-DP06

AP1AAPS-DP09

AP1AAPS-DP07

AP1AAPS-DP80

AP1AAPS-DP81

AP1AAPS-DP82

AP1AAPS-DP84

AP1AAPS-DP08

AP1AAPS-DP83

AP1AAPS-DP12

AP1AAPS-DP02

AP1AAPS-DP31

AP1AAPS-DP30

AP1AAPS-DP11

AP1AAPS-DP10

AP1AAPS-DP13

AP1AAPS-DP15

AP1AAPS-DP14

AP1AAPS-DP16

AP1AAPS-DP17

AP1AAPS-DP03

AP1AAPS-DP18

AP1AFTA-DP28

AP1AAPS-DP22

AP1AAPS-DP23

AP1AFTA-DP32

AP1AFTA-DP31

OTH023-3

OTH 23-1

OTH 23-2

WD-259

VICINITY MAP

Oakland

Alameda

San Francisco Bay

LEGEND

- Soil Sampling Location
- Soil and Groundwater Sampling Location
- Catch Basin
- Manhole
- SWMU
- Area of Concern (Soil)
- Area of Concern (Groundwater)
- Transfer Parcels FED-1A, 2B, and 2C
- Other Transfer Parcels
- Alameda Point NAS Property Boundary
- Environmental Baseline Survey Parcel
- Open Area 3
- Least Tern Sanctuary
- Corrective Action Area
- IR 33
- Environmental Restoration Site
- Munitions Storage Areas (MSA)
- Building or Structure (Present)
- Building or Structure (Removed)
- Storm Drain
- Communications Line
- Electric Line
- Fuel Line
- Gas Line
- Industrial Wastewater Line
- Storm Sewer Line
- Steam Line
- Aerial Staining Area

0 120 240 Feet

Notes:
APS = Aircraft Parking and Staining
EDC = Economic Development Conveyance
FED = Federal Agency Parcel
CAA = Corrective Action Area
OU = Operable Unit
IR = Installation Restoration (Program)
SWMU = Solid Waste Management Unit

FIGURE F1-9
Aircraft Parking and Staining Areas of Interest
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL

Attachment F2
Site Reconnaissance Photographs

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Photograph 1: Aircraft Parking and Staining General Apron. Large cracks within concrete pads filled with black tar material.

Photograph 2: Aircraft Parking and Staining General Apron. Seams between concrete pads filled with black tar material

Photograph 3: Aircraft Parking and Staining Location AP1AAPS-DP01 Vicinity.

Photograph 4: Aircraft Parking and Staining Location AP1AAPS-DP01.

Photograph 5: Aircraft Parking and Staining Location AP1AAPS-DP02 Vicinity

Photograph 6: Aircraft Parking and Staining Location AP1AAPS-DP02 Close-Up

Photograph 7: Aircraft Parking and Staining Location AP1AAPS-DP02. Close up of crack, no alligator cracking.

Photograph 8: Aircraft Parking and Staining Location AP1AAPS-DP03 Vicinity.

Photograph 9: Aircraft Parking and Staining Location AP1AAPS-DP03.

Photograph 10: Aircraft Parking and Staining Location AP1AAPS-DP03 Close-Up. No cracking observed.

Photograph 11: Aircraft Parking and Staining Location AP1AAPS-DP04 Vicinity.

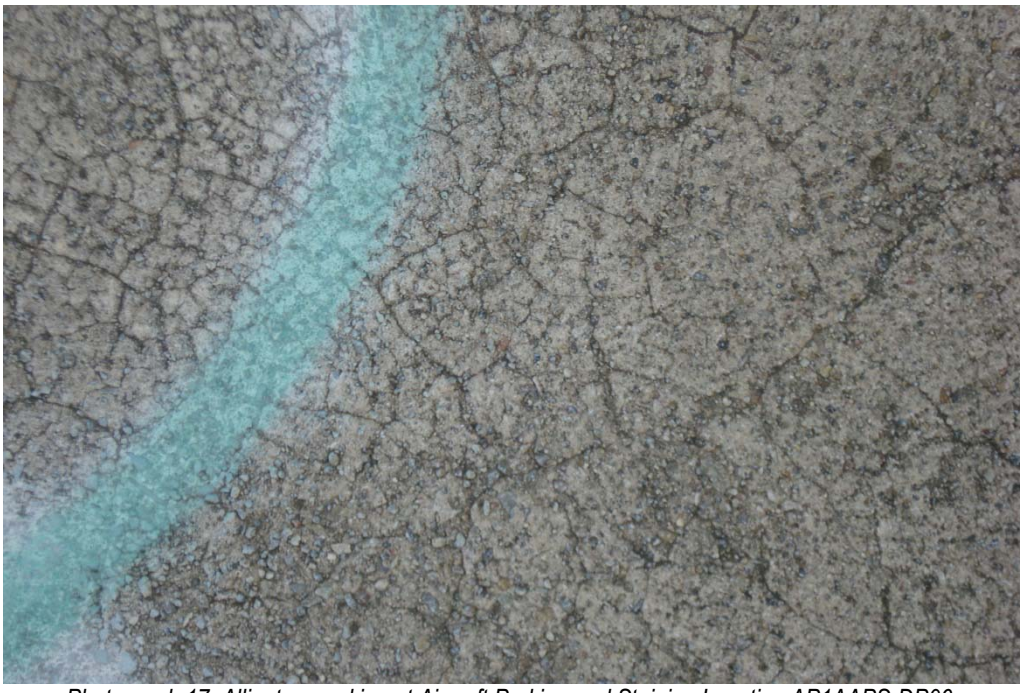
Photograph 12: Aircraft Parking and Staining Location AP1AAPS-DP04 Close-Up.

Photograph 13: Aircraft Parking and Staining Location AP1AAPS-DP05 Vicinity.

Photograph 14: Aircraft Parking and Staining Location AP1AAPS-DP05 Close-Up.

Photograph 15: Aircraft Parking and Staining Location AP1AAPS-DP06.

Photograph 16 Aircraft Parking and Staining Location AP1AAPS-DP06 Close-Up.



Photograph 17: Alligator cracking at Aircraft Parking and Staining Location AP1AAPS-DP06

Photograph 18: Aircraft Parking and Staining Location AP1AAPS-DP07 Vicinity.

Photograph 19: Aircraft Parking and Staining Location AP1AAPS-DP07.

Photograph 20: Aircraft Parking and Staining Location AP1AAPS-DP08 Vicinity.

Photograph 21: Aircraft Parking and Staining Location AP1AAPS-DP08.

Photograph 22: Aircraft Parking and Staining Location AP1AAPS-DP09 Vicinity.

Photograph 23: Aircraft Parking and Staining Location AP1AAPS-DP09.

Photograph 24: Aircraft Parking and Staining Location AP1AAPS-DP09 Close-Up. No alligator cracking observed.

Photograph 25: Aircraft Parking and Staining Location AP1AAPS-DP10 Vicinity.

Photograph 26: Aircraft Parking and Staining Location AP1AAPS-DP10 Close-Up.

Photograph 27: Aircraft Parking and Staining Location AP1AAPS-DP10. Close-Up of crack adjacent to location. No other cracking observed on this pad.

Photograph 28: Aircraft Parking and Staining Location AP1AAPS-DP11 Vicinity.

Photograph 29: Aircraft Parking and Staining Location AP1AAPS-DP11.

Photograph 30: Aircraft Parking and Staining Location AP1AAPS-DP11. Crack adjacent to DP11 filled with tar. No other cracking observed on this pad.

Photograph 31: Aircraft Parking and Staining Location AP1AAPS-DP12 Vicinity.

Photograph 32: Aircraft Parking and Staining Location AP1AAPS-DP12.

Photograph 33: Aircraft Parking and Staining Location AP1AAPS-DP13 Vicinity.

Photograph 34: Aircraft Parking and Staining Location AP1AAPS-DP13

Photograph 35: Aircraft Parking and Staining Location AP1AAPS-DP13. Close-Up of location showing crack.

Photograph 36: Aircraft Parking and Staining Location AP1AAPS-DP14 Vicinity.

Photograph 37: Aircraft Parking and Staining Location AP1AAPS-DP14

Photograph 38: Aircraft Parking and Staining Location AP1AAPS-DP14 Close-Up. Minor cracking observed.

Photograph 39: Aircraft Parking and Staining Location AP1AAPS-DP15 Vicinity.

Photograph 40: Aircraft Parking and Staining Location AP1AAPS-DP15.

Photograph 41: Aircraft Parking and Staining Location AP1AAPS-DP15 Close-Up. No cracking observed.

Photograph 42: Aircraft Parking and Staining Location AP1AAPS-DP16 Vicinity. 15 foot radius buffer observed.

Photograph 43: Aircraft Parking and Staining Location AP1AAPS-DP16.

Photograph 44: Aircraft Parking and Staining Location AP1AAPS-DP16 Close-Up. No Cracking Observed.

Photograph 45: Aircraft Parking and Staining Location AP1AAPS-DP17 Vicinity.

Photograph 46: Aircraft Parking and Staining Location AP1AAPS-DP17.

Photograph 47: Aircraft Parking and Staining Location AP1AAPS-DP17 Close-Up. Shows minor cracking at marked location.

Photograph 48: Aircraft Parking and Staining Location AP1AAPS-DP18 Vicinity.

Photograph 49: Aircraft Parking and Staining Location AP1AAPS-DP18

Photograph 50: Aircraft Parking and Staining Location AP1AAPS-DP18 Close-Up.

Photograph 51: Aircraft Parking and Staining Location AP1AAPS-DP19.

Photograph 52: Aircraft Parking and Staining Location AP1AAPS-DP19 Close-Up.

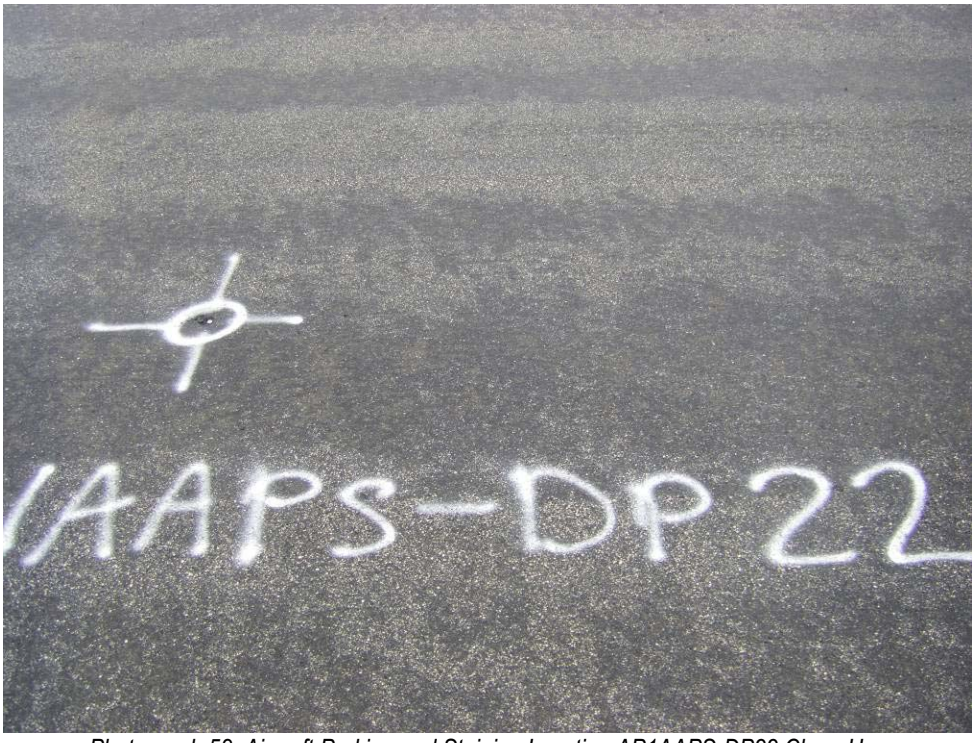
Photograph 53: Aircraft Parking and Staining Location AP1AAPS-DP20.

Photograph 54: Aircraft Parking and Staining Location AP1AAPS-DP20 Close-Up.

Photograph 55: Aircraft Parking and Staining Location AP1AAPS-DP21.

Photograph 56: Aircraft Parking and Staining Location AP1AAPS-DP21 Close-Up.

Photograph 57: Aircraft Parking and Staining Location AP1AAPS-DP22.

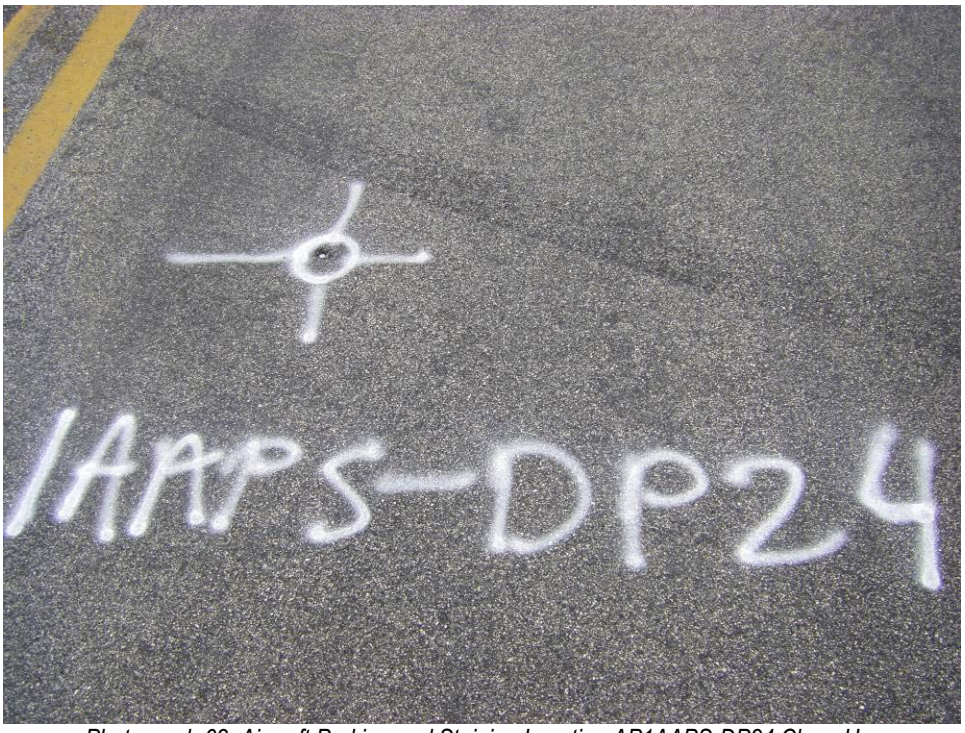


Photograph 58: Aircraft Parking and Staining Location AP1AAPS-DP22 Close-Up.

Photograph 59: Aircraft Parking and Staining Location AP1AAPS-DP23.

Photograph 60: Aircraft Parking and Staining Location AP1AAPS-DP23 Close-Up.

Photograph 61: Aircraft Parking and Staining Location AP1AAPS-DP24.

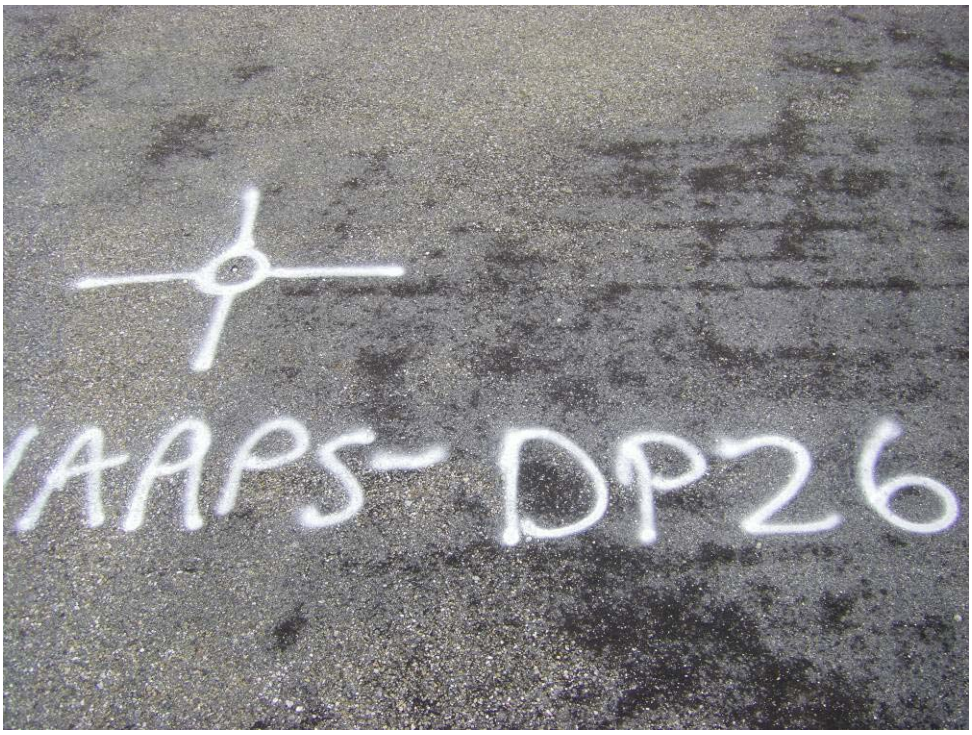


Photograph 62: Aircraft Parking and Staining Location AP1AAPS-DP24 Close-Up.

Photograph 63: Aircraft Parking and Staining Location AP1AAPS-DP25.

Photograph 64: Aircraft Parking and Staining Location AP1AAPS-DP25 Close-Up.

Photograph 65: Aircraft Parking and Staining Location AP1AAPS-DP26.

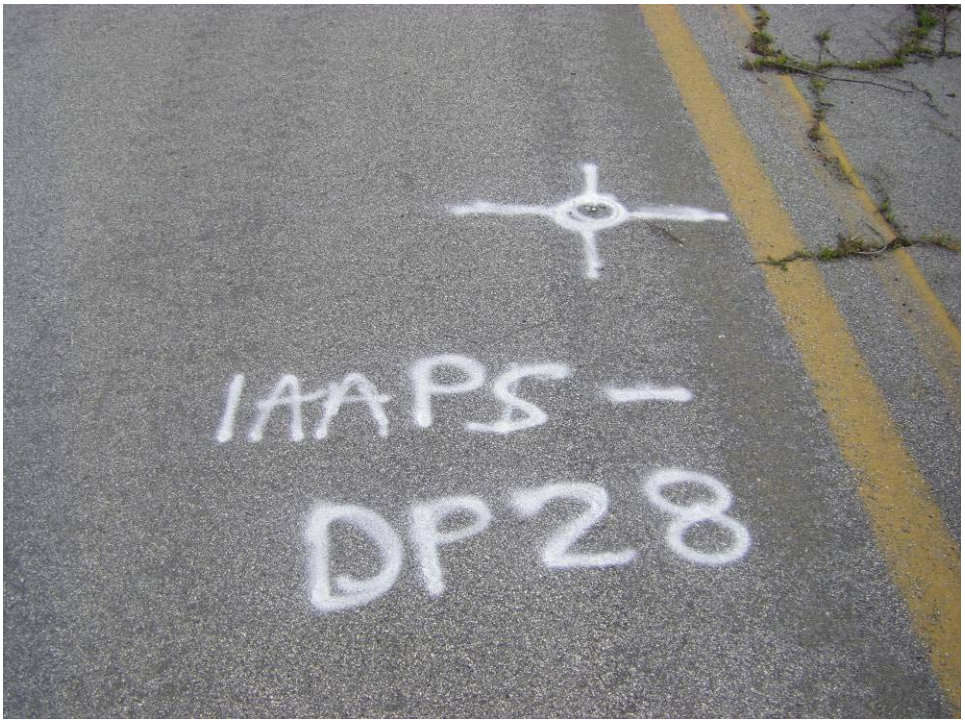


Photograph 66: Aircraft Parking and Staining Location AP1AAPS-DP26 Close-Up.

Photograph 67: Aircraft Parking and Staining Location AP1AAPS-DP27.

Photograph 68: Aircraft Parking and Staining Location AP1AAPS-DP27 Close-Up.

Photograph 69: Aircraft Parking and Staining Location AP1AAPS-DP28.



Photograph 70: Aircraft Parking and Staining Location AP1AAPS-DP28 Close-up.

Photograph 71: Aircraft Parking and Staining Location AP2CAPS-DP01.

Photograph 72: Aircraft Parking and Staining Location AP2CAPS-DP01 Close-Up.

Appendix G
Human Health Risk Evaluation Results

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Appendix G Tables and References

Tables

G-1 Screening-Level Risk Results – Soil, Transfer Parcel FED-1A, EBS Parcel 5

G-2 Industrial Screening-Level Risk Results – Soil Transfer Parcel FED-1A, EBS Parcel 5

G-3 Screening-Level Risk Results – Shallow Groundwater (Indoor Air), Transfer Parcel FED-1A, EBS Parcel 5

G-4 Screening-Level Risk Results – Soil, Transfer Parcel FED-1A, EBS Parcel 23

G-5 Industrial Screening-Level Risk Results – Soil Transfer Parcel FED-1A, EBS Parcel 23

G-6 Screening-Level Risk Results – Groundwater (Indoor Air), Transfer Parcel FED-1A, EBS Parcel 23

G-7 Screening-Level Risk Results – Soil, Transfer Parcel FED-1A, EBS Parcel 24

G-8 Screening-Level Risk Results – Groundwater (Indoor Air), Transfer Parcel FED-1A, EBS Parcel 24

G-9 Screening-Level Risk Results – Soil, Transfer Parcel FED-2B, EBS Parcel 27

G-10 Screening-Level Risk Results – Groundwater (Indoor Air), Transfer Parcel FED-2C, EBS Parcel 27

G-11 Screening-Level Risk Results – Soil, Transfer Parcel FED-2C, EBS Parcel 23E

G-12 Screening-Level Risk Results – Groundwater (Indoor Air), Transfer Parcel FED-2C, EBS Parcel 23E

G-13 Screening-Level Risk Results – Soil, 2010 Investigation

G-14 Screening-Level Risk Results – Shallow Groundwater (Vapor Intrusion), 2010 Investigation

G-15 Screening-Level Risk Results – Soil (without elevated PAH samples), 2010 Investigation

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Tetra Tech EM Inc (TtEMI). 2004. Alameda Point ArcView Query Station. October 11.

United States Environmental Protection Agency (USEPA). 2004. Region 9 Preliminary Remediation Goals. October.

Table G-1
Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 5

			RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a,b,c]	Units	Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
acenaphthene	8.6	µg/kg		3.4E+03	RSL		2.5E-06
acenaphthylene[d]	6.5	µg/kg		3.4E+03	RSL		1.9E-06
acetone	23.8	µg/kg		6.1E+04	RSL		3.9E-07
aluminum	6,350	mg/kg		7.7E+04	RSL		8.2E-02
anthracene	21	µg/kg		1.7E+04	RSL		1.2E-06
Aroclor 1260	370	µg/kg	2.2E-01		RSL	1.7E-06	
arsenic	11	mg/kg	3.9E-01	2.2E+01	RSL	2.8E-05	5.0E-01
barium	68.3	mg/kg		1.5E+04	RSL		4.6E-03
benz(a)anthracene	30	µg/kg	1.5E-01		RSL	2.0E-07	
benzo(b)fluoranthene	55	µg/kg	1.5E-01		RSL	3.7E-07	
benzo(k)fluoranthene	49	µg/kg	1.5E+00		RSL	3.3E-08	
benzo(g,h,i)perylene[f]	88	µg/kg		1.7E+03	RSL		5.2E-05
benzo(a)pyrene	53	µg/kg	1.5E-02		RSL	3.5E-06	
beryllium	0.968	mg/kg	1.4E+03	1.6E+02	RSL	6.9E-10	6.1E-03
cadmium	3.1	mg/kg	1.8E+03	7.0E+01	RSL	1.7E-09	4.4E-02
chloroform	1.3	µg/kg	2.9E-01	2.1E+02	RSL	4.5E-09	6.2E-06
chromium[g]	37	mg/kg	2.8E+02		RSL	1.3E-07	
chrysene	82	µg/kg	1.5E+01		RSL	5.5E-09	
cobalt	23.1	mg/kg	3.7E+02	2.3E+01	RSL	6.2E-08	1.0E+00
copper	27	mg/kg		3.1E+03	RSL		8.7E-03
4,4'-DDT	3.3	µg/kg	1.7E+00	3.6E+01	RSL	1.9E-09	9.2E-05
dibenz(a,h)anthracene	18	µg/kg	1.5E-02		RSL	1.2E-06	
endosulfan sulfate[h]	1.7	µg/kg		3.7E+02	RSL		4.6E-06
fluoranthene	82	µg/kg		2.3E+03	RSL		3.6E-05
fluorene	17	µg/kg		2.3E+03	RSL		7.4E-06
gamma-BHC	0.597	µg/kg	5.2E-01	2.1E+01	RSL	1.1E-09	2.8E-05
indeno(1,2,3-cd)pyrene	52	µg/kg	1.5E-01		RSL	3.5E-07	
iron	11,600	mg/kg		5.5E+04	RSL		2.1E-01
manganese	172	mg/kg		1.8E+03	RSL		9.6E-02
mercury	0.195	mg/kg		2.3E+01	RSL		8.5E-03
nickel	33	mg/kg	1.3E+04	1.5E+03	RSL	3.5E-07	2.2E-02
2-methylnaphthalene	23	µg/kg		3.1E+02	RSL		7.4E-05
naphthalene	34	µg/kg	3.6E+00	1.4E+02	RSL	9.4E-09	2.4E-04
phenanthrene[j]	40	µg/kg		1.7E+03	RSL		2.4E-05
pyrene	83	µg/kg		1.7E+03	RSL		4.9E-05
silver	10	mg/kg		3.9E+02	RSL		2.6E-02
titanium	565	mg/kg			RSL		
vanadium	26.3	mg/kg		3.9E+02	RSL		6.7E-02
zinc	83	mg/kg		2.3E+04	RSL		3.6E-03
					Total	**3.6E-05**	**2.1E+00**
					Incremental[l]	**7.4E-06**	**1.1E+00**
					PAHs	**5.7E-06**	**4.9E-04**
					Total Less PAHs	**3.0E-05**	**2.1E+00**
					Incremental[l] Less PAHs	**1.8E-06**	**1.1E+00**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Table G-1
Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 5

Notes:

[a] the maximum lead concentration of 62 mg/kg is below the 2004 EPA California-modified residential soil PRG of 150 mg/kg
[b] maximum concentrations obtained from the Alameda Point ArcView Query Station (TtEMI 2004) and the analytical results database associated with the BEI 2003a document and the 2010 Investigation
[c] shaded rows indicate that concentration is below background levels
[d] acenaphthene used as surrogate for acenaphthylene
[f] pyrene used as surrogate for benzo(g,h,i)perylene
[g] chromium as total chromium (1:6 ratio CrVI:CrIII)
[h] endosulfan used as surrogate for endosulfan sulfate
[j] anthracene used as surrogate for phenanthrene
[l] incremental includes total less background

Acronyms/Abbreviations:

BEI – Bechtel Environmental, Inc.
CHHSL - California Human Health Screening Level (DTSC 2009)
CrIII – trivalent chromium
CrVI – hexavalent chromium
EBS – environmental baseline survey
ESL – environmental screening level (for indoor air, Water Board 2007)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening level (for direct contact, U.S. EPA 2010)
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Table G-2
Industrial Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 5

Chemical	Maximum Concentration[a,b,c]	Units	INDUSTRIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
acenaphthene	8.6	µg/kg		3.3E+04	RSL		2.6E-07
acenaphthylene[d]	6.5	µg/kg		3.3E+04	RSL		2.0E-07
acetone	23.8	µg/kg		6.3E+05	RSL		3.8E-08
aluminum	6,350	mg/kg		9.9E+05	RSL		6.4E-03
anthracene	21	µg/kg		1.7E+05	RSL		1.2E-07
Aroclor 1260	370	µg/kg	7.4E-01		RSL	5.0E-07	
arsenic	11	mg/kg	1.6E+00	2.6E+02	RSL	6.9E-06	4.2E-02
barium	68.3	mg/kg		1.9E+05	RSL		3.6E-04
benz(a)anthracene	30	µg/kg	2.1E+00		RSL	1.4E-08	
benzo(b)fluoranthene	55	µg/kg	2.1E+00		RSL	2.6E-08	
benzo(k)fluoranthene	49	µg/kg	2.1E+01		RSL	2.3E-09	
benzo(g,h,i)perylene[f]	88	µg/kg		1.7E+04	RSL		5.2E-06
benzo(a)pyrene	53	µg/kg	2.1E-01		RSL	2.5E-07	
beryllium	0.968	mg/kg	6.9E+03	2.0E+03	RSL	1.4E-10	4.8E-04
cadmium	3.1	mg/kg	9.3E+03	8.0E+02	RSL	3.3E-10	3.9E-03
chloroform	1.3	µg/kg	1.5E+00	1.1E+03	RSL	8.7E-10	1.2E-06
chromium[g]	37	mg/kg	1.4E+03		RSL	2.6E-08	
chrysene	82	µg/kg	2.1E+02		RSL	3.9E-10	
cobalt	23.1	mg/kg	1.9E+03	3.0E+02	RSL	1.2E-08	7.7E-02
copper	27	mg/kg		4.1E+04	RSL		6.6E-04
4,4'-DDT	3.3	µg/kg	7.0E+00	4.3E+02	RSL	4.7E-10	7.7E-06
dibenz(a,h)anthracene	18	µg/kg	2.1E-01		RSL	8.6E-08	
endosulfan sulfate[h]	1.7	µg/kg		3.7E+03	RSL		4.6E-07
fluoranthene	82	µg/kg		2.2E+04	RSL		3.7E-06
fluorene	17	µg/kg		2.2E+04	RSL		7.7E-07
gamma-BHC	0.597	µg/kg	2.1E+00	2.4E+02	RSL	2.8E-10	2.5E-06
indeno(1,2,3-cd)pyrene	52	µg/kg	2.1E+00		RSL	2.5E-08	
iron	11,600	mg/kg		7.2E+05	RSL		1.6E-02
manganese	172	mg/kg		2.3E+04	RSL		7.5E-03
mercury	0.195	mg/kg		3.1E+02	RSL		6.3E-04
nickel	33	mg/kg	6.4E+04	2.0E+04	RSL	5.2E-10	1.7E-03
2-methylnaphthalene	23	µg/kg		4.1E+03	RSL		5.6E-06
naphthalene	34	µg/kg	1.8E+01	6.2E+02	RSL	1.9E-09	5.5E-05
phenanthrene[j]	40	µg/kg		1.7E+05	RSL		2.4E-07
pyrene	83	µg/kg		1.7E+04	RSL		4.9E-06
silver	10	mg/kg		5.1E+03	RSL		2.0E-03
titanium	565	mg/kg			RSL		
vanadium	26.3	mg/kg		5.2E+03	RSL		5.1E-03
zinc	83	mg/kg		3.1E+05	RSL		2.7E-04
					Total	**7.8E-06**	**1.6E-01**
					Incremental[l]	**9.2E-07**	**8.4E-02**
					PAHs	**4.1E-07**	**7.6E-05**
					Total Less PAHs	**7.4E-06**	**1.6E-01**
					Incremental[l] Less PAHs	**5.1E-07**	**8.4E-02**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Table G-2
Industrial Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 5

Notes:

[a] the maximum lead concentration of 62 mg/kg is below the 2010 EPA industrial soil RSL of 800 mg/kg

[b] maximum concentrations obtained from the Alameda Point ArcView Query Station (TtEMI 2004) and the analytical results database associated with the BEI 2003a document and the 2010 Investigation

[c] shaded rows indicate that concentration is below background levels

[d] acenaphthene used as surrogate for acenaphthylene

[f] pyrene used as surrogate for benzo(g,h,i)perylene

[g] chromium as total chromium (1:6 ratio CrVI:CrIII)

[h] endosulfan used as surrogate for endosulfan sulfate

[j] anthracene used as surrogate for phenanthrene

[l] incremental includes total less background

Acronyms/Abbreviations:

BEI – Bechtel Environmental, Inc.
CHHSL - California Human Health Screening Level (DTSC 2009)
CrIII – trivalent chromium
CrVI – hexavalent chromium
EBS – environmental baseline survey
ESL – environmental screening level (for indoor air, Water Board 2007)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening level (for direct contact, U.S. EPA 2010)
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Table G-3
Screening-Level Risk Results – Shallow Groundwater (Indoor Air)
Transfer Parcel FED-1A, EBS Parcel 5

			GROUNDWATER				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a,b]	Units	Cancer (µg/L)	Noncancer (µg/L)	Source	Cancer Risk	Hazard Index
aluminum	137	µg/L					
arsenic	21.7	µg/L					
barium	316	µg/L					
benzene	0.4	µg/L	5.4E+02		ESL	7.4E-10	
cadmium	1.39	µg/L					
carbon disulfide	0.997	µg/L					
chloromethane	3.99	µg/L		2.1E+02	ESLadj		1.9E-02
1,2-dichloroethane	0.2	µg/L	2.0E+02		ESL	9.8E-10	
cis-1,2-dichloroethene	0.6	µg/L		3.1E+04	ESLadj		1.9E-05
1,2-dichloroethylene[c]	1	µg/L		3.1E+04	ESLadj		3.2E-05
di-n-butyl phthalate	0.46	µg/L					
fluoranthene	0.0262	µg/L					
heptachlor epoxide	0.006	µg/L					
iron	12500	µg/L					
isopropylbenzene	0.03	µg/L					
manganese	1990	µg/L					
2-methylnaphthalene	0.021	µg/L		1.3E+05	ESLadj		1.6E-07
molybdenum	10.1	µg/L					
pyrene	0.0316	µg/L		6.8E+02	ESLadj		4.7E-05
trichloroethene	0.1	µg/L	5.3E+02		ESL	1.9E-10	
vinyl chloride	2.1	µg/L	3.8E+00		ESL	5.5E-07	
m,p-xylene	0.08	µg/L		8.1E+05	ESLadj		9.9E-08
zinc	27.7	µg/L					
					Total	**5.5E-07**	**1.9E-02**
					Incremental[d]	**5.5E-07**	**1.9E-02**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[a] maximum concentrations obtained from the Alameda Point 2010 Investigation and ArcView Query Station (TtEMI 2004) and analytical results database associated with the ITSI 2007 document
[b] shaded rows indicate that concentration is below background levels
[c] cis-1,2-dichloroethene was used for 1,2-dichloroethene
[d] incremental includes total less background

Acronyms/Abbreviations:
EBS – environmental baseline survey
FED – federal agency
ITSI – Innovative Technical Solutions, Inc.
µg/L – micrograms per liter
ESL – Environmental Screening Level (for vapor intrusion, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-4
Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 23

Chemical	Maximum Concentration[a,b,c]	Units	RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
acenaphthene	1840	µg/kg		3.4E+03	RSL		5.4E-04
acenaphthylene[d]	38	µg/kg		3.4E+03	RSL		1.1E-05
acetone	118	µg/kg		6.1E+04	RSL		1.9E-06
aluminum	14,400	mg/kg		7.7E+04	RSL		1.9E-01
anthracene	2,690	µg/kg		1.7E+04	RSL		1.6E-04
antimony	1.72	mg/kg		3.1E+01	RSL		5.5E-02
arsenic	10	mg/kg	3.9E-01	2.2E+01	RSL	2.6E-05	4.5E-01
barium	191	mg/kg		1.5E+04	RSL		1.3E-02
benzene	1.69	µg/kg	1.1E+00	8.6E+01	RSL	1.5E-09	2.0E-05
benz(a)anthracene	35,000	µg/kg	1.5E-01		RSL	2.3E-04	
benzo(b)fluoranthene	116,000	µg/kg	1.5E-01		RSL	7.7E-04	
benzo(k)fluoranthene	27,400	µg/kg	1.5E+00		RSL	1.8E-05	
benzo(g,h,i)perylene[f]	83,300	µg/kg		1.7E+03	RSL		4.9E-02
benzo(a)pyrene	97,200	µg/kg	1.5E-02		RSL	6.5E-03	
beryllium	0.704	mg/kg	1.4E+03	1.6E+02	RSL	5.0E-10	4.4E-03
bis(2-ethylhexyl)phthalate	66	µg/kg	3.5E+01	1.2E+03	RSL	1.9E-09	5.5E-05
bromomethane	0.364	µg/kg		7.3E+00	RSL		5.0E-05
2-butanone	103	µg/kg		2.8E+04	RSL		3.7E-06
butyl benzyl phthalate	270	µg/kg	2.6E+02	1.2E+04	RSL		2.3E-05
cadmium	7.56	mg/kg	1.8E+03	7.0E+01	RSL	4.2E-09	1.1E-01
carbon disulfide	3.82	µg/kg		8.2E+02	RSL		4.7E-06
chloroform	30.1	µg/kg	2.9E-01	2.1E+02	RSL	1.0E-07	1.4E-04
chromium[g]	34	mg/kg	2.8E+02		RSL	1.2E-07	
chrysene	75,200	µg/kg	1.5E+01		RSL	5.0E-06	
cobalt	156	mg/kg	3.7E+02	2.3E+01	RSL	4.2E-07	6.8E+00
copper	124	mg/kg		3.1E+03	RSL		4.0E-02
4,4'-DDD	9.5	µg/kg	2.0E+00		RSL	4.8E-09	
dibenz(a,h)anthracene	12,200	µg/kg	1.5E-02		RSL	8.1E-04	
1,2-dibromo3-chloropropane	3.83	µg/kg	5.4E-03	4.9E+00	RSL	7.1E-07	7.8E-04
di-n-butyl phthalate	19	µg/kg		6.1E+03	RSL		3.1E-06
1,4-dichlorobenzene	0.323	µg/kg	2.4E+00	3.5E+03	RSL	1.3E-10	9.2E-08
1,3-dinitrobenzene	386	µg/kg		6.1E+00	RSL		6.3E-02
2.6-dinitrotoluene	378	µg/kg		6.1E+01	RSL		6.2E-03
ethylbenzene	32.2	µg/kg	5.4E+00	3.5E+03	RSL	6.0E-09	9.2E-06
fluoranthene	57,500	µg/kg		2.3E+03	RSL		2.5E-02
fluorene	1,760	µg/kg		2.3E+03	RSL		7.7E-04
HMX	164	µg/kg		3.8E+03	RSL		4.3E-05
n-hexane	6.56	µg/kg		5.7E+02	RSL		1.2E-05
2-hexanone	2.93	µg/kg		2.1E+02	RSL		1.4E-05
indeno(1,2,3-cd)pyrene	88,700	µg/kg	1.5E-01		RSL	5.9E-04	
iron	32,100	mg/kg		5.5E+04	RSL		5.8E-01
isopropylbenzene	78	µg/kg		2.1E+03	RSL		3.7E-05
manganese	1,000	mg/kg		1.8E+03	RSL		5.6E-01
mercury	2.22	mg/kg		2.3E+01	RSL		9.7E-02
molybdenum	1.72	mg/kg		3.9E+02	RSL		4.4E-03
methylene chloride	299	µg/kg	1.1E+01	1.7E+03	RSL	2.7E-08	1.8E-04
1-methylnaphthalene	6,060	µg/kg	2.2E+01	5.5E+03	RSL	2.8E-07	1.1E-03
2-methylnaphthalene	5,780	µg/kg		3.1E+02	RSL		1.9E-02
4-methyl-2-pentanone	0.506	µg/kg		5.3E+03	RSL		9.5E-08
naphthalene	2,600	µg/kg	3.6E+00	1.4E+02	RSL		1.9E-02
nickel[i]	86.1	mg/kg	1.3E+04	1.5E+03	RSL		5.7E-02
nitrobenzene	1,110	µg/kg	4.8E+00	1.3E+02	RSL	2.3E-07	8.5E-03
3-nitrotoluene	151	µg/kg	2.9E+00	7.0E+01	RSL	5.2E-08	2.2E-03
pentachlorophenol	35	µg/kg	8.9E-01	2.3E+02	RSL	3.9E-08	1.5E-04
phenanthrene[j]	10,100	µg/kg		1.7E+03	RSL		5.9E-03
phenol	20	µg/kg		1.8E+04	RSL		1.1E-06

Table G-4
Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 23

Chemical	Maximum Concentration[a,b,c]	Units	RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
pyrene	60,800	µg/kg		1.7E+03	RSL		3.6E-02
RDX	355	µg/kg	5.5E+00	2.3E+02	RSL	6.5E-08	1.5E-03
selenium	0.72	mg/kg		3.9E+02	RSL		1.8E-03
silver	2.27	mg/kg		3.9E+02	RSL		5.8E-03
thallium	2.8	mg/kg		6.5E+00	ESLadj		4.3E-01
titanium	513	mg/kg					
toluene	6.22	µg/kg		5.0E+03	RSL		1.2E-06
1,2,4-trichlorobenzene	0.453	µg/kg	2.2E+01	6.2E+01	RSL	2.1E-11	7.3E-06
1,2,4-trimethylbenzene	549	µg/kg		6.2E+01	RSL		8.9E-03
1,3,5-trimethylbenzene	164	µg/kg		7.8E+02	RSL		2.1E-04
1,3,5-trinitrobenzene	143	µg/kg		2.2E+03	RSL		6.5E-05
2,4,6-trinitrotoluene	258	µg/kg	1.9E+01	3.6E+01	RSL	1.4E-08	7.2E-03
vanadium	43.9	mg/kg		3.9E+02	RSL		1.1E-01
xylenes, total	53	µg/kg		6.3E+02	RSL		8.4E-05
zinc	119	mg/kg		2.3E+04	RSL		5.2E-03
					Total	**8.9E-03**	**9.8E+00**
					Incremental[l]	**8.9E-03**	**9.1E+00**
					PAHs	**8.9E-03**	**1.6E-01**
					Total Less PAHs	**2.8E-05**	**9.6E+00**
					Incremental[l] Less PAHs	**2.0E-06**	**9.0E+00**

Equations used to calculate risk and hazard:

Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline

Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:

[a] the maximum lead concentration of 163 mg/kg exceeds the 2004 USEPA California-modified residential soil PRG of 150 mg/kg

[b] maximum concentrations are from the top 10 feet of soil and are obtained from the 2010 Investigation, Alameda Point ArcView Query Station (TtEMI 2004) and the analytical results databases associated with the following documents: IT 2001, BEI 2003a

[c] shaded rows indicate that concentration is below background levels

[d] acenaphthene used as surrogate for acenaphthylene

[f] pyrene used as surrogate for benzo(g,h,i)perylene

[g] chromium as total chromium (1:6 ratio CrVI:CrIII)

[i] nickel as nickel (soluble salts)

[j] anthracene used as surrogate for phenanthrene

[l] incremental includes total less background

Acronyms/Abbreviations:

BEI – Bechtel Environmental, Inc.
CHHSL - California Human Health Screening Level (DTSC 2009)
CrIII – trivalent chromium
CrVI – hexavalent chromium
DDD – dichlorodiphenyldichloroethane
EBS – environmental baseline survey
ESL – environmental screening level (for indoor air, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
IT – International Technology Corporation
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Table G-5
Industrial Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 23

Chemical	Maximum Concentration[a,b,c]	Units	INDUSTRIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
acenaphthene	1840	µg/kg		3.3E+04	RSL		5.6E-05
acenaphthylene[d]	38	µg/kg		3.3E+04	RSL		1.2E-06
acetone	118	µg/kg		6.3E+05	RSL		1.9E-07
aluminum	14,400	mg/kg		9.9E+05	RSL		1.5E-02
anthracene	2,690	µg/kg		1.7E+05	RSL		1.6E-05
antimony	1.72	mg/kg		4.1E+02	RSL		4.2E-03
arsenic	10	mg/kg	1.6E+00	2.6E+02	RSL	6.3E-06	3.8E-02
barium	191	mg/kg		1.9E+05	RSL		1.0E-03
benzene	1.69	µg/kg	5.4E+00	4.5E+02	RSL	3.1E-10	3.8E-06
benz(a)anthracene	35,000	µg/kg	2.1E+00		RSL	1.7E-05	
benzo(b)fluoranthene	116,000	µg/kg	2.1E+00		RSL	5.5E-05	
benzo(k)fluoranthene	27,400	µg/kg	2.1E+01		RSL	1.3E-06	
benzo(g,h,i)perylene[f]	83,300	µg/kg		1.7E+04	RSL		4.9E-03
benzo(a)pyrene	97,200	µg/kg	2.1E-01		RSL	4.6E-04	
beryllium	0.704	mg/kg	6.9E+03	2.0E+03	RSL	1.0E-10	3.5E-04
bis(2-ethylhexyl)phthalate	66	µg/kg	1.2E+02	1.2E+04	RSL	5.5E-10	5.5E-06
bromomethane	0.364	µg/kg		3.2E+01	RSL		1.1E-05
2-butanone	103	µg/kg		2.0E+05	RSL		5.2E-07
butyl benzyl phthalate	270	µg/kg	9.1E+02	1.2E+05	RSL		2.3E-06
cadmium	7.56	mg/kg	9.3E+03	8.0E+02	RSL	8.1E-10	9.5E-03
carbon disulfide	3.82	µg/kg		3.7E+03	RSL		1.0E-06
chloroform	30.1	µg/kg	1.5E+00	1.1E+03	RSL	2.0E-08	2.7E-05
chromium[g]	34	mg/kg	1.4E+03		RSL	2.4E-08	
chrysene	75,200	µg/kg	2.1E+02		RSL	3.6E-07	
cobalt	156	mg/kg	1.9E+03	3.0E+02	RSL	8.2E-08	5.2E-01
copper	124	mg/kg		4.1E+04	RSL		3.0E-03
4,4'-DDD	9.5	µg/kg	7.2E+00		RSL	1.3E-09	
dibenz(a,h)anthracene	12,200	µg/kg	2.1E-01		RSL	5.8E-05	
1,2-dibromo3-chloropropane	3.83	µg/kg	6.9E-02	2.6E+01	RSL	5.6E-08	1.5E-04
di-n-butyl phthalate	19	µg/kg		6.2E+04	RSL		3.1E-07
1,4-dichlorobenzene	0.323	µg/kg	1.2E+01	2.5E+04	RSL	2.7E-11	1.3E-08
1,3-dinitrobenzene	386	µg/kg		6.2E+01	RSL		6.2E-03
2.6-dinitrotoluene	378	µg/kg		6.2E+02	RSL		6.1E-04
ethylbenzene	32.2	µg/kg	2.7E+01	2.1E+04	RSL	1.2E-09	1.5E-06
fluoranthene	57,500	µg/kg		2.2E+04	RSL		2.6E-03
fluorene	1,760	µg/kg		2.2E+04	RSL		8.0E-05
HMX	164	µg/kg		4.9E+04	RSL		3.3E-06
n-hexane	6.56	µg/kg		2.6E+03	RSL		2.5E-06
2-hexanone	2.93	µg/kg		1.4E+03	RSL		2.1E-06
indeno(1,2,3-cd)pyrene	88,700	µg/kg	2.1E+00		RSL	4.2E-05	
iron	32,100	mg/kg		7.2E+05	RSL		4.5E-02
isopropylbenzene	78	µg/kg		1.1E+04	RSL		7.1E-06
manganese	1,000	mg/kg		2.3E+04	RSL		4.3E-02
mercury	2.22	mg/kg		3.1E+02	RSL		7.2E-03
molybdenum	1.72	mg/kg		5.1E+03	RSL		3.4E-04
methylene chloride	299	µg/kg	5.3E+01	9.2E+03	RSL	5.6E-09	3.3E-05
1-methylnaphthalene	6,060	µg/kg	9.9E+01	7.2E+04	RSL	6.1E-08	8.4E-05
2-methylnaphthalene	5,780	µg/kg		4.1E+03	RSL		1.4E-03
4-methyl-2-pentanone	0.506	µg/kg		5.3E+04	RSL		9.5E-09
naphthalene	2,600	µg/kg	1.8E+01	6.2E+02	RSL		4.2E-03
nickel[i]	86.1	mg/kg	6.4E+04	2.0E+04	RSL		4.3E-03
nitrobenzene	1,110	µg/kg	2.4E+01	1.2E+03	RSL		9.3E-04
3-nitrotoluene	151	µg/kg	1.3E+01	9.2E+02	RSL		1.6E-04
pentachlorophenol	35	µg/kg	9.0E+00	1.9E+03	RSL	3.9E-09	1.8E-05
phenanthrene[j]	10,100	µg/kg		1.7E+04	RSL		5.9E-04
phenol	20	µg/kg		1.8E+05	RSL		1.1E-07

Table G-5
Industrial Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 23

Chemical	Maximum Concentration[a,b,c]	Units	INDUSTRIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
pyrene	60,800	µg/kg		1.7E+04	RSL		3.6E-03
RDX	355	µg/kg	2.4E+01	2.8E+03	RSL		1.3E-04
selenium	0.72	mg/kg		5.1E+03	RSL		1.4E-04
silver	2.27	mg/kg		5.1E+03	RSL		4.5E-04
thallium	2.8	mg/kg		8.0E+01	ESLadj		3.5E-02
titanium	513	mg/kg					
toluene	6.22	µg/kg		4.5E+04	RSL		1.4E-07
1,2,4-trichlorobenzene	0.453	µg/kg	9.9E+01	2.7E+02	RSL	4.6E-12	1.7E-06
1,2,4-trimethylbenzene	549	µg/kg		2.6E+02	RSL		2.1E-03
1,3,5-trimethylbenzene	164	µg/kg		1.0E+04	RSL		1.6E-05
1,3,5-trinitrobenzene	143	µg/kg		2.7E+04	RSL		5.3E-06
2,4,6-trinitrotoluene	258	µg/kg	7.9E+01	4.2E+02	RSL	3.3E-09	6.1E-04
vanadium	43.9	mg/kg		5.2E+03	RSL		8.4E-03
xylenes, total	53	µg/kg		2.7E+03	RSL		2.0E-05
zinc	119	mg/kg		3.1E+05	RSL		3.8E-04
					Total	**6.4E-04**	**7.6E-01**
					Incremental[l]	**6.4E-04**	**7.1E-01**
					PAHs	**6.4E-04**	**1.8E-02**
					Total Less PAHs	**6.5E-06**	**7.5E-01**
					Incremental[l] Less PAHs	**2.4E-07**	**6.9E-01**

Equations used to calculate risk and hazard:

Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline

Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:

[a] the maximum lead concentration of 163 mg/kg is below the 2010 USEPA RSL of 800 mg/kg

[b] maximum concentrations are from the top 10 feet of soil and are obtained from the 2010 Investigation, Alameda Point ArcView Query Station (TtEMI 2004) and the analytical results databases associated with the following documents: IT 2001, BEI 2003a

[c] shaded rows indicate that concentration is below background levels

[d] acenaphthene used as surrogate for acenaphthylene

[f] pyrene used as surrogate for benzo(g,h,i)perylene

[g] chromium as total chromium (1:6 ratio CrVI:CrIII)

[i] nickel as nickel (soluble salts)

[j] anthracene used as surrogate for phenanthrene

[l] incremental includes total less background

Acronyms/Abbreviations:

BEI – Bechtel Environmental, Inc.
CHHSL - California Human Health Screening Level (DTSC 2009)
CrIII – trivalent chromium
CrVI – hexavalent chromium
DDD – dichlorodiphenyldichloroethane
EBS – environmental baseline survey
ESL – environmental screening level (for indoor air, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
IT – International Technology Corporation
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Table G-6
Screening-Level Risk Results – Groundwater (Indoor Air)
Transfer Parcel FED-1A, EBS Parcel 23

Chemical	Maximum Concentration[a,b,c]	Units	GROUNDWATER				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer (µg/L)	Noncancer (µg/L)	Source	Cancer Risk	Hazard Index
acenaphthene	0.421	µg/L		2.1E+04	ESLadj		2.0E-05
acetone	4.85	µg/L		2.6E+08	ESLadj		1.8E-08
aluminum	4530	µg/L					
anthracene	0.414	µg/L		2.2E+02	ESLadj		1.9E-03
arsenic	10.1	µg/L					
barium	355	µg/L					
benzene	0.202	µg/L	5.4E+02		ESL	3.7E-10	
benzo(g,h,i)perylene[d]	0.06	µg/L		6.8E+02	ESLadj		8.9E-05
benzo(k)fluoranthene	0.003	µg/L					
2-butanone	53	µg/L		1.2E+08	ESLadj		4.4E-07
cadmium	0.55	µg/L					
carbon disulfide	31	µg/L					
chloromethane	4.37	µg/L		2.1E+02	ESLadj		2.1E-02
4-chloro-3-methylphenol	0.7	µg/L					
chromium	17.9	µg/L					
hexavalent chromium	10	µg/L					
cobalt	2.1	µg/L					
1,1-dichloroethane	0.608	µg/L	1.0E+03		ESL	6.0E-10	
1,2-dichloroethane	0.4	µg/L	2.0E+02		ESL	2.0E-09	
1,1-dichloroethene	3.99	µg/L		3.1E+04	ESLadj		1.3E-04
cis-1,2-dichloroethene	0.5	µg/L		3.1E+04	ESLadj		1.6E-05
dimethyl phthalate	3	µg/L					
ethylbenzene	0.212	µg/L	1.7E+05		ESL	1.3E-12	
fluorene	0.698	µg/L		9.5E+03	ESLadj		7.3E-05
HMX	4.8	µg/L					
iron	5470	µg/L					
isophorone	1	µg/L					
manganese	331	µg/L					
methylene chloride	1.45	µg/L	2.4E+03		ESL	6.0E-10	
2-methylnaphthalene	26	µg/L		1.3E+05	ESLadj		2.0E-04
molybdenum	10.7	µg/L					
naphthalene	21.3	µg/L	3.2E+03		ESL	6.6E-09	
nickel	19.3	µg/L					
phenanthrene	0.04	µg/L					
pyrene	0.6	µg/L		6.8E+02	ESLadj		8.9E-04
selenium	2.6	µg/L					
vanadium	21.3	µg/L					
vinyl chloride	0.218	µg/L	3.8E+00		ESL	5.7E-08	
zinc	226	µg/L					
					Total	**6.7E-08**	**2.4E-02**
					Incremental[e]	**6.7E-08**	**2.4E-02**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[a] the maximum lead concentration of 2 µg/L is below the lead action level of 15 µg/L
[a] maximum concentrations obtained from the Alameda Point 2010 Investigation and ArcView Query Station (TtEMI 2004) and analytical results database associated with the ITSI 2007 document
[c] shaded rows indicate that concentration is below background levels
[d] pyrene used as a surrogate for benzo(g,h,i)perylene
[e] incremental includes total less background

Table G-6
Screening-Level Risk Results – Groundwater (Indoor Air)
Transfer Parcel FED-1A, EBS Parcel 23

Acronyms/Abbreviations:
EBS – environmental baseline survey
FED – federal agency
HMX – octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
IT – International Technology Corporation
ITSI – Innovative Technical Solutions, Inc.
µg/L – micrograms per liter
ESL – Environmental Screening Level (for vapor intrusion, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Table G-7
Screening-Level Risk Results – Soil
Transfer Parcel FED-1A, EBS Parcel 24

			RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a,b]	Units	Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
acenaphthene	10	µg/kg		3.4E+03	RSL		3E-06
anthracene	27	µg/kg		1.7E+04	RSL		2E-06
benz(a)anthracene	29	µg/kg	1.5E-01		RSL	2E-07	
benzo(b)fluoranthene	40	µg/kg	1.5E-01		RSL	3E-07	
benzo(k)fluoranthene	13	µg/kg	1.5E+00		RSL	9E-09	
benzo(g,h,i)perylene[d]	9	µg/kg		1.7E+03	RSL		5E-06
benzo(a)pyrene	16	µg/kg	1.5E-02		RSL	1E-06	
sec-butylbenzene	3	µg/kg			RSL		
chrysene	60	µg/kg	1.5E+01		RSL	4E-09	
fluoranthene	70	µg/kg		2.3E+03	RSL		3E-05
fluorene	100	µg/kg		2.3E+03	RSL		4E-05
indeno(1,2,3-cd)pyrene	3	µg/kg	1.5E-01		RSL	2E-08	
p-isopropyltoluene[e]	10	µg/kg		2.1E+03	RSL		5E-06
methylene chloride	10	µg/kg	1.1E+01	1.7E+03	RSL	9E-10	6E-06
2-methylnaphthalene	70	µg/kg		3.1E+02	RSL		2E-04
naphthalene	12	µg/kg	3.6E+00	1.4E+02	RSL	3E-09	9E-05
phenanthrene[g]	620	µg/kg		1.7E+03	RSL		4E-04
pyrene	100	µg/kg		1.7E+03	RSL		6E-05
1,2,4-trimethylbenzene	9	µg/kg		6.2E+01	RSL		1E-04
1,3,5-trimethylbenzene	16	µg/kg		7.8E+02	RSL		2E-05
					Total	**2E-06**	**1E-03**
					Incremental[h]	**2E-06**	**1E-03**
					PAHs	**2E-06**	**8E-04**
					Total Less PAHs	**9E-10**	**2E-04**
					Incremental[h] Less PAHs	**9E-10**	**2E-04**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[a] the maximum lead concentration of 5.9 mg/kg is below the residential soil California modified PRG of 150 mg/kg
[b] maximum concentrations obtained from the Alameda Point ArcView Query Station (TtEMI 2004) and the analytical results databases associated with the following documents: IT 2001, BEI 2003a

[d] pyrene used as surrogate for benzo(g,h,i)perylene
[e] cumene (isopropylbenzene) used as surrogate for p-isopropyltoluene

[g] anthracene used as surrogate for phenanthrene
[h] incremental includes total less background

Acronyms/Abbreviations:
BEI – Bechtel Environmental, Inc.
EBS – environmental baseline survey
ESL – environmental screening level (for vapor intrusion, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
IT – International Technology Corporation
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-8
Screening-Level Risk Results – Groundwater (Indoor Air)
Transfer Parcel FED-1A, EBS Parcel 24

Chemical	Maximum Concentration[a,b]	Units	GROUNDWATER: Risk-Based Guideline: Cancer (µg/L)	Risk-Based Guideline: Noncancer (µg/L)	Risk-Based Guideline: Source	Risk and Hazard Calculation: Cancer Risk	Risk and Hazard Calculation: Hazard Index
acetone	18	µg/L		2.6E+08	ESLadj		6.8E-08
2-butanone	5	µg/L		1.2E+08	ESLadj		4.1E-08
sec-butylbenzene	0.4	µg/L					
fluorene	0.3	µg/L		9.5E+03	ESLadj		3.2E-05
p-isopropyltoluene	1.3	µg/L					
naphthalene	58	µg/L	3.2E+03		ESL	1.8E-08	
phenanthrene	0.62	µg/L					
1,2,4-trimethylbenzene	13.6	µg/L					
1,3,5-trimethylbenzene	3.6	µg/L					
total xylenes	2	µg/L		8.1E+05	ESLadj		2.5E-06
					Total	**1.8E-08**	**3.4E-05**
					Incremental[c]	**1.8E-08**	**3.4E-05**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[a] the maximum lead concentration of 68.7 µg/L is above the California-modified lead action level of 15 µg/L
[b] maximum concentration obtained from the 2010 Investigation and the electronic database associated with Shaw 2005
[c] incremental includes total less background

Acronyms/Abbreviations:
EBS – environmental baseline survey
FED – federal agency
µg/L – micrograms per liter
ESL – Environmental Screening Level (for vapor intrusion, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-9
Screening-Level Risk Results – Soil
Transfer Parcel FED-2B, EBS Parcel 27

			RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a,b,c]	Units	Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
aluminum	4,960	mg/kg		7.7E+04	RSL		6.4E-02
antimony	0.56	mg/kg		3.1E+01	RSL		1.8E-02
arsenic[d]	0.94	mg/kg	3.9E-01	2.2E+01	RSL	2.4E-06	4.3E-02
barium	29	mg/kg		1.5E+04	RSL		1.9E-03
cadmium	0.1	mg/kg	1.8E+03	7.0E+01	RSL	5.6E-11	1.4E-03
chromium[e]	43	mg/kg	2.8E+02		RSL	1.5E-07	
cobalt	6.4	mg/kg	3.7E+02	2.3E+01	RSL	1.7E-08	2.8E-01
copper	5.4	mg/kg		3.1E+03	RSL		1.7E-03
iron	11,300	mg/kg		5.5E+04	RSL		2.1E-01
manganese	120	mg/kg		1.8E+03	RSL		6.7E-02
molybdenum	0.19	mg/kg		3.9E+02	RSL		4.9E-04
nickel[f]	27.4	mg/kg	1.3E+04	1.5E+03	RSL	2.1E-09	1.8E-02
vanadium	28.1	mg/kg		3.9E+02	RSL		7.2E-02
zinc	20.6	mg/kg		2.3E+04	RSL		9.0E-04
					Total	**2.6E-06**	**7.7E-01**
					Incremental[g]	**0.0E+00**	**0.0E+00**
					PAHs	**0.0E+00**	**0.0E+00**
					Total Less PAHs	**2.6E-06**	**7.7E-01**
					Incremental[g] Less PAHs	**0.0E+00**	**0.0E+00**

Equations used to calculate risk and hazard:

Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline

Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:

[a] the maximum lead concentration of 3 mg/kg is below the 2004 USEPA California-modified residential soil PRG of 150 mg/kg

[b] maximum concentrations obtained from the 2010 Investigation and the analytical results database associated with the IT 2001 document

[c] shaded rows indicate that concentration is below background levels

[d] California-modified PRG used to calculate cancer risk

[e] chromium as total chromium (1:6 ratio CrVI:CrIII)

[f] nickel as nickel (soluble salts)

[g] incremental includes total less background

Acronyms/Abbreviations:

CHHSL - California Human Health Screening Level (DTSC 2009)
CrIII – chromium, trivalent
CrVI – chromium, hexavalent
EBS – environmental baseline survey
FED – federal agency
IT – International Technology Corporation
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
U.S. EPA – United States Environmental Protection Agency

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Table G-10
Screening-Level Risk Results – Groundwater (Indoor Air)
Transfer Parcel FED-2C, EBS Parcel 27

			GROUNDWATER				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a,b]	Units	Cancer (µg/L)	Noncancer (µg/L)	Source	Cancer Risk	Hazard Index
barium	118	µg/L					
carbon disulfide	1	µg/L					
chloroform	0.5	µg/L	3.3E+02		ESL	1.5E-09	
iron	226	µg/L					
manganese	1,110	µg/L					
molybdenum	20.1	µg/L					
nickel	17.7	µg/L					
					Total	**1.5E-09**	**0.0E+00**
					Incremental[c]	**1.5E-09**	**0.0E+00**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[b] maximum concentrations obtained from the 2010 Investigation and the analytical results database associated with the IT 2001 document
[b] shaded rows indicate that concentration is below background levels
[c] incremental includes total less background

Acronyms/Abbreviations:
EBS – environmental baseline survey
ESL – Environmental Screening Level (for vapor intrusion, Water Board 2008)
FED – federal agency
IT – International Technology Corporation
µg/L – micrograms per liter
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-11
Screening-Level Risk Results – Soil
Transfer Parcel FED-2C, EBS Parcel 23E

			RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a]	Units	Cancer (mg/kg)	Noncancer (mg/kg)	Source	Cancer Risk	Hazard Index
acetone	11.9	µg/kg		6.1E+04	RSL		2.0E-07
aluminum	4,690	mg/kg		7.7E+04	RSL		6.1E-02
arsenic	1.36	mg/kg	3.9E-01	2.2E+01	RSL	3.5E-06	6.2E-02
barium	36.9	mg/kg		1.5E+04	RSL		2.5E-03
beryllium	0.238	mg/kg	1.4E+03	1.6E+02	RSL	1.7E-10	1.5E-03
cadmium	0.113	mg/kg	1.8E+03	7.0E+01	RSL	6.3E-11	1.6E-03
cobalt	21.5	mg/kg	3.7E+02	2.3E+01	RSL	5.8E-08	9.3E-01
copper	5.28	mg/kg		3.1E+03	RSL		1.7E-03
iron	8,430	mg/kg		5.5E+04	RSL		1.5E-01
manganese	97	mg/kg		1.8E+03	RSL		5.4E-02
methylene chloride	18	µg/kg	1.1E+01	1.7E+03	RSL	1.7E-09	1.1E-05
molybdenum	0.465	mg/kg		3.9E+02	RSL		1.2E-03
nickel	25.4	mg/kg	1.3E+04	1.5E+03	RSL	2.0E-09	1.7E-02
pyrene	1.78	µg/kg		1.7E+03	RSL		1.0E-06
vanadium	17.7	mg/kg		3.9E+02	RSL		4.5E-02
zinc	16.8	mg/kg		2.3E+04	RSL		7.3E-04
					Total	**3.5E-06**	**1.3E+00**
					Incremental[b]	**6.0E-08**	**9.3E-01**
					PAHs	**0.0E+00**	**1.0E-06**
					Total Less PAHs	**3.5E-06**	**1.3E+00**
					Incremental[b] Less PAHs	**6.0E-08**	**9.3E-01**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[b] maximum concentrations obtained from the 2010 Investigation and the analytical results database associated with the IT 2001 document
[b] incremental includes total less background
[a] the maximum lead concentration of 1.65 mg/kg is below the 2004 USEPA California-modified residential soil PRG of 150 mg/kg

Acronyms/Abbreviations:
EBS – environmental baseline survey
FED – federal agency
IT – International Technology Corporation
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-12
Screening-Level Risk Results – Groundwater (Indoor Air)
Transfer Parcel FED-2C, EBS Parcel 23E

			GROUNDWATER				
			Risk-Based Guideline			Risk and Hazard Calculation	
Chemical	Maximum Concentration[a,b]	Units	Cancer (µg/L)	Noncancer (µg/L)	Source	Cancer Risk	Hazard Index
acenaphthene	1.6	µg/L		2.1E+04	ESLadj		7.5E-05
aluminum	286	µg/L					
anthracene	0.206	µg/L		2.2E+02	ESLadj		9.5E-04
arsenic	10.5	µg/L					
barium	531	µg/L					
benzo(a)anthracene	0.133	µg/L					
benzo(a)pyrene	0.296	µg/L					
benzo(b)fluoranthene	0.297	µg/L					
benzo(k)fluroanthene	0.103	µg/L					
chloromethane	1	µg/L		2.1E+02	ESLadj		4.8E-03
cobalt	5.19	µg/L					
chrysene	0.158	µg/L					
fluoranthene	1.32	µg/L					
fluorene	0.367	µg/L		9.5E+03	ESLadj		3.9E-05
indeno(1,2,3-cd)pyren	0.2	µg/L					
iron	22100	µg/L					
isopropylbenzene	42	µg/L					
manganese	2610	µg/L					
molybdenum	15.3	µg/L					
nickel	4.21	µg/L					
n-propylbenzene	0.49	µg/L					
pyrene	2.97	µg/L		6.8E+02	ESLadj		4.4E-03
					Total	**0.0E+00**	**9.3E-03**
					Incremental[c]	**0.0E+00**	**9.3E-03**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[a] maximum concentrations obtained from the 2010 Investigation and the analytical database associated with the BEI 2003b document
[b] shaded rows indicate that concentration is below background levels
[c] incremental includes total less background

Acronyms/Abbreviations:
BEI – Bechtel Environmental, Inc.
EBS – environmental baseline survey
ESL – Environmental Screening Level (for vapor intrusion, Water Board 2008)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
µg/L – micrograms per liter
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-13
Screening Level Risk Results - Soil
2010 Investigation

Chemical	Maximum Concentration[abc]	Units	RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer	Noncancer	Source	Cancer Risk	Hazard Index
1,2,4-Trichlorobenzene	4.81	µg/kg	2.20E+04	6.20E+04	RSL	2.19E-10	7.76E-05
1,2,4-Trimethylbenzene	549	µg/kg		6.20E+04	RSL		8.85E-03
1,2-Dibromo-3-chloropropane	3.92	µg/kg	5.40E+00	4.90E+03	RSL	7.26E-07	8.00E-04
1,3,5-Trimethylbenzene	164	µg/kg		7.80E+05	RSL		2.10E-04
1,3,5-Trinitrobenzene	143	µg/kg		2.20E+06	RSL		6.50E-05
1,3-Dinitrobenzene	386	µg/kg		6.10E+03	RSL		6.33E-02
1,4-Dichlorobenzene	5.45	µg/kg	2.40E+03	3.50E+06	RSL	2.27E-09	1.56E-06
1-Methylnaphthalene	6060	µg/kg	2.20E+04	5.50E+06	RSL	2.75E-07	1.10E-03
2,3,7,8-TCDD (dioxin)	0.516	pg/g	4.50E+06	7.20E+07	RSL	1.15E-13	7.17E-09
2,4,6-Trinitrotoluene	258	µg/kg	1.90E+04	3.60E+04	RSL	1.36E-08	7.17E-03
2,6-Dinitrotoluene	378	µg/kg		6.10E+04	RSL		6.20E-03
2-Butanone	103	µg/kg		2.80E+07	RSL		3.68E-06
2-Hexanone	10.9	µg/kg		2.10E+05	RSL		5.19E-05
2-Methylnaphthalene	5780	µg/kg		3.10E+05	RSL		1.86E-02
3-Nitrotoluene	151	µg/kg		6.10E+03	RSL		2.48E-02
4-Methyl-2-pentanone	10.9	µg/kg		5.30E+06	RSL		2.06E-06
Acenaphthene	1840	µg/kg		3.40E+06	RSL		5.41E-04
Acetone	118	µg/kg		6.10E+07	RSL		1.93E-06
Aluminum	14400	mg/kg		7.70E+04	RSL		1.87E-01
Anthracene	2690	µg/kg		1.70E+07	RSL		1.58E-04
Antimony	0.932	mg/kg		3.10E+01	RSL		3.01E-02
Arsenic	6.82	mg/kg	3.90E-01	2.20E+01	RSL	1.75E-05	3.10E-01
Barium	191	mg/kg		1.50E+04	RSL		1.27E-02
Benzene	1.69	µg/kg	1.10E+03	8.60E+04	RSL	1.54E-09	1.97E-05
Benzo(a)anthracene	34300	µg/kg	1.50E+02		RSL	2.29E-04	
Benzo(a)pyrene	97200	µg/kg	1.50E+01		RSL	6.48E-03	
Benzo(b)fluoranthene	116000	µg/kg	1.50E+02		RSL	7.73E-04	
Benzo(k)fluoranthene	27400	µg/kg	1.50E+03		RSL	1.83E-05	
Beryllium	0.704	mg/kg	1.40E+03	1.60E+02	RSL	5.03E-10	4.40E-03
Bromomethane	0.364	µg/kg		7.30E+03	RSL		4.99E-05
Cadmium	7.56	mg/kg	1.80E+03	7.00E+01	RSL	4.20E-09	1.08E-01
Carbon disulfide	3.82	µg/kg		8.20E+05	RSL		4.66E-06
Chloroform	30.1	µg/kg	2.90E+02	2.10E+05	RSL	1.04E-07	1.43E-04
Chrysene	75200	µg/kg	1.50E+04		RSL	5.01E-06	
Cobalt	156	mg/kg	3.70E+02	2.30E+01	RSL	4.22E-07	6.78E+00
Copper	124	mg/kg		3.10E+03	RSL		4.00E-02
Dibenz(a,h)anthracene	12200	µg/kg	1.50E+01		RSL	8.13E-04	
Ethylbenzene	32.2	µg/kg	5.40E+03	3.50E+06	RSL	5.96E-09	9.20E-06
Fluoranthene	57500	µg/kg		2.30E+06	RSL		2.50E-02
Fluorene	1760	µg/kg		2.30E+06	RSL		7.65E-04
gamma-BHC (Lindane)	0.597	µg/kg	5.20E+02	2.10E+04	RSL	1.15E-09	2.84E-05
HMX	164	µg/kg		3.80E+06	RSL		4.32E-05

Table G-13
Screening Level Risk Results - Soil
2010 Investigation

Chemical	Maximum Concentration[abc]	Units	RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer	Noncancer	Source	Cancer Risk	Hazard Index
Indeno(1,2,3-cd)pyrene	88700	µg/kg	1.50E+02		RSL	5.91E-04	
Iron	32100	mg/kg		5.50E+04	RSL		5.84E-01
Isopropylbenzene	77.7	µg/kg		2.10E+06	RSL		3.70E-05
Manganese	1000	mg/kg		1.80E+03	RSL		5.56E-01
Mercury	2.22	mg/kg		5.60E+00	RSL		3.96E-01
Methylene chloride	299	µg/kg	1.10E+04	1.70E+06	RSL	2.72E-08	1.76E-04
Molybdenum	1.72	mg/kg		3.90E+02	RSL		4.41E-03
Naphthalene	2600	µg/kg	3.60E+03	1.40E+05	RSL	7.22E-07	1.86E-02
n-Hexane	6.56	µg/kg		5.70E+05	RSL		1.15E-05
Nickel	86.1	mg/kg	1.30E+04	1.50E+03	RSL	6.62E-09	5.74E-02
Nitrobenzene	1110	µg/kg	4.80E+03	1.30E+05	RSL	2.31E-07	8.54E-03
Pyrene	60800	µg/kg		1.70E+06	RSL		3.58E-02
RDX	355	µg/kg	5.50E+03	2.30E+05	RSL	6.45E-08	1.54E-03
Selenium	0.335	mg/kg		3.90E+02	RSL		8.59E-04
Silver	2.27	mg/kg		3.90E+02	RSL		5.82E-03
Toluene	6.22	µg/kg		5.00E+06	RSL		1.24E-06
Vanadium	43.9	mg/kg		3.90E+02	RSL		1.13E-01
Xylene, total	53	µg/kg		6.30E+05	RSL		8.41E-05
Zinc	119	mg/kg		2.30E+04	RSL		5.17E-03
					Total	**8.93E-03**	**9.42E+00**
					Incremental[d]	**8.91E-03**	**8.95E+00**
					PAHs	**8.91E-03**	**8.03E-02**
					Total Less PAHs	**1.94E-05**	**9.34E+00**
					Incremental[l] Less PAHs	**1.89E-06**	**8.87E+00**

Equations used to calculate risk and hazard:

Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline

Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:

[a] the maximum lead concentration of 163 mg/kg exceeds the residential soil CHHSL of 80 mg/kg

[b] maximum concentrations obtained from the Alameda Point 2010 Investigation

[c] shaded rows indicate that concentration is below background levels

[d] incremental includes total less background

Acronyms/Abbreviations:

BEI – Bechtel Environmental, Inc.
CHHSL - California Human Health Screening Level (DTSC 2009)
EBS – environmental baseline survey
ESL – environmental screening level (for indoor air, Water Board 2007)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
TtEMI – Tetra Tech EM Inc.
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Table G-14
Screening-Level Risk Results - Shallow Groundwater (Vapor Intrusion)
2010 Investigation

Chemical	Maximum Concentration[a,b]	Units	Groundwater				
			Risk-Based Guideline (Residential)			Risk and Hazard Calculation	
			Cancer	Noncancer	Source	Cancer Risk	Hazard Index
1,1-Dichloroethane	0.608	µg/L	1.00E+03		ESL	6.08E-10	
1,1-Dichloroethene	3.99	µg/L		3.15E+04	ESLadj		1.27E-04
2-Methylnaphthalene	26	µg/L		1.30E+05	ESLadj		2.00E-04
Acenaphthene	1.6	µg/L		2.10E+04	ESLadj		7.62E-05
Acetone	4.85	µg/L		2.65E+08	ESLadj		1.83E-08
Anthracene	0.414	µg/L		2.15E+02	ESLadj		1.93E-03
Benzene	0.202	µg/L	5.40E+02		ESL	3.74E-10	
Chloromethane	4.37	µg/L		2.05E+02	ESLadj		2.13E-02
Ethylbenzene	0.212	µg/L	1.70E+05		ESL	1.25E-12	
Fluorene	0.698	µg/L		9.50E+03	ESLadj		7.35E-05
Methylene chloride	1.45	µg/L	2.40E+03		ESL	6.04E-10	
Naphthalene	21.3	µg/L	3.20E+03		ESL	6.66E-09	
Pyrene	2.97	µg/L		7.00E+02	ESLadj		4.24E-03
Vinyl chloride	0.218	µg/L	3.80E+00		ESL	5.74E-08	
					Total	7E-08	3E-02

Equations used to calculate risk and hazard:

Risk = (Maximum Concentration x $1x10^{-6}$) / Cancer Risk-Based Guideline

Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:

[a] maximum concentrations obtained from the Alameda Point 2010 Investigation

[b] shaded rows indicate that concentration is below background levels

[c] incremental includes total less background

Acronyms/Abbreviations:

BEI – Bechtel Environmental, Inc.

EBS – environmental baseline survey

ESL – Environmental Screening Level (for vapor intrusion, Water Board 2008)

ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1

FED – federal agency

µg/L – micrograms per liter

U.S. EPA – United States Environmental Protection Agency

Water Board – San Francisco Bay Regional Water Quality Control Board

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Table G-15
Screening-Level Risk Results - Soil (without elevated PAH samples)
2010 Investigation

Chemical	Maximum Concentration[abc]	Units	RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer	Noncancer	Source	Cancer Risk	Hazard Index
1,2,4-Trichlorobenzene	0.399	µg/kg	2.20E+04	6.20E+04	RSL	1.81E-11	6.44E-06
1,2,4-Trimethylbenzene	549	µg/kg		6.20E+04	RSL		8.85E-03
1,2-Dibromo-3-chloropropane	3.83	µg/kg	5.40E+00	4.90E+03	RSL	7.09E-07	7.82E-04
1,3,5-Trimethylbenzene	164	µg/kg		7.80E+05	RSL		2.10E-04
1,3,5-Trinitrobenzene	143	µg/kg		2.20E+06	RSL		6.50E-05
1,3-Dinitrobenzene	386	µg/kg		6.10E+03	RSL		6.33E-02
1,4-Dichlorobenzene	0.323	µg/kg	2.40E+03	3.50E+06	RSL	1.35E-10	9.23E-08
1-Methylnaphthalene	6060	µg/kg	2.20E+04	5.50E+06	RSL	2.75E-07	1.10E-03
2,3,7,8-TCDD (dioxin)	0.516	pg/g	4.50E+06	7.20E+07	RSL	1.15E-13	7.17E-09
2,4,6-Trinitrotoluene	258	µg/kg	1.90E+04	3.60E+04	RSL	1.36E-08	7.17E-03
2,6-Dinitrotoluene	378	µg/kg		6.10E+04	RSL		6.20E-03
2-Butanone	103	µg/kg		2.80E+07	RSL		3.68E-06
2-Hexanone	2.93	µg/kg		2.10E+05	RSL		1.40E-05
2-Methylnaphthalene	5780	µg/kg		3.10E+05	RSL		1.86E-02
3-Nitrotoluene	151	µg/kg		6.10E+03	RSL		2.48E-02
4-Methyl-2-pentanone	0.506	µg/kg		5.30E+06	RSL		9.55E-08
Acenaphthene	4.67	µg/kg		3.40E+06	RSL		1.37E-06
Acetone	118	µg/kg		6.10E+07	RSL		1.93E-06
Aluminum	14400	mg/kg		7.70E+04	RSL		1.87E-01
Anthracene	45.7	µg/kg		1.70E+07	RSL		2.69E-06
Antimony	1.72	mg/kg		3.10E+01	RSL		5.55E-02
Arsenic	6.82	mg/kg	3.90E-01	2.20E+01	RSL	1.75E-05	3.10E-01
Barium	169	mg/kg		1.50E+04	RSL		1.13E-02
Benzene	1.69	µg/kg	1.10E+03	8.60E+04	RSL	1.54E-09	1.97E-05
Benzo(a)anthracene	525	µg/kg	1.50E+02		RSL	3.50E-06	
Benzo(a)pyrene	26.9	µg/kg	1.50E+01		RSL	1.79E-06	
Benzo(b)fluoranthene	466	µg/kg	1.50E+02		RSL	3.11E-06	
Benzo(k)fluoranthene	177	µg/kg	1.50E+03		RSL	1.18E-07	
Beryllium	0.618	mg/kg	1.40E+03	1.60E+02	RSL	4.41E-10	3.86E-03
Bromomethane	0.364	µg/kg		7.30E+03	RSL		4.99E-05
Cadmium	7.56	mg/kg	1.80E+03	7.00E+01	RSL	4.20E-09	1.08E-01
Carbon disulfide	3.82	µg/kg		8.20E+05	RSL		4.66E-06
Chloroform	30.1	µg/kg	2.90E+02	2.10E+05	RSL	1.04E-07	1.43E-04
Chrysene	873	µg/kg	1.50E+04		RSL	5.82E-08	
Cobalt	31.6	mg/kg	3.70E+02	2.30E+01	RSL	8.54E-08	1.37E+00
Copper	124	mg/kg		3.10E+03	RSL		4.00E-02
Dibenz(a,h)anthracene	12.6	µg/kg	1.50E+01		RSL	8.40E-07	
Ethylbenzene	32.2	µg/kg	5.40E+03	3.50E+06	RSL	5.96E-09	9.20E-06
Fluoranthene	388	µg/kg		2.30E+06	RSL		1.69E-04
Fluorene	1760	µg/kg		2.30E+06	RSL		7.65E-04
gamma-BHC (Lindane)	0.597	µg/kg	5.20E+02	2.10E+04	RSL	1.15E-09	2.84E-05
HMX	164	µg/kg		3.80E+06	RSL		4.32E-05
Indeno(1,2,3-cd)pyrene	106	µg/kg	1.50E+02		RSL	7.07E-07	

Table G-15
Screening-Level Risk Results - Soil (without elevated PAH samples)
2010 Investigation

Chemical	Maximum Concentration[abc]	Units	RESIDENTIAL SOIL				
			Risk-Based Guideline			Risk and Hazard Calculation	
			Cancer	Noncancer	Source	Cancer Risk	Hazard Index
Iron	32100	mg/kg		5.50E+04	RSL		5.84E-01
Isopropylbenzene	77.7	µg/kg		2.10E+06	RSL		3.70E-05
Manganese	1000	mg/kg		1.80E+03	RSL		5.56E-01
Mercury	1.24	mg/kg		5.60E+00	RSL		2.21E-01
Methylene chloride	299	µg/kg	1.10E+04	1.70E+06	RSL	2.72E-08	1.76E-04
Molybdenum	1.72	mg/kg		3.90E+02	RSL		4.41E-03
Naphthalene	2600	µg/kg	3.60E+03	1.40E+05	RSL	7.22E-07	1.86E-02
n-Hexane	6.56	µg/kg		5.70E+05	RSL		1.15E-05
Nickel	86.1	mg/kg	1.30E+04	1.50E+03	RSL	6.62E-09	5.74E-02
Nitrobenzene	1110	µg/kg	4.80E+03	1.30E+05	RSL	2.31E-07	8.54E-03
Pyrene	334	µg/kg		1.70E+06	RSL		1.96E-04
RDX	355	µg/kg	5.50E+03	2.30E+05	RSL	6.45E-08	1.54E-03
Selenium	0.349	mg/kg		3.90E+02	RSL		8.95E-04
Silver	2.27	mg/kg		3.90E+02	RSL		5.82E-03
Toluene	6.22	µg/kg		5.00E+06	RSL		1.24E-06
Vanadium	43.9	mg/kg		3.90E+02	RSL		1.13E-01
Xylene, total	53	µg/kg		6.30E+05	RSL		8.41E-05
Zinc	119	mg/kg		2.30E+04	RSL		5.17E-03
					Total	**2.99E-05**	**3.80E+00**
					Incremental[l]	**1.24E-05**	**3.32E+00**
					PAHs	**1.11E-05**	**3.94E-02**
					Total Less PAHs	**1.88E-05**	**3.76E+00**
					Incremental[l] Less PAHs	**1.25E-06**	**3.28E+00**

Equations used to calculate risk and hazard:
Risk = (Maximum Concentration x 1x10 $^{-6}$) / Cancer Risk-Based Guideline
Hazard = Maximum Concentration / Noncancer Risk-Based Guideline

Notes:
[a] the maximum lead concentration of 163 mg/kg exceeds the residential soil CHHSL of 80 mg/kg
[b] maximum concentrations obtained from the Alameda Point 2010 Investigation
[c] shaded rows indicate that concentration is below background levels
[d] incremental includes total less background

Acronyms/Abbreviations:
CHHSL - California Human Health Screening Level (DTSC 2009)
EBS – environmental baseline survey
ESL – environmental screening level (for indoor air, Water Board 2007)
ESLadj – noncancer values multiplied by 5 to adjust target hazard quotient to 1
FED – federal agency
µg/kg – micrograms per kilogram
mg/kg – milligrams per kilogram
PAH – polycyclic aromatic hydrocarbon
RSL – regional screening levels (for direct contact, U.S. EPA 2010)
U.S. EPA – United States Environmental Protection Agency
Water Board – San Francisco Bay Regional Water Quality Control Board

Appendix H
2010 Data Quality Evaluation

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Acronyms and Abbreviations

ASTM	American Society of Testing and Materials
DoD	U.S. Department of Defense
DQE	Data Quality Evaluation
DQO	data quality objective
EPA	U.S. Environmental Protection Agency
EXPLO	explosives
J	concentration estimated
J-	concentration estimated, with a potential low bias
J+	concentration estimated, with a potential high bias
LCS	laboratory control sample
NJ	analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value is the approximate concentration of the parameter in the sample
MS/MSD	matrix spike/matrix spike duplicate
PAL	project action limit
PARCC	precision, accuracy, representativeness, completeness, and comparability
PCB	polychlorinated biphenyl
PEST	chlorinated pesticide
QC	quality control
QL	quantitation limit
R	rejected
RPD	relative percent difference
SAP	Sampling and Analysis Plan
SIM	selected ion monitoring
SOP	standard operating procedure
TCE	trichloroethene
UFP	Uniform Federal Policy
UJ	not detected, quantitation limit estimated
U	not detected

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APPENDIX H

Data Quality Evaluation

H.1 Data Quality Assessment

This data quality evaluation assesses the effect of the overall analytical process on the "availability" of the analytical data. "Availability" in this context refers to whether results can be used by the project team based on their analytical soundness. If a result is analytically sound, it is available to use (1) for evaluating the potential releases, (2) for evaluating the nature and extent of contamination, and (3) for estimating potential associated human health and ecological risks. However, a particular result or group of results may not be "usable" for these purposes if other conditions apply. For example, if a trichloroethene (TCE) spill had occurred on a hypothetical site and the TCE data for many or all of the samples were rejected, the data may not be usable for making site-specific determinations; this would be so even if all the non-TCE data were analytically sound and available for use by the project team. To avoid confusion of terms, this data quality evaluation differentiates the "availability" of results from "usability" of results. "Available" results are analytically sound and available for use by the project team to make decisions, even if the results are not usable for a particular purpose.

The three major categories of data evaluation are laboratory performance, field collection performance (i.e. blank contamination), and matrix interferences. Evaluation of laboratory performance is a check for compliance with the method requirements; in other words, evaluation of laboratory performance determines whether the laboratory analyzed the samples within analytical method limits . Additionally, an independent, third-party validator conducts a review of the laboratory data to assess whether the analytical methods were within required control limits at the time of analysis. Evaluation of potential matrix interferences involves the review of several areas of results, including surrogate spike recoveries, matrix spike recoveries, and duplicate sample results. Evaluation of field collection performance, such as blank contamination and field duplicates, involves the review of field quality control (QC) and the determination of their effect on the sample results.

The data evaluation and validation is a multi-tiered approach. The process begins with an internal laboratory review, continues with an independent review by a third-party validator, and ends with an overall review by the Navy contractor project chemistry team. While only the data validator is allowed to apply qualifiers to the data, the process provides a medium for essential communication between the laboratory, validator, and project team. The process also allows thorough evaluation of data quality.

H.1.1 Laboratory Internal Quality Control Review

Prior to releasing the analytical data, the laboratory reviewed both the sample and QC data to verify sample identity, instrument calibration, quantitation limits, dilution factors, numerical computations, accuracy of transcriptions, and chemical interpretations. In addition, the QC data were tabulated and the results were reviewed to ascertain whether

they were within the contract-required or laboratory-defined limits for accuracy and precision. Any non-conforming data were discussed in the data package cover letter and case narrative. The case narrative was then reviewed by the data validator and was incorporated into the data validation report. If necessary, the exceedances were verified and qualifiers were applied based on this information.

H.1.2 Data Validation

An independent data validator reviewed all data packages using the validation criteria outlined in the site-specific Uniform Federal Policy Sampling and Analysis Plan (UFP-SAP) work plan, the analytical methodology, and the laboratory's standard operating procedures (SOPs). National Functional Guidelines were applied to the data to help the validator create a thorough and systematic approach to the validation process. As stated above, the data validation process was independent and separate from the laboratory's internal review. The process was specifically focused on the effects of the laboratory's performance and sample matrix on the analytical results. Areas of review consisted of holding time compliance, surrogate recovery accuracy, matrix spiked sample precision and accuracy, blank contamination, initial and continuing calibration accuracy and precision, laboratory control sample accuracy, internal standard response and retention time accuracy, instrument tune criteria accuracy, and duplicate sample precision (laboratory and field duplicates). Additionally, the analytical spectrum and raw data output were reviewed and laboratory results that were selected by the validator were recalculated from the raw data to verify final laboratory identification and quantitation.

When multiple analyses were performed, the analytical run with the lowest quantitation limits was selected by the validator if the QC criteria were met for that analysis. If a sample was analyzed more than once as a result of concentrations exceeding the calibration range, the data validator selected results from the appropriate dilution. When multiple analyses were performed and QC criteria were outside control limits for all analyses, the data validator selected results from the analytical run with the least number of exceptions or the best possible QC.

Qualification of data is not an unusual occurrence. To define a laboratory QC exceedance and to define when a laboratory QC exceedance occurs, the laboratory refers to its in-house SOPs. The SOPs are based on U.S. Department of Defense (DoD) requirements, the requested analytical method, and accumulated laboratory experience. When a laboratory QC exceedance occurs, the situation may be acceptable or it may require further action by the laboratory, such as application of a laboratory qualifier or re-extraction and/or reanalysis of the sample. The data validator uses a separate set of QC criteria, based on guidance from the U.S. Environmental Protection Agency (EPA) region that applies to the samples. A laboratory QC exceedance may not constitute a data validation exceedance, and a data validation exceedance may not constitute a laboratory QC exceedance. Data validation criteria exceedances may result in the qualification of or rejection of data, as deemed appropriate by the third-party data validator.

The data validator examines each data point and determines any effects that QC exceedances have had. Most often, these effects dictate that the result or quantitation limit should be considered estimated but is still available for use. The J-qualification, UJ-qualification, and U-qualification of results are common occurrences and have no adverse

effects on the availability of that result to the project team for making decisions. J-qualified results are available, at the reported result, for use as detects as long as they are considered "estimated" by the project team. Human health risk assessment guidance suggests that these qualifiers "indicate uncertainty in the reported concentration of the chemical, but not in its assigned identity. Therefore, these data can be used just as positive data with no qualifiers or codes." (Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual, [Part A] EPA/540/1-89/002, Office of Emergency and Remedial Response, EPA, Washington, D.C., 1989). U-qualified and UJ-qualified results are available, at the reported quantitation limit, for use as non-detects as long as they are considered "non-detect," "not detected at significantly greater than that in an associated blank," or "non-detect, estimated quantitation limit," as appropriate.

In extreme cases, a result is rejected and deemed to be unusable. "Unusable" in this instance is defined as a result that is not analytically sound and is not generally considered available for use by the project team. In some cases, the project team may still decide to use a rejected result. An example of this would be if a result is rejected because it is biased extremely high yet is still below the project action limits. A conservative decision may be made to consider this result a non-exceedance, even if its concentration were rejected. For that reason, it is important to examine why a result was rejected. For the most part, however, rejected results are not usable, and the R-qualifier is the only qualifier that has an adverse effect on the availability of data.

In large data sets, rejected results are often inconsequential because sufficient non-rejected data are available to the project team. If (1) enough non-rejected data are available, (2) the project team is able to infer results from adjacent sampling locations, or (3) other site-specific information can provide additional lines of evidence, it may not be necessary to know the concentrations of some rejected constituents. It may also not be necessary to prove a constituent's absence if sufficient additional lines of evidence exist.

H.1.3 Primary Data Validation Qualifiers

The following data validation qualifiers were applied to one or more analytical results:

- **U** - Not detected. Sample was analyzed for this parameter, but it was not detected at greater than the reported quantitation limit. The data validator may also apply this qualifier to indicate that a concentration was not detected at significantly greater than that in an associated blank. Thus, this qualifier does not necessarily indicate a quality control problem.
- **UJ** – Not detected, quantitation limit estimated. Sample was analyzed for this parameter, but it was not detected above the reported quantitation limit. The quantitation limit for this parameter is estimated due to a quality control exceedance.
- **J** - Concentration estimated. The parameter was positively identified and the associated numerical value is the approximate concentration of the parameter in the sample. Often, a J-qualifier is applied simply because the result was less than the quantitation limit.
- **J-** - Concentration estimated, with a potential low bias. The parameter was positively identified and the associated numerical value is the approximate concentration of the parameter in the sample.

- **J+** - Concentration estimated, with a potential high bias. The parameter was positively identified and the associated numerical value is the approximate concentration of the parameter in the sample.
- **NJ** - The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value is the approximate concentration of the parameter in the sample.
- **R** - Rejected. The result was rejected because quality control limits were exceeded. The presence or absence of the parameter cannot be verified and the result generally is not usable as detected or as not detected.
- **[No qualifier present] -** Detected. Qualification was not warranted.

H.1.4 Impact of Data Quality on Project Data Quality Objectives and Data Usability Data Validation

The laboratory analyzed the samples in accordance with EPA SW-846 methods. The data packages were reviewed by an independent data validator.

The laboratory utilized various qualifiers to represent "below reporting limit," "non-detect," and "detected." Any other extraneous laboratory qualifiers were superseded by data validation qualifiers. The data validator utilized J-qualifiers, UJ-qualifiers, U-qualifiers, and R-qualifiers to represent "estimated," "non-detect, estimated quantitation limit," "non-detect" or "not detected at significantly greater than that in an associated blank," and "rejected," respectively. The only time the data validator changed a result's detect status was when a null value (e.g. CLEAR) or J-qualifiers were changed to U-qualifiers or UJ-qualifiers (detect to non-detect) as a result of blank contamination and when CLEAR, J-qualifiers, or U-qualifiers were changed to R-qualifiers (detect or non-detect to rejected) as a result of a severe quality control exceedance.

The J- and UJ-qualifiers indicate that some results are estimated. These qualifiers indicate that data are available for use as detects and non-detects, respectively. These qualifiers do not necessarily indicate a problem that adversely affects the data availability. For example, J-qualifiers are often applied simply because results are below the quantitation limit.

If a result is attributable to blank contamination, it is U-qualified and is no longer distinguishable from results that are simply non-detect. The U-qualified value is elevated to the quantitation limit if necessary. This supports the practice that J-qualified results, while estimated, are available for use as detects at their qualified concentration and U- and UJ-qualifiers are available for use as non-detects at their qualified quantitation limit. In general, J-, UJ-, and U-qualified results are available for use as qualified for evaluating potential releases, for evaluating the nature and extent of contamination, and for estimating potentially associated human health and ecological risks.

H.1.5 Secondary Data Validation Qualifiers (Reason Codes)

The secondary data validation qualifiers (DV_Qual_Code or "reason codes") were applied to one or more analytical results and the combinations that resulted.

DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC	Explanation
U	CLEAR	22,439	66.48%	X				Constituent was analyzed for but not detected. Further qualification was not necessary (no QA/QC exceedances). The result is usable as a nondetect at the reported quantitation limit.
CLEAR	CLEAR	4,096	12.13%	X				Constituent was analyzed for and detected. Further qualification was not necessary (no QA/QC exceedances). The result is usable as a detect as reported.
J	BRL	1,435	4.25%	X				Constituent was analyzed for and detected. The detection was less than the quantitation limit and was J- or B-qualified (as in "below reporting limit") by the laboratory. Further qualification was not necessary (no QA/QC exceedances), except to standardize the qualifier to a valid value. The result is usable as a detect as reported.
UJ	HT	1,198	3.55%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to a holding time exceedance. The holding time exceedance may or may not have been slight and must not have exceeded 2X the limit (assuming temperature, preservation, and sample integrity were not an issue). The QA/QC exceedance (potential bias) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
UJ	ISL	1,147	3.40%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to low recovery for an internal standard. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
U	MBL	473	1.40%		X			Constituent was analyzed for and detected. Often, the detection was less than the quantitation limit and/or also detected in a method blank. The result was U-qualified as "not detected at significantly greater than that in an associated blank". When the detection was less than the quantitation limit, the data validator raised it to the quantitation limit. The QA/QC exceedance was not severe enough to warrant rejection. The result is usable as a nondetect at the reported (final) quantitation limit. Thus, there is no impact on the availability of data for use by the project team. On reporting tables, these results cannot easily be distinguished from true nondetect results.
UJ	SSL	441	1.31%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to low recovery for a spiked surrogate (or deuterated monitoring compound). The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
J+	MSH	333	0.99%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated, with a potential high bias" due to high recovery in a matrix spike and/or matrix spike duplicate. The QA/QC exceedance (potential high bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
UJ	OT	307	0.91%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to reasons of "other," often simply because the data validator does not have a valid-value reason code for the issue that is present in the data. This is often determined by third-party data validator professional judgment. The QA/QC issue was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
J	BSH	228	0.68%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to high recovery for a laboratory control sample (blank spike). The QA/QC exceedance (potential high bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
UJ	MSL	224	0.66%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to low recovery in a matrix spike and/or matrix spike duplicate. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
R	OT	184	0.55%			X	C, P, A	Constituent was analyzed for and may or may not have been detected. The result was R-qualified as "rejected" due to reasons of "other". Often, this is simply because the data validator does not have a valid-value reason code for the issue that is present in the data. This is often determined by third-party data validator professional judgment. This has a negative impact on completeness and a potential negative impact on accuracy and/or precision. Because the direction of bias is not known, there are no circumstances under which the data user may choose to use this data point.
J-	CCL	175	0.52%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated, with a potential low bias" due to recovery exceeding the lower limit in a continuing calibration. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	MDP	167	0.49%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to relative percent difference exceeding the upper control limit between the matrix spike and matrix spike duplicate. The QA/QC exceedance (potential precision issue) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.

DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC	Explanation
U	EBL	120	0.36%		X			Constituent was analyzed for and detected. Often, the detection was less than the quantitation limit and/or also detected in an equipment blank. The result was U-qualified as "not detected at significantly greater than that in an associated blank". When the detection was less than the quantitation limit, the data validator raised it to the quantitation limit. The QA/QC exceedance was not severe enough to warrant rejection. The result is usable as a nondetect at the reported (final) quantitation limit. Thus, there is no impact on the availability of data for use by the project team. On reporting tables, these results cannot easily be distinguished from true nondetect results.
J	FD	97	0.29%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to poor field duplicate reproducibility (as defined by the UFP-SAP workplan; > 50% RPD for solid matrices; and > 30% RPD for aqueous matrices, unless superseded by EPA Regional limits). The QA/QC exceedance (potential precision issue) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	ISL	95	0.28%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to low recovery for an internal standard. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
UJ	CCL	75	0.22%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to low recovery in a continuing calibration verification. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
J-	OT	74	0.22%		X			Constituent was analyzed for and was detected. The result was J-qualified as "estimated, with a potential low bias" due to reasons of "other," often simply because the data validator does not have a valid-value reason code for the issue that is present in the data. This is often determined by third-party data validator professional judgment. The QA/QC issue was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J+	OT	64	0.19%		X			Constituent was analyzed for and was detected. The result was J-qualified as "estimated, with a potential high bias" due to reasons of "other," often simply because the data validator does not have a valid-value reason code for the issue that is present in the data. This is often determined by third-party data validator professional judgment. The QA/QC issue was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
R	ISL	56	0.17%			X	C, A	Constituent was analyzed for and may or may not have been detected. The result was R-qualified as "rejected" due to low recovery for an internal standard. The QA/QC exceedance (extreme low bias) was severe enough that the result should not be used as a detect or as a nondetect for any purpose. This has a negative impact on completeness and a negative impact on accuracy. Because the direction of bias is known, the data user may choose to use these data points (as conservative exceedances, understanding that the result may be higher than reported) if the result was detected and exceeded a project action limit.
J-	MSL	55	0.16%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated, with a potential low bias" due to low recovery in a matrix spike and/or matrix spike duplicate. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
R	BSL	43	0.13%			X	C, A	Constituent was analyzed for and may or may not have been detected. The result was R-qualified as "rejected" due to low recovery for a laboratory control sample (blank spike). The QA/QC exceedance (extreme low bias) was severe enough that the result should not be used as a detect or as a nondetect for any purpose. This has a negative impact on completeness and a negative impact on accuracy. Because the direction of bias is known, the data user may choose to use these data points (as conservative exceedances, understanding that the result may be higher than reported) if the result was detected and exceeded a project action limit.
R	MSL	36	0.11%			X	C, A	Constituent was analyzed for and may or may not have been detected. The result was R-qualified as "rejected" due to recovery exceeding the lower limit in a matrix spike and/or matrix spike duplicate. Matrix spike recovery less than 10% often necessitates rejection, and matrix spike recovery is sometimes 0% (no recovery). This is indicative of matrix effects or matrix interference, and laboratory performance is often assured by acceptable laboratory control sample recoveries. The QA/QC exceedance (extreme low bias) was severe enough that the result should not be used as a detect or as a nondetect for any purpose. This has a negative impact on completeness and a negative impact on accuracy. Because the direction of bias is known, the data user may choose to use these data points (as conservative exceedances, understanding that the result may be higher than reported) if the result was detected and exceeded a project action limit.
NJ	MI	23	0.07%		X			Constituent was analyzed for and tentatively identified. The result was J-qualified as "estimated" due to matrix interference. This is often determined by third-party data validator professional judgment. This is indicative of matrix interference and may be evident in the chromatograms or raw data. The matrix interference was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	CCH	21	0.06%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to recovery exceeding the upper limit in a continuing calibration. The QA/QC exceedance (potential high bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	CCL	19	0.06%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to recovery exceeding the lower limit in a continuing calibration. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.

DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC	Explanation
J	MSL	18	0.05%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to low recovery in a matrix spike and/or matrix spike duplicate. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	OT	17	0.05%		X			Constituent was analyzed for and was detected. The result was J-qualified as "estimated" due to reasons of "other". Often, this is simply because the data validator does not have a valid-value reason code for the issue that is present in the data. This is often determined by third-party data validator professional judgment. The QA/QC issue was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	HT	15	0.04%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to a holding time exceedance. The holding time exceedance may or may not have been slight and must not have exceeded 2X the limit (assuming temperature, preservation, and sample integrity were not an issue). The QA QC exceedance (potential bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
U	FBL	11	0.03%		X			Constituent was analyzed for and detected. Often, the detection was less than the quantitation limit and/or also detected in a field blank. The result was U-qualified as "not detected at significantly greater than that in an associated blank." When the detection was less than the quantitation limit, the data validator raised it to the quantitation limit. The QA/QC exceedance was not severe enough to warrant rejection. The result is usable as a nondetect at the reported (final) quantitation limit. Thus, there is no impact on the availability of data for use by the project team. On reporting tables, these results cannot easily be distinguished from true nondetect results.
UJ	FD	12	0.04%		X			Constituent was analyzed for but not detected. The result was UJ-qualified as "nondetect, estimated quantitation limit" due to poor field duplicate reproducibility (as defined by the UFP-SAP workplan; > 30% RPD for solid matrices; and > 20% RPD for aqueous matrices, unless superseded by EPA Regional limits). Sometimes this occurs when a constituent is detected in the parent sample but not in the field duplicate or vice versa. The QA/QC exceedance (potential precision issue) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
J	SSL	10	0.03%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to low recovery for a spiked surrogate (or deuterated monitoring compound). The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J+	CCH	9	0.06%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated, with a potential high bias" due to recovery exceeding the upper limit in a continuing calibration. The QA/QC exceedance (potential high bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	BSL	9	0.03%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to low recovery for a laboratory control sample (blank spike). The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	MSH	8	0.02%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to high recovery in a matrix spike and/or matrix spike duplicate. The QA/QC exceedance (potential high bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
U	TBL	7	0.02%		X			Constituent was analyzed for and detected. Often, the detection was less than the quantitation limit and/or also detected in a trip blank. The result was U-qualified as "not detected at significantly greater than that in an associated blank". When the detection was less than the quantitation limit, the data validator raised it to the quantitation limit. The QA/QC exceedance was not severe enough to warrant rejection. The result is usable as a nondetect at the reported (final) quantitation limit. Thus, there is no impact on the availability of data for use by the project team. On reporting tables, these results cannot easily be distinguished from true nondetect results.
J	SSH	4	0.01%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to high recovery for a spiked surrogate (or deuterated monitoring compound). The QA/QC exceedance (potential high bias) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
J	2C	3	0.01%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to poor dual-column repeatability, usually for PEST/PCBs or EXPLOs. This often occurs when the percent difference between columns exceeds 40%. The QA/QC exceedance (potential precision issue) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
U	OT	2	0.01%		X			Constituent was analyzed for and detected. The result was U-qualified as "not detected" due to reasons of "other," often simply because the data validator does not have a valid-value reason code for the issue that is present in the data. This is often determined by third-party data validator professional judgment. The QA/QC issue was not severe enough to warrant rejection. The result is usable as a nondetect at the reported (final) quantitation limit. Thus, there is no impact on the availability of data for use by the project team. On reporting tables, these results cannot easily be distinguished from true nondetect results.

DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC	Explanation
J	BD	1	0.003%		X			Constituent was analyzed for and detected. The result was J-qualified as "estimated" due to relative percent difference exceeding the upper control limit between a blank spike and blank spike duplicate. The QA/QC exceedance (potential precision issue) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
U	ISL	1	0.003%		X			Constituent was analyzed for but not detected. The result was U-qualified as "not detected" due to low recovery for an internal standard. The QA/QC exceedance (potential low bias) was not severe enough to warrant rejection. The result is usable as a nondetect at the reported quantitation limit. Thus, there is no impact on the availability of data for use by the project team.
NJ	FD	1	0.003%		X			Constituent was analyzed for and tentatively identified. The result was J-qualified as "estimated" due to poor field duplicate reproducibility (as defined by the UFP-SAP workplan; > 30% RPD for solid matrices; and > 20% RPD for aqueous matrices, unless superseded by EPA Regional limits). This is often determined by third-party data validator professional judgment. This is indicative of matrix interference and may be evident in the chromatograms or raw data. The matrix interference was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
NJ	2C	1	0.003%		X			Constituent was analyzed for and tentatively identified. The result was J-qualified as "estimated" due to poor dual-column repeatability, usually for PEST/PCBs or EXPLOs. This often occurs when the percent difference between columns exceeds 40%. The QA/QC exceedance (potential precision issue) was not severe enough to warrant rejection. The result is usable as a detect as qualified. Thus, there is no impact on the availability of data for use by the project team.
	TOTAL:	36,375	100.00%	76.89%	22.23%	0.88%		
				99.12% available for use, qualified as applicable (completeness goal of 95% available data met)				

It is a common occurrence for achieved quantitation limits to be greater than project action limits or for quantitation limits to be elevated above what was expected or requested. In many cases, either project action limits are simply unreasonably low, or the laboratory was forced—by the analytical method or sample matrices—to raise quantitation limits for various reasons. In the instance where non-detect quantitation limits are greater than project action limits, the results are available for use as non-detects; however, their use adds uncertainty to the conclusions drawn. A variety of typical and potentially unavoidable reasons explain how the quantitation limits of non-detect results exceed project action limits:

- If a criterion (project action limit) is unreasonably low, current instrumentation technology may not be able to achieve an RL lower than the project action limit.
- The quantitation limit may have been established when the criterion (project action limit) was higher (less stringent), but the reporting is being done using new (more stringent) criteria. Published criteria sets, such as EPA Regional Screening Levels, may change as toxicity values are updated.
- If a target compound or analyte is present at an elevated level, the laboratory will dilute the entire sample in order to report that concentration within the instrument's linear calibration range. It may not be possible to analyze the sample at a lesser dilution if the target compound's high concentration is likely to damage or saturate the instrument. The high concentration of a non-target compound or analyte may also necessitate initial dilution for the same reason.
- If matrix effects mask low concentrations, the laboratory may be forced to elevate quantitation limits to demonstrate the fact that low concentrations cannot be detected.
- If matrix effects are particularly strong, the laboratory may be forced to analyze the sample at an initial dilution in an attempt to dilute the matrix effects.
- If historical concentrations warrant, the laboratory detects an odor, or the field team designates a sample as "expected high concentration," the laboratory may pre-screen the sample and initially dilute it.
- If the sample appearance indicates possible high concentrations, the laboratory may be forced to analyze the sample at a concentration range different from what is requested. For example, if a sample is designated as "groundwater" but is actually an emulsion or sludge, the laboratory may be forced to analyze the sample using the "medium" instead of the "low" or "selected ion monitoring" ("SIM") concentration range.
- If the field team cannot provide the full sample volume, the laboratory may be forced to dilute the sample by adding water until the minimum volume is achieved.
- If a sample is characterized by high percent moisture, the reporting limits will be elevated such that the concentrations and quantitation limits are reported on a dry-weight basis.

H.1.6 Comparison of Nondetects to Project Action Limits

When evaluating the data and making decisions, the project team compares detected sample results to project action limits in order to determine exceedances. When making decisions,

the project action limit is the level at which a sample concentration dictates an action or causes an understanding. Nondetect results are also compared to project action limits, typically during a risk assessment or exceedance screening, by comparing one-half the quantitation limit to the project action limit. However, this is done only when the same constituent was detected in another sample of the same matrix at the same site. The assumption is that, if the constituent is present in a given sample of a particular matrix at a site, then it may also be present at low concentrations (less than the quantitation limit [QL]) in a nondetect sample. However, when a constituent was not detected in any samples of a particular matrix at a site, then it is important to compare the nondetect results to the project action limit. If the nondetect results (quantitation limits) are not low enough when compared with the project action limit (PAL), then it may be possible that the constituent is present in a sample at greater than the PAL but not detected or reported by the laboratory instrumentation. This situation is a common occurrence and is not cause for alarm. There are various typical reasons for this occurrence, and the occurrence is expected. Refer to section H.1.4 above. Most notably, Worksheet 15 in the UFP-SAP Work plan predicts when this is expected and unavoidable, and Worksheet 11 discusses the uncertainty surrounding this situation. A total of 33,754 data points exist in the data set that was evaluated.

H.1.7 PARCC Considerations

H.1.7.1 Precision

Precision is defined as the agreement between duplicate results and was characterized by comparing duplicate matrix spike recoveries, laboratory replicates, and field duplicate sample results. For this data set, precision was also assessed by examining dual-column reproducibility (percent difference between instrument columns). Although results may have been qualified due to exceedances that may suggest an impact on precision, no actual significant negative impact on precision occurs unless a data point is deemed unusable (rejected) due to precision exceedances.

H.1.7.2 Accuracy

Accuracy is a measure of the agreement between an experimental determination and the true value of the parameter being measured. For organic analyses, each sample was spiked with surrogate compounds; for organic and inorganic analyses, a matrix spike/matrix spike duplicate (MS/MSD) and laboratory control sample (LCS) were spiked with a known parameter concentration before preparation. Internal standards also provide a measure of accuracy. Internal standards, surrogates, and MS/MSD provide a measure of the matrix effects on the analytical accuracy. LCS demonstrates accuracy of the method and the laboratory's ability to meet the method criteria. Accuracy is also assessed by calibration recoveries. Although results may have been qualified due to exceedances that may suggest an impact on accuracy, no actual significant negative impact on accuracy occurs unless a data point is deemed unusable (rejected) due to accuracy exceedances.

H.1.7.3 Representativeness

Representativeness is a qualitative measure of the degree to which sample data accurately and precisely represent a characteristic environmental condition—in this case, nature and extent of contamination. Representativeness is a subjective parameter and is used to evaluate the efficacy of the sample planning design. In terms of data quality, representativeness was assured because the sampling team followed approved SOPs for

sample collection and handling, and the laboratory followed approved SOPs for sample handling, preparation, and analysis.

H.1.7.4 Completeness

For purposes of this Data Quality Evaluation (DQE) and as defined in the UFP-SAP work plan, completeness will be defined as the percentage of measurements that are judged to be valid, with validity being defined by the data quality objectives (DQOs). Therefore, completeness will be calculated as the number of analytically sound results available for use compared with the total number of measurements made. The following publications designate all results except those R-qualified as "rejected" to be available for use as analytically sound results: *USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review*; EPA 540/R-99/008; October, 1999, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*; EPA 540-R-04-004; October, 2004, *Standard Operating Procedure for the Validation of Organic Data Acquired Using SW-846 Method 8260B* (Rev 3, Oct 2006); SOP NO. HW-24, *Validating Semivolatile Compounds by SW-846 Method 8270* (Rev. 3, October 2006); SOP HW-22, *Nitroaromatics and Nitroamines by HPLC* (Rev. 2, September, 2006); SOP HW-16, *Data Validation SOP of Organochlorine Pesticides by Gas Chromatography SW-846 Method 8081B (Rev 1, October, 2006); SOP HW-44, Data Validation SOP of PCBs by Gas Chromatography SW-846 Method 8082A (Rev 1, October, 2006); HW-45*, and *Validation of Metals for the Contract Laboratory Program (CLP) based on SOW ILM05.3* (SOP Revision 13); (Revision 13, September, 2006). The R-qualifier is the only qualifier that negatively affects a data point's availability. Completeness is provided for each combination of site, matrix, and analysis group. Per the site-specific UFP-SAP work plan under which data from these sites were collected, this project has a 95 percent completeness goal. Overall, the entire data set was 99 percent complete.

H.1.7.5 Comparability

Comparability is a qualitative measure designed to express the confidence with which one data set may be compared with another. Factors that affect comparability are sample collection and handling techniques, sample matrix, and analytical methods. In this case, the data user may express confidence in the fact that this data set is comparable to others of acceptable data quality because approved SOPs were used for sample collection and handling; common sample matrices were evaluated (surface soil, subsurface soil, and groundwater); and EPA methods, EPA SW-846 methods, and American Society of Testing and Materials (ASTM) methods were utilized. In addition, comparability is controlled by the other precision, accuracy, representativeness, completeness, and comparability (PARCC) parameters because data sets can be compared with confidence only when precision and accuracy are known. Except in the case of rejected data, precision and accuracy were demonstrated to be acceptable, and the data user may be confident that this data set is comparable to others of high-quality data.

H.2 Transfer Parcels FED-1A, FED-2B, and FED-2C

The purpose of this DQE is to summarize the data validation findings and any effects on data availability for the Draft Final Site Inspection Report Transfer Parcel FED-1A, FED-2B, and FED-2C, as well as to provide a data usability assessment. The impact of rejected data on data usability is discussed in the sections below.

H.2.1 Subsurface Soil Data

This evaluation assesses the analytical results of the subsurface soil samples collected from March 22 through May 5, 2010.

H.2.1.1 Total Petroleum Hydrocarbons (TPH)

Total Petroleum Hydrocarbons Gasoline Range Organics (C6-C10), Diesel Range Organics (C10-C22), and Oil Range Organics (C22-C36) were analyzed by SW-846 method 8015B. The validation process resulted in the qualifiers for results in the TPH fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
TPH	U	CLEAR	202	65.0%	X			
TPH	J	BRL	51	16.4%	X			
TPH	J	BSH	22	7.1%		X		
TPH	CLEAR	CLEAR	15	4.8%	X			
TPH	J	CCL	6	1.9%		X		
TPH	U	EBL	4	1.3%		X		
TPH	J	CCH	3	1.0%		X		
TPH	UJ	HT	3	1.0%		X		
TPH	J	MSL	2	0.6%		X		
TPH	UJ	SSL	2	0.6%		X		
TPH	J	HT	1	0.3%		X		
TOTAL:			311	100.0%	86.2%	13.8%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.1.2 Pesticides/PCBs

Chlorinated Pesticides and PCBs were analyzed by SW-846 methods 8081A and 8082. The validation process resulted in the qualifiers for results in the chlorinated pesticides/polychlorinated biphenyl (PEST/PCB) fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
PEST_PCB	U	CLEAR	273	77.1%	X			
PEST_PCB	UJ	SSL	81	22.9%		X		
TOTAL:			354	100.0%	77.1%	22.9%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.1.3 Volatile Compounds

Volatiles were analyzed by SW-846 method 8260B. The validation process resulted in the qualifiers for results in the volatiles fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
VOA	U	CLEAR	5,160	91.33%	X			
VOA	UJ	HT	249	4.41%		X		
VOA	UJ	SSL	84	1.49%		X		
VOA	UJ	ISL	55	0.97%		X		
VOA	CLEAR	CLEAR	29	0.51%	X			
VOA	J	BRL	23	0.41%	X			
VOA	U	MBL	14	0.25%		X		
VOA	R	ISL	13	0.23%			X	C, A[a]
VOA	R	BSL	6	0.11%			X	C, A[a]
VOA	J	ISL	5	0.09%		X		
VOA	UJ	CCL	4	0.07%		X		
VOA	J	CCH	2	0.04%		X		
VOA	UJ	FD	2	0.04%		X		
VOA	U	EBL	2	0.04%		X		
VOA	J	HT	1	0.02%		X		
VOA	J	BD	1	0.02%		X		
TOTAL:			5,650	100.00%	92.25%	7.41%	0.34%	
					99.66% available for use, qualified as applicable (completeness goal met)			

[a] Negative impact on completeness. Potential negative impact on accuracy.

Several analytes were rejected in samples DP01-53061 and DP29-03229 due to low internal standard recovery. Samples were re-analyzed with similar results, indicating a sample matrix effect. The low internal standard recovery is indicative of a potentially high bias. 2-Butanone, 2-Hexanone, and 4-Methyl-2-butanone were also rejected in samples DP01-03360 and DP01-53360 due to low blank spike recovery. These are commonly rejected compounds due to typical poor instrument response and are indicative of a potentially low bias. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining volatile results (5,631 of 5,650 results) for this site are available for the project team's use. Refer to Table H-1 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C (all tables are presented at the end of this appendix).

H.2.1.4 Semivolatile Compounds

Semivolatiles were analyzed by SW-846 methods 8270C and 8270C-SIM. The validation process resulted in the qualifiers for results in the semivolatiles fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
SVOA	U	CLEAR	3,553	80.57%	X			
SVOA	CLEAR	CLEAR	391	8.87%	X			
SVOA	J	BRL	244	5.53%	X			
SVOA	J	BSH	86	1.95%		X		
SVOA	UJ	ISL	55	1.25%		X		
SVOA	NJ	MI	20	0.45%		X		
SVOA	R	BSL	14	0.32%			X	C, A[a]
SVOA	J	MSL	11	0.25%		X		
SVOA	U	EBL	10	0.23%		X		
SVOA	U	FBL	10	0.23%		X		
SVOA	J	MSH	6	0.14%		X		
SVOA	J	ISL	5	0.11%		X		
SVOA	UJ	FD	2	0.05%		X		
SVOA	J	CCH	1	0.03%		X		
SVOA	UJ	MSL	1	0.02%		X		
SVOA	J	BSL	1	0.03%		X		
TOTAL:			4,410	100.00%	94.97%	4.71%	0.32%	
					99.68% available for use, qualified as applicable (completeness goal met)			

[a] Negative impact on completeness. Potential negative impact on accuracy.

Benzo(a)anthracene was rejected in samples DP23-07249, DP23-07250, DP23-07251, DP23-57250, DP25-07257, DP25-07258, DP25-07259, DP26-07261, DP26-07262, DP26-07263, DP27-07265, DP27-07266, DP27-07267, and DP28-07269 due to low blank spike recovery. This is indicative of a potentially low bias. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining semivolatile results (4,396 of 4,410 results) for this site are available for the project team's use. Refer to Table H-1 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.1.5 Dioxin/Furan Compounds

Dioxins/furans were analyzed by SW-846 method 8290. The validation process resulted in the qualifiers for results in the dioxins/furans fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
DIOXIN	U	CLEAR	689	56.2%	X			
DIOXIN	U	MBL	246	20.1%		X		

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
DIOXIN	J	BRL	104	8.5%	X			
DIOXIN	R	OT	93	7.6%			X	C, A[a]
DIOXIN	CLEAR	CLEAR	50	4.1%	X			
DIOXIN	U	EBL	38	3.1%		X		
DIOXIN	J	ISL	3	0.2%		X		
DIOXIN	UJ	ISL	2	0.2%		X		
TOTAL:			1,225	100.0%	68.8%	23.6%	7.6%	
					92.4% available for use, qualified as applicable (completeness goal met)			

[a] Negative impact on completeness. Potential negative impact on accuracy.

Several dioxin/furan isomers were rejected in 37 samples due to ion abundance ratios that were outside criteria. This is indicative of an improperly identified compound due to matrix interference. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining dioxin/furan results (1,132 of 1,225 results) for this site are available for the project team's use. Refer to Table H-1 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.1.6 Explosives

Explosives were analyzed by SW-846 method 8330A. The validation process resulted in the qualifiers for results in the explosives (EXPLO) fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
EXPLO	U	CLEAR	262	98.5%	X			
EXPLO	CLEAR	CLEAR	4	1.5%	X			
TOTAL:			266	100.0%	100.0%			
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.1.7 Total Metals

Total metals (including mercury) were analyzed by SW-846 methods 6010B and 7471A. The validation process resulted in the qualifiers for results in the metals fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
METAL	CLEAR	CLEAR	1,419	50.97%	X			
METAL	U	CLEAR	588	21.12%	X			
METAL	J	BRL	191	6.86%	X			
METAL	J+	MSH	168	6.03%		X		
METAL	UJ	MSL	87	3.13%		X		
METAL	J	MDP	80	2.87%		X		
METAL	J-	CCL	68	2.44%		X		
METAL	J-	OT	44	1.58%		X		
METAL	UJ	OT	41	1.47%		X		
METAL	J+	OT	28	1.01%		X		
METAL	U	EBL	16	0.57%		X		
METAL	J-	MSL	16	0.57%		X		
METAL	U	MBL	13	0.47%		X		
METAL	J	FD	11	0.40%		X		
METAL	R	MSL	6	0.22%			X	C, A[a]
METAL	J	CCL	4	0.14%		X		
METAL	UJ	CCL	3	0.11%		X		
METAL	J+	CCH	1	0.04%		X		
TOTAL:			2,784	100.00%	78.95%	20.83%	0.22%	
					99.78% available for use, qualified as applicable (completeness goal met)			

[a] Negative impact on completeness. Potential negative impact on accuracy.

Mercury was rejected in samples DP01-03055, DP01-03056, DP01-03061, DP01-53061, DP02-03058, and DP35-03247 due to extremely low recovery in a matrix spike sample. This is indicative of a potentially low bias. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining metals results (2,778 of 2,784 results) for this site are available for the project team's use. Refer to Table H-1 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.2 Surface Soil Data

This evaluation assesses the analytical results of the surface soil samples collected from March 22 through May 5, 2010.

H.2.2.1 Total Petroleum Hydrocarbons (TPH)

Total Petroleum Hydrocarbons Gasoline Range Organics (C6-C10), Diesel Range Organics (C10-C22), and Oil Range Organics (C22-C36) were analyzed by SW-846 method 8015B. The validation process resulted in the qualifiers for results in the TPH fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
TPH	U	CLEAR	161	55.3%	X			
TPH	CLEAR	CLEAR	50	17.2%	X			
TPH	J	BRL	31	10.7%	X			
TPH	J	BSH	14	4.8%		X		
TPH	UJ	SSL	11	3.8%		X		
TPH	J	CCH	5	1.7%		X		
TPH	J	CCL	4	1.4%		X		
TPH	UJ	HT	3	1.0%		X		
TPH	J	FD	3	1.0%		X		
TPH	J	SSL	3	1.0%		X		
TPH	J	HT	3	1.0%		X		
TPH	R	MSL	2	0.7%			X	C, A[a]
TPH	J	MDP	1	0.3%		X		
TOTAL:			291	100.0%	83.2%	16.1%	0.7%	
					99.3% available for use, qualified as applicable (completeness goal met)			

[a] Negative impact on completeness. Potential negative impact on accuracy.

TPH-Diesel Range and TPH-Oil Range were rejected in sample DP07-03275 due to extremely low recovery in a matrix spike sample. This is indicative of a potentially low bias. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining TPH results (289 of 291 results) for this site are available for the project team's use. Refer to Table H-2 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.2.2 Pesticides/PCBs

Chlorinated Pesticides and PCBs were analyzed by SW-846 methods 8081A and 8082. The validation process resulted in the qualifiers for results in the PEST_PCB fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
PEST_PCB	U	CLEAR	212	70.0%	X			
PEST_PCB	UJ	SSL	90	29.7%		X		
PEST_PCB	CLEAR	CLEAR	1	0.3%	X			
TOTAL:			303	100.0%	70.3%	29.7%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.2.3 Volatile Compounds

Volatiles were analyzed by SW-846 method 8260B. The validation process resulted in the qualifiers for results in the volatiles fraction as shown below.

Several analytes were rejected in samples DP02-03039, DP02-03045, DP02-03147, DP20-03201, DP28-03225, DP30-0323, and DP31-03234 due to low internal standard recovery. Samples were re-analyzed with similar results, indicating a sample matrix effect. The low internal standard recovery is indicative of a potentially high bias. 2-Butanone, 2-Hexanone, and 4-Methyl-2-butanone were rejected in sample DP01-03359, and Hexane was rejected in samples DP30-03345, DP31-03347, DP31-03348, DP80-03360, DP80-03361, DP81-03362, and DP81-03363 due to low blank spike recovery. These are commonly rejected compounds due to typical poor instrument response and are indicative of a potentially low bias. Vinyl acetate was rejected in samples DP01-03084, DP04-03266, and DP08-03278 due to extremely low recovery in a matrix spike sample. This is indicative of a potentially low bias. 2-Butanone was rejected in sample DP28-03225 due to incorrect identification in the sample. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining volatile results (5,293 of 5,350 results) for this site are available for use to the project team. Refer to Table H-2 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
VOA	U	CLEAR	3,297	61.63%	X			
VOA	UJ	ISL	1,018	19.03%		X		
VOA	UJ	HT	741	13.85%		X		
VOA	J	ISL	68	1.27%		X		
VOA	UJ	MSL	51	0.95%		X		
VOA	R	ISL	43	0.80%			X	C, A[a]
VOA	UJ	SSL	42	0.79%		X		
VOA	J	BRL	29	0.54%	X			
VOA	CLEAR	CLEAR	21	0.39%	X			
VOA	U	MBL	16	0.30%		X		
VOA	R	BSL	10	0.19%			X	C, A[a]
VOA	R	MSL	3	0.06%			X	C, A[a]
VOA	UJ	CCL	3	0.06%		X		
VOA	U	TBL	2	0.04%		X		
VOA	J	MSL	2	0.04%		X		
VOA	J	HT	2	0.04%		X		
VOA	R	OT	1	0.02%			X	C, A[a]
VOA	U	ISL	1	0.02%		X		
TOTAL:			5,350	100.00%	62.56%	36.37%	1.07%	
					98.93% available for use, qualified as applicable (completeness goal met)			

[a]Negative impact on completeness. Potential negative impact on accuracy.

H.2.2.4 Semivolatile Compounds

Semivolatiles were analyzed by SW-846 methods 8270C and 8270C-SIM. The validation process resulted in the qualifiers for results in the semivolatiles fraction as shown below.

Benzo(a)anthracene was rejected in samples DP26-07260, DP26-57260, and DP28-07268 due to low blank spike recovery. This is indicative of a potentially low bias. Several analytes were rejected in samples DP01-07108, DP01-07148, DP08-09112, and DP26-07260 due to extremely low recovery in a matrix spike sample. This is indicative of a potentially low bias.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
SVOA	U	CLEAR	1,068	67.4%	X			
SVOA	CLEAR	CLEAR	262	16.5%	X			
SVOA	J	BRL	85	5.4%	X			
SVOA	J	BSH	49	3.1%		X		
SVOA	J	FD	41	2.6%		X		
SVOA	R	MSL	23	1.5%			X	C, A[a]
SVOA	J	MDP	13	0.8%		X		
SVOA	J	ISL	9	0.6%		X		
SVOA	UJ	FD	8	0.5%		X		
SVOA	J	CCH	4	0.3%		X		
SVOA	UJ	MSL	4	0.3%		X		
SVOA	NJ	MI	3	0.2%		X		
SVOA	R	BSL	3	0.2%			X	C, A[a]
SVOA	J	MSL	3	0.2%		X		
SVOA	UJ	ISL	3	0.2%		X		
SVOA	U	EBL	2	0.1%		X		
SVOA	J	BSL	2	0.1%		X		
SVOA	U	FBL	1	0.1%		X		
SVOA	NJ	FD	1	0.1%		X		
TOTAL:			1,584	100.00%	89.3%	9.1%	1.6%	
					98.4% available for use, qualified as applicable (completeness goal met)			

[a]Negative impact on completeness. Potential negative impact on accuracy.

Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining semivolatile results (1,558 of 1,584 results) for this site are available for the project team's use. Refer to Table H-2 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.2.5 Dioxin/Furan Compounds

Dioxins/furans were analyzed by SW-846 method 8290. The validation process resulted in the qualifiers for results in the dioxins/furans fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
DIOXIN	U	CLEAR	500	48.9%	X			
DIOXIN	U	MBL	155	15.2%		X		
DIOXIN	J	BRL	147	14.4%	X			
DIOXIN	CLEAR	CLEAR	92	9.0%	X			
DIOXIN	R	OT	90	8.8%			X	C, A[a]
DIOXIN	U	EBL	19	1.9%		X		
DIOXIN	UJ	ISL	14	1.4%		X		
DIOXIN	J	ISL	5	0.5%		X		
DIOXIN	J	FD	1	0.1%		X		
TOTAL:			1,023	100.0%	72.2%	19.0%	8.8%	
					91.2% available for use, qualified as applicable (completeness goal met)			

[a]Negative impact on completeness. Potential negative impact on accuracy.

Several dioxin/furan isomers were rejected in 36 samples due to ion abundance ratios that were outside criteria. This is indicative of an improperly identified compound due to matrix interference. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining dioxin/furan results (933 of 1,023 results) for this site are available for the project team's use. Refer to Table H-2 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.2.6 Explosives

Explosives were analyzed by SW-846 method 8330A. The validation process resulted in the qualifiers for results in the EXPLO fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
EXPLO	U	CLEAR	144	93.5%	X			
EXPLO	CLEAR	CLEAR	6	3.9%	X			
EXPLO	J	2C	3	1.9%		X		
EXPLO	NJ	2C	1	0.6%		X		
TOTAL:			154	100.0%	97.4%	2.6%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.2.7 Total Metals

Total metals (including mercury) were analyzed by SW-846 methods 6010B and 7471A. The validation process resulted in the qualifiers for results in the metals fraction as shown below.

Mercury was rejected in samples DP02-03057 and DP35-03246 due to extremely low recovery in a matrix spike sample. This is indicative of a potentially low bias. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining metals results (2,638 of 2,640 results) for this site are available for the project team's use. Refer to Table H-2 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
METAL	CLEAR	CLEAR	1,312	49.7%	X			
METAL	U	CLEAR	494	18.7%	X			
METAL	J	BRL	235	8.9%	X			
METAL	J+	MSH	155	5.9%		X		
METAL	J-	CCL	94	3.6%		X		
METAL	J	MDP	73	2.8%		X		
METAL	UJ	MSL	60	2.3%		X		
METAL	J	FD	41	1.6%		X		
METAL	UJ	OT	38	1.4%		X		
METAL	J-	MSL	37	1.4%		X		
METAL	J-	OT	30	1.1%		X		
METAL	J+	OT	28	1.1%		X		
METAL	U	EBL	16	0.6%		X		
METAL	U	MBL	9	0.3%		X		
METAL	J+	CCH	6	0.2%		X		
METAL	J	CCL	5	0.2%		X		
METAL	UJ	CCL	3	0.1%		X		
METAL	R	MSL	2	0.1%			X	C, A[a]
METAL	J	MSH	2	0.1%		X		
TOTAL:			2,640	100.00%	77.3%	22.6%	0.1%	
					99.9% available for use, qualified as applicable (completeness goal met)			

[a]Negative impact on completeness. Potential negative impact on accuracy.

H.2.3 Concrete Data

This evaluation assesses the analytical results of the concrete samples collected on April 13, 2010.

H.2.3.1 PCBs

PCBs were analyzed by SW-846 method 8082. The validation process resulted in the qualifiers for results in the PEST_PCB fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
PEST_PCB	J	SSL	5	9.4%		X		
PEST_PCB	UJ	SSL	48	90.6%		X		
TOTAL:			53	100.0%		100.0%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.4 Groundwater Data

This evaluation assesses the analytical results of the groundwater samples collected from March 22 through May 5, 2010.

H.2.4.1 Total Petroleum Hydrocarbons (TPH)

Total Petroleum Hydrocarbons Gasoline Range Organics (C6-C10), Diesel Range Organics (C10-C22), and Oil Range Organics (C22-C36) were analyzed by SW-846 method 8015B. The validation process resulted in the qualifiers for results in the TPH fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
TPH	U	CLEAR	130	64.7%	X			
TPH	J	BRL	13	6.5%	X			
TPH	UJ	OT	12	6.0%		X		
TPH	UJ	HT	12	6.0%		X		
TPH	J	BSH	9	4.5%		X		
TPH	CLEAR	CLEAR	8	4.0%	X			
TPH	UJ	SSL	4	2.0%		X		
TPH	J	HT	4	2.0%		X		
TPH	U	EBL	3	1.5%		X		
TPH	UJ	MSL	2	1.0%		X		

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
TPH	U	TBL	2	1.0%		X		
TPH	J	BSL	2	1.0%		X		
TOTAL:			201	100.0%	75.1%	24.9%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.4.2 Pesticides/PCBs

Chlorinated Pesticides and PCBs were analyzed by SW-846 methods 8081A and 8082. The validation process resulted in the qualifiers for results in the PEST_PCB fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
PEST_PCB	U	CLEAR	81	64.3%	X			
PEST_PCB	UJ	SSL	45	35.7%		X		
TOTAL:				100.0%	64.3%	35.7%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.4.3 Volatile Compounds

Volatiles were analyzed by SW-846 method 8260B. The validation process resulted in the qualifiers for results in the volatiles fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
VOA	U	CLEAR	3,945	93.93%	X			
VOA	UJ	OT	100	2.38%		X		
VOA	UJ	HT	47	1.12%		X		
VOA	J	BRL	37	0.88%	X			
VOA	UJ	CCL	21	0.50%		X		
VOA	CLEAR	CLEAR	10	0.24%	X			
VOA	R	BSL	10	0.24%			X	C, A[a]
VOA	U	EBL	9	0.21%		X		

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
VOA	J	BSH	5	0.12%		X		
VOA	J	SSH	4	0.10%		X		
VOA	UJ	MSL	3	0.07%		X		
VOA	J	HT	3	0.07%		X		
VOA	U	TBL	3	0.07%		X		
VOA	U	MBL	2	0.05%		X		
VOA	J	CCH	1	0.02%		X		
TOTAL:			4,200	100.00%	95.05%	4.71%	0.24%	
					99.76% available for use, qualified as applicable (completeness goal met)			

[a] Negative impact on completeness. Potential negative impact on accuracy.

N-Hexane and Vinyl Acetate were rejected in samples DP06-03536, DP06-03537, DP81-03596, DP81-03597, DP82-03598, DP82-03599, DP83-03600, DP83-03601, DP84-03602, and DP84-03603 due to low blank spike recovery. These are commonly rejected compounds due to typical poor instrument response and are indicative of a potentially low bias. Although these points cannot be used for decision-making purposes, this is likely inconsequential to the decisions made with these data. The remaining volatile results (4,190 of 4,200 results) for this site are available for the project team's use. Refer to Table H-3 for a summary of rejected results for Transfer Parcels FED-1A, FED-2B, and FED-2C.

H.2.4.4 Semivolatile Compounds

Semivolatiles were analyzed by SW-846 methods 8270C and 8270C-SIM. The validation process resulted in the following results in the semivolatiles fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
SVOA	U	CLEAR	837	62.0%	X			
SVOA	UJ	HT	143	10.6%		X		
SVOA	UJ	OT	107	7.9%		X		
SVOA	CLEAR	CLEAR	75	5.6%	X			
SVOA	J	BRL	60	4.4%	X			
SVOA	J	BSH	43	3.2%		X		
SVOA	UJ	SSL	34	2.5%		X		
SVOA	J	OT	17	1.3%		X		
SVOA	U	MBL	10	0.7%		X		

SVOA	UJ	MSL	9	0.7%		X		
SVOA	J	CCH	5	0.4%		X		
SVOA	J	BSL	4	0.3%		X		
SVOA	J	SSL	2	0.1%		X		
SVOA	U	OT	2	0.1%		X		
SVOA	U	EBL	1	0.1%		X		
SVOA	J	HT	1	0.1%		X		
TOTAL:			1,350	100.00%	72.0%	28.0%		
					100.0% available for use, qualified as applicable (completeness goal met)			

H.2.4.5 Dissolved Metals

Dissolved metals (including mercury) were analyzed by SW-846 methods 6010B and 7471A. The validation process resulted in the qualifiers for results in the metals fraction as shown below.

Analysis Group	DV Qual	DV Qual Code	Count	Percent	Available as Reported	Available as Qualified	Not Available	Impact on PARCC
METAL	U	CLEAR	843	57.0%	X			
METAL	CLEAR	CLEAR	351	23.7%	X			
METAL	J	BRL	185	12.5%	X			
METAL	UJ	CCL	41	2.8%		X		
METAL	J-	CCL	13	0.9%		X		
METAL	J+	MSH	10	0.7%		X		
METAL	UJ	OT	9	0.6%		X		
METAL	J+	OT	8	0.5%		X		
METAL	U	MBL	8	0.5%		X		
METAL	UJ	MSL	7	0.5%		X		
METAL	J-	MSL	2	0.1%		X		
METAL	J+	CCH	2	0.1%		X		
TOTAL:			1,479	100.00%	93.2%	6.8%		
					100.0% available for use, qualified as applicable (completeness goal met)			

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Tables

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TABLE H-1
Summary of Rejected Data - Subsurface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	DV_Qual_Code	Units
SB	DIOXIN	DP01-03145	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.104	R	OT	PG_G
SB	DIOXIN	DP03-03151	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.237	R	OT	PG_G
SB	DIOXIN	DP03-03151	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.0900	R	OT	PG_G
SB	DIOXIN	DP04-03154	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.362	R	OT	PG_G
SB	DIOXIN	DP09-03169	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.0537	R	OT	PG_G
SB	DIOXIN	DP09-03169	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.271	R	OT	PG_G
SB	DIOXIN	DP11-03175	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.0941	R	OT	PG_G
SB	DIOXIN	DP11-03175	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.0687	R	OT	PG_G
SB	DIOXIN	DP15-03187	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.131	R	OT	PG_G
SB	DIOXIN	DP15-03187	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.0452	R	OT	PG_G
SB	DIOXIN	DP16-03190	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.267	R	OT	PG_G
SB	DIOXIN	DP16-03190	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.0695	R	OT	PG_G
SB	DIOXIN	DP16-03190	Octachlorodibenzofuran	39001-02-0	0.121	R	OT	PG_G
SB	DIOXIN	DP16-53190	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.271	R	OT	PG_G
SB	DIOXIN	DP18-03197	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.0679	R	OT	PG_G
SB	DIOXIN	DP19-03199	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.0585	R	OT	PG_G
SB	DIOXIN	DP19-03200	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1.09	R	OT	PG_G
SB	DIOXIN	DP19-53200	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.0344	R	OT	PG_G
SB	DIOXIN	DP19-53200	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.0747	R	OT	PG_G
SB	DIOXIN	DP20-03202	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.0859	R	OT	PG_G
SB	DIOXIN	DP20-03202	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	5.97	R	OT	PG_G
SB	DIOXIN	DP20-03202	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.100	R	OT	PG_G
SB	DIOXIN	DP20-03202	2,3,7,8-TCDD (dioxin)	1746-01-6	0.222	R	OT	PG_G
SB	DIOXIN	DP20-03203	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.137	R	OT	PG_G
SB	DIOXIN	DP20-03203	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.0953	R	OT	PG_G
SB	DIOXIN	DP20-03203	Octachlorodibenzofuran	39001-02-0	0.168	R	OT	PG_G
SB	DIOXIN	DP21-03205	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	5.22	R	OT	PG_G
SB	DIOXIN	DP21-03205	2,3,7,8-TCDD (dioxin)	1746-01-6	0.129	R	OT	PG_G
SB	DIOXIN	DP21-03206	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.170	R	OT	PG_G
SB	DIOXIN	DP21-03206	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0574	R	OT	PG_G
SB	DIOXIN	DP21-03206	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0712	R	OT	PG_G

TABLE H-1
Summary of Rejected Data - Subsurface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	DV_Qual_Code	Units
SB	DIOXIN	DP21-03206	2,3,7,8-TCDD (dioxin)	1746-01-6	0.262	R	OT	PG_G
SB	DIOXIN	DP22-03208	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.237	R	OT	PG_G
SB	DIOXIN	DP22-03208	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0893	R	OT	PG_G
SB	DIOXIN	DP22-03208	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.359	R	OT	PG_G
SB	DIOXIN	DP22-03209	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.244	R	OT	PG_G
SB	DIOXIN	DP22-03209	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.362	R	OT	PG_G
SB	DIOXIN	DP23-03211	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.125	R	OT	PG_G
SB	DIOXIN	DP23-03211	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.176	R	OT	PG_G
SB	DIOXIN	DP23-03211	2,3,7,8-TCDD (dioxin)	1746-01-6	0.127	R	OT	PG_G
SB	DIOXIN	DP23-03212	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0617	R	OT	PG_G
SB	DIOXIN	DP23-03212	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.514	R	OT	PG_G
SB	DIOXIN	DP23-03212	Octachlorodibenzofuran	39001-02-0	0.203	R	OT	PG_G
SB	DIOXIN	DP24-03214	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.125	R	OT	PG_G
SB	DIOXIN	DP24-03214	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.131	R	OT	PG_G
SB	DIOXIN	DP24-03214	2,3,7,8-TCDD (dioxin)	1746-01-6	0.256	R	OT	PG_G
SB	DIOXIN	DP24-03215	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.260	R	OT	PG_G
SB	DIOXIN	DP24-03215	2,3,7,8-TCDD (dioxin)	1746-01-6	0.195	R	OT	PG_G
SB	DIOXIN	DP25-03217	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.144	R	OT	PG_G
SB	DIOXIN	DP25-03217	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.379	R	OT	PG_G
SB	DIOXIN	DP25-03217	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.122	R	OT	PG_G
SB	DIOXIN	DP25-03217	2,3,7,8-TCDD (dioxin)	1746-01-6	0.169	R	OT	PG_G
SB	DIOXIN	DP25-03217	Octachlorodibenzofuran	39001-02-0	0.335	R	OT	PG_G
SB	DIOXIN	DP25-03218	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.108	R	OT	PG_G
SB	DIOXIN	DP25-03218	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.125	R	OT	PG_G
SB	DIOXIN	DP26-03220	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0789	R	OT	PG_G
SB	DIOXIN	DP26-03220	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.480	R	OT	PG_G
SB	DIOXIN	DP26-03221	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	5.64	R	OT	PG_G
SB	DIOXIN	DP26-03221	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0745	R	OT	PG_G
SB	DIOXIN	DP26-03221	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0903	R	OT	PG_G
SB	DIOXIN	DP26-03221	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.104	R	OT	PG_G
SB	DIOXIN	DP26-03221	Octachlorodibenzofuran	39001-02-0	0.278	R	OT	PG_G

TABLE H-1
Summary of Rejected Data - Subsurface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	DV_Qual_Code	Units
SB	DIOXIN	DP26-53220	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.173	R	OT	PG_G
SB	DIOXIN	DP26-53220	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.212	R	OT	PG_G
SB	DIOXIN	DP26-53220	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.276	R	OT	PG_G
SB	DIOXIN	DP26-53220	Octachlorodibenzofuran	39001-02-0	0.191	R	OT	PG_G
SB	DIOXIN	DP27-03223	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	4.95	R	OT	PG_G
SB	DIOXIN	DP27-03224	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.200	R	OT	PG_G
SB	DIOXIN	DP27-03224	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0725	R	OT	PG_G
SB	DIOXIN	DP27-03224	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.113	R	OT	PG_G
SB	DIOXIN	DP27-03224	2,3,7,8-TCDD (dioxin)	1746-01-6	0.202	R	OT	PG_G
SB	DIOXIN	DP28-03226	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.0785	R	OT	PG_G
SB	DIOXIN	DP28-03226	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0807	R	OT	PG_G
SB	DIOXIN	DP28-03226	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.0894	R	OT	PG_G
SB	DIOXIN	DP28-03226	2,3,7,8-TCDD (dioxin)	1746-01-6	0.133	R	OT	PG_G
SB	DIOXIN	DP28-03227	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.102	R	OT	PG_G
SB	DIOXIN	DP28-03227	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.180	R	OT	PG_G
SB	DIOXIN	DP28-03227	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	5.78	R	OT	PG_G
SB	DIOXIN	DP29-03229	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.445	R	OT	PG_G
SB	DIOXIN	DP29-53230	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.236	R	OT	PG_G
SB	DIOXIN	DP29-53230	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0951	R	OT	PG_G
SB	DIOXIN	DP29-53230	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0848	R	OT	PG_G
SB	DIOXIN	DP31-03236	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.498	R	OT	PG_G
SB	DIOXIN	DP31-03236	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.100	R	OT	PG_G
SB	DIOXIN	DP31-03236	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	5.96	R	OT	PG_G
SB	DIOXIN	DP31-03236	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0858	R	OT	PG_G
SB	DIOXIN	DP31-03236	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.107	R	OT	PG_G
SB	DIOXIN	DP32-03239	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.168	R	OT	PG_G
SB	DIOXIN	DP32-03239	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.105	R	OT	PG_G
SB	DIOXIN	DP33-03241	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.134	R	OT	PG_G
SB	DIOXIN	DP33-03241	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.182	R	OT	PG_G
SB	DIOXIN	DP33-03241	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.119	R	OT	PG_G
SB	DIOXIN	DP35-03247	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.499	R	OT	PG_G

TABLE H-1
Summary of Rejected Data - Subsurface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	DV_Qual_Code	Units
SB	METAL	DP01-03055	Mercury	7439-97-6	0.0330	R	MSL	MG_KG
SB	METAL	DP01-03056	Mercury	7439-97-6	0.0390	R	MSL	MG_KG
SB	METAL	DP01-03061	Mercury	7439-97-6	0.0385	R	MSL	MG_KG
SB	METAL	DP01-53061	Mercury	7439-97-6	0.0380	R	MSL	MG_KG
SB	METAL	DP02-03058	Mercury	7439-97-6	0.0330	R	MSL	MG_KG
SB	METAL	DP35-03247	Mercury	7439-97-6	0.0388	R	MSL	MG_KG
SB	SVOA	DP23-07249	Benzo(a)anthracene	56-55-3	74.3	R	BSL	UG_KG
SB	SVOA	DP23-07250	Benzo(a)anthracene	56-55-3	5.96	R	BSL	UG_KG
SB	SVOA	DP23-07251	Benzo(a)anthracene	56-55-3	5.91	R	BSL	UG_KG
SB	SVOA	DP23-57250	Benzo(a)anthracene	56-55-3	5.93	R	BSL	UG_KG
SB	SVOA	DP25-07257	Benzo(a)anthracene	56-55-3	34.7	R	BSL	UG_KG
SB	SVOA	DP25-07258	Benzo(a)anthracene	56-55-3	5.33	R	BSL	UG_KG
SB	SVOA	DP25-07259	Benzo(a)anthracene	56-55-3	5.88	R	BSL	UG_KG
SB	SVOA	DP26-07261	Benzo(a)anthracene	56-55-3	6.18	R	BSL	UG_KG
SB	SVOA	DP26-07262	Benzo(a)anthracene	56-55-3	6.03	R	BSL	UG_KG
SB	SVOA	DP26-07263	Benzo(a)anthracene	56-55-3	6.17	R	BSL	UG_KG
SB	SVOA	DP27-07265	Benzo(a)anthracene	56-55-3	72.9	R	BSL	UG_KG
SB	SVOA	DP27-07266	Benzo(a)anthracene	56-55-3	5.17	R	BSL	UG_KG
SB	SVOA	DP27-07267	Benzo(a)anthracene	56-55-3	5.84	R	BSL	UG_KG
SB	SVOA	DP28-07269	Benzo(a)anthracene	56-55-3	71.1	R	BSL	UG_KG
SB	VOA	DP01-03360	2-Butanone	78-93-3	10.6	R	BSL	UG_KG
SB	VOA	DP01-03360	2-Hexanone	591-78-6	10.6	R	BSL	UG_KG
SB	VOA	DP01-03360	4-Methyl-2-pentanone	108-10-1	10.6	R	BSL	UG_KG
SB	VOA	DP01-53061	1,1,2,2-Tetrachloroethane	79-34-5	5.45	R	ISL	UG_KG
SB	VOA	DP01-53061	1,2-Dibromo-3-chloropropane	96-12-8	3.92	R	ISL	UG_KG
SB	VOA	DP01-53061	1,2-Dichlorobenzene	95-50-1	5.45	R	ISL	UG_KG
SB	VOA	DP01-53061	1,3,5-Trimethylbenzene	108-67-8	5.45	R	ISL	UG_KG
SB	VOA	DP01-53061	1,3-Dichlorobenzene	541-73-1	5.45	R	ISL	UG_KG
SB	VOA	DP01-53061	1,4-Dichlorobenzene	106-46-7	5.45	R	ISL	UG_KG
SB	VOA	DP01-53360	2-Butanone	78-93-3	10.6	R	BSL	UG_KG
SB	VOA	DP01-53360	2-Hexanone	591-78-6	10.6	R	BSL	UG_KG

TABLE H-1
Summary of Rejected Data - Subsurface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	DV_Qual_Code	Units
SB	VOA	DP01-53360	4-Methyl-2-pentanone	108-10-1	10.6	R	BSL	UG_KG
SB	VOA	DP29-03229	1,1,2,2-Tetrachloroethane	79-34-5	3.60	R	ISL	UG_KG
SB	VOA	DP29-03229	1,2,4-Trichlorobenzene	120-82-1	3.60	R	ISL	UG_KG
SB	VOA	DP29-03229	1,2-Dibromo-3-chloropropane	96-12-8	2.59	R	ISL	UG_KG
SB	VOA	DP29-03229	1,2-Dichlorobenzene	95-50-1	3.60	R	ISL	UG_KG
SB	VOA	DP29-03229	1,3,5-Trimethylbenzene	108-67-8	3.60	R	ISL	UG_KG
SB	VOA	DP29-03229	1,3-Dichlorobenzene	541-73-1	3.60	R	ISL	UG_KG
SB	VOA	DP29-03229	1,4-Dichlorobenzene	106-46-7	3.60	R	ISL	UG_KG

Reason Codes (DV_Qual_Code)
BSL Blank Spike - Low Recovery
ISL Internal Standard - Low Recovery
MSL Matrix Spike - Low Recovery
OT Other

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TABLE H-2
Summary of Rejected Data - Surface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
SS	DIOXIN	DP01-03144	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	5.61	R	OT	PG_G
SS	DIOXIN	DP01-03144	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	5.61	R	OT	PG_G
SS	DIOXIN	DP01-03144	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.132	R	OT	PG_G
SS	DIOXIN	DP02-03147	Octachlorodibenzo-p-dioxin	3268-87-9	0.947	R	OT	PG_G
SS	DIOXIN	DP03-03150	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.563	R	OT	PG_G
SS	DIOXIN	DP03-53150	Octachlorodibenzofuran	39001-02-0	1.33	R	OT	PG_G
SS	DIOXIN	DP04-03153	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.315	R	OT	PG_G
SS	DIOXIN	DP04-03153	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.148	R	OT	PG_G
SS	DIOXIN	DP05-03156	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	1.11	R	OT	PG_G
SS	DIOXIN	DP05-03156	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.801	R	OT	PG_G
SS	DIOXIN	DP06-03159	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.471	R	OT	PG_G
SS	DIOXIN	DP06-03160	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1.19	R	OT	PG_G
SS	DIOXIN	DP08-03165	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.167	R	OT	PG_G
SS	DIOXIN	DP08-03165	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.104	R	OT	PG_G
SS	DIOXIN	DP08-03166	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.458	R	OT	PG_G
SS	DIOXIN	DP09-03168	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	5.11	R	OT	PG_G
SS	DIOXIN	DP10-03171	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	4.83	R	OT	PG_G
SS	DIOXIN	DP12-03178	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	6.35	R	OT	PG_G
SS	DIOXIN	DP12-03178	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.244	R	OT	PG_G
SS	DIOXIN	DP12-03178	Octachlorodibenzo-p-dioxin	3268-87-9	0.945	R	OT	PG_G
SS	DIOXIN	DP13-53180	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.135	R	OT	PG_G
SS	DIOXIN	DP13-53180	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0999	R	OT	PG_G
SS	DIOXIN	DP14-03183	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	1.85	R	OT	PG_G
SS	DIOXIN	DP14-03183	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.744	R	OT	PG_G
SS	DIOXIN	DP14-03183	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.653	R	OT	PG_G
SS	DIOXIN	DP15-03186	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.0667	R	OT	PG_G
SS	DIOXIN	DP15-03186	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.0398	R	OT	PG_G
SS	DIOXIN	DP15-03186	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.0563	R	OT	PG_G
SS	DIOXIN	DP16-03189	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.249	R	OT	PG_G
SS	DIOXIN	DP16-03189	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.164	R	OT	PG_G
SS	DIOXIN	DP16-03189	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.113	R	OT	PG_G

TABLE H-2
Summary of Rejected Data - Surface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
SS	DIOXIN	DP16-03189	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	1.06	R	OT	PG_G
SS	DIOXIN	DP16-03189	Octachlorodibenzofuran	39001-02-0	0.534	R	OT	PG_G
SS	DIOXIN	DP17-03192	Octachlorodibenzo-p-dioxin	3268-87-9	1.06	R	OT	PG_G
SS	DIOXIN	DP19-03198	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.0445	R	OT	PG_G
SS	DIOXIN	DP20-03201	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.161	R	OT	PG_G
SS	DIOXIN	DP20-03201	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.264	R	OT	PG_G
SS	DIOXIN	DP20-03201	2,3,7,8-TCDD (dioxin)	1746-01-6	0.516	R	OT	PG_G
SS	DIOXIN	DP21-03204	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0462	R	OT	PG_G
SS	DIOXIN	DP21-03204	2,3,7,8-TCDD (dioxin)	1746-01-6	0.124	R	OT	PG_G
SS	DIOXIN	DP21-03204	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.516	R	OT	PG_G
SS	DIOXIN	DP22-03207	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.112	R	OT	PG_G
SS	DIOXIN	DP22-03207	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0782	R	OT	PG_G
SS	DIOXIN	DP22-03207	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.104	R	OT	PG_G
SS	DIOXIN	DP22-03207	2,3,7,8-TCDD (dioxin)	1746-01-6	0.160	R	OT	PG_G
SS	DIOXIN	DP22-03207	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.413	R	OT	PG_G
SS	DIOXIN	DP23-03210	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.0975	R	OT	PG_G
SS	DIOXIN	DP23-03210	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.164	R	OT	PG_G
SS	DIOXIN	DP23-03210	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.0992	R	OT	PG_G
SS	DIOXIN	DP23-03210	2,3,7,8-TCDD (dioxin)	1746-01-6	0.200	R	OT	PG_G
SS	DIOXIN	DP23-03210	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.312	R	OT	PG_G
SS	DIOXIN	DP23-53210	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0595	R	OT	PG_G
SS	DIOXIN	DP23-53210	2,3,7,8-TCDD (dioxin)	1746-01-6	0.161	R	OT	PG_G
SS	DIOXIN	DP24-03213	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	5.13	R	OT	PG_G
SS	DIOXIN	DP24-03213	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.261	R	OT	PG_G
SS	DIOXIN	DP24-03213	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.148	R	OT	PG_G
SS	DIOXIN	DP25-03216	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.159	R	OT	PG_G
SS	DIOXIN	DP25-03216	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.0872	R	OT	PG_G
SS	DIOXIN	DP25-03216	2,3,7,8-TCDD (dioxin)	1746-01-6	0.117	R	OT	PG_G
SS	DIOXIN	DP25-03216	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.385	R	OT	PG_G
SS	DIOXIN	DP26-03219	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.201	R	OT	PG_G
SS	DIOXIN	DP26-03219	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.161	R	OT	PG_G

TABLE H-2
Summary of Rejected Data - Surface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
SS	DIOXIN	DP26-03219	2,3,7,8-TCDD (dioxin)	1746-01-6	0.151	R	OT	PG_G
SS	DIOXIN	DP27-03222	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	4.60	R	OT	PG_G
SS	DIOXIN	DP27-03222	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.0921	R	OT	PG_G
SS	DIOXIN	DP27-03222	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	4.60	R	OT	PG_G
SS	DIOXIN	DP27-03222	2,3,7,8-TCDD (dioxin)	1746-01-6	0.147	R	OT	PG_G
SS	DIOXIN	DP28-03225	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.121	R	OT	PG_G
SS	DIOXIN	DP28-03225	2,3,7,8-TCDD (dioxin)	1746-01-6	0.149	R	OT	PG_G
SS	DIOXIN	DP29-03228	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.0922	R	OT	PG_G
SS	DIOXIN	DP29-03228	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.146	R	OT	PG_G
SS	DIOXIN	DP29-03228	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.194	R	OT	PG_G
SS	DIOXIN	DP30-03231	1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	0.196	R	OT	PG_G
SS	DIOXIN	DP30-03231	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.0520	R	OT	PG_G
SS	DIOXIN	DP31-03234	1,2,3,4,6,7,8-Heptachlorodibenzofuran	67562-39-4	0.189	R	OT	PG_G
SS	DIOXIN	DP31-03234	1,2,3,4,7,8,9-Heptachlorodibenzofuran	55673-89-7	0.0982	R	OT	PG_G
SS	DIOXIN	DP31-03234	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.181	R	OT	PG_G
SS	DIOXIN	DP32-03237	1,2,3,7,8,9-Hexachlorodibenzofuran	72918-21-9	0.124	R	OT	PG_G
SS	DIOXIN	DP32-03237	2,3,7,8-TCDD (dioxin)	1746-01-6	0.221	R	OT	PG_G
SS	DIOXIN	DP33-03240	1,2,3,7,8,9-Hexachlorodibenzo-p-dioxin	19408-74-3	5.36	R	OT	PG_G
SS	DIOXIN	DP33-03240	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.305	R	OT	PG_G
SS	DIOXIN	DP33-03240	2,3,7,8-TCDD (dioxin)	1746-01-6	0.169	R	OT	PG_G
SS	DIOXIN	DP33-03240	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.444	R	OT	PG_G
SS	DIOXIN	DP33-53240	1,2,3,4,7,8-Hexachlorodibenzofuran	70648-26-9	0.122	R	OT	PG_G
SS	DIOXIN	DP33-53240	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.165	R	OT	PG_G
SS	DIOXIN	DP33-53240	1,2,3,7,8-Pentachlorodibenzofuran	57117-41-6	0.130	R	OT	PG_G
SS	DIOXIN	DP33-53240	2,3,4,7,8-Pentachlorodibenzofuran	57117-31-4	0.409	R	OT	PG_G
SS	DIOXIN	DP35-03246	1,2,3,6,7,8-Hexachlorodibenzofuran	57117-44-9	0.0920	R	OT	PG_G
SS	DIOXIN	DP35-03246	2,3,4,6,7,8-Hexachlorodibenzofuran	60851-34-5	0.114	R	OT	PG_G
SS	DIOXIN	DP35-03246	2,3,7,8-Tetrachlorodibenzofuran	51207-31-9	0.433	R	OT	PG_G
SS	METAL	DP02-03057	Mercury	7439-97-6	0.0330	R	MSL	MG_KG
SS	METAL	DP35-03246	Mercury	7439-97-6	0.0330	R	MSL	MG_KG
SS	SVOA	DP01-07108	Benzo(a)pyrene	50-32-8	52.9	R	MSL	UG_KG

TABLE H-2
Summary of Rejected Data - Surface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
SS	SVOA	DP01-07108	Benzo(b)fluoranthene	205-99-2	52.9	R	MSL	UG_KG
SS	SVOA	DP01-07108	Benzo(k)fluoranthene	207-08-9	52.9	R	MSL	UG_KG
SS	SVOA	DP01-07108	Dibenz(a,h)anthracene	53-70-3	52.9	R	MSL	UG_KG
SS	SVOA	DP01-07108	Indeno(1,2,3-cd)pyrene	193-39-5	52.9	R	MSL	UG_KG
SS	SVOA	DP01-07148	2-Methylnaphthalene	91-57-6	53.4	R	MSL	UG_KG
SS	SVOA	DP01-07148	Benzo(a)pyrene	50-32-8	53.4	R	MSL	UG_KG
SS	SVOA	DP01-07148	Benzo(b)fluoranthene	205-99-2	53.4	R	MSL	UG_KG
SS	SVOA	DP01-07148	Benzo(g,h,i)perylene	191-24-2	53.4	R	MSL	UG_KG
SS	SVOA	DP01-07148	Benzo(k)fluoranthene	207-08-9	53.4	R	MSL	UG_KG
SS	SVOA	DP01-07148	Dibenz(a,h)anthracene	53-70-3	53.4	R	MSL	UG_KG
SS	SVOA	DP01-07148	Indeno(1,2,3-cd)pyrene	193-39-5	53.4	R	MSL	UG_KG
SS	SVOA	DP08-09112	Benzo(a)pyrene	50-32-8	71.1	R	MSL	UG_KG
SS	SVOA	DP08-09112	Benzo(b)fluoranthene	205-99-2	71.1	R	MSL	UG_KG
SS	SVOA	DP08-09112	Benzo(g,h,i)perylene	191-24-2	71.1	R	MSL	UG_KG
SS	SVOA	DP08-09112	Benzo(k)fluoranthene	207-08-9	71.1	R	MSL	UG_KG
SS	SVOA	DP08-09112	Dibenz(a,h)anthracene	53-70-3	71.1	R	MSL	UG_KG
SS	SVOA	DP08-09112	Indeno(1,2,3-cd)pyrene	193-39-5	71.1	R	MSL	UG_KG
SS	SVOA	DP26-07260	Benzo(a)anthracene	56-55-3	79.0	R	BSL	UG_KG
SS	SVOA	DP26-07260	Benzo(b)fluoranthene	205-99-2	79.0	R	MSL	UG_KG
SS	SVOA	DP26-07260	Benzo(g,h,i)perylene	191-24-2	79.0	R	MSL	UG_KG
SS	SVOA	DP26-07260	Benzo(k)fluoranthene	207-08-9	79.0	R	MSL	UG_KG
SS	SVOA	DP26-07260	Dibenz(a,h)anthracene	53-70-3	79.0	R	MSL	UG_KG
SS	SVOA	DP26-07260	Indeno(1,2,3-cd)pyrene	193-39-5	79.0	R	MSL	UG_KG
SS	SVOA	DP26-57260	Benzo(a)anthracene	56-55-3	80.7	R	BSL	UG_KG
SS	SVOA	DP28-07268	Benzo(a)anthracene	56-55-3	71.6	R	BSL	UG_KG
SS	TPH	DP07-03275	TPH-Diesel Range	TPH-DRO	118	R	MSL	MG_KG
SS	TPH	DP07-03275	TPH-Oil Range	TPH-ORO	118	R	MSL	MG_KG
SS	VOA	DP01-03084	Vinyl acetate	108-05-4	4.69	R	MSL	UG_KG
SS	VOA	DP01-03359	2-Butanone	78-93-3	10.9	R	BSL	UG_KG
SS	VOA	DP01-03359	2-Hexanone	591-78-6	10.9	R	BSL	UG_KG
SS	VOA	DP01-03359	4-Methyl-2-pentanone	108-10-1	10.9	R	BSL	UG_KG

TABLE H-2
Summary of Rejected Data - Surface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
SS	VOA	DP02-03039	1,1,2,2-Tetrachloroethane	79-34-5	4.50	R	ISL	UG_KG
SS	VOA	DP02-03039	1,2-Dibromo-3-chloropropane	96-12-8	3.24	R	ISL	UG_KG
SS	VOA	DP02-03039	1,2-Dichlorobenzene	95-50-1	4.50	R	ISL	UG_KG
SS	VOA	DP02-03039	1,3,5-Trimethylbenzene	108-67-8	4.50	R	ISL	UG_KG
SS	VOA	DP02-03039	1,3-Dichlorobenzene	541-73-1	4.50	R	ISL	UG_KG
SS	VOA	DP02-03039	1,4-Dichlorobenzene	106-46-7	4.50	R	ISL	UG_KG
SS	VOA	DP02-03045	1,1,2,2-Tetrachloroethane	79-34-5	4.82	R	ISL	UG_KG
SS	VOA	DP02-03045	1,2-Dibromo-3-chloropropane	96-12-8	3.47	R	ISL	UG_KG
SS	VOA	DP02-03045	1,2-Dichlorobenzene	95-50-1	4.82	R	ISL	UG_KG
SS	VOA	DP02-03045	1,3,5-Trimethylbenzene	108-67-8	4.82	R	ISL	UG_KG
SS	VOA	DP02-03045	1,3-Dichlorobenzene	541-73-1	4.82	R	ISL	UG_KG
SS	VOA	DP02-03045	1,4-Dichlorobenzene	106-46-7	4.82	R	ISL	UG_KG
SS	VOA	DP02-03147	1,1,2,2-Tetrachloroethane	79-34-5	4.74	R	ISL	UG_KG
SS	VOA	DP02-03147	1,2-Dibromo-3-chloropropane	96-12-8	3.42	R	ISL	UG_KG
SS	VOA	DP02-03147	1,2-Dichlorobenzene	95-50-1	4.74	R	ISL	UG_KG
SS	VOA	DP02-03147	1,3,5-Trimethylbenzene	108-67-8	4.74	R	ISL	UG_KG
SS	VOA	DP02-03147	1,3-Dichlorobenzene	541-73-1	4.74	R	ISL	UG_KG
SS	VOA	DP02-03147	1,4-Dichlorobenzene	106-46-7	4.74	R	ISL	UG_KG
SS	VOA	DP04-03266	Vinyl acetate	108-05-4	5.83	R	MSL	UG_KG
SS	VOA	DP08-03278	Vinyl acetate	108-05-4	6.17	R	MSL	UG_KG
SS	VOA	DP20-03201	1,1,2,2-Tetrachloroethane	79-34-5	4.81	R	ISL	UG_KG
SS	VOA	DP20-03201	1,2,4-Trichlorobenzene	120-82-1	4.81	R	ISL	UG_KG
SS	VOA	DP20-03201	1,2-Dibromo-3-chloropropane	96-12-8	3.47	R	ISL	UG_KG
SS	VOA	DP20-03201	1,2-Dichlorobenzene	95-50-1	4.81	R	ISL	UG_KG
SS	VOA	DP20-03201	1,3-Dichlorobenzene	541-73-1	4.81	R	ISL	UG_KG
SS	VOA	DP20-03201	1,4-Dichlorobenzene	106-46-7	4.81	R	ISL	UG_KG
SS	VOA	DP28-03225	1,1,2,2-Tetrachloroethane	79-34-5	2.47	R	ISL	UG_KG
SS	VOA	DP28-03225	1,2,4-Trichlorobenzene	120-82-1	2.47	R	ISL	UG_KG
SS	VOA	DP28-03225	1,2-Dibromo-3-chloropropane	96-12-8	1.78	R	ISL	UG_KG
SS	VOA	DP28-03225	1,2-Dichlorobenzene	95-50-1	2.47	R	ISL	UG_KG
SS	VOA	DP28-03225	1,3-Dichlorobenzene	541-73-1	2.47	R	ISL	UG_KG

TABLE H-2
Summary of Rejected Data - Surface Soil Matrix
Transfer Parcel FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
SS	VOA	DP28-03225	2-Butanone	78-93-3	5.35	R	OT	UG_KG
SS	VOA	DP30-03231	1,1,2,2-Tetrachloroethane	79-34-5	3.50	R	ISL	UG_KG
SS	VOA	DP30-03231	1,2,4-Trichlorobenzene	120-82-1	3.50	R	ISL	UG_KG
SS	VOA	DP30-03231	1,2-Dibromo-3-chloropropane	96-12-8	3.50	R	ISL	UG_KG
SS	VOA	DP30-03231	1,2-Dichlorobenzene	95-50-1	3.50	R	ISL	UG_KG
SS	VOA	DP30-03231	1,3,5-Trimethylbenzene	108-67-8	3.50	R	ISL	UG_KG
SS	VOA	DP30-03231	1,3-Dichlorobenzene	541-73-1	3.50	R	ISL	UG_KG
SS	VOA	DP30-03231	1,4-Dichlorobenzene	106-46-7	3.50	R	ISL	UG_KG
SS	VOA	DP30-03345	n-Hexane	110-54-3	4.62	R	BSL	UG_KG
SS	VOA	DP31-03234	1,1,2,2-Tetrachloroethane	79-34-5	2.87	R	ISL	UG_KG
SS	VOA	DP31-03234	1,2,4-Trimethylbenzene	95-63-6	2.87	R	ISL	UG_KG
SS	VOA	DP31-03234	1,2-Dibromo-3-chloropropane	96-12-8	2.07	R	ISL	UG_KG
SS	VOA	DP31-03234	1,2-Dichlorobenzene	95-50-1	2.87	R	ISL	UG_KG
SS	VOA	DP31-03234	1,3,5-Trimethylbenzene	108-67-8	2.87	R	ISL	UG_KG
SS	VOA	DP31-03234	1,3-Dichlorobenzene	541-73-1	2.87	R	ISL	UG_KG
SS	VOA	DP31-03234	1,4-Dichlorobenzene	106-46-7	2.87	R	ISL	UG_KG
SS	VOA	DP31-03347	n-Hexane	110-54-3	5.00	R	BSL	UG_KG
SS	VOA	DP31-03348	n-Hexane	110-54-3	4.42	R	BSL	UG_KG
SS	VOA	DP80-03360	n-Hexane	110-54-3	5.61	R	BSL	UG_KG
SS	VOA	DP80-03361	n-Hexane	110-54-3	5.65	R	BSL	UG_KG
SS	VOA	DP81-03362	n-Hexane	110-54-3	5.66	R	BSL	UG_KG
SS	VOA	DP81-03363	n-Hexane	110-54-3	5.65	R	BSL	UG_KG

Reason Codes (DV_Qual_Code)

BSL	Blank Spike - Low Recovery
ISL	Internal Standard - Low Recovery
MSL	Matrix Spike - Low Recovery
OT	Other

TABLE H-3

Summary of Rejected Data - Groundwater Matrix

Transfer Parcel FED-1A, FED-2B, and FED-2C

Alameda Point, Alameda, California

Matrix	Analysis_Group	Sample_ID	Chem_Name	CAS_Number	Ana_Value	DV_Qual	V_Qual_Cod	Units
GW	VOA	DP06-03536	n-Hexane	110-54-3	1.00	R	BSL	UG_L
GW	VOA	DP06-03537	n-Hexane	110-54-3	1.00	R	BSL	UG_L
GW	VOA	DP81-03596	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP81-03597	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP82-03598	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP82-03599	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP83-03600	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP83-03601	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP84-03602	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L
GW	VOA	DP84-03603	Vinyl acetate	108-05-4	3.00	R	BSL	UG_L

Reason Codes (DV_Qual_Code)

BSL Blank Spike - Low Recovery

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Appendix I
Comparison of Detection Limits and Screening Criteria

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Acronyms/Abbreviations

AOC	area of concern
CTR	California Toxics Rule
DTSC	California Department of Toxic Substances Control
EBS	environmental baseline survey
ESL	environmental screening level
FED	federal agency
HHRA	human health risk assessment
IR	Installation Restoration (Program)
MCL	maximum contaminant level
MDL	method detection limit
mg/kg	milligrams per kilogram
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
PRG	preliminary remediation goal
RSL	regional screening levels
SI	site investigation
SVOC	semivolatile organic compound
TPH	total petroleum hydrocarbons
TEQ	toxic equivalency factor
VOC	volatile organic compound

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APPENDIX I

Comparison of Detection Limits and Screening Criteria

This appendix provides a discussion of detection limits that exceeded screening criteria for analytes not reported above detection limits in soil, groundwater, surface water, and sediments at Transfer Parcels Federal Agency (FED)-1A, FED-2B, and FED-2C. Tables I-1 through I-18 list all sampling locations where detection limits exceeded applicable screening criteria.

Data used in this Site Investigation (SI) Report were collected from 15 investigations performed between 1990 and 2010. As such, analytical methods have varied and detection limits have changed. In some cases, detection limits that were adequate for site characterization in earlier investigations now exceed relevant screening criteria. Overall, the data quality has been determined to be satisfactory for this SI. The following sections summarize the instances where detection limits exceeded screening criteria.

I1 Detection Limit Exceedances in Soil

Detection limits exceeded screening criteria for seven chemical classes in soil (total petroleum hydrocarbons [TPH], semivolatile organic compounds [SVOCs] and polycyclic aromatic hydrocarbons [PAHs], pesticides and Polychlorinated Biphenyls [PCBs], metals, volatile organic compounds, dioxins and furans and explosives) as discussed in the following subsections.

I1.1 Total Petroleum Hydrocarbons

Multiple soil samples collected in each of the evaluation areas during the 2010 investigation and sampled for TPH were reported with detection limits above Alameda Point Petroleum Strategy environmental screening level (ESL) limits, but are still considered to be usable. All non-detected results are evaluated to the method detection limit (MDL), which in most cases is at or below the ESL limits.

Detection limits used for analysis of TPH constituents exceeded ESLs used for comparison prior to the 2010 investigation in one soil sample collected in Environmental Baseline Survey (EBS) Parcel 24 (101-LT-SO-07) and one soil sample collected in EBS Parcel 5 (SS1-RA-21) (Table I-1). The sample from EBS Parcel 24 was collected from the eastern sidewall of an excavation and this exceedance is not of concern because another sample collected from the bottom of the excavation had TPH concentrations below ESLs. Additionally, concentrations of all TPH constituents in post-removal samples were below the ecological screening criteria used during the removal action and likely represent isolated concentrations.

Two soil samples collected from one location (SS1-RA-21) in EBS Parcel 5 were reported with detection limits above ESLs. Specifically, TPH as diesel and as jet propellant grade 5

both were analyzed by analytical methods using detection limits of 110 milligrams per kilogram (mg/kg); the ESL for TPH is 100 mg/kg.

I1.2 Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Detection limits used for several SVOC and PAH analyses in soil at four EBS parcels exceeded the residential preliminary remediation goals (PRGs) or regional screening levels (RSLs) (Table I-2). Except in the case of bis(2-chloroethyl)ether, hexachlorobenzene, N-nitroso-di-n-propylamine, 3,3′-dichlorobenzidine (two occurrences), and pentachlorophenol (one occurrence), the detection limits used were not above the industrial PRGs or RSLs.

I1.3 Pesticides and Polychlorinated Biphenyls

Detection limits used for analysis of up to six PCBs in soil exceeded residential PRGs for samples from seven locations (A-1, A-2, A-3, A-4, A-6, WB-3, and WB-4) (Table I-3). The detection limit used for one pesticide (toxaphene) analysis also exceeded the residential PRG for samples from four of these locations (A-2, A-3, WB-3, and WB-4). The exceedances at WB-3 and WB-4 were not of concern because soil samples collected from monitoring well boreholes located adjacent to these locations (M015-A and M010-A, respectively) did not have pesticides and PCBs reported above detection limits and the detection limits used for the analyses were below screening criteria. Location A-1 had a concentration of Aroclor 1260 reported above screening criteria and thus is included in Area of Concern (AOC) 1 for further evaluation. However, the elevated detection limits for PCBs at locations A-2, A-3, A-4, and A-6 and for pesticides at locations A-2 and A-3 are of concern and thus these locations are also included within AOC 1.

As shown in Table I-3, the detection limits for the PCBs and the pesticide toxaphene did not exceed the industrial PRGs and no detection limits exceed industrial or residential RSLs.

I1.4 Metals

Detection limits exceeded residential PRGs and Alameda Point background for thallium in 15 soil samples collected in EBS Parcel 5 and 8 soil samples collected in EBS Parcel 23 (Table I-4). These detection limit exceedances are not of concern because the detection limits were below industrial soil PRGs and no future residential use of the transfer parcel is planned. Residential PRGs were used as a conservative screening tool. No detection limits exceed industrial or residential RSLs.

I1.5 Volatile Organic Compounds

Detection limits used for several VOC analyses in soil at two EBS parcels exceeded the residential RSLs (Table I-5). Except in the case of 1, 2, 3 Trichloropropane (five occurrences), and, 1,2-Dibromo-3-chloropropane, (six occurrences), the detection limits used were not above the industrial RSLs.

I1.6 Dioxins and Furans

Detection limits used for several dioxins and furans analyses in soil in one EBS parcel exceeded the residential RSLs (Table I-6). The detection limits used were not above the industrial RSLs or either the residential or industrial Toxic Equivalency Factors (TEQ).

I1.7 Explosives

Detection limits used for explosives analyses in soil did not exceed residential or industrial RSLs (Table I-7).

I2 Detection Limit Exceedances in Groundwater

Detection limits exceeded screening criteria for five chemical classes in groundwater (volatile organic compounds [VOCs], TPH, SVOCs and PAHs, pesticides and PCBs, and metals) as discussed in the following subsections. A separate discussion is also included for chemicals which were not reported above detection limits and for which the detection limits were above California Toxics Rule (CTR) criteria.

I2.1 Volatile Organic Compounds

Detection limits used for analysis of several VOCs were above the applicable maximum contaminant levels (MCLs) or their tap water RSLs (which were used when MCLs were not established) in groundwater samples collected from EBS Parcels 23, 5 and 23E (Table I-8). However, these sampling locations are not of concern because MCLs are not directly applicable to groundwater beneath Transfer Parcels FED-1A, FED-2B, and FED-2C, since groundwater beneath these transfer parcels is not considered a current or potential drinking water source.

I2.2 Total Petroleum Hydrocarbons

Multiple groundwater samples collected in each of the evaluation areas during the 2010 investigation and sampled for TPH were reported with detection limits above Alameda Point Petroleum Strategy ESL limits, but are still considered to be usable. All non-detected results are evaluated to the MDL, which in most cases is at or below the ESL limits.

Detection limits used for TPH as motor oil analysis exceeded the ESL in one groundwater sample collected in EBS Parcel 24 (101-LT-GW-03) (Table I-9). This exceedance will be addressed as part of AOC 3, which will include the sampling of the downgradient monitoring wells M108-A/B (located in EBS Parcel 23) for petroleum constituents.

I2.3 Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Detection limits used for analysis of SVOCs and PAHs exceeded the applicable MCLs in several groundwater samples (Table I-10). These samples were primarily located in EBS Parcel 23 and in EBS Parcel 5 with a few exceedances located in the central portion of Transfer Parcel FED-1A, in the vicinity and to the east of EBS Parcel 24, and in EBS Parcel 27. However, these detection limit exceedances are not of concern because MCLs are not directly applicable to groundwater below Transfer Parcels FED-1A, FED-2B, and FED-2C;

groundwater beneath these transfer parcels is not considered a current or potential drinking water source.

I2.4 Pesticides and Polychlorinated Biphenyls

Detection limits used for analysis of seven PCBs and two pesticides exceeded their MCLs in groundwater samples collected from monitoring wells located in EBS Parcels 5 and 23 (Table I-11). However, these detection limit exceedances are not considered to be of concern because MCLs are not directly applicable to groundwater below Transfer Parcels FED-1A, FED-2B, and FED-2C; groundwater beneath these transfer parcels is not considered a current or potential drinking water source.

I2.5 Metals

Detection limits used for the analyses of five metals exceeded the associated MCLs or tap water RSLs (which were used when MCLs were unavailable) and background values in groundwater samples collected at four EBS parcels (Table I-12). However, these detection limit exceedances are not of concern because MCLs and tap water RSLs are not directly applicable to groundwater below Transfer Parcels FED-1A, FED-2B, and FED-2C; groundwater beneath these transfer parcels is not considered a current or potential drinking water source.

I2.6 California Toxics Rule Criteria

Detection limits used for analysis of the SVOC pentachlorophenol exceeded the CTR value in groundwater samples collected from four locations (M015-A and M025-A/C/E) (Table I-13). Detection limits for eight pesticides and seven PCBs exceeded CTR values in groundwater samples collected from four locations (M015-A and M025-A/C/E). Detection limits used for cyanide, nickel, and silver exceeded CTR values in groundwater samples collected from wells M015-A and M025-A/C. Detection limits used for copper analysis were also above CTR values, but were below the background concentrations in groundwater samples collected from wells M015-A and M025-E.

It should be noted that many of the data referenced in this SI Report are older and were not intended for comparison with the CTR criteria. Therefore, it would be inappropriate to consider the detection limits as representative of current concentrations that exceed CTR values. It should also be noted that it is unlikely that SVOC, pesticide, PCB, and metals concentrations in groundwater would be present in the San Francisco Bay at the same concentrations, since attenuation during groundwater transport and mixing of groundwater and bay water would likely reduce the concentrations. Consequently, the CTR exceedances were not found to represent data gaps.

I3 Detection Limit Exceedances in Surface water

Detection limits used for the SVOC pentachlorophenol exceeded the CTR value in surface water samples collected from two locations (RW002 and RW006) collected from EBS Parcel 25 (Table I-14). Detection limits used for eight pesticides exceeded CTR values in samples collected from two locations (R1 and R2) (Table I-15). Furthermore, detection limits used for seven PCBs exceeded CTR values in samples collected from locations R1, R2, RW002, and RW006 (Table I-15).

Detection limits used for copper analysis exceeded CTR values and the background value in surface water samples collected from R1 and R2 (Table I-16). Detection limits used for nickel analysis were also above the CTR criterion continuous concentration values, but were below the CTR criteria maximum concentration values, in samples collected from R1 and R2. Detection limits used for tributyltin analysis exceeded CTR values in surface water samples collected from RW002 and RW006.

It should be noted that many of the data referenced in this SI Report are older and were not intended for comparison with the CTR criteria. Therefore, it would be inappropriate to consider the detection limits as representative of current concentrations that exceed CTR values. Consequently, the CTR exceedances were not found to represent data gaps.

I4 Detection Limit Exceedances in Sediment

Detection limits used for seven SVOCs in sediment samples collected from seven locations at EBS Parcel 25 exceeded residential or California-modified PRGs (Table 4-1). At four of these locations (R1 through R4), concentrations were not above industrial PRGs (except for benzidine). Two of the remaining three locations (RW002 and RW003) were adjacent to locations where detection limits were below industrial PRGs. RW004 is therefore the only location for which detection limits used for SVOCs were above residential and industrial PRGs and which was not adjacent to any other sampling locations. However, these PRG exceedances in sediment samples are not considered to be data gaps because both this SI Report and the Runway Wetlands Report determined that no further evaluation is warranted at Transfer Parcel FED-2B (including EBS Parcel 25). Additionally, the findings of the human health risk evaluation conducted during this SI indicate that no further evaluation is warranted based on the current designation as a wetland habitat, which prohibits future residential use.

I5 Detection Limit Exceedances in Concrete

Detection limits used for PCB analyses in concrete did not exceed residential or industrial RSLS (Table I-18).

I6 References

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Tables

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Table I-1
Soil Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	ESL[a] (mg/kg)	ESL for Petroleum Strategy Plan[b] (mg/kg)
FED-1A	5	SS1-RA-21	0	0.5	diesel	110	100	--
FED-1A	5	SS1-RA-21	0	0.5	JP-5	110	100	--
FED-1A	24	101-LT-SO-07	NA	NA	JP-5	110	100	--
FED-1A	Parcel 5	AP1AW467B-DP01	0	0.5	TPH-diesel range	217	--	83
FED-1A	Parcel 5	AP1AW467B-DP02	0	1	TPH-diesel range	214	--	83
FED-1A	Parcel 23	AP1AAPS-DP09	0	0.5	TPH-diesel range	119	--	83
FED-1A	Parcel 23	AP1AAPS-DP15	0	0.5	TPH-diesel range	120	--	83
FED-1A	Parcel 23	AP1AAPS-DP19	0	0.5	TPH-diesel range	210	--	83
FED-1A	Parcel 23	AP1AAPS-DP22	1.75	2.25	TPH-diesel range	118	--	83
FED-1A	Parcel 23	AP1AAPS-DP23	0	0.5	TPH-diesel range	219	--	83
FED-1A	Parcel 23	AP1AAPS-DP24	0	0.5	TPH-diesel range	203	--	83
FED-1A	Parcel 23	AP1AAPS-DP25	0	0.5	TPH-diesel range	217	--	83
FED-1A	Parcel 23	AP1AAPS-DP27	0	0.5	TPH-diesel range	207	--	83
FED-1A	Parcel 23	AP1AAPS-DP28	0	0.5	TPH-diesel range	121	--	83
FED-1A	Parcel 23	AP1AAPS-DP31	0	0.5	TPH-diesel range	234	--	83
FED-1A	Parcel 23	AP1AAPS-DP80	0	0.5	TPH-diesel range	113	--	83
FED-1A	Parcel 23	AP1AAPS-DP80	0.5	1	TPH-diesel range	112	--	83
FED-1A	Parcel 23	AP1AAPS-DP81	0	0.5	TPH-diesel range	113	--	83
FED-1A	Parcel 23	AP1AAPS-DP81	0.5	1	TPH-diesel range	113	--	83
FED-1A	Parcel 23	AP1AAPS-DP82	0	0.5	TPH-diesel range	114	--	83
FED-1A	Parcel 23	AP1AFTA-DP02	0	0.5	TPH-diesel range	216	--	83
FED-1A	Parcel 23	AP1AFTA-DP04	0	0.5	TPH-diesel range	213	--	83
FED-1A	Parcel 23	AP1AFTA-DP05	0	0.5	TPH-diesel range	109	--	83

Table I-1
Soil Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	ESL[a] (mg/kg)	ESL for Petroleum Strategy Plan[b] (mg/kg)
FED-1A	Parcel 23	AP1AFTA-DP07	0	0.5	TPH-diesel range	217	--	83
FED-1A	Parcel 23	AP1AFTA-DP08	0	0.5	TPH-diesel range	141	--	83
FED-1A	Parcel 23	AP1AFTA-DP08	1.5	2	TPH-diesel range	117	--	83
FED-1A	Parcel 23	AP1AFTA-DP09	0	0.5	TPH-diesel range	212	--	83
FED-1A	Parcel 23	AP1AFTA-DP09	0.5	1.5	TPH-diesel range	114	--	83
FED-1A	Parcel 23	AP1AFTA-DP11	0	0.5	TPH-diesel range	224	--	83
FED-1A	Parcel 23	AP1AFTA-DP12	0	0.5	TPH-diesel range	222	--	83
FED-1A	Parcel 23	AP1AFTA-DP13	0	0.5	TPH-diesel range	226	--	83
FED-1A	Parcel 23	AP1AFTA-DP13	0	0.5	TPH-diesel range	231	--	83
FED-1A	Parcel 23	AP1AFTA-DP14	0	0.5	TPH-diesel range	111	--	83
FED-1A	Parcel 23	AP1AFTA-DP15	0	0.5	TPH-diesel range	111	--	83
FED-1A	Parcel 23	AP1AFTA-DP16	0	0.5	TPH-diesel range	114	--	83
FED-1A	Parcel 23	AP1AFTA-DP16	1.5	2	TPH-diesel range	112	--	83
FED-1A	Parcel 23	AP1AFTA-DP17	0	0.5	TPH-diesel range	115	--	83
FED-1A	Parcel 23	AP1AFTA-DP18	0	0.5	TPH-diesel range	113	--	83
FED-1A	Parcel 23	AP1AFTA-DP20	0	0.5	TPH-diesel range	207	--	83
FED-1A	Parcel 23	AP1AFTA-DP21	0	0.5	TPH-diesel range	229	--	83
FED-1A	Parcel 23	AP1AFTA-DP28	0	0.5	TPH-diesel range	120	--	83
FED-1A	Parcel 23	AP1AFTA-DP29	1.2	2	TPH-diesel range	225	--	83
FED-1A	Parcel 23	AP1AFTA-DP30	0	0.5	TPH-diesel range	113	--	83
FED-1A	Parcel 23	AP1AFTA-DP31	0	0.5	TPH-diesel range	221	--	83
FED-1A	Parcel 23	AP1AFTA-DP32	0	0.5	TPH-diesel range	209	--	83
FED-1A	Parcel 23	AP1AFTA-DP33	0	0.5	TPH-diesel range	216	--	83

Table I-1
Soil Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	ESL[a] (mg/kg)	ESL for Petroleum Strategy Plan[b] (mg/kg)
FED-1A	Parcel 23	AP1AFTA-DP33	0	0.5	TPH-diesel range	225	--	83
FED-1A	Parcel 23	AP1AFTA-DP35	0	0.5	TPH-diesel range	109	--	83
FED-1A	Parcel 23	AP1AW483A-DP01	0	0.5	TPH-diesel range	214	--	83
FED-1A	Parcel 23	AP1AW483A-DP02	0	1	TPH-diesel range	212	--	83
FED-1A	Parcel 23	AP1AW483B-DP01	0	0.5	TPH-diesel range	213	--	83
FED-1A	Parcel 23	AP1AW483B-DP02	0	0.5	TPH-diesel range	211	--	83
FED-1A	Parcel 23	AP1AW485B-DP02	0	0.5	TPH-diesel range	218	--	83
FED-1A	Parcel 23	AP1AW485B-DP02	1.5	2	TPH-diesel range	222	--	83
FED-1A	Parcel 23	AP1AW495B-DP01	0	1	TPH-diesel range	108	--	83
FED-1A	Parcel 23	AP1AW495B-DP01	2.5	3	TPH-diesel range	117	--	83
FED-1A	Parcel 23	AP1AW495B-DP01	2.5	3	TPH-diesel range	115	--	83
FED-1A	Parcel 23	AP1AW495B-DP02	0	0.5	TPH-diesel range	208	--	83
FED-1A	Parcel 23	AP1AW496-DP01	0	0.5	TPH-diesel range	224	--	83
FED-1A	Parcel 23	AP1AW496-DP02	0	0.5	TPH-diesel range	238	--	83
FED-1A	Parcel 23	AP1AW499-DP01	0	0.5	TPH-diesel range	117	--	83
FED-1A	Parcel 23	AP1AW499-DP02	0	0.5	TPH-diesel range	220	--	83
FED-1A	Parcel 23	AP1AW499-DP02	1.75	2.25	TPH-diesel range	116	--	83
FED-1A	Parcel 23	AP1AW499-DP02	1.75	2.25	TPH-diesel range	115	--	83
FED-1A	Parcel 23	AP1AW599A-DP01	0	0.5	TPH-diesel range	104	--	83
FED-1A	Parcel 23	AP1AW599A-DP02	0	0.5	TPH-diesel range	223	--	83
FED-1A	Parcel 23	AP1AW599B-DP01	0	0.5	TPH-diesel range	106	--	83
FED-1A	Parcel 23	AP1AW599B-DP02	0	0.5	TPH-diesel range	108	--	83
FED-2c	Parcel 23E	AP2CAPS-DP01	0	0.5	TPH-diesel range	124	--	83

Table I-1
Soil Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Notes:
[a] Water Board 2007
[b] Water Board 2008

bgs = below ground surface
EBS = environmental baseline survey
ESL = environmental screening level
JP-5 = jet propellant grade 5
mg/kg = milligrams per kilogram
NA = not available
-- = not established
TPH – total petroleum hydrocarbon

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	5	A-1	0	0	3,3′-dichlorobenzidine	2,700	1,100	3,800	--	--
FED-1A	5	A-1	0	0	4,6-dinitro-2-methylphenol	6,600	6,100	62,000	--	--
FED-1A	5	A-1	0	0	bis(2-chloroethyl)ether	1,400	220	580	--	--
FED-1A	5	A-1	0	0	hexachlorobenzene	1,400	300	1,100	--	--
FED-1A	5	A-1	0	0	n-nitroso-di-n-propylamine	1,400	69	250	--	--
FED-1A	5	A-1	0	0	pentachlorophenol	6,600	3,000	9,000	--	--
FED-1A	5	A-2	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	A-2	0	0	bis(2-chloroethyl)ether	680	220	580	--	--
FED-1A	5	A-2	0	0	hexachlorobenzene	680	300	1,100	--	--
FED-1A	5	A-2	0	0	n-nitroso-di-n-propylamine	680	69	250	--	--
FED-1A	5	A-2	0	0	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	5	A-3	0	0	3,3′-dichlorobenzidine	1,300	1,100	3,800	--	--
FED-1A	5	A-3	0	0	bis(2-chloroethyl)ether	670	220	580	--	--
FED-1A	5	A-3	0	0	hexachlorobenzene	670	300	1,100	--	--
FED-1A	5	A-3	0	0	n-nitroso-di-n-propylamine	670	69	250	--	--
FED-1A	5	A-3	0	0	pentachlorophenol	3,200	3,000	9,000	--	--
FED-1A	5	A-4	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	A-4	0	0	bis(2-chloroethyl)ether	700	220	580	--	--
FED-1A	5	A-4	0	0	hexachlorobenzene	700	300	1,100	--	--
FED-1A	5	A-4	0	0	n-nitroso-di-n-propylamine	700	69	250	--	--
FED-1A	5	A-4	0	0	pentachlorophenol	3,400	3,000	9,000	--	--
FED-1A	5	A-5	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	A-5	0	0	bis(2-chloroethyl)ether	700	220	580	--	--
FED-1A	5	A-5	0	0	hexachlorobenzene	700	300	1,100	--	--
FED-1A	5	A-5	0	0	n-nitroso-di-n-propylamine	700	69	250	--	--
FED-1A	5	A-5	0	0	pentachlorophenol	3,400	3,000	9,000	--	--
FED-1A	5	A-6	0	0	3,3′-dichlorobenzidine	2,900	1,100	3,800	--	--
FED-1A	5	A-6	0	0	4,6-dinitro-2-methylphenol	6,900	6,100	62,000	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	5	A-6	0	0	bis(2-chloroethyl)ether	1,400	220	580	--	--
FED-1A	5	A-6	0	0	hexachlorobenzene	1,400	300	1,100	--	--
FED-1A	5	A-6	0	0	n-nitroso-di-n-propylamine	1,400	69	250	--	--
FED-1A	5	A-6	0	0	pentachlorophenol	6,900	3,000	9,000	--	--
FED-1A	5	A-7	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	A-7	0	0	bis(2-chloroethyl)ether	680	220	580	--	--
FED-1A	5	A-7	0	0	hexachlorobenzene	680	300	1,100	--	--
FED-1A	5	A-7	0	0	n-nitroso-di-n-propylamine	680	69	250	--	--
FED-1A	5	A-7	0	0	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	5	A-8	0	0	3,3′-dichlorobenzidine	1,300	1,100	3,800	--	--
FED-1A	5	A-8	0	0	bis(2-chloroethyl)ether	670	220	580	--	--
FED-1A	5	A-8	0	0	hexachlorobenzene	670	300	1,100	--	--
FED-1A	5	A-8	0	0	n-nitroso-di-n-propylamine	670	69	250	--	--
FED-1A	5	A-8	0	0	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	5	B-2	0	0	3,3′-dichlorobenzidine	1,300	1,100	3,800	--	--
FED-1A	5	B-2	0	0	bis(2-chloroethyl)ether	660	220	580	--	--
FED-1A	5	B-2	0	0	hexachlorobenzene	660	300	1,100	--	--
FED-1A	5	B-2	0	0	n-nitroso-di-n-propylamine	660	69	250	--	--
FED-1A	5	B-2	0	0	pentachlorophenol	3,200	3,000	9,000	--	--
FED-1A	5	B-3	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	B-3	0	0	bis(2-chloroethyl)ether	680	220	580	--	--
FED-1A	5	B-3	0	0	hexachlorobenzene	680	300	1,100	--	--
FED-1A	5	B-3	0	0	n-nitroso-di-n-propylamine	680	69	250	--	--
FED-1A	5	B-3	0	0	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	5	B-4	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	B-4	0	0	bis(2-chloroethyl)ether	670	220	580	--	--
FED-1A	5	B-4	0	0	hexachlorobenzene	670	300	1,100	--	--
FED-1A	5	B-4	0	0	n-nitroso-di-n-propylamine	670	69	250	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	5	B-4	0	0	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	5	B-5	0	0	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	5	B-5	0	0	bis(2-chloroethyl)ether	700	220	580	--	--
FED-1A	5	B-5	0	0	hexachlorobenzene	700	300	1,100	--	--
FED-1A	5	B-5	0	0	n-nitroso-di-n-propylamine	700	69	250	--	--
FED-1A	5	B-5	0	0	pentachlorophenol	3,400	3,000	9,000	--	--
FED-1A	5	B-6	0	0	3,3′-dichlorobenzidine	1,500	1,100	3,800	--	--
FED-1A	5	B-6	0	0	bis(2-chloroethyl)ether	740	220	580	--	--
FED-1A	5	B-6	0	0	hexachlorobenzene	740	300	1,100	--	--
FED-1A	5	B-6	0	0	n-nitroso-di-n-propylamine	740	69	250	--	--
FED-1A	5	B-6	0	0	pentachlorophenol	3,600	3,000	9,000	--	--
FED-1A	5	B-7	0	0	3,3′-dichlorobenzidine	1,500	1,100	3,800	--	--
FED-1A	5	B-7	0	0	bis(2-chloroethyl)ether	730	220	580	--	--
FED-1A	5	B-7	0	0	hexachlorobenzene	730	300	1,100	--	--
FED-1A	5	B-7	0	0	n-nitroso-di-n-propylamine	730	69	250	--	--
FED-1A	5	B-7	0	0	pentachlorophenol	3,500	3,000	9,000	--	--
FED-1A	5	B-8	0	0	3,3′-dichlorobenzidine	6,900	1,100	3,800	--	--
FED-1A	5	B-8	0	0	4,6-dinitro-2-methylphenol	17,000	6,100	62,000	--	--
FED-1A	5	B-8	0	0	bis(2-chloro-1-methylethyl)ether	3,400	2,900	7,400	--	--
FED-1A	5	B-8	0	0	bis(2-chloroethyl)ether	3,400	220	580	--	--
FED-1A	5	B-8	0	0	hexachlorobenzene	3,400	300	1,100	--	--
FED-1A	5	B-8	0	0	naphthalene	3,400	56,000	1,700c	--	--
FED-1A	5	B-8	0	0	n-nitroso-di-n-propylamine	3,400	69	250	--	--
FED-1A	5	B-8	0	0	pentachlorophenol	17,000	3,000	9,000	--	--
FED-1A	5	M025-A	4	4	n-nitroso-di-n-propylamine	110	69	250	--	--
FED-1A	5	M025-A	80	80	n-nitroso-di-n-propylamine	120	69	250	--	--
FED-1A	5	M025-C	0	0	3,3′-dichlorobenzidine	2,700	1,100	3,800	--	--
FED-1A	5	M025-C	0	0	bis(2-chloroethyl)ether	440	220	580	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	5	M025-C	0	0	hexachlorobenzene	540	300	1,100	--	--
FED-1A	5	M025-C	0	0	n-nitroso-di-n-propylamine	540	69	250	--	--
FED-1A	5	M025-E	21.5	22.8	n-nitroso-di-n-propylamine	120	69	250	--	--
FED-1A	5	M025-E	32	33	n-nitroso-di-n-propylamine	120	69	250	--	--
FED-1A	5	SS1-RA-20	0	0.5	bis(2-chloroethyl)ether	340	220	580	--	--
FED-1A	5	SS1-RA-20	0	0.5	hexachlorobenzene	340	300	1,100	--	--
FED-1A	5	SS1-RA-20	0	0.5	n-nitroso-di-n-propylamine	340	69	250	--	--
FED-1A	5	SS1-RA-21	0	0.5	bis(2-chloroethyl)ether	370	220	580	--	--
FED-1A	5	SS1-RA-21	0	0.5	hexachlorobenzene	370	300	1,100	--	--
FED-1A	5	SS1-RA-21	0	0.5	n-nitroso-di-n-propylamine	370	69	250	--	--
FED-1A	23	023-0075	7	8	bis(2-chloroethyl)ether	540	220	580	--	--
FED-1A	23	023-0075	7	8	hexachlorobenzene	540	300	1,100	--	--
FED-1A	23	023-0075	7	8	n-nitroso-di-n-propylamine	540	69	250	--	--
FED-1A	23	023-0075RE	7	8	bis(2-chloroethyl)ether	360	220	580	--	--
FED-1A	23	023-0075RE	7	8	hexachlorobenzene	360	300	1,100	--	--
FED-1A	23	023-0075RE	7	8	n-nitroso-di-n-propylamine	360	69	250	--	--
FED-1A	23	023-0044	3	4	bis(2-chloroethyl)ether	390	220	580	--	--
FED-1A	23	023-0044	3	4	hexachlorobenzene	390	300	1,100	--	--
FED-1A	23	023-0044	3	4	n-nitroso-di-n-propylamine	390	69	250	--	--
FED-1A	23	023-0044RE	3	4	bis(2-chloroethyl)ether	390	220	580	--	--
FED-1A	23	023-0044RE	3	4	hexachlorobenzene	390	300	1,100	--	--
FED-1A	23	023-0044RE	3	4	n-nitroso-di-n-propylamine	390	69	250	--	--
FED-1A	23	023-0046	3	4	bis(2-chloroethyl)ether	370	220	580	--	--
FED-1A	23	023-0046	3	4	hexachlorobenzene	370	300	1,100	--	--
FED-1A	23	023-0046	3	4	n-nitroso-di-n-propylamine	370	69	250	--	--
FED-1A	23	023-0046RE	3	4	bis(2-chloroethyl)ether	370	220	580	--	--
FED-1A	23	023-0046RE	3	4	hexachlorobenzene	370	300	1,100	--	--
FED-1A	23	023-0046RE	3	4	n-nitroso-di-n-propylamine	370	69	250	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	023-0048	3	4	bis(2-chloroethyl)ether	380	220	580	--	--
FED-1A	23	023-0048	3	4	hexachlorobenzene	380	300	1,100	--	--
FED-1A	23	023-0048	3	4	n-nitroso-di-n-propylamine	380	69	250	--	--
FED-1A	23	023-0048RE	3	4	bis(2-chloroethyl)ether	370	220	580	--	--
FED-1A	23	023-0048RE	3	4	hexachlorobenzene	370	300	1,100	--	--
FED-1A	23	023-0048RE	3	4	n-nitroso-di-n-propylamine	370	69	250	--	--
FED-1A	23	023M-003	4	4.5	bis(2-chloroethyl)ether	390	220	580	--	--
FED-1A	23	023M-003	4	4.5	hexachlorobenzene	390	300	1,100	--	--
FED-1A	23	023M-003	4	4.5	n-nitroso-di-n-propylamine	390	69	250	--	--
FED-1A	23	025-0001	0	0.5	bis(2-chloroethyl)ether	370	220	580	--	--
FED-1A	23	025-0001	0	0.5	hexachlorobenzene	370	300	1,100	--	--
FED-1A	23	025-0001	0	0.5	n-nitroso-di-n-propylamine	370	69	250	--	--
FED-1A	23	M009-A	0	0	n-nitroso-di-n-propylamine	110	69	250	--	--
FED-1A	23	M009-A	2	3.3	n-nitroso-di-n-propylamine	110	69	250	--	--
FED-1A	23	M010-B	0	0.5	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M010-B	0	0.5	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M014-B	0	0.5	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M014-B	0	0.5	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M015-A	2	4.8	n-nitroso-di-n-propylamine	110	69	250	--	--
FED-1A	23	M103-A	5	6.5	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M103-A	5	6.5	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M103-B	0	0.5	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M103-B	0	0.5	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M104-A	0.5	2	n-nitroso-di-n-propylamine	110	69	250	--	--
FED-1A	23	M104-A	0.5	2	n-nitroso-di-n-propylamine	120	69	250	--	--
FED-1A	23	M104-C	0	0	n-nitroso-di-n-propylamine	100	69	250	--	--
FED-1A	23	M104-C	0	0	n-nitroso-di-n-propylamine	100	69	250	--	--
FED-1A	23	M104-C	60	62	n-nitroso-di-n-propylamine	120	69	250	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	M105-A	5.5	7	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M105-A	5.5	7	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M105-B	0	0.5	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M105-B	0	0.5	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M106-A	0	0	n-nitroso-di-n-propylamine	100	69	250	--	--
FED-1A	23	M106-A	2	3	n-nitroso-di-n-propylamine	120	69	250	--	--
FED-1A	23	M107-A	0	0	n-nitroso-di-n-propylamine	100	69	250	--	--
FED-1A	23	M107-A	0.5	2	n-nitroso-di-n-propylamine	100	69	250	--	--
FED-1A	23	M108-A	5	6.5	n-nitrosodimethylamine	170	9.5	250	--	--
FED-1A	23	M108-A	5	6.5	n-nitroso-di-n-propylamine	170	69	250	--	--
FED-1A	23	M108-B	0	0.5	3,3′-dichlorobenzidine	6,800	1,100	3,800	--	--
FED-1A	23	M108-B	0	0.5	4,6-dinitro-2-methylphenol	17,000	6,100	62,000	--	--
FED-1A	23	M108-B	0	0.5	bis(2-chloro-1-methylethyl)ether	3,400	2,900	7,400	--	--
FED-1A	23	M108-B	0	0.5	bis(2-chloroethyl)ether	3,400	220	580	--	--
FED-1A	23	M108-B	0	0.5	hexachlorobenzene	3,400	300	1,100	--	--
FED-1A	23	M108-B	0	0.5	naphthalene	3,400	56,000	1,700c	--	--
FED-1A	23	M108-B	0	0.5	n-nitrosodimethylamine	3,400	9.5	250	--	--
FED-1A	23	M108-B	0	0.5	n-nitroso-di-n-propylamine	3,400	69	250	--	--
FED-1A	23	M108-B	0	0.5	pentachlorophenol	17,000	3,000	9,000	--	--
FED-1A	23	M108-B	0	0.5	3,3′-dichlorobenzidine	6,800	1,100	3,800	--	--
FED-1A	23	M108-B	0	0.5	4,6-dinitro-2-methylphenol	17,000	6,100	62,000	--	--
FED-1A	23	M108-B	0	0.5	bis(2-chloro-1-methylethyl)ether	3,400	2,900	7,400	--	--
FED-1A	23	M108-B	0	0.5	bis(2-chloroethyl)ether	3,400	220	580	--	--
FED-1A	23	M108-B	0	0.5	hexachlorobenzene	3,400	300	1,100	--	--
FED-1A	23	M108-B	0	0.5	naphthalene	3,400	56,000	1,700c	--	--
FED-1A	23	M108-B	0	0.5	n-nitrosodimethylamine	3,400	9.5	250	--	--
FED-1A	23	M108-B	0	0.5	n-nitroso-di-n-propylamine	3,400	69	250	--	--
FED-1A	23	M108-B	0	0.5	pentachlorophenol	17,000	3,000	9,000	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	M109-A	0	0	n-nitroso-di-n-propylamine	110	69	250	--	--
FED-1A	23	M109-A	5.5	6.3	n-nitroso-di-n-propylamine	100	69	250	--	--
FED-1A	23	WB-3	0	0.5	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	23	WB-3	0	0.5	bis(2-chloroethyl)ether	690	220	580	--	--
FED-1A	23	WB-3	0	0.5	hexachlorobenzene	690	300	1,100	--	--
FED-1A	23	WB-3	0	0.5	n-nitroso-di-n-propylamine	690	69	250	--	--
FED-1A	23	WB-3	0	0.5	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	23	WB-3	15.5	16	bis(2-chloroethyl)ether	410	220	580	--	--
FED-1A	23	WB-3	15.5	16	hexachlorobenzene	410	300	1,100	--	--
FED-1A	23	WB-3	15.5	16	n-nitroso-di-n-propylamine	410	69	250	--	--
FED-1A	23	WB-3	35.5	36	bis(2-chloroethyl)ether	400	220	580	--	--
FED-1A	23	WB-3	35.5	36	hexachlorobenzene	400	300	1,100	--	--
FED-1A	23	WB-3	35.5	36	n-nitroso-di-n-propylamine	400	69	250	--	--
FED-1A	23	WB-3	45.5	46	bis(2-chloroethyl)ether	410	220	580	--	--
FED-1A	23	WB-3	45.5	46	hexachlorobenzene	410	300	1,100	--	--
FED-1A	23	WB-3	45.5	46	n-nitroso-di-n-propylamine	410	69	250	--	--
FED-1A	23	WB-4	0	0.5	3,3′-dichlorobenzidine	1,400	1,100	3,800	--	--
FED-1A	23	WB-4	0	0.5	bis(2-chloroethyl)ether	690	220	580	--	--
FED-1A	23	WB-4	0	0.5	hexachlorobenzene	690	300	1,100	--	--
FED-1A	23	WB-4	0	0.5	n-nitroso-di-n-propylamine	690	69	250	--	--
FED-1A	23	WB-4	0	0.5	pentachlorophenol	3,300	3,000	9,000	--	--
FED-1A	23	WB-4	10.5	11	3,3′-dichlorobenzidine	1,700	1,100	3,800	--	--
FED-1A	23	WB-4	10.5	11	bis(2-chloroethyl)ether	860	220	580	--	--
FED-1A	23	WB-4	10.5	11	hexachlorobenzene	860	300	1,100	--	--
FED-1A	23	WB-4	10.5	11	n-nitroso-di-n-propylamine	860	69	250	--	--
FED-1A	23	WB-4	10.5	11	pentachlorophenol	4,200	3,000	9,000	--	--
FED-1A	23	WB-4	35	35.5	3,3′-dichlorobenzidine	1,700	1,100	3,800	--	--
FED-1A	23	WB-4	35	35.5	bis(2-chloroethyl)ether	830	220	580	--	--

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	WB-4	35	35.5	hexachlorobenzene	830	300	1,100	--	--
FED-1A	23	WB-4	35	35.5	n-nitroso-di-n-propylamine	830	69	250	--	--
FED-1A	23	WB-4	35	35.5	pentachlorophenol	4,000	3,000	9,000	--	--
FED-1A	23	WB-4	50.5	51	3,3′-dichlorobenzidine	1,700	1,100	3,800	--	--
FED-1A	23	WB-4	50.5	51	bis(2-chloroethyl)ether	850	220	580	--	--
FED-1A	23	WB-4	50.5	51	hexachlorobenzene	850	300	1,100	--	--
FED-1A	23	WB-4	50.5	51	n-nitroso-di-n-propylamine	850	69	250	--	--
FED-1A	23	WB-4	50.5	51	pentachlorophenol	4,100	3,000	9,000	--	--
FED-2B	27	027T-0007	4	6	bis(2-chloroethyl)ether	380	220	580	--	--
FED-2B	27	027T-0007	4	6	hexachlorobenzene	380	300	1,100	--	--
FED-2B	27	027T-0007	4	6	n-nitroso-di-n-propylamine	380	69	250	--	--
FED-2C	23E	030-0048	2.5	4.5	bis(2-chloroethyl)ether	380	220	580	--	--
FED-2C	23E	030-0048	2.5	4.5	hexachlorobenzene	380	300	1,100	--	--
FED-2C	23E	030-0048	2.5	4.5	n-nitroso-di-n-propylamine	380	69	250	--	--
FED-1A	23	AP1AAPS-DP19	0	0.5	Benzo(a)pyrene	52.7	--	--	15	210
FED-1A	23	AP1AAPS-DP19	0.5	2	Benzo(a)pyrene	53.9	--	--	15	210
FED-1A	23	AP1AAPS-DP19	0	0.5	Dibenz(a,h)anthracene	52.7	--	--	15	210
FED-1A	23	AP1AAPS-DP19	0.5	2	Dibenz(a,h)anthracene	53.9	--	--	15	210
FED-1A	23	AP1AAPS-DP20	0	0.5	Benzo(a)pyrene	54.4	--	--	15	210
FED-1A	23	AP1AAPS-DP20	0	0.5	Dibenz(a,h)anthracene	54.4	--	--	15	210
FED-1A	23	AP1AAPS-DP21	0	0.5	Dibenz(a,h)anthracene	54.9	--	--	15	210
FED-1A	23	AP1AAPS-DP21	0	0.5	Dibenz(a,h)anthracene	54.8	--	--	15	210
FED-1A	23	AP1AAPS-DP21	0	0.5	Benzo(a)pyrene	54.8	--	--	15	210
FED-1A	23	AP1AAPS-DP21	0	0.5	Benzo(a)pyrene	54.9	--	--	15	210
FED-1A	23	AP1AAPS-DP22	0	0.5	Benzo(a)pyrene	51	--	--	15	210
FED-1A	23	AP1AAPS-DP22	0.5	2	Dibenz(a,h)anthracene	57.5	--	--	15	210
FED-1A	23	AP1AAPS-DP22	0.5	2	Benzo(a)pyrene	57.5	--	--	15	210
FED-1A	23	AP1AAPS-DP22	0	0.5	Dibenz(a,h)anthracene	51	--	--	15	210

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	AP1AAPS-DP23	0	0.5	Benzo(a)pyrene	71.1	--	--	15	210
FED-1A	23	AP1AAPS-DP23	0.5	2	Benzo(a)pyrene	74.3	--	--	15	210
FED-1A	23	AP1AAPS-DP23	0.5	2	Dibenz(a,h)anthracene	74.3	--	--	15	210
FED-1A	23	AP1AAPS-DP23	0	0.5	Dibenz(a,h)anthracene	71.1	--	--	15	210
FED-1A	23	AP1AAPS-DP24	0	0.5	Dibenz(a,h)anthracene	54.2	--	--	15	210
FED-1A	23	AP1AAPS-DP24	0	0.5	Benzo(a)pyrene	54.2	--	--	15	210
FED-1A	23	AP1AAPS-DP25	0.5	2	Dibenz(a,h)anthracene	34.7	--	--	15	210
FED-1A	23	AP1AAPS-DP25	0	0.5	Dibenz(a,h)anthracene	70.7	--	--	15	210
FED-1A	23	AP1AAPS-DP25	0.5	2	Benzo(a)pyrene	34.7	--	--	15	210
FED-1A	23	AP1AAPS-DP25	0	0.5	Benzo(a)pyrene	70.7	--	--	15	210
FED-1A	23	AP1AAPS-DP26	0	0.5	Benzo(a)pyrene	79	--	--	15	210
FED-1A	23	AP1AAPS-DP26	0	0.5	Benzo(a)pyrene	80.7	--	--	15	210
FED-1A	23	AP1AAPS-DP26	0	0.5	Dibenz(a,h)anthracene	80.7	--	--	15	210
FED-1A	23	AP1AAPS-DP27	0.5	2	Benzo(a)pyrene	72.9	--	--	15	210
FED-1A	23	AP1AAPS-DP27	0.5	2	Dibenz(a,h)anthracene	72.9	--	--	15	210
FED-1A	23	AP1AAPS-DP27	0	0.5	Dibenz(a,h)anthracene	71.7	--	--	15	210
FED-1A	23	AP1AAPS-DP27	0	0.5	Benzo(a)pyrene	71.7	--	--	15	210
FED-1A	23	AP1AAPS-DP28	0	0.5	Benzo(a)pyrene	71.6	--	--	15	210
FED-1A	23	AP1AAPS-DP28	0.5	2	Benzo(a)pyrene	71.1	--	--	15	210
FED-1A	23	AP1AAPS-DP28	0.5	2	Dibenz(a,h)anthracene	71.1	--	--	15	210
FED-1A	23	AP1AAPS-DP28	0	0.5	Dibenz(a,h)anthracene	71.6	--	--	15	210
FED-1A	23	AP1AAPS-DP31	0	0.5	Dibenz(a,h)anthracene	78.6	--	--	15	210
FED-1A	23	AP1AAPS-DP31	0	0.5	Benzo(a)pyrene	78.6	--	--	15	210
FED-1A	23	AP1AAPS-DP31	0	0.5	Dibenz(a,h)anthracene	79.4	--	--	15	210
FED-1A	23	AP1AAPS-DP31	0	0.5	Benzo(a)pyrene	79.4	--	--	15	210
FED-1A	23	AP1AAPS-DP80	0	0.5	Benzo(a)pyrene	74.8	--	--	15	210
FED-1A	23	AP1AAPS-DP80	0	0.5	Dibenz(a,h)anthracene	74.8	--	--	15	210
FED-1A	23	AP1AIR33-DP02	2	4	Dibenz(a,h)anthracene	73.8	--	--	15	210

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	AP1AIR33-DP02	2	4	Benzo(a)pyrene	73.8	--	--	15	210
FED-1A	23	AP1AIR33-DP03	0	0.5	Dibenz(a,h)anthracene	70.5	--	--	15	210
FED-1A	23	AP1AIR33-DP11	0.5	2	Dibenz(a,h)anthracene	78.9	--	--	15	210
FED-1A	23	AP1AIR33-DP19	0	0.5	Dibenz(a,h)anthracene	71.8	--	--	15	210
FED-1A	23	AP1AIR33-DP20	0	0.5	Dibenz(a,h)anthracene	35.7	--	--	15	210
FED-1A	23	AP1AIR33-DP20	0	0.5	Benzo(a)pyrene	35.7	--	--	15	210
FED-1A	23	AP1AW483A-DP01	0.5	2	Benzo(a)pyrene	54.7	--	--	15	210
FED-1A	23	AP1AW483A-DP01	0.5	2	Dibenz(a,h)anthracene	54.7	--	--	15	210
FED-1A	23	AP1AW483A-DP01	0	0.5	Dibenz(a,h)anthracene	37	--	--	15	210
FED-1A	23	AP1AW483A-DP01	0	0.5	Benzo(a)pyrene	37	--	--	15	210
FED-1A	23	AP1AW483A-DP02	0	0.5	Benzo(a)pyrene	69.8	--	--	15	210
FED-1A	23	AP1AW483A-DP02	0	0.5	Dibenz(a,h)anthracene	69.8	--	--	15	210
FED-1A	23	AP1AW483B-DP01	0	0.5	Benzo(a)pyrene	36.9	--	--	15	210
FED-1A	23	AP1AW483B-DP01	0	0.5	Benzo(a)pyrene	36.9	--	--	15	210
FED-1A	23	AP1AW483B-DP01	0.5	2	Benzo(a)pyrene	73.3	--	--	15	210
FED-1A	23	AP1AW483B-DP01	0	0.5	Dibenz(a,h)anthracene	36.9	--	--	15	210
FED-1A	23	AP1AW483B-DP01	0	0.5	Dibenz(a,h)anthracene	36.9	--	--	15	210
FED-1A	23	AP1AW483B-DP01	0.5	2	Dibenz(a,h)anthracene	73.3	--	--	15	210
FED-1A	23	AP1AW483B-DP02	0	0.5	Benzo(a)pyrene	72.6	--	--	15	210
FED-1A	23	AP1AW483B-DP02	0.5	2	Benzo(a)pyrene	72.7	--	--	15	210
FED-1A	23	AP1AW483B-DP02	0.5	2	Dibenz(a,h)anthracene	72.7	--	--	15	210
FED-1A	23	AP1AW483B-DP02	0	0.5	Dibenz(a,h)anthracene	72.6	--	--	15	210
FED-1A	23	AP1AW485B-DP01	0.5	2	Benzo(a)pyrene	71.8	--	--	15	210
FED-1A	23	AP1AW485B-DP01	0	0.5	Dibenz(a,h)anthracene	75.4	--	--	15	210
FED-1A	23	AP1AW485B-DP01	0.5	2	Dibenz(a,h)anthracene	71.8	--	--	15	210
FED-1A	23	AP1AW485B-DP01	0	0.5	Benzo(a)pyrene	75.4	--	--	15	210
FED-1A	23	AP1AW485B-DP02	0.5	2	Benzo(a)pyrene	53.5	--	--	15	210
FED-1A	23	AP1AW485B-DP02	0	0.5	Benzo(a)pyrene	72.4	--	--	15	210

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDa	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	AP1AW485B-DP02	0	0.5	Dibenz(a,h)anthracene	72.4	--	--	15	210
FED-1A	23	AP1AW485B-DP02	0	0.5	Dibenz(a,h)anthracene	54.4	--	--	15	210
FED-1A	23	AP1AW485B-DP02	0.5	2	Dibenz(a,h)anthracene	53.5	--	--	15	210
FED-1A	23	AP1AW485B-DP02	0	0.5	Benzo(a)pyrene	54.4	--	--	15	210
FED-1A	23	AP1AW495A-DP01	2	4	Benzo(a)pyrene	37.4	--	--	15	210
FED-1A	23	AP1AW495A-DP01	2	4	Dibenz(a,h)anthracene	37.4	--	--	15	210
FED-1A	23	AP1AW495A-DP01	0.5	2	Dibenz(a,h)anthracene	71.5	--	--	15	210
FED-1A	23	AP1AW495A-DP02	0	0.5	Benzo(a)pyrene	107	--	--	15	210
FED-1A	23	AP1AW495A-DP02	0.5	2	Dibenz(a,h)anthracene	52.9	--	--	15	210
FED-1A	23	AP1AW495A-DP02	2	4	Benzo(a)pyrene	36.5	--	--	15	210
FED-1A	23	AP1AW495A-DP02	0	0.5	Dibenz(a,h)anthracene	107	--	--	15	210
FED-1A	23	AP1AW495A-DP02	0	0.5	Dibenz(a,h)anthracene	54	--	--	15	210
FED-1A	23	AP1AW495A-DP02	2	4	Dibenz(a,h)anthracene	36.5	--	--	15	210
FED-1A	23	AP1AW495B-DP01	2	4	Benzo(a)pyrene	38.5	--	--	15	210
FED-1A	23	AP1AW495B-DP01	0.5	2	Dibenz(a,h)anthracene	71	--	--	15	210
FED-1A	23	AP1AW495B-DP01	0	0.5	Benzo(a)pyrene	71.6	--	--	15	210
FED-1A	23	AP1AW495B-DP01	0	0.5	Dibenz(a,h)anthracene	71.6	--	--	15	210
FED-1A	23	AP1AW495B-DP01	2	4	Dibenz(a,h)anthracene	38.5	--	--	15	210
FED-1A	23	AP1AW495B-DP02	0.5	2	Dibenz(a,h)anthracene	36.2	--	--	15	210
FED-1A	23	AP1AW495B-DP02	0	0.5	Benzo(a)pyrene	69.2	--	--	15	210
FED-1A	23	AP1AW495B-DP02	0	0.5	Dibenz(a,h)anthracene	69.2	--	--	15	210
FED-1A	23	AP1AW495B-DP02	0.5	2	Benzo(a)pyrene	36.2	--	--	15	210
FED-1A	23	AP1AW496-DP01	0.5	2	Dibenz(a,h)anthracene	71.6	--	--	15	210
FED-1A	23	AP1AW496-DP01	0.5	2	Benzo(a)pyrene	71.6	--	--	15	210
FED-1A	23	AP1AW496-DP02	0.5	2	Benzo(a)pyrene	78.7	--	--	15	210
FED-1A	23	AP1AW496-DP02	0	0.5	Dibenz(a,h)anthracene	92.3	--	--	15	210
FED-1A	23	AP1AW496-DP02	0.5	2	Dibenz(a,h)anthracene	78.7	--	--	15	210
FED-1A	23	AP1AW496-DP02	0	0.5	Benzo(a)pyrene	92.3	--	--	15	210

Table I-2
Soil Samples With Detection Limits Exceeding Screening Levels: Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station IDs[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Residential PRGc (µg/kg)	Industrial PRGc (µg/kg)	Residential RSLd (µg/kg)	Industrial RSLd (µg/kg)
FED-1A	23	AP1AW499-DP01	0.5	2	Benzo(a)pyrene	28.2	--	--	15	210
FED-1A	23	AP1AW499-DP01	0.5	2	Dibenz(a,h)anthracene	28.2	--	--	15	210
FED-1A	23	AP1AW499-DP01	0	0.5	Dibenz(a,h)anthracene	51	--	--	15	210
FED-1A	23	AP1AW499-DP01	0	0.5	Benzo(a)pyrene	51	--	--	15	210
FED-1A	23	AP1AW499-DP02	0	0.5	Dibenz(a,h)anthracene	71.3	--	--	15	210
FED-1A	23	AP1AW499-DP02	0	0.5	Benzo(a)pyrene	71.3	--	--	15	210
FED-1A	23	AP1AW599A-DP01	0	0.5	Dibenz(a,h)anthracene	36.1	--	--	15	210
FED-1A	23	AP1AW599A-DP01	0	0.5	Benzo(a)pyrene	36.1	--	--	15	210
FED-1A	23	AP1AW599A-DP02	0.5	2	Dibenz(a,h)anthracene	35.7	--	--	15	210
FED-1A	23	AP1AW599A-DP02	0.5	2	Benzo(a)pyrene	35.7	--	--	15	210
FED-1A	23	AP1AW599B-DP01	0	0.5	Dibenz(a,h)anthracene	53	--	--	15	210
FED-1A	23	AP1AW599B-DP01	0	0.5	Dibenz(a,h)anthracene	53	--	--	15	210
FED-1A	23	AP1AW599B-DP01	0.5	2	Benzo(a)pyrene	53.4	--	--	15	210
FED-1A	23	AP1AW599B-DP01	0	0.5	Benzo(a)pyrene	53	--	--	15	210
FED-1A	23	AP1AW599B-DP01	0.5	2	Dibenz(a,h)anthracene	53.4	--	--	15	210
FED-1A	23	AP1AW599B-DP02	0.5	2	Dibenz(a,h)anthracene	52.4	--	--	15	210
FED-1A	23	AP1AW599B-DP02	2	4	Dibenz(a,h)anthracene	54.4	--	--	15	210
FED-1A	23	AP1AW599B-DP02	2	4	Benzo(a)pyrene	54.4	--	--	15	210
FED-1A	23	AP1AW599B-DP02	0.5	2	Benzo(a)pyrene	52.4	--	--	15	210

Notes:
[a] EBS sampling locations are identified by sample ID
[b] U.S. EPA 2004
[c] California-modified PRG
[d] U.S EPA 2010
bgs = below ground surface
EBS = environmental baseline survey
µg/kg = micrograms per kilogram
NA = not available
-- = not established
PRG = preliminary remediation goal

Table I-3
Soil Samples with Detection Limits Exceeding Screening Levels: Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential PRG[a] (mg/kg)	Industrial PRG[a] (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	5	A-1	0	0	Aroclor 1254	0.26	0.22	0.74	--	--
FED-1A	5	A-2	0	0	Aroclor 1221	0.26	0.22	0.74	--	--
FED-1A	5	A-2	0	0	Aroclor 1232	0.26	0.22	0.74	--	--
FED-1A	5	A-2	0	0	Aroclor 1242	0.26	0.22	0.74	--	--
FED-1A	5	A-2	0	0	Aroclor 1248	0.26	0.22	0.74	--	--
FED-1A	5	A-2	0	0	Aroclor 1254	0.51	0.22	0.74	--	--
FED-1A	5	A-2	0	0	Aroclor 1260	0.51	0.22	0.74	--	--
FED-1A	5	A-2	0	0	toxaphene	0.51	0.44	1.6	--	--
FED-1A	5	A-3	0	0	Aroclor 1221	0.25	0.22	0.74	--	--
FED-1A	5	A-3	0	0	Aroclor 1232	0.25	0.22	0.74	--	--
FED-1A	5	A-3	0	0	Aroclor 1242	0.25	0.22	0.74	--	--
FED-1A	5	A-3	0	0	Aroclor 1248	0.25	0.22	0.74	--	--
FED-1A	5	A-3	0	0	Aroclor 1254	0.5	0.22	0.74	--	--
FED-1A	5	A-3	0	0	Aroclor 1260	0.5	0.22	0.74	--	--
FED-1A	5	A-3	0	0	toxaphene	0.5	0.44	1.6	--	--
FED-1A	5	A-4	0	0	Aroclor 1254	0.26	0.22	0.74	--	--
FED-1A	5	A-4	0	0	Aroclor 1260	0.26	0.22	0.74	--	--
FED-1A	5	A-6	0	0	Aroclor 1254	0.27	0.22	0.74	--	--
FED-1A	5	A-6	0	0	Aroclor 1260	0.27	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	Aroclor 1221	0.26	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	Aroclor 1232	0.26	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	Aroclor 1242	0.26	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	Aroclor 1248	0.26	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	Aroclor 1254	0.52	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	Aroclor 1260	0.52	0.22	0.74	--	--
FED-1A	23	WB-3	0	0.5	toxaphene	0.52	0.44	1.6	--	--
FED-1A	23	WB-3	15.5	16	Aroclor 1221	0.31	0.22	0.74	--	--

Table I-3
Soil Samples with Detection Limits Exceeding Screening Levels: Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential PRG[a] (mg/kg)	Industrial PRG[a] (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	WB-3	15.5	16	Aroclor 1232	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	15.5	16	Aroclor 1242	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	15.5	16	Aroclor 1248	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	15.5	16	Aroclor 1254	0.63	0.22	0.74	--	--
FED-1A	23	WB-3	15.5	16	Aroclor 1260	0.63	0.22	0.74	--	--
FED-1A	23	WB-3	15.5	16	toxaphene	0.63	0.44	1.6	--	--
FED-1A	23	WB-3	35.5	36	Aroclor 1221	0.3	0.22	0.74	--	--
FED-1A	23	WB-3	35.5	36	Aroclor 1232	0.3	0.22	0.74	--	--
FED-1A	23	WB-3	35.5	36	Aroclor 1242	0.3	0.22	0.74	--	--
FED-1A	23	WB-3	35.5	36	Aroclor 1248	0.3	0.22	0.74	--	--
FED-1A	23	WB-3	35.5	36	Aroclor 1254	0.6	0.22	0.74	--	--
FED-1A	23	WB-3	35.5	36	Aroclor 1260	0.6	0.22	0.74	--	--
FED-1A	23	WB-3	35.5	36	toxaphene	0.6	0.44	1.6	--	--
FED-1A	23	WB-3	45.5	46	Aroclor 1221	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	45.5	46	Aroclor 1232	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	45.5	46	Aroclor 1242	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	45.5	46	Aroclor 1248	0.31	0.22	0.74	--	--
FED-1A	23	WB-3	45.5	46	Aroclor 1254	0.62	0.22	0.74	--	--
FED-1A	23	WB-3	45.5	46	Aroclor 1260	0.62	0.22	0.74	--	--
FED-1A	23	WB-3	45.5	46	toxaphene	0.62	0.44	1.6	--	--
FED-1A	23	WB-4	0	0.5	Aroclor 1221	0.26	0.22	0.74	--	--
FED-1A	23	WB-4	0	0.5	Aroclor 1232	0.26	0.22	0.74	--	--
FED-1A	23	WB-4	0	0.5	Aroclor 1242	0.26	0.22	0.74	--	--
FED-1A	23	WB-4	0	0.5	Aroclor 1248	0.26	0.22	0.74	--	--
FED-1A	23	WB-4	0	0.5	Aroclor 1254	0.52	0.22	0.74	--	--
FED-1A	23	WB-4	0	0.5	Aroclor 1260	0.52	0.22	0.74	--	--
FED-1A	23	WB-4	0	0.5	toxaphene	0.52	0.44	1.6	--	--

Table I-3
Soil Samples with Detection Limits Exceeding Screening Levels: Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential PRG[a] (mg/kg)	Industrial PRG[a] (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	WB-4	10.5	11	Aroclor 1221	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	10.5	11	Aroclor 1232	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	10.5	11	Aroclor 1242	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	10.5	11	Aroclor 1248	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	10.5	11	Aroclor 1254	0.65	0.22	0.74	--	--
FED-1A	23	WB-4	10.5	11	Aroclor 1260	0.65	0.22	0.74	--	--
FED-1A	23	WB-4	10.5	11	toxaphene	0.65	0.44	1.6	--	--
FED-1A	23	WB-4	35	35.5	Aroclor 1221	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	35	35.5	Aroclor 1232	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	35	35.5	Aroclor 1242	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	35	35.5	Aroclor 1248	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	35	35.5	Aroclor 1254	0.63	0.22	0.74	--	--
FED-1A	23	WB-4	35	35.5	Aroclor 1260	0.63	0.22	0.74	--	--
FED-1A	23	WB-4	35	35.5	toxaphene	0.63	0.44	1.6	--	--
FED-1A	23	WB-4	50.5	51	Aroclor 1254	0.32	0.22	0.74	--	--
FED-1A	23	WB-4	50.5	51	Aroclor 1260	0.32	0.22	0.74	--	--

Notes:

* U.S. EPA 2004
[b] U.S. EPA 2010

bgs = below ground surface
mg/kg = milligrams per kilogram
EBS = environmental baseline survey
NA = not available
-- = not establised
PCB – polychlorinated biphenyl
PRG – preliminary remediation goal

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Table I-4
Soil Samples With Detection Limits Exceeding Screening Levels and Alameda Point Background: Metals

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Background[a] (mg/kg)	Residential PRG[b] (mg/kg)	Industrial PRG[b] (mg/kg)	Residential RSL[c] (ug/kg)	Industrial RSL[c] (ug/kg)
FED-1A	5	A1	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	A2	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	A3	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	A4	0	0	thallium	11	11.5	5.2	67	--	--
FED-1A	5	A5	0	0	thallium	11	11.5	5.2	67	--	--
FED-1A	5	A6	0	0	thallium	11	11.5	5.2	67	--	--
FED-1A	5	A7	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	A8	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	B2	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	B3	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	B4	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	B5	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	5	B6	0	0	thallium	11	11.5	5.2	67	--	--
FED-1A	5	B7	0	0	thallium	11	11.5	5.2	67	--	--
FED-1A	5	B8	0	0	thallium	10	11.5	5.2	67	--	--
FED-1A	23	WB-3	0	0.5	thallium	10	11.5	5.2	67	--	--
FED-1A	23	WB-3	15.5	16	thallium	12	11.5	5.2	67	--	--
FED-1A	23	WB-3	35.5	36	thallium	12	11.5	5.2	67	--	--
FED-1A	23	WB-3	45.5	46	thallium	12	11.5	5.2	67	--	--
FED-1A	23	WB-4	0	0.5	thallium	10	11.5	5.2	67	--	--
FED-1A	23	WB-4	10.5	11	thallium	13	11.5	5.2	67	--	--
FED-1A	23	WB-4	35	35.5	thallium	13	11.5	5.2	67	--	--
FED-1A	23	WB-4	50.5	51	thallium	13	11.5	5.2	67	--	--

Notes:
[a] TtEMI 2004
[b] U.S. EPA 2004
[c] U.S. EPA 2010

bgs = below ground surface
EBS = environmental baseline survey
mg/kg = milligrams per kilogram
PRG = preliminary remediation goal
-- = not established

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Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	5	AP1AW467B-DP01	2.5	3	1,2,3-Trichloropropane	5.75	5	95
FED-1A	5	AP1AW467B-DP01	0	0.5	1,2,3-Trichloropropane	5.21	5	95
FED-1A	5	AP1AW467B-DP01	2.5	3	1,2,3-Trichloropropane	5.58	5	95
FED-1A	5	AP1AW467B-DP02	0	1	1,2,3-Trichloropropane	5.73	5	95
FED-1A	5	AP1AW467B-DP02	4.75	5.25	1,2,3-Trichloropropane	5.43	5	95
FED-1A	23	AP1A259-DP01	0	0.5	1,2,3-Trichloropropane	5.03	5	95
FED-1A	23	AP1A259-DP01	1.75	2.25	1,2,3-Trichloropropane	5.07	5	95
FED-1A	23	AP1A259-DP03	2.25	2.75	1,2,3-Trichloropropane	5.83	5	95
FED-1A	23	AP1A259-DP03	0	0.5	1,2,3-Trichloropropane	5.09	5	95
FED-1A	23	AP1A259-DP04	1.25	1.75	1,2,3-Trichloropropane	5.04	5	95
FED-1A	23	AP1AAPS-DP01	0	0.75	1,2,3-Trichloropropane	5.34	5	95
FED-1A	23	AP1AAPS-DP01	0.75	1.25	1,2,3-Trichloropropane	5.44	5	95
FED-1A	23	AP1AAPS-DP01	0.75	1.25	1,2-Dibromo-3-chloropropane	5.44	5.4	69
FED-1A	23	AP1AAPS-DP01	0	0.75	1,2,3-Trichloropropane	5.04	5	95
FED-1A	23	AP1AAPS-DP02	0.75	1.25	1,2-Dibromo-3-chloropropane	5.73	5.4	69
FED-1A	23	AP1AAPS-DP02	0	0.75	1,2,3-Trichloropropane	5.68	5	95
FED-1A	23	AP1AAPS-DP02	0	0.75	1,2-Dibromo-3-chloropropane	5.68	5.4	69
FED-1A	23	AP1AAPS-DP02	0.75	1.25	1,2,3-Trichloropropane	5.73	5	95
FED-1A	23	AP1AAPS-DP03	0	0.5	1,2,3-Trichloropropane	5.63	5	95
FED-1A	23	AP1AAPS-DP04	1.5	2	1,2,3-Trichloropropane	5.23	5	95
FED-1A	23	AP1AAPS-DP04	0	0.5	1,2,3-Trichloropropane	5.83	5	95
FED-1A	23	AP1AAPS-DP05	2	3	1,2,3-Trichloropropane	5.16	5	95
FED-1A	23	AP1AAPS-DP05	2	3	1,2,3-Trichloropropane	5.47	5	95
FED-1A	23	AP1AAPS-DP06	0	0.5	1,2,3-Trichloropropane	5.16	5	95
FED-1A	23	AP1AAPS-DP07	1.5	2	1,2,3-Trichloropropane	5.04	5	95
FED-1A	23	AP1AAPS-DP08	1.5	2	1,2-Dibromo-3-chloropropane	182	5.4	69
FED-1A	23	AP1AAPS-DP08	1.5	2	1,2,3-Trichloropropane	253	5	95

Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	AP1AAPS-DP08	1.5	2	1,2-Dibromoethane	101	34	170
FED-1A	23	AP1AAPS-DP08	0	0.5	1,2,3-Trichloropropane	5.12	5	95
FED-1A	23	AP1AAPS-DP08	1.5	2	Vinyl chloride	253	60	1,700
FED-1A	23	AP1AAPS-DP09	0	0.5	1,2,3-Trichloropropane	5.26	5	95
FED-1A	23	AP1AAPS-DP10	2	2.5	1,2,3-Trichloropropane	5.38	5	95
FED-1A	23	AP1AAPS-DP10	0	0.5	1,2,3-Trichloropropane	5.78	5	95
FED-1A	23	AP1AAPS-DP11	1.5	2	1,2,3-Trichloropropane	5.44	5	95
FED-1A	23	AP1AAPS-DP11	0	0.5	1,2,3-Trichloropropane	5.36	5	95
FED-1A	23	AP1AAPS-DP11	1.5	2	1,2-Dibromo-3-chloropropane	5.44	5.4	69
FED-1A	23	AP1AAPS-DP12	0	0.75	1,2,3-Trichloropropane	260	5	95
FED-1A	23	AP1AAPS-DP12	0	0.75	1,2-Dibromo-3-chloropropane	188	5.4	69
FED-1A	23	AP1AAPS-DP12	0	0.75	1,2-Dibromoethane	104	34	170
FED-1A	23	AP1AAPS-DP12	1.5	2	1,2,3-Trichloropropane	5.63	5	95
FED-1A	23	AP1AAPS-DP12	0	0.75	Vinyl chloride	261	60	1,700
FED-1A	23	AP1AAPS-DP12	0	0.75	Vinyl chloride	260	60	1,700
FED-1A	23	AP1AAPS-DP12	0	0.75	1,2,3-Trichloropropane	261	5	95
FED-1A	23	AP1AAPS-DP12	0	0.75	1,2-Dibromoethane	104	34	170
FED-1A	23	AP1AAPS-DP12	0	0.75	1,2-Dibromo-3-chloropropane	188	5.4	69
FED-1A	23	AP1AAPS-DP13	3.5	4	1,2,3-Trichloropropane	5.1	5	95
FED-1A	23	AP1AAPS-DP13	0	0.5	1,2,3-Trichloropropane	5.26	5	95
FED-1A	23	AP1AAPS-DP14	0	0.5	1,2,3-Trichloropropane	5.45	5	95
FED-1A	23	AP1AAPS-DP15	0	0.5	1,2,3-Trichloropropane	5.42	5	95
FED-1A	23	AP1AAPS-DP16	0	0.5	1,2,3-Trichloropropane	6.38	5	95
FED-1A	23	AP1AAPS-DP18	1.5	2	1,2,3-Trichloropropane	6.29	5	95
FED-1A	23	AP1AAPS-DP18	0	0.5	1,2,3-Trichloropropane	5.78	5	95
FED-1A	23	AP1AAPS-DP19	3.5	4	1,2,3-Trichloropropane	5.4	5	95
FED-1A	23	AP1AAPS-DP20	3.5	4	1,2,3-Trichloropropane	6.06	5	95

Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	AP1AAPS-DP20	5	5.5	1,2,3-Trichloropropane	5.32	5	95
FED-1A	23	AP1AAPS-DP21	3.5	4	1,2,3-Trichloropropane	5.2	5	95
FED-1A	23	AP1AAPS-DP22	1.75	2.25	1,2,3-Trichloropropane	5.22	5	95
FED-1A	23	AP1AAPS-DP23	3.5	4	1,2,3-Trichloropropane	5.88	5	95
FED-1A	23	AP1AAPS-DP24	0	0.5	1,2,3-Trichloropropane	5.18	5	95
FED-1A	23	AP1AAPS-DP24	7.5	8	1,2,3-Trichloropropane	5.55	5	95
FED-1A	23	AP1AAPS-DP25	5.5	6	1,2,3-Trichloropropane	5.92	5	95
FED-1A	23	AP1AAPS-DP25	5.5	6	1,2,3-Trichloropropane	5.55	5	95
FED-1A	23	AP1AAPS-DP26	0	0.5	1,2-Dibromo-3-chloropropane	5.68	5.4	69
FED-1A	23	AP1AAPS-DP26	3	3.5	1,2,3-Trichloropropane	5.64	5	95
FED-1A	23	AP1AAPS-DP26	3	3.5	1,2-Dibromo-3-chloropropane	5.64	5.4	69
FED-1A	23	AP1AAPS-DP26	0	0.5	1,2,3-Trichloropropane	5.68	5	95
FED-1A	23	AP1AAPS-DP27	5.5	6	1,2,3-Trichloropropane	5.16	5	95
FED-1A	23	AP1AAPS-DP27	0	0.5	1,2,3-Trichloropropane	5.74	5	95
FED-1A	23	AP1AAPS-DP27	0	0.5	1,2-Dibromo-3-chloropropane	5.74	5.4	69
FED-1A	23	AP1AAPS-DP27	3.5	4	1,2,3-Trichloropropane	5.35	5	95
FED-1A	23	AP1AAPS-DP28	0	0.5	1,2,3-Trichloropropane	5.81	5	95
FED-1A	23	AP1AAPS-DP28	0	0.5	1,2-Dibromo-3-chloropropane	5.81	5.4	69
FED-1A	23	AP1AAPS-DP28	3.5	4	1,2,3-Trichloropropane	5.09	5	95
FED-1A	23	AP1AAPS-DP80	0	0.5	1,2,3-Trichloropropane	5.65	5	95
FED-1A	23	AP1AAPS-DP80	0.5	1	1,2,3-Trichloropropane	5.61	5	95
FED-1A	23	AP1AAPS-DP81	0	0.5	1,2,3-Trichloropropane	5.66	5	95
FED-1A	23	AP1AAPS-DP81	0.5	1	1,2,3-Trichloropropane	5.65	5	95
FED-1A	23	AP1AAPS-DP82	0.5	1	1,2,3-Trichloropropane	5.29	5	95
FED-1A	23	AP1AAPS-DP83	3.5	4	1,2,3-Trichloropropane	5.55	5	95
FED-1A	23	AP1AAPS-DP83	0	0.5	1,2,3-Trichloropropane	5.31	5	95
FED-1A	23	AP1AAPS-DP84	1.5	2	1,2,3-Trichloropropane	5.53	5	95

Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	AP1AFTA-DP03	0	0.5	1,2,3-Trichloropropane	5.99	5	95
FED-1A	23	AP1AFTA-DP03	0	0.5	1,2,3-Trichloropropane	5.75	5	95
FED-1A	23	AP1AFTA-DP04	0	0.5	1,2,3-Trichloropropane	5.57	5	95
FED-1A	23	AP1AFTA-DP05	0	0.5	1,2-Dibromo-3-chloropropane	5.58	5.4	69
FED-1A	23	AP1AFTA-DP05	0	0.5	1,2,3-Trichloropropane	7.75	5	95
FED-1A	23	AP1AFTA-DP06	3.5	4	1,2-Dibromo-3-chloropropane	5.66	5.4	69
FED-1A	23	AP1AFTA-DP06	3.5	4	1,2,3-Trichloropropane	5.66	5	95
FED-1A	23	AP1AFTA-DP07	3.5	4	1,2,3-Trichloropropane	5.75	5	95
FED-1A	23	AP1AFTA-DP07	3.5	4	1,2-Dibromo-3-chloropropane	5.75	5.4	69
FED-1A	23	AP1AFTA-DP07	0	0.5	1,2,3-Trichloropropane	5.95	5	95
FED-1A	23	AP1AFTA-DP08	0	0.5	1,2,3-Trichloropropane	6.17	5	95
FED-1A	23	AP1AFTA-DP09	0	0.5	1,2-Dibromo-3-chloropropane	6.27	5.4	69
FED-1A	23	AP1AFTA-DP09	0.5	1.5	1,2-Dibromo-3-chloropropane	6.32	5.4	69
FED-1A	23	AP1AFTA-DP09	0	0.5	1,2,3-Trichloropropane	6.27	5	95
FED-1A	23	AP1AFTA-DP09	0.5	1.5	1,2,3-Trichloropropane	6.32	5	95
FED-1A	23	AP1AFTA-DP10	0	0.5	1,2-Dibromoethane	58.1	34	170
FED-1A	23	AP1AFTA-DP10	0	0.5	1,2-Dibromo-3-chloropropane	105	5.4	69
FED-1A	23	AP1AFTA-DP10	0	0.5	1,2,3-Trichloropropane	145	5	95
FED-1A	23	AP1AFTA-DP10	1.5	2	1,2,3-Trichloropropane	5.19	5	95
FED-1A	23	AP1AFTA-DP10	0	0.5	Vinyl chloride	145	60	1,700
FED-1A	23	AP1AFTA-DP13	0	0.5	1,2,3-Trichloropropane	5.72	5	95
FED-1A	23	AP1AFTA-DP14	0	0.5	1,2-Dibromo-3-chloropropane	5.91	5.4	69
FED-1A	23	AP1AFTA-DP14	0	0.5	1,2,3-Trichloropropane	8.21	5	95
FED-1A	23	AP1AFTA-DP17	0	0.5	1,2,3-Trichloropropane	5.02	5	95
FED-1A	23	AP1AFTA-DP18	4.5	5	1,2,3-Trichloropropane	5.45	5	95
FED-1A	23	AP1AFTA-DP18	0	0.5	1,2,3-Trichloropropane	5.36	5	95
FED-1A	23	AP1AFTA-DP18	3.5	4	1,2,3-Trichloropropane	5.06	5	95

Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	AP1AFTA-DP19	5.5	6	1,2,3-Trichloropropane	5.61	5	95
FED-1A	23	AP1AFTA-DP19	0	0.5	1,2,3-Trichloropropane	5.04	5	95
FED-1A	23	AP1AFTA-DP20	3.5	4	1,2,3-Trichloropropane	7.26	5	95
FED-1A	23	AP1AFTA-DP20	7.5	8	1,2,3-Trichloropropane	5.37	5	95
FED-1A	23	AP1AFTA-DP21	3.5	4	1,2,3-Trichloropropane	5.3	5	95
FED-1A	23	AP1AFTA-DP21	7.5	8	1,2,3-Trichloropropane	5.61	5	95
FED-1A	23	AP1AFTA-DP21	7.5	8	1,2,3-Trichloropropane	5.61	5	95
FED-1A	23	AP1AFTA-DP23	7.5	8	1,2,3-Trichloropropane	5.12	5	95
FED-1A	23	AP1AFTA-DP23	3.5	4	1,2,3-Trichloropropane	5.54	5	95
FED-1A	23	AP1AFTA-DP23	0	0.5	1,2,3-Trichloropropane	5.42	5	95
FED-1A	23	AP1AFTA-DP23	0	0.5	1,2,3-Trichloropropane	5.03	5	95
FED-1A	23	AP1AFTA-DP24	7.5	8	1,2,3-Trichloropropane	5.52	5	95
FED-1A	23	AP1AFTA-DP24	0	0.5	1,2,3-Trichloropropane	30.5	5	95
FED-1A	23	AP1AFTA-DP24	0	0.5	1,2-Dibromo-3-chloropropane	22	5.4	69
FED-1A	23	AP1AFTA-DP25	3.5	4	1,2,3-Trichloropropane	5.75	5	95
FED-1A	23	AP1AFTA-DP26	7.5	8	1,2,3-Trichloropropane	5.47	5	95
FED-1A	23	AP1AFTA-DP26	1.5	2.5	1,2,3-Trichloropropane	5.62	5	95
FED-1A	23	AP1AFTA-DP27	0	0.5	1,2,3-Trichloropropane	5.31	5	95
FED-1A	23	AP1AFTA-DP27	7.5	8	1,2,3-Trichloropropane	5.17	5	95
FED-1A	23	AP1AFTA-DP27	1.5	2	1,2,3-Trichloropropane	5.81	5	95
FED-1A	23	AP1AFTA-DP32	7.5	8	1,2,3-Trichloropropane	5.43	5	95
FED-1A	23	AP1AFTA-DP32	1.5	2	1,2,3-Trichloropropane	5.84	5	95
FED-1A	23	AP1AFTA-DP35	3.5	4	Vinyl chloride	269	60	1,700
FED-1A	23	AP1AFTA-DP35	3.5	4	1,2-Dibromoethane	108	34	170
FED-1A	23	AP1AFTA-DP35	3.5	4	1,2-Dibromo-3-chloropropane	194	5.4	69
FED-1A	23	AP1AFTA-DP35	3.5	4	1,2,3-Trichloropropane	269	5	95
FED-1A	23	AP1AW483A-DP01	0	0.5	1,2,3-Trichloropropane	5.31	5	95

Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	AP1AW483A-DP01	3.5	4	1,2,3-Trichloropropane	5.44	5	95
FED-1A	23	AP1AW483A-DP02	0	1	1,2,3-Trichloropropane	5.86	5	95
FED-1A	23	AP1AW483A-DP02	3.5	4.5	1,2,3-Trichloropropane	5.64	5	95
FED-1A	23	AP1AW483A-DP02	3.5	4.5	1,2,3-Trichloropropane	5.39	5	95
FED-1A	23	AP1AW483B-DP01	3	3.5	1,2,3-Trichloropropane	5.08	5	95
FED-1A	23	AP1AW483B-DP01	0	0.5	1,2,3-Trichloropropane	5.79	5	95
FED-1A	23	AP1AW483B-DP02	3.25	3.75	1,2,3-Trichloropropane	5.24	5	95
FED-1A	23	AP1AW485B-DP01	2.5	3	1,2,3-Trichloropropane	5.43	5	95
FED-1A	23	AP1AW485B-DP02	0	0.5	1,2-Dibromo-3-chloropropane	185	5.4	69
FED-1A	23	AP1AW485B-DP02	0	0.5	1,2-Dibromoethane	103	34	170
FED-1A	23	AP1AW485B-DP02	0	0.5	1,2,3-Trichloropropane	257	5	95
FED-1A	23	AP1AW485B-DP02	0	0.5	Vinyl chloride	257	60	1,700
FED-1A	23	AP1AW485B-DP02	2.5	3	1,2,3-Trichloropropane	5.18	5	95
FED-1A	23	AP1AW495A-DP01	3.5	4	1,2,3-Trichloropropane	5.63	5	95
FED-1A	23	AP1AW495A-DP01	0	0.5	1,2,3-Trichloropropane	5.52	5	95
FED-1A	23	AP1AW495A-DP01	7.5	8	1,2,3-Trichloropropane	5.38	5	95
FED-1A	23	AP1AW495B-DP01	2.5	3	1,2,3-Trichloropropane	5.45	5	95
FED-1A	23	AP1AW495B-DP02	2.5	3	1,2,3-Trichloropropane	5.53	5	95
FED-1A	23	AP1AW495B-DP02	7.5	8	1,2,3-Trichloropropane	5.28	5	95
FED-1A	23	AP1AW496-DP01	0	0.5	1,2,3-Trichloropropane	5.12	5	95
FED-1A	23	AP1AW496-DP02	3.5	4	1,2,3-Trichloropropane	5.41	5	95
FED-1A	23	AP1AW499-DP01	0	0.5	1,2,3-Trichloropropane	5.83	5	95
FED-1A	23	AP1AW499-DP02	1.75	2.25	1,2,3-Trichloropropane	5.33	5	95
FED-1A	23	AP1AW499-DP02	0	0.5	1,2,3-Trichloropropane	5.49	5	95
FED-1A	23	AP1AW499-DP02	1.75	2.25	1,2,3-Trichloropropane	6.27	5	95
FED-1A	23	AP1AW599A-DP01	0	0.5	1,2,3-Trichloropropane	5.33	5	95
FED-1A	23	AP1AW599A-DP01	4.25	4.75	1,2,3-Trichloropropane	5.24	5	95

Table I-5
Soil Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[b] (ug/kg)	Industrial RSL[b] (ug/kg)
FED-1A	23	AP1AW599A-DP02	3.75	4.25	1,2,3-Trichloropropane	5.82	5	95
FED-1A	23	AP1AW599B-DP01	0	0.5	1,2,3-Trichloropropane	5.1	5	95
FED-1A	23	AP1AW599B-DP01	3.5	4	1,2,3-Trichloropropane	5.38	5	95
FED-1A	23	AP1AW599B-DP02	4.75	5.25	1,2,3-Trichloropropane	5.28	5	95
FED-2c	23	AP2CAPS-DP01	0	0.5	1,2,3-Trichloropropane	5.44	5	95
FED-2c	23	AP2CAPS-DP01	1.5	2	1,2,3-Trichloropropane	5.31	5	95
FED-2c	23	AP2CAPS-DP01	1.5	2	1,2,3-Trichloropropane	5.29	5	95

Notes:
[a] TtEMI 2004
[b] U.S. EPA 2010

bgs = below ground surface
EBS = environmental baseline survey
mg/kg = milligrams per kilogram
PRG = preliminary remediation goal

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Table I-6
Soil Samples With Detection Limits Exceeding Screening Levels: Dioxins and Furans

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[a] (mg/kg)	Industrial RSL[a] (mg/kg)	Residential TEQ[b] (pg/g)	Industrial TEQ[b] (pg/g)
FED-1A	23	AP1AFTA-DP01	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.61	4.5	18	--	--
FED-1A	23	AP1AFTA-DP01	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.43	4.5	18	--	--
FED-1A	23	AP1AFTA-DP02	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.25	4.5	18	--	--
FED-1A	23	AP1AFTA-DP02	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.56	4.5	18	--	--
FED-1A	23	AP1AFTA-DP03	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.28	4.5	18	--	--
FED-1A	23	AP1AFTA-DP03	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.49	4.5	18	--	--
FED-1A	23	AP1AFTA-DP04	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.62	4.5	18	--	--
FED-1A	23	AP1AFTA-DP04	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.51	4.5	18	--	--
FED-1A	23	AP1AFTA-DP05	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.72	4.5	18	--	--
FED-1A	23	AP1AFTA-DP05	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.59	4.5	18	--	--
FED-1A	23	AP1AFTA-DP06	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.82	4.5	18	--	--
FED-1A	23	AP1AFTA-DP06	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.96	4.5	18	--	--
FED-1A	23	AP1AFTA-DP06	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.77	4.5	18	--	--
FED-1A	23	AP1AFTA-DP07	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.33	4.5	18	--	--
FED-1A	23	AP1AFTA-DP07	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.57	4.5	18	--	--
FED-1A	23	AP1AFTA-DP08	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.09	4.5	18	--	--
FED-1A	23	AP1AFTA-DP08	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.84	4.5	18	--	--
FED-1A	23	AP1AFTA-DP09	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.11	4.5	18	--	--
FED-1A	23	AP1AFTA-DP09	0.5	1.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.57	4.5	18	--	--
FED-1A	23	AP1AFTA-DP09	0.5	1.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.1	4.5	18	--	--
FED-1A	23	AP1AFTA-DP10	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.4	4.5	18	--	--
FED-1A	23	AP1AFTA-DP10	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.83	4.5	18	--	--
FED-1A	23	AP1AFTA-DP11	2	2.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.36	4.5	18	--	--
FED-1A	23	AP1AFTA-DP11	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.72	4.5	18	--	--
FED-1A	23	AP1AFTA-DP12	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.35	4.5	18	--	--
FED-1A	23	AP1AFTA-DP13	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.64	4.5	18	--	--
FED-1A	23	AP1AFTA-DP13	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.24	4.5	18	--	--
FED-1A	23	AP1AFTA-DP14	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.39	4.5	18	--	--
FED-1A	23	AP1AFTA-DP15	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.65	4.5	18	--	--

Table I-6
Soil Samples With Detection Limits Exceeding Screening Levels: Dioxins and Furans

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[a] (mg/kg)	Industrial RSL[a] (mg/kg)	Residential TEQ[b] (pg/g)	Industrial TEQ[b] (pg/g)
FED-1A	23	AP1AFTA-DP15	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.21	4.5	18	--	--
FED-1A	23	AP1AFTA-DP16	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.6	4.5	18	--	--
FED-1A	23	AP1AFTA-DP16	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.32	4.5	18	--	--
FED-1A	23	AP1AFTA-DP16	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.16	4.5	18	--	--
FED-1A	23	AP1AFTA-DP17	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.88	4.5	18	--	--
FED-1A	23	AP1AFTA-DP17	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.44	4.5	18	--	--
FED-1A	23	AP1AFTA-DP18	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.44	4.5	18	--	--
FED-1A	23	AP1AFTA-DP18	4.5	5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.19	4.5	18	--	--
FED-1A	23	AP1AFTA-DP18	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.77	4.5	18	--	--
FED-1A	23	AP1AFTA-DP19	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.42	4.5	18	--	--
FED-1A	23	AP1AFTA-DP19	5.5	6	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.46	4.5	18	--	--
FED-1A	23	AP1AFTA-DP19	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.56	4.5	18	--	--
FED-1A	23	AP1AFTA-DP19	5.5	6	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.66	4.5	18	--	--
FED-1A	23	AP1AFTA-DP20	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.54	4.5	18	--	--
FED-1A	23	AP1AFTA-DP20	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.97	4.5	18	--	--
FED-1A	23	AP1AFTA-DP21	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.02	4.5	18	--	--
FED-1A	23	AP1AFTA-DP21	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.74	4.5	18	--	--
FED-1A	23	AP1AFTA-DP21	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.22	4.5	18	--	--
FED-1A	23	AP1AFTA-DP22	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.58	4.5	18	--	--
FED-1A	23	AP1AFTA-DP22	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.8	4.5	18	--	--
FED-1A	23	AP1AFTA-DP22	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.01	4.5	18	--	--
FED-1A	23	AP1AFTA-DP23	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.38	4.5	18	--	--
FED-1A	23	AP1AFTA-DP23	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.14	4.5	18	--	--
FED-1A	23	AP1AFTA-DP23	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.95	4.5	18	--	--
FED-1A	23	AP1AFTA-DP24	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.79	4.5	18	--	--
FED-1A	23	AP1AFTA-DP24	2	2.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.47	4.5	18	--	--
FED-1A	23	AP1AFTA-DP24	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.13	4.5	18	--	--
FED-1A	23	AP1AFTA-DP25	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.74	4.5	18	--	--

Table I-6
Soil Samples With Detection Limits Exceeding Screening Levels: Dioxins and Furans

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[a] (mg/kg)	Industrial RSL[a] (mg/kg)	Residential TEQ[b] (pg/g)	Industrial TEQ[b] (pg/g)
FED-1A	23	AP1AFTA-DP25	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.14	4.5	18	--	--
FED-1A	23	AP1AFTA-DP25	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.11	4.5	18	--	--
FED-1A	23	AP1AFTA-DP26	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.64	4.5	18	--	--
FED-1A	23	AP1AFTA-DP26	1.5	2.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.48	4.5	18	--	--
FED-1A	23	AP1AFTA-DP26	1.5	2.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.33	4.5	18	--	--
FED-1A	23	AP1AFTA-DP26	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.02	4.5	18	--	--
FED-1A	23	AP1AFTA-DP27	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.95	4.5	18	--	--
FED-1A	23	AP1AFTA-DP27	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.33	4.5	18	--	--
FED-1A	23	AP1AFTA-DP27	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.6	4.5	18	--	--
FED-1A	23	AP1AFTA-DP28	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.45	4.5	18	--	--
FED-1A	23	AP1AFTA-DP28	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.12	4.5	18	--	--
FED-1A	23	AP1AFTA-DP28	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.78	4.5	18	--	--
FED-1A	23	AP1AFTA-DP29	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.01	4.5	18	--	--
FED-1A	23	AP1AFTA-DP29	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.17	4.5	18	--	--
FED-1A	23	AP1AFTA-DP29	1.2	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.48	4.5	18	--	--
FED-1A	23	AP1AFTA-DP29	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.42	4.5	18	--	--
FED-1A	23	AP1AFTA-DP30	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.91	4.5	18	--	--
FED-1A	23	AP1AFTA-DP31	2	2.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.9	4.5	18	--	--
FED-1A	23	AP1AFTA-DP31	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.91	4.5	18	--	--
FED-1A	23	AP1AFTA-DP31	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.96	4.5	18	--	--
FED-1A	23	AP1AFTA-DP32	7.5	8	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	10.5	4.5	18	--	--
FED-1A	23	AP1AFTA-DP32	1.5	2	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.1	4.5	18	--	--
FED-1A	23	AP1AFTA-DP32	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.07	4.5	18	--	--
FED-1A	23	AP1AFTA-DP33	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.36	4.5	18	--	--
FED-1A	23	AP1AFTA-DP33	1.75	2.25	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.08	4.5	18	--	--
FED-1A	23	AP1AFTA-DP33	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	4.98	4.5	18	--	--
FED-1A	23	AP1AFTA-DP34	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	7.03	4.5	18	--	--
FED-1A	23	AP1AFTA-DP34	1.75	2.25	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	5.91	4.5	18	--	--

Table I-6
Soil Samples With Detection Limits Exceeding Screening Levels: Dioxins and Furans

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[a] (mg/kg)	Industrial RSL[a] (mg/kg)	Residential TEQ[b] (pg/g)	Industrial TEQ[b] (pg/g)
FED-1A	23	AP1AFTA-DP35	3.5	4	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.03	4.5	18	--	--
FED-1A	23	AP1AFTA-DP35	0	0.5	1,2,3,7,8-Pentachlorodibenzo-p-dioxin	6.22	4.5	18	--	--

Notes:
[a] U.S. EPA 2010
[b] DTSC 2009

bgs = below ground surface
EBS = environmental baseline survey
mg/kg = milligrams per kilogram
-- = not established
PRG = preliminary remediation goal
TEQ = Toxic Equivalency Factor

Table I-7
Soil Samples With Detection Limits Exceeding
Screening Levels: Explosives

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL[a] (ug/kg)	Industrial RSL[a] (ug/kg)
--	--	--	--	--	--	--	--	--

Notes:
[a] U.S. EPA 2010

bgs = below ground surface
EBS = environmental baseline survey
mg/kg = milligrams per kilogram
PRG = preliminary remediation goal

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Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
First Water-Bearing Zone									
FED-1A	23	023-0045	7.5	8.5	1,2,4-trichlorobenzene	10	70	5	--
FED-1A	23	023-0045	7.5	8.5	1,4-dichlorobenzene	10	75	5	--
FED-1A	23	023-0047	8	9	1,2,4-trichlorobenzene	10	70	5	--
FED-1A	23	023-0047	8	9	1,4-dichlorobenzene	10	75	5	--
FED-1A	23	023-0049	8	9	1,2,4-trichlorobenzene	10	70	5	--
FED-1A	23	023-0049	8	9	1,4-dichlorobenzene	10	75	5	--
FED-1A	23	M010-A	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M010-A	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M011-A	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M011-A	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M011-A	NA	NA	methylene chloride	10	5	5	--
FED-1A	23	M012-A	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M012-A	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M013-A	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M013-A	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M014-A	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M014-A	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	HP2-4-A	8	8	1,1,2,2-tetrachloroethane	2	—e	1	--
FED-1A	23	HP2-4-E	8	8	1,1,2,2-tetrachloroethane	2	—	1	--
FED-1A	23	HPRA-20-A	8	8	1,2-dichloroethane	1	5	0.5	--
FED-1A	23	HPRA-20-E	20	20	1,2-dichloroethane	1	5	0.5	--
FED-1A	23	HPRA-23-A	8	8	1,2-dichloroethane	1	5	0.5	--
FED-1A	23	HPRA-8-A	8	8	1,1,2,2-tetrachloroethane	2	—	1	--
FED-1A	23	HPRA-8-E	23	23	1,1,2,2-tetrachloroethane	2	—	1	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	M009-A	NA	NA	1,1,2,2-tetrachloroethane	5	—	1	--
FED-1A	23	M009-A	NA	NA	1,2-dichloroethane	5	5	0.5	--
FED-1A	23	M009-A	NA	NA	benzene	5	5	1	--
FED-1A	23	M009-A	NA	NA	carbon tetrachloride	5	5	0.5	--
FED-1A	23	M009-A	NA	NA	vinyl chloride	5	2	0.5	--
FED-1A	23	M015-A	NA	NA	1,2-dichloroethane	1	5	0.5	--
FED-1A	23	M015-A	NA	NA	carbon tetrachloride	1	5	0.5	--
FED-1A	23	M015-A	NA	NA	vinyl chloride	1	2	0.5	--
FED-1A	24	101-LT-GW-03	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	24	101-LT-GW-03	NA	NA	1,2-dibromoethane	2	0.05	0.05	--
FED-1A	5	M025-A	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	5	M025-A	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	5	HP1-10-E	17	17	1,1,2,2-tetrachloroethane	2	—	1	--
FED-2B	27	027-IWTP-004	4	8	1,1,2,2-tetrachloroethane	10	—	1	--
FED-2B	27	027-IWTP-004	4	8	1,1,2-trichloroethane	10	5	5	--
FED-2B	27	027-IWTP-004	4	8	1,1-dichloroethane	10	—	5	--
FED-2B	27	027-IWTP-004	4	8	1,1-dichloroethene	10	7	6	--
FED-2B	27	027-IWTP-004	4	8	1,2,4-trichlorobenzene	10	70	5	--
FED-2B	27	027-IWTP-004	4	8	1,2-dichloroethane	10	5	0.5	--
FED-2B	27	027-IWTP-004	4	8	1,2-dichloropropane	10	5	5	--
FED-2B	27	027-IWTP-004	4	8	benzene	10	5	1	--
FED-2B	27	027-IWTP-004	4	8	carbon tetrachloride	10	5	0.5	--
FED-2B	27	027-IWTP-004	4	8	methylene chloride	10	5	5	--
FED-2B	27	027-IWTP-004	4	8	tetrachloroethene	10	5	5	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-2B	27	027-IWTP-004	4	8	trichloroethene	10	5	5	--
FED-2B	27	027-IWTP-004	4	8	vinyl chloride	10	2	0.5	--
FED-2C	23E	26B28	6	6	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B28	6	6	1,2-dichloroethane	3	5	0.5	--
FED-2C	23E	26B28	6	6	benzene	3	5	1	--
FED-2C	23E	26B28	6	6	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B28	6	6	vinyl chloride	3	2	0.5	--
FED-2C	23E	26B28	15	15	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B28	15	15	1,2-dichloroethane	3	5	0.5	--
FED-2C	23E	26B28	15	15	benzene	3	5	1	--
FED-2C	23E	26B28	15	15	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B28	15	15	vinyl chloride	3	2	0.5	--
FED-2C	23E	26B28	15	15	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B28	15	15	1,2-dichloroethane	3	5	0.5	--
FED-2C	23E	26B28	15	15	benzene	3	5	1	--
FED-2C	23E	26B28	15	15	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B28	15	15	vinyl chloride	3	2	0.5	--
FED-2C	23E	26B29	6	6	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B29	6	6	1,2-dichloroethane	3	5	0.5	--
FED-2C	23E	26B29	6	6	benzene	3	5	1	--
FED-2C	23E	26B29	6	6	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B29	6	6	vinyl chloride	3	2	0.5	--
FED-2C	23E	26B29	15	15	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B29	15	15	1,2-dichloroethane	3	5	0.5	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-2C	23E	26B29	15	15	benzene	3	5	1	--
FED-2C	23E	26B29	15	15	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B29	15	15	vinyl chloride	3	2	0.5	--
FED-2C	23E	26B40	6	6	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B40	6	6	1,2-dichloroethane	3	5	0.5	--
FED-2C	23E	26B40	6	6	benzene	3	5	1	--
FED-2C	23E	26B40	6	6	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B40	6	6	vinyl chloride	3	2	0.5	--
FED-2C	23E	26B40	15	15	1,1,2,2-tetrachloroethane	3	—	1	--
FED-2C	23E	26B40	15	15	1,2-dichloroethane	3	5	0.5	--
FED-2C	23E	26B40	15	15	benzene	3	5	1	--
FED-2C	23E	26B40	15	15	carbon tetrachloride	3	5	0.5	--
FED-2C	23E	26B40	15	15	vinyl chloride	3	2	0.5	--
FED-2C	23E	26SW02	6.2	16.2	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-2C	23E	26SW02	6.2	16.2	1,2-dibromoethane	0.5	0.05	0.05	--
Second Water-Bearing Zone									
FED-1A	5	M025-C	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	5	M025-C	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	5	M025-C	NA	NA	methylene chloride	10	5	5	--
FED-1A	23	M010-B	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M010-B	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M010-B	NA	NA	methylene chloride	10	5	5	--
FED-1A	23	M012-B	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M012-B	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	M012-B	NA	NA	methylene chloride	10	5	5	--
FED-1A	23	M013-C	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M013-C	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M013-C	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M013-C	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	M014-B	NA	NA	1,2-dibromo-3-chloropropane	2	0.2	0.2	--
FED-1A	23	M014-B	NA	NA	1,2-dibromoethane	0.5	0.05	0.05	--
FED-1A	23	HP2-4-D	4	4	1,1,2,2-tetrachloroethane	2	—	1	--
FED-1A	23	HPRA-20-D	47	47	1,2-dichloroethane	1	5	0.5	--
FED-1A	23	M108-B	NA	NA	1,2-dichloroethane	0.7	5	0.5	--
Aquitard									--
FED-1A	23	HPRA-8-D	42	46	1,1,2,2-tetrachloroethane	2	—	1	--
FED-1A	5	AP1AW467B-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	5	AP1AW467B-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	5	AP1AW467B-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	5	AP1AW467B-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	5	AP1AW467B-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	5	AP1AW467B-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	5	AP1AW467B-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	5	AP1AW467B-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	5	AP1AW467B-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	5	AP1AW467B-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	5	AP1AW467B-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	5	AP1AW467B-DP02	5	7	Chloroform	1	--	0.19	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	5	AP1AW467B-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	5	AP1AW467B-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	5	AP1AW467B-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	5	AP1AW467B-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	5	AP1AW467B-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	5	AP1AW467B-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	5	AP1AW467B-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	5	AP1AW467B-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	5	AP1AW467B-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	5	AP1AW467B-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	5	AP1AW467B-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	5	AP1AW467B-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	5	AP1AW467B-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	5	AP1AW467B-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	5	AP1AW467B-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	5	AP1AW467B-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	5	AP1AW467B-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	5	AP1AW467B-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	5	AP1AW467B-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	5	AP1AW467B-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	5	AP1AW467B-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	5	AP1AW467B-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP01	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP01	5	7	1,1,2-Trichloroethane	1	5	0.24	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1A259-DP01	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP01	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP01	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP01	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP01	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP01	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP01	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP01	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP01	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP01	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP01	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP01	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP01	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP01	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP01	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP01	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP01	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP01	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP01	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP01	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP01	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP01	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP01	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP01	13	15	Benzene	1	1	0.41	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1A259-DP01	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP01	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP01	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP01	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP01	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP01	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP01	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP01	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1A259-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP03	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP03	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP03	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP03	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP03	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP03	5	7	1,2-Dichloroethane	1	0.5	0.15	5

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Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1A259-DP03	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP03	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP03	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP03	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP03	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP03	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP03	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP03	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP03	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP03	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP03	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP03	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP03	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP03	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP03	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP03	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP03	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP03	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP03	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP03	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP03	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP03	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP03	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP03	13	15	cis-1,3-Dichloropropene	1	--	0.43	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1A259-DP03	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP03	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP03	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP03	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP04	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP04	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP04	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1A259-DP04	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP04	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP04	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP04	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP04	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP04	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP04	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP04	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP04	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP04	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP04	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP04	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP04	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP04	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1A259-DP04	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1A259-DP04	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1A259-DP04	13	15	1,2,3-Trichloropropane	1	--	0.00072	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1A259-DP04	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1A259-DP04	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1A259-DP04	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1A259-DP04	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1A259-DP04	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1A259-DP04	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1A259-DP04	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1A259-DP04	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1A259-DP04	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1A259-DP04	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP04	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1A259-DP04	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1A259-DP04	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1A259-DP04	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP01	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP01	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP01	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP01	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP01	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP01	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP01	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP01	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP01	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP01	5	7	Bromodichloromethane	1	--	0.12	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP01	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP01	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP01	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP01	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP01	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP01	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP01	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP01	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP01	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP01	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP01	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP01	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP01	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP01	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP01	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP01	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP01	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP01	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP01	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP01	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP01	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP01	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP01	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP01	13	15	Vinyl chloride	1	0.5	0.016	2

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP03	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP03	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP03	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP03	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP03	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP03	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP03	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP03	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP03	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP03	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP03	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP03	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP03	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP03	5	7	Dibromochloromethane	1	--	0.15	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP03	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP03	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP03	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP03	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP03	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP03	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP03	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP03	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP03	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP03	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP03	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP03	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP03	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP03	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP03	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP03	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP03	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP03	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP03	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP03	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP05	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP05	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP05	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP05	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP05	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP05	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP05	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP05	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP05	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP05	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP05	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP05	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP05	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP05	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP05	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP05	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP05	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP05	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP05	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP05	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP05	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP05	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP05	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP05	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP05	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP05	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP05	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP05	13	15	Chloroform	1	--	0.19	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP05	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP05	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP05	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP05	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP05	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP06	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP06	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP06	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP06	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP06	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP06	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP06	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP06	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP06	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP06	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP06	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP06	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP06	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP06	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP06	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP06	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP06	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP06	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP06	13	15	1,1,2-Trichloroethane	1	5	0.24	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP06	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP06	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP06	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP06	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP06	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP06	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP06	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP06	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP06	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP06	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP06	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP06	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP06	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP06	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP06	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP07	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP07	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP07	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP07	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP07	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP07	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP07	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP07	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP07	5	7	Benzene	1	1	0.41	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP07	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP07	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP07	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP07	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP07	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP07	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP07	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP07	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP07	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP07	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP07	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP07	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP07	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP07	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP07	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP07	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP07	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP07	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP07	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP07	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP07	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP07	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP07	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP07	13	15	trans-1,3-Dichloropropene	1	--	0.43	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP07	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP09	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP09	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP09	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP09	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP09	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP09	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP09	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP09	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP09	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP09	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP09	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP09	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP09	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP09	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP09	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP09	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP09	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP09	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP09	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP09	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP09	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP09	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP09	13	15	1,2-Dichloroethane	1	0.5	0.15	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP09	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP09	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP09	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP09	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP09	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP09	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP09	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP09	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP09	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP09	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP09	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP11	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP11	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP11	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP11	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP11	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP11	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP11	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP11	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP11	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP11	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP11	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP11	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP11	5	7	cis-1,3-Dichloropropene	1	--	0.43	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP11	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP11	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP11	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP11	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP11	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP11	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP11	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP11	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP11	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP11	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP11	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP11	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP11	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP11	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP11	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP11	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP11	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP11	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP11	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP11	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP11	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP12	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP12	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP12	5	7	1,2,3-Trichloropropane	1	--	0.00072	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP12	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP12	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP12	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP12	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP12	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP12	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP12	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP12	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP12	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP12	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP12	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP12	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP12	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP12	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP12	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP12	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP12	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP12	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP12	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP12	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP12	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP12	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP12	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP12	13	15	Bromodichloromethane	1	--	0.12	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP12	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP12	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP12	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP12	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP12	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP12	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP12	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP13	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP13	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP13	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP13	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP13	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP13	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP13	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP13	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP13	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP13	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP13	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP13	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP13	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP13	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP13	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP13	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP13	5	7	Vinyl chloride	1	0.5	0.016	2

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP13	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP13	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP13	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP13	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP13	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP13	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP13	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP13	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP13	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP13	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP13	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP13	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP13	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP13	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP13	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP13	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP13	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP17	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP17	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP17	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP17	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP17	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP17	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP17	5	7	1,2-Dichloropropane	1	5	0.39	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP17	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP17	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP17	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP17	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP17	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP17	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP17	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP17	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP17	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP17	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP17	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP17	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP17	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP17	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP17	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP17	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP17	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP17	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP17	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP17	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP17	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP17	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP17	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP17	13	15	Dibromochloromethane	1	--	0.15	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP17	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP17	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP17	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP19	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP19	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP19	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP19	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP19	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP19	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP19	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP19	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP19	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP19	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP19	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP19	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP19	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP19	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP19	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP19	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP19	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP19	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP19	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP19	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP19	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP19	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP19	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP19	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP19	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP19	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP19	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP19	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP19	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP19	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP19	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP19	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP19	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP19	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP21	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP21	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP21	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP21	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP21	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP21	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP21	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP21	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP21	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP21	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP21	5	7	Carbon tetrachloride	1	0.5	0.44	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP21	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP21	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP21	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP21	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP21	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP21	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP21	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP21	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP21	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP21	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP21	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP21	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP21	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP21	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP21	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP21	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP21	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP21	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP21	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP21	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP21	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP21	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP21	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP22	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP22	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP22	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP22	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP22	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP22	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP22	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP22	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP22	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP22	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP22	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP22	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP22	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP22	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP22	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP22	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP22	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP22	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP22	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP22	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP22	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP22	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP22	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP22	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP22	13	15	1,4-Dichlorobenzene	1	5	0.43	75

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP22	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP22	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP22	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP22	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP22	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP22	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP22	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP22	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP22	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP24	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP24	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP24	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP24	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP24	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP24	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP24	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP24	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP24	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP24	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP24	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP24	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP24	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP24	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP24	5	7	Tetrachloroethene	1	5	0.11	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP24	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP24	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP24	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP24	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP24	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP24	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP24	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP24	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP24	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP24	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP24	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP24	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP24	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP24	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP24	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP24	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP24	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP24	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP24	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP28	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP28	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP28	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP28	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP28	5	7	1,2-Dibromoethane	1	--	0.0065	0.05

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP28	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP28	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP28	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP28	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP28	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP28	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP28	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP28	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP28	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP28	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP28	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP28	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP28	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP28	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP28	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP28	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP28	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP28	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP28	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP28	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP28	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP28	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP28	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP28	13	15	Chloroform	1	--	0.19	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP28	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP28	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP28	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP28	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP28	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP30	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP30	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP30	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP30	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP30	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP30	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP30	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP30	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP30	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP30	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP30	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP30	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP30	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP30	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP30	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP30	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP30	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP30	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP30	13	15	1,1,2-Trichloroethane	1	5	0.24	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP30	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP30	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP30	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP30	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP30	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP30	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP30	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP30	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP30	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP30	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP30	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP30	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP30	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP30	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP30	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP31	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP31	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP31	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP31	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP31	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP31	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP31	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP31	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP31	5	7	Benzene	1	1	0.41	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP31	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP31	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP31	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP31	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP31	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP31	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP31	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP31	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP80	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP80	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP80	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP80	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP80	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP80	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP80	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP80	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP80	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP80	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP80	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP80	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP80	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP80	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP80	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP80	5	7	trans-1,3-Dichloropropene	1	--	0.43	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP80	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP80	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP80	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP80	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP80	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP80	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP80	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP80	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP80	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP80	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP80	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP80	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP80	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP80	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP80	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP80	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP80	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP80	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP81	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP81	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP81	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP81	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP81	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP81	5	7	1,2-Dichloroethane	1	0.5	0.15	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP81	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP81	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP81	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP81	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP81	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP81	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP81	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP81	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP81	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP81	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP81	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP81	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP81	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP81	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP81	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP81	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP81	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP81	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP81	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP81	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP81	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP81	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP81	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP81	13	15	cis-1,3-Dichloropropene	1	--	0.43	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP81	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP81	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP81	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP81	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP82	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP82	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP82	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP82	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP82	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP82	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP82	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP82	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP82	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP82	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP82	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP82	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP82	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP82	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP82	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP82	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP82	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP82	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP82	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP82	13	15	1,2,3-Trichloropropane	1	--	0.00072	--

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP82	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP82	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP82	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP82	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP82	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP82	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP82	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP82	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP82	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP82	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP82	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP82	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP82	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP82	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP83	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP83	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP83	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP83	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP83	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP83	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP83	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP83	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP83	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP83	5	7	Bromodichloromethane	1	--	0.12	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP83	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP83	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP83	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP83	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP83	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP83	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP83	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP83	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP83	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP83	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP83	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP83	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP83	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP83	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP83	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP83	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP83	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP83	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP83	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP83	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP83	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP83	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP83	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP83	13	15	Vinyl chloride	1	0.5	0.016	2

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP84	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP84	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP84	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP84	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP84	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP84	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP84	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AAPS-DP84	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP84	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP84	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP84	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP84	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP84	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP84	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP84	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP84	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP84	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AAPS-DP84	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AAPS-DP84	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AAPS-DP84	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AAPS-DP84	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AAPS-DP84	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AAPS-DP84	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AAPS-DP84	13	15	1,2-Dichloropropane	1	5	0.39	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AAPS-DP84	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AAPS-DP84	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AAPS-DP84	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AAPS-DP84	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AAPS-DP84	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AAPS-DP84	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AAPS-DP84	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AAPS-DP84	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AAPS-DP84	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483A-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW483A-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW483A-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW483A-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW483A-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW483A-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW483A-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW483A-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW483A-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW483A-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW483A-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW483A-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW483A-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483A-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW483A-DP02	5	7	Tetrachloroethene	1	5	0.11	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW483A-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483A-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW483A-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW483A-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW483A-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW483A-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW483A-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW483A-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW483A-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW483A-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW483A-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW483A-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW483A-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW483A-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW483A-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483A-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW483A-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW483A-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483A-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW483B-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW483B-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW483B-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW483B-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW483B-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW483B-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW483B-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW483B-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW483B-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW483B-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW483B-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW483B-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW483B-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483B-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW483B-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW483B-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483B-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW483B-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW483B-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW483B-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW483B-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW483B-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW483B-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW483B-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW483B-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW483B-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW483B-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW483B-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW483B-DP02	13	15	Chloroform	1	--	0.19	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW483B-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483B-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW483B-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW483B-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW483B-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW485B-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW485B-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW485B-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW485B-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW485B-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW485B-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW485B-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW485B-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW485B-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW485B-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW485B-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW485B-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW485B-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW485B-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW485B-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW485B-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW485B-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW485B-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW485B-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW485B-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW485B-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW485B-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW485B-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW485B-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW485B-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW485B-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW485B-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW485B-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW485B-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW485B-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW485B-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW485B-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW485B-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW485B-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW495A-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW495A-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW495A-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW495A-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW495A-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW495A-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW495A-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW495A-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW495A-DP02	5	7	Benzene	1	1	0.41	5

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Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW495A-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW495A-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW495A-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW495A-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495A-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW495A-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW495A-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495A-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW495A-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW495A-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW495A-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW495A-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW495A-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW495A-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW495A-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW495A-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW495A-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW495A-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW495A-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW495A-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW495A-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495A-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW495A-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW495A-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--

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Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW495A-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW495B-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW495B-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW495B-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW495B-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW495B-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW495B-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW495B-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW495B-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW495B-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW495B-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW495B-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW495B-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW495B-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495B-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW495B-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW495B-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495B-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW495B-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW495B-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW495B-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW495B-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW495B-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW495B-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5

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Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW495B-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW495B-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW495B-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW495B-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW495B-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW495B-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW495B-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495B-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW495B-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW495B-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW495B-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW496-DP01	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW496-DP01	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW496-DP01	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW496-DP01	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW496-DP01	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW496-DP01	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW496-DP01	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW496-DP01	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW496-DP01	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW496-DP01	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW496-DP01	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW496-DP01	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW496-DP01	5	7	cis-1,3-Dichloropropene	1	--	0.43	--

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Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW496-DP01	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW496-DP01	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW496-DP01	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW496-DP01	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW496-DP01	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW496-DP01	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW496-DP01	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW496-DP01	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW496-DP01	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW496-DP01	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW496-DP01	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW496-DP01	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW496-DP01	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW496-DP01	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW496-DP01	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW496-DP01	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW496-DP01	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW496-DP01	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW496-DP01	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW496-DP01	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW496-DP01	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW499-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW499-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW499-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--

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Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW499-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW499-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW499-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW499-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW499-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW499-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW499-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW499-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW499-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW499-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW499-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW499-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW499-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW499-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW499-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW499-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW499-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW499-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW499-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW499-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW499-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW499-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW499-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW499-DP02	13	15	Bromodichloromethane	1	--	0.12	80

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Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW499-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW499-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW499-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW499-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW499-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW499-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW499-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW599A-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW599A-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW599A-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW599A-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW599A-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW599A-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW599A-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW599A-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW599A-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW599A-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW599A-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW599A-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW599A-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599A-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW599A-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW599A-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599A-DP02	5	7	Vinyl chloride	1	0.5	0.016	2

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Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW599A-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW599A-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW599A-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW599A-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW599A-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW599A-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW599A-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW599A-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW599A-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW599A-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW599A-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW599A-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW599A-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599A-DP02	13	15	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW599A-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW599A-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599A-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW599B-DP02	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW599B-DP02	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW599B-DP02	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW599B-DP02	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW599B-DP02	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW599B-DP02	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW599B-DP02	5	7	1,2-Dichloropropane	1	5	0.39	5

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW599B-DP02	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW599B-DP02	5	7	Benzene	1	1	0.41	5
FED-1A	23	AP1AW599B-DP02	5	7	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW599B-DP02	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW599B-DP02	5	7	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW599B-DP02	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599B-DP02	5	7	Dibromochloromethane	1	--	0.15	80
FED-1A	23	AP1AW599B-DP02	5	7	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW599B-DP02	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599B-DP02	5	7	Vinyl chloride	1	0.5	0.016	2
FED-1A	23	AP1AW599B-DP02	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-1A	23	AP1AW599B-DP02	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-1A	23	AP1AW599B-DP02	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-1A	23	AP1AW599B-DP02	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-1A	23	AP1AW599B-DP02	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-1A	23	AP1AW599B-DP02	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-1A	23	AP1AW599B-DP02	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-1A	23	AP1AW599B-DP02	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-1A	23	AP1AW599B-DP02	13	15	Benzene	1	1	0.41	5
FED-1A	23	AP1AW599B-DP02	13	15	Bromodichloromethane	1	--	0.12	80
FED-1A	23	AP1AW599B-DP02	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-1A	23	AP1AW599B-DP02	13	15	Chloroform	1	--	0.19	80
FED-1A	23	AP1AW599B-DP02	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599B-DP02	13	15	Dibromochloromethane	1	--	0.15	80

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-1A	23	AP1AW599B-DP02	13	15	Tetrachloroethene	1	5	0.11	5
FED-1A	23	AP1AW599B-DP02	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-1A	23	AP1AW599B-DP02	13	15	Vinyl chloride	1	0.5	0.016	2
FED-2c	23E	AP2CAPS-DP01	5	7	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-2c	23E	AP2CAPS-DP01	5	7	1,1,2-Trichloroethane	1	5	0.24	5
FED-2c	23E	AP2CAPS-DP01	5	7	1,2,3-Trichloropropane	1	--	0.00072	--
FED-2c	23E	AP2CAPS-DP01	5	7	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2
FED-2c	23E	AP2CAPS-DP01	5	7	1,2-Dibromoethane	1	--	0.0065	0.05
FED-2c	23E	AP2CAPS-DP01	5	7	1,2-Dichloroethane	1	0.5	0.15	5
FED-2c	23E	AP2CAPS-DP01	5	7	1,2-Dichloropropane	1	5	0.39	5
FED-2c	23E	AP2CAPS-DP01	5	7	1,4-Dichlorobenzene	1	5	0.43	75
FED-2c	23E	AP2CAPS-DP01	5	7	Benzene	1	1	0.41	5
FED-2c	23E	AP2CAPS-DP01	5	7	Bromodichloromethane	1	--	0.12	80
FED-2c	23E	AP2CAPS-DP01	5	7	Carbon tetrachloride	1	0.5	0.44	5
FED-2c	23E	AP2CAPS-DP01	5	7	Chloroform	1	--	0.19	80
FED-2c	23E	AP2CAPS-DP01	5	7	cis-1,3-Dichloropropene	1	--	0.43	--
FED-2c	23E	AP2CAPS-DP01	5	7	Dibromochloromethane	1	--	0.15	80
FED-2c	23E	AP2CAPS-DP01	5	7	Tetrachloroethene	1	5	0.11	5
FED-2c	23E	AP2CAPS-DP01	5	7	trans-1,3-Dichloropropene	1	--	0.43	--
FED-2c	23E	AP2CAPS-DP01	5	7	Vinyl chloride	1	0.5	0.016	2
FED-2c	23E	AP2CAPS-DP01	13	15	1,1,2,2-Tetrachloroethane	1	1	0.067	--
FED-2c	23E	AP2CAPS-DP01	13	15	1,1,2-Trichloroethane	1	5	0.24	5
FED-2c	23E	AP2CAPS-DP01	13	15	1,2,3-Trichloropropane	1	--	0.00072	--
FED-2c	23E	AP2CAPS-DP01	13	15	1,2-Dibromo-3-chloropropane	1.5	0.2	0.00032	0.2

Table I-8
Groundwater Samples With Detection Limits Exceeding Screening Levels: Volatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Tap Water RSLs[d, f] (µg/L)
FED-2c	23E	AP2CAPS-DP01	13	15	1,2-Dibromoethane	1	--	0.0065	0.05
FED-2c	23E	AP2CAPS-DP01	13	15	1,2-Dichloroethane	1	0.5	0.15	5
FED-2c	23E	AP2CAPS-DP01	13	15	1,2-Dichloropropane	1	5	0.39	5
FED-2c	23E	AP2CAPS-DP01	13	15	1,4-Dichlorobenzene	1	5	0.43	75
FED-2c	23E	AP2CAPS-DP01	13	15	Benzene	1	1	0.41	5
FED-2c	23E	AP2CAPS-DP01	13	15	Bromodichloromethane	1	--	0.12	80
FED-2c	23E	AP2CAPS-DP01	13	15	Carbon tetrachloride	1	0.5	0.44	5
FED-2c	23E	AP2CAPS-DP01	13	15	Chloroform	1	--	0.19	80
FED-2c	23E	AP2CAPS-DP01	13	15	cis-1,3-Dichloropropene	1	--	0.43	--
FED-2c	23E	AP2CAPS-DP01	13	15	Dibromochloromethane	1	--	0.15	80
FED-2c	23E	AP2CAPS-DP01	13	15	Tetrachloroethene	1	5	0.11	5
FED-2c	23E	AP2CAPS-DP01	13	15	trans-1,3-Dichloropropene	1	--	0.43	--
FED-2c	23E	AP2CAPS-DP01	13	15	Vinyl chloride	1	0.5	0.016	2

Notes:
[a] EBS sampling locations are identified by sample ID
[b] U.S. EPA 2006
[c] CDHS 2006
[d] U.S. EPA 2010
[e] dash indicates that no value exists for this analyte
[f] Tap water RSLs were used as screening criteria only where no MCLs are established

bgs = below ground surface
EBS = environmental baseline survey
GW = groundwater
µg/L = micrograms per liter
MCL = maximum contaminant level
NA = not applicable
-- = not established

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	24	101-LT-GW-03	NA	NA	motor oil	4.8	2.5	
FED-1A	Parcel 5	AP1AW467B-DP02	5	7	TPH-diesel range	0.187	--	0.1
FED-1A	Parcel 5	AP1AW467B-DP02	5	7	TPH-oil range	0.187	--	0.1
FED-1A	Parcel 5	AP1AW467B-DP02	13	15	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 5	AP1AW467B-DP02	13	15	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP01	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP01	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP01	13	15	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP01	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP01	13	15	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP02	5	7	TPH-diesel range	0.205	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP02	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP02	5	7	TPH-oil range	0.205	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP02	13	15	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP02	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP02	13	15	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP03	5	7	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP03	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP03	5	7	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP03	13	15	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP03	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP03	13	15	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP05	13	15	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP05	13	15	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP06	5	7	TPH-diesel range	0.286	--	0.1

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	Parcel 23	AP1AAPS-DP06	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP06	5	7	TPH-oil range	0.286	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP06	13	15	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP06	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP06	13	15	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP07	5	7	TPH-diesel range	0.222	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP07	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP07	5	7	TPH-oil range	0.222	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP07	13	15	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP07	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP07	13	15	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP09	5	7	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP09	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP09	5	7	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP09	13	15	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP09	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP09	13	15	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP11	5	7	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP11	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP11	5	7	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP11	13	15	TPH-diesel range	0.213	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP11	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP11	13	15	TPH-oil range	0.213	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP12	13	15	TPH-diesel range	0.211	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP12	13	15	TPH-gas range	0.15	--	0.1

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	Parcel 23	AP1AAPS-DP13	5	7	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	5	7	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	5	7	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	5	7	TPH-oil range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	13	15	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP13	13	15	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP17	5	7	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP17	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP17	5	7	TPH-oil range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP17	13	15	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP17	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP17	13	15	TPH-oil range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP19	5	7	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP19	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP19	5	7	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP19	13	15	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP19	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP19	13	15	TPH-oil range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP21	5	7	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP21	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP21	5	7	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP21	13	15	TPH-diesel range	0.2	--	0.1

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	Parcel 23	AP1AAPS-DP21	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP21	13	15	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP22	5	7	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP22	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP22	13	15	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP22	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP22	13	15	TPH-oil range	0.196	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP24	5	7	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP24	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP24	5	7	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP24	13	15	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP24	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP24	13	15	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	5	7	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	5	7	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	5	7	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	5	7	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	13	15	TPH-diesel range	0.217	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP28	13	15	TPH-oil range	0.217	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	5	7	TPH-diesel range	0.23	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	5	7	TPH-oil range	0.23	--	0.1

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	Parcel 23	AP1AAPS-DP30	13	15	TPH-diesel range	0.208	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	13	15	TPH-diesel range	0.23	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	13	15	TPH-oil range	0.23	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP30	13	15	TPH-oil range	0.208	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP31	5	7	TPH-diesel range	0.23	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP31	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP31	5	7	TPH-oil range	0.23	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP80	5	7	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP80	13	15	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP81	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP81	5	7	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP81	13	15	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP82	5	7	TPH-diesel range	0.206	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP82	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP82	5	7	TPH-oil range	0.206	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP82	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP82	13	15	TPH-oil range	0.206	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP83	5	7	TPH-oil range	0.238	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP83	13	15	TPH-diesel range	0.213	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP83	13	15	TPH-oil range	0.213	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP84	5	7	TPH-diesel range	0.208	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP84	5	7	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP84	5	7	TPH-oil range	0.208	--	0.1

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	Parcel 23	AP1AAPS-DP84	13	15	TPH-diesel range	0.198	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP84	13	15	TPH-gas range	0.15	--	0.1
FED-1A	Parcel 23	AP1AAPS-DP84	13	15	TPH-oil range	0.198	--	0.1
FED-1A	Parcel 23	AP1AW483A-DP02	5	7	TPH-diesel range	0.283	--	0.1
FED-1A	Parcel 23	AP1AW483A-DP02	5	7	TPH-oil range	0.283	--	0.1
FED-1A	Parcel 23	AP1AW483A-DP02	13	15	TPH-diesel range	0.294	--	0.1
FED-1A	Parcel 23	AP1AW483A-DP02	13	15	TPH-oil range	0.294	--	0.1
FED-1A	Parcel 23	AP1AW483B-DP02	5	7	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AW483B-DP02	5	7	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AW483B-DP02	13	15	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AW483B-DP02	13	15	TPH-oil range	0.192	--	0.1
FED-1A	Parcel 23	AP1AW485B-DP02	5	7	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AW485B-DP02	5	7	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AW485B-DP02	5	7	TPH-oil range	0.189	--	0.1
FED-1A	Parcel 23	AP1AW485B-DP02	13	15	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AW495A-DP02	5	7	TPH-diesel range	0.3	--	0.1
FED-1A	Parcel 23	AP1AW495A-DP02	5	7	TPH-diesel range	0.3	--	0.1
FED-1A	Parcel 23	AP1AW495A-DP02	13	15	TPH-diesel range	0.3	--	0.1
FED-1A	Parcel 23	AP1AW495B-DP02	5	7	TPH-diesel range	0.3	--	0.1
FED-1A	Parcel 23	AP1AW495B-DP02	13	15	TPH-diesel range	0.3	--	0.1
FED-1A	Parcel 23	AP1AW496-DP01	5	7	TPH-diesel range	0.192	--	0.1
FED-1A	Parcel 23	AP1AW499-DP02	5	7	TPH-diesel range	0.196	--	0.1
FED-1A	Parcel 23	AP1AW499-DP02	5	7	TPH-oil range	0.196	--	0.1
FED-1A	Parcel 23	AP1AW499-DP02	13	15	TPH-diesel range	0.189	--	0.1
FED-1A	Parcel 23	AP1AW499-DP02	13	15	TPH-oil range	0.189	--	0.1

Table I-9
Groundwater Samples With Detection Limits Exceeding Screening Levels: Total Petroleum Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	ESL[a] (µg/L)	ESL for Petroleum Strategy Plan[b]
FED-1A	Parcel 23	AP1AW599A-DP02	5	7	TPH-diesel range	0.294	--	0.1
FED-1A	Parcel 23	AP1AW599A-DP02	5	7	TPH-oil range	0.294	--	0.1
FED-1A	Parcel 23	AP1AW599A-DP02	13	15	TPH-diesel range	0.283	--	0.1
FED-1A	Parcel 23	AP1AW599A-DP02	13	15	TPH-oil range	0.283	--	0.1
FED-1A	Parcel 23	AP1AW599B-DP02	5	7	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AW599B-DP02	5	7	TPH-diesel range	0.294	--	0.1
FED-1A	Parcel 23	AP1AW599B-DP02	5	7	TPH-oil range	0.2	--	0.1
FED-1A	Parcel 23	AP1AW599B-DP02	13	15	TPH-diesel range	0.2	--	0.1
FED-1A	Parcel 23	AP1AW599B-DP02	13	15	TPH-diesel range	0.6	--	0.1
FED-1A	Parcel 23	AP1AW599B-DP02	13	15	TPH-oil range	0.2	--	0.1
FED-2c	Parcel 23E	AP2CAPS-DP01	5	7	TPH-diesel range	0.196	--	0.1
FED-2c	Parcel 23E	AP2CAPS-DP01	5	7	TPH-gas range	0.15	--	0.1
FED-2c	Parcel 23E	AP2CAPS-DP01	5	7	TPH-oil range	0.196	--	0.1
FED-2c	Parcel 23E	AP2CAPS-DP01	13	15	TPH-diesel range	0.196	--	0.1
FED-2c	Parcel 23E	AP2CAPS-DP01	13	15	TPH-gas range	0.15	--	0.1
FED-2c	Parcel 23E	AP2CAPS-DP01	13	15	TPH-oil range	0.196	--	0.1

Notes:
[a] Water Board 2007
[b] Water Board 2008

bgs = below ground surface
EBS = environmental baseline survey
ESL = environmental screening level
mg/L = milligrams per liter
-- = not established
TPH = total petroleum hydrocarbon

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Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
First Water-Bearing Zone								
FED-1A	23	023-0045	7.5	8.5	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	023-0045	7.5	8.5	bis(2-ethylhexyl)phthalate	10	6	4
FED-1A	23	023-0045	7.5	8.5	hexachlorobenzene	10	1	1
FED-1A	23	023-0045	7.5	8.5	pentachlorophenol	25	1	1
FED-1A	23	023-0047	8	9	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	023-0047	8	9	bis(2-ethylhexyl)phthalate	10	6	4
FED-1A	23	023-0047	8	9	hexachlorobenzene	10	1	1
FED-1A	23	023-0047	8	9	pentachlorophenol	25	1	1
FED-1A	23	023-0049	8	9	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	023-0049	8	9	bis(2-ethylhexyl)phthalate	10	6	4
FED-1A	23	023-0049	8	9	hexachlorobenzene	10	1	1
FED-1A	23	023-0049	8	9	pentachlorophenol	25	1	1
FED-1A	23	M011-A	NA	NA	1,2,4-trichlorobenzene	9.4	70	5
FED-1A	23	M011-A	NA	NA	1,4-dichlorobenzene	9.4	75	5
FED-1A	23	M011-A	NA	NA	bis(2-ethylhexyl)phthalate	9.4	6	4
FED-1A	23	M011-A	NA	NA	hexachlorobenzene	9.4	1	1
FED-1A	23	M011-A	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	M012-A	NA	NA	1,2,4-trichlorobenzene	9.7	70	5
FED-1A	23	M012-A	NA	NA	1,4-dichlorobenzene	9.7	75	5
FED-1A	23	M012-A	NA	NA	bis(2-ethylhexyl)phthalate	9.7	6	4
FED-1A	23	M012-A	NA	NA	hexachlorobenzene	9.7	1	1
FED-1A	23	M012-A	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	M013-A	NA	NA	1,2,4-trichlorobenzene	9.6	70	5
FED-1A	23	M013-A	NA	NA	1,4-dichlorobenzene	9.6	75	5
FED-1A	23	M013-A	NA	NA	bis(2-ethylhexyl)phthalate	9.6	6	4
FED-1A	23	M013-A	NA	NA	hexachlorobenzene	9.6	1	1

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	23	M013-A	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	M014-A	NA	NA	1,2,4-trichlorobenzene	9.6	70	5
FED-1A	23	M014-A	NA	NA	1,4-dichlorobenzene	9.6	75	5
FED-1A	23	M014-A	NA	NA	bis(2-ethylhexyl)phthalate	9.6	6	4
FED-1A	23	M014-A	NA	NA	hexachlorobenzene	9.6	1	1
FED-1A	23	M014-A	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	HP2-4-A	8	8	benzo(a)pyrene	5	0.2	0.2
FED-1A	23	HP2-4-A	8	8	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	23	HP2-4-A	8	8	hexachlorobenzene	5	1	1
FED-1A	23	HP2-4-A	8	8	pentachlorophenol	12	1	1
FED-1A	23	HP2-4-E	8	8	benzo(a)pyrene	5	0.2	0.2
FED-1A	23	HP2-4-E	8	8	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	23	HP2-4-E	8	8	hexachlorobenzene	5	1	1
FED-1A	23	HP2-4-E	8	8	pentachlorophenol	12	1	1
FED-1A	23	HP2-5-A	8	8	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HP2-5-A	8	8	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HP2-5-A	8	8	hexachlorobenzene	10	1	1
FED-1A	23	HP2-5-A	8	8	pentachlorophenol	25	1	1
FED-1A	23	HP2-5-E	22	22	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HP2-5-E	22	22	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HP2-5-E	22	22	hexachlorobenzene	10	1	1
FED-1A	23	HP2-5-E	22	22	pentachlorophenol	25	1	1
FED-1A	23	HP2-5-E	22	22	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HP2-5-E	22	22	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HP2-5-E	22	22	hexachlorobenzene	10	1	1
FED-1A	23	HP2-5-E	22	22	pentachlorophenol	25	1	1
FED-1A	23	HPRA-20-A	8	8	1,2,4-trichlorobenzene	10	70	5

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	23	HPRA-20-A	8	8	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HPRA-20-A	8	8	hexachlorobenzene	10	1	1
FED-1A	23	HPRA-20-A	8	8	pentachlorophenol	25	1	1
FED-1A	23	HPRA-20-E	20	20	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HPRA-20-E	20	20	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HPRA-20-E	20	20	hexachlorobenzene	10	1	1
FED-1A	23	HPRA-20-E	20	20	pentachlorophenol	25	1	1
FED-1A	23	HPRA-23-A	8	8	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HPRA-23-A	8	8	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HPRA-23-A	8	8	hexachlorobenzene	10	1	1
FED-1A	23	HPRA-23-A	8	8	pentachlorophenol	25	1	1
FED-1A	23	HPRA-23-E	22	22	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HPRA-23-E	22	22	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HPRA-23-E	22	22	hexachlorobenzene	10	1	1
FED-1A	23	HPRA-23-E	22	22	pentachlorophenol	25	1	1
FED-1A	23	HPRA-8-A	8	8	benzo(a)pyrene	5	0.2	0.2
FED-1A	23	HPRA-8-A	8	8	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	23	HPRA-8-A	8	8	hexachlorobenzene	5	1	1
FED-1A	23	HPRA-8-A	8	8	pentachlorophenol	12	1	1
FED-1A	23	HPRA-8-E	23	23	benzo(a)pyrene	5	0.2	0.2
FED-1A	23	HPRA-8-E	23	23	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	23	HPRA-8-E	23	23	hexachlorobenzene	5	1	1
FED-1A	23	HPRA-8-E	23	23	pentachlorophenol	12	1	1
FED-1A	23	M009-A	NA	NA	benzo(a)pyrene	2	0.2	0.2
FED-1A	23	M009-A	NA	NA	bis(2-ethylhexyl)phthalate	4.8	6	4
FED-1A	23	M009-A	NA	NA	hexachlorobenzene	2	1	1
FED-1A	23	M009-A	NA	NA	pentachlorophenol	10	1	1

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	23	M010-A	NA	NA	benzo(a)pyrene	2	0.2	0.2
FED-1A	23	M010-A	NA	NA	bis(2-ethylhexyl)phthalate	23	6	4
FED-1A	23	M010-A	NA	NA	hexachlorobenzene	2	1	1
FED-1A	23	M010-A	NA	NA	pentachlorophenol	10	1	1
FED-1A	23	M015-A	NA	NA	benzo(a)pyrene	2	0.2	0.2
FED-1A	23	M015-A	NA	NA	bis(2-ethylhexyl)phthalate	5.4	6	4
FED-1A	23	M015-A	NA	NA	hexachlorobenzene	2	1	1
FED-1A	23	M015-A	NA	NA	pentachlorophenol	10	1	1
FED-1A	23	M103-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M103-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M103-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M103-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M104-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M104-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M104-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M104-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M105-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M105-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M105-A	NA	NA	bis(2-ethylhexyl)phthalate	6	6	4
FED-1A	23	M105-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M105-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M106-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M106-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M106-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M106-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M106-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M106-A	NA	NA	benzo(a)pyrene	10	0.2	0.2

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	23	M106-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M106-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M107-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M107-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M107-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M107-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M108-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M108-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M108-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M108-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M109-A	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M109-A	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M109-A	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M109-A	NA	NA	pentachlorophenol	25	1	1
FED-1A	5	M025-A	NA	NA	1,2,4-trichlorobenzene	9.5	70	5
FED-1A	5	M025-A	NA	NA	1,4-dichlorobenzene	9.5	75	5
FED-1A	5	M025-A	NA	NA	benzo(a)pyrene	9.5	0.2	0.2
FED-1A	5	M025-A	NA	NA	bis(2-ethylhexyl)phthalate	9.5	6	4
FED-1A	5	M025-A	NA	NA	hexachlorobenzene	9.5	1	1
FED-1A	5	M025-A	NA	NA	pentachlorophenol	19	1	1
FED-1A	5	HP1-10-E	17	17	benzo(a)pyrene	5	0.2	0.2
FED-1A	5	HP1-10-E	17	17	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	5	HP1-10-E	17	17	hexachlorobenzene	5	1	1
FED-1A	5	HP1-10-E	17	17	pentachlorophenol	12	1	1
FED-1A	5	HP1-11-A	8	8	1,2,4-trichlorobenzene	10	70	5
FED-1A	5	HP1-11-A	8	8	benzo(a)pyrene	10	0.2	0.2
FED-1A	5	HP1-11-A	8	8	hexachlorobenzene	10	1	1

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	5	HP1-11-A	8	8	pentachlorophenol	25	1	1
FED-1A	5	HP1-11-E	17	17	1,2,4-trichlorobenzene	10	70	5
FED-1A	5	HP1-11-E	17	17	benzo(a)pyrene	10	0.2	0.2
FED-1A	5	HP1-11-E	17	17	hexachlorobenzene	10	1	1
FED-1A	5	HP1-11-E	17	17	pentachlorophenol	25	1	1
FED-1A	5	M025-E	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	5	M025-E	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	5	M025-E	NA	NA	hexachlorobenzene	10	1	1
FED-1A	5	M025-E	NA	NA	pentachlorophenol	25	1	1
FED-1A	5	M025-E	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	5	M025-E	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	5	M025-E	NA	NA	hexachlorobenzene	10	1	1
FED-1A	5	M025-E	NA	NA	pentachlorophenol	25	1	1
FED-2B	27	027-IWTP-004	4	8	benzo(a)pyrene	10	0.2	0.2
FED-2B	27	027-IWTP-004	4	8	hexachlorobenzene	10	1	1
FED-2B	27	027-IWTP-004	4	8	pentachlorophenol	25	1	1
Second Water-Bearing Zone								
FED-1A	23	M010-B	NA	NA	1,2,4-trichlorobenzene	9.4	70	5
FED-1A	23	M010-B	NA	NA	1,4-dichlorobenzene	9.4	75	5
FED-1A	23	M010-B	NA	NA	bis(2-ethylhexyl)phthalate	9.4	6	4
FED-1A	23	M010-B	NA	NA	hexachlorobenzene	9.4	1	1
FED-1A	23	M010-B	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	M012-B	NA	NA	1,4-dichlorobenzene	9.5	75	5
FED-1A	23	M012-B	NA	NA	bis(2-ethylhexyl)phthalate	9.5	6	4
FED-1A	23	M012-B	NA	NA	hexachlorobenzene	9.5	1	1
FED-1A	23	M012-B	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	M013-C	NA	NA	1,2,4-trichlorobenzene	10	70	5

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	23	M013-C	NA	NA	1,4-dichlorobenzene	10	75	5
FED-1A	23	M013-C	NA	NA	bis(2-ethylhexyl)phthalate	10	6	4
FED-1A	23	M013-C	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M013-C	NA	NA	pentachlorophenol	20	1	1
FED-1A	23	M013-C	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M013-C	NA	NA	1,4-dichlorobenzene	10	75	5
FED-1A	23	M013-C	NA	NA	bis(2-ethylhexyl)phthalate	10	6	4
FED-1A	23	M013-C	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M013-C	NA	NA	pentachlorophenol	21	1	1
FED-1A	23	M014-B	NA	NA	1,2,4-trichlorobenzene	9.5	70	5
FED-1A	23	M014-B	NA	NA	bis(2-ethylhexyl)phthalate	9.5	6	4
FED-1A	23	M014-B	NA	NA	hexachlorobenzene	9.5	1	1
FED-1A	23	M014-B	NA	NA	pentachlorophenol	19	1	1
FED-1A	23	DRA-01	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	DRA-01	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	DRA-01	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	DRA-01	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	HP2-4-D	4	4	benzo(a)pyrene	5	0.2	0.2
FED-1A	23	HP2-4-D	4	4	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	23	HP2-4-D	4	4	hexachlorobenzene	5	1	1
FED-1A	23	HP2-4-D	4	4	pentachlorophenol	12	1	1
FED-1A	23	HP2-5-D	38	38	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HP2-5-D	38	38	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HP2-5-D	38	38	hexachlorobenzene	10	1	1
FED-1A	23	HP2-5-D	38	38	pentachlorophenol	25	1	1
FED-1A	23	HPRA-20-D	47	47	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HPRA-20-D	47	47	benzo(a)pyrene	10	0.2	0.2

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	23	HPRA-20-D	47	47	hexachlorobenzene	10	1	1
FED-1A	23	HPRA-20-D	47	47	pentachlorophenol	25	1	1
FED-1A	23	HPRA-23-D	44	44	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	HPRA-23-D	44	44	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	HPRA-23-D	44	44	bis(2-ethylhexyl)phthalate	7	6	4
FED-1A	23	HPRA-23-D	44	44	hexachlorobenzene	10	1	1
FED-1A	23	HPRA-23-D	44	44	pentachlorophenol	25	1	1
FED-1A	23	M105-B	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M105-B	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M105-B	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M105-B	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M108-B	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M108-B	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M108-B	NA	NA	bis(2-ethylhexyl)phthalate	14	6	4
FED-1A	23	M108-B	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M108-B	NA	NA	pentachlorophenol	25	1	1
FED-1A	5	HP1-10-D	48.7	48.7	1,2,4-trichlorobenzene	10	70	5
FED-1A	5	HP1-10-D	48.7	48.7	benzo(a)pyrene	10	0.2	0.2
FED-1A	5	HP1-10-D	48.7	48.7	hexachlorobenzene	10	1	1
FED-1A	5	HP1-10-D	48.7	48.7	pentachlorophenol	25	1	1
FED-1A	5	HP1-11-D	60	60	1,2,4-trichlorobenzene	10	70	5
FED-1A	5	HP1-11-D	60	60	benzo(a)pyrene	10	0.2	0.2
FED-1A	5	HP1-11-D	60	60	bis(2-ethylhexyl)phthalate	14	6	4
FED-1A	5	HP1-11-D	60	60	hexachlorobenzene	10	1	1
FED-1A	5	HP1-11-D	60	60	pentachlorophenol	25	1	1
FED-1A	5	M025-C	NA	NA	1,2,4-trichlorobenzene	9.6	70	5
FED-1A	5	M025-C	NA	NA	1,4-dichlorobenzene	9.6	75	5

Table I-10
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Semivolatile Organic Compounds and Polycyclic Aromatic Hydrocarbons

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)
FED-1A	5	M025-C	NA	NA	benzo(a)pyrene	9.6	0.2	0.2
FED-1A	5	M025-C	NA	NA	hexachlorobenzene	9.6	1	1
FED-1A	5	M025-C	NA	NA	pentachlorophenol	19	1	1
Aquitard								
FED-1A	23	HPRA-8-D	42	46	benzo(a)pyrene	5	0.2	0.2
FED-1A	23	HPRA-8-D	42	46	bis(2-ethylhexyl)phthalate	5	6	4
FED-1A	23	HPRA-8-D	42	46	hexachlorobenzene	5	1	1
FED-1A	23	HPRA-8-D	42	46	pentachlorophenol	12	1	1
FED-1A	23	M103-B	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M103-B	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M103-B	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M103-B	NA	NA	pentachlorophenol	25	1	1
FED-1A	23	M104-C	NA	NA	1,2,4-trichlorobenzene	10	70	5
FED-1A	23	M104-C	NA	NA	benzo(a)pyrene	10	0.2	0.2
FED-1A	23	M104-C	NA	NA	hexachlorobenzene	10	1	1
FED-1A	23	M104-C	NA	NA	pentachlorophenol	25	1	1

Notes:
[a] EBS sampling locations are identified by sample ID
[b] U.S. EPA 2006
[c] CDHS 2006

bgs = below ground surface
EBS = environmental baseline survey
µg/L = micrograms per liter
MCL = maximum contaminant level
NA = not applicable

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Table I-11
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[a] (µg/L)	California MCL[b] (µg/L)
First Water-Bearing Zone								
FED-1A	5	M025-A	NA	NA	Aroclor 1221	0.95	0.5	0.5
FED-1A	5	M025-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	5	M025-E	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	5	M025-E	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M011-A	NA	NA	Aroclor 1221	0.94	0.5	0.5
FED-1A	23	M011-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M011-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M012-A	NA	NA	Aroclor 1221	0.98	0.5	0.5
FED-1A	23	M012-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M012-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M013-A	NA	NA	Aroclor 1221	0.95	0.5	0.5
FED-1A	23	M013-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M013-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M014-A	NA	NA	Aroclor 1221	0.96	0.5	0.5
FED-1A	23	M014-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M014-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M009-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M009-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M010-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M010-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M015-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M015-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M103-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M103-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M103-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M103-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01

Table I-11
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[a] (µg/L)	California MCL[b] (µg/L)
FED-1A	23	M104-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M104-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M105-A	NA	NA	Aroclor 1016	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	Aroclor 1221	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	Aroclor 1232	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	Aroclor 1242	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	Aroclor 1248	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	Aroclor 1254	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	Aroclor 1260	0.543	0.5	0.5
FED-1A	23	M105-A	NA	NA	heptachlor	0.054	0.4	0.01
FED-1A	23	M105-A	NA	NA	heptachlor epoxide	0.054	0.2	0.01
FED-1A	23	M106-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M106-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M107-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M107-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M108-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M108-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M109-A	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M109-A	NA	NA	heptachlor epoxide	0.05	0.2	0.01
Second Water-Bearing Zone								
FED-1A	23	M012-B	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M013-C	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M010-B	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M014-B	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M105-B	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M105-B	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M108-B	NA	NA	heptachlor	0.05	0.4	0.01

Table I-11
Groundwater Samples With Detection Limits Exceeding Maximum Containment Levels:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[a] (µg/L)	California MCL[b] (µg/L)
FED-1A	23	M108-B	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M108-B	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M108-B	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	5	M025-C	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	5	M025-C	NA	NA	heptachlor epoxide	0.05	0.2	0.01
Aquitard								
FED-1A	23	M103-B	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M103-B	NA	NA	heptachlor epoxide	0.05	0.2	0.01
FED-1A	23	M104-C	NA	NA	heptachlor	0.05	0.4	0.01
FED-1A	23	M104-C	NA	NA	heptachlor epoxide	0.05	0.2	0.01

Notes:
[a] U.S. EPA 2006
[b] CDHS 2006

bgs = below ground surface
EBS =environmental baseline survey
µg/L = micrograms per liter
MCL = maximum contaminant level
NA = not applicable
WBZ = water-bearing zone

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Table I-12
Groundwater Samples With Detection Limits Exceeding Screening Levels and Alameda Point Background: Metals

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Background[d] (µg/L)	Tap Water RSL[e,f] (µg/L)
FED-1A	23	M009-A	NA	NA	antimony	37.5	6	6	37.50	--
FED-1A	23	M015-A	NA	NA	antimony	37.5	6	6	37.50	--
FED-2B	27	027-IWTP-004	4	8	antimony	60	6	6	37.50	--
FED-2B	27	027-IWTP-004	4	8	arsenic	100	10	50	20.72	--
FED-2B	27	027-IWTP-004	4	8	beryllium	40	4	4	2.5	--
FED-2B	27	027-IWTP-004	4	8	chromium	100	100	50	12.45	--
FED-2B	27	027-IWTP-004	4	8	lead	30	15	15	11.45	--
FED-1A	5	AP1AW467B-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	5	AP1AW467B-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	5	AP1AW467B-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	5	AP1AW467B-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP01	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP01	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP01	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP01	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP03	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP03	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP03	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP03	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP05	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP05	5	7	Cobalt, Dissolved	12.5	--	11	--	--

Table I-12
Groundwater Samples With Detection Limits Exceeding
Screening Levels and Alameda Point Background: Metals

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Background[d] (µg/L)	Tap Water RSL[e,f] (µg/L)
FED-1A	23	AP1AAPS-DP05	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP05	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP06	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP06	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP06	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP06	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP07	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP07	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP07	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP07	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP09	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP09	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP09	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP09	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP11	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP11	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP11	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP11	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP12	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP12	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP12	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP12	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP13	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP13	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP13	13	15	Beryllium, Dissolved	5	4	73	4	2.5

Table I-12
Groundwater Samples With Detection Limits Exceeding Screening Levels and Alameda Point Background: Metals

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Background[d] (µg/L)	Tap Water RSL[e,f] (µg/L)
FED-1A	23	AP1AAPS-DP13	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP17	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP17	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP17	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP17	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP19	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP19	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP19	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP19	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP21	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP21	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP21	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP21	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP22	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP22	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP22	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP22	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP24	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP24	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP24	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP24	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP28	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP28	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AAPS-DP28	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AAPS-DP28	13	15	Cobalt, Dissolved	12.5	--	11	--	--

Table I-12
Groundwater Samples With Detection Limits Exceeding
Screening Levels and Alameda Point Background: Metals

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Background[d] (µg/L)	Tap Water RSL[e,f] (µg/L)
FED-1A	23	AP1AW483A-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW483A-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW483A-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW483A-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW483B-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW483B-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW483B-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW483B-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW485B-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW485B-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW485B-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW485B-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW495A-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW495A-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW495A-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW495A-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW495B-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW495B-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW495B-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW495B-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW496-DP01	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW496-DP01	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW496-DP01	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW496-DP01	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW499-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5

Table I-12
Groundwater Samples With Detection Limits Exceeding
Screening Levels and Alameda Point Background: Metals

Transfer Parcel	EBS Parcel	Station ID[a]	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (µg/L)	Federal MCL[b] (µg/L)	California MCL[c] (µg/L)	Background[d] (µg/L)	Tap Water RSL[e,f] (µg/L)
FED-1A	23	AP1AW499-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW499-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW499-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW599A-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW599A-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW599A-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW599A-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW599B-DP02	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW599B-DP02	5	7	Cobalt, Dissolved	12.5	--	11	--	--
FED-1A	23	AP1AW599B-DP02	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-1A	23	AP1AW599B-DP02	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-2c	23E	AP2CAPS-DP01	5	7	Beryllium, Dissolved	5	4	73	4	2.5
FED-2c	23E	AP2CAPS-DP01	13	15	Beryllium, Dissolved	5	4	73	4	2.5
FED-2c	23E	AP2CAPS-DP01	13	15	Cadmium, Dissolved	10	5	18	5	--
FED-2c	23E	AP2CAPS-DP01	13	15	Chromium, Dissolved	20	50	0.043	100	12.45
FED-2c	23E	AP2CAPS-DP01	13	15	Cobalt, Dissolved	12.5	--	11	--	--
FED-2c	23E	AP2CAPS-DP01	13	15	Zinc, Dissolved	40	--	11,000	--	36.39

Notes:
[a] EBS sampling locations are identified by sample ID
[b] U.S. EPA 2006
[c] CDHS 2006
[d] TtEMI 2004
[e] U.S. EPA 2010
[f] Tap water RSLs were used as screening criteria only where no MCLs are established

bgs = below ground surface
EBS = environmental baseline survey
µg/L = micrograms per liter
MCL = maximum contaminant level
NA = not applicable
-- = not established

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Table I-13
Groundwater Samples With Detection Limits Exceeding California Toxics Rule Values

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte Name	Detection Limit (µg/L)	Background[a] (µg/L)	CCC[b] (µg/L)	CMC[b] (µg/L)
First Water-Bearing Zone									
FED-1A	5	M025-A	NA	NA	cyanide	10	—[c]	1	1
FED-1A	5	M025-A	NA	NA	nickel	20	—	8.2	74
FED-1A	5	M025-A	NA	NA	silver	5	—	—	1.9
FED-1A	5	M025-A	NA	NA	4,4′-DDT	0.1	—	0.001	0.13
FED-1A	5	M025-A	NA	NA	Aroclor 1016	0.48	—	0.03	—
FED-1A	5	M025-A	NA	NA	Aroclor 1221	0.95	—	0.03	—
FED-1A	5	M025-A	NA	NA	Aroclor 1232	0.48	—	0.03	—
FED-1A	5	M025-A	NA	NA	Aroclor 1242	0.48	—	0.03	—
FED-1A	5	M025-A	NA	NA	Aroclor 1248	0.48	—	0.03	—
FED-1A	5	M025-A	NA	NA	Aroclor 1254	0.48	—	0.03	—
FED-1A	5	M025-A	NA	NA	Aroclor 1260	0.48	—	0.03	—
FED-1A	5	M025-A	NA	NA	dieldrin	0.1	—	0.002	0.71
FED-1A	5	M025-A	NA	NA	endosulfan I	0.05	—	0.009	0.034
FED-1A	5	M025-A	NA	NA	endosulfan II	0.1	—	0.009	0.034
FED-1A	5	M025-A	NA	NA	endrin	0.1	—	0.002	0.037
FED-1A	5	M025-A	NA	NA	heptachlor	0.05	—	0.004	0.053
FED-1A	5	M025-A	NA	NA	toxaphene	1	—	2E-04	0.21
FED-1A	5	M025-A	NA	NA	pentachlorophenol	19	—	7.9	13
FED-1A	5	M025-E	NA	NA	copper	12	24.03	3.1	4.8
FED-1A	5	M025-E	NA	NA	4,4′-DDT	0.1	—	0.001	0.13
FED-1A	5	M025-E	NA	NA	Aroclor 1016	0.5	—	0.03	—
FED-1A	5	M025-E	NA	NA	Aroclor 1221	0.5	—	0.03	—
FED-1A	5	M025-E	NA	NA	Aroclor 1232	0.5	—	0.03	—
FED-1A	5	M025-E	NA	NA	Aroclor 1242	0.5	—	0.03	—
FED-1A	5	M025-E	NA	NA	Aroclor 1248	0.5	—	0.03	—
FED-1A	5	M025-E	NA	NA	Aroclor 1254	0.5	—	0.03	—
FED-1A	5	M025-E	NA	NA	Aroclor 1260	0.5	—	0.03	—

Table I-13
Groundwater Samples With Detection Limits Exceeding California Toxics Rule Values

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte Name	Detection Limit (µg/L)	Background[a] (µg/L)	CCC[b] (µg/L)	CMC[b] (µg/L)
FED-1A	5	M025-E	NA	NA	dieldrin	0.05	—	0.002	0.71
FED-1A	5	M025-E	NA	NA	endosulfan I	0.05	—	0.009	0.034
FED-1A	5	M025-E	NA	NA	endosulfan II	0.1	—	0.009	0.034
FED-1A	5	M025-E	NA	NA	endrin	0.05	—	0.002	0.037
FED-1A	5	M025-E	NA	NA	heptachlor	0.05	—	0.004	0.053
FED-1A	5	M025-E	NA	NA	heptachlor epoxide	0.05	—	0.004	0.053
FED-1A	5	M025-E	NA	NA	toxaphene	1	—	2E-04	0.21
FED-1A	5	M025-E	NA	NA	pentachlorophenol	25	—	7.9	13
FED-1A	23	M015-A	NA	NA	copper	3.8	24.03	3.1	4.8
FED-1A	23	M015-A	NA	NA	nickel	13.2	—	8.2	74
FED-1A	23	M015-A	NA	NA	silver	4.8	—	—	1.9
FED-1A	23	M015-A	NA	NA	4,4′-DDT	0.1	—	0.001	0.13
FED-1A	23	M015-A	NA	NA	Aroclor 1016	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	Aroclor 1221	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	Aroclor 1232	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	Aroclor 1242	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	Aroclor 1248	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	Aroclor 1254	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	Aroclor 1260	0.5	—	0.03	—
FED-1A	23	M015-A	NA	NA	dieldrin	0.05	—	0.002	—
FED-1A	23	M015-A	NA	NA	endosulfan I	0.05	—	0.009	0.034
FED-1A	23	M015-A	NA	NA	endosulfan II	0.1	—	0.009	0.034
FED-1A	23	M015-A	NA	NA	endrin	0.05	—	0.002	0.037
FED-1A	23	M015-A	NA	NA	heptachlor	0.05	—	0.004	0.053
FED-1A	23	M015-A	NA	NA	heptachlor epoxide	0.05	—	0.004	0.053
FED-1A	23	M015-A	NA	NA	toxaphene	1	—	2E-04	0.21
FED-1A	23	M015-A	NA	NA	pentachlorophenol	10	—	7.9	—

Table I-13
Groundwater Samples With Detection Limits Exceeding California Toxics Rule Values

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte Name	Detection Limit (µg/L)	Background[a] (µg/L)	CCC[b] (µg/L)	CMC[b] (µg/L)
Second Water-Bearing Zone									
FED-1A	5	M025-C	NA	NA	silver	5	—	—	1.9
FED-1A	5	M025-C	NA	NA	4,4′-DDT	0.1	—	0.001	0.13
FED-1A	5	M025-C	NA	NA	Aroclor 1016	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	Aroclor 1221	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	Aroclor 1232	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	Aroclor 1242	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	Aroclor 1248	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	Aroclor 1254	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	Aroclor 1260	0.5	—	0.03	—
FED-1A	5	M025-C	NA	NA	dieldrin	0.05	—	0.002	0.71
FED-1A	5	M025-C	NA	NA	endosulfan I	0.05	—	0.009	0.034
FED-1A	5	M025-C	NA	NA	endosulfan II	0.1	—	0.009	0.034
FED-1A	5	M025-C	NA	NA	endrin	0.05	—	0.002	0.037
FED-1A	5	M025-C	NA	NA	heptachlor	0.05	—	0.004	0.053
FED-1A	5	M025-C	NA	NA	heptachlor epoxide	0.05	—	0.004	0.053
FED-1A	5	M025-C	NA	NA	toxaphene	1	—	2E-04	0.21
FED-1A	5	M025-C	NA	NA	pentachlorophenol	19	—	7.9	13

Notes:
[a] TtEMI 2004
[b] U.S. EPA 2006
[c] dash indicates that a value does not exist for this analyte

CCC = criteria continuous concentration
CMC = criteria maximum concentration
DDT = dichlorodiphenyltrichloroethane
µg/L = micrograms per liter
NA = not applicable

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Table I-14
Surface Water Samples with Detection Limit Exceeding California Toxics Rule Values: Semivolatile Organic Compounds

Transfer Parcel	EBS Parcel	Sample ID	Analyte	Detection Limit (µg/L)	CCC* (µg/L)	CMC* (µg/L)
FED-2B	25	RW002	pentachlorophenol	20	7.9	13
FED-2B	25	RW006	pentachlorophenol	20	7.9	13

Notes:
* U.S. EPA 2006

CCC = criterion continuous concentration
CMC = criteria maximum concentration
EBS = environmental baseline survey
µg/L = micrograms per liter

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Table I-15
Surface Water Samples with Detection Limits Exceeding California Toxics Rule Values:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	CCC* (µg/L)	CMC* (µg/L)
FED-2B	25	R1	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R1	Aroclor 1016	1	0.03	0.014
FED-2B	25	R1	Aroclor 1221	2	0.03	0.014
FED-2B	25	R1	Aroclor 1232	1	0.03	0.014
FED-2B	25	R1	Aroclor 1242	1	0.03	0.014
FED-2B	25	R1	Aroclor 1248	1	0.03	0.014
FED-2B	25	R1	Aroclor 1254	1	0.03	0.014
FED-2B	25	R1	Aroclor 1260	1	0.03	0.014
FED-2B	25	R1	dieldrin	0.1	0.0019	0.71
FED-2B	25	R1	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R1	endosulfan II	0.1	0.0087	0.034
FED-2B	25	R1	endrin	0.1	0.0023	0.037
FED-2B	25	R1	heptachlor	0.05	0.0036	0.038
FED-2B	25	R1	heptachlor epoxide	0.05	0.0036	0.038
FED-2B	25	R1	toxaphene	2	0.0002	0.021
FED-2B	25	R1	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R1	Aroclor 1016	1	0.03	0.014
FED-2B	25	R1	Aroclor 1221	2	0.03	0.014
FED-2B	25	R1	Aroclor 1232	1	0.03	0.014
FED-2B	25	R1	Aroclor 1242	1	0.03	0.014
FED-2B	25	R1	Aroclor 1248	1	0.03	0.014
FED-2B	25	R1	Aroclor 1254	1	0.03	0.014
FED-2B	25	R1	Aroclor 1260	1	0.03	0.014
FED-2B	25	R1	dieldrin	0.1	0.0019	0.71
FED-2B	25	R1	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R1	endosulfan II	0.1	0.0087	0.034

Table I-15
Surface Water Samples with Detection Limits Exceeding California Toxics Rule Values:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	CCC* (µg/L)	CMC* (µg/L)
FED-2B	25	R1	endrin	0.1	0.0023	0.037
FED-2B	25	R1	heptachlor	0.05	0.0036	0.038
FED-2B	25	R1	heptachlor epoxide	0.05	0.0036	0.038
FED-2B	25	R1	toxaphene	2	0.0002	0.021
FED-2B	25	R1	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R1	Aroclor 1016	1	0.03	0.014
FED-2B	25	R1	Aroclor 1221	2	0.03	0.014
FED-2B	25	R1	Aroclor 1232	1	0.03	0.014
FED-2B	25	R1	Aroclor 1242	1	0.03	0.014
FED-2B	25	R1	Aroclor 1248	1	0.03	0.014
FED-2B	25	R1	Aroclor 1254	1	0.03	0.014
FED-2B	25	R1	Aroclor 1260	1	0.03	0.014
FED-2B	25	R1	dieldrin	0.1	0.0019	0.71
FED-2B	25	R1	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R1	endosulfan II	0.1	0.0087	0.034
FED-2B	25	R1	endrin	0.1	0.0023	0.037
FED-2B	25	R1	heptachlor	0.05	0.0036	0.038
FED-2B	25	R1	heptachlor epoxide	0.05	0.0036	0.038
FED-2B	25	R1	toxaphene	2	0.0002	0.021
FED-2B	25	R1	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R1	Aroclor 1016	1	0.03	0.014
FED-2B	25	R1	Aroclor 1221	2	0.03	0.014
FED-2B	25	R1	Aroclor 1232	1	0.03	0.014
FED-2B	25	R1	Aroclor 1242	1	0.03	0.014
FED-2B	25	R1	Aroclor 1248	1	0.03	0.014
FED-2B	25	R1	Aroclor 1254	1	0.03	0.014

Table I-15
Surface Water Samples with Detection Limits Exceeding California Toxics Rule Values:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	CCC* (µg/L)	CMC* (µg/L)
FED-2B	25	R1	Aroclor 1260	1	0.03	0.014
FED-2B	25	R1	dieldrin	0.1	0.0019	0.71
FED-2B	25	R1	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R1	endosulfan II	0.1	0.0087	0.034
FED-2B	25	R1	endrin	0.1	0.0023	0.037
FED-2B	25	R1	heptachlor	0.05	0.0036	0.038
FED-2B	25	R1	heptachlor epoxide	0.05	0.0036	0.038
FED-2B	25	R1	toxaphene	2	0.0002	0.021
FED-2B	25	R2	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R2	Aroclor 1016	1	0.03	0.014
FED-2B	25	R2	Aroclor 1221	2	0.03	0.014
FED-2B	25	R2	Aroclor 1232	1	0.03	0.014
FED-2B	25	R2	Aroclor 1242	1	0.03	0.014
FED-2B	25	R2	Aroclor 1248	1	0.03	0.014
FED-2B	25	R2	Aroclor 1254	1	0.03	0.014
FED-2B	25	R2	Aroclor 1260	1	0.03	0.014
FED-2B	25	R2	dieldrin	0.1	0.0019	0.71
FED-2B	25	R2	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R2	endosulfan II	0.1	0.0087	0.034
FED-2B	25	R2	endrin	0.1	0.0023	0.037
FED-2B	25	R2	heptachlor	0.05	0.0036	0.038
FED-2B	25	R2	heptachlor epoxide	0.05	0.0036	0.038
FED-2B	25	R2	toxaphene	2	0.0002	0.021
FED-2B	25	R2	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R2	Aroclor 1016	1	0.03	0.014
FED-2B	25	R2	Aroclor 1221	2	0.03	0.014

Table I-15
Surface Water Samples with Detection Limits Exceeding California Toxics Rule Values:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	CCC* (µg/L)	CMC* (µg/L)
FED-2B	25	R2	Aroclor 1232	1	0.03	0.014
FED-2B	25	R2	Aroclor 1242	1	0.03	0.014
FED-2B	25	R2	Aroclor 1248	1	0.03	0.014
FED-2B	25	R2	Aroclor 1254	1	0.03	0.014
FED-2B	25	R2	Aroclor 1260	1	0.03	0.014
FED-2B	25	R2	dieldrin	0.1	0.0019	0.71
FED-2B	25	R2	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R2	endosulfan II	0.1	0.0087	0.034
FED-2B	25	R2	endrin	0.1	0.0023	0.037
FED-2B	25	R2	heptachlor	0.05	0.0036	0.038
FED-2B	25	R2	heptachlor epoxide	0.05	0.0036	0.038
FED-2B	25	R2	toxaphene	2	0.0002	0.021
FED-2B	25	R2	4,4′-DDT	0.1	0.001	0.13
FED-2B	25	R2	Aroclor 1016	1	0.03	0.014
FED-2B	25	R2	Aroclor 1221	2	0.03	0.014
FED-2B	25	R2	Aroclor 1232	1	0.03	0.014
FED-2B	25	R2	Aroclor 1242	1	0.03	0.014
FED-2B	25	R2	Aroclor 1248	1	0.03	0.014
FED-2B	25	R2	Aroclor 1254	1	0.03	0.014
FED-2B	25	R2	Aroclor 1260	1	0.03	0.014
FED-2B	25	R2	dieldrin	0.1	0.0019	0.71
FED-2B	25	R2	endosulfan I	0.1	0.0087	0.034
FED-2B	25	R2	endosulfan II	0.1	0.0087	0.034
FED-2B	25	R2	endrin	0.1	0.0023	0.037
FED-2B	25	R2	heptachlor	0.05	0.0036	0.038
FED-2B	25	R2	heptachlor epoxide	0.05	0.0036	0.038

Table I-15
Surface Water Samples with Detection Limits Exceeding California Toxics Rule Values:
Pesticides and Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	CCC* (µg/L)	CMC* (µg/L)
FED-2B	25	R2	toxaphene	2	0.0002	0.021
FED-2B	25	RW002	Aroclor 1016	0.2	0.03	0.014
FED-2B	25	RW002	Aroclor 1221	0.2	0.03	0.014
FED-2B	25	RW002	Aroclor 1232	0.2	0.03	0.014
FED-2B	25	RW002	Aroclor 1242	0.2	0.03	0.014
FED-2B	25	RW002	Aroclor 1248	0.2	0.03	0.014
FED-2B	25	RW002	Aroclor 1254	0.2	0.03	0.014
FED-2B	25	RW002	Aroclor 1260	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1016	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1221	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1232	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1242	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1248	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1254	0.2	0.03	0.014
FED-2B	25	RW006	Aroclor 1260	0.2	0.03	0.014

Note:
* U.S. EPA 2006

CCC = criterion continuous concentration
CMC = criteria maximum concentration
DDT = dichlorodiphenyltrichloroethane
EBS = environmental baseline survey
µg/L = micrograms per liter

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Table I-16
Surface Water Samples With Detection Limits Exceeding California Toxics Rule Values: Metals

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	Groundwater Background[a] (µg/L)	CCC[b] (µg/L)	CMC[b] (µg/L)
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—[c]	8.2	74
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—	8.2	74
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—	8.2	74
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—	8.2	74
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—	8.2	74
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—	8.2	74
FED-2B	25	R1	copper	25	24.03	3.1	4.8
FED-2B	25	R1	nickel	40	—	8.2	74
FED-2B	25	R2	copper	25	24.03	3.1	4.8
FED-2B	25	R2	nickel	40	—	8.2	74
FED-2B	25	R2	copper	25	24.03	3.1	4.8
FED-2B	25	R2	nickel	40	—	8.2	74
FED-2B	25	R2	copper	25	24.03	3.1	4.8
FED-2B	25	R2	nickel	40	—	8.2	74
FED-2B	25	R2	copper	25	24.03	3.1	4.8
FED-2B	25	R2	nickel	40	—	8.2	74
FED-2B	25	R2	copper	25	24.03	3.1	4.8

Table I-16
Surface Water Samples With Detection Limits Exceeding California Toxics Rule Values: Metals

Transfer Parcel	EBS Parcel	Station ID	Analyte	Detection Limit (µg/L)	Groundwater Background[a] (µg/L)	CCC[b] (µg/L)	CMC[b] (µg/L)
FED-2B	25	R2	nickel	40	—	8.2	74
FED-2B	25	RW002	tributyltin	0.044	—	0.0074	—
FED-2B	25	RW006	tributyltin	0.044	—	0.0074	—

Notes:
[a] TtEMI 2004
[b] U.S. EPA 2006
[c] dash indicates that a value does not exist for this analyte

CCC = criterion continuous concentration
CMC = criteria maximum concentration
EBS = environmental baseline survey
µg/L = micrograms per liter

Table I-17
Sediment Samples With Detection Limits Exceeding Preliminary Remedial Goals:
Semivolatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Bottom Depth (feet bgs)	Top Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Industrial PRG[a] (µg/kg)	Residential PRG[b] (µg/kg)
FED-2B	25	R1	NA	NA	benzidine	930	2.1	7.5
FED-2B	25	R1	NA	NA	benzo(a)pyrene	93	62	210
FED-2B	25	R1	NA	NA	dibenz(a,h)anthracene	93	62	210
FED-2B	25	R1	NA	NA	N-nitroso-di-n-propylamine	93	69	250
FED-2B	25	R1	NA	NA	benzidine	990	2.1	7.5
FED-2B	25	R1	NA	NA	benzo(a)pyrene	99	62	210
FED-2B	25	R1	NA	NA	dibenz(a,h)anthracene	99	62	210
FED-2B	25	R1	NA	NA	N-nitroso-di-n-propylamine	99	69	250
FED-2B	25	R1	NA	NA	benzidine	910	2.1	7.5
FED-2B	25	R1	NA	NA	benzo(a)pyrene	91	62	210
FED-2B	25	R1	NA	NA	dibenz(a,h)anthracene	91	62	210
FED-2B	25	R1	NA	NA	N-nitroso-di-n-propylamine	91	69	250
FED-2B	25	R2	NA	NA	benzidine	910	2.1	7.5
FED-2B	25	R2	NA	NA	benzo(a)pyrene	91	62	210
FED-2B	25	R2	NA	NA	dibenz(a,h)anthracene	91	62	210
FED-2B	25	R2	NA	NA	N-nitroso-di-n-propylamine	91	69	250
FED-2B	25	R2	NA	NA	benzidine	920	2.1	7.5
FED-2B	25	R2	NA	NA	benzo(a)pyrene	92	62	210
FED-2B	25	R2	NA	NA	dibenz(a,h)anthracene	92	62	210
FED-2B	25	R2	NA	NA	N-nitroso-di-n-propylamine	92	69	250
FED-2B	25	R2	NA	NA	benzidine	880	2.1	7.5
FED-2B	25	R2	NA	NA	benzo(a)pyrene	88	62	210
FED-2B	25	R2	NA	NA	dibenz(a,h)anthracene	88	62	210
FED-2B	25	R2	NA	NA	N-nitroso-di-n-propylamine	88	69	250
FED-2B	25	R3	NA	NA	benzidine	1,400	2.1	7.5

Table I-17
Sediment Samples With Detection Limits Exceeding Preliminary Remedial Goals:
Semivolatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Bottom Depth (feet bgs)	Top Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Industrial PRG[a] (µg/kg)	Residential PRG[b] (µg/kg)
FED-2B	25	R3	NA	NA	benzo(a)pyrene	140	62	210
FED-2B	25	R3	NA	NA	dibenz(a,h)anthracene	140	62	210
FED-2B	25	R3	NA	NA	N-nitroso-di-n-propylamine	140	69	250
FED-2B	25	R3	NA	NA	benzidine	1,200	2.1	7.5
FED-2B	25	R3	NA	NA	benzo(a)pyrene	120	62	210
FED-2B	25	R3	NA	NA	N-nitroso-di-n-propylamine	120	69	250
FED-2B	25	R3	NA	NA	benzidine	1,100	2.1	7.5
FED-2B	25	R3	NA	NA	dibenz(a,h)anthracene	110	62	210
FED-2B	25	R3	NA	NA	N-nitroso-di-n-propylamine	110	69	250
FED-2B	25	R4	NA	NA	benzidine	800	2.1	7.5
FED-2B	25	R4	NA	NA	benzo(a)pyrene	80	62	210
FED-2B	25	R4	NA	NA	dibenz(a,h)anthracene	80	62	210
FED-2B	25	R4	NA	NA	N-nitroso-di-n-propylamine	80	69	250
FED-2B	25	R4	NA	NA	benzidine	830	2.1	7.5
FED-2B	25	R4	NA	NA	benzo(a)pyrene	83	62	210
FED-2B	25	R4	NA	NA	dibenz(a,h)anthracene	83	62	210
FED-2B	25	R4	NA	NA	N-nitroso-di-n-propylamine	83	69	250
FED-2B	25	R4	NA	NA	benzidine	850	2.1	7.5
FED-2B	25	R4	NA	NA	benzo(a)pyrene	85	62	210
FED-2B	25	R4	NA	NA	dibenz(a,h)anthracene	85	62	210
FED-2B	25	R4	NA	NA	N-nitroso-di-n-propylamine	85	69	250
FED-2B	25	RW002	0-0.5	0-0.5	benzo(k)fluoranthene	400	6,200	380[b]
FED-2B	25	RW002	0-0.5	0-0.5	benzo(a)pyrene	400	62	210
FED-2B	25	RW002	0-0.5	0-0.5	bis(2-chloroethyl)ether	400	220	580
FED-2B	25	RW002	0-0.5	0-0.5	dibenz(a,h)anthracene	400	62	210

Table I-17
Sediment Samples With Detection Limits Exceeding Preliminary Remedial Goals:
Semivolatile Organic Compounds

Transfer Parcel	EBS Parcel	Station ID	Bottom Depth (feet bgs)	Top Depth (feet bgs)	Analyte	Detection Limit (µg/kg)	Industrial PRG[a] (µg/kg)	Residential PRG[b] (µg/kg)
FED-2B	25	RW002	0-0.5	0-0.5	hexachlorobenzene	400	300	1,100
FED-2B	25	RW002	0-0.5	0-0.5	N-nitroso-di-n-propylamine	400	69	250
FED-2B	25	RW003	0-0.5	0-0.5	benzo(k)fluoranthene	430	6,200	380[b]
FED-2B	25	RW003	0-0.5	0-0.5	benzo(a)pyrene	430	62	210
FED-2B	25	RW003	0-0.5	0-0.5	bis(2-chloroethyl)ether	430	220	580
FED-2B	25	RW003	0-0.5	0-0.5	dibenz(a,h)anthracene	430	62	210
FED-2B	25	RW003	0-0.5	0-0.5	hexachlorobenzene	430	300	1,100
FED-2B	25	RW003	0-0.5	0-0.5	N-nitroso-di-n-propylamine	430	69	250
FED-2B	25	RW004	0-0.5	0-0.5	benzo(a)pyrene	260	62	210
FED-2B	25	RW004	0-0.5	0-0.5	bis(2-chloroethyl)ether	260	220	580
FED-2B	25	RW004	0-0.5	0-0.5	dibenz(a,h)anthracene	260	62	210
FED-2B	25	RW004	0-0.5	0-0.5	N-nitroso-di-n-propylamine	260	69	250

Notes:
[a] U.S. EPA 2004
[b] California-modified PRG

EBS = environmental baseline survey
µg/kg = micrograms per kilogram
NA = not available
PRG = preliminary remediation goal

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Table I-18
Concrete Samples with Detection Limits Exceeding Screening Levels: Polychlorinated Biphenyls

Transfer Parcel	EBS Parcel	Station ID	Top Depth (feet bgs)	Bottom Depth (feet bgs)	Analyte	Detection Limit (mg/kg)	Residential RSL* (mg/kg)	Industrial RSL* (mg/kg)
--	--	--	--	--	--	--	--	--

Notes:
* U.S. EPA 2010

bgs = below ground surface
mg/kg = milligrams per kilogram
EBS = environmental baseline survey
NA = not available
RSL = regional screening level

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Appendix J
Screening-Level Ecological Risk Assessment for Transfer Parcel FED-1A

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Attachment

J1 Hazard Quotient Calculations for Screening-Level Ecological Risk Assessment, Transfer Parcel FED-1A (on CD-ROM)

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Acronyms/Abbreviations

AME, Inc.	Affiliated medical Enterprises, Inc.
ATSDR	Agency for Toxic Substance and Disease Registry
BAF	bioaccumulation factor
BCF	bioconcentration factor
bgs	below ground surface
BJC	Bechtel Jacobs Company, LLC
BTAG	Biological Technical Assistance Group
Cal/EPA	California Environmental Protection Agency
CDFG	California Department of Fish and Game
COPEC	chemical of potential ecological concern
CRC	CRC Publishers
CSM	conceptual site model
CTO	contract task order
DDD	4,4-dichlorodiphenyl-dichloroethane
DDE	dichlorodiphenyldichloroethene
DDT	dichlorodiphenyltrichloroethane
DOE	Department of Energy
DON	Department of the Navy
EFA-West	Engineering Field Activity, West
EPC	exposure point concentration
ERA	ecological risk assessment
FCM	food chain multiplier
FED	federal agency
HERD	Human and Ecological Risk Division
HI	hazard index
HQ	hazard quotient
IR	Installation Restoration (Program)
IRIS	Integrated Risk Information System
K_{OW}	octanol/water partition coefficient
KOWwin	computer program for estimating K_{ow}
LSA	LSA Associates, Inc.
LOAEL	lowest-observed-adverse-effect level
LOEC	lowest-observed-effect concentration
mg/kg	milligrams per kilogram
mg/kg/day	milligrams per kilogram per day
NOAA	National Oceanic and Atmospheric Administration

NOAEL	no-observed-adverse-effect level
NOEC	no-observed-effect concentration
NTP	National Toxicity Program
ORNL	Oak Ridge National Laboratory
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
pCi/g	picocuries per gram
pCi/L	picocuries per liter
PRC	PRC Environmental Management, Inc.
RI	remedial investigation
SVOC	semivolatile organic compound
TRV	toxicity reference value
TtEMI	Tetra Tech EM Inc.
TtFW	Tetra Tech FW, Inc.
UCL	upper confidence limit
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UF	uncertainty factor
VOC	volatile organic compound
WRT	Wallace Roberts & Todd, LLC

APPENDIX J

Screening-Level Ecological Risk Assessment for Transfer Parcel FED-1A

A screening-level ecological risk assessment (ERA) was conducted as part of the site investigation (SI) by the Department of the Navy (DON) to estimate the potential impacts of chemicals reported in soil and groundwater at Transfer Parcel Federal Agency (FED)-1A, Alameda Point, Alameda, California. Figures and tables for this ERA are included at the end of this appendix.

The screening-level ERA is Tier 1 (Steps 1 and 2) of the Navy policy for conducting ERAs (DON, 1999, 2001) and employs existing data and conservative assumptions regarding contaminant exposure to evaluate whether additional assessment is warranted. Step 1 involves developing the screening-level conceptual model through problem formulation and toxicity evaluation. Step 2 consists of the exposure estimate and risk calculations.

The Navy policy is consistent with the U.S. Environmental Protection Agency's (USEPA's) ERA Guidance for Superfund (USEPA, 1997a). The Navy Tier 1 process is analogous to Steps 1 and 2 of the Superfund guidance, which also results in a screening-level ERA.

The state of California has also prepared guidance documents pertaining to ERAs (Cal/EPA, 1996a,b). The Navy Tier 1 process is similar to the first two components of the California process (Scoping Assessment and Phase I Predictive Assessment). Following the ERA process described in the Navy policy (DON 1999, 2001) is expected to be consistent with the California process.

In the Navy Tier 1 process, the primary objective of Step 1 is to evaluate whether complete exposure pathways exist between chemicals and selected ecological receptors. In Step 2 of the Tier 1 process, risks are estimated for those chemicals for which complete pathways were identified. At the conclusion of the Tier 1 process, a risk management decision is made regarding site status. The decision criteria identify the following three possible outcomes of the Tier 1 screening-level ERA.

- Transfer Parcel FED-1A poses an acceptable risk and no further action is warranted.
- Transfer Parcel FED-1A poses a potentially unacceptable risk that requires additional evaluation with a Tier 2 baseline ERA.
- Transfer Parcel FED-1A poses a potentially unacceptable risk and accelerated site remediation is warranted.

This ERA also includes an evaluation of refined exposure estimates described by USEPA guidance (USEPA, 1997a) and Step 3a of Navy policy (DON, 1999, 2001). The supplemental refined evaluation is presented in addition to the screening-level ERA (rather than as part of the screening-level ERA) and as an aid to the risk managers. The refined exposure estimates use exposure factors that are more realistic for the site than the most-conservative values

used in Steps 1 and 2. This step provides a refined list of chemicals of potential ecological concern (COPECs).

J1 Problem Formulation

Problem formulation evaluates the site characteristics, identification of COPECs, fate and transport factors for the COPECs, ecological habitats and representative organisms, threatened and endangered species, and potential exposure pathways between COPECs and ecological receptors.

J1.1 Site Location and Description

Alameda Point is located on the western end of Alameda Island, which is located along the eastern margin of the San Francisco Bay near the city of Oakland in Alameda County, California (Figure J-1). This screening-level ERA addresses the soil and groundwater at Transfer Parcel FED-1A.

The land that is Alameda Point was created by filling natural bay tidelands and offshore areas with dredge spoils from the Oakland Estuary (now the Oakland Inner Harbor), Seaplane Lagoon, and the San Francisco Bay.

Oakland Inner Harbor and Seaplane Lagoon are bodies of water contiguous with San Francisco Bay (Figure J-2). Because of this, references to "the bay" in this ERA refer also to the Oakland Inner Harbor and Seaplane Lagoon. The Oakland Inner Harbor represents the northern boundary of Alameda Point. Seaplane Lagoon is located in the southeastern portion of Alameda Point.

Transfer Parcel FED-1A is approximately 400 acres and is located in the western portion of Alameda Point (Figure J-2). Transfer Parcel FED-1A was previously designated for future use as a wildlife refuge, but the future use of this parcel is currently unknown because of a request by the Department of Veterans' Affairs in 2006 for a "Federal-to-Federal" transfer of the property to allow reuse of the land for an outpatient clinic, a long-term care facility, and a national columbarium.

Approximately 75 percent of the site (290 acres) is covered by pavement or buildings and 25 percent is bare soil or grassy areas (Figure J-3). The ground surface is flat, with an approximate elevation of 10 feet above mean sea level. Typical groundwater elevation is 3 to 5 feet below ground surface (bgs). Groundwater near the shoreline varies in elevation due to tidal influence. No naturally occurring surface water bodies exist on Alameda Point, although seasonal ponds occur in low grassy areas.

J1.2 Ecological Setting

This section describes biological habitats; representative organisms; and rare, endangered, or threatened species in the vicinity of Transfer Parcel FED-1A. Habitat descriptions are based on information presented in the California Wildlife Habitat Relationships System (CDFG, 2001; Sawyer and Keeler-Wolf, 1995; Mayer and Laudenslayer, Jr., 1988).

J1.2.1 Ecological Habitats

The following ecological habitats occur within 1 mile of Transfer Parcel FED-1A:

- Barren habitat occurs at Transfer Parcel FED-1A as bare soil, paved areas, and buildings; and on adjacent land at Alameda Point and in the cities of Oakland and Alameda as roads, parking areas, buildings, and runways.
- Urban habitat occurs on adjacent land at Alameda Point and in the cities of Oakland and Alameda as ornamental shrubs, trees, and landscaped areas.
- Nonnative grassland habitat occurs at Transfer Parcel FED-1A and other land at Alameda Point.
- Coastal scrub habitat occurs along the margins of the West Beach Wetland and the Runway Wetland at Alameda Point and in an area between these wetlands and along the south shore of Transfer Parcel FED-1A.
- Wetland habitat occurs in the western portion of Alameda Point as salt marsh at the West Beach Wetland and the Runway Wetland, and as seasonal wetlands at low grassy areas.
- Estuarine habitat occurs in portions of San Francisco Bay, such as the Oakland Inner Harbor, Seaplane Lagoon, and the main San Francisco Bay.

Barren habitat generally offers little value to wildlife; it may serve as a corridor between other habitats or as a place of brief resting, but it is not a significant place of shelter.

Urban habitat generally supports few wildlife species, due to human disturbances and limited vegetation. Vegetation includes grass lawns, ornamental trees, and landscaped shrubs. Typical animal representatives of the urban habitat include the house finch (*Carpodacus mexicanus*), house sparrow (*Passer domesticus*), American robin (*Turdus migratorius*), red-winged blackbird (*Agelaius phoeniceus*), scrub jays (*Aphelocoma californica*), California ground squirrel (*Spermophilus beecheyi*), and feral cats (USFWS, 1998). In addition, raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), and Virginia opossum (*Didelphis virginiana*) may occur occasionally.

Nonnative grassland habitat offers shelter, forage, and nesting opportunities for a variety of animal species. The northern harrier (*Circus cyaneus*), killdeer (*Charadrius vociferus*), California horned lark (*Eremophila alpestris actia*), and burrowing owl (*Athene cunicularia*) are avian species that nest in the grassland habitat of Alameda Point (USFWS, 1998). Avian predators occurring in the grassland habitat include the red-tailed hawk (*Buteo jamaicensis*), northern harrier, American peregrine falcon (*Falco peregrinus anatum*), white-tailed kite (*Elanus leucurus*), and American kestrel (*Falco sparverius*). Prey species occurring in the grassland habitat include the rock dove (*Columba livia*), mourning dove (*Zenaida macroura*), black-tailed hare (*Lepus californicus*), rabbit (*Sylvilagus floridanus*), and California ground squirrel. Raccoon, striped skunk, and Virginia opossum may forage in the grassland region. Small areas of scrub habitat occur within the grassland habitat.

The coastal scrub habitat on Alameda Point occurs as a disturbed habitat with mixed scrub vegetation and vegetation from the nonnative grassland. This habitat has sometimes been

referred to as ruderal upland vegetation. Wildlife characteristics of the scrub habitat are essentially the same as for the grasslands.

Several saline emergent wetland habitat areas, also known as salt marshes, occur at Alameda Point. West Beach Landfill Wetland (22.3 acres) is located at the western end of Alameda Point (PRC, 1994). Runway Wetland (12.7 acres) is located along the southern margin of Alameda Point near Seaplane Lagoon (PRC, 1994). Three narrow areas (less than 50 feet wide) of saline emergent wetland were identified in the northern portion of Alameda Point along the shoreline of Oakland Inner Harbor (TtEMI, 2001a, EDAW, 2005). These narrow shoreline wetlands are routinely inundated during high tide and lack a typical high tide zone into which marsh vertebrates can escape the tidal water. The salt marshes support characteristic vegetation, abundant invertebrates, and various birds. Few mammals occur in the salt marsh. Pickleweed (*Salicornia virginica*) is the dominant vegetation of saline emergent habitat. Numerous invertebrates occur in the salt marsh, such as polychaete worms, amphipod crustaceans, clams, snails, and crabs. Depending on the availability of water in the salt marsh, several fish species may occur, including topsmelt (*Atherinops affinis*), killifish (*Fundulus parvipinnis*), and anchovy (*Engraulis mordax* and *Anchoa compressa*). Invertebrates represent an abundant food source for birds such as the great blue heron (*Ardea herodias*), great egret (*Ardea alba*), snowy egret (*Egretta thula*), willet (*Catoptrophorus semipalmatus*), and American avocet (*Recurvirostra americana*). The Alameda song sparrow (*Melospiza melodia pusillula*) and salt marsh common yellowthroats (*Geothlypis trichas sinuosa*) may nest and forage in the upper reaches of the salt marsh. The Caspian tern (*Hydroprogne caspia*) has established a significant nesting site at the West Beach Landfill Wetland. Small mammals such as house mouse (*Mus musculus*), salt marsh harvest mouse (*Reithrodontomys raviventris*), and Norway rat (*Rattus norvegicus*) may also occur in the salt marsh.

Several seasonal wetlands were identified at the western portion of Alameda Point and along some of the runway margins (TtFW, 2004; EDAW, 2005). Seasonal wetlands are characterized by hydrophytic vegetation, i.e., plants which have adapted to growing in the low-oxygen (anaerobic) conditions associated with prolonged saturation or flooding. A formal wetland delineation was not completed as part of this ERA. At such time when actions are planned for the site that may adversely impact the seasonal wetland areas, a wetland delineation may be recommended. Common plants in seasonal wetlands in the western portion of Alameda Point include saltgrass (*Distichlis spicata*), dock willow (*Rumex salicifolius*), bird's-foot trefoil (*Lotus corniculatus*), and creeping spikerush (*Eleocharis macrostachyas*) (TtFW, 2004). Common plants in seasonal wetlands in the central portion of Alameda Point include sand pygmy weed (*Crassula erecta*), loose-strife hyssop (*Lythrum hyssopifolia*), rabbits's foot grass (*Polypogon monspeliensis*), and Baltic rush (*Juncus balticus*) (EDAW, 2005). The seasonal wetlands also provide rest, shelter, and forage for Canada geese (*Branta canadensis*) and other migratory water fowl.

Estuarine habitat of San Francisco Bay exists in the intertidal and subtidal zones along the shoreline of Alameda Point and nearby areas. Predominant vegetation includes eelgrass (*Zostera marinara*), various marine algae, and phytoplankton. The estuarine habitat supports numerous invertebrates, including polychaete worms, amphipod crustaceans, clams, snails, and crabs. Representative fish species include topsmelt, anchovy, surfperch, and gobies. Numerous other fish species are also present. Fish and invertebrates occurring in the estuarine habitat represent a food source for many birds, including the California least tern (*Sternula antillarum browni*), California brown pelican (*Pelecanus occidentalis californicus*),

western grebe (*Aechmophorus occidentalis*), and western snowy plover (*Charadrius alexandrinus nivosus*) (PRC, 1996; USFWS, 1998; EDAW, 2005).

J1.2.2 Threatened, Endangered, and of-Concern Species

Special-status species are those plant and animal species that are classified as threatened, endangered, or of-concern by state or federal agencies, and that are known to occur or have the potential to occur in the terrestrial or aquatic habitats in the vicinity of Transfer Parcel FED-1A (CDFG, 2006a,b,c,d,e). Table J-1 provides a list of these special-status species for Alameda Point. Local environmental impact reports were used to determine the likelihood of these species occurring at or in the vicinity of Alameda Point (LSA, 2001; WRT, 2002; EDAW, 2005).

Point Reyes bird's-beak (*Cordylanthus maritimus palustris*), a small annual herb that grows along the fringe of coastal salt marshes, is a federally listed endangered species and has not been reported at Alameda Point since 1917. According to historical records, the grassland and scrub plant species Santa Cruz tarplant (*Holocarpha macradeni*), Kellogg's horkelia (*Horkelia cuneata sericea*), Contra Costa goldfields (*Lasthenia conjugens*), and Adobe sanicle (*Sanicula maritima*) have also not been observed in the area for many years. It is therefore unlikely that these species occur or will occur at Alameda Point. In fact, none of the plant species on state or federal lists were reported in vegetation surveys at Alameda Point in 1995 and 1997 (TtEMI, 2003).

Steelhead (*Oncorhynchus mykiss*) and Chinook salmon (*Oncorhynchus tshawytscha*) traverse the San Francisco Bay during migration between the ocean and the Sacramento River delta and freshwater rivers and streams (USACE, et al. 1998). Green sturgeon (*Acipenser medirostris*) occur primarily in the northern portion of San Francisco Bay (San Pablo and Suisun Bays) and spawn in the rivers (USACE, et al. 1998). Steelhead, salmon, and sturgeon may occasionally occur in the vicinity of Alameda Point.

The Alameda whipsnake (*Masticophus lateralis euryxanthus*) occurs primarily in scrub habitat and occasionally in grassland habitat. The Alameda whipsnake has not been observed at Alameda Point and is unlikely to occur there due to limited habitat.

Occasional observations of marine mammals such as seals and sea lions, including the Steller sea lion (*Eumetopias jubatus*), have been recorded in the area near Alameda Point. The Steller sea lion is not expected to occur regularly near Alameda Point. The salt marsh harvest mouse and salt marsh wandering shrew (*Sorex vagrans halicoetes*) inhabit salt marshes, but neither has been observed at Alameda Point. No salt marsh harvest mice were reported during a biological survey in 1995 (TtEMI, 2003). The San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) and Alameda Island mole (*Scapanus latimanus parvus*) are unlikely to occur at Alameda Point, based on infrequent sightings in the past. The California mastiff bat (*Eumops perotis californicus*) and Townsend's western big-eared bat (*Corynorhinus townsendii*) may roost in abandoned buildings at Alameda Point (Constantine, 1996).

Several sea birds, shore birds, and salt marsh birds such as the western snowy plover, California least tern, double-crested cormorant, California brown pelican, California clapper rail, California black rail (*Laterallus jamaicensis coturniculus*), salt marsh common yellowthroat, and Alameda song sparrow occur or may potentially occur at Alameda Point. However, the shore birds and marsh birds are not expected to occur at Transfer Parcel FED-1A because they prefer a salt marsh habitat. The sea birds such as cormorant, pelican, and

tern may forage for fish in the bay at Oakland Inner Harbor. Several birds occur in the grassland or scrub habitat in the vicinity of Transfer Parcel FED-1A; these birds include the northern harrier (*Circus cyaneus*), merlin, burrowing owl, California horned lark (*Eremophilia alpestris actia*), loggerhead shrike (*Lanius ludovicianus*), white-tailed kite (*Elanus leucurus*), and American peregrine falcon.

Wetlands, eelgrass beds, and the paved runway used for least tern nesting are considered sensitive habitats. The wetlands occur in the western portion of Alameda Point. Salt marsh wetlands are located near shoreline areas and seasonal wetlands are located at some low grassy areas. The eelgrass beds are located in the shallow water off the west end of Alameda Point. The California least tern nesting site is on the runway in the southeastern portion of the airfield in Transfer Parcel FED-1A.

J1.3 Identification of COPECs

Results from investigations at Transfer Parcel FED-1A indicate the presence of various organic and inorganic chemicals in soil and groundwater. Soil and groundwater samples have been analyzed for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), metals, and radionuclides. Most of the SVOCs reported in soil and groundwater samples were polycyclic aromatic hydrocarbons (PAHs). COPECs were identified from the analytical data collected during previous investigations. Chemicals not reported above detection limits were eliminated as COPECs.

J1.3.1 Soil COPECS

COPECs in soil were identified using analytical data collected from samples between 0 and 6 feet bgs (Cal/EPA, 1998). The initial COPEC list for soil includes all chemicals that were reported at least once at a concentration greater than the detection limit (Table J-2). Descriptive statistics are presented for the initial COPECs.

J1.3.2 Groundwater COPECs

COPECs in groundwater were identified using analytical data collected from groundwater monitoring wells and other groundwater sampling locations. The initial COPEC list for groundwater includes all chemicals that were reported at least once at a concentration greater than the detection limit (Table J-3). Descriptive statistics are presented for the initial COPECs.

J1.4 Contaminant Fate and Transport

Fate-and-transport information describes how chemicals degrade and where they travel in the environment, whether the chemicals are naturally occurring or released. Chemicals in the environment are analyzed in terms of a modeling system that indicates not only how the chemicals move through air, water, and soil (transport), but also how the chemicals change in the presence of other chemicals and particles (fate).

Physical processes influencing contaminant fate and transport include diffusion (e.g., random movement of molecules) and advection (e.g., flow of groundwater to surface water). Soil erosion, sedimentation, and sediment resuspension describe the sequestering or

transport of soil and sediment particles to which contaminants may be sorbed. The flat surface of Transfer Parcel FED-1A is largely paved; therefore, soil erosion to the bay is unlikely.

Groundwater flow provides a mechanism by which groundwater constituents can migrate to local surface-water bodies. An evaluation of the groundwater at Transfer Parcel FED-1A indicates that the groundwater is moving toward the San Francisco Bay and the Oakland Inner Harbor.

Chemical processes that affect contaminant fate and transport include various chemical reactions. Acid-base reactions affect the chemical form of the contaminant; precipitation reactions can result in sequestering of contaminants with carbonates, hydrous oxides, and sulfides; and oxidation-reduction reactions can alter the chemical form or speciation of a contaminant. Sorption reactions are dependent on the hydrophobic properties of contaminants and the likelihood of sorption of contaminants to soil and sediment particles; these reactions affect bioavailability and toxicity. Volatilization, hydrolysis, photolysis, and ligand complexation can also affect the persistence and properties of contaminants.

Biological processes may also affect contaminant fate and transport. Biotransformation is a chemical reaction occurring within an organism that alters the chemical form of a contaminant. Contaminants may transfer from the atmosphere, water, soil, and sediment to biota in the process of bioaccumulation.

VOCs in groundwater degrade slowly compared to the rate of volatilization of these compounds from surface water, soil, and sediment in to the atmosphere. Rates of degradation in the atmosphere are chemical-specific, ranging from slow to rapid depending on rates of photooxidation. Bioconcentration of VOCs is not a significant process for aquatic or terrestrial organisms.

PAHs are composed of various combinations of fused benzene rings. Properties of PAH compounds vary with molecular weight. Higher-molecular-weight compounds are generally less mobile and less toxic than lower-molecular-weight compounds. PAHs in the atmosphere, water, or soil and sediment become associated with particulate material. PAHs in sediment and soil may transfer to plants or other biota. Environmental degradation occurs by chemical oxidation, photooxidation, and biological transformation. Soil- and sediment-bound PAHs can persist for an extended time. Biological transformation is likely the final fate of PAHs.

Pesticides generally have a cyclic structure and are characterized by the inclusion of chlorine atoms. The pesticides are persistent nonpolar organic compounds that exhibit high solubility in lipids. The pesticides adsorb strongly to soil or sediment particles. Volatilization, photolysis, and oxidation rates vary among the pesticides depending on structure; these are generally not significant pathways. Because of their lipophilic character the pesticides strongly bioaccumulate as well as biomagnify.

PCBs are a group of aromatic hydrocarbon compounds with various patterns of chlorine substitution on the biphenyl structure. Properties of PCB compounds vary with the amount of chlorine substitution. Generally, PCBs with a higher number of chlorines are less mobile than the PCBs with fewer chlorines. PCBs in the atmosphere, water, or soil and sediment become associated with particulate material. Volatilization occurs for PCBs with few substituted chlorines. PCBs in sediment and soil may transfer to plants or other biota. PCBs are lipophilic and will bioaccumulate and biomagnify in the food chain. Environmental

degradation occurs by photochemical breakdown and biological transformation. Soil- and sediment-bound PCBs can persist for an extended time. Biological transformation is likely the final fate of PCBs.

Metals vary widely in chemical form and properties; however, metals differ from organic compounds because none degrade in the environment, many exist naturally in soil and sediment, and a few are essential nutrients for living organisms. The fate of metals in the environment is primarily dependent on sorption, chemical speciation, complexation, biotransformation, and bioaccumulation. Metals occurring in soil and sediment may be sorbed to particles (silt- and clay-size), bound in a complex molecule, bound in a precipitate (e.g., sulfides), or may exist in a free ionic state. Organisms can easily bioaccumulate available metals.

J1.5 Exposure Pathway Analysis

Exposure pathway analysis evaluates the potential for contact between the chemical compounds reported in soil and groundwater and the ecological receptors that are representative of the ecosystem present (or potentially present) at the site.

J1.5.1 Soil Pathways

Exposure of terrestrial organisms to soil is considered a potential pathway. Potential exposure of terrestrial organisms to chemicals in soil may occur by direct contact, inhalation, incidental soil ingestion, and ingestion of food items that have absorbed site contaminants. Exposure by direct (e.g., dermal) contact and inhalation is not readily estimated or evaluated for ecological receptors due to insufficient exposure and toxicity data available to develop adequate exposure models. Exposure by ingestion is assumed to be a more significant contributor to total exposure than exposure by direct contact or inhalation. Therefore, direct contact and inhalation exposures for terrestrial receptors will not be evaluated in this risk assessment.

J1.5.2 Groundwater Pathways

Exposure of aquatic organisms to groundwater is considered a potential pathway because groundwater may discharge to the San Francisco Bay or Oakland Inner Harbor. Aquatic organism exposures may include direct contact, ingestion, and ingestion of food items that have absorbed contaminants from groundwater.

J1.6 Assessment and Measurement Endpoints

Assessment endpoints are an expression of the important ecological values that should be protected at a site (EPA, 1997b). The assessment endpoints are developed according to known information concerning the contaminants present, the study area, and the ecological management goals. The assessment endpoints for this site are any adverse effects on receptor populations and communities for non-threatened and endangered species, and individuals for threatened and endangered species, when applicable.

Adverse effects on these assessment endpoints are predicted from measurement endpoints. Measurement endpoints were selected for each assessment endpoint. The measurement endpoint evaluations for this site are the effects of chemical exposure on reproduction, survival, and/or growth, which can be used to predict effects at all levels of organization

(individual, population, and community) for each receptor group (plants/invertebrates, aquatic life, birds, mammals); these factors were considered in the identification and evaluation of appropriate toxicity information.

J1.7 Conceptual Site Model

The conceptual site model (CSM) can be described as a representation of the known, expected, and/or predicted relationships between site COPECs and ecological receptors. The CSM, based on current knowledge about Transfer Parcel FED-1A, identifies the following:

- Contaminant sources
- Fate and transport mechanisms
- Exposure pathways
- Ecological receptors

Transfer Parcel FED-1A investigations have reported the presence of VOCs, SVOCs (including PAHs), pesticides, PCBs, metals, and radionuclides in soil; and VOCs, SVOCs (including PAHs), and metals in groundwater. These are potential sources of contamination that could affect the ecological habitats and associated organisms occurring in the vicinity of the site.

J1.7.1 Soil Model

Fate-and-transport mechanisms exist that provide models for potential exposure of terrestrial organisms to COPECs. Soil COPECs generally maintain persistent forms and stable concentrations by bonding with soil particles and materials. Transfer of soil COPECs to the biota of lower trophic levels (e.g., vegetation, invertebrates, and small mammals) is estimated using bioaccumulation factors (BAFs). A BAF is a ratio of the concentration of a chemical compound in biota (e.g., plants) to the concentration in soil. Transfer to biota of higher trophic orders (e.g., predators) is estimated using receptor-specific exposure factors.

Representative terrestrial receptors were selected based on a review of current site conditions, various potential reuse plans, and potential habitat. The site currently includes areas formerly used for runway and aircraft management; it is covered by paved surfaces and nonnative grassland. The future use of Transfer Parcel FED-1A is currently unknown, as discussed in Section J1.1.

This screening-level risk assessment evaluates plants, soil invertebrates, and birds and mammals of the major terrestrial feeding guilds as potential ecological receptors (Figure J-4). The deer mouse is a representative species for omnivorous mammals. The California ground squirrel is a representative species for herbivorous mammals. The Alameda song sparrow is a representative species for avian receptors that feed on a combination of invertebrates and plant material. The American robin is a representative species for avian receptors that feed primarily on terrestrial invertebrates. The red-tailed hawk is a representative species for avian predators (raptors) that feed on small mammals.

J1.7.2 Groundwater Model

Existing fate-and-transport mechanisms indicate the potential exposure of aquatic organisms to groundwater COPECs. These groundwater COPECs may discharge to surface

water according to groundwater flow patterns and may bioaccumulate in local aquatic biota. Transfer of COPECs to the biota of lower trophic levels, such as invertebrates and small fish, is estimated using BAF values. Transfer to biota of higher trophic orders, such as predators, is estimated using receptor-specific exposure factors. Benthic organisms dwelling in or on the mud of the bay bottom are potentially exposed to COPECs by direct contact, as groundwater discharges through the mud to the bay. Other aquatic organisms dwelling in the open water column of the bay are exposed by direct contact to much smaller concentrations of COPECs than benthic organisms, due to the tidal mixing and dilution that occurs in the water column.

This screening-level ERA evaluates aquatic life organisms as well as aquatic-dependent birds and mammals as potential ecological receptors (Figure J-5). Aquatic life is a group name applied to the general classification that includes fish and invertebrates in the bay. The harbor seal is a representative species for piscivorous marine mammals. The California least tern and California brown pelican are representative species for piscivorous birds. The western snowy plover is a representative species for birds that feed on aquatic invertebrates.

J2 Ecotoxicity of COPECS

COPECs were evaluated with ecotoxicity estimates. These values are preferentially based on a no-effect level for chronic exposures.

J2.1 Soil Benchmarks for Terrestrial Plants and Invertebrates

Soil screening benchmarks were compared to the site soil concentrations for terrestrial plants and invertebrates (Table J-4). Soil screening benchmarks were selected from USEPA (2005a–g, 2006a,b), Efroymson et al. (1997a,b) and United States Department of Energy (DOE, 2002, 2004, 2006). Screening benchmarks have been developed for only a few COPECs.

J2.2 Toxicity Reference Values for Mammals and Birds

COPECs identified in soil and groundwater are known or suspected to cause various adverse responses in terrestrial wildlife. Guideline toxicity reference values (TRVs) originally prepared by the Navy and the USEPA Region 9 Biological Technical Assistance Group (BTAG) (EFA-West, 1998) are included in ERA guidance documents by the California Environmental Protection Agency (Cal/EPA) (2000, 2002b). Wildlife TRVs are presented as an upper estimate and a lower estimate of effect thresholds. The low-TRV, based on no-observed-adverse-effect-level (NOAEL) data, represents a threshold below which no adverse effect is expected. The high-TRV, based on an approximate midpoint of the range of effect levels, represents a threshold above which an adverse effect is likely to occur. TRVs used in this screening-level ERA are low-TRVs unless otherwise noted.

For compounds without a Navy-BTAG TRV, a TRV was selected from readily available toxicity review documents such as Sample et al. (1996) from Oak Ridge National Laboratory, USEPA's Integrated Risk Information System (IRIS), and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profiles. If multiple toxicity values were found, the most conservative value was used. If literature-based values were not chronic NOAEL values, a factor of 0.1 was used to convert to a chronic value, and a factor of 0.1 was

used to convert to a NOAEL value, as necessary. If an avian TRV was unavailable for a COPEC, the mammalian TRV was used with an adjustment factor of 0.1. TRVs are listed in Table J-5 for mammals and in Table J-6 for birds.

If the difference in body weight was more than two orders of magnitude (Cal/EPA, 1999), wildlife TRVs were adjusted for the difference in sensitivity between test species (usually standard laboratory animals) and selected ecological receptors for the site. An allometric adjustment was used for mammalian and avian species (Sample and Arenal, 1999) based on body weights of the test species described in the scientific literature. Scaling factors presented by Sample and Arenal (1999) indicate that mammalian sensitivity increases with increased body weight and avian sensitivity increases with decreased body weight.

For mammals, TRVs were calculated using

$$TRV_{wildlife} = NOAEL_{test} * (BW_{test}/BW_{wildlife})^{[1-0.94]}$$

For birds, TRVs were calculated using

$$TRV_{wildlife} = NOAEL_{test} * (BW_{test}/BW_{wildlife})^{[1-1.2]}$$

where

$TRV_{wildlife}$	=	TRV for wildlife species
$NOAEL_{test}$	=	NOAEL for test species
BW_{test}	=	body weight for test species
$BW_{wildlife}$	=	body weight for wildlife species

Radionuclide benchmarks (Tables J-5 and J-6) are available for the protection of riparian animals (e.g., raccoon, mink) and terrestrial animals (e.g., deer mouse, rabbit, fox, coyote, bat) (DOE, 2002, 2004, 2006).

J2.3 Toxicity Reference Values for Aquatic Life

Exposure to COPECs is known to produce adverse effects in aquatic organisms. For this screening-level ERA, the preferred aquatic threshold value was a chemical-specific ambient water quality criterion for saltwater aquatic life (Table J-7). The preferred values were ambient water quality criteria presented in the California Toxics Rule (USEPA, 2000a) or updates. If chemicals were not listed in the California Toxics Rule, values were selected from available proposed ambient water quality criteria. If chemicals were not listed in the California Toxics Rule and proposed ambient water quality criteria were not available, scientific literature was searched for available values. The few values listed in Table 3-3 of the San Francisco Bay Basin Plan (Cal/EPA, 1995) are consistent with the values selected here. The aquatic life TRV selection process is summarized below:

- Water quality criteria (criteria continuous concentration) for saltwater aquatic life in California Toxics Rule (USEPA, 2000a), and updates
  - Update for cadmium (USEPA, 2001a)
  - Update for mercury (USEPA, 2002a)

- Proposed federal water quality criteria (criteria continuous concentration) for saltwater aquatic life
  - Antimony (USEPA, 1990)
  - Phenanthrene (USEPA, 1990)
- Chronic screening value for salt water, USEPA Region IV (USEPA, 2001b)
- Available data from scientific literature
  - Chronic no-observed-effect concentration (NOEC), adjustment factor 1
  - Acute NOEC, adjustment factor 0.1
  - 96-hour lethal concentration 50 percent, adjustment factor 0.01
  - Chronic LOEC, adjustment factor 0.1
  - Acute LOEC, adjustment factor 0.01

Radionuclide benchmarks for radium-226 and radium-228 are available for the protection of aquatic animals (e.g., fish) (DOE, 2002, 2004, 2006).

J3 Exposure Estimate

Exposure estimates represent the quantity of COPECs to which the representative ecological receptors are exposed. Soil exposure estimates are evaluated as a daily dose for ingestion.

J3.1 Soil COPEC Concentrations

Exposure estimates for wildlife were developed from reported soil concentrations of COPECs. The wildlife exposure estimate was based on an ingestion-exposure pathway. Maximum concentrations reported for each soil COPEC were assumed to represent the concentration throughout the site. Soil COPECs are listed in Table J-2.

J3.2 COPEC Concentrations in Terrestrial Biota

Tissue residue concentrations of the COPECs in prey species were estimated using soil-to-plant, soil-to-invertebrate, and soil-to-small-mammal BAF values (Table J-8).

J3.2.1 Soil-to-Plant Bioaccumulation Factors

Soil-to-plant BAF values for some inorganic COPECs were developed at Oak Ridge National Laboratory (ORNL). Median values were selected from those developed by Bechtel Jacobs Company LLC (BJC, 1998), Efroymson et al. (2001), and Baes et al. (1984).

Soil-to-plant BAF values for organic COPECs were estimated from regressions or median values from USEPA (2005h) for specific PAHs, dieldrin, and DDT. USEPA presented a group-specific regression for other PAHs, and a regression for other organic compounds based on octanol-water partition coefficient (K_{ow}) values.

J3.2.2 Soil-to-Invertebrate Bioaccumulation Factors

Soil-to-invertebrate BAF values for some inorganic COPECs were developed at ORNL. Median values were selected from Sample et al. (1998a, 1999). The BAF value for thallium was selected from USEPA (1999b). BAFs for pesticides are from Sample et al. (1999). BAF values for PAHs were selected from Beyer and Stafford (1993). The BAF values for SVOCs were estimated with the median uptake factor for 2,3,7,8-tetrachlorodibenzo-p-dioxin (Sample et al., 1999). BAF values for VOCs were estimated using the equation of Southworth et al. (1978):

$$\text{Log soil-to-invertebrate } BAF = (0.819 * \text{Log } K_{ow}) - 1.146$$

where

K_{ow} = octanol-water partition coefficient

J3.2.3 Soil-to-Small-Mammal Bioaccumulation Factors

Soil-to-small-mammal BAF values for some inorganic COPECs were developed at ORNL. Median values were selected from Sample et al. (1998b). Because a BAF value for beryllium was not available, a BAF value of 1 was assumed. Soil-to-small-mammal BAF values for organic COPECs were estimated using the median value for tetrachlorodibenzodioxin from Sample et al. (1998b).

J3.3 Groundwater COPEC Concentrations

Concentrations of COPECs for aquatic receptors at San Francisco Bay were estimated using maximum concentrations of COPECs reported from groundwater monitoring wells and other groundwater sampling locations. These concentrations are presented in Table J-3.

J3.4 COPEC Concentrations in Aquatic Biota

Tissue residue concentrations of the groundwater COPECs in prey species were estimated with water-to-invertebrate and water-to-fish BAFs. The aquatic BAFs were estimated as the bioconcentration factor (BCF) multiplied by the food chain multiplier (FCM) (Table J-9). The BCF only accounts for direct contact transfer of COPECs; the FCM accounts for the COPEC transfer to prey species via ingestion of food items.

J3.4.1 Water-to-Invertebrate Bioconcentration Factors

Water-to-invertebrate BCFs for inorganic chemicals were selected from USEPA values (1999b). BCF values for cobalt and manganese were estimated with values from the scientific literature. The BCF values for aluminum, iron, and vanadium were estimated with the mean of other inorganic chemicals reported by USEPA (1999b). Invertebrate BCFs for two organic compounds were available from the USEPA (1999b). The remaining invertebrate BCFs for organic compounds were estimated using the water-to-fish BCF values.

J3.4.2 Water-to-Fish Bioconcentration Factors

Water-to-fish BCFs for most inorganic chemicals were selected from USEPA values (1999b). The cobalt BCF was estimated with the geometric mean of values from the scientific literature (USEPA, 2002b). The BCF values for barium, iron, manganese, and vanadium

were estimated with the mean of other inorganic chemicals reported by USEPA (1999b). Water-to-fish BCFs for organic compounds were selected from a predictive model ("BCFwin") available from the USEPA (2000c) based on K_{ow} values. The K_{ow} values were selected from a database and predictive model ("KOWwin") available from the USEPA (2000c).

J3.4.3 Food Chain Multiplier

Water-to-fish and water-to-invertebrate BCFs were multiplied by FCMs to account for the increased concentrations of COPECs that occur in organisms higher in the food chain (higher trophic levels). FCMs vary with K_{ow} values and were selected from USEPA values (1995).

J3.5 Exposure Factors

Exposure factors for the ingestion pathway for terrestrial and aquatic wildlife include ingestion rate, body weight, and site-use factors. These exposure factors are specific for each ecological receptor evaluated. Fractional intake, the dietary component, is specific for each receptor and ingested medium (food type). Gastrointestinal assimilation efficiency and bioavailability are specific to each receptor, ingested medium, and chemical compound. For this screening-level ERA, conservative assumptions are used for assimilation efficiency and site-use factors (values set to 1). The receptors are assumed to experience no reduction in bioavailability and are also assumed to feed only at the site.

Exposure factors (Tables J-10 and J-11) were selected from available scientific literature, such as the USEPA Wildlife Exposure Handbook (USEPA, 1993) and the California Wildlife Biology Exposure Factor and Toxicity database (Cal/EPA, 2002a). Minimum values were used for body weight. Ingestion rates are estimated from body weight with predictive equations.

Exposure dose was calculated with the following formula for each receptor and COPEC:

$$Dose = \frac{\sum_{k}^{i=1}\left[C * BAF_i * IR * FI_i * AE * SUF\right]}{BW}$$

where

Dose = daily dose of COPEC per receptor; value expressed as $mg_{chemical}/kg_{BW}$/day
C = concentration in medium (soil or water) using the maximum concentration, expressed as $mg_{chemical}/kg_{soil}$ dry weight (dw) or $mg_{chemical}/L_{water}$
BAF_i = media-to-biota bioaccumulation factor, expressed as kg_{soil} dw /kg_{biota} dw or L_{water} /kg_{biota} dw
IR = receptor-specific ingestion rate, expressed as kg_{food} dw/day
FI_i = receptor-specific fractional intake rate for each ingested item (including incidental soil and food items); dietary composition
AE = chemical-specific gastrointestinal absorption efficiency (bioavailability) for each ingested medium (including soil and food items) for each representative species; value has no units; value assumed at 1

SUF = site use factor, receptor specific; value has no units; value assumed at 1
i, k = identifier and number of ingested media types (i.e., soil, food types)
BW = body weight of the animal, expressed as kg_{BW}

J4 Risk Estimation

The risk for potential ecological receptors is estimated by the hazard quotient (HQ), obtained by dividing the exposure dose estimate by the TRV:

$$HQ = \frac{Dose}{TRV}$$

where

HQ = hazard quotient
Dose = daily exposure dose for a COPEC, milligrams per kilogram per day (mg/kg/day)
TRV = toxicity reference value, mg/kg/day

Hazard index (HI) values were calculated to assess the potential for a cumulative effect from multiple COPECs having similar modes of action in birds or mammals. The HI was calculated as the sum of all of the individual HQ values for a group of COPECs (e.g., metals, PAHs).

J4.1 Terrestrial Plants and Invertebrates

Table J-12 lists the HQ for each soil COPEC for potential terrestrial plant and invertebrate receptors. Most of the HQ values for organic chemicals are not available since few benchmarks are available for organic compounds. None of the available plant or invertebrate organic compound HQ values exceed 1. Several inorganic HQ values for plants exceed 1, ranging from 2 for cobalt and zinc to 100 for aluminum. Two inorganic HQ values for invertebrates exceed 1, ranging from 2 for mercury to 90 for chromium. Only aluminum, chromium, cobalt, mercury, silver, thallium, vanadium, and zinc have HQ values greater than 1 for plants or invertebrates. Therefore, these eight compounds are retained for further evaluation for the plant and invertebrate receptors. Pentachlorophenol, phenol, arsenic, barium, beryllium, cadmium, copper, lead, nickel, and selenium do not have HQ values exceeding 1 for both plants and invertebrates; therefore, these compounds are eliminated from further evaluation for the plant and invertebrate receptors.

J4.2 Terrestrial Wildlife Receptors

Table J-13 lists the HQ for each soil COPEC for potential terrestrial wildlife receptors (mammals and birds). Most of the HQ values for organic chemicals are less than or equal to 1, indicating that those COPECs are unlikely to represent an ecological risk for terrestrial wildlife. Butylbenzyl phthalate, nine PAHs, 4,4'-dichlorodiphenyl-dichloroethane (DDD), Aroclor 1260, and most metals are presented with HQ values exceeding 1, indicating potentially unacceptable ecological risk. HI values for SVOCs, PAHs, pesticides, PCBs, and metals were greater than 1. The HQs for individual analytes within each of these groups were also greater than 1, except for pesticides. The COPECs with the highest HQ values for the five representative wildlife receptors are benzo(b)fluoranthene (HQ 10), aluminum (HQ

100), cadmium (HQ 100), lead (HQ 300), and nickel (HQ 60). Potential risk to terrestrial wildlife receptors should be further evaluated with refined exposure point concentrations (EPCs) and refined exposure factors for the representative receptors. COPECs with maximum HQ values less than 1 are eliminated from further evaluation for terrestrial wildlife receptors. Acetone, barium, manganese, silver, radium-226, and radium-228 are eliminated from further evaluation for terrestrial wildlife receptors due to an HQ value not exceeding 1.

J4.3 Aquatic Wildlife Receptors

Table J-14 lists the HQ for each water COPEC for potential aquatic wildlife receptor (mammals and birds). Most of the organic COPECs have HQ values that are less than or equal to 1, indicating that those COPECs are unlikely to represent an ecological risk for aquatic wildlife. However, 4 VOCs, 2 SVOCs, 3 PAHs, 19 metals, and 1 radionuclide are presented with HQ and HI values exceeding 1, indicating potentially unacceptable ecological risk for aquatic wildlife receptors. The COPECs with the highest HQ values for the four representative wildlife receptors are aluminum (HQ 700), cadmium (HQ 200), lead (HQ 30,000), manganese (HQ 200), mercury (HQ 200), and thallium (HQ 600). Potential risk to aquatic wildlife receptors should be further evaluated for the COPECs with HQ values greater than 1 using refined EPCs and refined exposure factors for the representative receptors. Silver, potassium-40, radium-226, tritium, uranium-233, uranium-235, and uranium-238 are eliminated from further evaluation for aquatic wildlife receptors due to an HQ value not exceeding 1.

J4.4 Aquatic Life Receptors

Table J-15 lists the HQ for each groundwater COPEC for potential pelagic (in the water column) and benthic (near the bottom) aquatic life receptors (fish and invertebrates). Most of the HQ values for the COPECs are less than or equal to 1, indicating that those COPECs are unlikely to represent an ecological risk to aquatic life. However, three organic COPECs and seven inorganic COPECs are presented with HQ values exceeding 1, indicating potentially unacceptable ecological risk to aquatic life. These COPECs are 1,2,4-trimethylbenzene (HQ 3), naphthalene (HQ 2), heptachlor epoxide (HQ 2), aluminum (HQ 50), iron (HQ 90), lead (HQ 8), manganese (HQ 4), nickel (HQ 2), silver (HQ 100), and zinc (HQ 3). All SVOCs, antimony, arsenic, barium, beryllium, cadmium, chromium, hexavalent chromium, cobalt, copper, mercury, molybdenum, selenium, thallium, vanadium, potassium-40, radium-226, radium-228, tritium, uranium-233, uranium-235, and uranium-238 are eliminated from further evaluation because none of the HQ or HI values exceed 1. Potential risk to the aquatic life receptors should be further evaluated with refined EPCs.

J4.5 Screening-Level Risk Assessment Summary

Based on the soil concentrations, there is potential ecological risk for terrestrial ecological receptors for 12 organic COPECs and 15 inorganic COPECs. Based on the groundwater concentrations, there is potential ecological risk for aquatic wildlife (vertebrates) and aquatic life (fish and invertebrates) for 10 organic COPECs, 21 inorganic COPECs, and one radionuclide COPEC. Most of the soil and groundwater COPECs likely represent a negligible potential ecological risk due to HQs less than 1. Since the screening-level ERA indicates potentially unacceptable ecological risk, further evaluation with a Tier 2 baseline ERA is warranted for those COPECs and groups that have HQ values greater than 1. Section

J6 presents the first step of the baseline ERA, Step 3a, which uses refined exposure estimates to refine the COPEC list.

J5 Uncertainty Analysis

Some uncertainties are inherent in the risk assessment process, while other uncertainties result from limitations of the studies upon which the assessment is based. It is important to identify the sources and effects of uncertainty in the risk assessment to provide defensible hazard assessments and impact evaluations and to minimize subjective interpretation of the nature and degree of potential hazards posed by COPECs. Most assumptions in the ERA process are intentionally conservative, so that the risk assessment more likely overestimates than underestimates the potential hazard for ecological receptors.

Assumptions must be made in assessments of exposure and risk when values are unknown or when multiple values are possible. The qualitative effects of the major assumptions in this risk assessment are discussed in the following subsections.

J5.1 COPEC Selection

Some uncertainty exists in the selection of COPECs for a site. It is assumed that the sampling procedures and analytical methods used in the investigations adhered to standard protocols and likely reported the COPECs appropriately. A large number of soil and groundwater samples were analyzed and the number of COPECs is not likely underestimated.

J5.2 Exposure Pathways

This risk assessment did not take into account inhalation and dermal contact as potential exposure pathways for ecological receptors. Little data regarding these two exposure pathways are available (site-specific and/or in the scientific literature). The dermal contact pathway was not evaluated quantitatively. It is possible that exposures to COPECs at the site may have been underestimated for the selected receptors; however, the ingestion routes tend to be the significant drivers of exposures. Because it is impossible to account for all potential exposure pathways by all receptors, there may have been an underestimation of hazard for the selected receptors.

J5.3 End Point Receptor Selection

Uncertainty surrounds the selection of end points appropriate for the site because it is not feasible to evaluate all species and communities potentially at risk. The ecological end points selected for evaluation represent the broadest possible range of receptors (including special-status ecological receptors) that could be addressed with sufficient certainty to provide a basis for regulatory decision-making. Because of the wide range of ecological receptors selected, it is unlikely that the hazard would be underestimated for all the receptors potentially present at the site.

J5.4 Exposure Model

There are a number of caveats regarding the applicability, relevance, and usage of the exposure model for terrestrial and aquatic wildlife. The life histories of the prey species are

of critical importance for understanding the relationship of these species to the site and their potential exposure to contaminated media at the site. The model used in this assessment assumed that prey species would only be in contact with soil at this site.

J5.5 Exposure Estimates

Potential hazards of chemical exposures to the selected receptors are subject to uncertainty as a result of simplifying the assumptions used to estimate exposure.

The exposure estimate assumed that the EPC of a COPEC reported from soil or groundwater would be consistent throughout the site area. The EPC is an estimation of a reasonable exposure value based on the available data. For the screening-level ERA, the EPC was estimated as the maximum measured value. This EPC would overestimate the exposure and the risk.

Exposure parameters for the selected receptors are based on minimum body weight values derived from the literature. Actual intake rates for the selected receptors are likely smaller than those used in this ERA, resulting in an overestimation of potential exposures to site COPECs.

Furthermore, assumptions regarding food items ingested by the selected receptors were restrictive (e.g., a wildlife receptor consumes only a few representative food items at the site) and did not account for a probable varied diet, resulting in an overestimation or underestimation of the risk.

BAFs were used to estimate wildlife exposures from ingestion of contaminated prey. The BAFs were taken from a review of scientific literature. Site-specific BAFs may be over- or underestimated by the generalized values.

There are uncertainties associated with how extensively a receptor will use a site. In this risk assessment, it was assumed that receptors would forage exclusively at the site, which leads to an overestimation of the potential risk.

J5.6 Bioavailability

Because of the paucity of data on the amount of a chemical that may be bioavailable at any one site, the food chain modeling assumed 100 percent bioavailability for all COPECs, compared with reference literature toxicity values. Exposure estimation assumed that COPECs were completely bioavailable (which is unlikely under natural conditions), thereby resulting in an overestimation of hazard.

J5.7 Toxicity Reference Value Extrapolations

Uncertainties resulting from TRV extrapolation affect the evaluation of potential effects on sensitive or protected species and consideration of the bioavailability and toxicity of the forms of COPECs present at the site. Uncertainty can be introduced into the estimation of wildlife toxicity using TRVs as a result of the following:

- Extrapolation from acute or subchronic exposure to chronic exposure duration
- Extrapolation from a more toxicologically sensitive species than a selected receptor

- Extrapolation from lowest-observed-adverse-effect level (LOAEL) to no-observed-adverse-effect level (NOAEL)
- Extrapolation across species of varying taxonomic relatedness, feeding habits, and body size
- Extrapolation from representative species to sensitive or protected species
- Consideration of bioavailability, assimilation, and relative toxicity of chemical forms used in toxicity testing versus forms occurring in nature

The ERA implemented adjustment factors when these conditions were encountered to minimize the likelihood of underestimating the risk.

J5.8 Uncertainty Analyses of Risk Characterization

The screening-level ERA overestimates the actual hazard of adverse ecological effects because of the conservative nature of the assumptions used. For COPECs with estimated exposures lower than the toxicity benchmark values, the probability of significant ecological hazard is very low. Potential risk from chemical exposures that exceed the toxicity benchmark values cannot be eliminated from consideration; however, marginal exceedances of the benchmark values would suggest that significant levels of risk at the population or community level are not likely.

Benchmark values for some COPECs, particularly for terrestrial plants and invertebrates, are unavailable. It is uncertain whether the lack of these benchmarks represents an overestimation or underestimation of the risk.

The risk estimates included the calculation of an ecological HI. An ecological HI is a measure of the potential for adverse effects due to multiple COPECs based on the assumption that the effects are additive for COPECs that act by the same toxicological mechanisms. Risk may be overestimated for these COPECs because chemicals may interact in an additive, antagonistic, or synergistic manner indicating toxicity is variable.

J6 Refined Exposure Estimate (Step 3A)

This risk assessment includes a step for refined exposure estimates described by Step 3a of Navy policy (DON, 1999, 2001) and USEPA guidance (USEPA, 1997a). The refined exposure estimate uses exposure factors that are more realistic for the site than the most-conservative values used for Steps 1 and 2. Only COPECs with HQ values exceeding 1 and COPECs that lacked benchmarks in Step 2 were retained for further risk estimation using refined exposure estimates under Step 3a.

J6.1 Soil COPEC Concentrations

The refined EPCs for soil COPECs are the 95 percent upper confidence limit (UCL) representative of average exposures at Transfer Parcel FED-1A presented in Table J-2. The 95 percent UCLs were calculated with the ProUCL 3.0 software from USEPA. The ProUCL recommendation of the best 95 percent UCL, based on the distribution of the data, was accepted. Non-detect data were evaluated as one half the detection limits in the ProUCL

software. The lesser value of the maximum or the 95 percent UCL recommended by ProUCL was used as the COPEC EPC.

Background threshold values for Alameda Point were compared to the maximum reported concentration (Table J-2). If the maximum reported concentration was less than the background threshold value, the COPEC concentrations were considered to be statistically within the range of background concentrations. The inorganic soil COPECs that were not statistically greater than background concentrations were aluminum, barium, beryllium, chromium, iron, manganese, mercury, nickel, and vanadium.

J6.2 Groundwater COPEC Concentrations

Refined groundwater COPEC concentrations were evaluated by using only groundwater sampling locations that are within 100 feet of the shoreline. The near-shore groundwater locations were considered more representative of groundwater that may enter the bay than the Transfer Parcel FED-1A groundwater locations located further inland. The refined groundwater exposure concentration is the maximum concentration of the near-shore data (Table J-16). Groundwater COPECs that were not reported from groundwater locations in the near-shore area were not evaluated further.

Background threshold values for Alameda Point were compared to the maximum reported concentration (Table J-3). If the maximum reported concentration was less than the background threshold value, the COPEC concentrations were considered to be statistically within the range of background concentrations. The inorganic groundwater COPECs that were not statistically greater than background concentrations were arsenic, barium, chromium, cobalt, copper, iron, lead, manganese, nickel, vanadium, and zinc.

J6.3 Exposure Factors

Exposure factors for terrestrial wildlife (Table J-17) and aquatic wildlife (Table J-18) were refined to represent average site-specific conditions more closely. Body weights, ingestion rates, and site use factors were revised. The terrestrial site area was estimated as 162 hectares (400 acres). The aquatic site area was estimated as 2.3 hectares (5.7 acres), based on an area with length of 500 feet (portion of Transfer Parcel FED-1A shoreline) and width of 500 feet (distance from the shoreline into bay assumed characterized by the groundwater COPEC EPCs).

J7 Refined Risk Estimations

Refined risk estimations were prepared for terrestrial wildlife, aquatic wildlife, and aquatic life receptors using the refined exposure estimates.

During the refined risk estimations, inorganic COPECs with concentrations not statistically greater than the Alameda Point background concentrations were eliminated from further evaluation.

J7.1 Terrestrial Plant and Invertebrate Receptors

Table J-19 lists the refined HQ for each soil COPEC and potential terrestrial plant and invertebrate receptors. Most of the HQ values for organic chemicals are not available, since

few benchmarks are available for organic compounds. None of the available plant or invertebrate organic COPEC HQ values exceeds 1. Four inorganic HQ values for plants exceed 1: aluminum (HQ 100), chromium (HQ 30), thallium (HQ 3), and vanadium (HQ 10). One inorganic HQ value for invertebrates exceeds 1: chromium (HQ 80). Aluminum, chromium, and vanadium concentrations were not statistically greater than the background concentrations.

J7.2 Terrestrial Wildlife Receptors

Table J-20 lists the refined HQ for each soil COPEC and potential terrestrial wildlife receptor (mammals and birds). The HI values for SVOCs and pesticides are greater than 1. Except for butylbenzyl phthalate (HQ 4), the refined HQ values for organic COPECs are less than 1, indicating that the COPECs are unlikely to represent an ecological risk for wildlife.

Six inorganic COPECs had refined HQ values exceeding 1 and the metals HI value exceeding 1, indicating potentially unacceptable ecological risk to one or more of the five representative wildlife receptors: aluminum (HQ 30), cadmium (HQ 20), chromium (HQ 2), lead (HQ 100), nickel (HQ 20), and selenium (HQ 2). Aluminum, chromium, and nickel concentrations were not statistically greater than the Alameda Point background concentrations.

The maximum terrestrial wildlife HQ for chromium is 2. Retaining chromium as a soil COPEC would not change the ERA conclusions, which identify five other COPECs that are not expected to cause adverse ecological effects due to low refined HQs, low frequency of detection, or similarity to Alameda Point background concentrations.

J7.3 Aquatic Wildlife Receptors

Table J-21 lists the refined HQ for each water COPEC and potential aquatic wildlife receptor (mammals and birds). The refined HQ values for all organic COPECs are less than 1, indicating that the COPECs are unlikely to represent an ecological risk for aquatic wildlife.

One inorganic COPEC, lead (HQ 2), had a refined HQ value exceeding 1 causing the metals HI value to exceed 1, indicating potentially unacceptable ecological risk to one or more of the four representative wildlife receptors. Lead concentrations were not statistically greater than the background concentration.

The maximum aquatic receptor HQ for chromium is less than 1. The maximum aquatic receptor HQ for lead is 2. Retaining chromium and lead as groundwater COPECs would not change the ERA conclusions, which identify two other COPECs that are not expected to cause adverse ecological effects due to low refined HQs or low frequency of detection.

J7.4 Aquatic Life Receptors

Table J-22 lists the refined HQ for each groundwater COPEC and potential aquatic life receptor (fish and invertebrates). The refined HQ values for most organic COPECs are less than 1, indicating that the COPECs are unlikely to represent an ecological risk for aquatic wildlife. The refined HQ for heptachlor epoxide is 2.

One inorganic COPEC, aluminum (HQ 20), had a refined HQ value exceeding 1, indicating potentially unacceptable ecological risk to aquatic life receptors.

J7.5 LOAEL-Based Toxicity Evaluation

COPECs with HQ values greater than 1 (as shown in Tables J-20 and J-21) were further evaluated with effect-threshold toxicity values. The effect-threshold toxicity values, based on LOAEL toxicity data, are less conservative than the NOAEL values used for the HQ calculation. The effect-threshold (LOAEL-based) toxicity values represent exposure levels at which adverse effects are expected. The LOAEL-based TRVs (Table J-23) were selected from the BTAG High-TRVs and the scientific literature. If a LOAEL value was not available, one was estimated from a NOAEL value and an uncertainty factor of 10.

A LOAEL-HQ value was calculated using the refined exposure estimates for terrestrial and aquatic wildlife (birds and mammals) and the LOAEL-based TRV (Tables J-24 and J-25). LOAEL-HQ values were less than 1 for all soil COPECs except aluminum. Aluminum soil concentrations do not exceed the background levels and aluminum is not considered to represent a potential ecological hazard unless the soil pH is less than 5.5 (USEPA, 2003), which is unlikely for soil at Transfer Parcel FED-1A. LOAEL-HQ values were less than 1 for all the groundwater COPECs. While LOAEL-HQs for all individual pesticides are below 1, the LOAEL-HI value for pesticides is 2. However, risk may be overestimated for these COPECs because chemicals may interact in an additive, antagonistic, or synergistic manner that indicates toxicity is variable.

In accordance with the accepted procedures for a streamlined ERA (SLERA), an analysis of spatial distribution of chemicals has not been done for ERAs for other Alameda Point sites. Removal of pavement/structures may occur in the future, so spatial distributions or hot spots would not change the conclusions of the SLERA.

J8 Uncertainty Analysis – Refined exposure Estimates

For the refined exposure risk estimates, somewhat less conservative estimates were used for the exposure parameters. The soil EPCs were estimated with the 95 percent UCL of the arithmetic mean. The refined soil EPCs likely overestimate the exposure and risk, but not as much as the EPCs based on maximum concentrations. The refined groundwater EPCs were estimated using near-shore sampling locations. The refined groundwater EPCs likely overestimated exposure and risk of aquatic organisms due to dispersion and dilution effects.

Refined exposure factors for the selected avian and mammalian ecological receptors were based on average body-weight estimates. These exposure factors may over- or underestimate the exposure and risk. The exposure estimate was also refined based on a receptor foraging for a portion of time at the site, based on average foraging ranges published in the literature. Actual foraging ranges for the selected receptors are unknown, which may lead to overestimation or underestimation of hazard for those receptors.

The refined exposure risk estimates more likely overestimate than underestimate the actual hazard of adverse ecological effects because of the conservative nature of the assumptions used. A few of the exposure parameters are as likely to overestimate as underestimate the exposure and risk, but the likelihood of overestimating the exposure that is associated with

the majority of the exposure parameters leads to an overall likelihood of overestimating the exposure and risk. The conservative estimates of potential toxic effects were the same for the screening-level ERA as for the refined exposure risk estimates.

Chemicals for which no toxicological data were available were not identified as final COPECs in the refined characterization. Although some uncertainty is associated with this approach, it was assumed that a lack of toxicological data demonstrates that these chemicals historically have not been identified as significant ecological risk drivers. The lack of toxicological data indicates that it is unlikely these chemicals pose an ecological risk.

J9 Risk Characterization and Summary

After Tier 1 Steps 1 and 2, this screening-level ERA indicated several organic and inorganic soil and groundwater chemicals represent potentially unacceptable ecological risk to terrestrial wildlife, aquatic wildlife, and aquatic life. Exposure estimates were further analyzed according to the procedures of Step 3a to refine the COPEC list. The refined risk estimates so derived indicated potentially unacceptable ecological risk to terrestrial receptors from SVOC and metal COPECs in soil. The refined risk estimates also indicated potentially unacceptable risk to aquatic receptors from heptachlor epoxide and aluminum in groundwater.

J9.1 Terrestrial Receptors

The apparently unacceptable potential ecological risk to terrestrial receptors, as indicated by refined HQs and HIs ranging up to 100 for potential risk to the song sparrow and American robin (Table J-20) (due to lead exposure from ingestion of plants, soil invertebrates, and incidental soil), may overstate the actual potential for ecological hazards at Transfer Parcel FED-1A. Considering background concentrations, the soil COPECs and maximum HQ values are butylbenzyl phthalate (HQ 4), cadmium (HQ 20), lead (HQ 100), selenium (HQ 2), and thallium (HQ 3).

Butylbenzyl phthalate, selenium, and thallium showed HQ values of less than 5. Butylbenzyl phthalate is a common laboratory contaminant and was only reported in 6 percent of the soil samples. The frequencies of detection for selenium and thallium were 2 percent and 10 percent, respectively. These COPECs may not warrant further evaluation since the risk evaluation included many conservative estimates.

Evaluation of the HQ values for cadmium and lead concentrations in Alameda Point background suggests that they are equivalent to the HQ values for cadmium and lead at Transfer Parcel FED-1A. The cadmium HQ value of 20 for background soil concentration (1.33 milligrams per kilogram [mg/kg]) is the same as the cadmium HQ value for the refined EPC (1.22 mg/kg) for Transfer Parcel FED-1A. The lead HQ value of 100 for background soil concentration (32.6 mg/kg) is the same as the lead HQ value for the refined EPC (25.4 mg/kg) for Transfer Parcel FED-1A.

Additional evaluation of the soil COPECs using LOAEL-based TRVs (Table J-24) indicates that none of the LOAEL-HQs exceed 1, which indicates that adverse ecological effects due to soil COPEC concentrations are not expected at Transfer Parcel FED-1A. (The aluminum HQ exceeded 1 but aluminum soil concentrations do not exceed the background levels and

aluminum is not considered to represent a potential ecological hazard unless the soil pH is less than 5.5 [USEPA, 2003]).

J9.2 Aquatic Receptors

The potential for ecological risk to aquatic life (fish and invertebrates) may exist, based on the refined HQ values of 20 for aluminum and 2 for heptachlor epoxide. However, it is likely that the potential risk due to aluminum concentrations does not warrant further evaluation since there is no identified aluminum contaminant plume or release. The aquatic life toxicity factor for aluminum is a conservative screening-level value, which likely causes an overestimation of the potential risk from aluminum. Heptachlor epoxide is not likely to represent an actual risk at the site because it was detected in only 4 percent of the groundwater samples (1 of 25 samples) and the HQ value is low.

The refined risk estimates indicate that lead (HQ 2) may represent a potential risk to the aquatic wildlife (birds and mam\mals). Additional evaluation using LOAEL-based TRV indicates that the lead LOAEL-HQ does not exceed 1, which indicates that adverse ecological effects due to groundwater lead concentrations are not expected at Transfer Parcel FED-1A.

In addition, the actual exposure of aquatic receptors may be less than the estimates used in this ERA, considering tidal mixing and dispersion occurring upon groundwater encountering bay water. This factor has been estimated as a 10-fold reduction in concentrations by National Oceanic and Atmospheric Administration (NOAA) (Buchman, 1999).

J9.3 Conclusions and Recommendations

Most exposure and toxicity assumptions and estimates used in this screening-level ERA are intentionally conservative; therefore, the risk assessment likely overestimates rather than underestimates the potential hazard for ecological receptors. For the exposure estimate of Step 3a, the COPEC concentrations and wildlife exposure factors were refined to represent more realistic site-specific conditions. The refined risk estimate is expected to overestimate the risk, yet include some site-specific estimates.

Based on the soil COPEC concentrations, the screening-level estimates indicate potential ecological risk for terrestrial ecological receptors from one organic COPEC (butylbenzyl phthalate) and four inorganic COPECs (cadmium, lead, selenium, thallium). These COPECs likely represent negligible potential ecological risk, due to low refined HQs, low frequency of detection, or similarity to Alameda Point background concentrations. Additional evaluation indicates that adverse ecological effects are unlikely to occur at existing soil COPEC concentrations. Further, future exposure conditions will remain incomplete based on the FED-1A land use designation. Therefore, no further investigation or assessment of Transfer Parcel FED-1A soil is recommended.

Based on the groundwater COPEC concentrations, there is potential ecological risk for aquatic life (fish and invertebrates) from heptachlor epoxide and aluminum. It is unlikely that aluminum represents an actual ecological risk at the site, due to the uncertainties of the toxicity value. It is also unlikely that heptachlor epoxide represents an actual risk, due to the low frequency of detection and low HQ. Potential risk was indicated by screening-level estimates for aquatic wildlife (mammals and birds) due to groundwater lead; however,

adverse ecological effects are unlikely at existing groundwater lead concentrations. Therefore, no further investigation or assessment of Transfer Parcel FED-1A groundwater is recommended.

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Figures

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N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

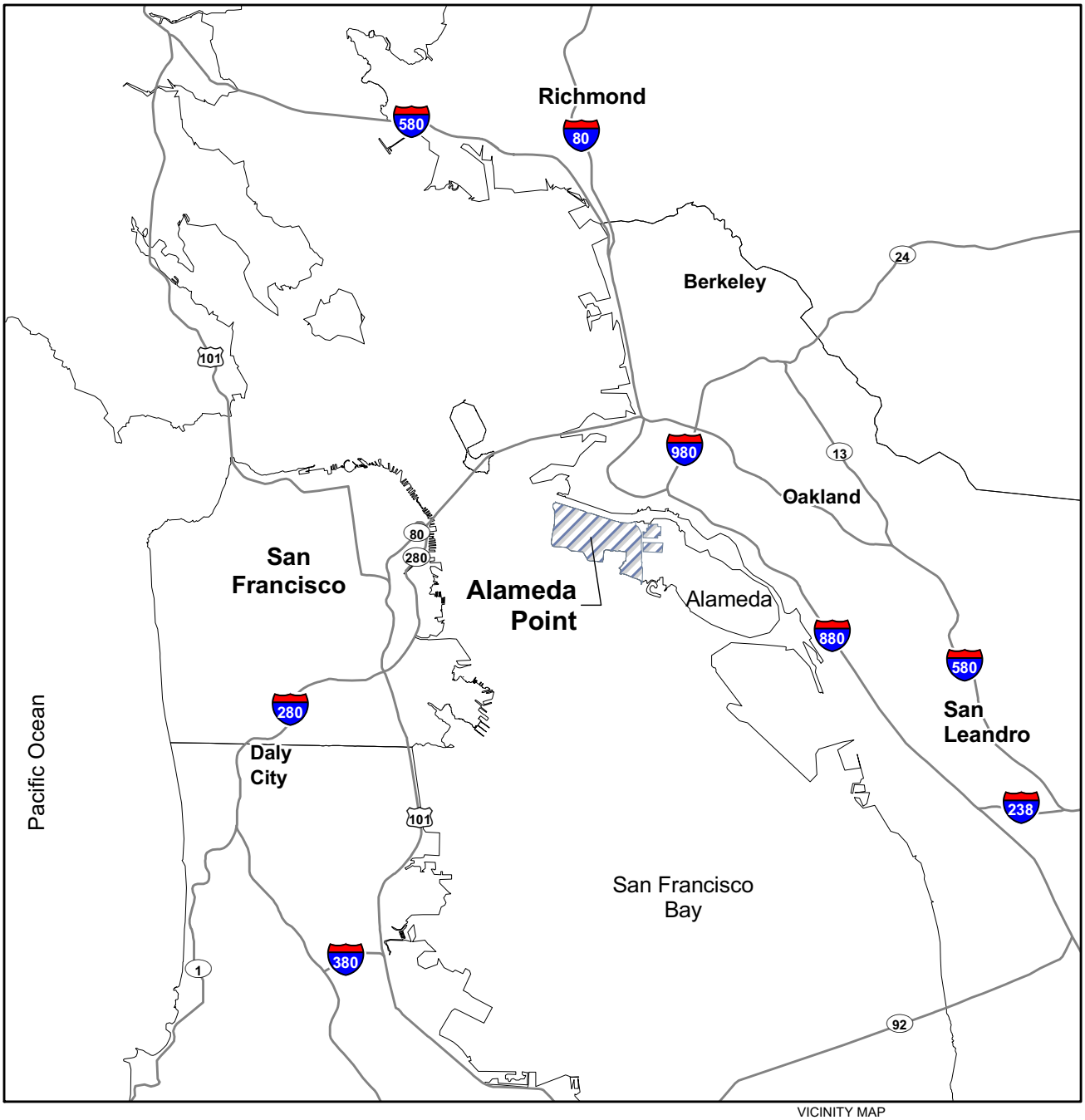
PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURES J-1 THROUGH J-3

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
NAVAL FACILITIES ENGINEERING COMMAND, SOUTHWEST
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil



LEGEND

Alameda Naval Air Station

County Boundary

VICINITY MAP

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Miles

FIGURE J-1
Alameda Point Regional Map
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

CH2MHILL

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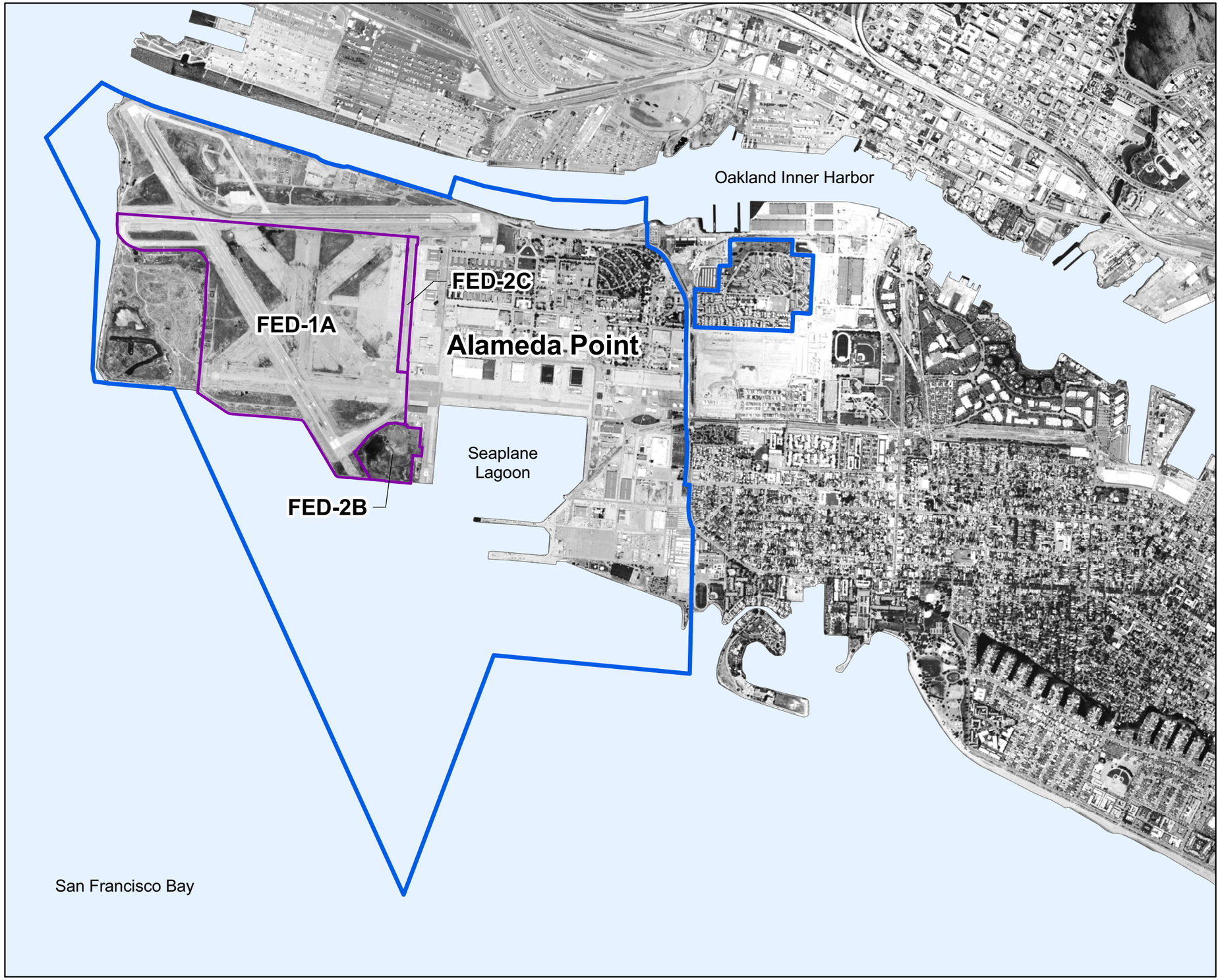
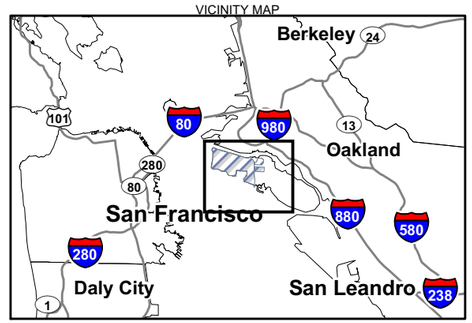




LEGEND

- Alameda Point Navy Property Boundaries
- Transfer Parcel Boundaries
- Water

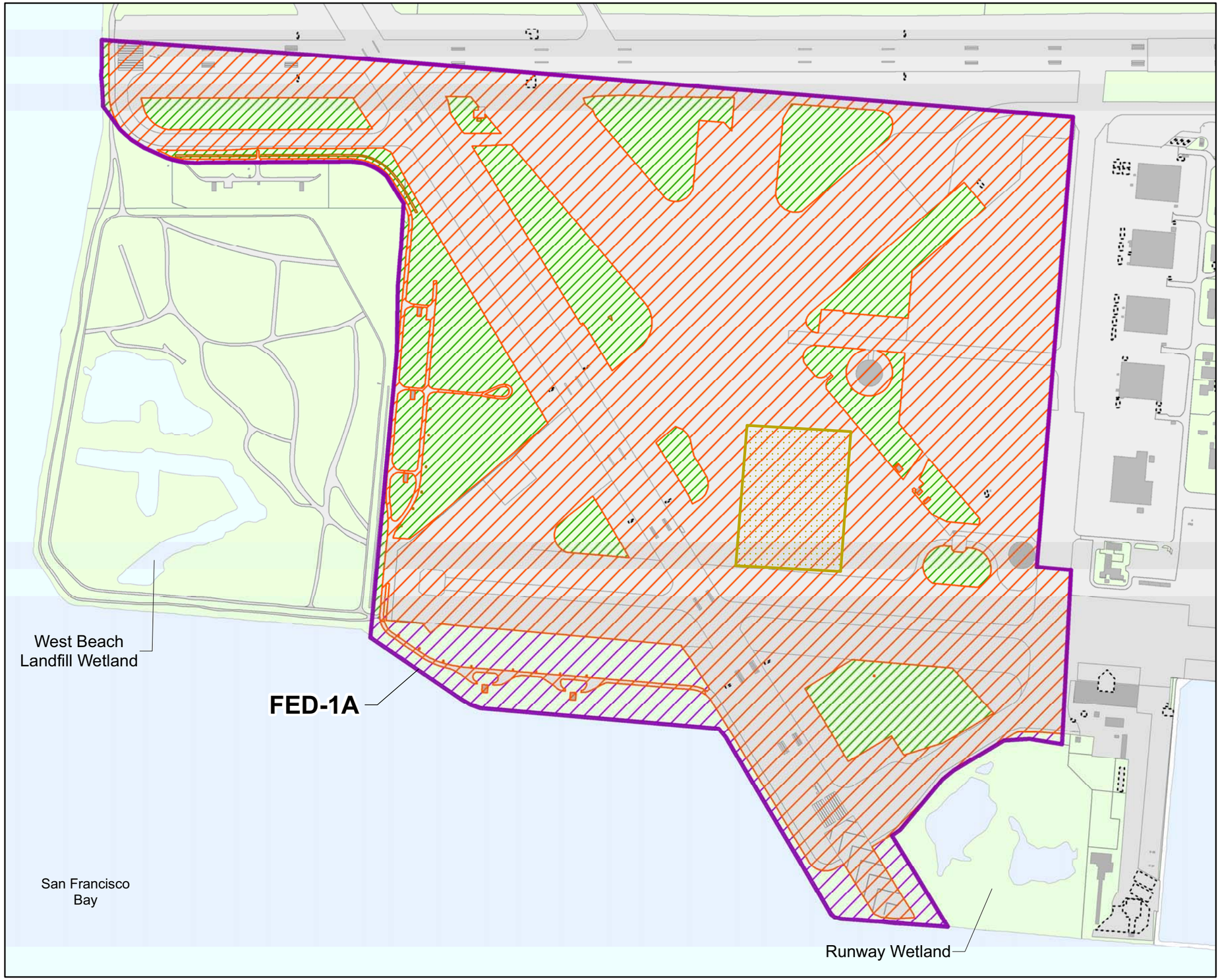
Notes:
EDC = Economic Development Conveyance
FED = Federal Agency

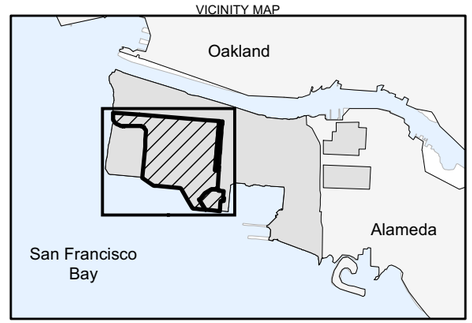
Aerial Source:
National Aerial Imagery Program, August 2005

N

0 2,000 4,000
Feet

FIGURE J-2
Site Location Map
Site Inspection Report for Transfer Parcels
FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California





LEGEND

- Transfer Parcel FED-1A Boundary
- Unpaved Area
- Road or Paved Area
- Building or Structure
- Water
- California Least Tern Sanctuary
- Barren Habitat
- Coastal Scrub
- Non-Native Grass

Notes:
EBS - Environmental Baseline Survey
FED - Federal Agency
ERA - Environmental Baseline Survey

Refference For Wetland Locations:
Tetra Tech EM INC. 2001. Wetland Delineation, IR Site 15, Alameda Point. May.

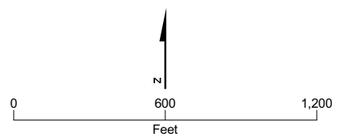


FIGURE J-3
Habitat Areas in Transfer Parcel FED-1A
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

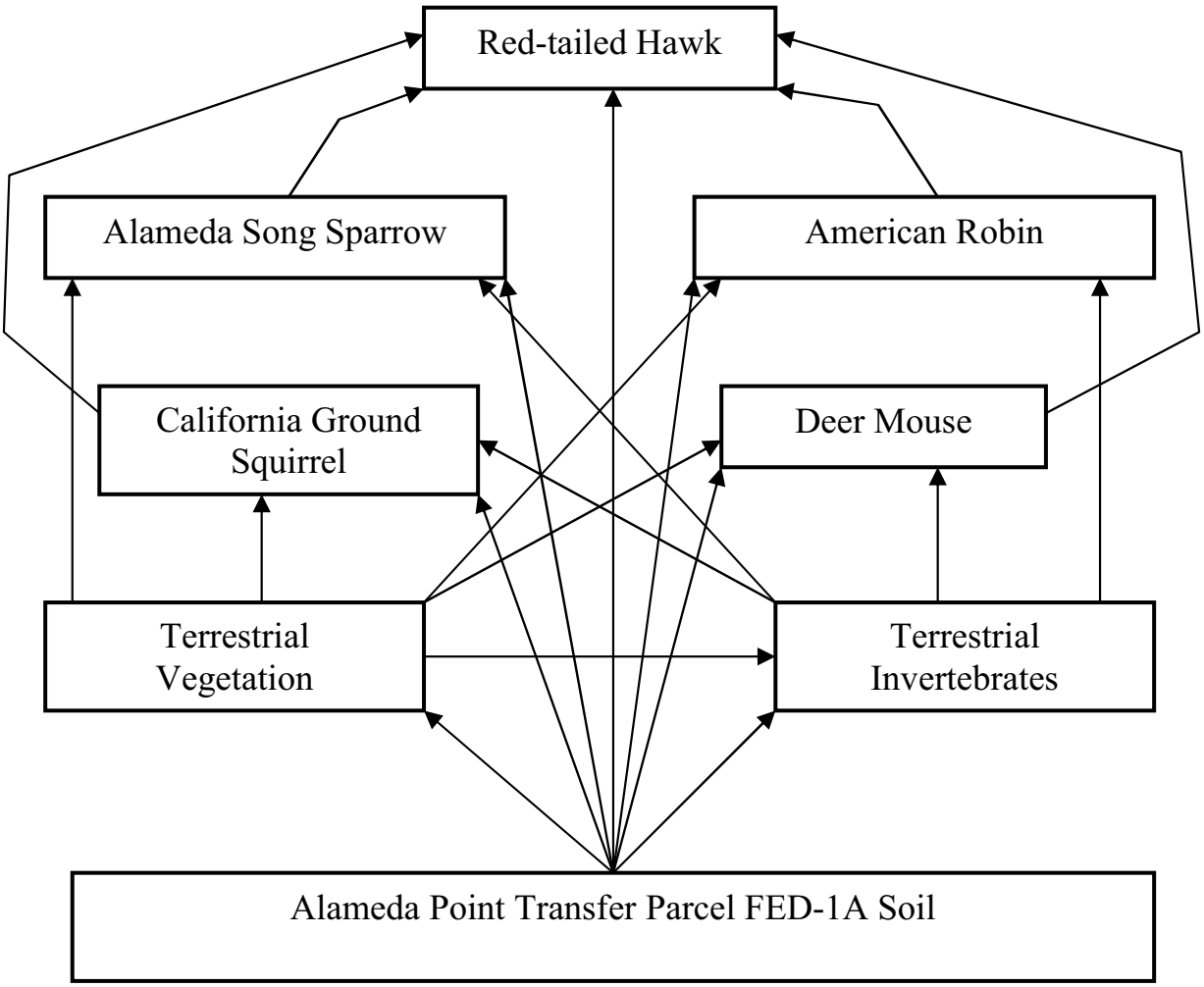


FIGURE J-4
Conceptual Site Model and Representative Ecological Receptors for Soil-Based Evaluation
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

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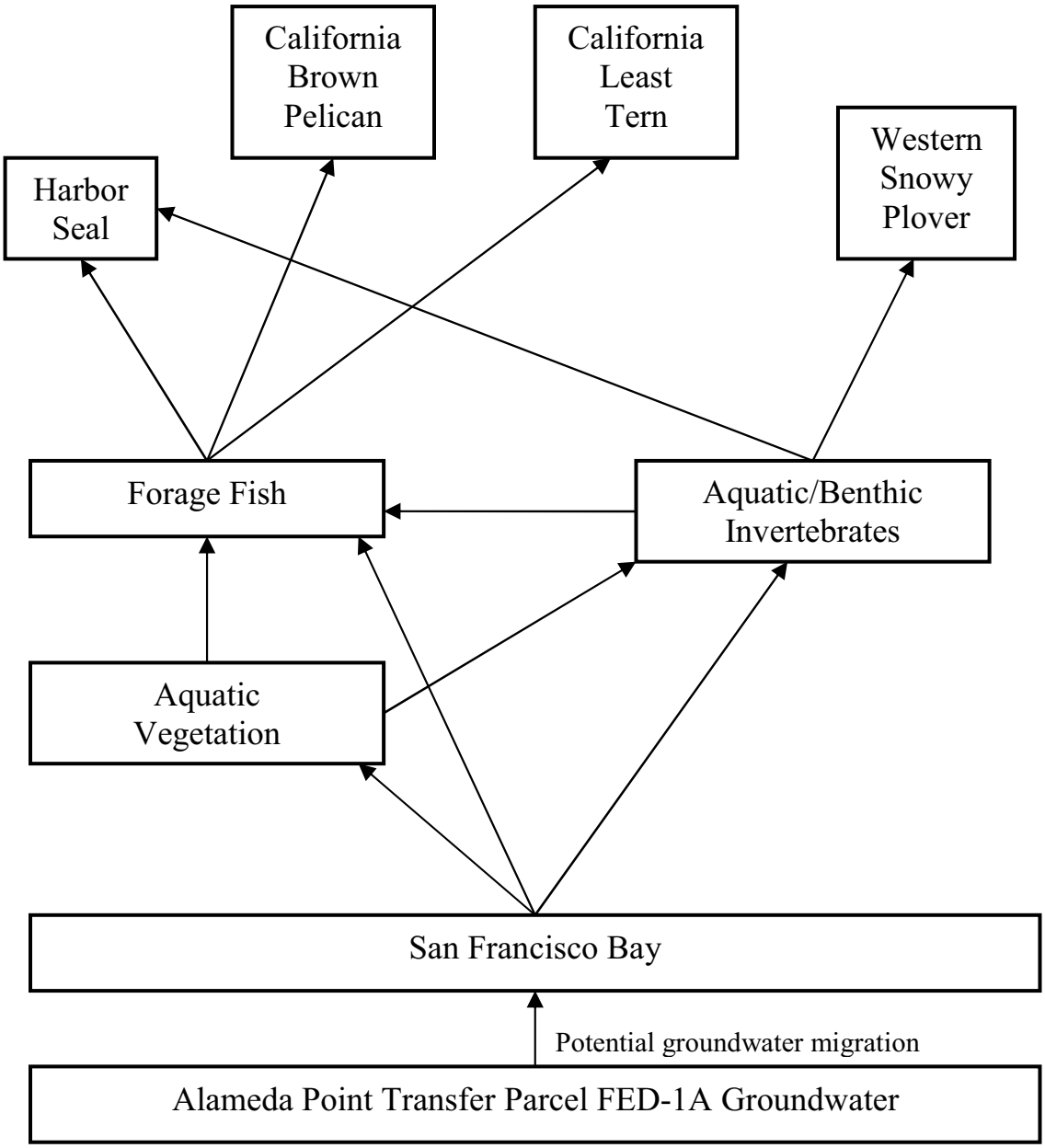

FIGURE J-5
Conceptual Site Model and Representative Ecological Receptors for Groundwater-Based Evaluation
Site Inspection Report for Transfer Parcels FED-1A, FED-2B, and FED-2C
Alameda Point, Alameda, California

Tables

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Table J-1
Special-Status Species Occurring or
Potentially Occurring in the Habitats of Alameda Point

Scientific Name	Common Name	Status	Occurrence
Plants			
Amsinckia lunaris	Bent-flowered fiddleneck	CNPS-1B	HA
Astralagus tener var tener	Alkali milk-vetch	CNPS-1B	HA
Atriplex joaquiniana	San Joaquin spearscale	CNPS-1B	HA
Chorizanthe cuspidata var cuspidata	San Francisco Bay spineflower	CNPS-1B	NH
Chorizanthe robusta var robusta	Robust spineflower	FE/CNPS-1B	HA
Cordylanthus maritimus palustris	Point Reyes bird's-beak	CNPS-1B	NH
California macrophylla	Round-leaved filaree	CNPS-2	HA
Gilia capitata ssp chamissonis	Blue coast (dune) gilia	CNPS-1B	NH
Holocarpha macradenia	Santa Cruz tarplant	FT/SE	HA
Horkelia cuneata sericea	Kellogg's horkelia	CNPS-1B	HA
Lasthenia conjugens	Contra Costa goldfields	FE/CNPS-1B	HA
Layia carnosa	Beach layia	FE/SE	NH
Leptosiphon rosaceus	Rose leptosiphon	CNPS-1B	HA
Plagiobothrys chorisianus var chorisianus	Choris' popcorn-flower	CNPS-1B	HA
Sanicula maritima	Adobe sanicle	SR	HA
Trifolium depauperatum var hydrophilum	Saline cover	CNPS-1B	HA
Invertebrates			
Cicindela hirticollis gravida	Sandy beach tiger beetle	CNDDB	NH
Trachusa gummifera	A leaf-cutting bee, no common name	CNDDB	NH
Tryonia imitator	California brackishwater snail	CNDDB	NH
Fish			
Acipenser medirostris	Green sturgeon	FT/CSC	PO
Eucyclogobius newberryi	Tidewater goby	FE/CSC	HA
Hypomesus transpacificus	Delta smelt	FT/ST	PO
Oncorhynchus mykiss	Steelhead	FT/CSC	PO
Oncorhynchus tshawytscha	Chinook salmon, winter run	FE/SE	PO
Spirinchus thaleichthys	Longfin smelt	CSC	PO
Reptiles			
Masticophis lateralis euryxanthus	Alameda whipsnake	FT/ST	HA
Amphibians			
Ambystoma californiense	California tiger salamander	FT/CSC	HA
Mammals			
Antrozous pallidus	Pallid bat	CSC	PO
Corynorhinus townsendii	Townsend's big-eared bat	CSC	PO
Eumetopias jubatus	Steller sea lion	FT	PO
Eumops perotis californicus	Western mastiff bat	CSC	PO
Neotoma fuscipes annectens	San Francisco dusky-footed woodrat	CSC	HA
Nyctinomops macrotis	Big free-tailed bat	CSC	PO
Reithrodontomys raviventris	Salt marsh harvest mouse	FE/SE	NH
Scapanus latimanus parvus	Alameda Island mole	CSC	HA
Sorex vagrans halicoetes	Salt marsh wandering shrew	CSC	NH

Table J-1
Special-Status Species Occurring or
Potentially Occurring in the Habitats of Alameda Point

Scientific Name	Common Name	Status	Occurrence
Birds			
Aquila chrysaetos	Golden eagle	CNDDB	PO
Accipiter cooperii	Cooper's hawk	CNDDB	PO
Athene cunicularia	Burrowing owl	CSC	PO
Charadrius alexandrinus nivosus	Western snowy plover	FT/CSC	NH
Circus cyaneus	Northern harrier	CSC	PO
Elanus leucurus	White-tailed kite	CFP	PO
Eremophila alpestris actia	California horned lark	CNDDB	PO
Falco columbarius	Merlin	CNDDB	PO
Falco peregrinus anatum	American peregrine falcon	SE	PO
Geothlypis trichas sinuosa	Salt marsh common yellowthroat	CSC	PO
Lanius ludovicianus	Loggerhead shrike	CSC	PO
Laterallus jamaicensis coturniculus	California black rail	ST	NH
Melospiza melodia pusillula	Alameda song sparrow	CSC	PO
Pelecanus occidentalis californicus	California brown pelican	FE/SE	PO
Phalacrocorax auritus	Double-crested cormorant	CNDDB	PO
Rallus longirostris obsoletus	California clapper rail	FE/SE	NH
Sternula antillarum browni	California least tern	FE/SE	PO

Acronyms/Abbreviations:
- CFP – California Department of Fish and Game – fully protected
- CNPS – California Native Plant Society
- CNPS-1B – plants rare or endangered in California and elsewhere
- CNPS-2 – plants rare or endangered in California, more common elsewhere
- CSC – California special-concern species
- FE – federally listed – endangered
- FT – federally listed – threatened
- HA – potentially suitable habitat present, species historically absent, unlikely to occur at Transfer Parcel FED-1A
- NH – no suitable habitat present at Transfer Parcel FED-1A
- PO – occurs or potentially occurs at or near Transfer Parcel FED-1A
- SE – California state listed – endangered
- SR – California state listed – rare
- ST – California state listed – threatened

Table J-2
Soil Chemicals of Potential Ecological Concern

COPEC	CAS Number	Minimum Detection	Maximum Detection	Frequency of Detection	Arithmetic Mean [a]	Standard Deviation	Arithmetic 95% UCL	Land's 95% UCL	Gamma 95% UCL	Approximate Chebyshev Limit on 95% UCL	ProUCL [b] Recommendation	Distribution Dependent 95% UCL	Final 95% UCL Refined EPC [c]	Basis for Final 95% UCL Refined EPC	Background Threshold Value [d]	Background Comparison
Volatile Organic Compound [e] (mg/kg)																
acetone	67-64-1	1.80E-02	1.80E-02	1/21	2.06E-02	3.45E-02	3.36E-02	2.94E-02	3.11E-02	5.35E-02	Nonparametric (0.05)	5.35E-02	1.80E-02	Maximum	NA	NA
Semivolatile Organic Compounds [e] (mg/kg)																
bis(2-ethylhexyl)phthalate	117-81-7	3.80E-02	6.60E-02	4/51	2.83E-01	3.91E-01	3.74E-01	3.73E-01	3.64E-01	5.21E-01	Nonparametric (0.05)	5.21E-01	6.60E-02	Maximum	NA	NA
butyl benzyl phthalate	85-68-7	3.90E-02	2.70E-01	3/51	2.86E-01	3.90E-01	3.78E-01	3.88E-01	3.68E-01	5.24E-01	Nonparametric (0.05)	5.24E-01	2.70E-01	Maximum	NA	NA
di-n-butyl phthalate	84-74-2	1.90E-02	1.90E-02	1/51	3.06E-01	4.08E-01	4.02E-01	4.76E-01	4.02E-01	5.55E-01	Nonparametric (0.05)	5.55E-01	1.90E-02	Maximum	NA	NA
pentachlorophenol	87-86-5	3.50E-02	3.50E-02	1/51	1.33E+00	1.97E+00	1.79E+00	1.84E+00	1.74E+00	2.53E+00	Nonparametric (0.05)	2.53E+00	3.50E-02	Maximum	NA	NA
phenol	108-95-2	2.00E-02	2.00E-02	1/51	2.95E-01	3.86E-01	3.86E-01	3.81E-01	3.74E-01	5.31E-01	Nonparametric (0.05)	5.31E-01	2.00E-02	Maximum	NA	NA
Polycyclic Aromatic Hydrocarbons [e] (mg/kg)																
acenaphthene	83-32-9	9.90E-04	6.70E-01	38/359	4.65E-02	1.81E-01	6.23E-02	2.38E-02	5.44E-02	8.81E-02	Nonparametric (0.05)	8.81E-02	8.81E-02	Statistics	NA	NA
acenaphthylene	208-96-8	1.80E-03	3.80E-02	17/355	4.36E-02	1.78E-01	5.92E-02	2.00E-02	5.10E-02	8.48E-02	Nonparametric (0.05)	8.48E-02	3.80E-02	Maximum	NA	NA
anthracene	120-12-7	4.70E-04	7.10E-01	58/355	4.68E-02	1.81E-01	6.27E-02	2.45E-02	5.49E-02	8.88E-02	Nonparametric (0.05)	8.88E-02	8.88E-02	Statistics	NA	NA
benz(a)anthracene	56-55-3	3.50E-04	3.50E+01	150/359	2.05E-01	1.98E+00	3.77E-01	5.46E-02	2.50E-01	6.60E-01	Nonparametric (0.05)	6.60E-01	6.60E-01	Statistics	NA	NA
benzo(b)fluoranthene	205-99-2	5.80E-04	8.70E+01	166/359	4.24E-01	4.78E+00	8.40E-01	8.17E-02	5.23E-01	1.52E+00	Nonparametric (0.05)	1.52E+00	1.52E+00	Statistics	NA	NA
benzo(k)fluoranthene	207-08-9	3.60E-04	3.10E+01	119/359	2.53E-01	2.28E+00	4.52E-01	5.59E-02	3.10E-01	7.78E-01	Nonparametric (0.05)	7.78E-01	7.78E-01	Statistics	NA	NA
benzo(g,h,i)perylene	191-24-2	5.10E-04	3.60E+01	214/359	2.19E-01	2.01E+00	3.94E-01	8.68E-02	2.64E-01	6.82E-01	Nonparametric (0.05)	6.82E-01	6.82E-01	Statistics	NA	NA
benzo(a)pyrene	50-32-8	4.60E-04	7.20E+01	162/359	3.81E-01	4.09E+00	7.37E-01	7.50E-02	4.69E-01	1.32E+00	Nonparametric (0.05)	1.32E+00	1.32E+00	Statistics	NA	NA
chrysene	218-01-9	4.10E-04	4.30E+01	192/359	2.59E-01	2.45E+00	4.72E-01	9.16E-02	3.15E-01	8.23E-01	Nonparametric (0.05)	8.23E-01	8.23E-01	Statistics	NA	NA
dibenz(a,h)anthracene	53-70-3	1.90E-04	1.20E+01	114/357	1.07E-01	7.53E-01	1.73E-01	4.06E-02	1.29E-01	2.81E-01	Nonparametric (0.05)	2.81E-01	2.81E-01	Statistics	NA	NA
fluoranthene	206-44-0	3.20E-04	2.20E+01	159/359	1.55E-01	1.26E+00	2.64E-01	5.82E-02	1.87E-01	4.44E-01	Nonparametric (0.05)	4.44E-01	4.44E-01	Statistics	NA	NA
fluorene	86-73-7	1.20E-03	3.60E-01	40/359	4.56E-02	1.77E-01	6.10E-02	2.45E-02	5.33E-02	8.63E-02	Nonparametric (0.05)	8.63E-02	8.63E-02	Statistics	NA	NA
indeno(1,2,3-cd)pyrene	193-39-5	5.90E-04	5.20E+01	177/359	2.72E-01	2.89E+00	5.24E-01	7.02E-02	3.34E-01	9.37E-01	Nonparametric (0.05)	9.37E-01	9.37E-01	Statistics	NA	NA
2-methylnaphthalene	91-57-6	3.10E-04	1.00E+00	79/359	5.31E-02	1.87E-01	6.94E-02	3.52E-02	6.24E-02	9.61E-02	Nonparametric (0.05)	9.61E-02	9.61E-02	Statistics	NA	NA
naphthalene	91-20-3	3.50E-04	5.70E-01	67/359	4.59E-02	1.79E-01	6.15E-02	2.50E-02	5.38E-02	8.70E-02	Nonparametric (0.05)	8.70E-02	8.70E-02	Statistics	NA	NA
phenanthrene	85-01-8	3.80E-04	2.80E+00	153/359	7.32E-02	2.59E-01	9.57E-02	5.10E-02	8.64E-02	1.33E-01	Nonparametric (0.05)	1.33E-01	1.33E-01	Statistics	NA	NA
pyrene	129-00-0	4.30E-04	2.50E+01	192/359	1.72E-01	1.43E+00	2.96E-01	6.83E-02	2.07E-01	5.00E-01	Nonparametric (0.05)	5.00E-01	5.00E-01	Statistics	NA	NA
Polychlorinated Biphenyl (mg/kg)																
Aroclor 1260	11096-82-5	1.20E-01	3.70E-01	2/46	5.64E-02	8.45E-02	7.73E-02	6.47E-02	7.40E-02	1.11E-01	Nonparametric (0.05)	1.11E-01	1.11E-01	Statistics	NA	NA
Pesticides (mg/kg)																
4,4′-DDD	72-54-8	9.50E-03	9.50E-03	1/43	4.10E-03	2.71E-03	4.79E-03	5.40E-03	4.91E-03	5.90E-03	Nonparametric (0.05)	5.90E-03	5.90E-03	Statistics	NA	NA
4,4′-DDT	50-29-3	1.60E-03	3.30E-03	3/43	4.06E-03	2.50E-03	4.70E-03	5.17E-03	4.79E-03	5.72E-03	Nonparametric (0.05)	5.72E-03	3.30E-03	Maximum	NA	NA
endosulfan sulfate	1031-07-8	1.70E-03	1.70E-03	1/43	3.96E-03	2.57E-03	4.62E-03	5.16E-03	4.73E-03	5.67E-03	Nonparametric (0.05)	5.67E-03	1.70E-03	Maximum	NA	NA
Metals (mg/kg)																
aluminum	7429-90-5	3.15E+03	6.55E+03	28/28	4.75E+03	7.77E+02	5.00E+03	5.02E+03	5.01E+03	5.39E+03	Data are normal (0.05)	5.00E+03	5.00E+03	Statistics	1.40E+04	< Bkgd
arsenic	7440-38-2	9.36E-01	1.10E+01	23/40	3.52E+00	2.42E+00	4.16E+00	4.53E+00	4.25E+00	5.19E+00	Nonparametric (0.05)	5.19E+00	5.19E+00	Statistics	9.14E+00	> Bkgd
barium	7440-39-3	2.05E+01	9.70E+01	38/40	3.25E+01	1.50E+01	3.65E+01	3.65E+01	3.63E+01	4.28E+01	Nonparametric (0.05)	4.28E+01	4.28E+01	Statistics	9.37E+01	> Bkgd
beryllium	7440-41-7	2.20E-01	9.68E-01	19/40	4.01E-01	1.86E-01	4.50E-01	4.97E-01	4.63E-01	5.29E-01	Nonparametric (0.05)	5.29E-01	5.29E-01	Statistics	1.27E+00	< Bkgd
cadmium	7440-43-9	1.00E-01	5.10E+00	20/40	6.11E-01	8.79E-01	8.45E-01	8.39E-01	7.91E-01	1.22E+00	Nonparametric (0.05)	1.22E+00	1.22E+00	Statistics	1.72E+00	> Bkgd

Table J-2
Soil Chemicals of Potential Ecological Concern

COPEC	CAS Number	Minimum Detection	Maximum Detection	Frequency of Detection	Arithmetic Mean [a]	Standard Deviation	Arithmetic 95% UCL	Land's 95% UCL	Gamma 95% UCL	Approximate Chebyshev Limit on 95% UCL	ProUCL [b] Recommendation	Distribution Dependent 95% UCL	Final 95% UCL Refined EPC [c]	Basis for Final 95% UCL Refined EPC	Background Threshold Value [d]	Background Comparison
Metals (mg/kg) (continued)																
chromium	7440-47-3	1.74E+01	3.70E+01	40/40	2.98E+01	3.48E+00	3.08E+01	3.09E+01	3.08E+01	3.22E+01	Data are normal (0.05)	3.08E+01	3.08E+01	Statistics	5.48E+01	< Bkgd
cobalt	7440-48-4	1.40E+00	2.10E+01	23/40	4.25E+00	3.18E+00	5.10E+00	4.78E+00	4.91E+00	6.44E+00	Nonparametric (0.05)	6.44E+00	6.44E+00	Statistics	1.43E+01	> Bkgd
copper	7440-50-8	4.80E+00	2.70E+01	38/40	9.52E+00	5.42E+00	1.10E+01	1.12E+01	1.10E+01	1.33E+01	Lognormal (0.05)	1.12E+01	1.12E+01	Statistics	3.91E+01	< Bkgd
iron	7439-89-6	6.61E+03	1.16E+04	29/29	8.38E+03	1.25E+03	8.78E+03	8.79E+03	8.78E+03	9.40E+03	Data follow gamma distribution (0.05)	8.78E+03	8.78E+03	Statistics	2.23E+04	< Bkgd
lead	7439-92-1	1.50E+00	6.20E+01	39/40	1.57E+01	1.41E+01	1.94E+01	3.03E+01	2.07E+01	2.54E+01	Nonparametric (0.05)	2.54E+01	2.54E+01	Statistics	3.77E+01	> Bkgd
manganese	7439-96-5	8.00E+01	2.04E+02	29/29	1.11E+02	3.04E+01	1.21E+02	1.20E+02	1.21E+02	1.36E+02	Nonparametric (0.05)	1.36E+02	1.36E+02	Statistics	3.83E+02	< Bkgd
mercury	7439-97-6	1.65E-01	2.17E-01	4/25	8.56E-02	5.36E-02	1.04E-01	1.06E-01	1.04E-01	1.32E-01	Nonparametric (0.05)	1.32E-01	1.32E-01	Statistics	5.20E-01	< Bkgd
nickel	7440-02-0	1.93E+01	3.30E+01	40/40	2.40E+01	3.07E+00	2.48E+01	2.48E+01	2.48E+01	2.61E+01	Assuming gamma distribution (0.05)	2.48E+01	2.48E+01	Statistics	5.57E+01	< Bkgd
selenium	7782-49-2	7.20E-01	7.20E-01	1/40	2.31E+00	2.48E+00	2.97E+00	8.41E+00	3.45E+00	4.02E+00	Nonparametric (0.05)	4.02E+00	7.20E-01	Maximum	1.78E+00	< Bkgd
silver	7440-22-4	5.82E-01	1.00E+01	5/40	1.47E+00	1.79E+00	1.95E+00	2.95E+00	2.03E+00	2.71E+00	Nonparametric (0.05)	2.71E+00	2.71E+00	Statistics	2.22E+00	> Bkgd
thallium	7440-28-0	3.60E-01	2.80E+00	4/40	2.43E+00	2.44E+00	3.08E+00	1.06E+01	3.62E+00	4.11E+00	Nonparametric (0.05)	4.11E+00	2.80E+00	Maximum	5.00E-01	> Bkgd
titanium	7440-32-6	3.90E+02	5.65E+02	17/17	4.53E+02	4.55E+01	4.72E+02	N/A	4.72E+02	5.01E+02	Data are normal (0.05)	4.72E+02	4.72E+02	Statistics	5.18E+02	> Bkgd
vanadium	7440-62-2	1.36E+01	2.70E+01	40/40	2.06E+01	2.62E+00	2.13E+01	2.13E+01	2.13E+01	2.24E+01	Data are normal (0.05)	2.13E+01	2.13E+01	Statistics	4.73E+01	> Bkgd
zinc	7440-66-6	1.20E+01	8.30E+01	39/40	2.87E+01	1.70E+01	3.32E+01	3.36E+01	3.33E+01	4.04E+01	Assuming gamma distribution (0.05)	3.33E+01	3.33E+01	Statistics	6.75E+01	> Bkgd
Radionuclides																
gross alpha (pCi/g)	12587-46-1	4.00E-01	1.20E+01	38/41	2.35E+00	2.19E+00	2.92E+00	3.39E+00	2.95E+00	3.84E+00	Data follow gamma distribution (0.05)	2.95E+00	2.95E+00	Statistics	NA	NA
gross beta (pCi/g)	12587-47-2	3.00E-01	5.72E+01	36/41	6.78E+00	9.58E+00	9.30E+00	2.15E+01	9.68E+00	1.33E+01	Assuming gamma distribution (0.05)	9.68E+00	9.68E+00	Statistics	NA	NA
radium-226 (pCi/g)	13982-63-3	1.00E-01	5.90E+00	38/38	1.42E+00	1.54E+00	1.84E+00	2.76E+00	1.95E+00	2.51E+00	Nonparametric (0.05)	2.51E+00	2.51E+00	Statistics	NA	NA
radium-228 (pCi/g)	15262-20-1	1.00E-01	2.30E+00	11/30	3.63E-01	4.83E-01	5.13E-01	4.68E-01	4.94E-01	7.48E-01	Nonparametric (0.05)	7.48E-01	7.48E-01	Statistics	NA	NA
total uranium (µg/g)	UTOT	3.00E-01	5.00E-01	8/9	3.50E-01	1.46E-01	4.40E-01	7.64E-01	5.20E-01	5.62E-01	Data are normal (0.05)	4.40E-01	4.40E-01	Statistics	NA	NA

Notes:

[a] average concentration exceeds the maximum in some cases due to elevated detection limits; for samples in which a given analyte was not detected, a value of one-half the detection limit was used to calculate the average

[b] ProUCL (U.S. EPA computer software) was used to calculate the 95 percent UCL values and to select the most appropriate distribution dependent value

[c] refined exposure point concentration, smaller value of the final 95 percent UCL and maximum detected concentration

[d] background values are 95th percentile for Alameda Point soil ("pink area") (TtEMI 2004)

[e] organic compounds are grouped into categories according to toxicity assessment protocols used in the ecological risk assessment

Acronyms/Abbreviations:

95% UCL – 95 percent upper confidence level of the arithmetic mean
> Bkgd – site data were greater than the background data; maximum site concentration compared to background threshold value
< Bkgd – site data were not greater than the background data; maximum site concentration compared to background threshold value
CAS – Chemical Abstracts Service
COPEC – chemical of potential ecological concern (for soil 0–6 feet below ground surface)
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
EPC – exposure point concentration
µg/g – micrograms per gram
mg/kg – milligrams per kilogram
NA – not analyzed for statistical difference from background
NC – not calculated
pCi/g – picocuries per gram
ProUCL – computer program by U.S. EPA
U.S. EPA – United States Environmental Protection Agency

Table J-3
Groundwater Chemicals of Potential Ecological Concern

Chemical	Minimum Detection	Maximum Detection	Frequency of Detection	Background Threshold Value [a]	Background Comparison	Maximum Concentration Location
Volatile Organic Compounds [b] (µg/L)						
acetone	0.5	18	3/42	NA	NA	GW EXCAV PIT-DAY 2
benzene	0.4	0.4	1/51	NA	NA	M025-A
2-butanone	5	57	4/39	NA	NA	HP2-5-D
sec-butylbenzene	0.4	0.4	1/12	NA	NA	GW EXCAV PIT-DAY 2
carbon disulfide	0.6	300	13/51	NA	NA	HPRA-23-D
1,2-dichloroethane	0.2	0.4	2/51	NA	NA	M011-A
1,2-dichloroethene	1	1	2/45	NA	NA	HP1-10-A, M025-A
cis-1,2-dichloroethene	0.5	0.6	2/12	NA	NA	M025-A
isopropylbenzene	0.03	0.03	1/12	NA	NA	M025-A
p-isopropyltoluene	1.3	1.3	1/12	NA	NA	GW EXCAV PIT-DAY 2
trichloroethene	0.1	0.1	1/51	NA	NA	M025-A
1,2,4-trimethylbenzene	13.6	13.6	1/12	NA	NA	GW EXCAV PIT-DAY 2
1,3,5-trimethylbenzene	3.6	3.6	1/12	NA	NA	GW EXCAV PIT-DAY 2
vinyl chloride	2.1	2.1	1/51	NA	NA	M025-A
meta-,para-xylene	0.08	0.08	1/11	NA	NA	M025-A
total xylenes	2	2	1/46	NA	NA	GW EXCAV PIT-DAY 2
Semivolatile Organic Compounds [b] (µg/L)						
bis(2-ethylhexyl)phthalate	2.7	2.7	1/49	NA	NA	M025-C
4-chloro-3-methylphenol	0.7	0.7	1/49	NA	NA	HP2-5-E
di-n-butyl phthalate	0.46	0.46	1/49	NA	NA	M025-A
dimethyl phthalate	3	3	1/49	NA	NA	M010-A
isophorone	1	5	4/49	NA	NA	HP1-11-D
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	4.8	4.8	1/6	NA	NA	023-005-022

Table J-3
Groundwater Chemicals of Potential Ecological Concern

Chemical	Minimum Detection	Maximum Detection	Frequency of Detection	Background Threshold Value [a]	Background Comparison	Maximum Concentration Location
Polycyclic Aromatic Hydrocarbon [b] (µg/L)						
benzo(k)fluoranthene	0.003	0.003	1/50	NA	NA	M011-A
benzo(g,h,i)perylene	0.06	0.06	1/50	NA	NA	M011-A
fluorene	0.3	0.3	1/50	NA	NA	GW EXCAV PIT-DAY 2
naphthalene	58.1	58.1	1/50	NA	NA	GW EXCAV PIT-DAY 2
phenanthrene	0.04	0.62	2/50	NA	NA	GW EXCAV PIT-DAY 2
pyrene	0.6	0.6	1/50	NA	NA	HP2-5-E
Pesticides (µg/L)						
heptachlor epoxide	0.006	0.006	1/25	NA	NA	M025-A
Metals (µg/L)						
aluminum	54	4530	8/26	439.13	>Bkgd	M010-A
antimony	0.87	0.87	1/26	45.77	<Bkgd	M011-A
arsenic	0.66	15	16/26	28.39	<Bkgd	M013-A
barium	13	1110	18/26	574.73	>Bkgd	DRA-01
beryllium	0.26	3	3/26	3.83	<Bkgd	M010-B
cadmium	0.07	3.4	11/26	5.38	<Bkgd	DRA-01
chromium	1.5	17.9	10/26	13.79	>Bkgd	M010-A
chromium, hexavalent	10	10	2/3	NA	NA	M010-B, M014-A
cobalt	0.12	12	10/26	11.57	>Bkgd	M012-B
copper	0.4	2.5	5/26	27.48	<Bkgd	M012-B
iron	25	13000	18/26	7135	>Bkgd	M011-A
lead	0.27	68.7	4/27	3.88	>Bkgd	GW EXCAV PIT-DAY 2
manganese	1	11100	26/26	5213	>Bkgd	M108-B
mercury	0.48	0.48	1/26	0.15	>Bkgd	M012-B
molybdenum	0.4	10.7	8/24	NA	NA	M010-A
nickel	0.79	19.3	10/26	19.06	>Bkgd	M010-A
selenium	0.63	2.8	2/26	5.97	<Bkgd	M012-B

Table J-3
Groundwater Chemicals of Potential Ecological Concern

Chemical	Minimum Detection	Maximum Detection	Frequency of Detection	Background Threshold Value [a]	Background Comparison	Maximum Concentration Location
silver	0.27	26.7	3/26	3.33	>Bkgd	M108-B
thallium	0.57	11.1	3/26	5.8	>Bkgd	M104-C
vanadium	5.5	23	9/26	28.65	<Bkgd	M013-A
zinc	1.8	226	16/26	42.91	>Bkgd	M010-A
Radionuclides (pCi/L)						
bismuth-214	5.79	18.4	4/5	NA	NA	M013-A
lead-214	15.5	16.2	2/8	NA	NA	M011-A
potassium-40	77.1	146	5/8	NA	NA	M010-B
radium	1.6	1.6	1/5	NA	NA	M025-A
radium-226	0.28	4.29	12/26	NA	NA	M108-B
radium-228	0.15	6.66	8/26	NA	NA	M108-B
thallium-208	10	10	1/10	NA	NA	M025-A
total gross alpha	1.24	68.5	12/26	NA	NA	M104-C
total gross beta	3.24	181	26/26	NA	NA	M103-B
tritium	18400	18400	1/10	NA	NA	M014-A
uranium-233	0.0444	7.07	5/10	NA	NA	M013-C
uranium-235	0.194	0.231	2/10	NA	NA	M013-C
uranium-238	2.17	5.49	3/10	NA	NA	M013-C

Table J-3
Groundwater Chemicals of Potential Ecological Concern

Notes:
[a] background values are 80th lower confidence limit, 95th percentile for Alameda Point groundwater (TtEMI 2001b)
[b] organic compounds are grouped into categories according to toxicity assessment protocols used in the ecological risk assessment

Acronyms/Abbreviations:
> Bkgd – site data were greater than the background data; maximum site concentration compared to background threshold value
< Bkgd – site data were not greater than the background data; maximum site concentration compared to background threshold value
COPEC – chemical of potential ecological concern
µg/L – micrograms per liter
NA – not analyzed for statistical difference from background
pCi/L – picocuries per liter

Table J-4
Terrestrial Plant and Invertebrate Soil Benchmarks

COPEC	Plant Benchmark (mg/kg)	Plant Benchmark Reference	Invertebrate Benchmark (mg/kg)	Invertebrate Benchmark Reference
Volatile Organic Compound				
acetone	NA	NA	NA	NA
Semivolatile Organic Compounds				
bis(2-ethylhexyl)phthalate	NA	NA	NA	NA
butylbenzyl phthalate	NA	NA	NA	NA
di-n-butyl phthalate	200	Efroymson et al. 1997a	NA	NA
pentachlorophenol	3	Efroymson et al. 1997a	6	Efroymson et al. 1997b
phenol	70	Efroymson et al. 1997a	30	Efroymson et al. 1997b
Polynuclear Aromatic Hydrocarbons				
acenaphthene	20	Efroymson et al. 1997a	NA	
acenaphthylene	NA	NA	NA	NA
anthracene	NA	NA	NA	NA
benzo(a)anthracene	NA	NA	NA	NA
benzo(b)fluoranthene	NA	NA	NA	NA
benzo(k)fluoranthene	NA	NA	NA	NA
benzo(g,h,i)perylene	NA	NA	NA	NA
benzo(a)pyrene	NA	NA	NA	NA
chrysene	NA	NA	NA	NA
dibenz(a,h)anthracene	NA	NA	NA	NA
fluoranthene	NA	NA	NA	NA
fluorene	NA	NA	30	Efroymson et al. 1997b
indeno(1,2,3-cd)pyrene	NA	NA	NA	NA
2-methylnaphthalene	NA	NA	NA	NA
naphthalene	NA	NA	NA	NA
phenanthrene	NA	NA	NA	NA
pyrene	NA	NA	NA	NA
Pesticides				
4,4'-DDD	NA	NA	NA	NA
4,4'-DDT	NA	NA	NA	NA
endosulfan sulfate	NA	NA	NA	NA
Polychlorinated Biphenyl				
Aroclor 1260	40	Efroymson et al. 1997a	NA	NA
Metals				
aluminum	50	Efroymson et al. 1997a	NA	NA
arsenic	18	U.S. EPA 2005d	60	Efroymson et al. 1997b
barium	500	Efroymson et al. 1997a	330	U.S. EPA 2005b

Table J-4
Terrestrial Plant and Invertebrate Soil Benchmarks

COPEC	Plant Benchmark (mg/kg)	Plant Benchmark Reference	Invertebrate Benchmark (mg/kg)	Invertebrate Benchmark Reference
Metals (continued)				
beryllium	10	Efroymson et al. 1997a	40	U.S. EPA 2005c
cadmium	32	U.S. EPA 2005e	140	U.S. EPA 2005e
chromium	1	Efroymson et al. 1997a	0.4	Efroymson et al. 1997b
cobalt	13	U.S. EPA 2005f	NA	NA
copper	100	Efroymson et al. 1997a	50	Efroymson et al. 1997b
iron	NA	NA	NA	NA
lead	120	U.S. EPA 2005g	1700	U.S. EPA 2005g
manganese	500	Efroymson et al. 1997a	NA	NA
mercury	0.3	Efroymson et al. 1997a	0.1	Efroymson et al. 1997b
nickel	30	Efroymson et al. 1997a	200	Efroymson et al. 1997b
selenium	1	Efroymson et al. 1997a	70	Efroymson et al. 1997b
silver	2	Efroymson et al. 1997a	NA	NA
thallium	1	Efroymson et al. 1997a	NA	NA
titanium	NA	NA	NA	NA
vanadium	2	Efroymson et al. 1997a	NA	NA
zinc	50	Efroymson et al. 1997a	200	Efroymson et al. 1997b
Radionuclides				
gross alpha	NA	NA	NA	NA
gross beta	NA	NA	NA	NA
radium-226 (pCi/g)	288	DOE 2006	NA	NA
radium-228 (pCi/g)	245	DOE 2006	NA	NA
total uranium	NA	NA	NA	NA

Acronyms/Abbreviations:
COPEC – chemical of potential ecological concern
DOE – (United States) Department of Energy
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
mg/kg – milligrams per kilogram
NA – not available
pCi/g – picocuries per gram
U.S. EPA – United States Environmental Protection Agency

Table J-5
Mammalian Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Volatile Organic Compounds					
acetone	90	rat	0.35		Dietz et al. 1991
benzene	26.36	mouse	0.03		Nawrot and Staples 1979
2-butanone	594	rat	0.35		Cox et al. 1975
sec-butylbenzene	2.1	mouse	0.03		Marks et al. 1982
carbon disulfide	11	rabbit	1.13		Hardin et al. 1981
1,2-dichloroethane	50	mouse	0.035		Lane et al. 1982
1,2-dichloroethene	45.2	mouse	0.03		Palmer et al. 1979
cis-1,2-dichloroethene	1.7	mouse	0.03		Barnes et al. 1985
isopropylbenzene	2.1	mouse	0.03		Marks et al. 1982
p-isopropyltoluene	2.1	mouse	0.03		Marks et al. 1982
trichloroethene	0.7	mouse	0.03		Buben and O'Flaherty 1985
1,2,4-trimethylbenzene	2.1	mouse	0.03		Marks et al. 1982
1,3,5-trimethylbenzene	2.1	mouse	0.03		Marks et al. 1982
vinyl chloride	0.17	rat	0.35		Feron et al. 1981
m-,p-xylene	2.1	mouse	0.03		Marks et al. 1982
xylenes, total	2.1	mouse	0.03		Marks et al. 1982
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate	18.3	mouse	0.03		Lamb et al. 1987
butylbenzyl phthalate	159	rat	0.3		NTP 1985b
4-chloro-3-methylphenol	0.24	rat	0.35		Schwetz et al. 1978
di-n-butylphthalate	550	mouse	0.03		Lamb et al. 1987
dimethylphthalate	4583	mouse	0.03		Lamb et al. 1987
isophorone	312	rat	0.35		AME Inc. 1972
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	50	rat	0.35		U.S. Army 1985
pentachlorophenol	0.24	rat	0.35		Schwetz et al. 1978
phenol	60	rat	0.35		NTP 1983
Polycyclic Aromatic Hydrocarbons					
acenaphthene	50	rat	0.2765	BTAG	Navarro et al. 1991
acenaphthylene	50	rat	0.2765	BTAG	Navarro et al. 1991
anthracene	50	rat	0.2765	BTAG	Navarro et al. 1991
benzo(a)anthracene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
benzo(b)fluoranthene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
benzo(k)fluoranthene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
benzo(g,h,i)perylene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
benzo(a)pyrene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
chrysene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967

Table J-5
Mammalian Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Polycyclic Aromatic Hydrocarbons (continued)					
dibenz(a,h)anthracene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
fluoranthene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
fluorene	50	rat	0.2765	BTAG	Navarro et al. 1991
indeno(1,2,3-cd)pyrene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
2-methylnaphthalene	50	rat	0.2765	BTAG	Navarro et al. 1991
naphthalene	50	rat	0.2765	BTAG	Navarro et al. 1991
phenanthrene	50	rat	0.2765	BTAG	Navarro et al. 1991
pyrene	1.31	mouse	0.0305	BTAG	Neal and Rigdon 1967
Pesticides					
4,4′-DDD	0.8	rat	0.32	BTAG	Fitzhugh 1948
4,4′-DDT	0.8	rat	0.32	BTAG	Fitzhugh 1948
endosulfan sulfate	0.15	rat	0.35		Dikshith et al 1984
heptachlor epoxide	0.129	rat	0.1	BTAG	Shain et al. 1977
Polychlorinated Biphenyl					
Aroclor 1260	0.36	mouse	0.02062	BTAG	Simmons and McKee 1992
Metals					
aluminum	1.93	mouse	0.03		Ondreicka et al., 1966
antimony	0.125	mouse	0.03		Schroeder et al. 1968b
arsenic	0.32	rat	0.332	BTAG	Schroeder et al. 1968a
barium	5.1	rat	0.435		Perry et al. 1983
beryllium	0.66	rat	0.35		Schroeder and Mitchner 1975
cadmium	0.06	mouse	0.0322	BTAG	Webster 1988
chromium	3.28	rat	0.35		MacKenzie et al. 1958
chromium, hexavalent	3.28	rat	0.35		MacKenzie et al. 1958
cobalt	1.2	rat	0.275	BTAG	Domingo et al. 1985
copper	2.67	mouse	0.03	BTAG	Pocino et al. 1991
iron	NA	NA	NA		NA
lead	1	rat	0.5506	BTAG	Fowler et al. 1980
manganese	13.7	mouse	0.0346	BTAG	Gray and Laskey 1980
mercury	0.25	rat	0.1875	BTAG	Khera and Tabacova 1973
molybdenum	0.26	mouse	0.03		Schroeder and Mitchner 1971
nickel	0.133	rat	0.2486	BTAG	Smith et al. 1993
selenium	0.05	rat	0.1865	BTAG	Harr et al. 1966
silver	22.22	rat	0.35		Matuk et al. 1981
thallium	0.48	rat	0.065	BTAG	Downs et al. 1960
titanium	NA	NA	NA		NA
vanadium	0.21	rat	0.26		Domingo et al. 1986
zinc	9.6	mouse	0.0255	BTAG	Aughey et al. 1977

Table J-5
Mammalian Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Radionuclides [c]					
bizmuth-214 (pCi/L)	NA	NA	NA		NA
lead-214 (pCi/L)	NA	NA	NA		NA
potassium-40 (pCi/L)	250	NA	NA		DOE 2006
radium	NA	NA	NA		NA
radium-226 (pCi/g)	50.6	NA	NA		DOE 2006
radium-226 (pCi/L)	4.08	NA	NA		DOE 2006
radium-228 (pCi/g)	43.9	NA	NA		DOE 2006
radium-228 (pCi/L)	3.4	NA	NA		DOE 2006
thallium-208 (pCi/L)	NA	NA	NA		NA
total gross alpha	NA	NA	NA		NA
total gross beta	NA	NA	NA		NA
total uranium	NA	NA	NA		NA
tritium (pCi/L)	2.65E+08	NA	NA		DOE 2006
uranium-233 (pCi/L)	676	NA	NA		DOE 2006
uranium-235 (pCi/L)	736	NA	NA		DOE 2006
uranium-238 (pCi/L)	756	NA	NA		DOE 2006

Notes:

[a] the following chemical surrogates were used:
Aroclor 1254 for Aroclor 1260
benzo(a)pyrene for benz(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, pyrene
1,2-dichlorobenzene for 1,3-dichlorobenzene
endosulfan for endosulfan sulfate
hexavalent chromium for total chromium
naphthalene for acenaphthene, acenaphthylene, anthracene, fluorene, 2-methylnaphthalene, and phenanthrene
pentachlorophenol for 4-choro-3-methylphenol
trans-1,2-dichloroethene for cis-1,2-dichloroethene
xylene, mixed isomers for sec-butylbenzene, isopropylbenzene, p-isopropyltoluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m-, p-xylene, total xylenes

[b] TRV presented by the BTAG are noted; other TRV were selected from the scientific literature

[c] radionuclides are evaluated with DOE BCG soil and water concentrations

Table J-5
Mammalian Toxicity Reference Values

Acronyms/Abbreviations:

BCG – biota concentration guideline
BTAG – Biological Technical Assistance Group (U.S. EPA Region 9)
COPEC – chemical of potential ecological concern
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
DOE – (United States) Department of Energy
kg – kilogram
mg/kg/day – milligrams per kilogram per day
NA – not available
NTP – National Toxicology Program
pCi/g – picocuries per gram
pCi/L – picocuries per liter
TRV – toxicity reference value
U.S. EPA – United States Environmental Protection Agency

Table J-6
Avian Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Volatile Organic Compounds					
acetone	52	Coturnix quail	0.050 [c]	NA	Hill and Camardese 1986
benzene	2.636 [d]	mouse	NA	NA	Nawrot and Staples 1979
2-butanone	52	Coturnix quail	0.050 [c]	NA	Hill and Camardese 1986
sec-butylbenzene	0.21	mouse	0.03		Marks et al. 1982
carbon disulfide	1.1 [d]	rabbit	NA	NA	Hardin et al. 1981
1,2-dichloroethane	17.2	chicken	1.6	NA	Alumot et al., 1976b
1,2-dichloroethene	4.52 [d]	mouse	NA	NA	Palmer et al. 1979
cis-1,2-dichloroethene	0.17 [d]	mouse	NA	NA	Barnes et al. 1985
isopropylbenzene	0.98	blackbird	0.074 [e]	NA	Schafer et al. 1983
p-isopropyltoluene	3.16	blackbird	0.074 [e]	NA	Schafer et al. 1983
trichloroethene	0.07 [d]	mouse	NA	NA	Buben and O'Flaherty 1985
1,2,4-trimethylbenzene	0.21	mouse	0.03		Marks et al. 1982
1,3,5-trimethylbenzene	0.21	mouse	0.03		Marks et al. 1982
vinyl chloride	0.017 [d]	rat	NA	NA	Feron et al. 1981
m-, p-xylene	0.21	mouse	0.03		Marks et al. 1982
xylene, total	0.21	mouse	0.03		Marks et al. 1982
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate	1.1	ringed dove	0.155	NA	Peakall 1974
butylbenzyl phthalate	0.11	ringed dove	0.155	NA	Peakall 1974
4-chloro-3-methylphenol	1.13	blackbird	0.074 [e]	NA	Schafer et al. 1983
di-n-butylphthalate	0.11	ringed dove	0.155	NA	Peakall 1974
dimethylphthalate	1	blackbird	0.074 [e]	NA	Schafer et al. 1983
isophorone	31 [d]	rat	NA	NA	AME Inc. 1972
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	5 [d]	rat	NA	NA	U.S. Army 1985
pentachlorophenol	4.03	Coturnix quail	0.15	NA	Hill and Camardese 1986
phenol	1.13	blackbird	0.074 [e]	NA	Schafer et al. 1983
Polycyclic Aromatic Hydrocarbons					
acenaphthene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
acenaphthylene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
anthracene	1.11	blackbird	0.074 [e]	NA	Schafer et al. 1983
benzo(a)anthracene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
benzo(b)fluoranthene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
benzo(k)fluoranthene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
benzo(g,h,i)perylene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
benzo(a)pyrene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983
chrysene	1.01	blackbird	0.074 [e]	NA	Schafer et al. 1983

Table J-6
Avian Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Polycyclic Aromatic Hydrocarbons (continued)					
dibenz(a,h)anthracene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
fluoranthene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
fluorene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
indeno(1,2,3-cd)pyrene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
2-methylnaphthalene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
naphthalene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
phenanthrene	1.13	blackbird	0.074[e]	NA	Schafer et al. 1983
pyrene	1.01	blackbird	0.074[e]	NA	Schafer et al. 1983
Pesticides					
4,4′-DDD	0.009	pelican	3.5	BTAG	Anderson et al. 1975
4,4′-DDT	0.009	pelican	3.5	BTAG	Anderson et al. 1975
endosulfan sulfate	10	partridge	0.4	NA	Abiola 1992
heptachlor epoxide	2.14	blackbird	0.064	NA	Stickel et al. 1983
Polychlorinated Biphenyl					
Aroclor 1260	0.088	chicken	0.8	BTAG	Platonow and Reinhart 1973
Metals					
aluminum	109.7	ringed dove	0.155	NA	Carriere et al. 1986
antimony	0.0125[d]	mouse	NA	NA	Schroeder et al. 1968b
arsenic	5.5	mallard	1.1722	BTAG	Stanley et al. 1994
barium	20.8	day-old chick	0.121	NA	Johnson et al. 1960
beryllium	0.066[d]	rat	NA	NA	Schroeder and Mitchner 1975
cadmium	0.078	mallard	0.7985	BTAG	Cain et al. 1983
chromium	1	black duck	1.25	NA	Haseltine et al. 1985
chromium, hexavalent	1	black duck	1.25	NA	Haseltine et al. 1985
cobalt	0.237	day-old chick	0.153	NA	Diaz et al. 1994
copper	2.3	broiler chick	0.639	BTAG	Norvell et al. 1975
iron	NA	NA	NA	NA	NA
lead	0.014	Japanese quail	0.0935	BTAG	Edens et al. 1976
manganese	77.6	Japanese quail	0.1965	BTAG	Laskey and Edens 1985
mercury	0.039	mallard	1	BTAG	Heinz 1974
molybdenum	3.5	chicken	1.5	NA	Lepore and Miller 1965
nickel	1.38	mallard	0.61375	BTAG	Cain and Pafford 1981
selenium	0.23	mallard	1.1077	BTAG	Heinz et al. 1989
silver	178	mallard	1	NA	U.S. EPA 1997a
thallium	0.35	starling	0.074[e]	NA	Schafer 1972
titanium	NA	NA	NA	NA	NA
vanadium	11.4	mallard	1.17	NA	White and Dieter 1978
zinc	17.2	mallard	0.955	BTAG	Gasaway and Buss 1972

Table J-6
Avian Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Radionuclides [f]					
bizmuth-214 (pCi/L)	NA	NA	NA		NA
lead-214 (pCi/L)	NA	NA	NA		NA
potassium-40 (pCi/L)	250	NA	NA		DOE 2006
radium	NA	NA	NA		NA
radium-226 (pCi/g)	50.6	NA	NA		DOE 2006
radium-226 (pCi/L)	4.08	NA	NA		DOE 2006
radium-228 (pCi/g)	43.9	NA	NA		DOE 2006
radium-228 (pCi/L)	3.4	NA	NA		DOE 2006
thallium-208 (pCi/L)	NA	NA	NA		NA
total gross alpha	NA	NA	NA	NA	NA
total gross beta	NA	NA	NA	NA	NA
total uranium	NA	NA	NA	NA	NA
tritium (pCi/L)	2.65E+08	NA	NA		DOE 2006
uranium-233 (pCi/L)	676	NA	NA		DOE 2006
uranium-235 (pCi/L)	736	NA	NA		DOE 2006
uranium-238 (pCi/L)	756	NA	NA		DOE 2006

Notes:

[a] the following chemical surrogates were used:
acetone for 2-butanone
Aroclor 1254 for Aroclor 1260
acenaphthene for acenaphthylene, benz(a)anthracene, benzo(b)fluoranthene, benzo(g,h,i)perylene, benzo(k)fluoranthene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, 2-methylnaphthalene, naphthalene, pyrene
chlordane for heptachlor epoxide
di-n-butylphthalate for butylbenzylphthalate
1,4-dichlorobenzene for 1,3-dichlorobenzene
endosulfan for endosulfan sulfate
trans-1,2-dichloroethene for cis-1,2-dichloroethene
trivalent chromium for total chromium and hexavalent chromium
xylene, mixed isomers for sec-butylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m-, p-xylene, total xylenes

[b] TRVs presented by the BTAG are noted; other TRVs were selected from the scientific literature

[c] Coturnix quail body weight from Fu et al. 2000

[d] avian TRV estimated from mammal TRV * 0.1

[e] red-winged blackbird body weight from Beletsky 1996

[f] radionuclides are evaluated with DOE BCG soil and water concentrations

Table J-6
Avian Toxicity Reference Values

Acronyms/Abbreviations:
- BCG – biota concentration guideline
- BTAG – biological technical assistance group, U.S. EPA Region 9
- COPEC – chemical of potential ecological concern
- DDD – dichlorodiphenyldichloroethane
- DDT – dichlorodiphenyltrichloroethane
- DOE – (United States) Department of Energy
- kg – kilogram
- mg/kg/day – milligrams per kilogram per day
- NA – not available
- pCi/g – picocuries per gram
- pCi/L – picocuries per liter
- TRV – toxicity reference value
- U.S. EPA – United States Environmental Protection Agency

Table J-7
Toxicity Reference Values for Aquatic Life

COPEC	Selected TRV (µg/L)	Literature-Based Toxicity Thresholds
Volatile Organic Compounds		
acetone	21,000	LC50 2,100 mg/L brine shrimp, Price et al. 1974, UF 0.01
benzene	109	Chronic screening value, U.S. EPA 2001b Region 4
2-butanone	40,000	No mortality effect sheepshead minnow 400 mg/L, UF 0.1, Heitmuller et al. 1981
sec-butylbenzene	4.3	Chronic Screening Value, U.S. EPA 2001 Region 4., ethylbenzene
carbon disulfide	450	LC50 45 mg/L, Bengtsson and Tarkpea 1983, UF 0.01
1,2-dichloroethane	1,130	Chronic screening value, U.S. EPA 2001b Region 4
1,2-dichloroethene	2,240	Chronic screening value, U.S. EPA 2001b Region 4, 1,1-dichloroethene
cis-1,2-dichloroethene	2,240	Chronic screening value, U.S. EPA 2001b Region 4, 1,1-dichloroethene
isopropylbenzene	4.3	Chronic Screening Value, U.S. EPA 2001b Region 4., ethylbenzene
p-isopropyltoluene	4.3	Chronic Screening Value, U.S. EPA 2001b Region 4., ethylbenzene
trichloroethene	140	14 mg/L 96-hour LC50, *Americamysis bahia*, UF 0.01, Tatem et al. 1978
1,2,4-trimethylbenzene	4.3	Chronic Screening Value, U.S. EPA 2001b Region 4., ethylbenzene
1,3,5-trimethylbenzene	4.3	Chronic Screening Value, U.S. EPA 2001b Region 4., ethylbenzene
vinyl chloride	2,240	Chronic screening value, U.S. EPA 2001b Region 4, 1,1-dichloroethene
m-, p-xylene	500	Chronic LOEC 5,000 mg/L, U.S. EPA 1986, toluene, UF 0.1
xylenes, total	500	Chronic LOEC 5,000 mg/L, U.S. EPA 1986, toluene, UF 0.1
Semivolatile Organic Compounds		
bis(2-ethylhexyl)phthalate	55,000	550 mg/L no mortality effect, sheepshead minnow, UF 0.1, Heitmuller et al. 1981
4-chloro-3-methylphenol	40.5	4.05 mg/L 96-hour LC50, *Pimephales promelas*, UF 0.01, Geiger et al. 1985
di-n-butyl phthalate	3.4	Chronic Screening Value, U.S. EPA 2001b Region 4
dimethyl phthalate	580	Chronic Screening Value, U.S. EPA 2001b Region 4
isophorone	129	Chronic Screening Value, U.S. EPA 2001b Region 4
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	150	15 mg/L 96-hour LC50, *Pimephales promelas*, UF 0.01, Bentley et al. 1977
Polycyclic Aromatic Hydrocarbon		
benzo(k)fluoranthene	3	Acute LOEC 300 mg/L, U.S. EPA 1986, PAHs, UF 0.01
benzo(g,h,i)perylene	3	Acute LOEC 300 mg/L, U.S. EPA 1986, PAHs, UF 0.01
fluorene	3	Acute LOEC 300 mg/L, U.S. EPA 1986, PAHs, UF 0.01
naphthalene	23.5	Chronic Screening Value, U.S. EPA 2001 Region 4.
phenanthrene	4.6	CCC proposed, U.S. EPA 1990 (55 FR 19986)
pyrene	95	9.454 mg/L 96-hour LC50, *Mulinia lateralis*, UF 0.01, Pelletier et al. 1997
Pesticides		
heptachlor epoxide	0.0036	CCC, U.S. EPA 2000a (CTR)

Table J-7
Toxicity Reference Values for Aquatic Life

COPEC	Selected TRV (µg/L)	Literature-Based Toxicity Thresholds
Metals		
aluminum	87	Chronic screening value, freshwater, U.S. EPA 2006c
antimony	500	CCC proposed, U.S. EPA 1990
arsenic	36	CCC, U.S. EPA 2000a (CTR)
barium	5,000	LC50 opossum shrimp >500,000 µg/L, U.S. EPA 1978, UF 0.01
beryllium	50	Mortality NOEC mummichog 5,000 µg/L (Eisler 1974)
cadmium	8.8	CCC, U.S. EPA 2001a (66 FR 18935)
chromium	50	CCC, U.S. EPA 2000a (CTR), hexavalent chromium
chromium, hexavalent	50	CCC, U.S. EPA 2000a (CTR)
cobalt	10	Growth NOEC, oyster 10 µg/L, Watling 1983
copper	3.1	CCC, U.S. EPA 2000a (CTR)
iron	150	Median growth EC50 15,000 µg/L, UF 0.01, U.S. EPA 2002b
lead	8.1	CCC, U.S. EPA 2000a (CTR)
manganese	2,500	Mortality NOEC, sea star 25,000 µg/L, Hansen and Bjerregaard 1995, UF 0.1
mercury	0.94	CCC, U.S. EPA 1999a (NRAWQC)
molybdenum	1,230	123 mg/L 96-hour LC50, *Americamysis bahia*, MoO3, UF 0.01, Carr 1987
nickel	8.2	CCC, U.S. EPA 2000a (CTR)
selenium	71	CCC, U.S. EPA 2000 (CTR)
silver	0.19	CMC 1.9 ug/L, U.S. EPA 2000a (CTR), UF 0.1
thallium	21.3	Chronic screening value, U.S. EPA 2001b Region 4
vanadium	205	Median EC50 growth 20,500 µg/L UF 0.01, U.S. EPA 2002b
zinc	81	CCC, U.S. EPA 2000a (CTR)
Radionuclides		
bismuth-214	NA	NA
lead-214	NA	NA
potassium-40	2,900	Biota concentration guideline, DOE 2006
radium	NA	NA
radium-226	10.2	Biota concentration guideline, DOE 2006
radium-228	8.49	Biota concentration guideline, DOE 2006
thallium-208	NA	NA
total gross alpha	NA	NA
total gross beta	NA	NA
tritium	4.99E+09	Biota concentration guideline, DOE 2006
uranium-233	200	Biota concentration guideline, DOE 2006
uranium-235	217	Biota concentration guideline, DOE 2006
uranium-238	223	Biota concentration guideline, DOE 2006

Table J-7
Toxicity Reference Values for Aquatic Life

Acronyms/Abbreviations:

CCC – criteria continuous concentration
CMC – criteria maximum concentration
COPEC – chemical of potential ecological concern
CTR – California Toxics Rule
DOE – (United States) Department of Energy
EC50 – effective concentration for 50 percent of organisms
LC50 – lethal concentration for 50 percent of organisms
μg/L – micrograms per liter
mg/L – milligrams per liter
NA – not available
NOEC – no observed effect concentration
TRV – toxicity reference value
UF – uncertainty factor
U.S. EPA – United States Environmental Protection Agency

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Table J-8
K_{ow} and Bioaccumulation Factors* for Soil Chemicals of Potential Ecological Concern

COPEC	Log K_{ow}	Soil-to-Plant	Ref	Soil-to-Invert	Ref	Soil-to-Mammal	Ref
Volatile Organic Compound							
acetone	-0.24	regression	a	4.54E-2	b	1.07E+0	c
Semivolatile Organic Compounds							
bis(2-ethylhexyl)phthalate	7.6	regression	a	1.1E+1	d	1.07E+0	c
butylbenzyl phthalate	4.73	regression	a	1.1E+1	d	1.07E+0	c
di-n-butyl phthalate	4.5	regression	a	1.1E+1	d	1.07E+0	c
pentachlorophenol	5.12	regression	a	1.1E+1	d	1.07E+0	c
phenol	1.46	regression	a	1.1E+1	d	1.07E+0	c
Polycyclic Aromatic Hydrocarbons							
acenaphthene	3.92	-5.562, -0.8556	e	3.0E-1	f	1.07E+0	c
acenaphthylene	3.94	-1.144, 0.791	e	2.2E-1	f	1.07E+0	c
anthracene	4.45	-0.9887, 0.7784	e	3.2E-1	f	1.07E+0	c
benzo(a)anthracene	5.76	-2.7078, 0.5944	e	2.7E-1	f	1.07E+0	c
benzo(b)fluoranthene	5.78	3.1E-1	g	2.1E-1	f	1.07E+0	c
benzo(k)fluoranthene	6.11	-2.1579, 0.8595	e	2.1E-1	f	1.07E+0	c
benzo(g,h,i)perylene	6.63	-0.9313, 1.1829	e	1.5E-1	f	1.07E+0	c
benzo(a)pyrene	6.13	-2.0615, 0.975	e	3.4E-1	f	1.07E+0	c
chrysene	5.81	-2.7078, 0.5944	e	4.4E-1	f	1.07E+0	c
dibenz(a,h)anthracene	6.75	1.3E-1	g	4.9E-1	f	1.07E+0	c
fluoranthene	5.16	5.0E-1	g	3.7E-1	f	1.07E+0	c
fluorene	4.18	-5.562, -0.8556	e	2.0E-1	f	1.07E+0	c
indeno(1,2,3-cd)pyrene	6.7	1.1E-1	g	4.1E-1	f	1.07E+0	c
2-methylnaphthalene	3.86	-1.1442, 0.7912	h	2.0E-1	f	1.07E+0	c
naphthalene	3.3	1.22E+1	g	2.1E-1	f	1.07E+0	c
phenanthrene	4.46	-0.1665, 0.6203	e	2.8E-1	f	1.07E+0	c
pyrene	4.88	7.2E-1	g	3.9E-1	f	1.07E+0	c

Table J-8
K_{ow} and Bioaccumulation Factors* for Soil Chemicals of Potential Ecological Concern

COPEC	Log K_{ow}	Soil-to-Plant	Ref	Soil-to-Invert	Ref	Soil-to-Mammal	Ref
Pesticides							
4,4'-DDD	6.02	-2.5119, 0.7524	e	6.67E+0	d	1.07E+0	c
4,4'-DDT	6.91	-2.5119, 0.7524	e	6.67E+0	d	1.07E+0	c
endosulfan sulfate	3.66	regression	a	6.67E+0	d	1.07E+0	c
Polychlorinated Biphenyl							
Aroclor 1260	8.27	regression	a	6.67E+0	d	1.07E+0	c
Metals							
aluminum	NA	2.87E-3	i	4.3E-2	j	2.63E-2	c
arsenic	NA	3.8E-2	k	2.2E-1	d	2.5E-3	c
barium	NA	1.56E-1	i	9.1E-2	j	5.66E-2	c
beryllium	NA	1.0E-2	l	4.5E-2	j	1.0E+0	m
cadmium	NA	5.9E-1	k	7.71E+0	d	3.33E-1	c
chromium	NA	4.1E-2	i	3.1E-1	d	8.46E-2	c
cobalt	NA	7.45E-3	i	1.22E-1	j	2.05E-2	c
copper	NA	1.2E-1	k	5.2E-1	d	1.96E-1	c
iron	NA	4.25E-3	i	3.6E-2	j	1.24E-2	c
lead	NA	3.9E-2	k	2.7E-1	d	1.05E-1	c
manganese	NA	7.92E-2	i	5.0E-2	d	2.05E-2	c
mercury	NA	6.5E-1	k	1.69E+0	d	5.43E-2	c
nickel	NA	1.8E-2	k	1.06E+0	d	2.49E-1	c
selenium	NA	6.7E-1	k	9.9E-1	d	1.62E-1	c
silver	NA	1.4E-2	i	2.05E+0	j	4.0E-3	c
thallium	NA	4.0E-3	l	1.3E+0	n	1.12E-1	c
titanium	NA	5.5E-3	l	1.0E+0	m	1.0E+0	m
vanadium	NA	4.85E-3	i	4.2E-2	j	1.23E-2	c
zinc	NA	3.7E-1	k	3.2E+0	d	7.72E-1	c
Radionuclides							
gross alpha	NA	NA	NA	NA	NA	NA	NA
gross beta	NA	NA	NA	NA	NA	NA	NA
radium-226	NA	NA	NA	NA	NA	NA	NA
radium-228	NA	NA	NA	NA	NA	NA	NA
total uranium	NA	NA	NA	NA	NA	NA	NA

Table J-8
K_{ow} and Bioaccumulation Factors* for Soil Chemicals of Potential Ecological Concern

References:

a – U.S. EPA 2005h, regression, non-ionic organic compounds, Log BAF = 1.781-(0.4057*Log Kow)
b – Southworth et al. 1978
c – Sample et al. 1998b
d – Sample et al. 1999
e – U.S. EPA 2005h, regression, compound-specific,
Ln plant concentration = B0+B1(Ln soil concentration), values shown are B0 followed by B1
f – Beyer and Stafford 1993
g – U.S. EPA 2005h, median, compound-specific
h – U.S. EPA 2005h, regression, PAH compounds,
Ln plant concentration = B0+B1(Ln soil concentration), values shown are B0 followed by B1
i – BJC 1998
j – Sample et al. 1998a
k – Efroymson et al. 2001
l – Baes et al. 1984
m – assumed value
n – U.S. EPA 1999b

Note:

* bioaccumulation factor units:
kg soil/kg biota (plant, invertebrate, small mammal) (dry weight)

Acronyms/Abbreviations:

BAF – bioaccumulation factor
BJC – Bechtel Jacobs Company LLC
COPEC – chemical of potential ecological concern
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
Invert – invertebrate
kg – kilograms
K_{ow} – octanol/water partition coefficient
Ln – lognormal
NA – not available
PAH – polynuclear aromatic hydrocarbon
Ref – references
U.S. EPA – U.S. Environmental Protection Agency

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Table J-9
Bioconcentration Factors for Water Chemicals of Potential Ecological Concern

COPEC	Water-to-Invertebrate (L/kg ww)	Ref	Water-to-Fish (L/kg ww)	Ref	Food Chain Multiplier* (unitless)
Volatile Organic Compounds					
acetone	3.162	a	3.162	b	1
benzene	8.712	a	8.712	b	1.005
2-butanone	3.162	a	3.162	b	1
sec-butylbenzene	659	a	659	b	1.95
carbon disulfide	6.22	a	6.22	b	1
1,2-dichlorobenzene	87.32	a	87.32	b	1.067
1,2-dichloroethane	2.752	a	2.752	b	1
1,2-dichloroethene	8.115	a	8.115	b	1
cis-1,2-dichloroethene	8.115	a	8.115	b	1
isopropylbenzene	131.3	a	131.3	b	1.128
p-isopropyltoluene	286.4	a	286.4	b	1.315
trichloroethene	14.57	a	14.57	b	1.010
1,2,4-trimethylbenzene	124.5	a	124.5	b	1.103
1,3,5-trimethylbenzene	85.78	a	85.78	b	1.067
vinyl chloride	0.62	c	3.548	b	1
m-, p-xylene	50.4	a	50.4	b	1.034
xylenes, total	50.4	a	50.4	b	1.034
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate	307.6	a	307.6	b	16.749
4-chloro-3-methylphenol	48.64	a	48.64	b	1.034
di-n-butyl phthalate	582.1	a	582.1	b	1.766
dimethyl phthalate	3.404	a	3.404	b	1
isophorone	4.064	a	4.064	b	1
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	3.162	a	3.162	b	1
Polycyclic Aromatic Hydrocarbon					
benzo(k)fluoranthene	10,110	a	10,110	b	17.783
benzo(g,h,i)perylene	25,420	a	25,420	b	25.645
fluorene	330.1	a	330.1	b	1.38
naphthalene	69.34	a	69.34	b	1.053
phenanthrene	542.3	a	542.3	b	1.766
pyrene	1,142	a	1,142	b	2.78
Pesticides					
heptachlor epoxide	1363	a	1,363	b	3.181

Table J-9
Bioconcentration Factors for Water Chemicals of Potential Ecological Concern

COPEC	Water-to-Invertebrate (L/kg ww)	Ref	Water-to-Fish (L/kg ww)	Ref	Food Chain Multiplier* (unitless)
Metals					
aluminum	4,066	c	2.7	c	1
antimony	7	c	40	c	1
arsenic	73	c	114	c	1
barium	200	c	633	c	1
beryllium	45	c	62	c	1
cadmium	3,461	c	907	c	1
chromium	3,000	c	19	c	1
chromium, hexavalent	3,000	c	19	c	1
cobalt	76	d	1.16	d	1
copper	3,718	c	710	c	1
iron	4,066	c	633	c	1
lead	5,059	c	0.09	c	1
manganese	37.5	d	633	c	1
mercury	20,184	c	3,530	c	1
molybdenum	4,066	c	633	c	1
nickel	28	c	78	c	1
selenium	1,262	c	129	c	1
silver	298	c	87.71	c	1
thallium	15,000	c	10,000	c	1
vanadium	4,066	c	633	c	1
zinc	4,578	c	2,059	c	1
Radionuclides					
bismuth-214	NA	NA	NA	NA	NA
lead-214	NA	NA	NA	NA	NA
potassium-40	NA	NA	NA	NA	NA
radium	NA	NA	NA	NA	NA
radium-226	NA	NA	NA	NA	NA
radium-228	NA	NA	NA	NA	NA
thallium-208	NA	NA	NA	NA	NA
total gross alpha	NA	NA	NA	NA	NA
total gross beta	NA	NA	NA	NA	NA
tritium	NA	NA	NA	NA	NA
uranium-233	NA	NA	NA	NA	NA
uranium-235	NA	NA	NA	NA	NA
uranium-238	NA	NA	NA	NA	NA

Table J-9
Bioconcentration Factors for Water Chemicals of Potential Ecological Concern

References:
a – water-fish BCF used as surrogate for water-invertebrate BCF
b– U.S. EPA 2000c, estimated by BCFWin
c – U.S. EPA 1999b
d – U.S. EPA 2002b, geometric mean value

Note:
* U.S. EPA 1995, largest of FCM for trophic levels 3 and 4

Acronyms/Abbreviations:
BCF – bioconcentration factor
BCFWin – program for estimating BCF
COPEC – chemical of potential ecological concern
FCM – food chain multiplier
L/kg ww – liters per kilogram of wet weight tissue
NA – not available
Ref – reference
U.S. EPA – United States Environmental Protection Agency

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Table J-10
Exposure Factors for Representative Terrestrial Wildlife Receptor Species

Exposure Factor	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-Tailed Hawk
Minimum body weight, kg	0.0109[a]	0.321[b]	0.0199[c]	0.0635[d]	0.957[e]
Maximum ingestion rate, kg/day dw	0.0044[f]	0.047[g]	0.00587[h]	0.01493[i]	0.10614[j]
Fractional intake, soil	0.05[k]	0.05[k]	0.093[l]	0.104[m]	0.0035[n]
Fractional intake, plant	0.5[o]	0.8[o]	0.5[o]	0.17[p]	0[o]
Fractional intake, invertebrate	0.5[o]	0.2[o]	0.5[o]	0.83[p]	0[o]
Fractional intake, small mammal	0[o]	0[o]	0[o]	0[o]	1[o]
Site use factor	1[o]	1[o]	1[o]	1[o]	1[o]

Notes:

[a] Morton et al. 1995 (as cited in Cal/Ecotox), minimum of range of adult males and females
[b] Tomich 1962 (as cited in Cal/Ecotox), minimum adult female
[c] Dunning 1993 (as cited in TtEMI 2003), mean of adult males and females
[d] Clench and Leberman 1978 (as cited in U.S. EPA 1993), minimum of adult males and females, breeding and nonbreeding
[e] Steenhof 1983 (as cited in U.S. EPA 1993), minimum of adult males and females
[f] Nagy 2001 (omnivorous mammals; grams of food per day dw = $0.432*BW_{(g)}^{0.678}$ using maximum body weight 30.2 grams, Stebbins et al. 1980)
[g] Nagy 2001 (omnivorous mammals; grams of food per day dw = $0.432*BW_{(g)}^{0.678}$ using maximum body weight 1009 grams, Tomich 1962)
[h] Nagy 2001 (passerines; grams of food per day dw = $0.630*BW_{(g)}^{0.683}$ using maximum body weight 26.25 grams, Smith et al. 1986)
[i] Nagy 2001 (passerines; grams of food per day dw = $0.630*BW_{(g)}^{0.683}$ using maximum body weight 103 grams, Clench and Leberman 1978)
[j] Nagy 2001 (carnivorous birds; grams of food per day dw = $0.849*BW_{(g)}^{0.663}$ using maximum body weight 1,455 grams, Preston and Beane 1993)
[k] Beyer et al. 1994, midpoint of two prairie dog values
[l] Beyer et al. 1994, for wild turkey
[m] Beyer et al. 1994, for American woodcock
[n] Pascoe et al. 1996, 0.35 percent for bald eagle
[o] assumed
[p] Wheelwright 1986 (as cited in U.S. EPA 1993), spring-conservative, western United States

Acronyms/Abbreviations:

$BW_{(g)}$ – body weight as grams
Cal/Ecotox – California Wildlife Biology, Exposure Factor, and Toxicity Database
dw – dry weight
kg – kilogram
kg/day dw – kilograms of food per day as dry weight

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Table J-11
Exposure Factors for Representative Aquatic Wildlife Receptor Species

Exposure Factor	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover
Minimum body weight, kg	40[a]	3.3[b]	0.030[c]	0.0325[d]
Maximum ingestion rate, kg/day ww	9.7813[e]	1.0077[f]	0.04113[g]	0.04345[h]
Fractional intake, invertebrate	0.2[i]	0[i]	0[i]	1[i]
Fractional intake, fish	0.8[i]	1[i]	1[i]	0[i]
Site use factor	1[i]	1[i]	1[i]	1[i]

Notes:

[a] Ashwell-Erickson and Elsner 1981 (as cited in U.S. EPA 1993), minimum 2-year-old males and females

[b] Schreiber 1976 (as cited in Cal/Ecotox), minimum adult

[c] Thompson et al. 1997, minimum adult

[d] Page et al. 1995, minimum adult males and females

[e] Nagy 2001 (carnivorous mammals; grams of food per day ww = $0.469*BW_{(g)}^{0.848}$ using maximum body weight 124 kg, Ashwell-Erickson and Elsner 1981)

[f] Nagy 2001 (carnivorous birds; grams of food per day ww = $1.020*BW_{(g)}^{0.845}$ using maximum body weight 3,500 grams, Schreiber 1976)

[g] Nagy 2001 (Charadriiformes birds; grams of food per day ww = $1.914*BW_{(g)}^{0.769}$ using maximum body weight 54 grams, Thompson et al. 1997)

[h] Nagy 2001 (Charadriiformes birds; grams of food per day ww = $1.914*BW_{(g)}^{0.769}$ using maximum body weight 58 grams, Page et al. 1995)

[i] assumed

Acronyms/Abbreviations:

$BW_{(g)}$ – body weight as grams
kg – kilograms
kg/day ww – kilograms of food per day as wet weight
ww – wet weight

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Table J-12
Terrestrial Plant and Invertebrate Hazard Quotients

COPEC	Soil Maximum Detected Concentration (mg/kg)	Plant Benchmark (mg/kg)	Plant HQ	Invertebrate Benchmark (mg/kg)	Invertebrate HQ
Volatile Organic Compound					
acetone	0.018	NA	NA	NA	NA
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate	0.066	NA	NA	NA	NA
butylbenzyl phthalate	0.27	NA	NA	NA	NA
di-n-butyl phthalate	0.019	200	9E-05	NA	NA
pentachlorophenol	0.035	3	1E-02	6	6E-03
phenol	0.02	70	3E-04	30	7E-04
Polycyclic Aromatic Hydrocarbons					
acenaphthene	0.67	20	3E-02	NA	NA
acenaphthylene	0.038	NA	NA	NA	NA
anthracene	0.71	NA	NA	NA	NA
benzo(a)anthracene	35	NA	NA	NA	NA
benzo(b)fluoranthene	87	NA	NA	NA	NA
benzo(k)fluoranthene	31	NA	NA	NA	NA
benzo(g,h,i)perylene	36	NA	NA	NA	NA
benzo(a)pyrene	72	NA	NA	NA	NA
chrysene	43	NA	NA	NA	NA
dibenz(a,h)anthracene	12	NA	NA	NA	NA
fluoranthene	22	NA	NA	NA	NA
fluorene	0.36	NA	NA	30	1E-02
indeno(1,2,3-cd)pyrene	52	NA	NA	NA	NA
2-methylnaphthalene	1	NA	NA	NA	NA
naphthalene	0.57	NA	NA	NA	NA
phenanthrene	2.8	NA	NA	NA	NA
pyrene	25	NA	NA	NA	NA
Pesticides					
4,4'-DDD	0.0095	NA	NA	NA	NA
4,4'-DDT	0.0033	NA	NA	NA	NA
endosulfan sulfate	0.0017	NA	NA	NA	NA
Polychlorinated Biphenyl					
Aroclor 1260	0.37	40	9E-03	NA	NA
Metals					
aluminum	6,550	50	**1E+02***	NA	NA
arsenic	11	18	6E-01	60	2E-01

Table J-12
Terrestrial Plant and Invertebrate Hazard Quotients

COPEC	Soil Maximum Detected Concentration (mg/kg)	Plant Benchmark (mg/kg)	Plant HQ	Invertebrate Benchmark (mg/kg)	Invertebrate HQ
Metals (continued)					
barium	97	500	2E-01	330	3E-01
beryllium	0.968	10	1E-01	40	2E-02
cadmium	5.1	32	2E-01	140	4E-02
chromium	37	1	**4E+01***	0.4	**9E+01***
cobalt	21	13	**2E+00***	NA	NA
copper	27	100	3E-01	50	5E-01
iron	11,600	NA	NA	NA	NA
lead	62	120	5E-01	1700	4E-02
manganese	204	500	4E-01	NA	NA
mercury	0.217	0.3	7E-01	0.1	**2E+00***
nickel	33	30	1E+00	200	2E-01
selenium	0.72	1	7E-01	70	1E-02
silver	10	2	**5E+00***	NA	NA
thallium	2.8	1	**3E+00***	NA	NA
titanium	565	NA	NA	NA	NA
vanadium	27	2	**1E+01***	NA	NA
zinc	83	50	**2E+00***	200	4E-01
Radionuclides (pCi/g)					
gross alpha	1.2	NA	NA	NA	NA
gross beta	5.72	NA	NA	NA	NA
radium-226	5.9	288	2E-02	NA	NA
radium-228	2.3	245	9E-03	NA	NA
total uranium	0.5	NA	NA	NA	NA

Note:
* bold type indicates hazard quotient greater than 1

Acronyms/Abbreviations:
COPEC – chemical of potential ecological concern
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
HQ – hazard quotient
mg/kg – milligrams per kilograms
NA – not available
pCi/g – picocuries per gram

Table J-13
Terrestrial Wildlife Receptor-Specific Hazard Quotients

COPEC	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-Tailed Hawk	Maximum
Volatile Organic Compound						
acetone	3E-03	2E-03	4E-03	1E-03	4E-05	4E-03
Semivolatile Organic Compounds						
bis(2-ethylhexyl)phthalate	8E-03	1E-03	1E-01	1E-01	7E-03	1E-01
butylbenzyl phthalate	4E-03	7E-04	**4E+00**[a]	**5E+00**[a]	3E-01	**5E+00**[a]
di-n-butyl phthalate	8E-05	2E-05	3E-01	4E-01	2E-02	4E-01
pentachlorophenol	3E-01	6E-02	1E-02	2E-02	1E-03	3E-01
phenol	2E-03	7E-04	7E-02	5E-02	2E-03	7E-02
Polycyclic Aromatic Hydrocarbons						
acenaphthene	1E-03	2E-04	5E-02	6E-02	8E-02	8E-02
acenaphthylene	1E-04	7E-05	6E-03	3E-03	4E-03	6E-03
anthracene	2E-03	9E-04	9E-02	7E-02	8E-02	9E-02
benzo(a)anthracene	**2E+00**[a]	5E-01	**2E+00**[a]	**3E+00**[a]	**4E+00**[a]	**4E+00**[a]
benzo(b)fluoranthene	**8E+00**[a]	**3E+ 00**[a]	**9E+00**[a]	**7E+00**[a]	**1E+01**[a]	**1E+01**[a]
benzo(k)fluoranthene	**2E+00**[a]	5E-01	**2E+00**[a]	**2E+00**[a]	**4E+00**[a]	**4E+00**[a]
benzo(g,h,i)perylene	**6E+00**[a]	**3E+ 00**[a]	**6E+00**[a]	**3E+00**[a]	**4E+00**[a]	**6E+00**[a]
benzo(a)pyrene	**6E+00**[a]	**2E+00**[a]	**7E+00**[a]	**7E+00**[a]	**8E+00**[a]	**8E+00**[a]
chrysene	**4E+00**[a]	7E-01	**4E+00**[a]	**5E+00** [a]	**5E+00**[a]	**5E+00**[a]
dibenz(a,h)anthracene	1E+00	3E-01	1E+00	1E+00	1E+00	1E+00
fluoranthene	**3E+00**[a]	1E+00	**3E+00**[a]	**3E+00**[a]	**3E+00**[a]	**3E+00**[a]
fluorene	5E-04	1E-04	2E-02	2E-02	4E-02	4E-02
indeno(1,2,3-cd)pyrene	**5E+00**[a]	1E+00	**5E+00**[a]	**6E+00**[a]	**6E+00**[a]	**6E+00**[a]
2-methylnaphthalene	2E-03	1E-03	1E-01	8E-02	1E-01	1E-01
naphthalene	3E-02	2E-02	1E+00	3E-01	7E-02	1E+00
phenanthrene	1E-02	5E-03	4E-01	3E-01	3E-01	4E-01
pyrene	**5E+00**[a]	**2E+00**[a]	**5E+00**[a]	**3E+00**[a]	**3E+00**[a]	**5E+00**[a]
Pesticides						
4,4'-DDD	2E-02	3E-03	**3E+0** [a]	1E+00	1E-01	**3E+00**[a]
4,4'-DDT	6E-03	1E-03	1E+00	5E-01	4E-02	1E+00
endosulfan sulfate	2E-02	5E-03	2E-04	2E-04	2E-05	2E-02
Polychlorinated Biphenyl						
Aroclor 1260	1E+00	2E-01	**4E+00**[a]	**6E+00**[a]	5E-01	**6E+00**[a]
Metals						
aluminum	**1E+02**[a]	**3E+01**[a]	**2E+00**[a]	**2E+00**[a]	2E-01	**1E+02**[a]
arsenic	**2E+00**[a]	6E-01	1E-01	1E-01	1E-03	**2E+00**[a]
barium	1E+00	5E-01	3E-01	2E-01	3E-02	1E+00

Table J-13
Terrestrial Wildlife Receptor-Specific Hazard Quotients

COPEC	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-Tailed Hawk	Maximum
Metals (continued)						
beryllium	5E-02	1E-02	5E-01	5E-01	**2E+00**[a]	**2E+00**[a]
cadmium	**1E+02**[a]	**3E+01**[a]	**8E+01**[a]	**1E+02**[a]	**2E+00**[a]	**1E+02**[a]
chromium	1E+00	2E-01	**3E+00**[a]	**3E+00**[a]	4E-01	**3E+00**[a]
cobalt	8E-01	2E-01	**4E+00**[a]	**4E+00**[a]	2E-01	**4E+00**[a]
copper	1E+00	4E-01	1E+00	**2E+00**[a]	3E-01	**2E+00**[a]
iron	NA	NA	NA	NA	NA	NA
lead	**5E+00**[a]	1E+00	**3E+02**[a]	**3E+02**[a]	**5E+01**[a]	**3E+02**[a]
manganese	7E-01	3E-01	1E-01	1E-01	7E-03	7E-01
mercury	4E-01	1E-01	**2E+00**[a]	**2E+00**[a]	4E-02	**2E+00**[a]
nickel	**6E+01**[a]	**1E+01**[a]	**4E+00**[a]	**6E+00**[a]	7E-01	**6E+01**[a]
selenium	**5E+00**[a]	**2E+00**[a]	9E-01	8E-01	6E-02	**5E+00**[a]
silver	2E-01	3E-02	2E-02	2E-02	5E-05	2E-01
thallium	**2E+00**[a]	3E-01	**2E+00**[a]	**2E+00**[a]	1E-01	**2E+00**[a]
titanium	NA	NA	NA	NA	NA	NA
vanadium	**4E+00**[a]	1E+00	8E-02	8E-02	4E-03	**4E+00**[a]
zinc	**6E+00**[a]	1E+00	**3E+00**[a]	**3E+00**[a]	4E-01	**6E+00**[a]
Radionuclides						
radium-226 [b]	1E-01	1E-01	1E-01	1E-01	1E-01	1E-01
radium-228 [b]	5E-02	5E-02	5E-02	5E-02	5E-02	5E-02
gross alpha	NA	NA	NA	NA	NA	NA
gross beta	NA	NA	NA	NA	NA	NA
total uranium	NA	NA	NA	NA	NA	NA
Hazard Indexes						
HI VOC	3E-03	2E-03	4E-03	1E-03	4E-05	4E-03
HI SVOC	3E-01	6E-02	**4E+00**[a]	**6E+00**[a]	3E-01	**6E+00**[a]
HI PAH	**4E+01**[a]	**1E+01**[a]	**5E+01**[a]	**4E+01**[a]	**5E+01**[a]	**5E+01**[a]
HI Pesticides	5E-02	9E-03	**4E+00**[a]	**2E+00**[a]	1E-01	**4E+00**[a]
HI PCB	1E+00	2E-01	**4E+00**[a]	**6E+00**[a]	5E-01	**6E+00**[a]
HI Metals	**3E+02**[a]	**8E+01**[a]	**4E+02**[a]	**4E+02**[a]	**6E+01**[a]	**4E+02**[a]

Notes:
[a] bold type indicates hazard quotient greater than 1
[b] evaluated with maximum soil concentration and terrestrial animal benchmark

Acronyms/Abbreviations:
COPEC – chemical of potential ecological concern
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
HI – hazard index
NA – not available
PAH – polynuclear aromatic hydrocarbon
PCB – polychlorinated biphenyl
SVOC – semivolatile organic compound
VOC – volatile organic compound

Table J-14
Aquatic Wildlife Receptor-Specific Hazard Quotients

COPEC	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover	Maximum
Volatile Organic Compounds					
acetone	2E-04	3E-04	2E-03	1E-03	2E-03
benzene	5E-05	4E-04	2E-03	2E-03	2E-03
2-butanone	1E-04	1E-03	5E-03	5E-03	5E-03
sec-butylbenzene	9E-02	7E-01	**3E+00** [a]	**3E+00** [a]	**3E+00** [a]
carbon disulfide	4E-02	5E-01	**2E+00** [a]	**2E+00** [a]	**2E+00** [a]
1,2-dichloroethane	8E-06	2E-05	9E-05	9E-05	9E-05
1,2-dichloroethene	7E-05	5E-04	2E-03	2E-03	2E-03
cis-1,2-dichloroethene	1E-03	9E-03	4E-02	4E-02	4E-02
isopropylbenzene	8E-04	1E-03	6E-03	6E-03	6E-03
p-isopropyltoluene	9E-02	5E-02	2E-01	2E-01	2E-01
trichloroethene	8E-04	6E-03	3E-02	3E-02	3E-02
1,2,4-trimethylbenzene	3E-01	**3E+00** [a]	**1E+01** [a]	**1E+01** [a]	**1E+01** [a]
1,3,5-trimethylbenzene	6E-02	5E-01	**2E+00** [a]	**2E+00** [a]	**2E+00** [a]
vinyl chloride	1E-02	1E-01	6E-01	1E-01	6E-01
m-, p-xylene	7E-04	6E-03	3E-02	3E-02	3E-02
xylenes, total	2E-02	2E-01	7E-01	7E-01	7E-01
Semivolatile Organic Compounds					
bis(2-ethylhexyl)phthalate	3E-01	**4E+00** [a]	**2E+01** [a]	**2E+01** [a]	**2E+01** [a]
4-chloro-3-methylphenol	5E-02	1E-02	4E-02	4E-02	5E-02
di-n-butyl phthalate	3E-04	1E+00	**6E+00** [a]	**6E+00** [a]	**6E+00** [a]
dimethyl phthalate	8E-07	3E-03	1E-02	1E-02	1E-02
isophorone	2E-05	2E-04	9E-04	9E-04	9E-04
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	1E-04	9E-04	4E-03	4E-03	4E-03
Polycyclic Aromatic Hydrocarbon					
benzo(k)fluoranthene	2E-01	2E-01	7E-01	7E-01	7E-01
benzo(g,h,i)perylene	**1E+01** [a]	**1E+01** [a]	**5E+01** [a]	**5E+01** [a]	**5E+01** [a]
fluorene	9E-04	4E-02	2E-01	2E-01	2E-01
naphthalene	3E-02	1E+00	**6E+00** [a]	**6E+00** [a]	**6E+00** [a]
phenanthrene	4E-03	2E-01	7E-01	7E-01	7E-01
pyrene	5E-01	6E-01	**3E+00** [a]	**3E+00** [a]	**3E+00** [a]
Pesticides					
heptachlor epoxide	7E-02	4E-03	2E-02	2E-02	7E-02

Table J-14
Aquatic Wildlife Receptor-Specific Hazard Quotients

COPEC	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover	Maximum
Metals					
aluminum	**7E+02** [a]	3E-02	2E-01	**2E+02** [a]	**7E+02** [a]
antimony	9E-02	9E-01	**4E+00** [a]	7E-01	**4E+00** [a]
arsenic	**2E+00** [a]	9E-02	4E-01	3E-01	**2E+00** [a]
barium	**3E+01** [a]	**1E+01** [a]	**5E+01** [a]	**1E+01** [a]	**5E+01** [a]
beryllium	9E-02	9E-01	**4E+00** [a]	**3E+00** [a]	**4E+00** [a]
cadmium	**3E+01** [a]	**1E+01** [a]	**5E+01** [a]	**2E+02** [a]	**2E+02** [a]
chromium	1E+00	1E-01	5E-01	**7E+01** [a]	**7E+01** [a]
chromium, hexavalent	6E-01	6E-02	3E-01	**4E+01** [a]	**4E+01** [a]
cobalt	5E-02	2E-02	8E-02	**5E+00** [a]	**5E+00** [a]
copper	5E-01	2E-01	1E+00	**5E+00** [a]	**5E+00** [a]
iron	NA	NA	NA	NA	NA
lead	**2E+01** [a]	1E-01	6E-01	**3E+04** [a]	**3E+04** [a]
manganese	**2E+02** [a]	**3E+01** [a]	**1E+02** [a]	**7E+00** [a]	**2E+02** [a]
mercury	**4E+00** [a]	**1E+01** [a]	**6E+01** [a]	**3E+02** [a]	**3E+02** [a]
molybdenum	**2E+01** [a]	6E-01	**3E+00** [a]	**2E+01** [a]	**2E+01** [a]
nickel	**3E+00** [a]	3E-01	1E+00	5E-01	**3E+00** [a]
selenium	**7E+00** [a]	5E-01	**2E+00** [a]	**2E+01** [a]	**2E+01** [a]
silver	5E-02	4E-03	2E-02	6E-02	6E-02
thallium	**9E+01** [a]	**1E+02** [a]	**4E+02** [a]	**6E+02** [a]	**6E+02** [a]
vanadium	**5E+01** [a]	4E-01	**2E+00** [a]	**1E+01** [a]	**5E+01** [a]
zinc	**2E+01** [a]	**8E+00** [a]	**4E+01** [a]	**8E+01** [a]	**8E+01** [a]
Radionuclides					
bismuth-214	NA	NA	NA	NA	NA
lead-214	NA	NA	NA	NA	NA
potassium-40 [b]	6E-01	6E-01	6E-01	6E-01	6E-01
radium	NA	NA	NA	NA	NA
radium-226 [b]	1E+00	1E+00	1E+00	1E+00	1E+00
radium-228 [b]	**2E+00**[a]	**2E+00**[a]	**2E+00**[a]	**2E+00**[a]	**2E+00**[a]
thallium-208	NA	NA	NA	NA	NA
total gross alpha	NA	NA	NA	NA	NA
total gross beta	NA	NA	NA	NA	NA
tritium [b]	7E-05	7E-05	7E-05	7E-05	7E-05

Table J-14
Aquatic Wildlife Receptor-Specific Hazard Quotients

COPEC	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover	Maximum
Radionuclides (continued)					
uranium-233 [b]	1E-02	1E-02	1E-02	1E-02	1E-02
uranium-235 [b]	3E-04	3E-04	3E-04	3E-04	3E-04
uranium-238 [b]	7E-03	7E-03	7E-03	7E-03	7E-03
Hazard Indexes					
HI VOC	6E-01	**5E+00** [a]	**2E+01** [a]	**2E+01** [a]	**2E+01** [a]
HI SVOC	4E-01	**5E+00** [a]	**3E+01** [a]	**3E+01** [a]	**3E+01** [a]
HI PAH	**1E+01** [a]	**1E+01** [a]	**6E+01** [a]	**6E+01** [a]	**6E+01** [a]
HI Pesticides	7E-02	4E-03	2E-02	2E-02	7E-02
HI Metals	**1E+03** [a]	**2E+02** [a]	**7E+02** [a]	**3E+04** [a]	**3E+04** [a]

Notes:
[a] bold type indicates hazard quotient greater than 1
[b] evaluated with maximum groundwater concentration and riparian animal benchmark

Acronyms/Abbreviations:
COPEC – chemical of potential ecological concern
HI – hazard index
NA – not available
PAH – polynuclear aromatic hydrocarbon
SVOC – semivolatile organic compound
VOC – volatile organic compound

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Table J-15
Aquatic Life[a] Hazard Quotients

COPEC	Groundwater Maximum Concentration (µg/L)	Toxicity Reference Value (µg/L)	Hazard Quotient
Volatile Organic Compounds			
acetone	18	21,000	9E-04
benzene	0.4	109	4E-03
2-butanone	57	40,000	1E-03
sec-butylbenzene	0.4	4.3	9E-02
carbon disulfide	300	450	7E-01
1,2-dichloroethane	0.4	1,130	4E-04
1,2-dichloroethene	1	2,240	4E-04
cis-1,2-dichloroethene	0.6	2,240	3E-04
isopropylbenzene	0.03	4.3	7E-03
p-isopropyltoluene	1.3	4.3	3E-01
trichloroethene	0.1	140	7E-04
1,2,4-trimethylbenzene	13.6	4.3	**3E+00** [b]
1,3,5-trimethylbenzene	3.6	4.3	8E-01
vinyl chloride	2.1	2,240	9E-04
m-, p-xylene	0.08	500	2E-04
xylenes, total	2	500	4E-03
Semivolatile Organic Compounds			
bis(2-ethylhexyl)phthalate	2.7	55,000	5E-05
4-chloro-3-methylphenol	0.7	40.5	2E-02
di-n-butyl phthalate	0.46	3.4	1E-01
dimethyl phthalate	3	580	5E-03
isophorone	5	129	4E-02
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	4.8	150	3E-02
Polycyclic Aromatic Hydrocarbon			
benzo(k)fluoranthene	0.003	3	1E-03
benzo(g,h,i)perylene	0.06	3	2E-02
fluorene	0.3	3	1E-01
naphthalene	58.1	23.5	**2E+00** [b]
phenanthrene	0.62	4.6	1E-01
pyrene	0.6	95	6E-03
Pesticides			
heptachlor epoxide	0.006	0.0036	**2E+00** [b]
Metals			
aluminum	4,530	87	**5E+01** [b]
antimony	0.87	500	2E-03

Table J-15
Aquatic Life[a] Hazard Quotients

COPEC	Groundwater Maximum Concentration (µg/L)	Toxicity Reference Value (µg/L)	Hazard Quotient
Metals (continued)			
arsenic	15	36	4E-01
barium	1,110	5,000	2E-01
beryllium	3	50	6E-02
cadmium	3.4	8.8	4E-01
chromium	17.9	50	4E-01
chromium, hexavalent	10	50	2E-01
cobalt	12	10	1E+00
copper	2.5	3.1	8E-01
iron	13,000	150	**9E+01** [b]
lead	68.7	8.1	**8E+00** [b]
manganese	11,100	2,500	**4E+00** [b]
mercury	0.48	0.94	5E-01
molybdenum	10.7	1,230	9E-03
nickel	19.3	8.2	**2E+00** [b]
selenium	2.8	71	4E-02
silver	26.7	0.19	**1E+02** [b]
thallium	11.1	21.3	5E-01
vanadium	23	205	1E-01
zinc	226	81	**3E+00** [b]
Radionuclides			
bizmuth-214	18.4	NA	NA
lead-214	16.2	NA	NA
potassium-40	146	2,900	5E-02
radium	1.6	NA	NA
radium-226	4.29	10.2	4E-01
radium-228	6.66	8.49	8E-01
thallium-208	10	NA	NA
total gross alpha	68.5	NA	NA
total gross beta	181	NA	NA
tritium	18400	4.99E+09	4E-06
uranium-233	7.07	200	4E-02
uranium-235	0.231	217	1E-03
uranium-238	5.49	223	2E-02

Table J-15
Aquatic Life[a] Hazard Quotients

Notes:

[a] equally applicable to pelagic and benthic aquatic life receptors
[b] bold type indicates hazard quotient greater than 1

Acronyms/Abbreviations:
COPEC – chemical of potential ecological concern
HI – hazard index
μg/L – micrograms per liter
NA – not applicable
PAH – polycyclic aromatic hydrocarbon
pCi/L – picocuries per liter
SVOC – semivolatile organic compound
VOC – volatile organic compound

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Table J-16
Near-Shore[a] Groundwater Chemicals of Potential Ecological Concern

Chemical	Minimum Detection	Maximum Detection	Frequency of Detection	Background Threshold Value[b]	Background Comparison	Maximum Concentration Location
Volatile Organic Compounds[c] (µg/L)						
acetone	NA	NA	0/4	NA	NA	NA
benzene	0.4	0.4	1/4	NA	NA	M025-A
2-butanone	NA	NA	0/4	NA	NA	NA
sec-butylbenzene	NA	NA	0/2	NA	NA	NA
carbon disulfide	NA	NA	0/4	NA	NA	NA
1,2-dichloroethane	0.2	0.2	1/4	NA	NA	M025-A
1,2-dichloroethene	1	1	1/4	NA	NA	M025-A
cis-1,2-dichloroethene	0.6	0.6	1/2	NA	NA	M025-A
isopropylbenzene	0.03	0.03	1/2	NA	NA	M025-A
p-isopropyltoluene	NA	NA	0/2	NA	NA	NA
trichloroethene	0.1	0.1	1/4	NA	NA	M025-A
1,2,4-trimethylbenzene	NA	NA	0/2	NA	NA	NA
1,3,5-trimethylbenzene	NA	NA	0/2	NA	NA	NA
vinyl chloride	2.1	2.1	1/4	NA	NA	M025-A
meta-,para-xylene	0.08	0.08	1/2	NA	NA	M025-A
total xylenes	NA	NA	0/4	NA	NA	NA
Semivolatile Organic Compounds[c] (µg/L)						
bis(2-ethylhexyl)phthalate	2.7	2.7	1/4	NA	NA	M025-C
4-chloro-3-methylphenol	NA	NA	0/4	NA	NA	NA
di-n-butyl phthalate	0.46	0.46	1/4	NA	NA	M025-A
dimethyl phthalate	NA	NA	0/4	NA	NA	NA
isophorone	NA	NA	0/4	NA	NA	NA
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	NA	NA	0/0	NA	NA	NA

Table J-16
Near-Shore[a] Groundwater Chemicals of Potential Ecological Concern

Chemical	Minimum Detection	Maximum Detection	Frequency of Detection	Background Threshold Value[a]	Background Comparison	Maximum Concentration Location
Polycyclic Aromatic Hydrocarbon[c] (µg/L)						
benzo(k)fluoranthene	NA	NA	0/4	NA	NA	NA
benzo(g,h,i)perylene	NA	NA	0/4	NA	NA	NA
fluorene	NA	NA	0/4	NA	NA	NA
naphthalene	NA	NA	0/2	NA	NA	NA
phenanthrene	NA	NA	0/4	NA	NA	NA
pyrene	NA	NA	0/4	NA	NA	NA
Pesticides (µg/L)						
heptachlor epoxide	0.006	0.006	1/4	NA	NA	M025-A
Metals (µg/L)						
aluminum	68	1,790	2/4	439.1	>Bkgd	M015-A
antimony	NA	NA	0/4	45.77	NA	NA
arsenic	3.7	3.7	1/4	28.39	<Bkgd	M025-C
barium	27.7	260	4/4	574.7	<Bkgd	M025-A
beryllium	NA	NA	0/4	3.83	NA	NA
cadmium	NA	NA	0/4	5.38	NA	NA
chromium	1.5	8.9	2/4	13.79	<Bkgd	M015-A
chromium, hexavalent	NA	NA	0/0	NA	NA	NA
cobalt	0.12	0.28	2/4	11.57	<Bkgd	M025-C
copper	0.4	0.7	2/4	27.48	<Bkgd	M025-A
iron	468	5,100	3/4	7135	<Bkgd	M025-C
lead	2	2	1/4	3.88	<Bkgd	M015-A
manganese	23	1,700	4/4	5213	<Bkgd	M025-C
mercury	NA	NA	0/4	0.15	NA	NA
molybdenum	0.65	0.65	1/3	NA	NA	M025-C
nickel	1	1	1/4	19.06	<Bkgd	M025-C

Table J-16
Near-Shore[a] Groundwater Chemicals of Potential Ecological Concern

Chemical	Minimum Detection	Maximum Detection	Frequency of Detection	Background Threshold Value[a]	Background Comparison	Maximum Concentration Location
Metals (µg/L) (continued)						
selenium	NA	NA	0/4	5.97	NA	NA
silver	NA	NA	0/4	3.33	NA	NA
thallium	NA	NA	0/4	5.8	NA	NA
vanadium	5.6	6.8	2/4	28.65	<Bkgd	M025-A
zinc	7.8	27.7	2/4	42.91	<Bkgd	M025-E
Radionuclides (pCi/L)						
bismuth-214	10	10	1/2	NA	NA	M025-A
lead-214	NA	NA	0/2	NA	NA	NA
potassium-40	114	114	1/2	NA	NA	M025-C
radium	1.6	1.6	1/2	NA	NA	M025-A
radium-226	0.614	0.614	1/4	NA	NA	M025-C
radium-228	0.6	0.6	1/4	NA	NA	M015-A
thallium-209	10	10	1/2	NA	NA	M025-A
total gross alpha	2.02	3.4	2/4	NA	NA	M015-A
total gross beta	4.81	52.3	4/4	NA	NA	M025-C
tritium	NA	NA	0/2	NA	NA	NA
uranium-233	NA	NA	0/2	NA	NA	NA
uranium-235	NA	NA	0/2	NA	NA	NA
uranium-238	NA	NA	0/2	NA	NA	NA

Table J-16
Near-Shore[a] Groundwater Chemicals of Potential Ecological Concern

Notes:
[a] "near-shore" includes the area within 100 feet of the bay shoreline
[b] background values are 80th lower confidence limit, 95th percentile for Alameda Point groundwater (TtEMI 2001b)
[c] organic compounds are grouped into categories according to toxicity assessment protocols used in the ecological risk assessment

Acronyms/Abbreviations:
> Bkgd – site data were greater than the background data; maximum site concentration compared to background threshold value
< Bkgd – site data were not greater than the background data; maximum site concentration compared to background threshold value
COPEC – chemical of potential ecological concern
μg/L – micrograms per liter
NA – not analyzed for statistical difference from background
pCi/L – picocuries per liter

Table J-17
Refined Exposure Factors for Representative Terrestrial Wildlife Receptors

Exposure Factor	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-Tailed Hawk
Mean body weight, kg	0.0184[a]	0.562[b]	0.0235[c]	0.0804[d]	1.13[e]
Mean ingestion rate, kg/day dw	0.0031[f]	0.0316[g]	0.00544[h]	0.01261[i]	0.08976[j]
Fractional intake, soil	0.05[k]	0.05[k]	0.093[l]	0.104[m]	0.0035[n]
Fractional intake, plant	0.5[o]	0.8[o]	0.5[o]	0.17[p]	0[o]
Fractional intake, invertebrate	0.5[o]	0.2[o]	0.5[o]	0.83[p]	0[o]
Fractional intake, small mammal	0[o]	0[o]	0[o]	0[o]	1[o]
Home range, ha	0.091[q]	0.2[r]	0.0144[s]	11[t]	100[u]
Site-use factor	1[v]	1[v]	1[v]	1[v]	1[v]

Notes:

[a] Hayes 1989 (as cited in Cal/Ecotox), mean adult both sex

[b] Holekamp and Nunes 1989 (as cited in Cal/Ecotox), mean female data

[c] Smith and Arcese 1988 (as cited in Cal/Ecotox), mean adult male & female

[d] Clench and Leberman 1978, Wheelwright 1986 (as cited in U.S. EPA 1993), mean of adult males and females, breeding and nonbreeding

[e] Craighead and Craighead 1956, Steenhof 1983, Springer and Osborne 1983 (as cited in U.S. EPA 1993), mean male and female adult values

[f] Nagy 2001 (omnivorous mammals; grams of food per day dw = $0.432*BW_{(g)}^{0.678}$ using mean body weight 18.4 grams, Hayes 1989)

[g] Nagy 2001 (omnivorous mammals; grams of food per day dw = $0.432*BW_{(g)}^{0.678}$ using mean body weight 562 grams, Holekamp & Nunes 1989)

[h] Nagy 2001 (passerines; grams of food per day dw = $0.630*BW_{(g)}^{0.683}$ using mean body weight 23.5 grams, Smith and Arcese. 1988)

[i] Nagy 2001 (passerines; grams of food per day dw = $0.630*BW_{(g)}^{0.683}$ using mean body weight 80.4 grams, Clench & Leberman 1978, Wheelwright 1986)

[j] Nagy 2001 (carnivorous birds; grams of food per day dw = $0.849*BW_{(g)}^{0.663}$ using mean body weight 1,130 grams, Craighead and Craighead 1956)

[k] Beyer et al. 1994, midpoint of two prairie dog values

[l] Beyer et al. 1994, for wild turkey

[m] Beyer et al. 1994, for American woodcock

[n] Pascoe et al. 1996, 0.35 percent for bald eagle

[o] assumed

[p] Wheelwright 1986 (U.S. EPA 1993) spring-conservative, western United States

[q] Storer et al. 1944, mean of male and female adult values

[r] Evans and Holdenreid 1943, Boellstorf and Owings 1995, Owings et al. 1977 (as cited in Cal/Ecotox), median value

[s] Haliburton and Mewaldt 1976, mean of male and female adult values

[t] mean of five values reported in literature

[u] U.S. EPA 1993, "> few hundred ha";
Zeiner et al. 1990, ">1 km^2"

[v] using site area of 162 ha

Acronyms/Abbreviations:

$BW_{(g)}$ – body weight as grams
dw – dry weight
ha – hectares
kg – kilogram
kg/day dw – kilograms of food per day as dry weight
km^2 – square kilometer
ww – wet weight

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Table J-18
Refined Exposure Factors for Representative Aquatic Wildlife Receptors

Exposure Factor	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover
Mean body weight, kg	80.55[a]	3.4[b]	0.045[c]	0.0418[d]
Mean ingestion rate, kg/day ww	6.7845[e]	0.98333[f]	0.03575[g]	0.03378[h]
Fractional intake, invertebrate	0.2[i]	0[i]	0[i]	1[i]
Fractional intake, fish	0.8[i]	1[i]	1[i]	0[i]
Home range, ha	7850[j]	125,664[k]	7850[l]	707[m]
Site use factor	0.00029[n]	0.000018[n]	0.00029[n]	0.0033[n]

Notes:

[a] Pitcher and Calkins 1979, (as cited in U.S. EPA 1993), mean male and female adult

[b] Dunning 1993, mean adult

[c] Thompson et al. 1997, mean adult

[d] Page et al. 1995, mean male and female adult

[e] Nagy 2001 (carnivorous mammals; grams of food per day ww = $0.469*BW_{(g)}^{0.848}$ using mean body weight 80.55 kg, U.S. EPA 1993)

[f] Nagy 2001 (carnivorous birds; grams of food per day ww = $1.020*BW_{(g)}^{0.845}$ using mean body weight 3,400 grams, Schreiber 1976)

[g] Nagy 2001 (Charadriiformes birds; grams of food per day ww = $1.914*BW_{(g)}^{0.769}$ using mean body weight 45 grams Thompson et al. 1997)

[h] Nagy 2001 (Charadriiformes birds; grams of food per day ww = $1.914*BW_{(g)}^{0.769}$ using mean body weight 41.8 grams, Page et al. 1995)

[i] assumed

[j] U.S. EPA 1993, 5 km radius

[k] Gress et al. 1980, 20 km radius

[l] Atwood and Minsky 1983, 5 km radius

[m] Zeiner et al. 1990, 1.5 km radius

[n] using site aquatic area of 2.3 ha, see text

Acronyms/Abbreviations:

$BW_{(g)}$ – body weight as grams
ha – hectares
kg – kilograms
kg/day ww – kilograms of food per day as wet weight
km – kilometer
U.S. EPA – United States Environmental Protection Agency
ww – wet weight

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Table J-19
Terrestrial Plant and Invertebrate Refined Hazard Quotients

COPEC	Background Comparison	Soil Refined Exposure Point Concentration (mg/kg)	Plant Benchmark (mg/kg)	Plant Refined HQ	Invertebrate Benchmark (mg/kg)	Invertebrate Refined HQ
Volatile Organic Compound						
acetone	NA	0.0180	NA	NA	NA	NA
Semivolatile Organic Compounds						
bis(2-ethylhexyl)phthalate	NA	0.0660	NA	NA	NA	NA
butylbenzyl phthalate	NA	0.2700	NA	NA	NA	NA
di-n-butyl phthalate	NA	0.0190	200	9E-05	NA	NA
Polycyclic Aromatic Hydrocarbons						
acenaphthene	NA	0.0881	20	4E-03	NA	NA
acenaphthylene	NA	0.0380	NA	NA	NA	NA
anthracene	NA	0.0888	NA	NA	NA	NA
benzo(a)anthracene	NA	0.6598	NA	NA	NA	NA
benzo(b)fluoranthene	NA	1.5237	NA	NA	NA	NA
benzo(k)fluoranthene	NA	0.7783	NA	NA	NA	NA
benzo(g,h,i)perylene	NA	0.6821	NA	NA	NA	NA
benzo(a)pyrene	NA	1.3220	NA	NA	NA	NA
chrysene	NA	0.8227	NA	NA	NA	NA
dibenz(a,h)anthracene	NA	0.2811	NA	NA	NA	NA
fluoranthene	NA	0.4437	NA	NA	NA	NA
fluorene	NA	0.0863	NA	NA	30	3E-03
indeno(1,2,3-cd)pyrene	NA	0.9368	NA	NA	NA	NA

Table J-19
Terrestrial Plant and Invertebrate Refined Hazard Quotients

COPEC	Background Comparison	Soil Refined Exposure Point Concentration (mg/kg)	Plant Benchmark (mg/kg)	Plant Refined HQ	Invertebrate Benchmark (mg/kg)	Invertebrate Refined HQ
Polynuclear Aromatic Hydrocarbons (continued)						
2-methylnaphthalene	NA	0.0961	NA	NA	NA	NA
naphthalene	NA	0.0870	NA	NA	NA	NA
phenanthrene	NA	0.1327	NA	NA	NA	NA
pyrene	NA	0.4998	NA	NA	NA	NA
Pesticides						
4,4'-DDD	NA	0.0059	NA	NA	NA	NA
4,4'-DDT	NA	0.0033	NA	NA	NA	NA
endosulfan sulfate	NA	0.0017	NA	NA	NA	NA
Polychlorinated Biphenyl						
Aroclor 1260	NA	0.1107	40	3E-03	NA	NA
Metals						
aluminum	<Bkgd	4999	50	**1E+02***	NA	NA
chromium	<Bkgd	30.76	1	**3E+01***	0.4	**8E+01***
cobalt	>Bkgd	6.44	13	5E-01	NA	NA
iron	<Bkgd	8785	NA	NA	NA	NA
manganese	<Bkgd	135.9	500	3E-01	NA	NA
mercury	<Bkgd	0.13	0.3	4E-01	0.1	1E+00
silver	>Bkgd	2.71	2	1E+00	NA	NA
thallium	NA	2.80	1	**3E+00***	NA	NA
titanium	NA	472.1	NA	NA	NA	NA
vanadium	<Bkgd	21.28	2	**1E+01***	NA	NA
zinc	>Bkgd	33.28	50	7E-01	200	2E-01

Table J-19
Terrestrial Plant and Invertebrate Refined Hazard Quotients

COPEC	Background Comparison	Soil Refined Exposure Point Concentration (mg/kg)	Plant Benchmark (mg/kg)	Plant Refined HQ	Invertebrate Benchmark (mg/kg)	Invertebrate Refined HQ
Radionuclides (pCi/g)						
gross alpha	NA	2.95	NA	NA	NA	NA
gross beta	NA	9.68	NA	NA	NA	NA
radium-226	NA	2.51	288	9E-03	NA	NA
radium-228	NA	0.75	245	3E-03	NA	NA
total uranium	NA	0.44	NA	NA	NA	NA

Note:
* bold type indicates hazard quotient greater than 1

Acronyms/Abbreviations:
> Bkgd – site data were statistically greater than the background data
< Bkgd – site data were not statistically greater than the background data
COPEC – chemical of potential ecological concern
DDD – dichlorodiphenyldichloroethane
DDT – dichlorodiphenyltrichloroethane
HQ – hazard quotient
mg/kg – milligrams per kilograms
NA – not available
NC – not compared to background
pCi/g – picocuries per gram

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Table J-20
Terrestrial Wildlife Receptor-Specific Refined Hazard Quotients

COPEC	Background Comparison	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-tailed Hawk	Maximum Refined HQ
Semivolatile Organic Compounds							
bis(2-ethylhexyl)phthalate	NA	3E-03	5E-04	8E-02	9E-02	5E-03	9E-02
butylbenzyl phthalate	NA	2E-03	3E-04	**3E+00***	**4E+00***	2E-01	**4E+00***
di-n-butyl phthalate	NA	4E-05	6E-06	2E-01	3E-01	1E-02	3E-01
pentachlorophenol	NA	1E-01	2E-02	1E-02	1E-02	7E-04	1E-01
phenol	NA	7E-04	3E-04	5E-02	3E-02	2E-03	5E-02
Polycyclic Aromatic Hydrocarbons							
acenaphthene	NA	1E-04	4E-05	8E-03	6E-03	7E-03	8E-03
acenaphthylene	NA	6E-05	3E-05	5E-03	2E-03	3E-03	5E-03
anthracene	NA	2E-04	6E-05	1E-02	6E-03	7E-03	1E-02
benzo(a)anthracene	NA	2E-02	5E-03	4E-02	3E-02	6E-02	6E-02
benzo(b)fluoranthene	NA	6E-02	2E-02	1E-01	8E-02	1E-01	1E-01
benzo(k)fluoranthene	NA	2E-02	6E-03	5E-02	4E-02	7E-02	7E-02
benzo(g,h,i)perylene	NA	3E-02	1E-02	6E-02	3E-02	6E-02	6E-02
benzo(a)pyrene	NA	5E-02	1E-02	1E-01	8E-02	1E-01	1E-01
chrysene	NA	3E-02	7E-03	7E-02	6E-02	7E-02	7E-02
dibenz(a,h)anthracene	NA	1E-02	3E-03	3E-02	2E-02	2E-02	3E-02
fluoranthene	NA	3E-02	1E-02	5E-02	3E-02	4E-02	5E-02
fluorene	NA	1E-04	4E-05	7E-03	4E-03	7E-03	7E-03
indeno(1,2,3-cd)pyrene	NA	4E-02	9E-03	8E-02	7E-02	8E-02	8E-02
2-methylnaphthalene	NA	1E-04	5E-05	1E-02	5E-03	8E-03	1E-02
naphthalene	NA	2E-03	1E-03	1E-01	3E-02	7E-03	1E-01
phenanthrene	NA	5E-04	2E-04	3E-02	1E-02	1E-02	3E-02
pyrene	NA	4E-02	2E-02	7E-02	4E-02	4E-02	7E-02

Table J-20
Terrestrial Wildlife Receptor-Specific Refined Hazard Quotients

COPEC	Background Comparison	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-tailed Hawk	Maximum Refined HQ
Pesticides							
4,4'-DDD	NA	4E-03	7E-04	1E+00	6E-01	6E-02	1E+00
4,4'-DDT	NA	2E-03	4E-04	8E-01	3E-01	3E-02	8E-01
endosulfan sulfate	NA	8E-03	2E-03	2E-04	2E-04	1E-05	8E-03
Polychlorinated Biphenyl							
Aroclor 1260	NA	2E-01	2E-02	1E+00	1E+00	1E-01	1E+00
Metals							
aluminum	<Bkgd	**3E+01***	**9E+00***	1E+00	1E+00	1E-01	**3E+01***
arsenic	>Bkgd	5E-01	1E-01	5E-02	4E-02	4E-04	5E-01
beryllium	<Bkgd	1E-02	3E-03	2E-01	2E-01	6E-01	6E-01
cadmium	>Bkgd	**1E+01***	**2E+00***	**2E+01***	**2E+01***	4E-01	**2E+01***
chromium	<Bkgd	4E-01	8E-02	**2E+00***	**2E+00***	2E-01	**2E+00***
cobalt	>Bkgd	1E-01	2E-02	1E+00	9E-01	5E-02	1E+00
copper	>Bkgd	3E-01	6E-02	5E-01	4E-01	8E-02	5E-01
iron	<Bkgd	NA	NA	NA	NA	NA	NA
lead	>Bkgd	9E-01	2E-01	**1E+02***	**1E+02***	**2E+01***	**1E+02***
mercury	<Bkgd	1E-01	3E-02	1E+00	9E-01	2E-02	1E+00
nickel	<Bkgd	**2E+01***	**3E+00***	**3E+00***	**3E+00***	4E-01	**2E+01***
selenium	NA	**2E+00***	6E-01	7E-01	5E-01	4E-02	**2E+00***
thallium	NA	7E-01	1E-01	1E+00	1E+00	7E-02	1E+00
titanium	NA	NA	NA	NA	NA	NA	NA
vanadium	<Bkgd	1E+00	4E-01	5E-02	4E-02	2E-03	1E+00
zinc	>Bkgd	1E+00	2E-01	8E-01	9E-01	1E-01	1E+00
Radionuclides							
gross alpha	NA	NA	NA	NA	NA	NA	NA
gross beta	NA	NA	NA	NA	NA	NA	NA
total uranium	NA	NA	NA	NA	NA	NA	NA

Table J-20
Terrestrial Wildlife Receptor-Specific Refined Hazard Quotients

COPEC	Background Comparison	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-tailed Hawk	Maximum Refined HQ
Hazard Indexes							
HI SVOC		1E-01	2E-02	**3E+00***	**4E+00***	2E-01	**4E+00***
HI PAH		3E-01	1E-01	8E-01	5E-01	7E-01	8E-01
HI Pesticides		1E-02	3E-03	**2E+00***	9E-01	9E-02	**2E+00***
HI PCB		2E-01	2E-02	1E+00	1E+00	1E-01	1E+00
HI Metals		**7E+01***	**2E+01***	**1E+02***	**1E+02***	**2E+01***	**1E+02***

Note:
* bold type indicates hazard quotient greater than 1

Acronyms/Abbreviations:
> Bkgd – site data were statistically greater than the background data
< Bkgd – site data were not statistically greater than the background data
COPEC – chemical of potential ecological concern
DDE – dichlorodiphenyldichloroethene
DDT – dichlorodiphenyltrichloroethane
HI – hazard index
NA – not available
NC – not compared to background
PAH – polycyclic aromatic hydrocarbon
PCB – polychlorinated biphenyl
SVOC – semivolatile organic compound
VOC – volatile organic compound

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Table J-21
Aquatic Wildlife Receptor-Specific Refined Hazard Quotients

COPEC	Background Comparison	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover	Maximum Refined HQ
Volatile Organic Compounds						
benzene	NA	5E-09	7E-09	3E-07	3E-06	3E-06
1,2-dichloroethane	NA	4E-10	2E-10	7E-09	8E-08	8E-08
1,2-dichloroethene	NA	7E-09	1E-08	4E-07	5E-06	5E-06
cis-1,2-dichloroethene	NA	1E-07	2E-07	7E-06	8E-05	8E-05
isopropylbenzene	NA	8E-08	2E-08	1E-06	1E-05	1E-05
trichloroethene	NA	8E-08	1E-07	5E-06	6E-05	6E-05
vinyl chloride	NA	1E-06	2E-06	1E-04	2E-04	2E-04
m-, p-xylene	NA	8E-08	1E-07	5E-06	5E-05	5E-05
Semivolatile Organic Compounds						
bis(2-ethylhexyl)phthalate	NA	3E-05	7E-05	3E-03	3E-02	3E-02
di-n-butyl phthalate	NA	3E-08	2E-05	1E-03	1E-02	1E-02
Pesticides						
heptachlor epoxide	NA	7E-06	6E-08	3E-06	3E-05	3E-05
Metals						
aluminum	>Bkgd	3E-02	2E-07	1E-05	2E-01	2E-01
arsenic	<Bkgd	4E-05	4E-07	2E-05	1E-04	1E-04
barium	<Bkgd	9E-04	4E-05	2E-03	7E-03	7E-03
chromium	<Bkgd	6E-05	9E-07	4E-05	7E-02	7E-02
cobalt	<Bkgd	1E-07	7E-09	3E-07	2E-04	2E-04
copper	<Bkgd	1E-05	1E-06	5E-05	3E-03	3E-03
iron	<Bkgd	NA	NA	NA	NA	NA
lead	<Bkgd	7E-05	7E-08	3E-06	**2E+00** [a]	**2E+00** [a]
manganese	<Bkgd	3E-03	7E-05	3E-03	2E-03	3E-03
molybdenum	NA	1E-04	6E-07	3E-05	2E-03	2E-03
nickel	<Bkgd	2E-05	3E-07	1E-05	5E-05	5E-05
vanadium	<Bkgd	1E-03	2E-06	9E-05	6E-03	6E-03
zinc	<Bkgd	3E-04	2E-05	8E-04	2E-02	2E-02
Radionuclides						
bismuth-214	NA	NA	NA	NA	NA	NA
potassium-40 [b]	NA	5E-01	5E-01	5E-01	5E-01	5E-01
radium	NA	NA	NA	NA	NA	NA
radium-226 [b]	NA	2E-01	2E-01	2E-01	2E-01	2E-01
radium-228 [b]	NA	2E-01	2E-01	2E-01	2E-01	2E-01
thallium-208	NA	NA	NA	NA	NA	NA
total gross alpha	NA	NA	NA	NA	NA	NA
total gross beta	NA	NA	NA	NA	NA	NA

Table J-21
Aquatic Wildlife Receptor-Specific Refined Hazard Quotients

COPEC	Background Comparison	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover	Maximum Refined HQ
Hazard Indexes						
HI VOC	NA	1E-06	2E-06	1E-04	4E-04	4E-04
HI SVOC	NA	3E-05	9E-05	4E-03	4E-02	4E-02
HI Pesticides	NA	7E-06	6E-08	3E-06	3E-05	3E-05
HI Metals	NA	4E-02	1E-04	6E-03	**2E+00** [a]	**2E+00** [a]

Notes:
[a] bold type indicates hazard quotient greater than 1
[b] evaluated with maximum near-shore groundwater concentration and riparian animal benchmark

Acronyms/Abbreviations:
> Bkgd – site data were statistically greater than the background data
< Bkgd – site data were not statistically greater than the background data
COPEC – chemical of potential ecological concern (near-shore groundwater locations, see Table G-16)
HI – hazard index
HQ – hazard quotient
NA – not available
NC – not compared to background
VOC – volatile organic compound

Table J-22
Aquatic Life[a] Refined Hazard Quotients

COPEC	Background Comparison	Near-shore Groundwater Maximum Concentration (µg/L)	Toxicity Reference Value (µg/L)	Refined Hazard Quotient
Volatile Organic Compounds				
benzene	NA	0.4	109	4E-03
1,2-dichloroethane	NA	0.2	1,130	2E-04
1,2-dichloroethene	NA	1	2,240	4E-04
cis-1,2-dichloroethene	NA	0.6	2,240	3E-04
isopropylbenzene	NA	0.03	4.3	7E-03
trichloroethene	NA	0.1	140	7E-04
vinyl chloride	NA	2.1	2,240	9E-04
m-, p-xylene	NA	0.08	500	2E-04
Semivolatile Organic Compounds				
bis(2-ethylhexyl)phthalate	NA	2.7	55,000	5E-05
di-n-butyl phthalate	NA	0.46	3.4	1E-01
Pesticides				
heptachlor epoxide	NA	0.006	0.0036	**2E+00**[b]
Metals				
aluminum	>Bkgd	1790	87	**2E+01**[b]
arsenic	<Bkgd	3.7	36	1E-01
barium	<Bkgd	260	5,000	5E-02
chromium	<Bkgd	8.9	50	2E-01
cobalt	<Bkgd	0.28	10	3E-02
copper	<Bkgd	0.7	3.1	2E-01
iron	<Bkgd	5100	150	3E+01
lead	<Bkgd	2	8.1	2E-01
manganese	<Bkgd	1700	2,500	7E-01
molybdenum	NA	0.65	1,230	5E-04
nickel	<Bkgd	1	8.2	1E-01
vanadium	<Bkgd	6.8	205	3E-02
zinc	<Bkgd	27.7	81	3E-01
Radionuclides (pCi/L)				
bismuth-214	NA	10	NA	NA
potassium-40	NA	114	2,900	4E-02
radium	NA	1.6	NA	NA
radium-226	NA	0.614	10.2	6E-02
radium-228	NA	0.6	8.49	7E-02
thallium-208	NA	10	NA	NA
total gross alpha	NA	3.4	NA	NA
total gross beta	NA	52.3	NA	NA

Table J-22
Aquatic Life[a] Refined Hazard Quotients

Notes:
[a] equally applicable to pelagic and benthic aquatic life receptors
[b] bold font indicates hazard quotient greater than 1

Acronyms/Abbreviations:
> Bkgd – site data were statistically greater than the background data
< Bkgd – site data were not statistically greater than the background data
COPEC – chemical of potential ecological concern (near-shore groundwater locations, see Table G-16)
µg/L – micrograms per liter
NA – not applicable
pCi/L – picocuries per liter

Table J-23
LOAEL-Based Toxicity Reference Values

COPEC[a]	TRV (mg/kg/day)	Species	Body Weight (kg)	BTAG[b]	Reference
Mammalian TRV					
Semivolatile Organic Compound					
butylbenzyl phthalate	470	rat	0.3		NTP 1985c
Metals					
aluminum	19.3	mouse	0.03		Ondreicka et al. 1966
cadmium	2.64	mouse	0.03141	BTAG	Schroeder and Mitchner 1971
chromium	13.14	rat	0.35		Steven et al. 1976
lead	240.64	mouse	0.0187	BTAG	Wise 1981
nickel	31.6	rat	0.2486	BTAG	Smith et al. 1993
selenium	1.21	mouse	0.0246	BTAG	Schroeder & Mitchner 1971
Avian TRV					
Semivolatile Organic Compounds					
butylbenzyl phthalate	1.1	ringed dove	0.155		Peakall 1974
Metals					
aluminum	1097	ringed dove	0.155		Carriere et al. 1986
cadmium	10.43	Japanese quail	0.084	BTAG	Richardson et al. 1974
chromium	5	black duck	1.25		Haseltine et al. 1985
lead	8.75	chicken	0.8	BTAG	Edens and Garlich 1983
nickel	56.26	mallard	0.58	BTAG	Cain and Pafford 1981
selenium	0.93	mallard	1.1077	BTAG	Heinz et al. 1989

Notes:
[a] the following chemical surrogates were used:
di-n-butylphthalate for butylbenzylphthalate avian TRV
hexavalent chromium for total chromium mammalian TRV
trivalent chromium for total chromium avian TRV
[b] TRV presented by the BTAG are noted (High-TRV; lowest observed adverse effect level [LOAEL]); other LOAEL-based TRV were selected from the scientific literature

Acronyms/Abbreviations:
BTAG – biological technical assistance group, U.S. EPA Region IX
COPEC – chemical of potential ecological concern
kg – kilograms
LOAEL – lowest observed adverse effect level
mg/kg/day – milligrams per kilogram per day
NOAEL – no observed adverse effect level
TRV – toxicity reference value

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Table J-24
Terrestrial Wildlife Receptor-Specific LOAEL-Based Refined Hazard Quotients

COPEC	Background Comparison	Deer Mouse	California Ground Squirrel	Alameda Song Sparrow	American Robin	Red-Tailed Hawk	Maximum Refined LOAEL-HQ
Semivolatile Organic Compound							
butylbenzyl phthalate	NA	6E-04	9E-05	3E-01	4E-01	2E-02	4E-01
Metals							
aluminum	<BKGD	**3E+00***	9E-01	1E-01	1E-01	1E-02	**3E+00***
cadmium	NA	3E-01	5E-02	1E-01	1E-01	3E-03	3E-01
chromium	<BKGD	9E-02	2E-02	4E-01	4E-01	4E-02	4E-01
lead	NA	4E-03	8E-04	2E-01	2E-01	3E-02	2E-01
nickel	<BKGD	8E-02	1E-02	6E-02	7E-02	9E-03	8E-02
selenium	NA	9E-02	3E-02	2E-01	1E-01	1E-02	2E-01

Note:
* bold type indicates hazard quotient greater than 1

Acronyms/Abbreviations:
> Bkgd – site data were statistically greater than the background data
< Bkgd – site data were not statistically greater than the background data
COPEC – chemical of potential ecological concern
LOAEL – lowest observed adverse effects level
NA – not available

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Table J-25
Aquatic Wildlife Receptor-Specific LOAEL-Based Refined Hazard Quotients

COPEC	Background Comparison	Harbor Seal	California Brown Pelican	California Least Tern	Western Snowy Plover	Maximum Refined LOAEL-HQ
Metal						
lead	<Bkgd	3E-07	1E-10	5E-09	3E-03	3E-03

Acronyms/Abbreviations:
< Bkgd – site data were not statistically greater than the background data
COPEC – chemical of potential ecological concern
HQ – hazard quotient
LOAEL – lowest observed adverse effects level

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Attachment J1
Hazard Quotient Calculations for Screening-Level Ecological Risk Assessment, Transfer Parcel FED-1A (On CD-ROM)

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Attachment J1 Tables (On CD-ROM)

J1-1 Hazard Quotient – Calculations for Deer Mouse, Initial Screening-Level

J1-2 Hazard Quotient – Calculations for California Ground Squirrel, Initial Screening-Level

J1-3 Hazard Quotient – Calculations for Alameda Song Sparrow, Initial Screening-Level

J1-4 Hazard Quotient – Calculations for American Robin, Initial Screening-Level

J1-5 Hazard Quotient – Calculations for Red-Tailed Hawk, Initial Screening-Level

J1-6 Hazard Quotient – Calculations for Harbor Seal, Initial Screening-Level

J1-7 Hazard Quotient – Calculations for California Brown Pelican, Initial Screening-Level

J1-8 Hazard Quotient – Calculations for California Least Tern, Initial Screening-Level

J1-9 Hazard Quotient – Calculations for Western Snowy Plover, Initial Screening-Level

J1-10 Hazard Quotient – Calculations for Deer Mouse, Refined Exposure

J1-11 Hazard Quotient – Calculations for California Ground Squirrel, Refined Exposure

J1-12 Hazard Quotient – Calculations for Alameda Song Sparrow, Refined Exposure

J1-13 Hazard Quotient – Calculations for American Robin, Refined Exposure

J1-14 Hazard Quotient – Calculations for Red-Tailed Hawk, Refined Exposure

J1-15 Hazard Quotient – Calculations for Harbor Seal, Refined Exposure

J1-16 Hazard Quotient – Calculations for California Brown Pelican, Refined Exposure

J1-17 Hazard Quotient – Calculations for California Least Tern, Refined Exposure

J1-18 Hazard Quotient – Calculations for Western Snowy Plover, Refined Exposure

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TABLE J1-1
Hazard Quotient - Calculations for Deer Mouse
Initial Screening-Level

	Food Ingestion Rate, kg food/day			4.35E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.09E-2									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	5.00E-2	7.56E+1	5.00E-1	4.54E-2	5.00E-1	1.07E+0	0.0	2.72E-1	9.00E+1	3.50E-1	9.00E+1	3E-3
bis(2-ethylhexyl)phthalate	6.60E-2	5.00E-2	4.99E-2	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	1.47E-1	1.83E+1	3.00E-2	1.83E+1	8E-3
butylbenzyl phthalate	2.70E-1	5.00E-2	7.28E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	6.38E-1	1.59E+2	3.00E-1	1.59E+2	4E-3
di-n-butyl phthalate	1.90E-2	5.00E-2	9.02E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	4.56E-2	5.50E+2	3.00E-2	5.50E+2	8E-5
pentachlorophenol	3.50E-2	5.00E-2	5.06E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	8.12E-2	2.40E-1	3.50E-1	2.40E-1	3E-1
phenol	2.00E-2	5.00E-2	1.54E+1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	1.06E-1	6.00E+1	3.50E-1	6.00E+1	2E-3
acenaphthene	6.70E-1	5.00E-2	8.08E-3	5.00E-1	3.00E-1	5.00E-1	1.07E+0	0.0	5.46E-2	5.00E+1	2.77E-1	5.00E+1	1E-3
acenaphthylene	3.80E-2	5.00E-2	6.31E-1	5.00E-1	2.20E-1	5.00E-1	1.07E+0	0.0	7.22E-3	5.00E+1	2.77E-1	5.00E+1	1E-4
anthracene	7.10E-1	5.00E-2	4.01E-1	5.00E-1	3.20E-1	5.00E-1	1.07E+0	0.0	1.16E-1	5.00E+1	2.77E-1	5.00E+1	2E-3
benzo(a)anthracene	3.50E+1	5.00E-2	1.58E-2	5.00E-1	2.70E-1	5.00E-1	1.07E+0	0.0	2.70E+0	1.31E+0	3.05E-2	1.31E+0	**2E+0**
benzo(b)fluoranthene	8.70E+1	5.00E-2	3.10E-1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	1.08E+1	1.31E+0	3.05E-2	1.31E+0	**8E+0**
benzo(k)fluoranthene	3.10E+1	5.00E-2	7.13E-2	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	2.36E+0	1.31E+0	3.05E-2	1.31E+0	**2E+0**
benzo(g,h,i)perylene	3.60E+1	5.00E-2	7.59E-1	5.00E-1	1.50E-1	5.00E-1	1.07E+0	0.0	7.25E+0	1.31E+0	3.05E-2	1.31E+0	**6E+0**
benzo(a)pyrene	7.20E+1	5.00E-2	1.14E-1	5.00E-1	3.40E-1	5.00E-1	1.07E+0	0.0	7.97E+0	1.31E+0	3.05E-2	1.31E+0	**6E+0**
chrysene	4.30E+1	5.00E-2	1.45E-2	5.00E-1	4.40E-1	5.00E-1	1.07E+0	0.0	4.76E+0	1.31E+0	3.05E-2	1.31E+0	**4E+0**
dibenz(a,h)anthracene	1.20E+1	5.00E-2	1.30E-1	5.00E-1	4.90E-1	5.00E-1	1.07E+0	0.0	1.73E+0	1.31E+0	3.05E-2	1.31E+0	1E+0
fluoranthene	2.20E+1	5.00E-2	5.00E-1	5.00E-1	3.70E-1	5.00E-1	1.07E+0	0.0	4.26E+0	1.31E+0	3.05E-2	1.31E+0	**3E+0**
fluorene	3.60E-1	5.00E-2	2.56E-2	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	2.34E-2	5.00E+1	2.77E-1	5.00E+1	5E-4
indeno(1,2,3-c,d)pyrene	5.20E+1	5.00E-2	1.10E-1	5.00E-1	4.10E-1	5.00E-1	1.07E+0	0.0	6.44E+0	1.31E+0	3.05E-2	1.31E+0	**5E+0**
2-methylnaphthalene	1.00E+0	5.00E-2	3.18E-1	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	1.24E-1	5.00E+1	2.77E-1	5.00E+1	2E-3
naphthalene	5.70E-1	5.00E-2	1.22E+1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	1.42E+0	5.00E+1	2.77E-1	5.00E+1	3E-2
phenanthrene	2.80E+0	5.00E-2	5.73E-1	5.00E-1	2.80E-1	5.00E-1	1.07E+0	0.0	5.33E-1	5.00E+1	2.77E-1	5.00E+1	1E-2
pyrene	2.50E+1	5.00E-2	7.20E-1	5.00E-1	3.90E-1	5.00E-1	1.07E+0	0.0	6.04E+0	1.31E+0	3.05E-2	1.31E+0	**5E+0**
4,4'-DDD	9.50E-3	5.00E-2	2.57E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	1.33E-2	8.00E-1	3.20E-1	8.00E-1	2E-2
4,4'-DDT	3.30E-3	5.00E-2	3.34E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	4.68E-3	8.00E-1	3.20E-1	8.00E-1	6E-3
endosulfan sulfate	1.70E-3	5.00E-2	1.98E+0	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	2.97E-3	1.50E-1	3.50E-1	1.50E-1	2E-2
Aroclor 1260	3.70E-1	5.00E-2	2.67E-2	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	5.02E-1	3.60E-1	2.06E-2	3.60E-1	1E+0
aluminum	6.55E+3	5.00E-2	2.87E-3	5.00E-1	4.30E-2	5.00E-1	2.63E-2	0.0	1.91E+2	1.93E+0	3.00E-2	1.93E+0	**1E+2**
arsenic	1.10E+1	5.00E-2	3.80E-2	5.00E-1	2.20E-1	5.00E-1	2.50E-3	0.0	7.87E-1	3.20E-1	3.32E-1	3.20E-1	**2E+0**
barium	9.70E+1	5.00E-2	1.56E-1	5.00E-1	9.10E-2	5.00E-1	5.66E-2	0.0	6.72E+0	5.10E+0	4.35E-1	5.10E+0	1E+0
beryllium	9.68E-1	5.00E-2	1.00E-2	5.00E-1	4.50E-2	5.00E-1	1.00E+0	0.0	3.00E-2	6.60E-1	3.50E-1	6.60E-1	5E-2
cadmium	5.10E+0	5.00E-2	5.90E-1	5.00E-1	7.71E+0	5.00E-1	3.33E-1	0.0	8.55E+0	6.00E-2	3.22E-2	6.00E-2	**1E+2**
chromium	3.70E+1	5.00E-2	4.10E-2	5.00E-1	3.10E-1	5.00E-1	8.46E-2	0.0	3.33E+0	3.28E+0	3.50E-1	3.28E+0	1E+0
cobalt	2.10E+1	5.00E-2	7.45E-3	5.00E-1	1.22E-1	5.00E-1	2.05E-2	0.0	9.62E-1	1.20E+0	2.75E-1	1.20E+0	8E-1
copper	2.70E+1	5.00E-2	1.20E-1	5.00E-1	5.20E-1	5.00E-1	1.96E-1	0.0	3.99E+0	2.67E+0	3.00E-2	2.67E+0	1E+0
iron	1.16E+4	5.00E-2	4.25E-3	5.00E-1	3.60E-2	5.00E-1	1.24E-2	0.0	3.25E+2	NA	0.0	NA	NA
lead	6.20E+1	5.00E-2	3.90E-2	5.00E-1	2.70E-1	5.00E-1	1.05E-1	0.0	5.07E+0	1.00E+0	5.51E-1	1.00E+0	**5E+0**
manganese	2.04E+2	5.00E-2	7.92E-2	5.00E-1	5.00E-2	5.00E-1	2.05E-2	0.0	9.34E+0	1.37E+1	3.46E-2	1.37E+1	7E-1
mercury	2.17E-1	5.00E-2	6.50E-1	5.00E-1	1.69E+0	5.00E-1	5.43E-2	0.0	1.06E-1	2.50E-1	1.88E-1	2.50E-1	4E-1
nickel	3.30E+1	5.00E-2	1.80E-2	5.00E-1	1.06E+0	5.00E-1	2.49E-1	0.0	7.76E+0	1.33E-1	2.49E-1	1.33E-1	**6E+1**
selenium	7.20E-1	5.00E-2	6.70E-1	5.00E-1	9.90E-1	5.00E-1	1.62E-1	0.0	2.53E-1	5.00E-2	1.87E-1	5.00E-2	**5E+0**
silver	1.00E+1	5.00E-2	1.40E-2	5.00E-1	2.05E+0	5.00E-1	4.00E-3	0.0	4.31E+0	2.22E+1	3.50E-1	2.22E+1	2E-1
thallium	2.80E+0	5.00E-2	4.00E-3	5.00E-1	1.30E+0	5.00E-1	1.12E-1	0.0	7.85E-1	4.80E-1	6.50E-2	4.80E-1	**2E+0**

TABLE J1-1
Hazard Quotient - Calculations for Deer Mouse
Initial Screening-Level

	Food Ingestion Rate, kg food/day			4.35E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.09E-2									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
titanium	5.65E+2	5.00E-2	5.50E-3	5.00E-1	1.00E+0	5.00E-1	1.00E+0	0.0	1.25E+2	NA	0.0	NA	NA
vanadium	2.70E+1	5.00E-2	4.85E-3	5.00E-1	4.20E-2	5.00E-1	1.23E-2	0.0	7.92E-1	2.10E-1	2.60E-1	2.10E-1	**4E+0**
zinc	8.30E+1	5.00E-2	3.70E-1	5.00E-1	3.20E+0	5.00E-1	7.72E-1	0.0	6.09E+1	9.60E+0	2.55E-2	9.60E+0	**6E+0**
radium-226	5.90E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	1.18E-1	NA	0.0	NA	NA
radium-228	2.30E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	4.59E-2	NA	0.0	NA	NA
gross alpha	1.20E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	2.40E-2	NA	0.0	NA	NA
gross beta	5.72E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	1.14E-1	NA	0.0	NA	NA
total uranium	5.00E-1	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	9.99E-3	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-2
Hazard Quotient - Calculations for California Ground Squirrel
Initial Screening-Level

	Food Ingestion Rate, kg food/day			4.70E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			3.21E-1									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	5.00E-2	7.56E+1	8.00E-1	4.54E-2	2.00E-1	1.07E+0	0.0	1.60E-1	9.00E+1	3.50E-1	9.00E+1	2E-3
bis(2-ethylhexyl)phthalate	6.60E-2	5.00E-2	4.99E-2	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	2.21E-2	1.83E+1	3.00E-2	1.83E+1	1E-3
butylbenzyl phthalate	2.70E-1	5.00E-2	7.28E-1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	1.12E-1	1.59E+2	3.00E-1	1.59E+2	7E-4
di-n-butyl phthalate	1.90E-2	5.00E-2	9.02E-1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	8.27E-3	5.50E+2	3.00E-2	5.50E+2	2E-5
pentachlorophenol	3.50E-2	5.00E-2	5.06E-1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	1.36E-2	2.40E-1	3.50E-1	2.40E-1	6E-2
phenol	2.00E-2	5.00E-2	1.54E+1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	4.28E-2	6.00E+1	3.50E-1	6.00E+1	7E-4
acenaphthene	6.70E-1	5.00E-2	8.08E-3	8.00E-1	3.00E-1	2.00E-1	1.07E+0	0.0	1.14E-2	5.00E+1	2.77E-1	5.00E+1	2E-4
acenaphthylene	3.80E-2	5.00E-2	6.31E-1	8.00E-1	2.20E-1	2.00E-1	1.07E+0	0.0	3.33E-3	5.00E+1	2.77E-1	5.00E+1	7E-5
anthracene	7.10E-1	5.00E-2	4.01E-1	8.00E-1	3.20E-1	2.00E-1	1.07E+0	0.0	4.52E-2	5.00E+1	2.77E-1	5.00E+1	9E-4
benzo(a)anthracene	3.50E+1	5.00E-2	1.58E-2	8.00E-1	2.70E-1	2.00E-1	1.07E+0	0.0	5.98E-1	1.31E+0	3.05E-2	1.31E+0	5E-1
benzo(b)fluoranthene	8.70E+1	5.00E-2	3.10E-1	8.00E-1	2.10E-1	2.00E-1	1.07E+0	0.0	4.33E+0	1.31E+0	3.05E-2	1.31E+0	**3E+0**
benzo(k)fluoranthene	3.10E+1	5.00E-2	7.13E-2	8.00E-1	2.10E-1	2.00E-1	1.07E+0	0.0	6.77E-1	1.31E+0	3.05E-2	1.31E+0	5E-1
benzo(g,h,i)perylene	3.60E+1	5.00E-2	7.59E-1	8.00E-1	1.50E-1	2.00E-1	1.07E+0	0.0	3.62E+0	1.31E+0	3.05E-2	1.31E+0	**3E+0**
benzo(a)pyrene	7.20E+1	5.00E-2	1.14E-1	8.00E-1	3.40E-1	2.00E-1	1.07E+0	0.0	2.21E+0	1.31E+0	3.05E-2	1.31E+0	**2E+0**
chrysene	4.30E+1	5.00E-2	1.45E-2	8.00E-1	4.40E-1	2.00E-1	1.07E+0	0.0	9.42E-1	1.31E+0	3.05E-2	1.31E+0	7E-1
dibenz(a,h)anthracene	1.20E+1	5.00E-2	1.30E-1	8.00E-1	4.90E-1	2.00E-1	1.07E+0	0.0	4.43E-1	1.31E+0	3.05E-2	1.31E+0	3E-1
fluoranthene	2.20E+1	5.00E-2	5.00E-1	8.00E-1	3.70E-1	2.00E-1	1.07E+0	0.0	1.69E+0	1.31E+0	3.05E-2	1.31E+0	1E+0
fluorene	3.60E-1	5.00E-2	2.56E-2	8.00E-1	2.00E-1	2.00E-1	1.07E+0	0.0	5.82E-3	5.00E+1	2.77E-1	5.00E+1	1E-4
indeno(1,2,3-c,d)pyrene	5.20E+1	5.00E-2	1.10E-1	8.00E-1	4.10E-1	2.00E-1	1.07E+0	0.0	1.68E+0	1.31E+0	3.05E-2	1.31E+0	1E+0
2-methylnaphthalene	1.00E+0	5.00E-2	3.18E-1	8.00E-1	2.00E-1	2.00E-1	1.07E+0	0.0	5.05E-2	5.00E+1	2.77E-1	5.00E+1	1E-3
naphthalene	5.70E-1	5.00E-2	1.22E+1	8.00E-1	2.10E-1	2.00E-1	1.07E+0	0.0	8.22E-1	5.00E+1	2.77E-1	5.00E+1	2E-2
phenanthrene	2.80E+0	5.00E-2	5.73E-1	8.00E-1	2.80E-1	2.00E-1	1.07E+0	0.0	2.31E-1	5.00E+1	2.77E-1	5.00E+1	5E-3
pyrene	2.50E+1	5.00E-2	7.20E-1	8.00E-1	3.90E-1	2.00E-1	1.07E+0	0.0	2.58E+0	1.31E+0	3.05E-2	1.31E+0	**2E+0**
4,4'-DDD	9.50E-3	5.00E-2	2.57E-1	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	2.21E-3	8.00E-1	3.20E-1	8.00E-1	3E-3
4,4'-DDT	3.30E-3	5.00E-2	3.34E-1	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	7.98E-4	8.00E-1	3.20E-1	8.00E-1	1E-3
endosulfan sulfate	1.70E-3	5.00E-2	1.98E+0	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	7.38E-4	1.50E-1	3.50E-1	1.50E-1	5E-3
Aroclor 1260	3.70E-1	5.00E-2	2.67E-2	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	7.61E-2	3.60E-1	2.06E-2	3.60E-1	2E-1
aluminum	6.55E+3	5.00E-2	2.87E-3	8.00E-1	4.30E-2	2.00E-1	2.63E-2	0.0	5.84E+1	1.93E+0	3.00E-2	1.93E+0	**3E+1**
arsenic	1.10E+1	5.00E-2	3.80E-2	8.00E-1	2.20E-1	2.00E-1	2.50E-3	0.0	2.00E-1	3.20E-1	3.32E-1	3.20E-1	6E-1
barium	9.70E+1	5.00E-2	1.56E-1	8.00E-1	9.10E-2	2.00E-1	5.66E-2	0.0	2.74E+0	5.10E+0	4.35E-1	5.10E+0	5E-1
beryllium	9.68E-1	5.00E-2	1.00E-2	8.00E-1	4.50E-2	2.00E-1	1.00E+0	0.0	9.50E-3	6.60E-1	3.50E-1	6.60E-1	1E-2
cadmium	5.10E+0	5.00E-2	5.90E-1	8.00E-1	7.71E+0	2.00E-1	3.33E-1	0.0	1.54E+0	6.00E-2	3.22E-2	6.00E-2	**3E+1**
chromium	3.70E+1	5.00E-2	4.10E-2	8.00E-1	3.10E-1	2.00E-1	8.46E-2	0.0	7.84E-1	3.28E+0	3.50E-1	3.28E+0	2E-1
cobalt	2.10E+1	5.00E-2	7.45E-3	8.00E-1	1.22E-1	2.00E-1	2.05E-2	0.0	2.47E-1	1.20E+0	2.75E-1	1.20E+0	2E-1
copper	2.70E+1	5.00E-2	1.20E-1	8.00E-1	5.20E-1	2.00E-1	1.96E-1	0.0	9.88E-1	2.67E+0	3.00E-2	2.67E+0	4E-1
iron	1.16E+4	5.00E-2	4.25E-3	8.00E-1	3.60E-2	2.00E-1	1.24E-2	0.0	1.03E+2	NA	0.0	NA	NA
lead	6.20E+1	5.00E-2	3.90E-2	8.00E-1	2.70E-1	2.00E-1	1.05E-1	0.0	1.23E+0	1.00E+0	5.51E-1	1.00E+0	1E+0
manganese	2.04E+2	5.00E-2	7.92E-2	8.00E-1	5.00E-2	2.00E-1	2.05E-2	0.0	3.68E+0	1.37E+1	3.46E-2	1.37E+1	3E-1
mercury	2.17E-1	5.00E-2	6.50E-1	8.00E-1	1.69E+0	2.00E-1	5.43E-2	0.0	2.89E-2	2.50E-1	1.88E-1	2.50E-1	1E-1
nickel	3.30E+1	5.00E-2	1.80E-2	8.00E-1	1.06E+0	2.00E-1	2.49E-1	0.0	1.33E+0	1.33E-1	2.49E-1	1.33E-1	**1E+1**
selenium	7.20E-1	5.00E-2	6.70E-1	8.00E-1	9.90E-1	2.00E-1	1.62E-1	0.0	8.27E-2	5.00E-2	1.87E-1	5.00E-2	**2E+0**
silver	1.00E+1	5.00E-2	1.40E-2	8.00E-1	2.05E+0	2.00E-1	4.00E-3	0.0	6.88E-1	2.22E+1	3.50E-1	2.22E+1	3E-2
thallium	2.80E+0	5.00E-2	4.00E-3	8.00E-1	1.30E+0	2.00E-1	1.12E-1	0.0	1.28E-1	4.80E-1	6.50E-2	4.80E-1	3E-1

TABLE J1-2
Hazard Quotient - Calculations for California Ground Squirrel
Initial Screening-Level

	Food Ingestion Rate, kg food/day			4.70E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			3.21E-1									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
titanium	5.65E+2	5.00E-2	5.50E-3	8.00E-1	1.00E+0	2.00E-1	1.00E+0	0.0	2.10E+1	NA	0.0	NA	NA
vanadium	2.70E+1	5.00E-2	4.85E-3	8.00E-1	4.20E-2	2.00E-1	1.23E-2	0.0	2.46E-1	2.10E-1	2.60E-1	2.10E-1	1E+0
zinc	8.30E+1	5.00E-2	3.70E-1	8.00E-1	3.20E+0	2.00E-1	7.72E-1	0.0	1.20E+1	9.60E+0	2.55E-2	9.60E+0	1E+0
radium-226	5.90E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	4.32E-2	NA	0.0	NA	NA
radium-228	2.30E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	1.68E-2	NA	0.0	NA	NA
gross alpha	1.20E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	8.79E-3	NA	0.0	NA	NA
gross beta	5.72E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	4.19E-2	NA	0.0	NA	NA
total uranium	5.00E-1	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	3.66E-3	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-3
Hazard Quotient - Calculations for Alameda Song Sparrow
Initial Screening-Level

	Food Ingestion Rate, kg food/day			5.87E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.99E-2									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	9.30E-2	7.56E+1	5.00E-1	4.54E-2	5.00E-1	1.07E+0	0.0	2.01E-1	5.20E+1	5.00E-2	5.20E+1	4E-3
bis(2-ethylhexyl)phthalate	6.60E-2	9.30E-2	4.99E-2	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	1.09E-1	1.10E+0	1.55E-1	1.10E+0	1E-1
butylbenzyl phthalate	2.70E-1	9.30E-2	7.28E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	4.75E-1	1.10E-1	1.55E-1	1.10E-1	**4E+0**
di-n-butyl phthalate	1.90E-2	9.30E-2	9.02E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	3.39E-2	1.10E-1	1.55E-1	1.10E-1	3E-1
pentachlorophenol	3.50E-2	9.30E-2	5.06E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	6.04E-2	4.03E+0	1.50E-1	4.03E+0	1E-2
phenol	2.00E-2	9.30E-2	1.54E+1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	7.86E-2	1.13E+0	7.40E-2	1.13E+0	7E-2
acenaphthene	6.70E-1	9.30E-2	8.08E-3	5.00E-1	3.00E-1	5.00E-1	1.07E+0	0.0	4.88E-2	1.01E+0	7.40E-2	1.01E+0	5E-2
acenaphthylene	3.80E-2	9.30E-2	6.31E-1	5.00E-1	2.20E-1	5.00E-1	1.07E+0	0.0	5.81E-3	1.01E+0	7.40E-2	1.01E+0	6E-3
anthracene	7.10E-1	9.30E-2	4.01E-1	5.00E-1	3.20E-1	5.00E-1	1.07E+0	0.0	9.50E-2	1.11E+0	7.40E-2	1.11E+0	9E-2
benzo(a)anthracene	3.50E+1	9.30E-2	1.58E-2	5.00E-1	2.70E-1	5.00E-1	1.07E+0	0.0	2.44E+0	1.01E+0	7.40E-2	1.01E+0	**2E+0**
benzo(b)fluoranthene	8.70E+1	9.30E-2	3.10E-1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	9.06E+0	1.01E+0	7.40E-2	1.01E+0	**9E+0**
benzo(k)fluoranthene	3.10E+1	9.30E-2	7.13E-2	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	2.14E+0	1.01E+0	7.40E-2	1.01E+0	**2E+0**
benzo(g,h,i)perylene	3.60E+1	9.30E-2	7.59E-1	5.00E-1	1.50E-1	5.00E-1	1.07E+0	0.0	5.81E+0	1.01E+0	7.40E-2	1.01E+0	**6E+0**
benzo(a)pyrene	7.20E+1	9.30E-2	1.14E-1	5.00E-1	3.40E-1	5.00E-1	1.07E+0	0.0	6.80E+0	1.01E+0	7.40E-2	1.01E+0	**7E+0**
chrysene	4.30E+1	9.30E-2	1.45E-2	5.00E-1	4.40E-1	5.00E-1	1.07E+0	0.0	4.06E+0	1.01E+0	7.40E-2	1.01E+0	**4E+0**
dibenz(a,h)anthracene	1.20E+1	9.30E-2	1.30E-1	5.00E-1	4.90E-1	5.00E-1	1.07E+0	0.0	1.43E+0	1.01E+0	7.40E-2	1.01E+0	1E+0
fluoranthene	2.20E+1	9.30E-2	5.00E-1	5.00E-1	3.70E-1	5.00E-1	1.07E+0	0.0	3.43E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
fluorene	3.60E-1	9.30E-2	2.56E-2	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	2.19E-2	1.01E+0	7.40E-2	1.01E+0	2E-2
indeno(1,2,3-c,d)pyrene	5.20E+1	9.30E-2	1.10E-1	5.00E-1	4.10E-1	5.00E-1	1.07E+0	0.0	5.41E+0	1.01E+0	7.40E-2	1.01E+0	**5E+0**
2-methylnaphthalene	1.00E+0	9.30E-2	3.18E-1	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	1.04E-1	1.01E+0	7.40E-2	1.01E+0	1E-1
naphthalene	5.70E-1	9.30E-2	1.22E+1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	1.06E+0	1.01E+0	7.40E-2	1.01E+0	1E+0
phenanthrene	2.80E+0	9.30E-2	5.73E-1	5.00E-1	2.80E-1	5.00E-1	1.07E+0	0.0	4.29E-1	1.13E+0	7.40E-2	1.13E+0	4E-1
pyrene	2.50E+1	9.30E-2	7.20E-1	5.00E-1	3.90E-1	5.00E-1	1.07E+0	0.0	4.78E+0	1.01E+0	7.40E-2	1.01E+0	**5E+0**
4,4'-DDD	9.50E-3	9.30E-2	2.57E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	9.96E-3	9.00E-3	3.50E+0	3.20E-3	**3E+0**
4,4'-DDT	3.30E-3	9.30E-2	3.34E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	3.50E-3	9.00E-3	3.50E+0	3.20E-3	1E+0
endosulfan sulfate	1.70E-3	9.30E-2	1.98E+0	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	2.21E-3	1.00E+1	4.00E-1	1.00E+1	2E-4
Aroclor 1260	3.70E-1	9.30E-2	2.67E-2	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	3.75E-1	8.80E-2	8.00E-1	8.80E-2	**4E+0**
aluminum	6.55E+3	9.30E-2	2.87E-3	5.00E-1	4.30E-2	5.00E-1	2.63E-2	0.0	2.24E+2	1.10E+2	1.55E-1	1.10E+2	**2E+0**
arsenic	1.10E+1	9.30E-2	3.80E-2	5.00E-1	2.20E-1	5.00E-1	2.50E-3	0.0	7.20E-1	5.50E+0	1.17E+0	5.50E+0	1E-1
barium	9.70E+1	9.30E-2	1.56E-1	5.00E-1	9.10E-2	5.00E-1	5.66E-2	0.0	6.19E+0	2.08E+1	1.21E-1	2.08E+1	3E-1
beryllium	9.68E-1	9.30E-2	1.00E-2	5.00E-1	4.50E-2	5.00E-1	1.00E+0	0.0	3.44E-2	6.60E-2	0.0	6.60E-2	5E-1
cadmium	5.10E+0	9.30E-2	5.90E-1	5.00E-1	7.71E+0	5.00E-1	3.33E-1	0.0	6.38E+0	7.80E-2	7.99E-1	7.80E-2	**8E+1**
chromium	3.70E+1	9.30E-2	4.10E-2	5.00E-1	3.10E-1	5.00E-1	8.46E-2	0.0	2.93E+0	1.00E+0	1.25E+0	1.00E+0	**3E+0**
cobalt	2.10E+1	9.30E-2	7.45E-3	5.00E-1	1.22E-1	5.00E-1	2.05E-2	0.0	9.77E-1	2.37E-1	1.53E-1	2.37E-1	**4E+0**
copper	2.70E+1	9.30E-2	1.20E-1	5.00E-1	5.20E-1	5.00E-1	1.96E-1	0.0	3.29E+0	2.30E+0	6.39E-1	2.30E+0	1E+0
iron	1.16E+4	9.30E-2	4.25E-3	5.00E-1	3.60E-2	5.00E-1	1.24E-2	0.0	3.87E+2	NA	0.0	NA	NA
lead	6.20E+1	9.30E-2	3.90E-2	5.00E-1	2.70E-1	5.00E-1	1.05E-1	0.0	4.53E+0	1.40E-2	9.35E-2	1.40E-2	**3E+2**
manganese	2.04E+2	9.30E-2	7.92E-2	5.00E-1	5.00E-2	5.00E-1	2.05E-2	0.0	9.48E+0	7.76E+1	1.97E-1	7.76E+1	1E-1
mercury	2.17E-1	9.30E-2	6.50E-1	5.00E-1	1.69E+0	5.00E-1	5.43E-2	0.0	8.09E-2	3.90E-2	1.00E+0	3.90E-2	**2E+0**
nickel	3.30E+1	9.30E-2	1.80E-2	5.00E-1	1.06E+0	5.00E-1	2.49E-1	0.0	6.15E+0	1.38E+0	6.14E-1	1.38E+0	**4E+0**
selenium	7.20E-1	9.30E-2	6.70E-1	5.00E-1	9.90E-1	5.00E-1	1.62E-1	0.0	1.96E-1	2.30E-1	1.11E+0	2.30E-1	9E-1
silver	1.00E+1	9.30E-2	1.40E-2	5.00E-1	2.05E+0	5.00E-1	4.00E-3	0.0	3.31E+0	1.78E+2	1.00E+0	1.78E+2	2E-2
thallium	2.80E+0	9.30E-2	4.00E-3	5.00E-1	1.30E+0	5.00E-1	1.12E-1	0.0	6.15E-1	3.50E-1	7.40E-2	3.50E-1	**2E+0**

TABLE J1-3
Hazard Quotient - Calculations for Alameda Song Sparrow
Initial Screening-Level

	Food Ingestion Rate, kg food/day			5.87E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.99E-2									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
titanium	5.65E+2	9.30E-2	5.50E-3	5.00E-1	1.00E+0	5.00E-1	1.00E+0	0.0	9.93E+1	NA	0.0	NA	NA
vanadium	2.70E+1	9.30E-2	4.85E-3	5.00E-1	4.20E-2	5.00E-1	1.23E-2	0.0	9.27E-1	1.14E+1	1.17E+0	1.14E+1	8E-2
zinc	8.30E+1	9.30E-2	3.70E-1	5.00E-1	3.20E+0	5.00E-1	7.72E-1	0.0	4.60E+1	1.72E+1	9.55E-1	1.72E+1	**3E+0**
radium-226	5.90E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	1.62E-1	NA	0.0	NA	NA
radium-228	2.30E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	6.31E-2	NA	0.0	NA	NA
gross alpha	1.20E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	3.29E-2	NA	0.0	NA	NA
gross beta	5.72E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	1.57E-1	NA	0.0	NA	NA
total uranium	5.00E-1	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	1.37E-2	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-4
Hazard Quotient - Calculations for American Robin
Initial Screening-Level

	Food Ingestion Rate, kg food/day			1.49E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			6.35E-2									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	1.04E-1	7.56E+1	1.70E-1	4.54E-2	8.30E-1	1.07E+0	0.0	5.50E-2	5.20E+1	5.00E-2	5.20E+1	1E-3
bis(2-ethylhexyl)phthalate	6.60E-2	1.04E-1	4.99E-2	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	1.44E-1	1.10E+0	1.55E-1	1.10E+0	1E-1
butylbenzyl phthalate	2.70E-1	1.04E-1	7.28E-1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	5.95E-1	1.10E-1	1.55E-1	1.10E-1	**5E+0**
di-n-butyl phthalate	1.90E-2	1.04E-1	9.02E-1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	4.20E-2	1.10E-1	1.55E-1	1.10E-1	4E-1
pentachlorophenol	3.50E-2	1.04E-1	5.06E-1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	7.68E-2	4.03E+0	1.50E-1	4.03E+0	2E-2
phenol	2.00E-2	1.04E-1	1.54E+1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	5.58E-2	1.13E+0	7.40E-2	1.13E+0	5E-2
acenaphthene	6.70E-1	1.04E-1	8.08E-3	1.70E-1	3.00E-1	8.30E-1	1.07E+0	0.0	5.58E-2	1.01E+0	7.40E-2	1.01E+0	6E-2
acenaphthylene	3.80E-2	1.04E-1	6.31E-1	1.70E-1	2.20E-1	8.30E-1	1.07E+0	0.0	3.52E-3	1.01E+0	7.40E-2	1.01E+0	3E-3
anthracene	7.10E-1	1.04E-1	4.01E-1	1.70E-1	3.20E-1	8.30E-1	1.07E+0	0.0	7.31E-2	1.11E+0	7.40E-2	1.11E+0	7E-2
benzo(a)anthracene	3.50E+1	1.04E-1	1.58E-2	1.70E-1	2.70E-1	8.30E-1	1.07E+0	0.0	2.72E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
benzo(b)fluoranthene	8.70E+1	1.04E-1	3.10E-1	1.70E-1	2.10E-1	8.30E-1	1.07E+0	0.0	6.77E+0	1.01E+0	7.40E-2	1.01E+0	**7E+0**
benzo(k)fluoranthene	3.10E+1	1.04E-1	7.13E-2	1.70E-1	2.10E-1	8.30E-1	1.07E+0	0.0	2.12E+0	1.01E+0	7.40E-2	1.01E+0	**2E+0**
benzo(g,h,i)perylene	3.60E+1	1.04E-1	7.59E-1	1.70E-1	1.50E-1	8.30E-1	1.07E+0	0.0	3.03E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
benzo(a)pyrene	7.20E+1	1.04E-1	1.14E-1	1.70E-1	3.40E-1	8.30E-1	1.07E+0	0.0	6.87E+0	1.01E+0	7.40E-2	1.01E+0	**7E+0**
chrysene	4.30E+1	1.04E-1	1.45E-2	1.70E-1	4.40E-1	8.30E-1	1.07E+0	0.0	4.77E+0	1.01E+0	7.40E-2	1.01E+0	**5E+0**
dibenz(a,h)anthracene	1.20E+1	1.04E-1	1.30E-1	1.70E-1	4.90E-1	8.30E-1	1.07E+0	0.0	1.50E+0	1.01E+0	7.40E-2	1.01E+0	1E+0
fluoranthene	2.20E+1	1.04E-1	5.00E-1	1.70E-1	3.70E-1	8.30E-1	1.07E+0	0.0	2.57E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
fluorene	3.60E-1	1.04E-1	2.56E-2	1.70E-1	2.00E-1	8.30E-1	1.07E+0	0.0	2.32E-2	1.01E+0	7.40E-2	1.01E+0	2E-2
indeno(1,2,3-c,d)pyrene	5.20E+1	1.04E-1	1.10E-1	1.70E-1	4.10E-1	8.30E-1	1.07E+0	0.0	5.66E+0	1.01E+0	7.40E-2	1.01E+0	**6E+0**
2-methylnaphthalene	1.00E+0	1.04E-1	3.18E-1	1.70E-1	2.00E-1	8.30E-1	1.07E+0	0.0	7.62E-2	1.01E+0	7.40E-2	1.01E+0	8E-2
naphthalene	5.70E-1	1.04E-1	1.22E+1	1.70E-1	2.10E-1	8.30E-1	1.07E+0	0.0	3.15E-1	1.01E+0	7.40E-2	1.01E+0	3E-1
phenanthrene	2.80E+0	1.04E-1	5.73E-1	1.70E-1	2.80E-1	8.30E-1	1.07E+0	0.0	2.86E-1	1.13E+0	7.40E-2	1.13E+0	3E-1
pyrene	2.50E+1	1.04E-1	7.20E-1	1.70E-1	3.90E-1	8.30E-1	1.07E+0	0.0	3.23E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
4,4'-DDD	9.50E-3	1.04E-1	2.57E-1	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	1.27E-2	9.00E-3	3.50E+0	9.00E-3	1E+0
4,4'-DDT	3.30E-3	1.04E-1	3.34E-1	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	4.42E-3	9.00E-3	3.50E+0	9.00E-3	5E-1
endosulfan sulfate	1.70E-3	1.04E-1	1.98E+0	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	2.39E-3	1.00E+1	4.00E-1	1.00E+1	2E-4
Aroclor 1260	3.70E-1	1.04E-1	2.67E-2	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	4.91E-1	8.80E-2	8.00E-1	8.80E-2	**6E+0**
aluminum	6.55E+3	1.04E-1	2.87E-3	1.70E-1	4.30E-2	8.30E-1	2.63E-2	0.0	2.16E+2	1.10E+2	1.55E-1	1.10E+2	**2E+0**
arsenic	1.10E+1	1.04E-1	3.80E-2	1.70E-1	2.20E-1	8.30E-1	2.50E-3	0.0	7.58E-1	5.50E+0	1.17E+0	5.50E+0	1E-1
barium	9.70E+1	1.04E-1	1.56E-1	1.70E-1	9.10E-2	8.30E-1	5.66E-2	0.0	4.70E+0	2.08E+1	1.21E-1	2.08E+1	2E-1
beryllium	9.68E-1	1.04E-1	1.00E-2	1.70E-1	4.50E-2	8.30E-1	1.00E+0	0.0	3.26E-2	6.60E-2	0.0	6.60E-2	5E-1
cadmium	5.10E+0	1.04E-1	5.90E-1	1.70E-1	7.71E+0	8.30E-1	3.33E-1	0.0	7.92E+0	7.80E-2	7.99E-1	7.80E-2	**1E+2**
chromium	3.70E+1	1.04E-1	4.10E-2	1.70E-1	3.10E-1	8.30E-1	8.46E-2	0.0	3.20E+0	1.00E+0	1.25E+0	1.00E+0	**3E+0**
cobalt	2.10E+1	1.04E-1	7.45E-3	1.70E-1	1.22E-1	8.30E-1	2.05E-2	0.0	1.02E+0	2.37E-1	1.53E-1	2.37E-1	**4E+0**
copper	2.70E+1	1.04E-1	1.20E-1	1.70E-1	5.20E-1	8.30E-1	1.96E-1	0.0	3.53E+0	2.30E+0	6.39E-1	2.30E+0	**2E+0**
iron	1.16E+4	1.04E-1	4.25E-3	1.70E-1	3.60E-2	8.30E-1	1.24E-2	0.0	3.67E+2	NA	0.0	NA	NA
lead	6.20E+1	1.04E-1	3.90E-2	1.70E-1	2.70E-1	8.30E-1	1.05E-1	0.0	4.88E+0	1.40E-2	9.35E-2	1.40E-2	**3E+2**
manganese	2.04E+2	1.04E-1	7.92E-2	1.70E-1	5.00E-2	8.30E-1	2.05E-2	0.0	7.63E+0	7.76E+1	1.97E-1	7.76E+1	1E-1
mercury	2.17E-1	1.04E-1	6.50E-1	1.70E-1	1.69E+0	8.30E-1	5.43E-2	0.0	8.26E-2	3.90E-2	1.00E+0	3.90E-2	**2E+0**
nickel	3.30E+1	1.04E-1	1.80E-2	1.70E-1	1.06E+0	8.30E-1	2.49E-1	0.0	7.65E+0	1.38E+0	6.14E-1	1.38E+0	**6E+0**
selenium	7.20E-1	1.04E-1	6.70E-1	1.70E-1	9.90E-1	8.30E-1	1.62E-1	0.0	1.76E-1	2.30E-1	1.11E+0	2.30E-1	8E-1
silver	1.00E+1	1.04E-1	1.40E-2	1.70E-1	2.05E+0	8.30E-1	4.00E-3	0.0	4.24E+0	1.78E+2	1.00E+0	1.78E+2	2E-2
thallium	2.80E+0	1.04E-1	4.00E-3	1.70E-1	1.30E+0	8.30E-1	1.12E-1	0.0	7.79E-1	3.50E-1	7.40E-2	3.50E-1	**2E+0**

TABLE J1-4
Hazard Quotient - Calculations for American Robin
Initial Screening-Level

	Food Ingestion Rate, kg food/day			1.49E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			6.35E-2									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
titanium	5.65E+2	1.04E-1	5.50E-3	1.70E-1	1.00E+0	8.30E-1	1.00E+0	0.0	1.24E+2	NA	0.0	NA	NA
vanadium	2.70E+1	1.04E-1	4.85E-3	1.70E-1	4.20E-2	8.30E-1	1.23E-2	0.0	8.87E-1	1.14E+1	1.17E+0	1.14E+1	8E-2
zinc	8.30E+1	1.04E-1	3.70E-1	1.70E-1	3.20E+0	8.30E-1	7.72E-1	0.0	5.51E+1	1.72E+1	9.55E-1	1.72E+1	**3E+0**
radium-226	5.90E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	1.44E-1	NA	0.0	NA	NA
radium-228	2.30E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	5.62E-2	NA	0.0	NA	NA
gross alpha	1.20E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	2.93E-2	NA	0.0	NA	NA
gross beta	5.72E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	1.40E-1	NA	0.0	NA	NA
total uranium	5.00E-1	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	1.22E-2	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-5
Hazard Quotient - Calculations for Red-Tailed Hawk
Initial Screening-Level

	Food Ingestion Rate, kg food/day			1.06E-1		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			9.57E-1									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	3.50E-3	7.56E+1	0.0	4.54E-2	0.0	1.07E+0	1.00E+0	2.14E-3	5.20E+1	5.00E-2	5.20E+1	4E-5
bis(2-ethylhexyl)phthalate	6.60E-2	3.50E-3	4.99E-2	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	7.83E-3	1.10E+0	1.55E-1	1.10E+0	7E-3
butylbenzyl phthalate	2.70E-1	3.50E-3	7.28E-1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	3.20E-2	1.10E-1	1.55E-1	1.10E-1	3E-1
di-n-butyl phthalate	1.90E-2	3.50E-3	9.02E-1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	2.26E-3	1.10E-1	1.55E-1	1.10E-1	2E-2
pentachlorophenol	3.50E-2	3.50E-3	5.06E-1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	4.15E-3	4.03E+0	1.50E-1	4.03E+0	1E-3
phenol	2.00E-2	3.50E-3	1.54E+1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	2.37E-3	1.13E+0	7.40E-2	1.13E+0	2E-3
acenaphthene	6.70E-1	3.50E-3	8.08E-3	0.0	3.00E-1	0.0	1.07E+0	1.00E+0	7.95E-2	1.01E+0	7.40E-2	1.01E+0	8E-2
acenaphthylene	3.80E-2	3.50E-3	6.31E-1	0.0	2.20E-1	0.0	1.07E+0	1.00E+0	4.51E-3	1.01E+0	7.40E-2	1.01E+0	4E-3
anthracene	7.10E-1	3.50E-3	4.01E-1	0.0	3.20E-1	0.0	1.07E+0	1.00E+0	8.43E-2	1.11E+0	7.40E-2	1.11E+0	8E-2
benzo(a)anthracene	3.50E+1	3.50E-3	1.58E-2	0.0	2.70E-1	0.0	1.07E+0	1.00E+0	4.15E+0	1.01E+0	7.40E-2	1.01E+0	**4E+0**
benzo(b)fluoranthene	8.70E+1	3.50E-3	3.10E-1	0.0	2.10E-1	0.0	1.07E+0	1.00E+0	1.03E+1	1.01E+0	7.40E-2	1.01E+0	**1E+1**
benzo(k)fluoranthene	3.10E+1	3.50E-3	7.13E-2	0.0	2.10E-1	0.0	1.07E+0	1.00E+0	3.68E+0	1.01E+0	7.40E-2	1.01E+0	**4E+0**
benzo(g,h,i)perylene	3.60E+1	3.50E-3	7.59E-1	0.0	1.50E-1	0.0	1.07E+0	1.00E+0	4.27E+0	1.01E+0	7.40E-2	1.01E+0	**4E+0**
benzo(a)pyrene	7.20E+1	3.50E-3	1.14E-1	0.0	3.40E-1	0.0	1.07E+0	1.00E+0	8.55E+0	1.01E+0	7.40E-2	1.01E+0	**8E+0**
chrysene	4.30E+1	3.50E-3	1.45E-2	0.0	4.40E-1	0.0	1.07E+0	1.00E+0	5.10E+0	1.01E+0	7.40E-2	1.01E+0	**5E+0**
dibenz(a,h)anthracene	1.20E+1	3.50E-3	1.30E-1	0.0	4.90E-1	0.0	1.07E+0	1.00E+0	1.42E+0	1.01E+0	7.40E-2	1.01E+0	1E+0
fluoranthene	2.20E+1	3.50E-3	5.00E-1	0.0	3.70E-1	0.0	1.07E+0	1.00E+0	2.61E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
fluorene	3.60E-1	3.50E-3	2.56E-2	0.0	2.00E-1	0.0	1.07E+0	1.00E+0	4.27E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
indeno(1,2,3-c,d)pyrene	5.20E+1	3.50E-3	1.10E-1	0.0	4.10E-1	0.0	1.07E+0	1.00E+0	6.17E+0	1.01E+0	7.40E-2	1.01E+0	**6E+0**
2-methylnaphthalene	1.00E+0	3.50E-3	3.18E-1	0.0	2.00E-1	0.0	1.07E+0	1.00E+0	1.19E-1	1.01E+0	7.40E-2	1.01E+0	1E-1
naphthalene	5.70E-1	3.50E-3	1.22E+1	0.0	2.10E-1	0.0	1.07E+0	1.00E+0	6.77E-2	1.01E+0	7.40E-2	1.01E+0	7E-2
phenanthrene	2.80E+0	3.50E-3	5.73E-1	0.0	2.80E-1	0.0	1.07E+0	1.00E+0	3.32E-1	1.13E+0	7.40E-2	1.13E+0	3E-1
pyrene	2.50E+1	3.50E-3	7.20E-1	0.0	3.90E-1	0.0	1.07E+0	1.00E+0	2.97E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
4,4'-DDD	9.50E-3	3.50E-3	2.57E-1	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	1.13E-3	9.00E-3	3.50E+0	9.00E-3	1E-1
4,4'-DDT	3.30E-3	3.50E-3	3.34E-1	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	3.92E-4	9.00E-3	3.50E+0	9.00E-3	4E-2
endosulfan sulfate	1.70E-3	3.50E-3	1.98E+0	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	2.02E-4	1.00E+1	4.00E-1	1.00E+1	2E-5
Aroclor 1260	3.70E-1	3.50E-3	2.67E-2	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	4.39E-2	8.80E-2	8.00E-1	8.80E-2	5E-1
aluminum	6.55E+3	3.50E-3	2.87E-3	0.0	4.30E-2	0.0	2.63E-2	1.00E+0	2.16E+1	1.10E+2	1.55E-1	1.10E+2	2E-1
arsenic	1.10E+1	3.50E-3	3.80E-2	0.0	2.20E-1	0.0	2.50E-3	1.00E+0	7.32E-3	5.50E+0	1.17E+0	5.50E+0	1E-3
barium	9.70E+1	3.50E-3	1.56E-1	0.0	9.10E-2	0.0	5.66E-2	1.00E+0	6.47E-1	2.08E+1	1.21E-1	2.08E+1	3E-2
beryllium	9.68E-1	3.50E-3	1.00E-2	0.0	4.50E-2	0.0	1.00E+0	1.00E+0	1.08E-1	6.60E-2	0.0	6.60E-2	**2E+0**
cadmium	5.10E+0	3.50E-3	5.90E-1	0.0	7.71E+0	0.0	3.33E-1	1.00E+0	1.91E-1	7.80E-2	7.99E-1	7.80E-2	**2E+0**
chromium	3.70E+1	3.50E-3	4.10E-2	0.0	3.10E-1	0.0	8.46E-2	1.00E+0	3.62E-1	1.00E+0	1.25E+0	1.00E+0	4E-1
cobalt	2.10E+1	3.50E-3	7.45E-3	0.0	1.22E-1	0.0	2.05E-2	1.00E+0	5.59E-2	2.37E-1	1.53E-1	2.37E-1	2E-1
copper	2.70E+1	3.50E-3	1.20E-1	0.0	5.20E-1	0.0	1.96E-1	1.00E+0	5.98E-1	2.30E+0	6.39E-1	2.30E+0	3E-1
iron	1.16E+4	3.50E-3	4.25E-3	0.0	3.60E-2	0.0	1.24E-2	1.00E+0	2.05E+1	NA	0.0	NA	**NA**
lead	6.20E+1	3.50E-3	3.90E-2	0.0	2.70E-1	0.0	1.05E-1	1.00E+0	7.49E-1	1.40E-2	9.35E-2	1.40E-2	**5E+1**
manganese	2.04E+2	3.50E-3	7.92E-2	0.0	5.00E-2	0.0	2.05E-2	1.00E+0	5.43E-1	7.76E+1	1.97E-1	7.76E+1	7E-3
mercury	2.17E-1	3.50E-3	6.50E-1	0.0	1.69E+0	0.0	5.43E-2	1.00E+0	1.39E-3	3.90E-2	1.00E+0	3.90E-2	4E-2
nickel	3.30E+1	3.50E-3	1.80E-2	0.0	1.06E+0	0.0	2.49E-1	1.00E+0	9.23E-1	1.38E+0	6.14E-1	1.38E+0	7E-1
selenium	7.20E-1	3.50E-3	6.70E-1	0.0	9.90E-1	0.0	1.62E-1	1.00E+0	1.32E-2	2.30E-1	1.11E+0	2.30E-1	6E-2
silver	1.00E+1	3.50E-3	1.40E-2	0.0	2.05E+0	0.0	4.00E-3	1.00E+0	8.32E-3	1.78E+2	1.00E+0	1.78E+2	5E-5
thallium	2.80E+0	3.50E-3	4.00E-3	0.0	1.30E+0	0.0	1.12E-1	1.00E+0	3.60E-2	3.50E-1	7.40E-2	3.50E-1	1E-1

TABLE J1-5
Hazard Quotient - Calculations for Red-Tailed Hawk
Initial Screening-Level

	Food Ingestion Rate, kg food/day		1.06E-1		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg		9.57E-1									
Compound	Soil Maximum Detection (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
titanium	5.65E+2	3.50E-3	5.50E-3	0.0	1.00E+0	0.0	1.00E+0	1.00E+0	6.29E+1	NA	0.0	NA	**NA**
vanadium	2.70E+1	3.50E-3	4.85E-3	0.0	4.20E-2	0.0	1.23E-2	1.00E+0	4.73E-2	1.14E+1	1.17E+0	1.14E+1	4E-3
zinc	8.30E+1	3.50E-3	3.70E-1	0.0	3.20E+0	0.0	7.72E-1	1.00E+0	7.14E+0	1.72E+1	9.55E-1	1.72E+1	4E-1
radium-226	5.90E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	2.29E-3	NA	0.0	NA	**NA**
radium-228	2.30E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	8.93E-4	NA	0.0	NA	**NA**
gross alpha	1.20E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	4.66E-4	NA	0.0	NA	**NA**
gross beta	5.72E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	2.22E-3	NA	0.0	NA	**NA**
total uranium	5.00E-1	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.94E-4	NA	0.0	NA	**NA**

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-6
Hazard Quotient - Calculations for Harbor Seal
Initial Screening-Level

Food Ingestion Rate, kg food/day 9.78E+0 Site Use Factor (SUF, percent) 1.00E+0
Body Weight, kg 4.00E+1

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
acetone	1.80E-2	0.0	0.0	0.0	3.16E+0	2.00E-1	3.16E+0	8.00E-1	1.000E+0	1.39E-2	9.00E+1	3.50E-1	6.77E+1	2E-4
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	2.00E-1	8.71E+0	8.00E-1	1.005E+0	8.56E-4	2.64E+1	3.00E-2	1.71E+1	5E-5
2-butanone	5.70E-2	0.0	0.0	0.0	3.16E+0	2.00E-1	3.16E+0	8.00E-1	1.000E+0	4.41E-2	5.94E+2	3.50E-1	4.47E+2	1E-4
sec-butylbenzene	4.00E-4	0.0	0.0	0.0	6.59E+2	2.00E-1	6.59E+2	8.00E-1	1.950E+0	1.26E-1	2.10E+0	3.00E-2	1.36E+0	9E-2
carbon disulfide	3.00E-1	0.0	0.0	0.0	6.22E+0	2.00E-1	6.22E+0	8.00E-1	1.000E+0	4.56E-1	1.10E+1	1.13E+0	1.10E+1	4E-2
1,2-dichloroethane	4.00E-4	0.0	0.0	0.0	2.75E+0	2.00E-1	2.75E+0	8.00E-1	1.000E+0	2.69E-4	5.00E+1	3.50E-2	3.28E+1	8E-6
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	2.00E-1	8.12E+0	8.00E-1	1.000E+0	1.98E-3	4.52E+1	3.00E-2	2.94E+1	7E-5
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	2.00E-1	8.12E+0	8.00E-1	1.000E+0	1.19E-3	1.70E+0	3.00E-2	1.10E+0	1E-3
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	2.00E-1	1.31E+2	8.00E-1	1.128E+0	1.09E-3	2.10E+0	3.00E-2	1.36E+0	8E-4
p-isopropyltoluene	1.30E-3	0.0	0.0	0.0	2.86E+2	2.00E-1	2.86E+2	8.00E-1	1.315E+0	1.20E-1	2.10E+0	3.00E-2	1.36E+0	9E-2
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	2.00E-1	1.46E+1	8.00E-1	1.010E+0	3.60E-4	7.00E-1	3.00E-2	4.55E-1	8E-4
1,2,4-trimethylbenzene	1.36E-2	0.0	0.0	0.0	1.25E+2	2.00E-1	1.25E+2	8.00E-1	1.103E+0	4.57E-1	2.10E+0	3.00E-2	1.36E+0	3E-1
1,3,5-trimethylbenzene	3.60E-3	0.0	0.0	0.0	8.58E+1	2.00E-1	8.58E+1	8.00E-1	1.067E+0	8.06E-2	2.10E+0	3.00E-2	1.36E+0	6E-2
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	2.00E-1	3.55E+0	8.00E-1	1.000E+0	1.52E-3	1.70E-1	3.50E-1	1.28E-1	1E-2
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	2.00E-1	5.04E+1	8.00E-1	1.034E+0	1.02E-3	2.10E+0	3.00E-2	1.36E+0	7E-4
xylenes, total	2.00E-3	0.0	0.0	0.0	5.04E+1	2.00E-1	5.04E+1	8.00E-1	1.034E+0	2.55E-2	2.10E+0	3.00E-2	1.36E+0	2E-2
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	2.00E-1	3.08E+2	8.00E-1	1.675E+1	3.40E+0	1.83E+1	3.00E-2	1.19E+1	3E-1
4-chloro-3-methylphenol	7.00E-4	0.0	0.0	0.0	4.86E+1	2.00E-1	4.86E+1	8.00E-1	1.034E+0	8.61E-3	2.40E-1	3.50E-1	1.81E-1	5E-2
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	2.00E-1	5.82E+2	8.00E-1	1.766E+0	1.16E-1	5.50E+2	3.00E-2	3.57E+2	3E-4
dimethyl phthalate	3.00E-3	0.0	0.0	0.0	3.40E+0	2.00E-1	3.40E+0	8.00E-1	1.000E+0	2.50E-3	4.58E+3	3.00E-2	2.98E+3	8E-7
isophorone	5.00E-3	0.0	0.0	0.0	4.06E+0	2.00E-1	4.06E+0	8.00E-1	1.000E+0	4.97E-3	3.12E+2	3.50E-1	2.35E+2	2E-5
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	4.80E-3	0.0	0.0	0.0	3.16E+0	2.00E-1	3.16E+0	8.00E-1	1.000E+0	3.71E-3	5.00E+1	3.50E-1	3.76E+1	1E-4
benzo(k)fluoranthene	3.00E-6	0.0	0.0	0.0	1.01E+4	2.00E-1	1.01E+4	8.00E-1	1.778E+1	1.32E-1	1.31E+0	3.05E-2	8.52E-1	2E-1
benzo(g,h,i)perylene	6.00E-5	0.0	0.0	0.0	2.54E+4	2.00E-1	2.54E+4	8.00E-1	2.565E+1	9.56E+0	1.31E+0	3.05E-2	8.52E-1	**1E+1**
fluorene	3.00E-4	0.0	0.0	0.0	3.30E+2	2.00E-1	3.30E+2	8.00E-1	1.380E+0	3.34E-2	5.00E+1	2.77E-1	3.71E+1	9E-4
naphthalene	5.81E-2	0.0	0.0	0.0	6.93E+1	2.00E-1	6.93E+1	8.00E-1	1.053E+0	1.04E+0	5.00E+1	2.77E-1	3.71E+1	3E-2
phenanthrene	6.20E-4	0.0	0.0	0.0	5.42E+2	2.00E-1	5.42E+2	8.00E-1	1.766E+0	1.45E-1	5.00E+1	2.77E-1	3.71E+1	4E-3
pyrene	6.00E-4	0.0	0.0	0.0	1.14E+3	2.00E-1	1.14E+3	8.00E-1	2.780E+0	4.66E-1	1.31E+0	3.05E-2	8.52E-1	5E-1
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	2.00E-1	1.36E+3	8.00E-1	3.181E+0	6.36E-3	1.29E-1	1.00E-1	9.00E-2	7E-2
aluminum	4.53E+0	0.0	0.0	0.0	4.07E+3	2.00E-1	2.70E+0	8.00E-1	1.000E+0	9.03E+2	1.93E+0	3.00E-2	1.25E+0	**7E+2**
antimony	8.70E-4	0.0	0.0	0.0	7.00E+0	2.00E-1	4.00E+1	8.00E-1	1.000E+0	7.11E-3	1.25E-1	3.00E-2	8.12E-2	9E-2
arsenic	1.50E-2	0.0	0.0	0.0	7.30E+1	2.00E-1	1.14E+2	8.00E-1	1.000E+0	3.88E-1	3.20E-1	3.32E-1	2.40E-1	**2E+0**
barium	1.11E+0	0.0	0.0	0.0	2.00E+2	2.00E-1	6.33E+2	8.00E-1	1.000E+0	1.48E+2	5.10E+0	4.35E-1	5.10E+0	**3E+1**
beryllium	3.00E-3	0.0	0.0	0.0	4.50E+1	2.00E-1	6.20E+1	8.00E-1	1.000E+0	4.30E-2	6.60E-1	3.50E-1	4.97E-1	9E-2
cadmium	3.40E-3	0.0	0.0	0.0	3.46E+3	2.00E-1	9.07E+2	8.00E-1	1.000E+0	1.18E+0	6.00E-2	3.22E-2	3.91E-2	**3E+1**
chromium	1.79E-2	0.0	0.0	0.0	3.00E+3	2.00E-1	1.90E+1	8.00E-1	1.000E+0	2.69E+0	3.28E+0	3.50E-1	2.47E+0	1E+0
chromium, hexavalent	1.00E-2	0.0	0.0	0.0	3.00E+3	2.00E-1	1.90E+1	8.00E-1	1.000E+0	1.50E+0	3.28E+0	3.50E-1	2.47E+0	6E-1
cobalt	1.20E-2	0.0	0.0	0.0	7.60E+1	2.00E-1	1.16E+0	8.00E-1	1.000E+0	4.73E-2	1.20E+0	2.75E-1	8.90E-1	5E-2
copper	2.50E-3	0.0	0.0	0.0	3.72E+3	2.00E-1	7.10E+2	8.00E-1	1.000E+0	8.02E-1	2.67E+0	3.00E-2	1.73E+0	5E-1
iron	1.30E+1	0.0	0.0	0.0	4.07E+3	2.00E-1	6.33E+2	8.00E-1	1.000E+0	4.19E+3	NA	0.0	NA	NA
lead	6.87E-2	0.0	0.0	0.0	5.06E+3	2.00E-1	9.00E-2	8.00E-1	1.000E+0	1.70E+1	1.00E+0	5.51E-1	1.00E+0	**2E+1**
manganese	1.11E+1	0.0	0.0	0.0	3.75E+1	2.00E-1	6.33E+2	8.00E-1	1.000E+0	1.39E+3	1.37E+1	3.46E-2	8.97E+0	**2E+2**

TABLE J1-6
Hazard Quotient - Calculations for Harbor Seal
Initial Screening-Level

Food Ingestion Rate, kg food/day	9.78E+0	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	4.00E+1		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
mercury	4.80E-4	0.0	0.0	0.0	2.02E+4	2.00E-1	3.53E+3	8.00E-1	1.000E+0	8.05E-1	2.50E-1	1.88E-1	1.81E-1	**4E+0**
molybdenum	1.07E-2	0.0	0.0	0.0	4.07E+3	2.00E-1	6.33E+2	8.00E-1	1.000E+0	3.45E+0	2.60E-1	3.00E-2	1.69E-1	**2E+1**
nickel	1.93E-2	0.0	0.0	0.0	2.80E+1	2.00E-1	7.80E+1	8.00E-1	1.000E+0	3.21E-1	1.33E-1	2.49E-1	9.81E-2	**3E+0**
selenium	2.80E-3	0.0	0.0	0.0	1.26E+3	2.00E-1	1.29E+2	8.00E-1	1.000E+0	2.43E-1	5.00E-2	1.87E-1	3.62E-2	**7E+0**
silver	2.67E-2	0.0	0.0	0.0	2.98E+2	2.00E-1	8.77E+1	8.00E-1	1.000E+0	8.47E-1	2.22E+1	3.50E-1	1.67E+1	5E-2
thallium	1.11E-2	0.0	0.0	0.0	1.50E+4	2.00E-1	1.00E+4	8.00E-1	1.000E+0	2.99E+1	4.80E-1	6.50E-2	3.27E-1	**9E+1**
vanadium	2.30E-2	0.0	0.0	0.0	4.07E+3	2.00E-1	6.33E+2	8.00E-1	1.000E+0	7.42E+0	2.10E-1	2.60E-1	1.55E-1	**5E+1**
zinc	2.26E-1	0.0	0.0	0.0	4.58E+3	2.00E-1	2.06E+3	8.00E-1	1.000E+0	1.42E+2	9.60E+0	2.55E-2	6.17E+0	**2E+1**
bismuth-214	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
lead-214	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
tritium	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-233	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-235	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-238	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-7
Hazard Quotient - Calculations for California Brown Pelican
Initial Screening-Level

Food Ingestion Rate, kg food/day	1.01E+0	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	3.30E+0		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
acetone	1.80E-2	0.0	0.0	0.0	3.16E+0	0.0	3.16E+0	1.00E+0	1.000E+0	1.74E-2	5.20E+1	5.00E-2	5.20E+1	3E-4
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	0.0	8.71E+0	1.00E+0	1.005E+0	1.07E-3	2.64E+0	0.0	2.64E+0	4E-4
2-butanone (syn: methyl ethyl l	5.70E-2	0.0	0.0	0.0	3.16E+0	0.0	3.16E+0	1.00E+0	1.000E+0	5.50E-2	5.20E+1	5.00E-2	5.20E+1	1E-3
sec-butylbenzene	4.00E-4	0.0	0.0	0.0	6.59E+2	0.0	6.59E+2	1.00E+0	1.950E+0	1.57E-1	2.10E-1	0.0	2.10E-1	7E-1
carbon disulfide	3.00E-1	0.0	0.0	0.0	6.22E+0	0.0	6.22E+0	1.00E+0	1.000E+0	5.70E-1	1.10E+0	0.0	1.10E+0	5E-1
1,2-dichloroethane	4.00E-4	0.0	0.0	0.0	2.75E+0	0.0	2.75E+0	1.00E+0	1.000E+0	3.36E-4	1.72E+1	1.60E+0	1.72E+1	2E-5
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	2.48E-3	4.52E+0	0.0	4.52E+0	5E-4
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	1.49E-3	1.70E-1	0.0	1.70E-1	9E-3
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	0.0	1.31E+2	1.00E+0	1.128E+0	1.36E-3	9.80E-1	7.40E-2	9.80E-1	1E-3
p-isopropyltoluene	1.30E-3	0.0	0.0	0.0	2.86E+2	0.0	2.86E+2	1.00E+0	1.315E+0	1.50E-1	3.16E+0	7.40E-2	3.16E+0	5E-2
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	0.0	1.46E+1	1.00E+0	1.010E+0	4.49E-4	7.00E-2	0.0	7.00E-2	6E-3
1,2,4-trimethylbenzene	1.36E-2	0.0	0.0	0.0	1.25E+2	0.0	1.25E+2	1.00E+0	1.103E+0	5.70E-1	2.10E-1	0.0	2.10E-1	**3E+0**
1,3,5-trimethylbenzene	3.60E-3	0.0	0.0	0.0	8.58E+1	0.0	8.58E+1	1.00E+0	1.067E+0	1.01E-1	2.10E-1	0.0	2.10E-1	5E-1
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	0.0	3.55E+0	1.00E+0	1.000E+0	2.28E-3	1.70E-2	0.0	1.70E-2	1E-1
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	0.0	5.04E+1	1.00E+0	1.034E+0	1.27E-3	2.10E-1	0.0	2.10E-1	6E-3
xylenes, total	2.00E-3	0.0	0.0	0.0	5.04E+1	0.0	5.04E+1	1.00E+0	1.034E+0	3.18E-2	2.10E-1	0.0	2.10E-1	2E-1
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	0.0	3.08E+2	1.00E+0	1.675E+1	4.25E+0	1.10E+0	1.55E-1	1.10E+0	**4E+0**
4-chloro-3-methylphenol	7.00E-4	0.0	0.0	0.0	4.86E+1	0.0	4.86E+1	1.00E+0	1.034E+0	1.08E-2	1.13E+0	7.40E-2	1.13E+0	1E-2
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	0.0	5.82E+2	1.00E+0	1.766E+0	1.44E-1	1.10E-1	1.55E-1	1.10E-1	1E+0
dimethyl phthalate	3.00E-3	0.0	0.0	0.0	3.40E+0	0.0	3.40E+0	1.00E+0	1.000E+0	3.12E-3	1.00E+0	7.40E-2	1.00E+0	3E-3
isophorone	5.00E-3	0.0	0.0	0.0	4.06E+0	0.0	4.06E+0	1.00E+0	1.000E+0	6.21E-3	3.12E+1	0.0	3.12E+1	2E-4
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	4.80E-3	0.0	0.0	0.0	3.16E+0	0.0	3.16E+0	1.00E+0	1.000E+0	4.63E-3	5.00E+0	0.0	5.00E+0	9E-4
benzo(k)fluoranthene	3.00E-6	0.0	0.0	0.0	1.01E+4	0.0	1.01E+4	1.00E+0	1.778E+1	1.65E-1	1.01E+0	7.40E-2	1.01E+0	2E-1
benzo(g,h,i)perylene	6.00E-5	0.0	0.0	0.0	2.54E+4	0.0	2.54E+4	1.00E+0	2.565E+1	1.19E+1	1.01E+0	7.40E-2	1.01E+0	**1E+1**
fluorene	3.00E-4	0.0	0.0	0.0	3.30E+2	0.0	3.30E+2	1.00E+0	1.380E+0	4.17E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
naphthalene	5.81E-2	0.0	0.0	0.0	6.93E+1	0.0	6.93E+1	1.00E+0	1.053E+0	1.30E+0	1.01E+0	7.40E-2	1.01E+0	1E+0
phenanthrene	6.20E-4	0.0	0.0	0.0	5.42E+2	0.0	5.42E+2	1.00E+0	1.766E+0	1.81E-1	1.13E+0	7.40E-2	1.13E+0	2E-1
pyrene	6.00E-4	0.0	0.0	0.0	1.14E+3	0.0	1.14E+3	1.00E+0	2.780E+0	5.82E-1	1.01E+0	7.40E-2	1.01E+0	6E-1
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	0.0	1.36E+3	1.00E+0	3.181E+0	7.94E-3	2.14E+0	6.40E-2	2.14E+0	4E-3
aluminum	4.53E+0	0.0	0.0	0.0	4.07E+3	0.0	2.70E+0	1.00E+0	1.000E+0	3.73E+0	1.10E+2	1.55E-1	1.10E+2	3E-2
antimony	8.70E-4	0.0	0.0	0.0	7.00E+0	0.0	4.00E+1	1.00E+0	1.000E+0	1.06E-2	1.25E-2	0.0	1.25E-2	9E-1
arsenic	1.50E-2	0.0	0.0	0.0	7.30E+1	0.0	1.14E+2	1.00E+0	1.000E+0	5.22E-1	5.50E+0	1.17E+0	5.50E+0	9E-2
barium	1.11E+0	0.0	0.0	0.0	2.00E+2	0.0	6.33E+2	1.00E+0	1.000E+0	2.15E+2	2.08E+1	1.21E-1	2.08E+1	**1E+1**
beryllium	3.00E-3	0.0	0.0	0.0	4.50E+1	0.0	6.20E+1	1.00E+0	1.000E+0	5.68E-2	6.60E-2	0.0	6.60E-2	9E-1
cadmium	3.40E-3	0.0	0.0	0.0	3.46E+3	0.0	9.07E+2	1.00E+0	1.000E+0	9.42E-1	7.80E-2	7.99E-1	7.80E-2	**1E+1**
chromium	1.79E-2	0.0	0.0	0.0	3.00E+3	0.0	1.90E+1	1.00E+0	1.000E+0	1.04E-1	1.00E+0	1.25E+0	1.00E+0	1E-1
chromium, hexavalent	1.00E-2	0.0	0.0	0.0	3.00E+3	0.0	1.90E+1	1.00E+0	1.000E+0	5.80E-2	1.00E+0	1.25E+0	1.00E+0	6E-2
cobalt	1.20E-2	0.0	0.0	0.0	7.60E+1	0.0	1.16E+0	1.00E+0	1.000E+0	4.25E-3	2.37E-1	1.53E-1	2.37E-1	2E-2
copper	2.50E-3	0.0	0.0	0.0	3.72E+3	0.0	7.10E+2	1.00E+0	1.000E+0	5.42E-1	2.30E+0	6.39E-1	2.30E+0	2E-1
iron	1.30E+1	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	2.51E+3	NA	0.0	NA	NA
lead	6.87E-2	0.0	0.0	0.0	5.06E+3	0.0	9.00E-2	1.00E+0	1.000E+0	1.89E-3	1.40E-2	9.35E-2	1.40E-2	1E-1
manganese	1.11E+1	0.0	0.0	0.0	3.75E+1	0.0	6.33E+2	1.00E+0	1.000E+0	2.15E+3	7.76E+1	1.97E-1	7.76E+1	**3E+1**

TABLE J1-7
Hazard Quotient - Calculations for California Brown Pelican
Initial Screening-Level

Food Ingestion Rate, kg food/day	1.01E+0	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	3.30E+0		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
mercury	4.80E-4	0.0	0.0	0.0	2.02E+4	0.0	3.53E+3	1.00E+0	1.000E+0	5.17E-1	3.90E-2	1.00E+0	3.90E-2	**1E+1**
molybdenum	1.07E-2	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	2.07E+0	3.50E+0	1.50E+0	3.50E+0	6E-1
nickel	1.93E-2	0.0	0.0	0.0	2.80E+1	0.0	7.80E+1	1.00E+0	1.000E+0	4.60E-1	1.38E+0	6.14E-1	1.38E+0	3E-1
selenium	2.80E-3	0.0	0.0	0.0	1.26E+3	0.0	1.29E+2	1.00E+0	1.000E+0	1.10E-1	2.30E-1	1.11E+0	2.30E-1	5E-1
silver	2.67E-2	0.0	0.0	0.0	2.98E+2	0.0	8.77E+1	1.00E+0	1.000E+0	7.15E-1	1.78E+2	1.00E+0	1.78E+2	4E-3
thallium	1.11E-2	0.0	0.0	0.0	1.50E+4	0.0	1.00E+4	1.00E+0	1.000E+0	3.39E+1	3.50E-1	7.40E-2	3.50E-1	**1E+2**
vanadium	2.30E-2	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	4.45E+0	1.14E+1	1.17E+0	1.14E+1	4E-1
zinc	2.26E-1	0.0	0.0	0.0	4.58E+3	0.0	2.06E+3	1.00E+0	1.000E+0	1.42E+2	1.72E+1	9.55E-1	1.72E+1	**8E+0**
bismuth-214	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
lead-214	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
tritium	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-233	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-235	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-238	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-8
Hazard Quotient - Calculations for California Least Tern
Initial Screening-Level

Food Ingestion Rate, kg food/day	4.11E-2	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	3.00E-2		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
acetone	1.80E-2	0.0	0.0	0.0	3.16E+0	0.0	3.16E+0	1.00E+0	1.000E+0	7.80E-2	5.20E+1	5.00E-2	5.20E+1	2E-3
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	0.0	8.71E+0	1.00E+0	1.005E+0	4.80E-3	2.64E+0	0.0	2.64E+0	2E-3
2-butanone (syn: methyl ethyl l	5.70E-2	0.0	0.0	0.0	3.16E+0	0.0	3.16E+0	1.00E+0	1.000E+0	2.47E-1	5.20E+1	5.00E-2	5.20E+1	5E-3
sec-butylbenzene	4.00E-4	0.0	0.0	0.0	6.59E+2	0.0	6.59E+2	1.00E+0	1.950E+0	7.05E-1	2.10E-1	0.0	2.10E-1	**3E+0**
carbon disulfide	3.00E-1	0.0	0.0	0.0	6.22E+0	0.0	6.22E+0	1.00E+0	1.000E+0	2.56E+0	1.10E+0	0.0	1.10E+0	**2E+0**
1,2-dichloroethane	4.00E-4	0.0	0.0	0.0	2.75E+0	0.0	2.75E+0	1.00E+0	1.000E+0	1.51E-3	1.72E+1	1.60E+0	1.72E+1	9E-5
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	1.11E-2	4.52E+0	0.0	4.52E+0	2E-3
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	6.68E-3	1.70E-1	0.0	1.70E-1	4E-2
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	0.0	1.31E+2	1.00E+0	1.128E+0	6.09E-3	9.80E-1	7.40E-2	9.80E-1	6E-3
p-isopropyltoluene	1.30E-3	0.0	0.0	0.0	2.86E+2	0.0	2.86E+2	1.00E+0	1.315E+0	6.71E-1	3.16E+0	7.40E-2	3.16E+0	2E-1
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	0.0	1.46E+1	1.00E+0	1.010E+0	2.02E-3	7.00E-2	0.0	7.00E-2	3E-2
1,2,4-trimethylbenzene	1.36E-2	0.0	0.0	0.0	1.25E+2	0.0	1.25E+2	1.00E+0	1.103E+0	2.56E+0	2.10E-1	0.0	2.10E-1	**1E+1**
1,3,5-trimethylbenzene	3.60E-3	0.0	0.0	0.0	8.58E+1	0.0	8.58E+1	1.00E+0	1.067E+0	4.52E-1	2.10E-1	0.0	2.10E-1	**2E+0**
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	0.0	3.55E+0	1.00E+0	1.000E+0	1.02E-2	1.70E-2	0.0	1.70E-2	6E-1
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	0.0	5.04E+1	1.00E+0	1.034E+0	5.72E-3	2.10E-1	0.0	2.10E-1	3E-2
xylenes, total	2.00E-3	0.0	0.0	0.0	5.04E+1	0.0	5.04E+1	1.00E+0	1.034E+0	1.43E-1	2.10E-1	0.0	2.10E-1	7E-1
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	0.0	3.08E+2	1.00E+0	1.675E+1	1.91E+1	1.10E+0	1.55E-1	1.10E+0	**2E+1**
4-chloro-3-methylphenol	7.00E-4	0.0	0.0	0.0	4.86E+1	0.0	4.86E+1	1.00E+0	1.034E+0	4.83E-2	1.13E+0	7.40E-2	1.13E+0	4E-2
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	0.0	5.82E+2	1.00E+0	1.766E+0	6.48E-1	1.10E-1	1.55E-1	1.10E-1	**6E+0**
dimethyl phthalate	3.00E-3	0.0	0.0	0.0	3.40E+0	0.0	3.40E+0	1.00E+0	1.000E+0	1.40E-2	1.00E+0	7.40E-2	1.00E+0	1E-2
isophorone	5.00E-3	0.0	0.0	0.0	4.06E+0	0.0	4.06E+0	1.00E+0	1.000E+0	2.79E-2	3.12E+1	0.0	3.12E+1	9E-4
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	4.80E-3	0.0	0.0	0.0	3.16E+0	0.0	3.16E+0	1.00E+0	1.000E+0	2.08E-2	5.00E+0	0.0	5.00E+0	4E-3
benzo(k)fluoranthene	3.00E-6	0.0	0.0	0.0	1.01E+4	0.0	1.01E+4	1.00E+0	1.778E+1	7.39E-1	1.01E+0	7.40E-2	1.01E+0	7E-1
benzo(g,h,i)perylene	6.00E-5	0.0	0.0	0.0	2.54E+4	0.0	2.54E+4	1.00E+0	2.565E+1	5.36E+1	1.01E+0	7.40E-2	1.01E+0	**5E+1**
fluorene	3.00E-4	0.0	0.0	0.0	3.30E+2	0.0	3.30E+2	1.00E+0	1.380E+0	1.87E-1	1.01E+0	7.40E-2	1.01E+0	2E-1
naphthalene	5.81E-2	0.0	0.0	0.0	6.93E+1	0.0	6.93E+1	1.00E+0	1.053E+0	5.82E+0	1.01E+0	7.40E-2	1.01E+0	**6E+0**
phenanthrene	6.20E-4	0.0	0.0	0.0	5.42E+2	0.0	5.42E+2	1.00E+0	1.766E+0	8.14E-1	1.13E+0	7.40E-2	1.13E+0	7E-1
pyrene	6.00E-4	0.0	0.0	0.0	1.14E+3	0.0	1.14E+3	1.00E+0	2.780E+0	2.61E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	0.0	1.36E+3	1.00E+0	3.181E+0	3.57E-2	2.14E+0	6.40E-2	2.14E+0	2E-2
aluminum	4.53E+0	0.0	0.0	0.0	4.07E+3	0.0	2.70E+0	1.00E+0	1.000E+0	1.68E+1	1.10E+2	1.55E-1	1.10E+2	2E-1
antimony	8.70E-4	0.0	0.0	0.0	7.00E+0	0.0	4.00E+1	1.00E+0	1.000E+0	4.77E-2	1.25E-2	0.0	1.25E-2	**4E+0**
arsenic	1.50E-2	0.0	0.0	0.0	7.30E+1	0.0	1.14E+2	1.00E+0	1.000E+0	2.34E+0	5.50E+0	1.17E+0	5.50E+0	4E-1
barium	1.11E+0	0.0	0.0	0.0	2.00E+2	0.0	6.33E+2	1.00E+0	1.000E+0	9.63E+2	2.08E+1	1.21E-1	2.08E+1	**5E+1**
beryllium	3.00E-3	0.0	0.0	0.0	4.50E+1	0.0	6.20E+1	1.00E+0	1.000E+0	2.55E-1	6.60E-2	0.0	6.60E-2	**4E+0**
cadmium	3.40E-3	0.0	0.0	0.0	3.46E+3	0.0	9.07E+2	1.00E+0	1.000E+0	4.23E+0	7.80E-2	7.99E-1	7.80E-2	**5E+1**
chromium	1.79E-2	0.0	0.0	0.0	3.00E+3	0.0	1.90E+1	1.00E+0	1.000E+0	4.66E-1	1.00E+0	1.25E+0	1.00E+0	5E-1
chromium, hexavalent	1.00E-2	0.0	0.0	0.0	3.00E+3	0.0	1.90E+1	1.00E+0	1.000E+0	2.60E-1	1.00E+0	1.25E+0	1.00E+0	3E-1
cobalt	1.20E-2	0.0	0.0	0.0	7.60E+1	0.0	1.16E+0	1.00E+0	1.000E+0	1.91E-2	2.37E-1	1.53E-1	2.37E-1	8E-2
copper	2.50E-3	0.0	0.0	0.0	3.72E+3	0.0	7.10E+2	1.00E+0	1.000E+0	2.43E+0	2.30E+0	6.39E-1	2.30E+0	1E+0
iron	1.30E+1	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	1.13E+4	NA	0.0	NA	NA
lead	6.87E-2	0.0	0.0	0.0	5.06E+3	0.0	9.00E-2	1.00E+0	1.000E+0	8.48E-3	1.40E-2	9.35E-2	1.40E-2	6E-1
manganese	1.11E+1	0.0	0.0	0.0	3.75E+1	0.0	6.33E+2	1.00E+0	1.000E+0	9.63E+3	7.76E+1	1.97E-1	7.76E+1	**1E+2**

TABLE J1-8
Hazard Quotient - Calculations for California Least Tern
Initial Screening-Level

Food Ingestion Rate, kg food/day	4.11E-2	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	3.00E-2		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
mercury	4.80E-4	0.0	0.0	0.0	2.02E+4	0.0	3.53E+3	1.00E+0	1.000E+0	2.32E+0	3.90E-2	1.00E+0	3.90E-2	**6E+1**
molybdenum	1.07E-2	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	9.29E+0	3.50E+0	1.50E+0	3.50E+0	**3E+0**
nickel	1.93E-2	0.0	0.0	0.0	2.80E+1	0.0	7.80E+1	1.00E+0	1.000E+0	2.06E+0	1.38E+0	6.14E-1	1.38E+0	1E+0
selenium	2.80E-3	0.0	0.0	0.0	1.26E+3	0.0	1.29E+2	1.00E+0	1.000E+0	4.95E-1	2.30E-1	1.11E+0	2.30E-1	**2E+0**
silver	2.67E-2	0.0	0.0	0.0	2.98E+2	0.0	8.77E+1	1.00E+0	1.000E+0	3.21E+0	1.78E+2	1.00E+0	1.78E+2	2E-2
thallium	1.11E-2	0.0	0.0	0.0	1.50E+4	0.0	1.00E+4	1.00E+0	1.000E+0	1.52E+2	3.50E-1	7.40E-2	3.50E-1	**4E+2**
vanadium	2.30E-2	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	2.00E+1	1.14E+1	1.17E+0	1.14E+1	**2E+0**
zinc	2.26E-1	0.0	0.0	0.0	4.58E+3	0.0	2.06E+3	1.00E+0	1.000E+0	6.38E+2	1.72E+1	9.55E-1	1.72E+1	**4E+1**
bismuth-214	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
lead-214	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
tritium	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-233	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-235	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-238	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-9
Hazard Quotient - Calculations for Western Snowy Plover
Initial Screening-Level

Food Ingestion Rate, kg food/day	4.35E-2	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	3.25E-2		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
acetone	1.80E-2	0.0	0.0	0.0	3.16E+0	1.00E+0	3.16E+0	0.0	1.000E+0	7.61E-2	5.20E+1	5.00E-2	5.20E+1	1E-3
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	1.00E+0	8.71E+0	0.0	1.005E+0	4.68E-3	2.64E+0	0.0	2.64E+0	2E-3
2-butanone (syn: methyl ethyl l	5.70E-2	0.0	0.0	0.0	3.16E+0	1.00E+0	3.16E+0	0.0	1.000E+0	2.41E-1	5.20E+1	5.00E-2	5.20E+1	5E-3
sec-butylbenzene	4.00E-4	0.0	0.0	0.0	6.59E+2	1.00E+0	6.59E+2	0.0	1.950E+0	6.87E-1	2.10E-1	0.0	2.10E-1	**3E+0**
carbon disulfide	3.00E-1	0.0	0.0	0.0	6.22E+0	1.00E+0	6.22E+0	0.0	1.000E+0	2.49E+0	1.10E+0	0.0	1.10E+0	**2E+0**
1,2-dichloroethane	4.00E-4	0.0	0.0	0.0	2.75E+0	1.00E+0	2.75E+0	0.0	1.000E+0	1.47E-3	1.72E+1	1.60E+0	1.72E+1	9E-5
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	1.00E+0	8.12E+0	0.0	1.000E+0	1.08E-2	4.52E+0	0.0	4.52E+0	2E-3
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	1.00E+0	8.12E+0	0.0	1.000E+0	6.51E-3	1.70E-1	0.0	1.70E-1	4E-2
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	1.00E+0	1.31E+2	0.0	1.128E+0	5.94E-3	9.80E-1	7.40E-2	9.80E-1	6E-3
p-isopropyltoluene	1.30E-3	0.0	0.0	0.0	2.86E+2	1.00E+0	2.86E+2	0.0	1.315E+0	6.55E-1	3.16E+0	7.40E-2	3.16E+0	2E-1
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	1.00E+0	1.46E+1	0.0	1.010E+0	1.97E-3	7.00E-2	0.0	7.00E-2	3E-2
1,2,4-trimethylbenzene	1.36E-2	0.0	0.0	0.0	1.25E+2	1.00E+0	1.25E+2	0.0	1.103E+0	2.50E+0	2.10E-1	0.0	2.10E-1	**1E+1**
1,3,5-trimethylbenzene	3.60E-3	0.0	0.0	0.0	8.58E+1	1.00E+0	8.58E+1	0.0	1.067E+0	4.41E-1	2.10E-1	0.0	2.10E-1	**2E+0**
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	1.00E+0	3.55E+0	0.0	1.000E+0	1.74E-3	1.70E-2	0.0	1.70E-2	1E-1
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	1.00E+0	5.04E+1	0.0	1.034E+0	5.57E-3	2.10E-1	0.0	2.10E-1	3E-2
xylenes, total	2.00E-3	0.0	0.0	0.0	5.04E+1	1.00E+0	5.04E+1	0.0	1.034E+0	1.39E-1	2.10E-1	0.0	2.10E-1	7E-1
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	1.00E+0	3.08E+2	0.0	1.675E+1	1.86E+1	1.10E+0	1.55E-1	1.10E+0	**2E+1**
4-chloro-3-methylphenol	7.00E-4	0.0	0.0	0.0	4.86E+1	1.00E+0	4.86E+1	0.0	1.034E+0	4.71E-2	1.13E+0	7.40E-2	1.13E+0	4E-2
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	1.00E+0	5.82E+2	0.0	1.766E+0	6.32E-1	1.10E-1	1.55E-1	1.10E-1	**6E+0**
dimethyl phthalate	3.00E-3	0.0	0.0	0.0	3.40E+0	1.00E+0	3.40E+0	0.0	1.000E+0	1.37E-2	1.00E+0	7.40E-2	1.00E+0	1E-2
isophorone	5.00E-3	0.0	0.0	0.0	4.06E+0	1.00E+0	4.06E+0	0.0	1.000E+0	2.72E-2	3.12E+1	0.0	3.12E+1	9E-4
octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine	4.80E-3	0.0	0.0	0.0	3.16E+0	1.00E+0	3.16E+0	0.0	1.000E+0	2.03E-2	5.00E+0	0.0	5.00E+0	4E-3
benzo(k)fluoranthene	3.00E-6	0.0	0.0	0.0	1.01E+4	1.00E+0	1.01E+4	0.0	1.778E+1	7.21E-1	1.01E+0	7.40E-2	1.01E+0	7E-1
benzo(g,h,i)perylene	6.00E-5	0.0	0.0	0.0	2.54E+4	1.00E+0	2.54E+4	0.0	2.565E+1	5.23E+1	1.01E+0	7.40E-2	1.01E+0	**5E+1**
fluorene	3.00E-4	0.0	0.0	0.0	3.30E+2	1.00E+0	3.30E+2	0.0	1.380E+0	1.83E-1	1.01E+0	7.40E-2	1.01E+0	2E-1
naphthalene	5.81E-2	0.0	0.0	0.0	6.93E+1	1.00E+0	6.93E+1	0.0	1.053E+0	5.67E+0	1.01E+0	7.40E-2	1.01E+0	**6E+0**
phenanthrene	6.20E-4	0.0	0.0	0.0	5.42E+2	1.00E+0	5.42E+2	0.0	1.766E+0	7.94E-1	1.13E+0	7.40E-2	1.13E+0	7E-1
pyrene	6.00E-4	0.0	0.0	0.0	1.14E+3	1.00E+0	1.14E+3	0.0	2.780E+0	2.55E+0	1.01E+0	7.40E-2	1.01E+0	**3E+0**
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	1.00E+0	1.36E+3	0.0	3.181E+0	3.48E-2	2.14E+0	6.40E-2	2.14E+0	2E-2
aluminum	4.53E+0	0.0	0.0	0.0	4.07E+3	1.00E+0	2.70E+0	0.0	1.000E+0	2.46E+4	1.10E+2	1.55E-1	1.10E+2	**2E+2**
antimony	8.70E-4	0.0	0.0	0.0	7.00E+0	1.00E+0	4.00E+1	0.0	1.000E+0	8.14E-3	1.25E-2	0.0	1.25E-2	7E-1
arsenic	1.50E-2	0.0	0.0	0.0	7.30E+1	1.00E+0	1.14E+2	0.0	1.000E+0	1.46E+0	5.50E+0	1.17E+0	5.50E+0	3E-1
barium	1.11E+0	0.0	0.0	0.0	2.00E+2	1.00E+0	6.33E+2	0.0	1.000E+0	2.97E+2	2.08E+1	1.21E-1	2.08E+1	**1E+1**
beryllium	3.00E-3	0.0	0.0	0.0	4.50E+1	1.00E+0	6.20E+1	0.0	1.000E+0	1.80E-1	6.60E-2	0.0	6.60E-2	**3E+0**
cadmium	3.40E-3	0.0	0.0	0.0	3.46E+3	1.00E+0	9.07E+2	0.0	1.000E+0	1.57E+1	7.80E-2	7.99E-1	7.80E-2	**2E+2**
chromium	1.79E-2	0.0	0.0	0.0	3.00E+3	1.00E+0	1.90E+1	0.0	1.000E+0	7.18E+1	1.00E+0	1.25E+0	1.00E+0	**7E+1**
chromium, hexavalent	1.00E-2	0.0	0.0	0.0	3.00E+3	1.00E+0	1.90E+1	0.0	1.000E+0	4.01E+1	1.00E+0	1.25E+0	1.00E+0	**4E+1**
cobalt	1.20E-2	0.0	0.0	0.0	7.60E+1	1.00E+0	1.16E+0	0.0	1.000E+0	1.22E+0	2.37E-1	1.53E-1	2.37E-1	**5E+0**
copper	2.50E-3	0.0	0.0	0.0	3.72E+3	1.00E+0	7.10E+2	0.0	1.000E+0	1.24E+1	2.30E+0	6.39E-1	2.30E+0	**5E+0**
iron	1.30E+1	0.0	0.0	0.0	4.07E+3	1.00E+0	6.33E+2	0.0	1.000E+0	7.07E+4	NA	0.0	NA	NA
lead	6.87E-2	0.0	0.0	0.0	5.06E+3	1.00E+0	9.00E-2	0.0	1.000E+0	4.65E+2	1.40E-2	9.35E-2	1.40E-2	**3E+4**
manganese	1.11E+1	0.0	0.0	0.0	3.75E+1	1.00E+0	6.33E+2	0.0	1.000E+0	5.57E+2	7.76E+1	1.97E-1	7.76E+1	**7E+0**

TABLE J1-9
Hazard Quotient - Calculations for Western Snowy Plover
Initial Screening-Level

Food Ingestion Rate, kg food/day	4.35E-2	Site Use Factor (SUF, percent)	1.00E+0
Body Weight, kg	3.25E-2		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
mercury	4.80E-4	0.0	0.0	0.0	2.02E+4	1.00E+0	3.53E+3	0.0	1.000E+0	1.30E+1	3.90E-2	1.00E+0	3.90E-2	**3E+2**
molybdenum	1.07E-2	0.0	0.0	0.0	4.07E+3	1.00E+0	6.33E+2	0.0	1.000E+0	5.82E+1	3.50E+0	1.50E+0	3.50E+0	**2E+1**
nickel	1.93E-2	0.0	0.0	0.0	2.80E+1	1.00E+0	7.80E+1	0.0	1.000E+0	7.23E-1	1.38E+0	6.14E-1	1.38E+0	5E-1
selenium	2.80E-3	0.0	0.0	0.0	1.26E+3	1.00E+0	1.29E+2	0.0	1.000E+0	4.72E+0	2.30E-1	1.11E+0	2.30E-1	**2E+1**
silver	2.67E-2	0.0	0.0	0.0	2.98E+2	1.00E+0	8.77E+1	0.0	1.000E+0	1.06E+1	1.78E+2	1.00E+0	1.78E+2	6E-2
thallium	1.11E-2	0.0	0.0	0.0	1.50E+4	1.00E+0	1.00E+4	0.0	1.000E+0	2.23E+2	3.50E-1	7.40E-2	3.50E-1	**6E+2**
vanadium	2.30E-2	0.0	0.0	0.0	4.07E+3	1.00E+0	6.33E+2	0.0	1.000E+0	1.25E+2	1.14E+1	1.17E+0	1.14E+1	**1E+1**
zinc	2.26E-1	0.0	0.0	0.0	4.58E+3	1.00E+0	2.06E+3	0.0	1.000E+0	1.38E+3	1.72E+1	9.55E-1	1.72E+1	**8E+1**
bismuth-214	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
lead-214	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
tritium	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-233	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-235	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
uranium-238	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-10
Hazard Quotient - Calculations for Deer Mouse
Refined Exposure

	Food Ingestion Rate, kg food/day			3.11E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.84E-2									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	5.00E-2	7.56E+1	5.00E-1	4.54E-2	5.00E-1	1.07E+0	0.0	1.15E-1	9.00E+1	3.50E-1	9.00E+1	1E-3
bis(2-ethylhexyl)phthalate	6.60E-2	5.00E-2	4.99E-2	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	6.23E-2	1.83E+1	3.00E-2	1.83E+1	3E-3
butylbenzyl phthalate	2.70E-1	5.00E-2	7.28E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	2.70E-1	1.59E+2	3.00E-1	1.59E+2	2E-3
di-n-butyl phthalate	1.90E-2	5.00E-2	9.02E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	1.93E-2	5.50E+2	3.00E-2	5.50E+2	4E-5
pentachlorophenol	3.50E-2	5.00E-2	5.06E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	3.44E-2	2.40E-1	3.50E-1	2.40E-1	1E-1
phenol	2.00E-2	5.00E-2	1.54E+1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	4.49E-2	6.00E+1	3.50E-1	6.00E+1	7E-4
acenaphthene	8.81E-2	5.00E-2	3.48E-1	5.00E-1	3.00E-1	5.00E-1	1.07E+0	0.0	5.58E-3	5.00E+1	2.77E-1	5.00E+1	1E-4
acenaphthylene	3.80E-2	5.00E-2	6.31E-1	5.00E-1	2.20E-1	5.00E-1	1.07E+0	0.0	3.06E-3	5.00E+1	2.77E-1	5.00E+1	6E-5
anthracene	8.88E-2	5.00E-2	6.36E-1	5.00E-1	3.20E-1	5.00E-1	1.07E+0	0.0	7.93E-3	5.00E+1	2.77E-1	5.00E+1	2E-4
benzo(a)anthracene	6.60E-1	5.00E-2	7.89E-2	5.00E-1	2.70E-1	5.00E-1	1.07E+0	0.0	2.50E-2	1.31E+0	3.05E-2	1.31E+0	2E-2
benzo(b)fluoranthene	1.52E+0	5.00E-2	3.10E-1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	7.99E-2	1.31E+0	3.05E-2	1.31E+0	6E-2
benzo(k)fluoranthene	7.78E-1	5.00E-2	1.20E-1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	2.83E-2	1.31E+0	3.05E-2	1.31E+0	2E-2
benzo(g,h,i)perylene	6.82E-1	5.00E-2	3.67E-1	5.00E-1	1.50E-1	5.00E-1	1.07E+0	0.0	3.56E-2	1.31E+0	3.05E-2	1.31E+0	3E-2
benzo(a)pyrene	1.32E+0	5.00E-2	1.26E-1	5.00E-1	3.40E-1	5.00E-1	1.07E+0	0.0	6.33E-2	1.31E+0	3.05E-2	1.31E+0	5E-2
chrysene	8.23E-1	5.00E-2	7.22E-2	5.00E-1	4.40E-1	5.00E-1	1.07E+0	0.0	4.26E-2	1.31E+0	3.05E-2	1.31E+0	3E-2
dibenz(a,h)anthracene	2.81E-1	5.00E-2	1.30E-1	5.00E-1	4.90E-1	5.00E-1	1.07E+0	0.0	1.71E-2	1.31E+0	3.05E-2	1.31E+0	1E-2
fluoranthene	4.44E-1	5.00E-2	5.00E-1	5.00E-1	3.70E-1	5.00E-1	1.07E+0	0.0	3.64E-2	1.31E+0	3.05E-2	1.31E+0	3E-2
fluorene	8.63E-2	5.00E-2	3.62E-1	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	4.83E-3	5.00E+1	2.77E-1	5.00E+1	1E-4
indeno(1,2,3-c,d)pyrene	9.37E-1	5.00E-2	1.10E-1	5.00E-1	4.10E-1	5.00E-1	1.07E+0	0.0	4.91E-2	1.31E+0	3.05E-2	1.31E+0	4E-2
2-methylnaphthalene	9.61E-2	5.00E-2	5.19E-1	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	6.66E-3	5.00E+1	2.77E-1	5.00E+1	1E-4
naphthalene	8.70E-2	5.00E-2	1.22E+1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	9.21E-2	5.00E+1	2.77E-1	5.00E+1	2E-3
phenanthrene	1.33E-1	5.00E-2	1.82E+0	5.00E-1	2.80E-1	5.00E-1	1.07E+0	0.0	2.47E-2	5.00E+1	2.77E-1	5.00E+1	5E-4
pyrene	5.00E-1	5.00E-2	7.20E-1	5.00E-1	3.90E-1	5.00E-1	1.07E+0	0.0	5.11E-2	1.31E+0	3.05E-2	1.31E+0	4E-2
4,4'-DDD	5.90E-3	5.00E-2	2.89E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	3.52E-3	8.00E-1	3.20E-1	8.00E-1	4E-3
4,4'-DDT	3.30E-3	5.00E-2	3.34E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	1.98E-3	8.00E-1	3.20E-1	8.00E-1	2E-3
endosulfan sulfate	1.70E-3	5.00E-2	1.98E+0	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	1.26E-3	1.50E-1	3.50E-1	1.50E-1	8E-3
Aroclor 1260	1.11E-1	5.00E-2	2.67E-2	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	6.36E-2	3.60E-1	2.06E-2	3.60E-1	2E-1
aluminum	5.00E+3	5.00E-2	2.87E-3	5.00E-1	4.30E-2	5.00E-1	2.63E-2	0.0	6.17E+1	1.93E+0	3.00E-2	1.93E+0	**3E+1**
arsenic	5.19E+0	5.00E-2	3.80E-2	5.00E-1	2.20E-1	5.00E-1	2.50E-3	0.0	1.57E-1	3.20E-1	3.32E-1	3.20E-1	5E-1
barium	4.28E+1	5.00E-2	1.56E-1	5.00E-1	9.10E-2	5.00E-1	5.66E-2	0.0	1.26E+0	5.10E+0	4.35E-1	5.10E+0	2E-1
beryllium	5.29E-1	5.00E-2	1.00E-2	5.00E-1	4.50E-2	5.00E-1	1.00E+0	0.0	6.93E-3	6.60E-1	3.50E-1	6.60E-1	1E-2
cadmium	1.22E+0	5.00E-2	5.90E-1	5.00E-1	7.71E+0	5.00E-1	3.33E-1	0.0	8.64E-1	6.00E-2	3.22E-2	6.00E-2	**1E+1**
chromium	3.08E+1	5.00E-2	4.10E-2	5.00E-1	3.10E-1	5.00E-1	8.46E-2	0.0	1.17E+0	3.28E+0	3.50E-1	3.28E+0	4E-1
cobalt	6.44E+0	5.00E-2	7.45E-3	5.00E-1	1.22E-1	5.00E-1	2.05E-2	0.0	1.25E-1	1.20E+0	2.75E-1	1.20E+0	1E-1
copper	1.12E+1	5.00E-2	1.20E-1	5.00E-1	5.20E-1	5.00E-1	1.96E-1	0.0	6.98E-1	2.67E+0	3.00E-2	2.67E+0	3E-1
iron	8.78E+3	5.00E-2	4.25E-3	5.00E-1	3.60E-2	5.00E-1	1.24E-2	0.0	1.04E+2	NA	0.0	NA	NA
lead	2.54E+1	5.00E-2	3.90E-2	5.00E-1	2.70E-1	5.00E-1	1.05E-1	0.0	8.78E-1	1.00E+0	5.51E-1	1.00E+0	9E-1
manganese	1.36E+2	5.00E-2	7.92E-2	5.00E-1	5.00E-2	5.00E-1	2.05E-2	0.0	2.63E+0	1.37E+1	3.46E-2	1.37E+1	2E-1
mercury	1.32E-1	5.00E-2	6.50E-1	5.00E-1	1.69E+0	5.00E-1	5.43E-2	0.0	2.73E-2	2.50E-1	1.88E-1	2.50E-1	1E-1
nickel	2.48E+1	5.00E-2	1.80E-2	5.00E-1	1.06E+0	5.00E-1	2.49E-1	0.0	2.47E+0	1.33E-1	2.49E-1	1.33E-1	**2E+1**
selenium	7.20E-1	5.00E-2	6.70E-1	5.00E-1	9.90E-1	5.00E-1	1.62E-1	0.0	1.07E-1	5.00E-2	1.87E-1	5.00E-2	**2E+0**
silver	2.71E+0	5.00E-2	1.40E-2	5.00E-1	2.05E+0	5.00E-1	4.00E-3	0.0	4.95E-1	2.22E+1	3.50E-1	2.22E+1	2E-2
thallium	2.80E+0	5.00E-2	4.00E-3	5.00E-1	1.30E+0	5.00E-1	1.12E-1	0.0	3.32E-1	4.80E-1	6.50E-2	4.80E-1	7E-1
titanium	4.72E+2	5.00E-2	5.50E-3	5.00E-1	1.00E+0	5.00E-1	1.00E+0	0.0	4.41E+1	NA	0.0	NA	NA

TABLE J1-10
Hazard Quotient - Calculations for Deer Mouse
Refined Exposure

	Food Ingestion Rate, kg food/day			3.11E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.84E-2									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
vanadium	2.13E+1	5.00E-2	4.85E-3	5.00E-1	4.20E-2	5.00E-1	1.23E-2	0.0	2.64E-1	2.10E-1	2.60E-1	2.10E-1	1E+0
zinc	3.33E+1	5.00E-2	3.70E-1	5.00E-1	3.20E+0	5.00E-1	7.72E-1	0.0	1.03E+1	9.60E+0	2.55E-2	9.60E+0	1E+0
radium-226	2.51E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	2.12E-2	NA	0.0	NA	NA
radium-228	7.48E-1	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	6.33E-3	NA	0.0	NA	NA
gross alpha	2.95E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	2.49E-2	NA	0.0	NA	NA
gross beta	9.68E+0	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	8.19E-2	NA	0.0	NA	NA
total uranium	4.40E-1	5.00E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	3.72E-3	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-11
Hazard Quotient - Calculations for California Ground Squirrel
Refined Exposure

	Food Ingestion Rate, kg food/day			3.16E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			5.62E-1									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	5.00E-2	7.56E+1	8.00E-1	4.54E-2	2.00E-1	1.07E+0	0.0	6.13E-2	9.00E+1	3.50E-1	9.00E+1	7E-4
bis(2-ethylhexyl)phthalate	6.60E-2	5.00E-2	4.99E-2	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	8.51E-3	1.83E+1	3.00E-2	1.83E+1	5E-4
butylbenzyl phthalate	2.70E-1	5.00E-2	7.28E-1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	4.30E-2	1.59E+2	3.00E-1	1.59E+2	3E-4
di-n-butyl phthalate	1.90E-2	5.00E-2	9.02E-1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	3.18E-3	5.50E+2	3.00E-2	5.50E+2	6E-6
pentachlorophenol	3.50E-2	5.00E-2	5.06E-1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	5.23E-3	2.40E-1	3.50E-1	2.40E-1	2E-2
phenol	2.00E-2	5.00E-2	1.54E+1	8.00E-1	1.10E+1	2.00E-1	1.07E+0	0.0	1.64E-2	6.00E+1	3.50E-1	6.00E+1	3E-4
acenaphthene	8.81E-2	5.00E-2	3.48E-1	8.00E-1	3.00E-1	2.00E-1	1.07E+0	0.0	1.93E-3	5.00E+1	2.77E-1	5.00E+1	4E-5
acenaphthylene	3.80E-2	5.00E-2	6.31E-1	8.00E-1	2.20E-1	2.00E-1	1.07E+0	0.0	1.28E-3	5.00E+1	2.77E-1	5.00E+1	3E-5
anthracene	8.88E-2	5.00E-2	6.36E-1	8.00E-1	3.20E-1	2.00E-1	1.07E+0	0.0	3.11E-3	5.00E+1	2.77E-1	5.00E+1	6E-5
benzo(a)anthracene	6.60E-1	5.00E-2	7.89E-2	8.00E-1	2.70E-1	2.00E-1	1.07E+0	0.0	6.20E-3	1.31E+0	3.05E-2	1.31E+0	5E-3
benzo(b)fluoranthene	1.52E+0	5.00E-2	3.10E-1	8.00E-1	2.10E-1	2.00E-1	1.07E+0	0.0	2.91E-2	1.31E+0	3.05E-2	1.31E+0	2E-2
benzo(k)fluoranthene	7.78E-1	5.00E-2	1.20E-1	8.00E-1	2.10E-1	2.00E-1	1.07E+0	0.0	8.22E-3	1.31E+0	3.05E-2	1.31E+0	6E-3
benzo(g,h,i)perylene	6.82E-1	5.00E-2	3.67E-1	8.00E-1	1.50E-1	2.00E-1	1.07E+0	0.0	1.43E-2	1.31E+0	3.05E-2	1.31E+0	1E-2
benzo(a)pyrene	1.32E+0	5.00E-2	1.26E-1	8.00E-1	3.40E-1	2.00E-1	1.07E+0	0.0	1.63E-2	1.31E+0	3.05E-2	1.31E+0	1E-2
chrysene	8.23E-1	5.00E-2	7.22E-2	8.00E-1	4.40E-1	2.00E-1	1.07E+0	0.0	9.06E-3	1.31E+0	3.05E-2	1.31E+0	7E-3
dibenz(a,h)anthracene	2.81E-1	5.00E-2	1.30E-1	8.00E-1	4.90E-1	2.00E-1	1.07E+0	0.0	3.98E-3	1.31E+0	3.05E-2	1.31E+0	3E-3
fluoranthene	4.44E-1	5.00E-2	5.00E-1	8.00E-1	3.70E-1	2.00E-1	1.07E+0	0.0	1.31E-2	1.31E+0	3.05E-2	1.31E+0	1E-2
fluorene	8.63E-2	5.00E-2	3.62E-1	8.00E-1	2.00E-1	2.00E-1	1.07E+0	0.0	1.84E-3	5.00E+1	2.77E-1	5.00E+1	4E-5
indeno(1,2,3-c,d)pyrene	9.37E-1	5.00E-2	1.10E-1	8.00E-1	4.10E-1	2.00E-1	1.07E+0	0.0	1.16E-2	1.31E+0	3.05E-2	1.31E+0	9E-3
2-methylnaphthalene	9.61E-2	5.00E-2	5.19E-1	8.00E-1	2.00E-1	2.00E-1	1.07E+0	0.0	2.73E-3	5.00E+1	2.77E-1	5.00E+1	5E-5
naphthalene	8.70E-2	5.00E-2	1.22E+1	8.00E-1	2.10E-1	2.00E-1	1.07E+0	0.0	4.82E-2	5.00E+1	2.77E-1	5.00E+1	1E-3
phenanthrene	1.33E-1	5.00E-2	1.82E+0	8.00E-1	2.80E-1	2.00E-1	1.07E+0	0.0	1.17E-2	5.00E+1	2.77E-1	5.00E+1	2E-4
pyrene	5.00E-1	5.00E-2	7.20E-1	8.00E-1	3.90E-1	2.00E-1	1.07E+0	0.0	1.98E-2	1.31E+0	3.05E-2	1.31E+0	2E-2
4,4'-DDD	5.90E-3	5.00E-2	2.89E-1	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	5.36E-4	8.00E-1	3.20E-1	8.00E-1	7E-4
4,4'-DDT	3.30E-3	5.00E-2	3.34E-1	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	3.06E-4	8.00E-1	3.20E-1	8.00E-1	4E-4
endosulfan sulfate	1.70E-3	5.00E-2	1.98E+0	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	2.84E-4	1.50E-1	3.50E-1	1.50E-1	2E-3
Aroclor 1260	1.11E-1	5.00E-2	2.67E-2	8.00E-1	6.67E+0	2.00E-1	1.07E+0	0.0	8.74E-3	3.60E-1	2.06E-2	3.60E-1	2E-2
aluminum	5.00E+3	5.00E-2	2.87E-3	8.00E-1	4.30E-2	2.00E-1	2.63E-2	0.0	1.71E+1	1.93E+0	3.00E-2	1.93E+0	**9E+0**
arsenic	5.19E+0	5.00E-2	3.80E-2	8.00E-1	2.20E-1	2.00E-1	2.50E-3	0.0	3.63E-2	3.20E-1	3.32E-1	3.20E-1	1E-1
barium	4.28E+1	5.00E-2	1.56E-1	8.00E-1	9.10E-2	2.00E-1	5.66E-2	0.0	4.65E-1	5.10E+0	4.35E-1	5.10E+0	9E-2
beryllium	5.29E-1	5.00E-2	1.00E-2	8.00E-1	4.50E-2	2.00E-1	1.00E+0	0.0	1.99E-3	6.60E-1	3.50E-1	6.60E-1	3E-3
cadmium	1.22E+0	5.00E-2	5.90E-1	8.00E-1	7.71E+0	2.00E-1	3.33E-1	0.0	1.41E-1	6.00E-2	3.22E-2	6.00E-2	**2E+0**
chromium	3.08E+1	5.00E-2	4.10E-2	8.00E-1	3.10E-1	2.00E-1	8.46E-2	0.0	2.51E-1	3.28E+0	3.50E-1	3.28E+0	8E-2
cobalt	6.44E+0	5.00E-2	7.45E-3	8.00E-1	1.22E-1	2.00E-1	2.05E-2	0.0	2.91E-2	1.20E+0	2.75E-1	1.20E+0	2E-2
copper	1.12E+1	5.00E-2	1.20E-1	8.00E-1	5.20E-1	2.00E-1	1.96E-1	0.0	1.57E-1	2.67E+0	3.00E-2	2.67E+0	6E-2
iron	8.78E+3	5.00E-2	4.25E-3	8.00E-1	3.60E-2	2.00E-1	1.24E-2	0.0	2.99E+1	NA	0.0	NA	NA
lead	2.54E+1	5.00E-2	3.90E-2	8.00E-1	2.70E-1	2.00E-1	1.05E-1	0.0	1.93E-1	1.00E+0	5.51E-1	1.00E+0	2E-1
manganese	1.36E+2	5.00E-2	7.92E-2	8.00E-1	5.00E-2	2.00E-1	2.05E-2	0.0	9.43E-1	1.37E+1	3.46E-2	1.37E+1	7E-2
mercury	1.32E-1	5.00E-2	6.50E-1	8.00E-1	1.69E+0	2.00E-1	5.43E-2	0.0	6.76E-3	2.50E-1	1.88E-1	2.50E-1	3E-2
nickel	2.48E+1	5.00E-2	1.80E-2	8.00E-1	1.06E+0	2.00E-1	2.49E-1	0.0	3.85E-1	1.33E-1	2.49E-1	1.33E-1	**3E+0**
selenium	7.20E-1	5.00E-2	6.70E-1	8.00E-1	9.90E-1	2.00E-1	1.62E-1	0.0	3.17E-2	5.00E-2	1.87E-1	5.00E-2	6E-1
silver	2.71E+0	5.00E-2	1.40E-2	8.00E-1	2.05E+0	2.00E-1	4.00E-3	0.0	7.16E-2	2.22E+1	3.50E-1	2.22E+1	3E-3
thallium	2.80E+0	5.00E-2	4.00E-3	8.00E-1	1.30E+0	2.00E-1	1.12E-1	0.0	4.93E-2	4.80E-1	6.50E-2	4.80E-1	1E-1
titanium	4.72E+2	5.00E-2	5.50E-3	8.00E-1	1.00E+0	2.00E-1	1.00E+0	0.0	6.75E+0	NA	0.0	NA	NA

TABLE J1-11
Hazard Quotient - Calculations for California Ground Squirrel
Refined Exposure

	Food Ingestion Rate, kg food/day			3.16E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			5.62E-1									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
vanadium	2.13E+1	5.00E-2	4.85E-3	8.00E-1	4.20E-2	2.00E-1	1.23E-2	0.0	7.45E-2	2.10E-1	2.60E-1	2.10E-1	4E-1
zinc	3.33E+1	5.00E-2	3.70E-1	8.00E-1	3.20E+0	2.00E-1	7.72E-1	0.0	1.85E+0	9.60E+0	2.55E-2	9.60E+0	2E-1
radium-226	2.51E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	7.06E-3	NA	0.0	NA	NA
radium-228	7.48E-1	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	2.10E-3	NA	0.0	NA	NA
gross alpha	2.95E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	8.30E-3	NA	0.0	NA	NA
gross beta	9.68E+0	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	2.72E-2	NA	0.0	NA	NA
total uranium	4.40E-1	5.00E-2	0.0	8.00E-1	0.0	2.00E-1	0.0	0.0	1.24E-3	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-12
Hazard Quotient - Calculations for Alameda Song Sparrow
Refined Exposure

	Food Ingestion Rate, kg food/day			5.44E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			2.35E-2									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	9.30E-2	7.56E+1	5.00E-1	4.54E-2	5.00E-1	1.07E+0	0.0	1.58E-1	5.20E+1	5.00E-2	5.20E+1	3E-3
bis(2-ethylhexyl)phthalate	6.60E-2	9.30E-2	4.99E-2	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	8.59E-2	1.10E+0	1.55E-1	1.10E+0	8E-2
butylbenzyl phthalate	2.70E-1	9.30E-2	7.28E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	3.73E-1	1.10E-1	1.55E-1	1.10E-1	**3E+0**
di-n-butyl phthalate	1.90E-2	9.30E-2	9.02E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	2.66E-2	1.10E-1	1.55E-1	1.10E-1	2E-1
pentachlorophenol	3.50E-2	9.30E-2	5.06E-1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	4.74E-2	4.03E+0	1.50E-1	4.03E+0	1E-2
phenol	2.00E-2	9.30E-2	1.54E+1	5.00E-1	1.10E+1	5.00E-1	1.07E+0	0.0	6.17E-2	1.13E+0	7.40E-2	1.13E+0	5E-2
acenaphthene	8.81E-2	9.30E-2	3.48E-1	5.00E-1	3.00E-1	5.00E-1	1.07E+0	0.0	8.51E-3	1.01E+0	7.40E-2	1.01E+0	8E-3
acenaphthylene	3.80E-2	9.30E-2	6.31E-1	5.00E-1	2.20E-1	5.00E-1	1.07E+0	0.0	4.56E-3	1.01E+0	7.40E-2	1.01E+0	5E-3
anthracene	8.88E-2	9.30E-2	6.36E-1	5.00E-1	3.20E-1	5.00E-1	1.07E+0	0.0	1.17E-2	1.11E+0	7.40E-2	1.11E+0	1E-2
benzo(a)anthracene	6.60E-1	9.30E-2	7.89E-2	5.00E-1	2.70E-1	5.00E-1	1.07E+0	0.0	4.09E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
benzo(b)fluoranthene	1.52E+0	9.30E-2	3.10E-1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	1.25E-1	1.01E+0	7.40E-2	1.01E+0	1E-1
benzo(k)fluoranthene	7.78E-1	9.30E-2	1.20E-1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	4.65E-2	1.01E+0	7.40E-2	1.01E+0	5E-2
benzo(g,h,i)perylene	6.82E-1	9.30E-2	3.67E-1	5.00E-1	1.50E-1	5.00E-1	1.07E+0	0.0	5.56E-2	1.01E+0	7.40E-2	1.01E+0	6E-2
benzo(a)pyrene	1.32E+0	9.30E-2	1.26E-1	5.00E-1	3.40E-1	5.00E-1	1.07E+0	0.0	9.99E-2	1.01E+0	7.40E-2	1.01E+0	1E-1
chrysene	8.23E-1	9.30E-2	7.22E-2	5.00E-1	4.40E-1	5.00E-1	1.07E+0	0.0	6.65E-2	1.01E+0	7.40E-2	1.01E+0	7E-2
dibenz(a,h)anthracene	2.81E-1	9.30E-2	1.30E-1	5.00E-1	4.90E-1	5.00E-1	1.07E+0	0.0	2.62E-2	1.01E+0	7.40E-2	1.01E+0	3E-2
fluoranthene	4.44E-1	9.30E-2	5.00E-1	5.00E-1	3.70E-1	5.00E-1	1.07E+0	0.0	5.43E-2	1.01E+0	7.40E-2	1.01E+0	5E-2
fluorene	8.63E-2	9.30E-2	3.62E-1	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	7.48E-3	1.01E+0	7.40E-2	1.01E+0	7E-3
indeno(1,2,3-c,d)pyrene	9.37E-1	9.30E-2	1.10E-1	5.00E-1	4.10E-1	5.00E-1	1.07E+0	0.0	7.66E-2	1.01E+0	7.40E-2	1.01E+0	8E-2
2-methylnaphthalene	9.61E-2	9.30E-2	5.19E-1	5.00E-1	2.00E-1	5.00E-1	1.07E+0	0.0	1.01E-2	1.01E+0	7.40E-2	1.01E+0	1E-2
naphthalene	8.70E-2	9.30E-2	1.22E+1	5.00E-1	2.10E-1	5.00E-1	1.07E+0	0.0	1.27E-1	1.01E+0	7.40E-2	1.01E+0	1E-1
phenanthrene	1.33E-1	9.30E-2	1.82E+0	5.00E-1	2.80E-1	5.00E-1	1.07E+0	0.0	3.52E-2	1.13E+0	7.40E-2	1.13E+0	3E-2
pyrene	5.00E-1	9.30E-2	7.20E-1	5.00E-1	3.90E-1	5.00E-1	1.07E+0	0.0	7.50E-2	1.01E+0	7.40E-2	1.01E+0	7E-2
4,4'-DDD	5.90E-3	9.30E-2	2.89E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	4.88E-3	9.00E-3	3.50E+0	3.31E-3	1E+0
4,4'-DDT	3.30E-3	9.30E-2	3.34E-1	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	2.75E-3	9.00E-3	3.50E+0	3.31E-3	8E-1
endosulfan sulfate	1.70E-3	9.30E-2	1.98E+0	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	1.74E-3	1.00E+1	4.00E-1	1.00E+1	2E-4
Aroclor 1260	1.11E-1	9.30E-2	2.67E-2	5.00E-1	6.67E+0	5.00E-1	1.07E+0	0.0	8.82E-2	8.80E-2	8.00E-1	8.80E-2	1E+0
aluminum	5.00E+3	9.30E-2	2.87E-3	5.00E-1	4.30E-2	5.00E-1	2.63E-2	0.0	1.34E+2	1.10E+2	1.55E-1	1.10E+2	1E+0
arsenic	5.19E+0	9.30E-2	3.80E-2	5.00E-1	2.20E-1	5.00E-1	2.50E-3	0.0	2.67E-1	5.50E+0	1.17E+0	5.50E+0	5E-2
barium	4.28E+1	9.30E-2	1.56E-1	5.00E-1	9.10E-2	5.00E-1	5.66E-2	0.0	2.15E+0	2.08E+1	1.21E-1	2.08E+1	1E-1
beryllium	5.29E-1	9.30E-2	1.00E-2	5.00E-1	4.50E-2	5.00E-1	1.00E+0	0.0	1.48E-2	6.60E-2	0.0	6.60E-2	2E-1
cadmium	1.22E+0	9.30E-2	5.90E-1	5.00E-1	7.71E+0	5.00E-1	3.33E-1	0.0	1.20E+0	7.80E-2	7.99E-1	7.80E-2	**2E+1**
chromium	3.08E+1	9.30E-2	4.10E-2	5.00E-1	3.10E-1	5.00E-1	8.46E-2	0.0	1.91E+0	1.00E+0	1.25E+0	1.00E+0	**2E+0**
cobalt	6.44E+0	9.30E-2	7.45E-3	5.00E-1	1.22E-1	5.00E-1	2.05E-2	0.0	2.35E-1	2.37E-1	1.53E-1	2.37E-1	1E+0
copper	1.12E+1	9.30E-2	1.20E-1	5.00E-1	5.20E-1	5.00E-1	1.96E-1	0.0	1.07E+0	2.30E+0	6.39E-1	2.30E+0	5E-1
iron	8.78E+3	9.30E-2	4.25E-3	5.00E-1	3.60E-2	5.00E-1	1.24E-2	0.0	2.30E+2	NA	0.0	NA	NA
lead	2.54E+1	9.30E-2	3.90E-2	5.00E-1	2.70E-1	5.00E-1	1.05E-1	0.0	1.45E+0	1.40E-2	9.35E-2	1.40E-2	**1E+2**
manganese	1.36E+2	9.30E-2	7.92E-2	5.00E-1	5.00E-2	5.00E-1	2.05E-2	0.0	4.96E+0	7.76E+1	1.97E-1	7.76E+1	6E-2
mercury	1.32E-1	9.30E-2	6.50E-1	5.00E-1	1.69E+0	5.00E-1	5.43E-2	0.0	3.88E-2	3.90E-2	1.00E+0	3.90E-2	1E+0
nickel	2.48E+1	9.30E-2	1.80E-2	5.00E-1	1.06E+0	5.00E-1	2.49E-1	0.0	3.62E+0	1.38E+0	6.14E-1	1.38E+0	**3E+0**
selenium	7.20E-1	9.30E-2	6.70E-1	5.00E-1	9.90E-1	5.00E-1	1.62E-1	0.0	1.54E-1	2.30E-1	1.11E+0	2.30E-1	7E-1
silver	2.71E+0	9.30E-2	1.40E-2	5.00E-1	2.05E+0	5.00E-1	4.00E-3	0.0	7.04E-1	1.78E+2	1.00E+0	1.78E+2	4E-3
thallium	2.80E+0	9.30E-2	4.00E-3	5.00E-1	1.30E+0	5.00E-1	1.12E-1	0.0	4.83E-1	3.50E-1	7.40E-2	3.50E-1	1E+0
titanium	4.72E+2	9.30E-2	5.50E-3	5.00E-1	1.00E+0	5.00E-1	1.00E+0	0.0	6.51E+1	NA	0.0	NA	NA

TABLE J1-12
Hazard Quotient - Calculations for Alameda Song Sparrow
Refined Exposure

	Food Ingestion Rate, kg food/day			5.44E-3		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			2.35E-2									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
vanadium	2.13E+1	9.30E-2	4.85E-3	5.00E-1	4.20E-2	5.00E-1	1.23E-2	0.0	5.74E-1	1.14E+1	1.17E+0	1.14E+1	5E-2
zinc	3.33E+1	9.30E-2	3.70E-1	5.00E-1	3.20E+0	5.00E-1	7.72E-1	0.0	1.45E+1	1.72E+1	9.55E-1	1.72E+1	8E-1
radium-226	2.51E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	5.41E-2	NA	0.0	NA	NA
radium-228	7.48E-1	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	1.61E-2	NA	0.0	NA	NA
gross alpha	2.95E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	6.35E-2	NA	0.0	NA	NA
gross beta	9.68E+0	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	2.08E-1	NA	0.0	NA	NA
total uranium	4.40E-1	9.30E-2	0.0	5.00E-1	0.0	5.00E-1	0.0	0.0	9.48E-3	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-13
Hazard Quotient - Calculations for American Robin
Refined Exposure

	Food Ingestion Rate, kg food/day			1.26E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			8.04E-2									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	1.04E-1	7.56E+1	1.70E-1	4.54E-2	8.30E-1	1.07E+0	0.0	3.67E-2	5.20E+1	5.00E-2	5.20E+1	7E-4
bis(2-ethylhexyl)phthalate	6.60E-2	1.04E-1	4.99E-2	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	9.57E-2	1.10E+0	1.55E-1	1.10E+0	9E-2
butylbenzyl phthalate	2.70E-1	1.04E-1	7.28E-1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	3.97E-1	1.10E-1	1.55E-1	1.10E-1	**4E+0**
di-n-butyl phthalate	1.90E-2	1.04E-1	9.02E-1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	2.80E-2	1.10E-1	1.55E-1	1.10E-1	3E-1
pentachlorophenol	3.50E-2	1.04E-1	5.06E-1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	5.12E-2	4.03E+0	1.50E-1	4.03E+0	1E-2
phenol	2.00E-2	1.04E-1	1.54E+1	1.70E-1	1.10E+1	8.30E-1	1.07E+0	0.0	3.72E-2	1.13E+0	7.40E-2	1.13E+0	3E-2
acenaphthene	8.81E-2	1.04E-1	3.48E-1	1.70E-1	3.00E-1	8.30E-1	1.07E+0	0.0	5.70E-3	1.01E+0	7.40E-2	1.01E+0	6E-3
acenaphthylene	3.80E-2	1.04E-1	6.31E-1	1.70E-1	2.20E-1	8.30E-1	1.07E+0	0.0	2.35E-3	1.01E+0	7.40E-2	1.01E+0	2E-3
anthracene	8.88E-2	1.04E-1	6.36E-1	1.70E-1	3.20E-1	8.30E-1	1.07E+0	0.0	6.65E-3	1.11E+0	7.40E-2	1.11E+0	6E-3
benzo(a)anthracene	6.60E-1	1.04E-1	7.89E-2	1.70E-1	2.70E-1	8.30E-1	1.07E+0	0.0	3.53E-2	1.01E+0	7.40E-2	1.01E+0	3E-2
benzo(b)fluoranthene	1.52E+0	1.04E-1	3.10E-1	1.70E-1	2.10E-1	8.30E-1	1.07E+0	0.0	7.91E-2	1.01E+0	7.40E-2	1.01E+0	8E-2
benzo(k)fluoranthene	7.78E-1	1.04E-1	1.20E-1	1.70E-1	2.10E-1	8.30E-1	1.07E+0	0.0	3.64E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
benzo(g,h,i)perylene	6.82E-1	1.04E-1	3.67E-1	1.70E-1	1.50E-1	8.30E-1	1.07E+0	0.0	3.11E-2	1.01E+0	7.40E-2	1.01E+0	3E-2
benzo(a)pyrene	1.32E+0	1.04E-1	1.26E-1	1.70E-1	3.40E-1	8.30E-1	1.07E+0	0.0	8.45E-2	1.01E+0	7.40E-2	1.01E+0	8E-2
chrysene	8.23E-1	1.04E-1	7.22E-2	1.70E-1	4.40E-1	8.30E-1	1.07E+0	0.0	6.21E-2	1.01E+0	7.40E-2	1.01E+0	6E-2
dibenz(a,h)anthracene	2.81E-1	1.04E-1	1.30E-1	1.70E-1	4.90E-1	8.30E-1	1.07E+0	0.0	2.35E-2	1.01E+0	7.40E-2	1.01E+0	2E-2
fluoranthene	4.44E-1	1.04E-1	5.00E-1	1.70E-1	3.70E-1	8.30E-1	1.07E+0	0.0	3.45E-2	1.01E+0	7.40E-2	1.01E+0	3E-2
fluorene	8.63E-2	1.04E-1	3.62E-1	1.70E-1	2.00E-1	8.30E-1	1.07E+0	0.0	4.49E-3	1.01E+0	7.40E-2	1.01E+0	4E-3
indeno(1,2,3-c,d)pyrene	9.37E-1	1.04E-1	1.10E-1	1.70E-1	4.10E-1	8.30E-1	1.07E+0	0.0	6.80E-2	1.01E+0	7.40E-2	1.01E+0	7E-2
2-methylnaphthalene	9.61E-2	1.04E-1	5.19E-1	1.70E-1	2.00E-1	8.30E-1	1.07E+0	0.0	5.40E-3	1.01E+0	7.40E-2	1.01E+0	5E-3
naphthalene	8.70E-2	1.04E-1	1.22E+1	1.70E-1	2.10E-1	8.30E-1	1.07E+0	0.0	3.21E-2	1.01E+0	7.40E-2	1.01E+0	3E-2
phenanthrene	1.33E-1	1.04E-1	1.82E+0	1.70E-1	2.80E-1	8.30E-1	1.07E+0	0.0	1.34E-2	1.13E+0	7.40E-2	1.13E+0	1E-2
pyrene	5.00E-1	1.04E-1	7.20E-1	1.70E-1	3.90E-1	8.30E-1	1.07E+0	0.0	4.31E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
4,4'-DDD	5.90E-3	1.04E-1	2.89E-1	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	5.26E-3	9.00E-3	3.50E+0	9.00E-3	6E-1
4,4'-DDT	3.30E-3	1.04E-1	3.34E-1	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	2.95E-3	9.00E-3	3.50E+0	9.00E-3	3E-1
endosulfan sulfate	1.70E-3	1.04E-1	1.98E+0	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	1.59E-3	1.00E+1	4.00E-1	1.00E+1	2E-4
Aroclor 1260	1.11E-1	1.04E-1	2.67E-2	1.70E-1	6.67E+0	8.30E-1	1.07E+0	0.0	9.79E-2	8.80E-2	8.00E-1	8.80E-2	1E+0
aluminum	5.00E+3	1.04E-1	2.87E-3	1.70E-1	4.30E-2	8.30E-1	2.63E-2	0.0	1.10E+2	1.10E+2	1.55E-1	1.10E+2	1E+0
arsenic	5.19E+0	1.04E-1	3.80E-2	1.70E-1	2.20E-1	8.30E-1	2.50E-3	0.0	2.38E-1	5.50E+0	1.17E+0	5.50E+0	4E-2
barium	4.28E+1	1.04E-1	1.56E-1	1.70E-1	9.10E-2	8.30E-1	5.66E-2	0.0	1.38E+0	2.08E+1	1.21E-1	2.08E+1	7E-2
beryllium	5.29E-1	1.04E-1	1.00E-2	1.70E-1	4.50E-2	8.30E-1	1.00E+0	0.0	1.19E-2	6.60E-2	0.0	6.60E-2	2E-1
cadmium	1.22E+0	1.04E-1	5.90E-1	1.70E-1	7.71E+0	8.30E-1	3.33E-1	0.0	1.26E+0	7.80E-2	7.99E-1	7.80E-2	**2E+1**
chromium	3.08E+1	1.04E-1	4.10E-2	1.70E-1	3.10E-1	8.30E-1	8.46E-2	0.0	1.78E+0	1.00E+0	1.25E+0	1.00E+0	**2E+0**
cobalt	6.44E+0	1.04E-1	7.45E-3	1.70E-1	1.22E-1	8.30E-1	2.05E-2	0.0	2.09E-1	2.37E-1	1.53E-1	2.37E-1	9E-1
copper	1.12E+1	1.04E-1	1.20E-1	1.70E-1	5.20E-1	8.30E-1	1.96E-1	0.0	9.73E-1	2.30E+0	6.39E-1	2.30E+0	4E-1
iron	8.78E+3	1.04E-1	4.25E-3	1.70E-1	3.60E-2	8.30E-1	1.24E-2	0.0	1.85E+2	NA	0.0	NA	NA
lead	2.54E+1	1.04E-1	3.90E-2	1.70E-1	2.70E-1	8.30E-1	1.05E-1	0.0	1.33E+0	1.40E-2	9.35E-2	1.40E-2	**1E+2**
manganese	1.36E+2	1.04E-1	7.92E-2	1.70E-1	5.00E-2	8.30E-1	2.05E-2	0.0	3.39E+0	7.76E+1	1.97E-1	7.76E+1	4E-2
mercury	1.32E-1	1.04E-1	6.50E-1	1.70E-1	1.69E+0	8.30E-1	5.43E-2	0.0	3.36E-2	3.90E-2	1.00E+0	3.90E-2	9E-1
nickel	2.48E+1	1.04E-1	1.80E-2	1.70E-1	1.06E+0	8.30E-1	2.49E-1	0.0	3.83E+0	1.38E+0	6.14E-1	1.38E+0	**3E+0**
selenium	7.20E-1	1.04E-1	6.70E-1	1.70E-1	9.90E-1	8.30E-1	1.62E-1	0.0	1.17E-1	2.30E-1	1.11E+0	2.30E-1	5E-1
silver	2.71E+0	1.04E-1	1.40E-2	1.70E-1	2.05E+0	8.30E-1	4.00E-3	0.0	7.66E-1	1.78E+2	1.00E+0	1.78E+2	4E-3
thallium	2.80E+0	1.04E-1	4.00E-3	1.70E-1	1.30E+0	8.30E-1	1.12E-1	0.0	5.20E-1	3.50E-1	7.40E-2	3.50E-1	1E+0
titanium	4.72E+2	1.04E-1	5.50E-3	1.70E-1	1.00E+0	8.30E-1	1.00E+0	0.0	6.92E+1	NA	0.0	NA	NA

TABLE J1-13
Hazard Quotient - Calculations for American Robin
Refined Exposure

	Food Ingestion Rate, kg food/day			1.26E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			8.04E-2									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
vanadium	2.13E+1	1.04E-1	4.85E-3	1.70E-1	4.20E-2	8.30E-1	1.23E-2	0.0	4.66E-1	1.14E+1	1.17E+0	1.14E+1	4E-2
zinc	3.33E+1	1.04E-1	3.70E-1	1.70E-1	3.20E+0	8.30E-1	7.72E-1	0.0	1.47E+1	1.72E+1	9.55E-1	1.72E+1	9E-1
radium-226	2.51E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	4.09E-2	NA	0.0	NA	NA
radium-228	7.48E-1	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	1.22E-2	NA	0.0	NA	NA
gross alpha	2.95E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	4.81E-2	NA	0.0	NA	NA
gross beta	9.68E+0	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	1.58E-1	NA	0.0	NA	NA
total uranium	4.40E-1	1.04E-1	0.0	1.70E-1	0.0	8.30E-1	0.0	0.0	7.18E-3	NA	0.0	NA	NA

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-14
Hazard Quotient - Calculations for Red-Tailed Hawk
Refined Exposure

	Food Ingestion Rate, kg food/day			8.98E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.13E+0									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
acetone	1.80E-2	3.50E-3	7.56E+1	0.0	4.54E-2	0.0	1.07E+0	1.00E+0	1.53E-3	5.20E+1	5.00E-2	5.20E+1	3E-5
bis(2-ethylhexyl)phthalate	6.60E-2	3.50E-3	4.99E-2	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	5.61E-3	1.10E+0	1.55E-1	1.10E+0	5E-3
butylbenzyl phthalate	2.70E-1	3.50E-3	7.28E-1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	2.30E-2	1.10E-1	1.55E-1	1.10E-1	2E-1
di-n-butyl phthalate	1.90E-2	3.50E-3	9.02E-1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	1.62E-3	1.10E-1	1.55E-1	1.10E-1	1E-2
pentachlorophenol	3.50E-2	3.50E-3	5.06E-1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	2.98E-3	4.03E+0	1.50E-1	4.03E+0	7E-4
phenol	2.00E-2	3.50E-3	1.54E+1	0.0	1.10E+1	0.0	1.07E+0	1.00E+0	1.70E-3	1.13E+0	7.40E-2	1.13E+0	2E-3
acenaphthene	8.81E-2	3.50E-3	3.48E-1	0.0	3.00E-1	0.0	1.07E+0	1.00E+0	7.49E-3	1.01E+0	7.40E-2	1.01E+0	7E-3
acenaphthylene	3.80E-2	3.50E-3	6.31E-1	0.0	2.20E-1	0.0	1.07E+0	1.00E+0	3.23E-3	1.01E+0	7.40E-2	1.01E+0	3E-3
anthracene	8.88E-2	3.50E-3	6.36E-1	0.0	3.20E-1	0.0	1.07E+0	1.00E+0	7.54E-3	1.11E+0	7.40E-2	1.11E+0	7E-3
benzo(a)anthracene	6.60E-1	3.50E-3	7.89E-2	0.0	2.70E-1	0.0	1.07E+0	1.00E+0	5.61E-2	1.01E+0	7.40E-2	1.01E+0	6E-2
benzo(b)fluoranthene	1.52E+0	3.50E-3	3.10E-1	0.0	2.10E-1	0.0	1.07E+0	1.00E+0	1.30E-1	1.01E+0	7.40E-2	1.01E+0	1E-1
benzo(k)fluoranthene	7.78E-1	3.50E-3	1.20E-1	0.0	2.10E-1	0.0	1.07E+0	1.00E+0	6.62E-2	1.01E+0	7.40E-2	1.01E+0	7E-2
benzo(g,h,i)perylene	6.82E-1	3.50E-3	3.67E-1	0.0	1.50E-1	0.0	1.07E+0	1.00E+0	5.80E-2	1.01E+0	7.40E-2	1.01E+0	6E-2
benzo(a)pyrene	1.32E+0	3.50E-3	1.26E-1	0.0	3.40E-1	0.0	1.07E+0	1.00E+0	1.12E-1	1.01E+0	7.40E-2	1.01E+0	1E-1
chrysene	8.23E-1	3.50E-3	7.22E-2	0.0	4.40E-1	0.0	1.07E+0	1.00E+0	6.99E-2	1.01E+0	7.40E-2	1.01E+0	7E-2
dibenz(a,h)anthracene	2.81E-1	3.50E-3	1.30E-1	0.0	4.90E-1	0.0	1.07E+0	1.00E+0	2.39E-2	1.01E+0	7.40E-2	1.01E+0	2E-2
fluoranthene	4.44E-1	3.50E-3	5.00E-1	0.0	3.70E-1	0.0	1.07E+0	1.00E+0	3.77E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
fluorene	8.63E-2	3.50E-3	3.62E-1	0.0	2.00E-1	0.0	1.07E+0	1.00E+0	7.34E-3	1.01E+0	7.40E-2	1.01E+0	7E-3
indeno(1,2,3-c,d)pyrene	9.37E-1	3.50E-3	1.10E-1	0.0	4.10E-1	0.0	1.07E+0	1.00E+0	7.96E-2	1.01E+0	7.40E-2	1.01E+0	8E-2
2-methylnaphthalene	9.61E-2	3.50E-3	5.19E-1	0.0	2.00E-1	0.0	1.07E+0	1.00E+0	8.17E-3	1.01E+0	7.40E-2	1.01E+0	8E-3
naphthalene	8.70E-2	3.50E-3	1.22E+1	0.0	2.10E-1	0.0	1.07E+0	1.00E+0	7.40E-3	1.01E+0	7.40E-2	1.01E+0	7E-3
phenanthrene	1.33E-1	3.50E-3	1.82E+0	0.0	2.80E-1	0.0	1.07E+0	1.00E+0	1.13E-2	1.13E+0	7.40E-2	1.13E+0	1E-2
pyrene	5.00E-1	3.50E-3	7.20E-1	0.0	3.90E-1	0.0	1.07E+0	1.00E+0	4.25E-2	1.01E+0	7.40E-2	1.01E+0	4E-2
4,4'-DDD	5.90E-3	3.50E-3	2.89E-1	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	5.01E-4	9.00E-3	3.50E+0	9.00E-3	6E-2
4,4'-DDT	3.30E-3	3.50E-3	3.34E-1	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	2.81E-4	9.00E-3	3.50E+0	9.00E-3	3E-2
endosulfan sulfate	1.70E-3	3.50E-3	1.98E+0	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	1.45E-4	1.00E+1	4.00E-1	1.00E+1	1E-5
Aroclor 1260	1.11E-1	3.50E-3	2.67E-2	0.0	6.67E+0	0.0	1.07E+0	1.00E+0	9.41E-3	8.80E-2	8.00E-1	8.80E-2	1E-1
aluminum	5.00E+3	3.50E-3	2.87E-3	0.0	4.30E-2	0.0	2.63E-2	1.00E+0	1.18E+1	1.10E+2	1.55E-1	1.10E+2	1E-1
arsenic	5.19E+0	3.50E-3	3.80E-2	0.0	2.20E-1	0.0	2.50E-3	1.00E+0	2.47E-3	5.50E+0	1.17E+0	5.50E+0	4E-4
barium	4.28E+1	3.50E-3	1.56E-1	0.0	9.10E-2	0.0	5.66E-2	1.00E+0	2.05E-1	2.08E+1	1.21E-1	2.08E+1	1E-2
beryllium	5.29E-1	3.50E-3	1.00E-2	0.0	4.50E-2	0.0	1.00E+0	1.00E+0	4.22E-2	6.60E-2	0.0	6.60E-2	6E-1
cadmium	1.22E+0	3.50E-3	5.90E-1	0.0	7.71E+0	0.0	3.33E-1	1.00E+0	3.26E-2	7.80E-2	7.99E-1	7.80E-2	4E-1
chromium	3.08E+1	3.50E-3	4.10E-2	0.0	3.10E-1	0.0	8.46E-2	1.00E+0	2.15E-1	1.00E+0	1.25E+0	1.00E+0	2E-1
cobalt	6.44E+0	3.50E-3	7.45E-3	0.0	1.22E-1	0.0	2.05E-2	1.00E+0	1.23E-2	2.37E-1	1.53E-1	2.37E-1	5E-2
copper	1.12E+1	3.50E-3	1.20E-1	0.0	5.20E-1	0.0	1.96E-1	1.00E+0	1.77E-1	2.30E+0	6.39E-1	2.30E+0	8E-2
iron	8.78E+3	3.50E-3	4.25E-3	0.0	3.60E-2	0.0	1.24E-2	1.00E+0	1.11E+1	NA	0.0	NA	**NA**
lead	2.54E+1	3.50E-3	3.90E-2	0.0	2.70E-1	0.0	1.05E-1	1.00E+0	2.20E-1	1.40E-2	9.35E-2	1.40E-2	**2E+1**
manganese	1.36E+2	3.50E-3	7.92E-2	0.0	5.00E-2	0.0	2.05E-2	1.00E+0	2.59E-1	7.76E+1	1.97E-1	7.76E+1	3E-3
mercury	1.32E-1	3.50E-3	6.50E-1	0.0	1.69E+0	0.0	5.43E-2	1.00E+0	6.08E-4	3.90E-2	1.00E+0	3.90E-2	2E-2
nickel	2.48E+1	3.50E-3	1.80E-2	0.0	1.06E+0	0.0	2.49E-1	1.00E+0	4.97E-1	1.38E+0	6.14E-1	1.38E+0	4E-1
selenium	7.20E-1	3.50E-3	6.70E-1	0.0	9.90E-1	0.0	1.62E-1	1.00E+0	9.46E-3	2.30E-1	1.11E+0	2.30E-1	4E-2
silver	2.71E+0	3.50E-3	1.40E-2	0.0	2.05E+0	0.0	4.00E-3	1.00E+0	1.61E-3	1.78E+2	1.00E+0	1.78E+2	9E-6
thallium	2.80E+0	3.50E-3	4.00E-3	0.0	1.30E+0	0.0	1.12E-1	1.00E+0	2.58E-2	3.50E-1	7.40E-2	3.50E-1	7E-2
titanium	4.72E+2	3.50E-3	5.50E-3	0.0	1.00E+0	0.0	1.00E+0	1.00E+0	3.76E+1	NA	0.0	NA	**NA**

TABLE J1-14
Hazard Quotient - Calculations for Red-Tailed Hawk
Refined Exposure

	Food Ingestion Rate, kg food/day			8.98E-2		Site Use Factor (SUF, percent)		1.00E+0					
	Body Weight, kg			1.13E+0									
Compound	Soil Final Exposure Point Concentration 95%UCL* (mg/kg)	Dietary Fraction - Soil Ingestion (kg soil/ kg food)	Soil-Plant BAF (kg soil/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (kg soil/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Soil-Mammal BAF (kg soil/ kg_mammal)	Dietary Fraction - Small Mammal Ingestion (kg mamml/ kg food)	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	Hazard Quotient
vanadium	2.13E+1	3.50E-3	4.85E-3	0.0	4.20E-2	0.0	1.23E-2	1.00E+0	2.67E-2	1.14E+1	1.17E+0	1.14E+1	2E-3
zinc	3.33E+1	3.50E-3	3.70E-1	0.0	3.20E+0	0.0	7.72E-1	1.00E+0	2.05E+0	1.72E+1	9.55E-1	1.72E+1	1E-1
radium-226	2.51E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	6.98E-4	NA	0.0	NA	**NA**
radium-228	7.48E-1	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	2.08E-4	NA	0.0	NA	**NA**
gross alpha	2.95E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	8.20E-4	NA	0.0	NA	**NA**
gross beta	9.68E+0	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	2.69E-3	NA	0.0	NA	**NA**
total uranium	4.40E-1	3.50E-3	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.22E-4	NA	0.0	NA	**NA**

HQ = [(Soil-Conc*IR-Food*Dietary-Soil-Ingest)
+(Soil-Conc*Soil-Plant-BAF*IR-Food*Dietary-Plant-Ingest)
+(Soil-Conc*Soil-Invert-BAF*IR-Food*Dietary-Invert-Ingest)
+(Soil-Conc*Soil-Mammal-BAF*IR-Food*Dietary-Mammal-Ingest)]
*SUF/(Body Weight*TRV-Receptor)

Note: If plant uptake of soil compounds was solved by regression, the BAF value shown is the regression-based plant concentration divided by the soil concentration for a particular compound.

TABLE J1-15
Hazard Quotient - Calculations for Harbor Seal
Refined Exposure

Food Ingestion Rate, kg food/day	6.78E+0	Site Use Factor (SUF, percent)	2.93E-4
Body Weight, kg	8.06E+1		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Water-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Water-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	2.00E-1	8.71E+0	8.00E-1	1.005E+0	8.64E-8	2.64E+1	3.00E-2	1.64E+1	5E-9
1,2-dichloroethane	2.00E-4	0.0	0.0	0.0	2.75E+0	2.00E-1	2.75E+0	8.00E-1	1.000E+0	1.36E-8	5.00E+1	3.50E-2	3.14E+1	4E-10
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	2.00E-1	8.12E+0	8.00E-1	1.000E+0	2.00E-7	4.52E+1	3.00E-2	2.81E+1	7E-9
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	2.00E-1	8.12E+0	8.00E-1	1.000E+0	1.20E-7	1.70E+0	3.00E-2	1.06E+0	1E-7
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	2.00E-1	1.31E+2	8.00E-1	1.128E+0	1.10E-7	2.10E+0	3.00E-2	1.31E+0	8E-8
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	2.00E-1	1.46E+1	8.00E-1	1.010E+0	3.63E-8	7.00E-1	3.00E-2	4.36E-1	8E-8
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	2.00E-1	3.55E+0	8.00E-1	1.000E+0	1.54E-7	1.70E-1	3.50E-1	1.23E-1	1E-6
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	2.00E-1	5.04E+1	8.00E-1	1.034E+0	1.03E-7	2.10E+0	3.00E-2	1.31E+0	8E-8
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	2.00E-1	3.08E+2	8.00E-1	1.675E+1	3.43E-4	1.83E+1	3.00E-2	1.14E+1	3E-5
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	2.00E-1	5.82E+2	8.00E-1	1.766E+0	1.17E-5	5.50E+2	3.00E-2	3.42E+2	3E-8
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	2.00E-1	1.36E+3	8.00E-1	3.181E+0	6.42E-7	1.29E-1	1.00E-1	8.63E-2	7E-6
aluminum	1.79E+0	0.0	0.0	0.0	4.07E+3	2.00E-1	2.70E+0	8.00E-1	1.000E+0	3.60E-2	1.93E+0	3.00E-2	1.20E+0	3E-2
arsenic	3.70E-3	0.0	0.0	0.0	7.30E+1	2.00E-1	1.14E+2	8.00E-1	1.000E+0	9.66E-6	3.20E-1	3.32E-1	2.30E-1	4E-5
barium	2.60E-1	0.0	0.0	0.0	2.00E+2	2.00E-1	6.33E+2	8.00E-1	1.000E+0	3.51E-3	5.10E+0	4.35E-1	3.73E+0	9E-4
chromium	8.90E-3	0.0	0.0	0.0	3.00E+3	2.00E-1	1.90E+1	8.00E-1	1.000E+0	1.35E-4	3.28E+0	3.50E-1	2.37E+0	6E-5
cobalt	2.80E-4	0.0	0.0	0.0	7.60E+1	2.00E-1	1.16E+0	8.00E-1	1.000E+0	1.11E-7	1.20E+0	2.75E-1	8.53E-1	1E-7
copper	7.00E-4	0.0	0.0	0.0	3.72E+3	2.00E-1	7.10E+2	8.00E-1	1.000E+0	2.27E-5	2.67E+0	3.00E-2	1.66E+0	1E-5
iron	5.10E+0	0.0	0.0	0.0	4.07E+3	2.00E-1	6.33E+2	8.00E-1	1.000E+0	1.66E-1	NA	0.0	NA	NA
lead	2.00E-3	0.0	0.0	0.0	5.06E+3	2.00E-1	9.00E-2	8.00E-1	1.000E+0	4.99E-5	1.00E+0	5.51E-1	7.41E-1	7E-5
manganese	1.70E+0	0.0	0.0	0.0	3.75E+1	2.00E-1	6.33E+2	8.00E-1	1.000E+0	2.16E-2	1.37E+1	3.46E-2	8.60E+0	3E-3
molybdenum	6.50E-4	0.0	0.0	0.0	4.07E+3	2.00E-1	6.33E+2	8.00E-1	1.000E+0	2.12E-5	2.60E-1	3.00E-2	1.62E-1	1E-4
nickel	1.00E-3	0.0	0.0	0.0	2.80E+1	2.00E-1	7.80E+1	8.00E-1	1.000E+0	1.68E-6	1.33E-1	2.49E-1	9.40E-2	2E-5
vanadium	6.80E-3	0.0	0.0	0.0	4.07E+3	2.00E-1	6.33E+2	8.00E-1	1.000E+0	2.21E-4	2.10E-1	2.60E-1	1.49E-1	1E-3
zinc	2.77E-2	0.0	0.0	0.0	4.58E+3	2.00E-1	2.06E+3	8.00E-1	1.000E+0	1.75E-3	9.60E+0	2.55E-2	5.92E+0	3E-4
bismuth-214	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	2.50E+2	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	4.08E+0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	3.40E+0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	2.00E-1	0.0	8.00E-1	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-16
Hazard Quotient - Calculations for Brown Pelican
Refined Exposure

Food Ingestion Rate, kg food/day	9.83E-1	Site Use Factor (SUF, percent)	1.83E-5
Body Weight, kg	3.40E+0		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Soil-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	0.0	8.71E+0	1.00E+0	1.005E+0	1.85E-8	2.64E+0	0.0	2.64E+0	7E-9
1,2-dichloroethane	2.00E-4	0.0	0.0	0.0	2.75E+0	0.0	2.75E+0	1.00E+0	1.000E+0	2.91E-9	1.72E+1	1.60E+0	1.72E+1	2E-10
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	4.30E-8	4.52E+0	0.0	4.52E+0	1E-8
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	2.58E-8	1.70E-1	0.0	1.70E-1	2E-7
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	0.0	1.31E+2	1.00E+0	1.128E+0	2.35E-8	9.80E-1	7.40E-2	9.80E-1	2E-8
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	0.0	1.46E+1	1.00E+0	1.010E+0	7.79E-9	7.00E-2	0.0	7.00E-2	1E-7
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	0.0	3.55E+0	1.00E+0	1.000E+0	3.94E-8	1.70E-2	0.0	1.70E-2	2E-6
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	0.0	5.04E+1	1.00E+0	1.034E+0	2.21E-8	2.10E-1	0.0	2.10E-1	1E-7
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	0.0	3.08E+2	1.00E+0	1.675E+1	7.36E-5	1.10E+0	1.55E-1	1.10E+0	7E-5
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	0.0	5.82E+2	1.00E+0	1.766E+0	2.50E-6	1.10E-1	1.55E-1	1.10E-1	2E-5
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	0.0	1.36E+3	1.00E+0	3.181E+0	1.38E-7	2.14E+0	6.40E-2	2.14E+0	6E-8
aluminum	1.79E+0	0.0	0.0	0.0	4.07E+3	0.0	2.70E+0	1.00E+0	1.000E+0	2.56E-5	1.10E+2	1.55E-1	1.10E+2	2E-7
arsenic	3.70E-3	0.0	0.0	0.0	7.30E+1	0.0	1.14E+2	1.00E+0	1.000E+0	2.23E-6	5.50E+0	1.17E+0	5.50E+0	4E-7
barium	2.60E-1	0.0	0.0	0.0	2.00E+2	0.0	6.33E+2	1.00E+0	1.000E+0	8.71E-4	2.08E+1	1.21E-1	2.08E+1	4E-5
chromium	8.90E-3	0.0	0.0	0.0	3.00E+3	0.0	1.90E+1	1.00E+0	1.000E+0	8.95E-7	1.00E+0	1.25E+0	1.00E+0	9E-7
cobalt	2.80E-4	0.0	0.0	0.0	7.60E+1	0.0	1.16E+0	1.00E+0	1.000E+0	1.72E-9	2.37E-1	1.53E-1	2.37E-1	7E-9
copper	7.00E-4	0.0	0.0	0.0	3.72E+3	0.0	7.10E+2	1.00E+0	1.000E+0	2.63E-6	2.30E+0	6.39E-1	2.30E+0	1E-6
iron	5.10E+0	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	1.71E-2	NA	0.0	NA	NA
lead	2.00E-3	0.0	0.0	0.0	5.06E+3	0.0	9.00E-2	1.00E+0	1.000E+0	9.53E-10	1.40E-2	9.35E-2	1.40E-2	7E-8
manganese	1.70E+0	0.0	0.0	0.0	3.75E+1	0.0	6.33E+2	1.00E+0	1.000E+0	5.70E-3	7.76E+1	1.97E-1	7.76E+1	7E-5
molybdenum	6.50E-4	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	2.18E-6	3.50E+0	1.50E+0	3.50E+0	6E-7
nickel	1.00E-3	0.0	0.0	0.0	2.80E+1	0.0	7.80E+1	1.00E+0	1.000E+0	4.13E-7	1.38E+0	6.14E-1	1.38E+0	3E-7
vanadium	6.80E-3	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	2.28E-5	1.14E+1	1.17E+0	1.14E+1	2E-6
zinc	2.77E-2	0.0	0.0	0.0	4.58E+3	0.0	2.06E+3	1.00E+0	1.000E+0	3.02E-4	1.72E+1	9.55E-1	1.72E+1	2E-5
bismuth-214	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	2.50E+2	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	4.08E+0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	3.40E+0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-17
Hazard Quotient - Calculations for California Least Tern
Refined Exposure

Food Ingestion Rate, kg food/day	3.57E-2	Site Use Factor (SUF, percent)	2.93E-4
Body Weight, kg	4.50E-2		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Soil-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	0.0	8.71E+0	1.00E+0	1.005E+0	8.15E-7	2.64E+0	0.0	2.64E+0	3E-7
1,2-dichloroethane	2.00E-4	0.0	0.0	0.0	2.75E+0	0.0	2.75E+0	1.00E+0	1.000E+0	1.28E-7	1.72E+1	1.60E+0	1.72E+1	7E-9
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	1.89E-6	4.52E+0	0.0	4.52E+0	4E-7
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	0.0	8.12E+0	1.00E+0	1.000E+0	1.13E-6	1.70E-1	0.0	1.70E-1	7E-6
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	0.0	1.31E+2	1.00E+0	1.128E+0	1.03E-6	9.80E-1	7.40E-2	9.80E-1	1E-6
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	0.0	1.46E+1	1.00E+0	1.010E+0	3.43E-7	7.00E-2	0.0	7.00E-2	5E-6
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	0.0	3.55E+0	1.00E+0	1.000E+0	1.73E-6	1.70E-2	0.0	1.70E-2	1E-4
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	0.0	5.04E+1	1.00E+0	1.034E+0	9.70E-7	2.10E-1	0.0	2.10E-1	5E-6
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	0.0	3.08E+2	1.00E+0	1.675E+1	3.24E-3	1.10E+0	1.55E-1	1.10E+0	3E-3
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	0.0	5.82E+2	1.00E+0	1.766E+0	1.10E-4	1.10E-1	1.55E-1	1.10E-1	1E-3
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	0.0	1.36E+3	1.00E+0	3.181E+0	6.06E-6	2.14E+0	6.40E-2	2.14E+0	3E-6
aluminum	1.79E+0	0.0	0.0	0.0	4.07E+3	0.0	2.70E+0	1.00E+0	1.000E+0	1.12E-3	1.10E+2	1.55E-1	1.10E+2	1E-5
arsenic	3.70E-3	0.0	0.0	0.0	7.30E+1	0.0	1.14E+2	1.00E+0	1.000E+0	9.82E-5	5.50E+0	1.17E+0	5.50E+0	2E-5
barium	2.60E-1	0.0	0.0	0.0	2.00E+2	0.0	6.33E+2	1.00E+0	1.000E+0	3.83E-2	2.08E+1	1.21E-1	2.08E+1	2E-3
chromium	8.90E-3	0.0	0.0	0.0	3.00E+3	0.0	1.90E+1	1.00E+0	1.000E+0	3.94E-5	1.00E+0	1.25E+0	1.00E+0	4E-5
cobalt	2.80E-4	0.0	0.0	0.0	7.60E+1	0.0	1.16E+0	1.00E+0	1.000E+0	7.56E-8	2.37E-1	1.53E-1	2.37E-1	3E-7
copper	7.00E-4	0.0	0.0	0.0	3.72E+3	0.0	7.10E+2	1.00E+0	1.000E+0	1.16E-4	2.30E+0	6.39E-1	2.30E+0	5E-5
iron	5.10E+0	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	7.51E-1	NA	0.0	NA	NA
lead	2.00E-3	0.0	0.0	0.0	5.06E+3	0.0	9.00E-2	1.00E+0	1.000E+0	4.19E-8	1.40E-2	9.35E-2	1.40E-2	3E-6
manganese	1.70E+0	0.0	0.0	0.0	3.75E+1	0.0	6.33E+2	1.00E+0	1.000E+0	2.50E-1	7.76E+1	1.97E-1	7.76E+1	3E-3
molybdenum	6.50E-4	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	9.58E-5	3.50E+0	1.50E+0	3.50E+0	3E-5
nickel	1.00E-3	0.0	0.0	0.0	2.80E+1	0.0	7.80E+1	1.00E+0	1.000E+0	1.82E-5	1.38E+0	6.14E-1	1.38E+0	1E-5
vanadium	6.80E-3	0.0	0.0	0.0	4.07E+3	0.0	6.33E+2	1.00E+0	1.000E+0	1.00E-3	1.14E+1	1.17E+0	1.14E+1	9E-5
zinc	2.77E-2	0.0	0.0	0.0	4.58E+3	0.0	2.06E+3	1.00E+0	1.000E+0	1.33E-2	1.72E+1	9.55E-1	1.72E+1	8E-4
bismuth-214	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	2.50E+2	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	4.08E+0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	3.40E+0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	0.0	0.0	1.00E+0	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

TABLE J1-18
Hazard Quotient - Calculations for Western Snowy Plover
Refined Exposure

Food Ingestion Rate, kg food/day	3.38E-2	Site Use Factor (SUF, percent)	3.25E-3
Body Weight, kg	4.18E-2		

Compound	GW Maximum Detection (mg/L)	Dietary Fraction - Sediment Ingestion (kg sed/ kg food)	Soil-Plant BAF (L/ kg_plant)	Dietary Fraction - Plant Ingestion (kg plant/ kg food)	Soil-Invertebrate BAF (L/ kg_Invert)	Dietary Fraction - Invertebrate Ingestion (kg invert/ kg food)	Fish BAF (L/ kg_mammal)	Dietary Fraction - Fish Ingestion (kg fish/ kg food)	Food Chain Multiplier	Total Exposure Dose (mg/kg-day)	Toxlcity Reference Value - Lab Species Chronic NOAEL (mg/kg-day)	Toxlcity Reference Value - Lab Species Body Weight (kg)	Toxlcity Reference Value - Receptor (mg/kg-day)	HQ
benzene	4.00E-4	0.0	0.0	0.0	8.71E+0	1.00E+0	8.71E+0	0.0	1.005E+0	9.21E-6	2.64E+0	0.0	2.64E+0	3E-6
1,2-dichloroethane	2.00E-4	0.0	0.0	0.0	2.75E+0	1.00E+0	2.75E+0	0.0	1.000E+0	1.45E-6	1.72E+1	1.60E+0	1.72E+1	8E-8
1,2-dichloroethene	1.00E-3	0.0	0.0	0.0	8.12E+0	1.00E+0	8.12E+0	0.0	1.000E+0	2.13E-5	4.52E+0	0.0	4.52E+0	5E-6
cis-1,2-dichloroethene	6.00E-4	0.0	0.0	0.0	8.12E+0	1.00E+0	8.12E+0	0.0	1.000E+0	1.28E-5	1.70E-1	0.0	1.70E-1	8E-5
isopropylbenzene	3.00E-5	0.0	0.0	0.0	1.31E+2	1.00E+0	1.31E+2	0.0	1.128E+0	1.17E-5	9.80E-1	7.40E-2	9.80E-1	1E-5
trichloroethene	1.00E-4	0.0	0.0	0.0	1.46E+1	1.00E+0	1.46E+1	0.0	1.010E+0	3.87E-6	7.00E-2	0.0	7.00E-2	6E-5
vinyl chloride	2.10E-3	0.0	0.0	0.0	6.20E-1	1.00E+0	3.55E+0	0.0	1.000E+0	3.42E-6	1.70E-2	0.0	1.70E-2	2E-4
m-, p-xylene	8.00E-5	0.0	0.0	0.0	5.04E+1	1.00E+0	5.04E+1	0.0	1.034E+0	1.10E-5	2.10E-1	0.0	2.10E-1	5E-5
bis(2-ethylhexyl)phthalate	2.70E-3	0.0	0.0	0.0	3.08E+2	1.00E+0	3.08E+2	0.0	1.675E+1	3.66E-2	1.10E+0	1.55E-1	1.10E+0	3E-2
di-n-butyl phthalate	4.60E-4	0.0	0.0	0.0	5.82E+2	1.00E+0	5.82E+2	0.0	1.766E+0	1.24E-3	1.10E-1	1.55E-1	1.10E-1	1E-2
heptachlor epoxide	6.00E-6	0.0	0.0	0.0	1.36E+3	1.00E+0	1.36E+3	0.0	3.181E+0	6.84E-5	2.14E+0	6.40E-2	2.14E+0	3E-5
aluminum	1.79E+0	0.0	0.0	0.0	4.07E+3	1.00E+0	2.70E+0	0.0	1.000E+0	1.91E+1	1.10E+2	1.55E-1	1.10E+2	2E-1
arsenic	3.70E-3	0.0	0.0	0.0	7.30E+1	1.00E+0	1.14E+2	0.0	1.000E+0	7.10E-4	5.50E+0	1.17E+0	5.50E+0	1E-4
barium	2.60E-1	0.0	0.0	0.0	2.00E+2	1.00E+0	6.33E+2	0.0	1.000E+0	1.37E-1	2.08E+1	1.21E-1	2.08E+1	7E-3
chromium	8.90E-3	0.0	0.0	0.0	3.00E+3	1.00E+0	1.90E+1	0.0	1.000E+0	7.02E-2	1.00E+0	1.25E+0	1.00E+0	7E-2
cobalt	2.80E-4	0.0	0.0	0.0	7.60E+1	1.00E+0	1.16E+0	0.0	1.000E+0	5.59E-5	2.37E-1	1.53E-1	2.37E-1	2E-4
copper	7.00E-4	0.0	0.0	0.0	3.72E+3	1.00E+0	7.10E+2	0.0	1.000E+0	6.84E-3	2.30E+0	6.39E-1	2.30E+0	3E-3
iron	5.10E+0	0.0	0.0	0.0	4.07E+3	1.00E+0	6.33E+2	0.0	1.000E+0	5.45E+1	NA	0.0	NA	NA
lead	2.00E-3	0.0	0.0	0.0	5.06E+3	1.00E+0	9.00E-2	0.0	1.000E+0	2.66E-2	1.40E-2	9.35E-2	1.40E-2	**2E+0**
manganese	1.70E+0	0.0	0.0	0.0	3.75E+1	1.00E+0	6.33E+2	0.0	1.000E+0	1.68E-1	7.76E+1	1.97E-1	7.76E+1	2E-3
molybdenum	6.50E-4	0.0	0.0	0.0	4.07E+3	1.00E+0	6.33E+2	0.0	1.000E+0	6.95E-3	3.50E+0	1.50E+0	3.50E+0	2E-3
nickel	1.00E-3	0.0	0.0	0.0	2.80E+1	1.00E+0	7.80E+1	0.0	1.000E+0	7.36E-5	1.38E+0	6.14E-1	1.38E+0	5E-5
vanadium	6.80E-3	0.0	0.0	0.0	4.07E+3	1.00E+0	6.33E+2	0.0	1.000E+0	7.27E-2	1.14E+1	1.17E+0	1.14E+1	6E-3
zinc	2.77E-2	0.0	0.0	0.0	4.58E+3	1.00E+0	2.06E+3	0.0	1.000E+0	3.33E-1	1.72E+1	9.55E-1	1.72E+1	2E-2
bismuth-214	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
potassium-40	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	2.50E+2	0.0	0.0	NA
radium	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
radium-226	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	4.08E+0	0.0	0.0	NA
radium-228	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	3.40E+0	0.0	0.0	NA
thallium-208	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross alpha	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA
total gross beta	NA	0.0	0.0	0.0	0.0	1.00E+0	0.0	0.0	1.000E+0	0.0	0.0	0.0	0.0	NA

HQ = {[(Soil-Conc*IR-Food*Dietary-Sediment-Ingest)
+(Soil-Conc*IR-Food*Dietary-Plant-Ingest*Water-Plant-BAF)
+(Soil-Conc*IR-Food*Dietary-Invert-Ingest*Water-Invert-BAF*FCM)
+(Soil-Conc*IR-Food*Dietary-Fish-Ingest*Water-Fish-BAF*FCM)]*SUF}
/(Body Weight*TRV-Receptor)

BAF - bioaccumulation factor
FCM - food chain multiplier
HQ - hazard quotient
SUF - site use factor
TRV - toxicicity reference value

Appendix K
The Runway Wetland Human Health and Ecological Risk Screening Report (On CD-ROM)

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INFO. REPOSITORY

Runway Wetland
Human Health and Ecological Risk Screening Report
Alameda Point, Alameda, CA

22 February 2002 DRAFT

Prepared for
Southwest Division
Naval Facilities Engineering Command
San Diego, CA

DEPARTMENT OF THE NAVY
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NAVAL FACILITIES ENGINEERING COMMAND
1220 PACIFIC HIGHWAY
SAN DIEGO, CA 92132-5190

5090
Ser 06CA.RW\0180
February 25, 2002

Ms. Anna-Marie Cook
USEPA, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Dear Ms. Cook:

Subj: DRAFT RUNWAY WETLAND HUMAN HEALTH AND ECOLOGICAL RISK SCREENING REPORT, ALAMEDA POINT, ALAMEDA, CALIFORNIA

This letter transmits the above-referenced document. A screening-level evaluation of human heath and ecological risk at the Runway Wetland is presented in the document.. Although the Runway Wetland is not included in the Site Management Plan, Navy is treating this as a primary document and is looking forward to receipt of comments by May 1, 2002.

Please feel free to contact me at (619) 532-0952, if you have any questions.

Sincerely,

RICHARD C. WEISSENBORN, P.E.
Remedial Project Manager

Encl: (1) Draft Runway Wetland Human Health and Ecological Risk Screening Report, Alameda Point, Alameda, California

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EXECUTIVE SUMMARY

The Runway Wetland encompasses approximately 27 acres (ac) and is located on the south-central portion of Alameda Point, approximately 300 ft west of the Seaplane Lagoon. Two buildings, part of Parcel 28, lay between Seaplane Lagoon and Runway Wetland. This report has been prepared to document site conditions at the Runway Wetland and to determine whether chemicals present in environmental media potentially pose an unacceptable risk to human health or the environment.

Alameda Point occupies 2676 ac at the west end of Alameda Island. The former Naval Air Station Alameda operated there as an active naval facility from 1940 until 1997. At present, approximately 927 ac at Alameda Point, including the Runway Wetland, are scheduled for transfer to the US Fish and Wildlife Service for management as the Alameda National Wildlife Refuge. The Runway Wetland was created between 1958 and 1963 when fill was placed behind a rock seawall that was constructed to allow the lengthening of an existing runway. The Runway Wetland is bordered by a runway to the west, a taxiway to the north, two buildings (Parcel 28) to the east, and the rock seawall (bordering San Francisco Bay) to the south. Two ponds occur seasonally in the central portion of the Runway Wetland. Construction debris comprised primarily of pieces of broken concrete with smaller amounts of asphalt and scrap metal was placed in Runway Wetland during the mid-1980s, creating an elevated area that occupies about 13% of the total area of the site. There are no current or historical structures or operational areas located in the Runway Wetland.

The Runway Wetland was not identified through the Initial Assessment Survey or the Environmental Baseline Survey as a candidate parcel for the Navy's Installation Restoration (IR) Program at Alameda Point because operational history indicates that no releases of hazardous substances are known or suspected to have occurred at the site. Evaluations conducted early in the IR Site 2 Remedial Investigation also supported the assertion that Runway Wetland was not a candidate for IR listing. The ecological risk screening was performed according to ecological risk assessment guidance established by the U.S. Environmental Protection Agency (EPA) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (EPA, 1997a). The human health risk screening follows EPA recommendations provided in Risk Assessment Guidance for Superfund (EPA, 1989) and EPA Region IX guidance for use of their preliminary remediation goals (EPA Region IX, 2000). The main objective of CERCLA is to establish a program to identify sites where hazardous substances were released into the environment, and to identify cleanup actions as necessary to reduce risks to acceptable levels.

Sediment at the Runway Wetland was sampled in 1993 through 1995, and in 1997. A total of seven samples were collected in the ponds, and an eighth sample was collected near the northern border of the site. Surface water sampling was conducted at the Runway Wetland during 1993, 1994, 1995, and 1997 to assess if the ponds were receiving any chemicals from the adjacent fill areas. Plants, invertebrates, non-migratory fishes, and small mammals were sampled from the aquatic, wetland, and upland terrestrial habitats at the Runway Wetland. Plant, invertebrate, and

mammal tissues were sampled from six locations in September 1998. Five fish samples were collected during February 1997, and one fish sample was collected in September 1998.

To support the conceptual site model (Section 4) and interpretation of the risk screening for Human Health (Section 5) and Ecological (Section 6) effects, chemical concentrations of Runway Wetland analytes were compared to ambient conditions. The comparisons included comparing Runway Wetland results to ambient upper tolerance limits for San Francisco Bay published by the Regional Water Quality Control Board (RWQCB, 1998). Additionally, sediment chemistry results were statistically compared to ambient conditions to determine if the distribution of site concentrations is 'shifted' higher than the ambient distribution. The decision to use San Francisco Bay ambient data was discussed with the BTAG and agreed to in a conference call held October 2, 2001. The results of the statistical comparisons indicate that inorganic chemicals are generally present at ambient levels. Chromium, lead mercury and silver were higher than ambient levels in the Runway Wetland. Statistical comparisons to ambient could not be conducted for constituents that were detected in fewer than 50% of the samples, which included most organic constituents.

Both the human health risk and ecological risk were evaluated in a screening context to determine whether the potential for adverse effects warrants the collection of additional site data. The human health exposure scenarios and pathways associated with management of the wildlife refuge are related to activities of USFWS staff, who maintain structures such as walkways and fences, and refuge visitors. Occupational and recreational scenarios are applicable to USFWS staff and visitors, respectively. Primary chronic human exposure pathways that are likely to be complete in both scenarios include incidental soil ingestion and dermal contact with soil. Inhalation of suspended particulates, while potentially complete, is likely to be of lesser importance because of the dense vegetative cover on the site. Because the entire site is being converted to a wildlife refuge, future anthropogenic disturbance of site soils is likely to be negligible. Incidental ingestion of pond water and dermal contact with pond water are unlikely to be complete chronic exposure pathways for occupational and recreational receptors. EPA Region IX preliminary remediation goals for residential land use were used in the screening. The great majority of potential site risk was associated with exposure to arsenic in sediments, but site concentrations of arsenic were found to be approximately one half of ambient levels. The results of the human health screening assessment indicate no potential for site-related adverse health effects.

The ecological risk screening for Runway Wetland was conducted in accordance with EPA Superfund Ecological Risk Assessment Guidance (EPA, 1997a) and Navy ERA guidelines (Navy, 1999b). The screening exposure estimate and risk calculation was conducted in two parts. The first part involved comparing maximum concentrations of constituents in sediment to conservative sediment screening benchmarks. Constituents that exceeded screening thresholds were carried forward to the second part of the screening: food chain modeling to upper-trophic level receptors. In this step, daily doses of the remaining constituents of potential ecological concern (COPECs) were calculated to nine upper trophic level receptors. The calculated doses were compared to available toxicity reference values (TRVs) for birds and mammals.

Exposure parameters chosen for the food-chain modeling of average daily doses were intentionally biased to be protective in keeping with the screening nature of the ecological risk assessment. Average daily doses were compared to both "lower-bound" and "high" TRV values. The conclusion of the ecological risk screening was that site-wide ecological risks at the Runway Wetland are likely to be negligible, although slight risk is possible to individual animals with small home ranges that may forage in the northern portion of the west pond. However, the magnitude and extent of the risk is likely too small to impact populations of any plants or animals that utilize Runway Wetland or Alameda Point.

Based of the results of the risk screening presented in this report, it is apparent that, even under the conservative set of assumptions used in the evaluations, no significant risks exists for either the human or ecological receptors associated with the Runway Wetland at Alameda Point.

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Abbreviations, Acronyms, and Symbols

ac	acres
ARRA	Alameda Reuse and Redevelopment Authority
BCT	BRAC Clean-up Team
BERC	Berkeley Environmental Restoration Center
bgs	below ground surface
BPTCP	Bay Protection and Toxic Cleanup Program
BRAC	Base Realignment and Closure
BSU	Bay Sediments Unit
BTAG	Biological Technical Advisory Group
BW	body weight
CA	California
C&D	construction and demolition
cm	centimeter (10^{-2} m)
COPC	chemical of potential concern
COPEC	chemical of potential ecological concern
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	conceptual site model
DI	daily ingestion
DSR	data summary report
EIS	environmental impact statement
EPA	US Environmental Protection Agency
ERA	ecological risk assessment
ER-L	effects range-low
ER-M	effects range-median
ESL	ecological screening level
FISCO	Fleet and Industrial Supply Center Oakland
Fm	Formation
FSAP	field sampling plan
FWBZ	first water-bearing zone

ha	hectare (1 ha = 10,000 m^2)
HMW	high molecular weight
HQ	hazard quotient
HRG	Habitat Restoration Group
HSI	Hydro-Search, Inc
IR	Installation Restoration
L	liter
LANL	Los Alamos National Laboratory
LEL	lowest effects level
LMW	low molecular weight
kg	kilogram (10^6 g)
mg	milligram (10^{-6} g)
m	meter
msl	mean sea level
n/a	not applicable
NA	not analyzed
N.A.	not available
NADEP	Naval Aviation Depot Alameda
NAS	Naval Air Station
N & C	Neptune and Company, Inc.
NNRMS	Naval Natural Resources Management Staff
NOAEL	no observable adverse effects level
NOEL	no observable effects level
NPL	National Priority List
OU	Operable Unit
PAH	polycyclic aromatic hydrocarbon
PCB	polychlorinated biphenyl
ppm	parts per million
PRC	PRC Environmental Management, Inc.
PRG	preliminary remediation goal
PWC	Public Works Center

RAGS	Risk Assessment Guidance for Superfund
RCRA	Resource Conservation and Recovery Act
RI	remedial investigation
RME	reasonable maximum exposure
RMP	regional monitoring program
RPM	Remedial Project Manager
RWQCB	Regional Water Quality Control Board (of California)
SFEI	San Francisco Estuary Institute
SFEP	San Francisco Estuary Project
SUF	site use factor
SVOC	semivolatile organic compound
SWBZ	second water-bearing zone
SWG	Sediment Work Group
TBT	tributyl tin
TDS	total dissolved solids
TEL	threshold effects level
TF	transfer factor
TPH	total petroleum hydrocarbons
TRV	toxicity reference value
TtEMI	Tetra Tech EMI
US	United States
USFS	US Forest Service
USFWS	US Fish and Wildlife Service
UTL	upper threshold limit
WBLW	West beach Landfill Wetlands
WET	Wetland Evaluation Technique
WP	work plan

1.0 INTRODUCTION

This section provides introductory information for the human health and ecological risk screening report for the Runway Wetland, located at Alameda Point, Alameda, California. The Runway Wetland is located within the National Priority List (NPL)-listed portion of the former Naval Air Station (NAS) Alameda.

1.1 REPORT SCOPE AND OBJECTIVES

This report has been prepared to document site conditions at the Runway Wetland and to determine whether chemicals present in environmental media potentially pose an unacceptable risk to human health or the environment. The risk screening was conducted using guidance provided by the US Environmental Protection Agency (EPA) to fulfill the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Acts.

This report describes historical activities and current environmental conditions at the Runway Wetland, provides a review of the environmental data available for this area, assesses the potential for adverse effects in screening-level risk assessments, and provides recommendations for further action. It is the intent of the Navy to determine whether chemical constituents at the Runway Wetland may adversely affect future use of this area by the US Fish and Wildlife Service (USFWS). The Navy plans to transfer the Wetland to the USFWS, who will manage this area as part of the Alameda National Wildlife Refuge.

1.2 SITE DESCRIPTION

Alameda Island is located on the east side of the San Francisco Bay, and is directly south of Oakland and east of San Francisco, California (Figure 1-1). Alameda Point occupies 2676 acres [ac] at the west end of Alameda Island. Of this total area, approximately 1562 ac consist of dry land with the remaining 1114 ac submerged. Alameda Point is bordered on the north by Oakland Inner Harbor, on the west and south by San Francisco Bay, and on the east by the city of Alameda.

The Runway Wetland encompasses approximately 27 ac and is located on the south-central portion of Alameda Point, approximately 300 ft west of the Seaplane Lagoon. Two buildings, part of Parcel 28, lay between Seaplane Lagoon and Runway Wetland. The Runway Wetland was created between 1958 and 1963 when fill was placed behind a rock seawall that was constructed to allow the lengthening of an existing runway. The Runway Wetland is bordered by runways to the west, a taxiway to the north, a building to the east, and a rock seawall (bordering San Francisco Bay) to the south. Two zones of standing water (ponds) seasonally occur in the central portion of the Runway Wetland; their presence has been noted by PRC Environmental Management, Inc. (PRC)(Tetra Tech EMI [TtEMI] 1999) during both winter and spring field activities, and during a fall site visit by Neptune and Company, Inc in November, 2000. A small

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

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FIGURE 1-1 – LOCATION OF ALAMEDA POINT AND RUNWAY WETLAND

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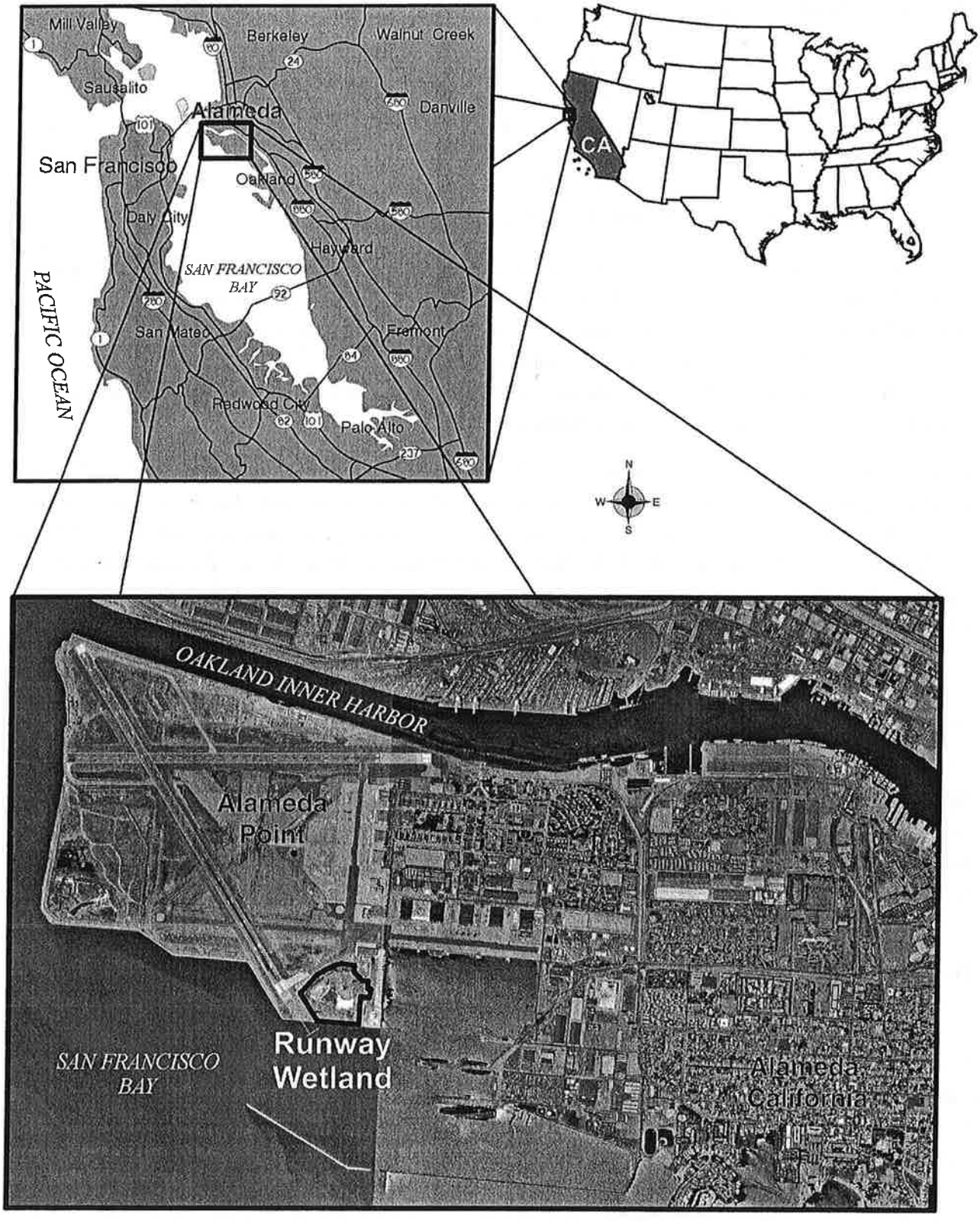

Figure 1-1. Location of Alameda Point and Runway Wetland

swale runs north-south in the southeastern corner of the Runway Wetland. The Runway Wetland is subject to limited tidal flow at high tides and during storms. The southern seawall generally restricts the free flow of water between the Runway Wetland and the San Francisco Bay. The topographic rise associated with Parcel 28 and the Seaplane Lagoon western seawall restrict the free flow of water between Seaplane Lagoon and Runway Wetland.

Construction debris was placed in Runway Wetland during the mid-1980s, creating an elevated area that occupies about 13% of the total area of the Runway Wetland (Naval Natural Resources Management Staff, 1986). Figure 1-2 shows the locations of the ponds and the construction debris. Visual inspection of the debris (November 2000) by the Navy Remedial Project Manager and Neptune and Company, Inc. personnel revealed it to be comprised primarily of pieces of broken concrete with smaller amounts of asphalt and scrap sheet-metal.

1.3 REGULATORY AND ADMINISTRATIVE CONTEXT

The Runway Wetland was not identified through the Initial Assessment Survey or the Environmental Baseline Survey (EBS) as a candidate parcel for the Navy's Installation Restoration (IR) Program, because knowledge of site history and operations did not suggest release of any chemical constituents that potentially posed a threat to human health or the environment. Evaluations conducted early in the IR Site 2 Remedial Investigation also supported the assertion that Runway Wetland was not a candidate for IR listing. The risk screening is being performed to supplement previous environmental findings with a more detailed evaluation of the site. The construction debris observed at Runway Wetland meets the EPA Region IX and State of California definitions for construction and demolition debris (see EPA, 1999 for both definitions), and hence is not subject to Resource Conservation and Recovery Act hazardous waste or municipal solid waste regulations. There is no evidence that hazardous materials or municipal solid wastes were disposed of at the Runway Wetland.

The ecological risk screening was performed according to ecological risk assessment guidance established by the EPA under CERCLA (EPA, 1997a). The human health risk screening follows EPA recommendations provided in Risk Assessment Guidance for Superfund (EPA, 1989) and EPA Region IX guidance for use of their preliminary remediation goals (EPA Region IX, 2000).

Neptune and Company, Inc. performed this work under a task order from the Department of the Navy, Naval Facilities Engineering Command, Engineering Field Division Southwest, under Contract N62474-00-F-0104. The Navy statement of work requested that existing data be evaluated and quantitative or qualitative human and ecological risk assessments be prepared for the Runway Wetland, depending on the appropriateness of the data. Available data was suitable for a screening-level evaluation of human health and ecological risk, which is presented in this document.

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE 1-2 – LOCATIONS OF CONSTRUCTION DEBRIS AND PONDS AT ALAMEDA POINT AND RUNWAY WETLAND

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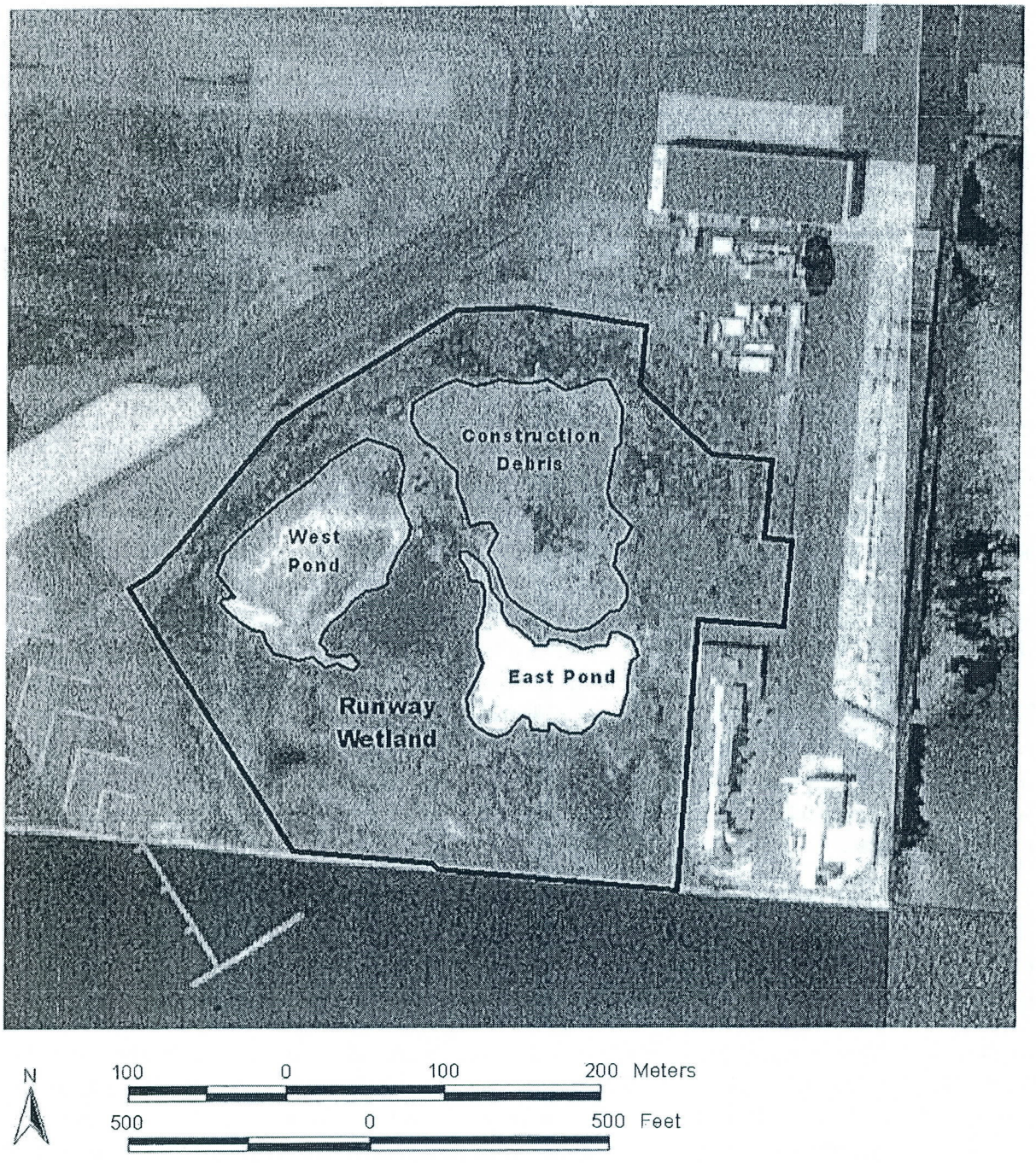

Figure 1-2. Locations of construction debris and ponds at Alameda Point Runway Wetland

1.4 REPORT ORGANIZATION

This report is organized into seven sections and three appendices. Section 2 presents the site history and environmental setting, including a description of Alameda Point historical activities. The physical environment subsection contains a description of the surface topography, general flora and fauna, present-day land use, climate, regional geology, and regional hydrology. Regional geology and hydrology are discussed because Runway Wetland-specific data are lacking. Section 3 presents a review of the sediment, surface water, and tissue data that have been collected at the Runway Wetland. Section 3 also contains a summary of data-collection activities. Section 4 presents the conceptual site model, chemical fate and transport processes, data interpretation, and the applicability of data for site-wide assessments. Section 5 presents the human health risk screening. Section 5 also includes identification of chemicals of potential concern, exposure scenarios and pathways, and an interpretation of the screening results. Section 6 presents the ecological risk screening. Section 6 also includes identification of chemicals of potential ecological concern, exposure scenarios and pathways, uncertainty evaluation, and an interpretation of the screening results. Section 7 presents the conclusions and recommendations of this risk screening report. Appendix A presents the data used in the assessments and provides supplementary information pertaining to the data review. Appendix B presents the ecological risk screening protocol used in Section 6 of the report. This screening protocol was discussed and agreed to with the BTAG during a conference call held 2 October 2001. Appendix C presents the minutes of that conference call.

1.5 PREVIOUS INVESTIGATIONS AND WORK

This section summarizes the previous investigations conducted at the Runway Wetland. Data from all of the studies listed below are presented in Appendix A and summarized in Section 3 of this report.

An initial field investigation was conducted at the offshore and wetland areas of Alameda Point in 1993 by PRC as part of a base-wide ecological assessment. From February 1993 through June 1993, sediment and surface water samples were collected from the Runway Wetland for bulk chemistry analyses, bioaccumulation assessments, and bioassays. Benthic invertebrate population studies were also performed in the wetlands. The results of this initial field investigation were presented in the "Draft Report, Naval Air Station Alameda Ecological Assessment" (PRC, 1994).

In 1996, after further evaluation of sediment and surface water chemistry at the wetland areas, the Navy submitted the draft "Naval Air Station Alameda Operable Unit 4 Ecological Risk Assessment, Revision 2" (OU-4 ERA Revision 2) (PRC, 1996a). Based upon information contained in that report, PRC prepared the "Naval Air Station Alameda Operable Unit 4 Follow-on Ecological Assessment Work Plan and Field Sampling Plan" (Follow-On WP/FSAP) (PRC, 1996b). The OU-4 ERA Revision 2 (PRC 1996a) and the Follow-On WP/FSAP (PRC, 1996b) were submitted to the regulatory agencies as companion documents supporting offshore and wetland ecological assessment activities at Alameda Point. The OU-4 ERA Revision 2 (PRC,

1996a) included a preliminary screening of potential ecological risks at the Runway Wetland as well as other areas in the southwestern portion of Alameda Point. The Follow-On WP/FSAP (PRC, 1996b) specified the collection of additional sediment, pore water, surface water, and invertebrate and fish tissue samples at the West Beach Landfill Wetland and the Runway Wetland for bulk chemistry analyses to allow for the completion of the ecological screen. In accordance with the Follow-On WP/FSAP, additional sediment, pore water, surface water, invertebrate tissue, and fish tissue samples were collected from the Runway Wetland in February 1997. These data were reported in the "Chemical Data Summary Report (DSR) for Offshore Sediment and Wetland Areas at Alameda Point, Alameda, California" (Tetra Tech EMI [TtEMI], 1998a).

In September 1998, TtEMI collected plant, invertebrate, and small mammal tissue data from the Runway Wetland. These data were collected in accordance with the "Work Plan and Field Sampling and Analysis Plan for West Beach Landfill, West Beach Landfill Wetland, and Runway Wetland" (TtEMI, 1998b). These data were originally intended for use in the Alameda Point IR Site 2 remedial investigation. The tissue data collected from the Runway Wetland were used in this report in the ecological risk screening.

2.0 SITE HISTORY AND ENVIRONMENTAL SETTING

2.1 ALAMEDA POINT HISTORY

Alameda Peninsula became Alameda Island when what is now the Oakland Inner Harbor Channel was dredged in 1902 to connect San Leandro Bay and San Francisco Bay. The US Army acquired the western tip of Alameda Island from the city of Alameda in 1930. The Navy acquired title to the land from the Army in 1936 and began building Naval Air Station (NAS) Alameda in response to the allied military buildup in Europe before World War II. Construction involved filling the natural tidelands, marshes, and sloughs between the Oakland Inner Harbor and the western tip of Alameda Island. The fill consisted largely of dredged material from the surrounding San Francisco Bay and Oakland Inner Harbor.

Alameda Point operated as an active naval facility from 1940 until 1997. The two major tenants, the Naval Public Works Center (PWC) and Naval Aviation Depot Alameda, conducted a variety of operations at Alameda Point, including aircraft, engine, gun and avionics maintenance; engine overhaul and repair; fueling activities; plating, stripping, and painting activities. The PWC also maintained all infrastructure, operated two power plants, and a transportation shop at Alameda Point. In addition, the installation operated a deep-water port capable of berthing aircraft carriers. The deep-water port was used primarily for minor carrier maintenance and ship overhaul. The following tenants also used Alameda Point during its tenure as an active military base:

- Construction Battalion Unit 416;
- Commander Naval Air Force, US Pacific Fleet Material Representative;
- Defense Property Disposal Office;
- Navy Disease Vector Ecology Control Center;
- Alameda Detachment, Explosive Ordnance Disposal Group One;
- Marine Air Group 42;
- Marine barracks;
- Naval Air Reserve Unit;
- Naval Regional Dental Center Branch Clinic;
- Naval Regional Medical Center Branch Clinic;
- Pacific Fleet Audio-Visual Facility Component;
- Shore Intermediate Maintenance Activity; and
- Supervisor of Shipbuilding, Conversion, and Repair

Prior to closure of the Naval Air Station, Alameda Point had a combined military/civilian work force of over 18,000 personnel.

Alameda Point was designated for closure in September 1993 pursuant to the Defense Base Closure and Realignment Act of 1990. Naval operations officially ceased on April 25, 1997. The Navy is currently in the process of transferring the land to new owners. A base realignment and closure (BRAC) clean-up plan (Navy, 1998a) was developed to address the fast-track cleanup mandated by President Clinton as part of his five-part program to expedite economic recovery at communities with military bases designated for closure. The Alameda BRAC Clean-Up Team established two goals for the cleanup process at Alameda Point:

1. protect human health and the environment, and
2. focus on community reuse priorities

The City of Alameda is working with the Alameda Reuse and Redevelopment Authority (ARRA) to establish appropriate reuse activities for the land. Approximately 927 acres at Alameda Point are scheduled currently for transfer to the US Department of the Interior, Fish and Wildlife Service (FWS). This area includes approximately 578 upland acres and 349 acres of open water. The Runway Wetland is part of the area to be transferred to FWS and is the focus of this report.

Runway Wetland History

The fill history map (Figure 2-1) shows that the fill that created the Runway Wetland area was deposited between 1958 and 1963, while adjacent areas to the north and northeast were filled in the 1930s and early 1940s. The reason that the Runway Wetland area was filled so much later than the adjacent areas is that the Navy needed to extend the runway (Runway 31) located to the west of what is now Runway Wetland. The Runway Wetland and the extension of Runway 31 are enclosed by a rock seawall along the Bay. The origin of the fill that was placed within the seawall is uncertain but is likely to consist of sediments dredged from the Bay, although some may have originated from Seaplane Lagoon (PRC, 1994).

Fill made up of construction debris was placed in the Runway Wetland during the mid-1980s (Naval Natural Resources Management Staff, 1986), which created an elevated area in the northeast portion of the site (Figure 2-2). The debris is comprised mainly of pieces of broken concrete with smaller amounts of asphalt and sheet-type scrap metal (Figure 2-3). There is no evidence that hazardous materials or municipal solid wastes were disposed of at the Runway Wetland.

2.2 PHYSICAL ENVIRONMENT

2.2.1 Surface Topography

The Runway Wetland area is mostly flat with two ponds and a small swale running north-south. The surface area of the ponds varies seasonally. The elevated area in the northeast portion of the site occupies approximately 13% of the total area of the Runway Wetland and, based upon visual observation, is 4 to 5 ft higher than the surrounding ground surface at its highest point. The Runway Wetland is subject to limited tidal influence at high tides and during storms through the swale and through groundwater infiltration. A variety of debris has been deposited over the seawall by high tides and storms (Figure 2-4).

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FIGURE 2-1 – RUNWAY WETLAND FILL HISTORY

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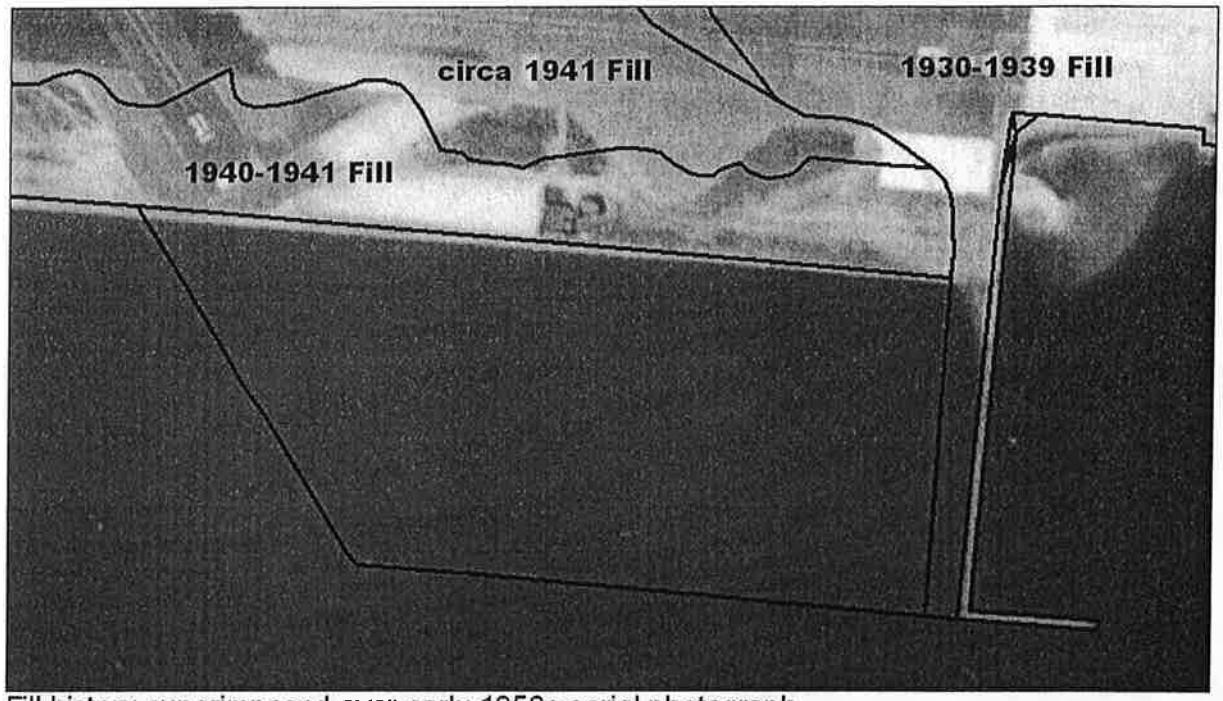
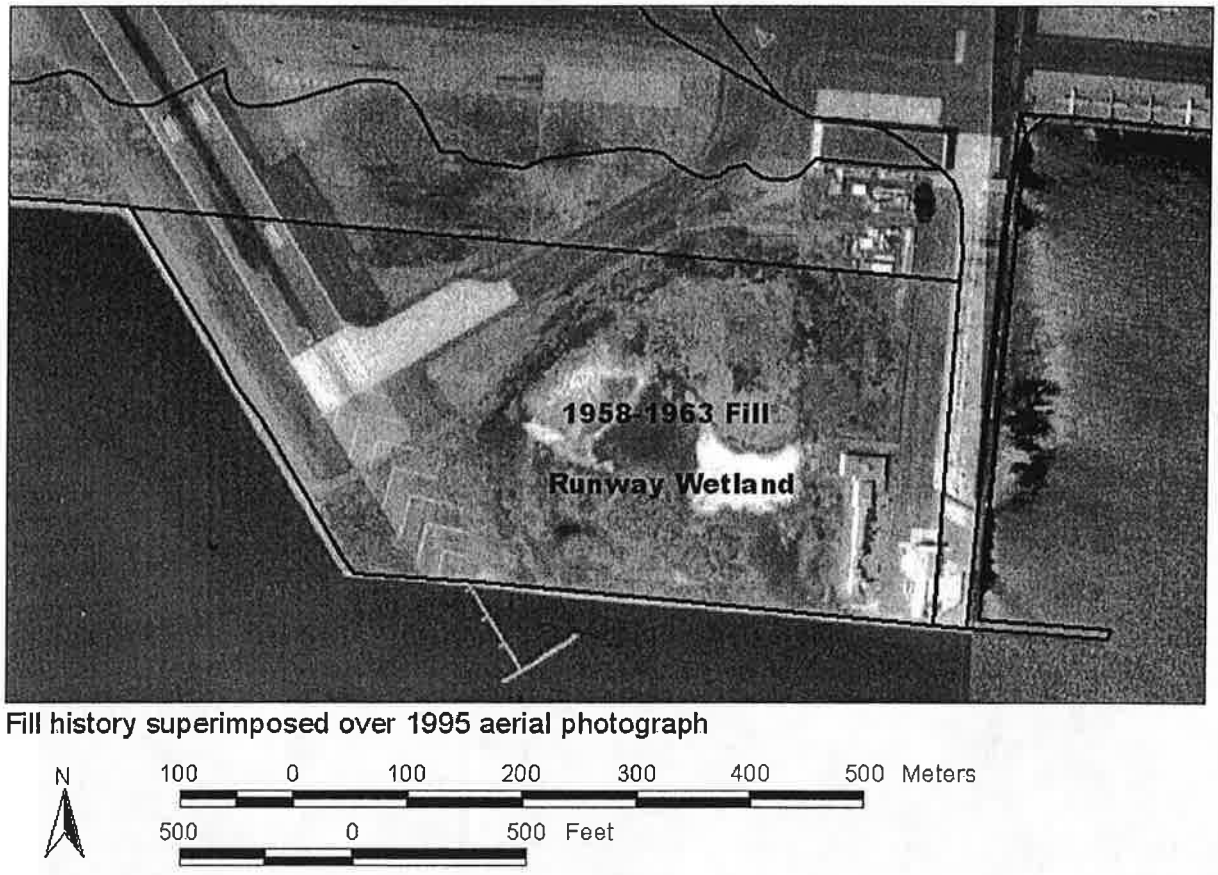


Fill history superimposed over early 1950s aerial photograph



Fill history superimposed over 1995 aerial photograph

Figure 2-1. Runway Wetland fill history

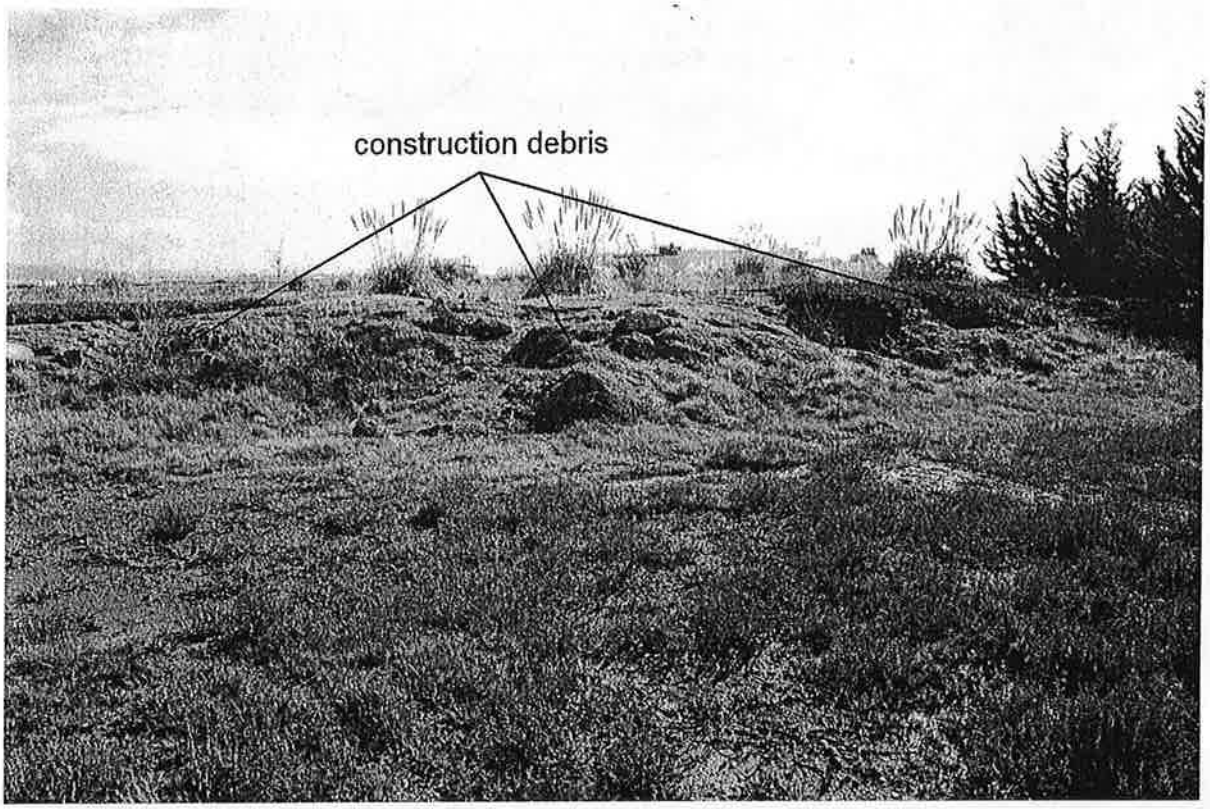


Figure 2-2. Construction debris mound in the northeast portion of the Runway Wetland

Figure 2-3. Close-up of construction debris showing pieces of broken concrete

Figure 2-4. Debris washed over the seawall into the Runway Wetland

2.2.2 Flora and Fauna

The Runway Wetland is characterized by plants typical of salt marsh habitats. Species observed in the wetland areas of the site include pickleweed (*Salicornia virginica*), brass buttons (*Cotula coronopifolia*), and seaside trefoil (*Lotus formosissimus)* (Habitat Restoration Group [HRG], 1993a; PRC, 1995a). Pampas grass (*Cortaderia sellona*) and ice plant (*Carpobrotus chilensis*) are dispersed throughout the dryer areas of the site. A list of plants observed by TtEMI during vegetation surveys is presented in Table 2-1.

Benthic invertebrates were collected at one location in the Runway Wetland (PRC, 1994). The most common benthic invertebrate collected was the annelid worm *Polydura cornuta* (Table 2-2). Unidentified Halacaridea and Podocopa crustaceans and unidentified Hydrozoa made up the remainder of the benthic invertebrate samples at the Runway Wetland (PRC, 1994).

The Runway Wetland is utilized by a variety of bird species year round. Migratory shorebirds and waterfowl use the ponds during the winter months, while Canada geese (*Branta canadensis*), black-necked stilts (*Himantopus mexicanus*), and American avocets (*Recurvirostra americana*) may nest in the wetland. Northern harriers (*Circus cyaneus*) and red-tailed hawks (*Buteo jamaicensis)* forage in the area, and the endangered California least tern nests on the tarmac to the north of the Runway Wetland. The pier at the western end of the Runway Wetland serves as

a roosting site for various birds, including cormorants, great blue herons (*Ardea herodias*), and brown pelicans (*Pelecanus occidentalis*). Results of the 1997 avian survey at the Runway Wetland (TtEMI 1999) are presented in Table 2-3.

Table 2-1. Plant Species Observed at Runway Wetland

Species Name	Common Name
Brassica nigra	Black Mustard
Cotula coronopifolia	Brass Buttons
Centaurium muenlenbeigii	Centaury
Chenopodium sp.	Chenopodium
Baccharis pilularis var. *consanguinea*	Coyote brush
Foeniculum vulgare	Fennel
Carpobrotus edulis	Fig-marigold (ice plant)
Cortaderia selloana	Pampas grass
Salicornia virginica	Pickleweed
Lotus formosissimus	Seaside trefoil
Lathyrus sp.	Sweet pea
Vicia sp.	Vetch
Melilotus officinalis	Yellow sweet clover

Note: Surveys were conducted by TtEMI between March 1997 and May 1997 (TtEMI 1999).

Table 2-2. Results of Samples Analysis for Benthic Invertebrates

Taxon	# Collected
Annelids	
Polydura cornuta	24
Oligochaete, unidentified	2
Crustaceans	
Halacaridea, unidentified	1
Podocopa, unidentified	7
Miscellaneous Taxa	
Hydrozoa, unidentified	1

Table 2-3. Results of 1997 Avian Surveys at the Runway Wetland

Observed Species	Survey Dates										Survey Totals
	Jan-2	Jan-23	Feb -6	Feb-20	Mar-11	Mar-27[a]	Apr-11	Apr-23	May-13	May-28[b]	
Avian Species:											
Podicipedidae											
Western grebe[c]	3	2	2	6		3					16
Horned grebe[c]							4				4
Pied-billed grebe[c]			6								6
Eared grebe[c]					2						2
Pelicanidae											
California brown pelican[c]							10				10
Phalacrocoracidae											
Double-crested cormorant[c]									1		1
Pelagic cormorant[c]							2				2
Brandt's cormorant[c]			6		3				2		11
Ardeidae											
Great blue heron	2	4	1	1	3	4	2	4	2	2	25
Great egret			2	1	6	10	2				21
Snowy egret				1	4	4	3				12
Anatidae											
Canada goose[d]	29	16	33	57	24	29	122	30	58		398
Green-winged teal					2	2					4
Mallard	17	25	5			5	2		7		61
Northern pintail							13				13
Cinnamon teal					2	11					13
Northern shoveler[d]	15	15	5	5	15	23					78

Table 2-3 (continued). Results of 1997 Avian Surveys at the Runway Wetland

Observed Species	Survey Dates										Survey Totals
	Jan-2	Jan-23	Feb -6	Feb-20	Mar-11	Mar-27[a]	Apr-11	Apr-23	May-13	May-28[b]	
Anatidae (continued)											
Gadwall					2	2		2	2		8
American widgeon	19	22	5	14	14	51	18	7			150
Lesser scaup[c]		2	2								4
Surf scoter[c]			5								5
Bufflehead	2	1	8	9							20
Ruddy duck	5	3	2								10
Rallidae											
American coot	29	32	5	10	9	9	11				105
Recurvirostridae											
Black-necked stilt			6	11	11	16	16	6	2	2	70
American avocet	4	1		7	17	32	16	13	7		97
Charadriidae											
Black-bellied plover							2	2	2		6
Killdeer	10	15	10	4	7	6	10	4	9		75
Scolopacidae											
Greater yellowlegs							3				3
Western sandpiper								12			12
Spotted sandpiper				3	2						5
Least sandpiper		2		6	16	14		3			41
Dunlin				5							5
Short-billed dowitcher					10	12	12	25			59
Common snipe				4	10	1					15

Table 2-3 (continued). Results of 1997 Avian Surveys at the Runway Wetland

Observed Species	Survey Dates										Survey Totals
	Jan-2	Jan-23	Feb -6	Feb-20	Mar-11	Mar-27[a]	Apr-11	Apr-23	May-13	May-28[b]	
Laridae											
Ring-billed Gull			2								2
California gull[d]			5		10	2					17
Glaucous-winged gull[c]				4							4
Western gull[d]	22	10		6	5	11	20	33	7		114
California least tern[c]									3		3
Caspian tern[c]							1	5			6
Forster's tern[c]	3			4			6	2			15
Falconidae											
Prairie falcon		1									1
Cathartidae											
Turkey vulture		1	1								2
Accipitridae											
Northern harrier	1	1			1	1	1				5
Red-tailed hawk	2	3	1	1							7
Colombidae											
Rock dove					2						2
Strigidae											
Burrowing owl		1									1
Tyrannidae											
Western kingbird	1	1									2
Unidentified flycatcher		1									1

Table 2-3 (continued). Results of 1997 Avian Surveys at the Runway Wetland

Observed Species	Survey Dates										Survey Totals
	Jan-2	Jan-23	Feb -6	Feb-20	Mar-11	Mar-27[a]	Apr-11	Apr-23	May-13	May-28[b]	
Hirundinidae											
Barn swallow					5	1		13	8	4	31
Corvidae											
Common raven		2					1	1			4
Sturnidae											
European starling[d]	30			50	12	1					93
Emberizidae											
Yellow-rumped warbler[d]	50	85									135
Savannah sparrow					3	2					5
Alameda song sparrow			2								2
Red-winged blackbird[d]	35	10	20	10	19	17	12	4	14	10	151
Brewer's blackbird				5	2						7
Fringillidae											
House finch	5	40	5		3	4	8	4	2		71
Total Avian Individuals	284	296	139	224	221	273	297	170	126	18	2048

Note: Counts do not necessarily correspond to exact number of species present in all instances. Many individuals may have been obscured by vegetation or were foraging outside of Runway Wetland during the survey times. Atypical weather situations causing ponds to dry up earlier in the season may have resulted in declined or underrepresented avian species counts

[a] Sunset survey

[b] Survey was terminated after 10 minutes due to sparsity of birds. The ponds had completely dried up by the end of May 1997. Counts recorded are associated with 10 minutes of observation at Station A.

[c] Species observed only outside of Runway Wetland (i.e., observed over San Francisco Bay, in distant upland areas, or flying over).

[d] Larger numbers of observed individuals of a particular species are approximations.

Mammals that occur in the Runway Wetland include the California ground squirrel *(Spermophilus beecheyi)*, black-tailed hare (*Lepus californicus*), long-tailed weasel (*Mustela frenata*), house mouse *(Mus musculus)* and black rat *(Rattus rattus)* (HRG, 1993b and PRC, 1995a). A bat survey (Constantine, 1996) identified the Mexican free-tailed bat (*Tadarida brasiliensis*) as the most commonly occurring bat species at Alameda Point. Other mammals that may occur within this habitat include the deer mouse (*Peromyscus maniculatus*), Virginia opposum (*Didelphus marsupialis*), raccoon (*Procyon lotor*), and red fox (*Vulpes vulpes*); however, the Navy has programs in place to limit the occurrence of predators such as raccoons, cats, dogs, and foxes to protect nesting birds (U.S. Navy, 1999a).

Special Status Species

Threatened and endangered species surveys conducted at Alameda Point are described in the threatened and endangered species survey report (TtEMI, 1998c). The report presents in detail the results of the vegetation, salt-marsh harvest mouse, and bird surveys. The following presents a brief summary of the special status species information contained in the threatened and endangered species report (TtEMI, 1998c).

The vegetation surveys conducted in 1995 and 1997 indicated that no threatened, endangered, or sensitive plant species were identified. No salt-marsh harvest mice were captured or observed during the salt marsh harvest mouse surveys conducted in 1995 and the small mammal trapping conducted in 1998. Special status species directly observed during the 1997 avian survey included the following:

- California brown pelican (*Pelecanus occidentalis californicus*)
- Great egret (*Ardea alba*)
- Great blue heron (*Ardea herodias)*
- Snowy egret (*Egretta thula*)
- Black-crowned night-heron (*Nycticorax nycticorax*)
- Canvasback (*Aythya valisineria*)
- Golden eagle (*Aquila chrysaetos*)
- Northern harrier (*Circus cyaneus*)
- California gull (*Larus californicus*)
- California least tern (*Sterna antillarum browni*)
- Caspian tern (*Sterna caspia*)
- Forster's tern (*Sterna forsteri)*
- Burrowing owl (*Speotyto cunicularia*)

- California horned lark (*Eremophila alpestriis actia*)
- Alameda song sparrow (*Melospiza melodia pusillula*)

2.2.3 Present-Day Land Use

The Runway Wetland consists of open land and ponds that are not used by the Navy for any particular activity. There is no record that the Runway Wetland was ever used in any capacity by the Navy, with the exception of the disposal of construction debris during the mid-1980s (Naval Natural Resources Management Staff, 1986).

2.2.4 Climate

The San Francisco Bay Area experiences a maritime climate with mild summer and winter temperatures. Prevailing winds in the Bay Area are from the west. Because of the varied topography of the Bay Area, climatic conditions vary considerably throughout the region. Rainfall occurs primarily during the months of October through April. Alameda Point, the closest weather station to the Runway Wetland, averages approximately 18 inches [0.46 m] of rainfall a year.

2.2.5 Geology

No information is available for the specific geology of the Runway Wetland. The whole of Alameda Point is made up of dredged fill material emplaced over shallow sediments. A general geology of the Alameda Point region is described below.

The nomenclature and description of the regional geology is based on the work of Trask and Rolston (1951), Radbruch (1957, 1969), Helley et al. (1979), Rogers and Figuers (1991), and Sloan (1990, 1992). The work of these investigators was generally regional in nature and was based on a limited number of borings in and around Alameda Point.

Alameda Point is located in the central portion of the eastern side of the San Francisco Bay and occupies a depression between two uplifted areas: the Berkeley Hills to the east and the Montara Mountains to the west. The depression and uplifted areas are formed by two subparallel, active faults: the San Andreas Fault west of the San Francisco Bay and the Hayward Fault east of the San Francisco Bay. Alameda Point and the San Francisco Bay are underlain by metamorphosed sandstone, siltstone, shale, graywacke, and igneous bedrock of Jurassic age, all of which comprise the Franciscan Formation (Fm). Alameda Island is underlain by 400 to 500 ft) of unconsolidated sediments overlying consolidated Franciscan bedrock (Rogers and Figuers, 1991).

Quaternary sediments consist of the following five units, from oldest to youngest: the Alameda Fm, the lower unit of the San Antonio Fm, the upper unit of the San Antonio Fm, the Merritt Sand Fm, and the Bay Mud Fm. All of these sedimentary units are overlain by the artificial fill that was used to construct Alameda Point.

The unconsolidated units and the approximate ages of these units are listed below from oldest to youngest, along with the equivalent nomenclature used by previous investigators (Trask and Rolston, 1951; Radbruch, 1957; Radbruch, 1969; and Rogers and Figuers, 1991):

- Pliocene to late Pleistocene terrestrial and estuarine deposits: the equivalent unit is the Alameda Fm.
- Late Pleistocene estuarine deposits: the equivalent unit is the lower unit of the San Antonio Fm (including the Yerba Buena Mud, also known as the Old Bay Mud).
- Late Pleistocene/Holocene alluvial deposits: the equivalent unit is the upper unit of the San Antonio Fm.
- Late Pleistocene/Holocene eolian deposits: the equivalent unit is the Merritt Sand.
- Holocene estuarine deposits: the equivalent unit is the Young Bay Mud. Because the Bay Mud consists of silt and clay with laterally discontinuous layers of silty and clayey sands, the formation is referred to as the Bay Sediments Unit (BSU) in the rest of this section.
- Dredged fill was placed over the BSU during the construction of Alameda Point.

The San Antonio Fm is made up of both estuarine (lower unit) and alluvial (upper unit) deposits. The Yerba Buena Mud is the uppermost member of the lower San Antonio Fm estuarine deposits.

2.2.6 Hydrogeology

No information is available for the Runway Wetland-specific hydrogeology. The general hydrogeology of the Alameda Point region is described below.

Alameda Point is underlain by two distinct aquifers. The deep aquifer occurs in terrestrial sediments of the Alameda Fm, while the shallow aquifer occurs in the Merritt Sand above the Yerba Buena Mud aquitard, which is found at depths ranging from 55 to 90 feet thick, and is continuous beneath all of Alameda Point. The Yerba Buena Mud aquitard is believed to be an effective hydraulic barrier between the shallow aquifer and the underlying Alameda Fm, since the Alameda Fm yields fresh water while the overlying Merritt Sand and upper unit of the San Antonio Fm yield saline to hypersaline water (Hickenbottom and Muir, 1988). Pumping tests performed in the Alameda Fm during which no drawdown was observed in the overlying Merritt Sand or upper unit of the San Antonio Fm also support this observation (Hydro-Search, Inc., 1977). Since the results from these pumping tests suggest that the Yerba Buena Mud aquitard serves as a hydraulic barrier, it is unlikely that the deep aquifer is at risk from any near-surface contamination at Alameda Point. The following discussion focuses on the shallow aquifer.

The shallow aquifer exists in the strata above the lower unit of the San Antonio Fm, and is subdivided into two locally interconnected water-bearing zones separated by a discontinuous aquitard (the BSU). The first water-bearing zone (FWBZ) of the shallow aquifer is unconfined and occurs in artificial fill. The second water-bearing zone (SWBZ) is semi-confined and occurs in Merritt Sand deposits and the upper unit of the San Antonio, where these deposits exist. The lower portion of the BSU forms the SWBZ where the Merritt Sand and the upper unit of the San Antonio Fm are absent. The SWBZ varies in thickness from 0 to 50 ft (0 to 15 m) as a result of erosion. Both the FWBZ and SWBZ are influenced by tidal fluctuations of the Bay. There is no direct hydraulic connection between the shallow aquifer systems on Alameda Island and the Oakland mainland because Oakland Inner Harbor bisects the Merritt Sand unit. The Merritt Sand unit on Alameda Island is, therefore, hydraulically isolated from mainland aquifers.

The BSU behaves as a local semi-confining layer. According to PRC and Montgomery Watson (MW) (1996) and TtEMI (1999) this observation is supported by 1) the lack of observed drawdown in the SWBZ when pumping tests were performed in the FWBZ artificial fill, 2) the lack of migration of saline water from the SWBZ into the fresh to brackish water of the FWBZ, and 3) the lack of migration of solvent indicators from the base of the fill into the BSU or of a breakthrough to the underlying Merritt Sand.

Artificial fill is continuous across Alameda Point and overlies all other late Quaternary sediments. The fill material is composed of various soil and sediment types, dominated by poorly graded, fine- to medium-grained sand with silt and clay. The fill is approximately 30 ft (9 m) thick at the western end of Alameda Island and is presumed to consist of dredge spoils from the surrounding Bay, Seaplane Lagoon, and Oakland Inner Harbor. The fill has been observed to contain layers of less permeable material that may facilitate lateral transport of groundwater and dissolved contaminants by inhibiting vertical flow (TtEMI, 1999). While this dredged fill is presumed to have contained saline pore waters at the time of its emplacement due to its origin in the Bay, the waters in the FWBZ are now relatively fresh. This indicates that the current FWBZ contains meteoric water, and that a freshwater lens has developed within it. This water is distinct from the more saline waters of the SWBZ (TtEMI, 1999).

Groundwater in the FWBZ at Alameda Point consists of a thin lens of fresh water floating on brackish to saline water. The interface between the fresh water and the brackish to saline water across the western and central regions of Alameda Point appears to be abrupt and coincides with the contact between the fill and BSU, where present (TtEMI, 1999). Below the contact between the fill and BSU (approximately 30 ft), groundwater is defined as brackish to saline. The value of 3000 milligrams per liter total dissolved solids is used for differentiation of fresh and brackish to saline groundwater (RWQCB 1995).

3.0 DATA REVIEW

3.1 SUMMARY OF DATA COLLECTION ACTIVITIES

This section provides a summary of data collection activities at the Runway Wetland. Sample locations for all media are illustrated in Figure 3-1.

3.1.1 Sediment Sampling

Sediment at the Runway Wetland was sampled in 1993 through 1995, and in 1997. A total of seven samples were collected in the ponds, and an eighth sample was collected near the northern border of the site.

During the 1993/1994 ecological assessment, four surface sediment samples were collected in the Runway Wetland. Two of the sediment samples were collected from the West Pond, and two sediment samples were collected from the East Pond. Sampling was conducted using a 4-inch-diameter stainless-steel hand corer to collect the top 4 inches of sediment (PRC, 1994). Samples collected in the 1993/1994 assessment were analyzed for chemical parameters and used to perform benthic invertebrate community analyses and solid-phase benthic invertebrate bioassays. Samples collected for benthic infauna analysis were sieved through 1-mm mesh screen, preserved in 10% formalin, and archived for later analysis. More recently, during the 1997 follow-on investigation, three surface sediment samples were collected, two in the West Pond, and one near the seawall south of the West Pond. The 1997 sediment samples were collected using a stainless-steel scoop to collect the top 6 inches of sediment (PRC, 1996b). Sediments collected during the 1997 investigation were analyzed for chemical parameters. A single sediment sample was collected along the northern boundary of Runway Wetland in 1995 as part of the environmental baseline survey and analyzed for chemical parameters.

Chemical data for all sediment samples in the Runway Wetland are presented in Section 3.2 and Appendix A.

3.1.2 Surface Water Sampling

Surface water sampling was conducted at the Runway Wetland during 1993, 1994, 1995, and 1997 to assess if the ponds were receiving any chemicals from the adjacent fill areas. In 1993, surface water samples were collected in the Runway Wetland from the East and the West Ponds and analyzed for metals, pesticides, polychlorinated biphenyls (PCBs, Aroclors), DDT (1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane) and its breakdown products, tributyl tin, total recoverable petroleum hydrocarbons, total suspended solids, and biological oxygen demand. Samples were collected in 1994 from the same locations and analyzed for high and low molecular weight polynuclear aromatic hydrocarbons (PAHs) and semivolatile organic compounds (SVOCs). Surface water samples collected in 1993 and 1994 were collected by immersion of nalgene sample bottles into the water (PRC, 1994). Additional surface water samples from each pond were collected during the 1997 sampling event. Water samples were

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FIGURE 3-1 – SAMPLING LOCATIONS AT THE RUNWAY WETLAND

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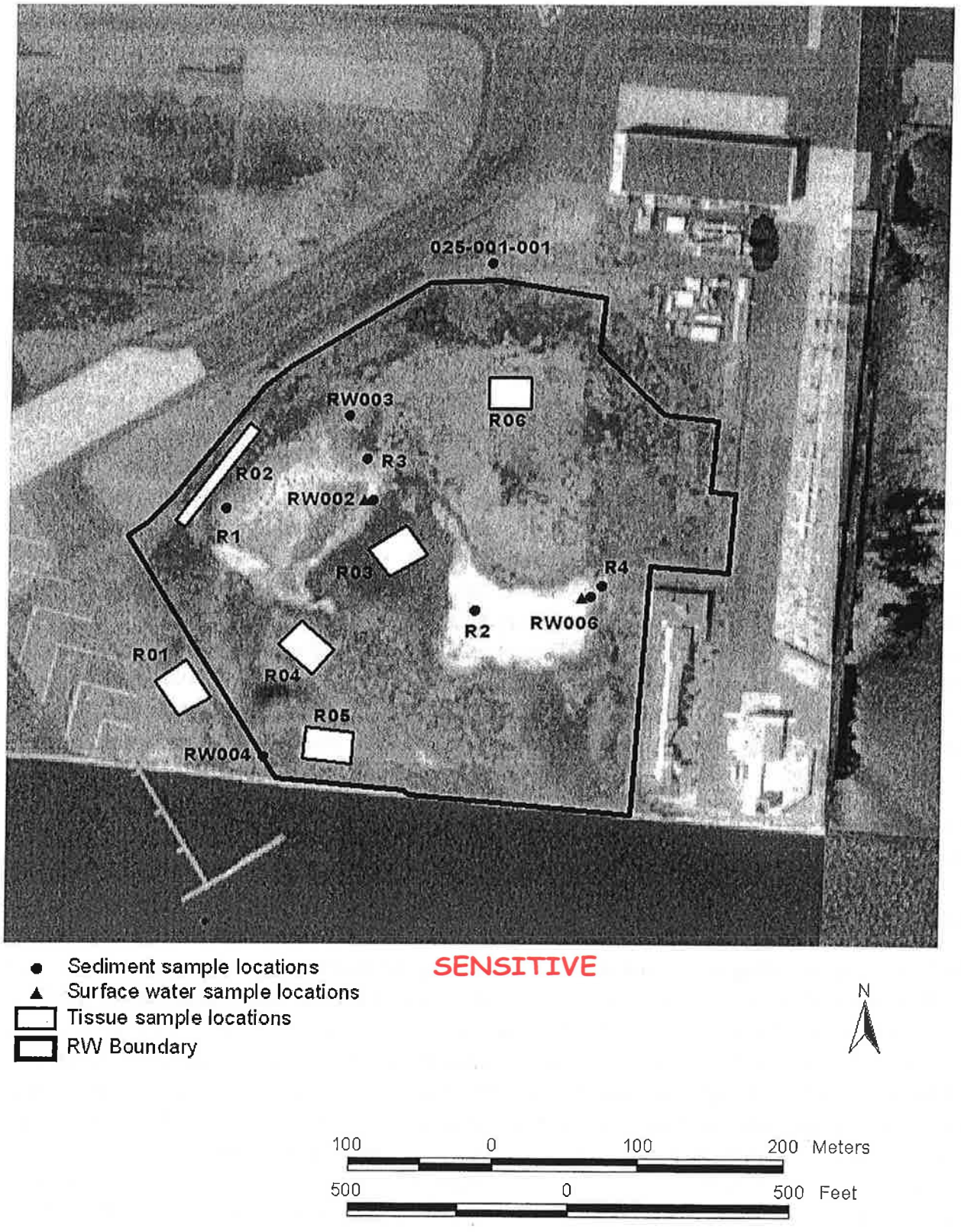

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Figure 3-1. Sampling locations at the Runway Wetland

collected in nalgene containers from the top 12 inches of water (PRC, 1996b). These samples were analyzed for all of the constituents listed above.

Surface water data are presented and discussed in Section 3.3 and Appendix A.

3.1.3 Porewater Sampling

During the 1997 investigation, three sediment porewater samples were collected from the Runway Wetland. Pore water was extracted from five-gallon bulk sediment samples collected from sampling locations RW002, RW003, and RW004 (PRC, 1996b).

Porewater data are presented in Appendix A.

3.1.4 Tissue Sampling

Plants, invertebrates, non-migratory fishes, and small mammals were sampled from the aquatic, wetland, and upland terrestrial habitats at the Runway Wetland. Plant and animal tissues were sampled from six locations in September 1998. Three sampling areas in the Runway Wetland were located in upland habitat and were sampled for small mammals, invertebrates, and vegetation. One sample of upland plant tissue (for example, grasses and California vetch) was collected from each area. All above-ground plant tissue was composited for each sample. A single composite sample of miscellaneous invertebrates was collected from all of the upland areas of the Runway Wetland. Small mammals were collected using live box traps deployed in the sampling areas overnight. Three sampling areas, located in wet portions of the Runway Wetland, were also sampled for small mammals, plants, and invertebrates using the same protocols as the terrestrial areas. As with terrestrial samples, invertebrates were scarce and a single composite sample was collected for the wetter areas of Runway Wetland. One fish sample was collected from the West Pond during this sampling event.

A total of five fish samples were collected from three locations in the East Pond and two locations in the West Pond during February 1997. Fish were caught using baited minnow traps that were deployed at each sampling location for several hours. All fish collected were Pacific Herring (*Clupea pallasi*).

Tissue data are presented and discussed in Section 3.4 and Appendix A.

3.1.5 Other Investigations

Wetland Delineation and Wetland Evaluation Technique (WET) Analysis

Jurisdictional wetlands were delineated in February and March 1993, which resulted in the identification of the wetlands within the West Beach Landfill Wetland and the Runway Wetland. Results of this work are presented in the "Naval Air Station Alameda Preliminary Wetland Delineation" (Habitat Restoration Group [HRG], 1993a). An analysis using the WET was conducted at the jurisdictional wetlands within the West Beach Landfill Wetland and the Runway Wetland in March 1993. Results of that work are presented in the "Naval Air Station

Alameda WET Analysis" (HRG, 1993b). Results of these two analyses also are presented in detail in the draft ecological assessment report (PRC, 1994) and summarized below.

The summary of the report for the Runway Wetland stated that the following features contribute to wetland function: irregular tidal influence, restricted outlets, seasonal ponding, dominance of impervious surfaces in the watershed, extensive vegetation cover, and its location along the Pacific Flyway migratory bird route. Each function was evaluated by assigning a rating of high, moderate, or low based on a matrix of threshold criteria. Groundwater recharge was rated low due to the underlying artificial fill. Groundwater discharge also was rated low because it is difficult to predict groundwater discharge in tidal systems. Sediment stabilization was rated high because the wetland is bordered on three sides by impervious surfaces, and on the fourth side a rock wall buffers the waves. Wildlife diversity/abundance breeding was rated low, mainly due to the noise from aircraft on the runway. It is likely that wildlife diversity/abundance will increase once the area is transferred to the U.S. Fish and Wildlife Service to be managed as a wildlife refuge. Aquatic diversity/abundance was also rated low, due to the small size (less than 40 acres), constricted outlet, seasonal ponding, and irregular tidal flooding of the Runway Wetland.

Sediment Toxicity Testing

Toxicity tests were conducted on sediment collected from the West Beach Landfill Wetland and the Runway Wetland in 1993. Solid-phase toxicity tests were conducted on sediments from four locations in the wetland using the amphipod *Eohaustorius estuarius* and the polychaete worm *Neanthes arenaceodentata.* Sediments were collected from locations R1 and R3 in the West Pond, and locations R2 and R4 in the East Pond (see Figure 3-1). Survival and reburial of the amphipod and growth of the polychaete worm were measured in five replicate tests conducted on surface sediments from each of the four sampling locations. Amphipod bioassays used 20 organisms per replicate and were conducted for 10 days under static conditions, with the number of surviving amphipods recorded at the end of the test. Polycheate worm tests were conducted using 5 juvenile organisms per replicate. Initial worm biomass was determined at time zero of the test, and again at the end of the test period (20 days). Amphipod survival was negatively impacted at location R3 in the West Pond, and was unimpacted at the other three locations. Growth of the polychaete worm was unimpacted at all four locations. Bioassay results are presented in Table 3-1.

Table 3-1. Results of Runway Wetland Invertebrate Sediment Bioassays

Station	Test Organism							
	Eohaustorius estuarius				*Neanthes arenaceodentata*			
	Mean Percent Survival	SD[a]	Mean Percent Reburial	SD	Mean Number Survival	SD	Mean Organism Weight (mg)	SD
Control	99.0	2.2	100.0	0.0	5.0	0.0	19.3	0.3
R1	96.7	4.1	100.0	0.0	5.0	0.0	20.7	1.5
Lab Replicate	100.0	0	100.0	0.0	NA[b]	NA	NA	NA
R2	92.0	2.7	98.9	2.5	5.0	0.0	20.3	1.2
R3	44.2	4.9	94.6	5.9	5.0	0.0	19.3	0.9
Lab Replicate	NA	NA	NA	NA	5.0	0.0	19.2	1.7
R4	99.0	2.2	100.0	0.0	5.2	0.0	19.8	2.1

[a] SD = standard deviation

[b] NA = not analyzed

3.2 ANALYSIS OF SEDIMENT DATA

Runway Wetland sediment samples collected in 1993 had laboratory replicate samples run, while samples collected in 1995 and 1997 had no replicate samples. In order to make the data from different years comparable for risk assessment purposes, decisions had to be made on how the 1993 replicate data would be handled to arrive at a single value to represent each sampling station. Since screening-level assessments generally require the most conservative approaches to be used, the maximum detected concentration among the replicates at each location was used to represent that location. If all of the replicates at a location were classified as nondetects, then the maximum detection limit among the replicates was used to represent the location.

Tables 3-2 through 3-6 are summary tables of inorganic and organic constituents organized by suites of analytes. The summary information includes the range of detected chemical concentrations across the locations at Runway Wetland, the range of reported detection limits for chemical constituents not detected, and an overall mean. The overall mean is the average of results from all locations across Runway Wetland. For those chemicals that were detected at all sampling locations at Runway Wetland, the mean was calculated using the maximum reported concentration at each location. For chemicals that were not detected at the site or were only detected at some locations, the mean was calculated using the maximum reported concentration for locations that had detected concentrations, and the mean of one-half detection limits for locations that were classified as nondetects. The use of one-half the detection limit to arrive at a site-wide mean is supported by EPA risk assessment guidance (EPA 1989).

Table 3-2. Summary of Inorganic Constituent Results in Runway Wetland Sediments

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/kg)	Detects Concentration Range (µg/kg)	Overall Mean* (µg/kg)
Aluminum	4	4		4940–18800	12112
Antimony	6	0	1–1.6		0.58
Arsenic	8	8		1.6–13	5.9
Barium	4	4		26.9–116	74.3
Beryllium	8	4	0.23–0.25	0.29–0.59	0.28
Cadmium	8	2	0.03–0.25	0.1–1.3	0.23
Calcium	3	3		2280–3350	2940
Chromium	8	8		24.9–150	74.2
Cobalt	4	3	4–4	8.8–13.7	8.6
Copper	8	8		6.7–59.8	27.1
Iron	3	3		13300–25500	19033
Lead	8	8		13–78	33
Magnesium	4	4		3080–11500	7225
Manganese	4	4		144–375	234
Mercury	8	7	0.16–0.16	0.09–0.68	0.29
Molybdenum	4	3	2.2–2.2	0.26–2.5	1.6
Nickel	8	8		23.5–110	55.6
Potassium	3	3		1970–6160	4450
Selenium	8	1	0.25–1.1	0.31–0.31	0.29
Silver	8	4	0.2–0.5	0.23–1.6	0.53
Sodium	3	3		2900–18000	11967
Thallium	8	2	0.41–0.81	0.5–1.6	0.47
Vanadium	4	4		21.4–68.1	43.9
Zinc	8	8		26.9–190	81.9

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-3. Summary of PAH Constituent Results in Runway Wetland Sediments

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/kg)	Detects Concentration Range (µg/kg)	Overall Mean* (µg/kg)
LMW PAHs					
2-Methylnaphthalene	8	0	85–430		116
Acenaphthene	8	0	85–430		116
Acenaphthylene	8	0	85–430		116
Anthracene	8	0	85–430		116
Fluorene	8	0	44–430		104
Naphthalene	8	0	85–430		116
Phenanthrene	8	0	85–430		116
HMW PAHs					
Benz(a)anthracene	8	2	85–430	24–160	108
Benzo(a)pyrene	8	2	85–430	32–150	108
Benzo(b)fluoranthene	8	2	85–430	56–330	133
Benzo(g,h,i)perylene	8	2	85–430	22–450	144
Benzo(k)fluoranthene	8	2	85–430	21–150	106
Chrysene	8	2	85–430	36–240	119
Dibenz(a,h)anthracene	8	1	85–430	120	123
Fluoranthene	8	4	85–430	34–210	131
Indeno(1,2,3-cd)pyrene	8	2	85–430	35–400	139
Pyrene	8	4	85–430	41–270	148

*Overall mean = average of results for the stations, where the result = max detect (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-4. Summary of Semivolatile Constituent Results in Runway Wetland Sediments

SVOC	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/kg)	Detects Concentration Range (µg/kg)	Overall Mean* (µg/kg)
1,2,4-Trichlorobenzene	8	0	85–430		116
1,2-Dichlorobenzene	8	0	85–430		116
1,3-Dichlorobenzene	8	0	85–430		116
1,4-Dichlorobenzene	8	0	85–430		116
2,2'-Oxybis(1-chloropropane)	7	0	85–430		106
2,4,5-Trichlorophenol	7	0	420–1000		323
2,4,6-Trichlorophenol	7	0	260–670		215
2,4-Dichlorophenol	7	0	250–430		161
2,4-Dimethylphenol	8	0	160–430		138
2,4-Dinitrophenol	7	0	420–1000		323
2,4-Dinitrotoluene	8	0	260–670		211
2,6-Dinitrotoluene	7	0	260–670		215
2-Chloronaphthalene	7	0	85–430		106
2-Chlorophenol	8	1	85–430	130	124
2-Methylphenol	8	0	85–430		116
2-Nitroaniline	7	0	420–1000		323
2-Nitrophenol	7	0	260–670		215
3,3'-Dichlorobenzidine	7	0	85–430		106
3-Nitroaniline	7	0	420–1000		323
4,6-dinitro-2-methylphenol	7	0	620–1400		466
4-Bromophenyl-phenylether	8	0	85–430		116
4-Chloro-3-methylphenol	8	0	160–430		139
4-Chloroaniline	8	0	250–430		164
4-Chlorophenyl-phenylether	8	0	85–430		116
4-Methylphenol	8	0	85–430		116
4-Nitroaniline	8	0	420–1000		338
4-Nitrophenol	8	1	420–1000	540	377
Benzidine	4	0	850–1400		490
Benzoic acid	4	0	850–1400		490
Benzyl alcohol	4	0	420–670		240
Bis(2-chloroethoxy)methane	8	0	85–430		116

Table 3-4 (continued). Summary of Semivolatile Constituent Results in Runway Wetland Sediments

SVOC	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/kg)	Detects Concentration Range (µg/kg)	Overall Mean* (µg/kg)
Bis(2-chloroethyl)ether	8	0	85–430		116
Bis(2-ethylhexyl)phthalate	8	2	85–340	38–310	114
Butylbenzylphthalate	8	0	85–430		116
Carbazole	4	0	260–430		182
Di-n-butylphthalate	8	2	180–430	19–190	129
Di-n-octylphthalate	8	0	85–430		117
Dibenzofuran	8	0	85–430		116
Diethylphthalate	8	1	85–430	120	123
Dimethylphthalate	8	0	85–430		116
Gasoline range organics	4	0	0.6–2		0.5
Hexachlorobenzene	7	0	85–430		106
Hexachlorobutadiene	7	0	160–430		132
Hexachlorocyclopentadiene	7	0	260–670		215
Hexachloroethane	7	0	160–430		132
Isophorone	8	0	85–430		116
N-nitroso-di-n-propylamine	8	0	85–430		116
N-nitrosodiphenylamine(1)	8	0	85–430		116
Nitrobenzene	7	0	85–430		106
Pentachlorophenol	8	0	420–1000		338
Phenol	8	1	160–430	20	118

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-5. Summary of Pesticides and Total PCBs Results in Runway Wetland Sediments

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/kg)	Detects Concentration Range (µg/kg)	Overall Mean* (µg/kg)
Pesticides					
4,4'-DDD	7	3	2.5–2.9	8–98	18
4,4'-DDE	7	3	2.5–2.9	5.1–8	3.7
4,4'-DDT	7	2	2.5–4	6.8–56	10
Aldrin	7	0	0.6–2.2		0.6
Alpha-BHC	7	0	0.6–2.2		0.6
Alpha-chlordane	7	2	0.6–2.2	0.69–2.2	0.86
Beta-BHC	7	1	1.3–94	1.6	21
Delta-BHC	7	0	1.3–94		21
Dieldrin	7	0	1.2–4.3		1.2
Endosulfan I	7	1	1.2–2.1	4	1.2
Endosulfan II	7	0	1.2–4.3		1.2
Endosulfan sulfate	7	0	1.2–4.3		1.2
Endrin	7	0	1.2–4.3		1.2
Endrin aldehyde	7	1	2.5–4	13	3.2
Endrin ketone	7	0	2.6–4.7		1.8
Gamma-BHC (lindane)	7	0	0.6–2.2		0.6
Gamma-chlordane	7	4	0.6–0.7	0.74–3.9	1.6
Heptachlor	7	0	1.3–94		21
Heptachlor epoxide	7	0	0.6–2.2		0.6
Methoxychlor	7	0	1.2–22		4.4
Toxaphene	7	0	49–220		56.5
Total PCBs					
Sum of Aroclors	7	3	199–232	119–180	174

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-6. Summary of TPH and Organo Tin Constituent Results in Runway Wetland Sediments

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/kg)	Detects Concentration Range (µg/kg)	Overall Mean* (µg/kg)
Organo Tin Compounds					
Dibutyl tin	7	0	2–5		2.1
Monobutyl tin	6	0	3–5		2.2
Tetrabutyl tin	7	0	2–5		2.2
Tributyl tin	7	1	2–5	25	5.4
TPHs					
Diesel range organics	4	0	11–30		9.9
Gasoline range organics	4	0	0.6–2		0.5
Motor oil range organics	4	4		18–84	51

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Most of the inorganic chemicals were detected at a majority of the stations sampled. For most of the organic chemicals, the detection rates were low. Low molecular weight (LMW) PAHs, defined as PAH constituents with less than four rings, were not detected in any sample. All high molecular weight (HMW) PAH constituents (PAHs with four or more rings) were detected at least once. For SVOCs, 6 of 51 analytes were detected one or more times. 2-chlorophenol, 4-nitrophenol, phenol, and diethylphthalate were each detected once, while bis(2-ethylhexyl)phthalate and di-n-butylphthalate were detected twice. Tributyl tin, detected in one of seven samples, was the only organo tin compound detected. Motor oil range petroleum hydrocarbons were detected in four of four samples, while gasoline range and diesel range petroleum hydrocarbons were not detected. Analyses were conducted for 21 pesticides, with DDT, DDE (1,1-dichloro-2,2,-bis[chlorophenyl]ethylene), DDD (1,1-dichloro-2,2-bis[p-chlorophenyl] ethane), alpha-chlordane, gamma-chlordane, beta-BHC, endosulfan I, and endrin aldehyde detected one or more times. At least one Aroclor compound was detected at three of seven locations. The results for PCBs are presented as total Aroclors (the sums of the seven individual Aroclor results).

To support the conceptual site model (Section 4) and interpretation of the risk screening for Human Health (Section 5) and Ecological (Section 6) effects, chemical concentrations of Runway Wetland analytes were compared to ambient conditions. The results of these comparisons are discussed in the risk characterization sections of the respective risk assessments. The comparisons included comparing Runway Wetland results to ambient upper tolerance limits for San Francisco Bay published by the Regional Water Quality Control Board (RWQCB, 1998).

Additionally, sediment chemistry results were statistically compared to ambient conditions to determine if the distribution of site concentrations is 'shifted' higher than the ambient distribution. This comparison involved the use of a set of distribution shift tests (background comparison tests) including: the t-test, Gehan test, quantile test, and slippage test. (Further details in Appendix A).

Whenever available, the data used to represent ambient conditions were the sediment chemistry results collected by the following programs: Bay Protection and Toxic Cleanup Program, and San Francisco Estuary Institute Regional Monitoring Program. All available sediment chemistry results from 1993 through 1997 are from stations classified as ambient by the RWQCB (1998). San Francisco Bay ambient data were chosen over ambient data collected for upland areas of Alameda Point because most of the available sediment samples for Runway Wetland represent areas that are submerged for much of the year, and because the site does have limited connectivity with the Bay. The decision to use San Francisco Bay ambient data was discussed with the BTAG and agreed to in a conference call held October 2, 2001. The Runway Wetland sediment analyses did not include a grain size analysis. Therefore, the results were compared to the full data set (i.e., across all grain sizes) from the ambient reference stations.

The results of the statistical comparisons indicate that inorganic chemicals are generally present at ambient levels. Statistical comparisons to ambient could not be conducted for constituents that were detected in fewer than 50% of the samples, which included most organic constituents.

3.3 ANALYSIS OF WATER DATA

Runway Wetland surface water samples included filtered and unfiltered samples collected at two locations during 1993 and two stations during 1997. The unfiltered samples are summarized in Tables 3-7 through 3-11. The water samples collected in 1993 had laboratory replicate samples run; samples collected in 1997 had no replicate samples. The replicate samples were collapsed into a single result for a particular location, collection date, and analyte in a manner analogous to that described for sediments in Section 3.2.

Tables 3-7 through 3-11 present inorganic and organic constituents organized by suites of analytes. The summary information includes the range of detected concentrations across the locations at Runway Wetland, the range of detection limits for nondetects, and an overall mean. The overall mean averages the results from all locations, including maximum detected concentrations and one-half of the detection limits of nondetects as discussed in Section 3.2.

Sixteen of 25 inorganic constituents were detected at a majority of the locations sampled. The detection rates for organic constituents were low. PAHs, pesticides, and Aroclors were not detected. Two of 51 SVOC analytes [bis(2-ethylhexyl)phthalate and diethylphthalate] were detected in one of three laboratory replicates at location R2. Dibutyl tin and tributyl tin were detected in one of two laboratory replicates at location R1. Motor oil range petroleum hydrocarbons were detected at both locations (RW002 and RW006) sampled in 1997.

Table 3-7. Summary of Inorganic Chemical Concentrations in Unfiltered Surface Water at Runway Wetland

Inorganic	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/L)	Detects Concentration Range (µg/L)	Overall Mean* (µg/L)
Aluminum	2	2		418–480	449
Antimony	5	0	2.1–3		1.3
Arsenic	5	4	10–10	2.2–11	5.4
Barium	2	2		25.9–47.6	36.7
Beryllium	5	0	0.02–5		1.5
Cadmium	5	0	0.28–5		1.6
Calcium	2	2		70000–82300	76150
Chromium	5	3	10–10	2.1–3.4	4.1
Cobalt	2	2		1.2–1.4	1.3
Copper	5	2	25–25	7.6–7.9	10.6
Iron	2	2		982–1040	1011
Lead	5	3	3–3	4.6–6.4	3.8
Magnesium	2	2		167000–262000	214500
Manganese	2	2		94.2–378	236
Mercury	5	0	0.1–0.5		0.2
Molybdenum	2	0	2.7–2.7		1.3
Nickel	5	3	40–40	9.2–10.8	16
Potassium	2	2		66900–101000	83950
Selenium	5	1	2.1–5	2.5–2.5	2.2
Silver	5	0	0.5–10		3.1
Sodium	2	2		1410000–2220000	1815000
Thallium	4	0	1.3–10		2.8
Titanium	1	0	10–10		5.0
Vanadium	2	2		3–6.6	4.8
Zinc	5	0	20–28.4		11.4

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-8. Summary of PAH Concentrations in Unfiltered Surface Water at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/L)	Detects Concentration Range (µg/L)	Overall Mean* (µg/L)
LMW PAHs					
2-Methylnaphthalene	4	0	1–5		1.5
Acenaphthene	4	0	1–5		1.5
Acenaphthylene	4	0	1–5		1.5
Anthracene	4	0	1–5		1.5
Fluorene	4	0	1–5		1.5
Naphthalene	4	0	1–5		1.5
Phenanthrene	4	0	1–5		1.5
HMW PAHs					
Benz(a)anthracene	4	0	1–5		1.5
Benzo(a)pyrene	4	0	1–5		1.5
Benzo(b)fluoranthene	4	0	1–5		1.5
Benzo(g,h,i)perylene	4	0	1–5		1.5
Benzo(k)fluoranthene	4	0	1–5		1.5
Chrysene	4	0	1–5		1.5
Dibenz(a,h)anthracene	4	0	1–5		1.5
Fluoranthene	4	0	1–5		1.5
Indeno(1,2,3-cd)pyrene	4	0	1–5		1.5
Pyrene	4	0	1–5		1.5

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-9. Summary of Semivolatile Chemical Concentrations in Unfiltered Surface Water at Runway Wetland

SVOCs	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/L)	Detects Concentration Range (µg/L)	Overall Mean* (µg/L)
1,2,4-Trichlorobenzene	4	0	1–5		1.5
1,2-Dichlorobenzene	4	0	1–5		1.5
1,3-Dichlorobenzene	4	0	1–5		1.5
1,4-Dichlorobenzene	4	0	1–5		1.5
2,2'-Oxybis(1-chloropropane)	4	0	1–5		1.5
2,4,5-Trichlorophenol	4	0	5–20		6.2
2,4,6-Trichlorophenol	4	0	5–5		2.5
2,4-Dichlorophenol	4	0	3–5		2
2,4-Dimethylphenol	4	0	2–5		1.7
2,4-Dinitrophenol	4	0	5–20		6.2
2,4-Dinitrotoluene	4	0	5–5		2.5
2,6-Dinitrotoluene	4	0	5–5		2.5
2-Chloronaphthalene	4	0	1–5		1.5
2-Chlorophenol	4	0	1–5		1.5
2-Methylphenol	4	0	1–5		1.5
2-Nitroaniline	4	0	5–20		6.2
2-Nitrophenol	4	0	5–5		2.5
3,3'-Dichlorobenzidine	4	0	1–5		1.5
3-Nitroaniline	4	0	5–20		6.2
4,6-Dinitro-2-methylphenol	4	0	10–20		7.5
4-Bromophenyl-phenylether	4	0	1–5		1.5
4-Chloro-3-methylphenol	4	0	2–5		1.7
4-Chloroaniline	4	0	3–5		2
4-Chlorophenyl-phenylether	4	0	1–5		1.5
4-Methylphenol	4	0	1–5		1.5
4-Nitroaniline	4	0	5–20		6.2
4-Nitrophenol	4	0	5–20		6.2
Benzidine	2	0	10–10		5
Benzoic acid	2	0	10–10		5
Benzyl alcohol	2	0	5–5		2.5

Table 3-9 (continued). Summary of Semivolatile Chemical Concentrations in Unfiltered Surface Water at Runway Wetland

SVOCs	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/L)	Detects Concentration Range (µg/L)	Overall Mean* (µg/L)
Bis(2-chloroethoxy)methane	4	0	1–5		1.5
Bis(2-chloroethyl)ether	4	0	1–5		1.5
Bis(2-ethylhexyl)phthalate	4	1	1–4	2.1	1.3
Butylbenzylphthalate	4	0	1–5		1.5
Carbazole	2	0	5–5		2.5
Di-n-butylphthalate	4	0	4–7.7		1.9
Di-n-octylphthalate	4	0	1–5		1.5
Dibenzofuran	4	0	1–5		1.5
Diethylphthalate	4	1	1–5	1.7	1.5
Dimethylphthalate	4	0	1–5		1.5
Hexachlorobenzene	4	0	1–5		1.5
Hexachlorobutadiene	4	0	2–5		1.7
Hexachlorocyclopentadiene	4	0	5–5		2.5
Hexachloroethane	4	0	2–5		1.7
Isophorone	4	0	1–5		1.5
N-nitroso-di-n-propylamine	4	0	1–5		1.5
N-nitrosodiphenylamine(1)	4	0	1–5		1.5
Nitrobenzene	4	0	1–5		1.5
Pentachlorophenol	4	0	5–20		6.2
Phenol	4	0	2–5		1.7

*Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-10. Summary of Pesticides and Total PCBs in Unfiltered Surface Water at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/L)	Detects Concentration Range (µg/L)	Overall Mean* (µg/L)
Pesticides					
4,4'-DDD	5	0	0.02–0.1		0.03
4,4'-DDE	5	0	0.02–0.1		0.03
4,4'-DDT	5	0	0.02–0.1		0.03
Aldrin	5	0	0.01–0.05		0.02
Alpha-BHC	5	0	0.01–0.05		0.02
Alpha-chlordane	5	0	0.01–0.5		0.15
Beta-BHC	5	0	0.01–0.05		0.02
Delta-BHC	5	0	0.01–0.05		0.02
Dieldrin	5	0	0.02–0.1		0.03
Endosulfan I	5	0	0.01–0.1		0.03
Endosulfan II	5	0	0.02–0.1		0.03
Endosulfan sulfate	5	0	0.02–0.1		0.03
Endrin	5	0	0.02–0.1		0.03
Endrin aldehyde	5	0	0.02–0.1		0.03
Endrin ketone	5	0	0.02–0.1		0.03
Gamma-BHC (lindane)	5	0	0.01–0.05		0.02
Gamma-chlordane	5	0	0.01–0.5		0.15
Heptachlor	5	0	0.01–0.05		0.02
Heptachlor epoxide	5	0	0.01–0.05		0.02
Methoxychlor	5	0	0.1–0.5		0.2
Toxaphene	5	0	1–2		0.8
Total PCBs					
Sum of Aroclors	5	0	1.4–8		1.9

*Overall mean = average of results for all sampling stations, where the result = max reported concentrations (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

Table 3-11. Summary of TPH and Organo Tin Concentrations in Unfiltered Surface Water at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (ng/L)[a]	Detects Concentration Range (ng/L)[a]	Overall Mean[b] (ng/L)[a]
Organo Tin Compounds					
Dibutyl tin	5	1	5–38	6	9.8
Monobutyl tin	5	0	5–31		7.7
Tetrabutyl tin	5	0	5–50		11
Tributyl tin	5	1	5–44	24	15
TPHs					
Diesel range organics	2	0	100–100 µg/L		50 µg/L
Gasoline range organics	2	0	50–50 µg/L		25 µg/L
Motor oil range organics	2	2		270–280 µg/L	275 µg/L

[a] ng/L unless otherwise noted

[b] Overall mean = average of results for all sampling stations, where the result = max reported concentration (if any detects among replicates for station), or mean of one-half the detection limits (if no detects for station).

3.4 ANALYSIS OF TISSUE DATA

Tissue data at the Runway Wetland were collected specifically for use as dose inputs to the ecological risk assessment food-chain models (TtEMI 1998b). Plant, fish, mammal, and invertebrate tissues were collected from the Runway Wetland.

3.4.1 Plant Tissue

Seven plant tissue samples were collected from the Runway Wetland. The samples collected represented stems and leaves of a variety of plant species. Three of the samples represented upland terrestrial plants, three samples were of emergent wetland plants, and one sample was of submerged aquatic vegetation. For the purpose of calculating summary statistics, data from all types of plant tissues were combined. Although it would have been preferable to calculate summary statistics for plants from the same habitats (e.g., separate statistics for terrestrial plants and aquatic plants), the small sample sizes did not allow for this. Since the herbivores and omnivores of interest at Runway Wetland are not species specific in their feeding habits, professional judgment deemed that combining all plant tissue data was necessary to gain maximum utility from the data. The number of samples, number of detects, mean tissue concentration, maximum tissue concentration, and detect status of the maximum concentration for constituents in plant tissue are provided in Table 3-12. Nondetects are represented in the table at one-half the reported detection limit. All plant tissue data are provided in Appendix A.

Table 3-12. Summary Statistics for Analytes in Plant Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean* (µg/kg)
PCB101	7	6	0.27	0.2–1.7	0.6
PCB105	7	5	0.19–0.43	0.1–0.6	0.24
PCB118	7	6	0.43	0.2–1.7	0.67
PCB128	6	0	0.1–0.5		0.12
PCB138	7	6	1.1	0.3–3.3	1.1
PCB153	7	6	0.37	0.2–2.2	0.6
PCB170	7	1	0.1–0.48	0.6	0.18
PCB18	6	0	0.1–.05		0.12
PCB180	7	5	0.17–0.37	0.09–1.1	0.31
PCB187	7	1	0.08–0.37	0.6	0.16
PCB195	6	0	0.1–0.5		0.12
PCB206	6	0	0.09–0.43		0.10
PCB209	7	0	0.09–0.44		0.12
PCB28	6	0	0.08–0.37		0.09
PCB44	6	3	0.08–0.37	0.15–0.3	0.15
PCB52	7	4	0.08–0.37	0.2–0.6	0.23
PCB66	7	6	0.37	0.2–1.1	0.53
PCB8	6	0	0.1–0.5		0.12
2,4'-DDD	7	2	0.2–1.1	0.5–7.2	1.3
2,4'-DDE	7	0	0.2–1.1		0.3
2,4'-DDT	7	0	0.2–1.1		0.3
4,4'-DDD	7	1	0.2–1.1	1.7	0.5
4,4'-DDE	7	0	0.2–1.1		0.3
4,4'-DDT	6	0	0.2–1.1		0.3
Aluminum	7	7		43–3287	545
Antimony	7	7		0.07–0.24	0.14
Arsenic	7			0.7–11.6	4.5
Barium	7	7		3.7–44.4	24.6
Beryllium	7	4	0.03–0.11	0.04–0.61	0.12
Cadmium	7	7		0.05–1.27	0.38
Calcium	7	7		1622–21602	7870

Table 3-12 (continued). Summary Statistics for Analytes in Plant Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean* (µg/kg)
Chromium	7	4	0.8–2.1	0.9–11	2.3
Cobalt	7	7		0.14–3.98	0.79
Copper	7	7		5.9–24.9	9.93
Iron	7	7		111–5370	929
Lead	7	7		0.92–23.48	5.00
Magnesium	7	7		1609–26851	6803
Manganese	7	7		10.8–25.41	404.87
Mercury	7	5	0.014–0.027	0.011–0.11	0.03
Molybdenum	7	7		0.59–3.51	2.03
Nickel	7	7		1.4–23.8	5.79
Potassium	7	7		4873–14904	10860.14
Selenium	7	0	3–6		2
Silver	7	3	0.009–0.17	0.005–0.02	0.02
Sodium	7	7		1296–115508	36937
Thallium	7	1	0.007–0.033	0.11	0.02
Tin	7	0	0.5–2.8		0.7
Vanadium	7	4	0.7–1.6	0.9–22	4.0
Zinc	7	7		21–50	32
Biphenyl	7	0	0.9–4.4		1.2
Benz(a)anthracene	7	6	3.7	1–17	4.2
Benzo(a)pyrene	7	5	1.7–3.7	1–17	4.3
Benzo(b)fluoranthene	7	6	3.2	1.9–28	6.2
Benzo(e)pyrene	7	6	2.1	1–22	5.0
Benzo(g,h,i)perylene	7	6	1.7	2–39	9.0
Benzo(k)fluoranthene	7	3	2–5	5–22	5
Chrysene	7	7		4–39	11
Dibenz(a,h)anthracene	7	5	3–5	4–21	10
Fluoranthene	7	5	9–11	11–44	16
Indeno(1,2,3-cd)pyrene	7	6	1.2	1.7–22	5.4
Perylene	7	1	0.8–3.7	4.4	1.4
Pyrene	7	7		7–39	14

Table 3-12 (continued). Summary Statistics for Analytes in Plant Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean* (µg/kg)
2-Methylnaphthalene	7	7		4–9	6
Acenaphthene	7	1	0.9–4.4	1.4	1.3
Acenaphthylene	7	0	0.9–4.4		1.2
Anthracene	7	1	0.9–4.4	1.4	1.3
Fluorene	7	3	1.4–3.3	1–2	1.3
Naphthalene	7	6	11	10–21	13
Phenanthrene	7	7		12–28	18
Aldrin	7	1	0.3–1.1	0.3	0.3
Alpha-BHC	7	0	0.2–1.1		0.3
Alpha-chlordane	7	0	0.2–2.5		0.6
Beta-BHC	7	0	0.2–1.1		0.3
Chlordane	7	1	11–55	17	16
Delta-BHC	7	0	0.3–1.1		0.3
Dieldrin	7	0	0.2–1.1		0.3
Endosulfan I	7	1	0.2–1.1	0.9	0.4
Endosulfan II	7	0	0.2–1.1		0.3
Endosulfan sulfate	7	0	0.2–1.1		0.3
Endrin	7	0	0.2–1.1		0.3
Endrin aldehyde	7	0	0.2–1.1		0.3
Endrin ketone	7	0	0.2–1.1		0.3
Gamma-BHC (lindane)	6	0	0.2–1.1		0.3
Gamma-chlordane	7	1	0.2–1.1	0.3	0.3
Heptachlor	7	0	0.2–1.1		0.3
Heptachlor epoxide	7	0	0.2–1.1		0.3
Methoxychlor	7	0	0.2–1.1		0.3
Mirex	7	0	0.2–1.1		0.3
Toxaphene	7	0	22–110		30
Trans-nonachlor	7	2	0.2–1.1	1–1.4	0.6
1-Methylnaphthalene	7	5	4.3–4.4	1–2.2	1.9
1-Methylphenanthrene	7	4	1.4–3.2	1–3.9	1.6
2,3,5-Trimethylnaphthalene	7	0	0.9–4.4		1.2

Table 3-12 (continued). Summary Statistics for Analytes in Plant Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean* (µg/kg)
2,6-Dimethylnaphthalene	7	2	2–11	5–22	6
Hexachlorobenzene	7	0	0.2–1.1		0.3
Dibutyl tin	7	2	3–11	3–17	5
N-butyl tin	7	1	4–22	64	13
Tetrabutyl tin	7	0	2–11		2.93
Tributyl tin	7	3	9–22	10–17	10
Dibenzothiophene	1	0	0.8		0.4

*The overall mean was calculated using one-half the reported detection limit for nondetected values.

Examination of the plant tissue data shows the one submerged plant sample (station R07) with concentrations of inorganic constituents at an order of magnitude higher than those observed in other plant samples. PAHs in the submerged plant sample were also elevated compared to the six terrestrial and emergent wetland plant samples. Concentrations of other organic constituents were fairly uniform across the plant samples. Both mean tissue concentrations and maximum tissue concentrations were used to calculate doses in the ecological risk assessment presented in Section 6.

3.4.2 Fish Tissue

Fish tissue was collected from five locations in 1997 (RW001, RW002, RW003, RW005, and RW006), and one location in 1998 (R07). All fish collected in 1997 were Pacific Herring, while the 1998 sample was unidentified as to species. For the purpose of calculating summary statistics, data from all fish tissue samples were combined. The number of samples, number of detects, mean tissue concentration, maximum tissue concentration, and detect status of the maximum concentration for constituents in fish tissue are provided in Table 3-13. Nondetects are represented in the table at one-half the reported detection limit. All fish tissue data are provided in Appendix A. The unidentified 1998 fish sample had higher concentrations of most metals and pesticides than observed in the 1997 samples. The reason for the observed differences in tissue concentrations between years is not clear. The 1998 samples also had lower reported detection limits for organic constituents than the 1997 samples. Both mean tissue concentrations and maximum tissue concentrations were used to calculate doses in the ecological risk assessment presented in Section 6.

Table 3-13. Summary Statistics for Analytes in Fish Tissues at Runway

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean
2,4'-DDD	1	1		27.6	27.6
2,4'-DDE	1	0	19		9.5
2,4'-DDT	1	0	19		9.5
4,4'-DDD	6	6		1–18.8	4.8
4,4'-DDE	6	6		6–34.1	9.7
4,4'-DDT	6	5	19	0.9–2.0	2.7
Aluminum	6	6		6.6–88	23
Antimony	6	0	0.08–0.17		0.08
Arsenic	6	4	0.17–0.18	0.28–4	0.86
Barium	6	6		0.8–8	2.2
Beryllium	6	0		0.009–0.08	0.01
Cadmium	6	6		0.039–0.15	0.06
Calcium	6	6		3560–49425	12112
Chromium	6	5	4	0.14–0.16	0.46
Cobalt	6	1	0.085–0.089	0.46	0.11
Copper	6	6		0.7–8.8	2.3
Iron	6	6		21–218	68
Lead	6	6		0.11–0.88	0.28
Magnesium	6	6		355–5785	1287
Manganese	6	6		9.7–249	50.8
Mercury	6	6		0.041–0.42	0.11
Molybdenum	6	1	0.062–0.065	0.15	0.05
Nickel	6	1	0.099–0.1	6.9	1.2
Potassium	6	6		3330–3870	3583
Selenium	6	5	4	0.44–0.59	0.78
Silver	6	1	0.07–0.08	0.12	0.06
Sodium	6	6		1460–36092	7019
Thallium	6	0	0.08–0.2		0.09
Tin	1	0	4		2
Vanadium	6	4	0.08–4	0.098–0.15	0.42
Zinc	6	6		15.9–218	50.53

Table 3-13 (continued). Summary Statistics for Analytes in Fish Tissues at Runway

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean
Biphenyl	1	0	38		19
Dibenzothiophene	1	0	38		19
Benz(a)anthracene	6	0	38–3600		771
Benzo(a)pyrene	6	0	38–3600		771
Benzo(b)fluoranthene	6	0	38–3600		771
Benzo(e)pyrene	1	0	38		19
Benzo(g,h,i)perylene	6	1	38–3600	207	803
Benzo(k)fluoranthene	6	0	38–3600		771
Chrysene	6	0	38–3600		771
Dibenz(a,h)anthracene	6	0	38–3600		771
Fluoranthene	6	0	38–3600		771
Indeno(1,2,3-cd)pyrene	6	0	38–3600		771
Perylene	1	0	38		19
Pyrene	6	0	38–3600		771
2-Methylnaphthalene	6	1	660–3600	38	775
Acenaphthene	6	0	38–3600		771
Acenaphthylene	6	0	38–3600		771
Anthracene	6	0	38–3600		771
Fluorene	6	0	38–3600		771
Naphthalene	6	1	660–3600	54	777
Phenanthrene	6	1	660–3600	46	776
Aldrin	6	0	0.8–19		1.9
Alpha-BHC	6	0	0.8–19		1.9
Alpha-chlordane	6	5	19	0.6–1	2.2
Beta-BHC	6	0	0.8–19		1.9
Chlordane	1	0	383		191.5
Delta-BHC	6	0	0.8–19		1.9
Dieldrin	6	0	2–23		2.7
Endosulfan I	6	0	0.8–19		1.9
Endosulfan II	6	0	2–19		2.4
Endosulfan sulfate	6	0	2–19		2.4
Endrin	6	0	2–19		2.4

Table 3-13 (continued). Summary Statistics for Analytes in Fish Tissues at Runway

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean
Endrin aldehyde	6	5	19	0.9–2	2.6
Endrin ketone	6	0	2–19		2.4
Gamma-BHC (Lindane)	6	0	0.8–19		1.9
Gamma-chlordane	6	2	0.8–19	0.7–0.9	2.0
Heptachlor	6	0	0.8–19		1.9
Heptachlor epoxide	6	0	0.8–19		1.9
Methoxychlor	6	0	8–19		4.9
Mirex	1	0	19		9.5
Toxaphene	6	0	83–1149		130
Trans-nonachlor	1	1		6.5	6.5
1-Methylnaphthalene	1	1		19	19
1-Methylphenanthrene	1	0	38		19
2,3,5-Trimethylnaphthalene	1	0	38		19
2,6-Dimethylnaphthalene	1	0	38		19
Hexachlorobenzene	6	0	19–3600		770
Dibutyl tin	6	1	2–3	8	2.3
N-butyl tin	1	0	19		9.5
Tetrabutyl tin	6	0	3–19		3.08
Tributyl tin	6	6		2–8	4.33
Aroclor-1016	5	0	17–17		8.5
Aroclor-1221	5	0	33–33		16.5
Aroclor-1232	5	0	17–17		8.5
Aroclor-1242	5	0	17–17		8.5
Aroclor-1248	5	0	17–17		8.5
Aroclor-1254	5	5		12–27	18.4
Aroclor-1260	5	5		11–18	15
1,2,4-Trichlorobenzene	5	0	660–3600		922
1,2-Dichlorobenzene	5	0	660–3600		922
1,3-Dichlorobenzene	5	0	660–3600		922
1,4-Dichlorobenzene	5	0	660–3600		922
2,2'-Oxybis(1-chloropropane)	5	0	660–3600		922

Table 3-13 (continued). Summary Statistics for Analytes in Fish Tissues at Runway

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean
2,4,5-Trichlorophenol	5	0	1600–8700		2240
2,4,6-Trichlorophenol	5	0	660–3600		922
2,4-Dichlorophenol	5	0	660–3600		922
2,4-Dimethylphenol	5	0	660–3600		922
2,4-Dinitrophenol	5	0	1600–8700		2240
2,4-Dinitrotoluene	5	0	660–3600		922
2,6-Dinitrotoluene	5	0	660–3600		922
2-Chloronaphthalene	5	0	660–3600		922
2-Chlorophenol	5	0	660–3600		922
2-Methylphenol	5	0	660–3600		922
2-Nitroaniline	5	0	1600–8700		2240
2-Nitrophenol	5	0	660–3600		922
3-Nitroaniline	5	0	1600–8700		2240
4,6-Dinitro-2-methylphenol	5	0	1600–8700		2240
4-Bromophenyl-phenylether	5	0	660–3600		922
4-Chloro-3-methylphenol	5	0	660–3600		922
4-Chlorophenyl-phenylether	5	0	660–3600		922
4-Methylphenol	5	0	660–3600		922
4-Nitroaniline	5	0	1600–8700		2240
4-Nitrophenol	0/5	0	1600–8700		2240
Bis(2-chloroethoxy)methane	0/5	0	660–3600		922
Bis(2-chloroethyl)ether	0/5	0	660–3600		922
Bis(2-ethylhexyl)phthalate	0/5	0	660–3600		922
Butylbenzylphthalate	0/5	0	660–3600		922
Carbazole	0/5	0	660–3600		922
Di-n-butylphthalate	0/5	0	660–3600		922
Di-n-octylphthalate	0/5	0	660–3600		922
Dibenzofuran	0/5	0	660–3600		922
Diethylphthalate	0/5	0	660–3600		922
Dimethylphthalate	0/5	0	660–3600		922
Hexachlorobutadiene	0/5	0	660–3600		922
Hexachloroethane	0/5	0	660–3600		922

Table 3-13 (continued). Summary Statistics for Analytes in Fish Tissues at Runway

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean
Isophorone	0/5	0	660–3600		922
N-nitroso-di-n-propylamine	0/5	0	660–3600		922
N-nitrosodiphenylamine (1)	0/5	0	660–3600		922
Nitrobenzene	0/5	0	660–3600		922
Pentachlorophenol	0/5	0	1600–8700		2240
Phenol	0/5	0	660–3600		922
Monobutyl tin	0/5	0	1–2		0.7

*Nondetects are represented in the tissue data at one-half the reported detection limit. If the maximum value reported in the table is identified as a nondetect, the reported value is one-half the reported detection limit.

3.4.3 Mammal Tissue

Six mammal tissue samples were collected from upland areas of the Runway Wetland. Five of the samples were house mice, while the remaining sample was a black rat. All of the samples represent whole carcasses minus the hide. Mouse hides were analyzed separately from the carcasses. All of the mammal carcass data (mouse and rat) were lumped for the purpose of calculating summary statistics. Hides were not included in the calculation of summary statistics, as it was judged that they were not directly comparable to carcass data. The carcass data were deemed to be the most realistic to use for dose inputs to carnivores, as most carnivores eat the entire carcass. The number of samples, number of detects, mean tissue concentration, maximum tissue concentration, and detect status of the maximum concentration for constituents in small mammal tissue are provided in Table 3-14. Nondetects are represented in the table at one-half the reported detection limit. All small mammal tissue data are provided in Appendix A. The rat tissue had slightly higher levels of zinc, nickel, manganese, and arsenic than observed in the mice tissue, but in general there were no patterns discernible across the mammal tissue samples.

Both mean tissue concentrations and maximum tissue concentrations were used to calculate doses in the ecological risk assessment presented in Section 6.

Table 3-14. Summary Statistics for Analytes in Mammal Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean*
PCB101	2	0	2.1–4.9		1.75
PCB105	5	2	1.5–1.7	0.28–1.8	0.89
PCB118	5	2	1.5–3.8	0.3–0.6	0.86
PCB128	5	2	1.5–1.5	0.3–0.3	0.57
PCB138	5	3	1.8–7.7	0.9–2.2	1.93
PCB153	5	3	2.4–29.4	0.6–4.3	4.76
PCB170	5	1	1.5–3.8	0.3	0.89
PCB180	5	4	12.2	0.6–3	2.48
PCB187	5	4	11.9	0.21–2.2	2.03
PCB195	5	0	1.5–1.7		0.77
[illegible]206	5	2	1.5–1.5	0.25–0.7	0.64
PCB209	5	0	1.5–1.7		0.77
PCB8	2	1	1.7	0.3	0.57
PCB18	2	0	1.5–1.7		0.8
PCB28	5	0	1.5–1.7		0.77
PCB44	5	0	0.29–3.9		0.86
PCB52	5	0	1.5–4.2		1.04
PCB66	5	0	1.5–3.6		0.98
2,4'-DDD	6	0	3–6		1.75
2,4'-DDE	6	0	3–12		2.6
2,4'-DDT	6	1	3–9	21	7
4,4'-DDD	6	0	3–24		4
4,4'-DDE	6	3	3–6	1.8–6.5	3.3
4,4'-DDT	6	0	3–21		5.2
Aluminum	6	6		37–629	184.17
Antimony	6	0	0.06–0.07		0.03
[illegible]	6	1	1.5–1.5	2.1	0.975
[illegible]	6	6		4.5–12	8.52
Beryllium	6	0	0.06–0.07		0.03

Table 3-14 (continued). Summary Statistics for Analytes in Mammal Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean*
Cadmium	6	5	0.06	0.09–0.12	0.10
Calcium	6	6		24908–58741	38142
Chromium	6	5	3	1.2–2.2	1.67
Cobalt	6	6		0.21–0.42	0.27
Copper	6	6		6–10.7	8.85
Iron	6	6		216–290	247
Lead	6	6		0.55–2.3	1.34
Magnesium	6	6		1375–2206	1556
Manganese	6	6		6.4–26.9	11.3
Mercury	6	6		0.015–0.09	0.05
Molybdenum	6	6		0.45–0.74	0.58
Nickel	6	6		4.5–8.4	6.0
Potassium	6	6		8822–9755	9395
Selenium	6	0	3–3		1.5
Silver	6	1	0.06–0.06	0.07	0.04
Sodium	6	6		3792–4930	4120
Thallium	6	0	0.06–0.07		0.03
Tin	6	0	3–3		1.5
Vanadium	6	0	3–3		1.5
Zinc	6	6		88–409	174
Biphenyl	6	0	30–35		15.7
Dibenzothiophene	3	0	30–31		15.3
Benz(a)anthracene	6	0	30–35		15.7
Benzo(a)pyrene	6	0	30–35		15.7
Benzo(b)fluoranthene	6	0	30–35		15.7
Benzo(e)pyrene	6	0	30–35		15.7
Benzo(g,h,i)perylene	6	0	30–35		15.7
Benzo(k)fluoranthene	6	0	30–35		15.7
Chrysene	6	0	30–35		15.7
Dibenz(a,h)anthracene	6	0	30–35		15.7
Fluoranthene	6	0	30–35		15.7

Table 3-14 (continued). Summary Statistics for Analytes in Mammal Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean*
Indeno(1,2,3-cd)pyrene	6	0	30–35		15.7
Perylene	6	0	30–35		15.7
Pyrene	6	0	30–35		15.7
2-Methylnaphthalene	6	0	30–35		15.7
Acenaphthene	6	0	30–35		15.7
Acenaphthylene	6	0	30–35		15.7
Anthracene	6	0	30–35		15.7
Fluorene	6	0	30–35		15.7
Naphthalene	3	0	30–31		15.3
Phenanthrene	6	0	30–35		15.7
Aldrin	6	0	3–6		1.7
Alpha-BHC	6	0	3–6		1.7
Alpha-chlordane	6	2	3–6	10–18	5.9
Beta-BHC	6	1	3–6	12.5	4.1
Chlordane	6	0	76–153		45.5
Delta-BHC	6	0	3–6		1.7
Dieldrin	6	3	3–3	2.8–6	2.7
Endosulfan I	6	0	3–6		1.7
Endosulfan II	6	1	3–6	2.1	1.8
Endosulfan sulfate	6	0	3–6		1.7
Endrin	6	1	3–6	3	2
Endrin aldehyde	6	0	3–6		2
Endrin ketone	6	0	3–6		1.7
Gamma-BHC (lindane)	6	1	3–6	1.8	1.8
Gamma-chlordane	6	0	3–6		1.7
Heptachlor	6	0	3–6		1.7
Heptachlor epoxide	6	3	7–12	6.4–9.5	6.5
Methoxychlor	6	0	3–6		1.7
Mirex	6	0	1.7–6		1.6
Toxaphene	6	0	151–306		91
Trans-nonachlor	6	0	3–6		1.7

Table 3-14 (continued). Summary Statistics for Analytes in Mammal Tissues at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)	Overall Mean*
1-Methylnaphthalene	6	0	30–35		15.7
1-Methylphenanthrene	6	0	30–35		15.7
2,3,5-Trimethylnaphthalene	6	0	30–35		15.7
2,6-Dimethylnaphthalene	6	0	30–35		15.7
Hexachlorobenzene	6	0	3–6		1.7
Dibutyl tin	5	0	15–77		14.8
N-butyl tin	5	1	15–77	24	17.2
Tetrabutyl tin	5	1	17–77	9	14.2
Tributyl tin	5	0	15–77		14.8

*Nondetects are represented in the tissue data at one-half the reported detection limit. If the maximum value reported in the table is identified as a nondetect, the reported value is one-half the reported detection limit.

3.4.4 Invertebrate Samples

Two terrestrial invertebrate samples and two aquatic invertebrate samples were collected from the Runway Wetland. For the purpose of calculating summary statistics, data from all invertebrate tissue samples were combined. The number of samples, number of detects, minimum tissue concentration, maximum tissue concentration, and detect status of the minimum and maximum concentrations of constituents in invertebrate tissue are provided in Table 3-15. Nondetects are represented in the table at the reported detection limit. All invertebrate tissue data are provided in Appendix A. Mean concentrations of constituents in invertebrate tissue were not calculated because not all samples were subject to full-suite chemical analyses, so many constituents are represented by only one or two samples. No patterns or trends are discernible across invertebrate tissue samples. Only the maximum invertebrate tissue concentrations were used to calculate doses in the ecological risk assessment presented in Section 6.

Table 3-15. Summary of Analytes in Invertebrate Tissue at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)
Aroclor-1016	1	0	19	
Aroclor-1221	1	0	38	
Aroclor-1232	1	0	19	
Aroclor-1242	1	0	19	
Aroclor-1248	1	0	19	
Aroclor-1254	1	1		18
Aroclor-1260	1	0	19	
PCB101	1	0	11	
PCB105	1	1		12.4
PCB118	1	1		5.3
PCB128	1	1		4
PCB138	1	1		19.2
PCB153	1	1		19.6
PCB170	1	1		4.7
PCB18	1	1		0.4
PCB180	1	1		7.6
PCB187	1	1		5.8
PCB195	1	0	1.8	
PCB206	1	1		0.7
PCB209	1	0	1.8	
PCB28	1	1		1.4
PCB44	1	1		2.2
PCB52	1	1		2.2
PCB66	1	1		5.8
PCB8	1	0	1.8	
2,4'-DDD	1	1		9.4
2,4'-DDE	1	1		8.3
2,4'-DDT	1	1		4.7
4,4'-DDD	2	0	2–8.3	
4,4'-DDE	2	2		4–15.6
4,4'-DDT	2	2		2–4

Table 3-15 (continued). Summary of Analytes in Invertebrate Tissue at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)
Aluminum	3	3		91–185
Antimony	3	1	0.05–0.07	0.07
Arsenic	3	3		0.4–2.5
Barium	3	3		8–11.6
Beryllium	3	0	0.05–0.07	
Cadmium	3	3		0.3–0.65
Calcium	3	3		1428–6621
Chromium	3	0	0.2–0.4	
Cobalt	3	3		0.18–0.43
Copper	3	3		23–42.4
Iron	3	3		200–529
Lead	3	3		0.62–2.68
Magnesium	3	3		1260–1815
Manganese	3	3		45.3–634
Mercury	4	3	0.02	0.033–0.33
Molybdenum	3	3		0.65–1.7
Nickel	3	3		1.1–2.5
Potassium	3	3		5471–9855
Selenium	3	0	2–4	
Silver	3	2	0.033	0.11–0.58
Sodium	3	3		1812–8986
Thallium	3	0	0.05–0.07	
Tin	3	0	2–4	
Vanadium	3	1	2–4	1.4
Zinc	3	3		94–152
Biphenyl	1	0	36	
Dibenzothiophene	1	0	36	
Benz(a)anthracene	1	0	36	
Benzo(a)pyrene	1	0	36	
Benzo(b)fluoranthene	1	0	36	
Benzo(e)pyrene	1	0	36	
Benzo(g,h,i)perylene	1	0	36	

Table 3-15 (continued). Summary of Analytes in Invertebrate Tissue at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)
Benzo(k)fluoranthene	1	0	36	
Chrysene	1	0	36	
Dibenz(a,h)anthracene	1	0	36	
Fluoranthene	1	0	36	
Indeno(1,2,3-cd)pyrene	1	0	36	
Perylene	1	0	36	
Pyrene	1	0	36	
2-Methylnaphthalene	1	1		14
Acenaphthene	1	0	36	
Acenaphthylene	1	0	36	
Anthracene	1	0	36	
Fluorene	1	0	36	
Naphthalene	1	1		11
Phenanthrene	1	0	36	
Aldrin	2	0	1–1.8	
Alpha-BHC	2	0	1–1.8	
Alpha-chlordane	2	0	1–1.8	
Beta-BHC	2	0	1–4.7	
Chlordane	1	0	36	
Delta-BHC	2	0	1–1.8	
Dieldrin	2	0	2–14.9	
Endosulfan I	2	0	1–1.8	
Endosulfan II	2	0	2–4.3	
Endosulfan sulfate	2	0	1.8–2	
Endrin	2	0	1.8–2	
Endrin aldehyde	2	0	1.8–2	
Endrin ketone	2	0	1.8–2	
Gamma-BHC (lindane)	2	0	1–1.8	
Gamma-chlordane	2	0	1–1.8	
Heptachlor	2	0	1–1.8	
Heptachlor epoxide	2	0	1–5.1	
Methoxychlor	2	0	1.8–10	

Table 3-15 (continued). Summary of Analytes in Invertebrate Tissue at Runway Wetland

Analyte	Total Samples	Total Detects	Nondetects Detection Limits Range (µg/Kg)	Detects Concentration Range (µg /Kg)
Mirex	1	0	1.8	
Toxaphene	2	0	95–109	
Trans-Nonachlor	1	0	1.8	
1-Methylnaphthalene	2	0	36–36	
2,3,5-Trimethylnaphthalene	1	0	36	
2,6-Dimethylnaphthalene	1	0	36	
Hexachlorobenzene	1	0	2.9	
Dibutyl tin	1	1		14
N-butyl tin	1	0	91	
Tetrabutyl tin	1	0	91	
Tributyl tin	1	0	91	

4.0 CONCEPTUAL SITE MODEL

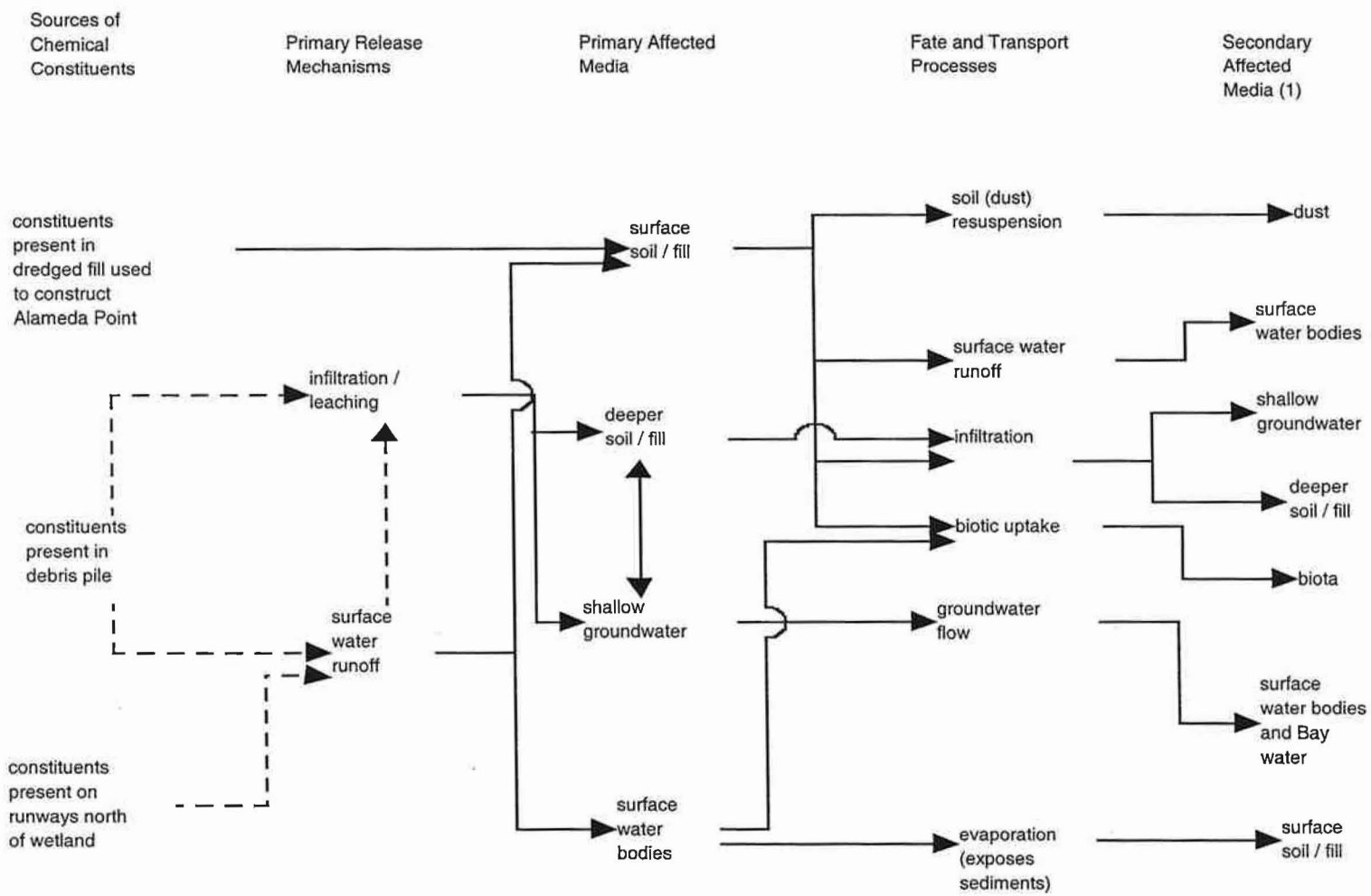
The conceptual site model (CSM) combines the information on site history and setting presented in Section 2 with the summary of environmental data (Section 3) to support evaluation of data adequacy for the screening assessments and subsequent recommendations. Agreement on the adequacy of the Runway Wetland data set to support screening-level human and ecological assessments was reached among stakeholders at a meeting of the Biological Technical Advisory Group (BTAG). This details of this agreement are provided in Appendix C. The critical assumptions agreed to with the stakeholders are 1) available data, although limited in areal extent, are representative of the entire site, and 2) the construction debris pile is not a source of hazardous chemical constituents to the Runway Wetland. This CSM therefore focuses on why this agreement is valid. A graphical depiction of the CSM pertaining to potential chemical fate and transport processes at the Runway Wetland is provided in Figure 4-1.

4.1 CONTAMINANT SOURCES

The Runway Wetland has not been identified as a candidate site for the Navy's Installation Restoration (IR) Program and no site-specific uses or releases of hazardous materials are known or suspected to have occurred. As described in Section 2.1, the Runway Wetland area was filled (probably with dredged sediments) between 1958 and 1963 during activities related to the lengthening of Runway 31. The only material other than the original fill that occurs within the wetland boundaries is construction debris that was placed in the mid-1980s.

Any possible contamination associated with materials within the Runway Wetland would be associated with either the fill material or the construction debris. The dredged sediments that probably constitute the fill used at the Runway Wetland may contain polynuclear aromatic hydrocarbons (PAHs) associated with historical industrial activities such as manufactured gas facilities and oil refineries that existed in the San Francisco Bay area from the late 19th century to the mid-20th century. This association of PAHs with dredged sediments has been discussed in an earlier document prepared for the Alameda Annex (Neptune and IT, 2000) and is the generally accepted model for the occurrence of PAHs in soil at Alameda Point. No specific hazardous constituents are expected to be associated with the largely concrete construction debris. This assumption is supported by US Environmental Protection Agency Region IX and State of California guidance that excludes construction debris from hazardous and municipal waste regulation (EPA, 1999).

The only other potential source of chemical contaminants for the Runway Wetland is residual contamination present on the surface of the taxiway and runway to the north and west of the site, respectively. Contamination on the tarmac might conceivably include trace amounts of petroleum hydrocarbons and metals related to aircraft and automobile exhaust and brakes. However, the amount of residual contamination from aircraft take-off and landing is likely to be relatively small so the tarmac is not expected to be a significant source of chemical contaminants to the wetland.



(1) Chemicals in secondary media that also exist as primary media are subject to identical fate and transport processes.

Dashed lines indicate that debris pile and runways are unlikely to be significant sources of contamination to the wetland.

Figure 4-1. Runway Wetland conceptual site model

The results of comparisons of site chemical and ambient chemical concentrations (Appendix A) indicate that relatively few chemicals at the Runway Wetland are clearly elevated with respect to ambient levels. Among metals, chromium, lead, mercury, and silver failed statistical comparison to ambient. Antimony, cadmium, and selenium were not detected in enough site samples to conduct statistical comparisons to ambient, while the RWQCB does not have ambient data for barium, beryllium, cobalt, molybdenum, thallium, or vanadium. Site gamma-chlordane concentrations are also higher than ambient concentrations. Concentrations of other metals and pesticides and concentrations of PAHs are either not elevated with respect to ambient, or analytical detection limitations and/or sample size render the results of these comparisons equivocal.

The results of the background comparisons are consistent with the hypothesis that no chemical releases have occurred at the Runway Wetland. Additionally, although PAHs were suspected of being elevated in Runway Wetland sediments based on the sediments' origin, these chemicals were found to be present at concentrations consistent with ambient levels. Based upon these considerations, the available information suggests that potential sources of contamination to the Runway Wetland have not discernibly affected site sediments.

4.2 CONTAMINANT RELEASE MECHANISMS

Contaminant release mechanisms for any contamination potentially present in the construction debris include leaching with precipitation and subsequent infiltration of the underlying fill, as well as release with surface water runoff. Release with surface water runoff is the only relevant release pathway to the Runway Wetland for contamination present on the runways. For reasons discussed above, neither the runways nor the debris pile are considered to be significant sources of contamination to the Runway Wetland. The connections between these sources and the primary release mechanisms are shown in Figure 4-1 as dashed lines for this reason. Because constituents present in the dredged fill are not "released" to the site, processes such as infiltration and surface water runoff are discussed in Section 4.3 within the context of contaminant fate and transport.

4.3 CONTAMINANT FATE AND TRANSPORT

Contaminant fate and transport mechanisms form the basis for discussions of how contaminants may be released to the accessible environment, and the processes responsible for transporting them away from the points of release. The types of fate and transport processes that may be important in the Runway Wetland are shown in Figure 4-1 and discussed in the following paragraphs.

Among the six fate and transport processes shown in Figure 4-1, soil resuspension, biotic uptake and groundwater flow are unlikely to have significant effects on chemical concentrations in environmental media used in the screening assessments. In the Runway Wetland, surface vegetative cover is dense and there is little exposed soil to allow wind-driven transport of soil particles to be an important transport mechanism. Biotic uptake can be a significant mechanism

of chemical transport when subsurface contamination is brought to the surface by plant roots and/or burrowing animals. However, the high spatial homogeneity in tissue chemical concentrations among terrestrial plants and animals suggests that any possible heterogeneity in subsurface chemical concentrations is not manifested in biotically-mediated transport. Groundwater flow may result in transport of dissolved chemicals, although tidal fluctuations may also affect the shallow aquifer underlying the Runway Wetland due to the proximity of the Bay. Although no groundwater data exist at the Runway Wetland, the absence of a discernible contaminant source suggests that this transport pathway is of minimal importance.

Chemicals on the ground surface are available for transport via surface water runoff. Transport of soluble chemicals may occur in the liquid phase, but this mechanism is expected to function primarily via suspension of particles for most contaminants. Because the land surface of the Runway Wetland is relatively flat and supports dense vegetation, surface runoff will generate relatively small flow velocities and hence will mobilize only fine-grained soil particles such as clays and silts. Buildup of fine particulates in the two ponds may result in locally elevated chemical concentrations in surface sediments because fine-grained particles generally are associated with higher chemical concentrations. For this reason, the sediment samples collected from the ponds should have higher chemical concentrations compared to soils in more upland areas of the site. A comparison of detected chemical concentrations in sediment samples from the ponds and sample 025-001-001 (located on the north boundary of the site) indicates that chemical concentrations are indeed generally higher in the pond sediment samples. This observation also supports the hypothesis that runoff from the runways north of the wetland is unlikely to be a significant source of contamination to the site.

Vertical migration of chemicals in the vadose zone of the upland areas of the Runway Wetland may be facilitated by the infiltration of precipitation. The rate of water infiltration in the upland areas of the Runway Wetland is dependent on several factors including the amount and type of precipitation, vegetation characteristics, soil characteristics, and local topography. Where a local depression in an upland area results in periodic, temporary surface water ponding following precipitation, such as the surface swale in the southeastern corner of the site, local infiltration volumes following precipitation may be high. Data to evaluate the relative importance of infiltration as a contaminant transport mechanism are unavailable, but the absence of a discernible contaminant source suggests that this transport pathway is of minimal importance.

The process of evaporation may have a seasonal effect on concentrations of certain chemicals in surface water and sediments at the Runway Wetland. During the rainy season (October through April), the size of the two ponds increases and therefore the volume of water available for dissolution of any chemical contamination in the water/sediment environment increases as well. In the dry season, as the ponds contract, water concentrations of soluble chemicals would be expected to increase. The importance of evaporation in the seasonal variability of chemical concentrations is likely to be limited to more soluble chemicals, and will also be affected by such factors as pH and salinity. Less soluble chemicals (such as PAHs and most pesticides) will tend to adsorb onto sediment particles in aqueous environments such as ponds. Sediment concentrations of less soluble chemicals would therefore not be expected to vary seasonally in

the manner of soluble chemicals. Sediment samples were collected primarily from the margins of the ponds at the end of the rainy season between the months of March and May. Therefore, concentrations of more soluble chemicals on these sediments may be lower than would have been the case at the end of the dry season when the sediments were not submerged.

4.4 LAND USE AND HUMAN EXPOSURE PATHWAYS

The city of Alameda is working with the Alameda Reuse and Redevelopment Authority to establish appropriate reuse activities for Alameda Point. Among the various land uses described in the long-term community reuse plan (Alameda Reuse and Redevelopment Authority, 1996), approximately 927 acres (ac) are scheduled to be transferred to the US Fish and Wildlife Service (USFWS). The 927 ac include 578 upland ac and 349 ac of open water. These 927 ac include the Runway Wetland. The USFWS will manage the acreage as the Alameda National Wildlife Refuge.

Exposure scenarios and pathways associated with management of the wildlife refuge are related to activities of USFWS staff who maintain structures such as walkways and fences, and refuge visitors. Occupational and recreational scenarios are applicable to USFWS staff and visitors, respectively.

Both occupational and recreational receptors are anticipated to be exposed to site soils along any walking trails that might be developed. However, during dryer periods of the year it is possible that exposure may occur in an essentially random manner for individuals who do not restrict themselves to paths. Primary chronic human exposure pathways that are likely to be complete in both scenarios include incidental soil ingestion and dermal contact with soil. Inhalation of suspended particulates, while potentially complete, is likely to be of lesser importance because of the dense vegetative cover on the site. Because the entire site is being converted to a wildlife refuge, future anthropogenic disturbance of site soils is likely to be negligible.

Incidental ingestion of pond water and dermal contact with pond water are unlikely to be complete chronic exposure pathways for occupational and recreational receptors. Wading in the ponds will probably be prohibited by USFWS for ecological reasons and workers who might need to enter the ponds would be expected to wear protective garments such as waders. Access trails that may be constructed will also presumably be located away from the ecologically-sensitive ponds. Therefore, any exposure events by occupational or recreational receptors are likely to be isolated accidental occurrences. Not only are chance exposure events difficult to quantify, the chemical toxicity values used in risk-based screening values are predicated upon chronic exposure. Chemical concentrations required to generate acute effects are generally much greater than those required to cause effects when exposure is chronic. For these reasons, receptor risks due to potential surface water exposure are expected to be insignificant and are not evaluated in the screening assessment.

Other potential human exposure pathways that are judged incomplete under the anticipated future land use include ingestion of groundwater and ingestion of plant or animal products

gathered on the site. A technical memorandum prepared for Alameda Point concludes that groundwater in the area is not suitable as a drinking water supply (TtEMI, 2000). Because the area will be a wildlife refuge, and because of the urban location, harvesting of edible plants, hunting, trapping and fishing, and gathering of other edible resources on a scale that might result in significant chronic human exposure is expected to be prohibited.

4.5 ECOLOGICAL EXPOSURE PATHWAYS

As stated in Section 4.4, the 27 acres encompassing the Runway Wetland will be managed by the U.S. Fish and Wildlife Service as part of the Alameda National Wildlife Refuge. Because of the designated use of the Runway Wetland, exposure of plants and animals to potential chemical contaminants is of primary concern. Primary exposure of plants to chemical constituents is via root uptake from sediment and surface water. Primary exposure to terrestrial and aquatic mammals and birds is via ingestion of contaminated food material (bioaccumulation) and surface water, and incidental ingestion of contaminated sediment. Dermal contact is considered a secondary exposure pathway for plants, mammals and birds at the site, as is inhalation of contaminated dust by mammals and birds. Although these pathways must contribute to the dose received by plants and animals, it is expected that the contribution of these pathways is relatively small and does not interfere with identification of contaminants of potential ecological concern (COPECs). Dermal contact and inhalation/respiration pathways have not typically been assessed quantitatively in ecological risk assessments, based on guidance that suggests that the ingestion route is most important to terrestrial animals (EPA, 1997a). Inhalation is viewed to be an insignificant pathway for contaminated soil in areas where plants cover the contaminated ground surface. Dermal exposure to wildlife is mitigated by the fur or feathers that cover the bodies of most vertebrates. In addition, the incidental consumption of soil during grooming is assumed to be included in the direct soil ingestion estimates. Soil exposure pathway analysis has shown that inhalation and dermal pathways contribute a small fraction of the dose obtained orally (EPA, 2000). The contribution from dermal exposure was shown to vary by contaminant type, with semivolatile organic chemicals (SVOCs) or high explosives contributing the largest amount and inorganic chemicals contributing the least to exposure dose (EPA, 2000).

5.0 SCREENING-LEVEL HUMAN HEALTH RISK ASSESSMENT

Consistent with US Environmental Protection Agency's (EPA) Risk Assessment Guidance for Superfund (RAGS), the approach for the screening-level human health risk assessment involves comparison of maximum and average sediment chemical concentrations at the Runway Wetland to EPA Region IX preliminary remediation goals (PRGs) for residential soils. The results of these comparisons are then interpreted using additional information including site history, uncertainty in the average site chemical concentrations, likely ambient chemical concentrations, and anticipated intensity of future land use relative to residential use.

Residential PRGs are used in the screening because published screening values consistent with recreational and very-low-intensity occupational land use are unavailable. Application of residential PRGs also ensures, if the site is determined to pose no significant risk in the screening, that future land uses need not be restricted to low-intensity activities. The degree of bias associated with the use of residential PRGs is discussed in detail in subsequent sections of this human health risk screening.

Section 5 is presented in four subsections. Chemicals of potential concern (COPCs) are identified in Section 5.1. The exposure scenarios, pathways, and model input parameters associated with both site-specific land use and the residential land use scenario that is the basis of EPA Region IX PRGs for residential soils are described in Section 5.2. A screening evaluation of site chemical concentrations relative to EPA Region IX PRGs for residential soils is presented in Section 5.3. An interpretation of the uncertainty in the screening results provided in Section 5.3 is presented in Section 5.4.

5.1 IDENTIFICATION OF CHEMICALS OF POTENTIAL CONCERN

In Section 5.9.4 of Risk Assessment Guidance for Superfund [RAGS] (EPA, 1989), the elements calcium, iron, magnesium, potassium, and sodium are identified as examples of chemicals that are essential macronutrients and therefore generally not evaluated as chronic toxicants. Other chemicals may also be essential nutrients in the body (for example, selenium) but are required at much lower levels in the diet than the macronutrients identified in RAGS. Subsequent to the publication of RAGS (EPA, 1989), EPA has further evaluated the potential toxicity of iron and a provisional toxicity value based on the recommended daily allowance has been published (EPA, 1996a). Therefore, although iron is an essential macronutrient, it will be evaluated as a COPC in this screening assessment on the basis of this provisional toxicity value. The macronutrients calcium, magnesium, potassium, and sodium are not addressed further in this screening assessment.

All other chemicals for which soil/sediment data are available are identified as COPCs and are evaluated in Section 5.3 of this report. Due to the limited sample support available for the Runway Wetland, chemicals are not prescreened prior to comparison with PRGs on the basis of

detection status or by comparison to ambient levels. These considerations will be introduced in the results discussion in Section 5.3.

5.2 EXPOSURE SCENARIOS AND PATHWAYS

Anticipated future land use and associated exposure scenarios and pathways have been described in Section 4.4 of this report. To summarize, the Runway Wetland will be managed by the US Fish and Wildlife Service (USFWS) as part of the Alameda National Wildlife Refuge. USFWS employees and visitors to the refuge were identified as potentially exposed populations. Relevant exposure pathways for both types of receptors are incidental ingestion of sediments, inhalation of suspended particulates, and dermal contact with soil. As stated in Section 4.4, chronic exposure to surface water is not expected to be a significant pathway for occupational or recreational receptors.

Current risk at the site is not evaluated since neither Navy personnel nor the public frequent the area; therefore, exposure is necessarily very limited. The future land use and exposure scenario used in this screening assessment is more conservative than an exposure scenario for the present would be.

Differences in reasonable maximum exposure (RME) assumptions for the site-specific recreational and occupational land use scenarios, and assumptions for the EPA Region IX residential PRGs used in this screening, are primarily related to the amount of time spent onsite during the year. The exposure frequency parameter is the most relevant for determining significant differences in exposure intensity between site land use scenarios and the residential land use scenario employed in the calculation of PRGs. The assumptions regarding exposure frequency parameter values are shown in Table 5-1.

Table 5-1. Comparison of Wildlife Refuge and Residential PRG Exposure Assumptions

Parameter	Unit	PRG Scenario		Site Recreational Scenario		Site Occupational Scenario	
		Value	Reference	Value	Reference	Value	Reference
Child exposure frequency	d/yr	350	EPA Region IX, 2000	12	BPJ[a] (a)[b]	0	child not evaluated
Adult exposure frequency	d/yr	350	EPA Region IX, 2000	12	BPJ (a)[b]	50	BPJ (b)[c]

[a] BPJ = best professional judgment.

[b] BPJ (a) = the reasonable maximum frequency of visits over several years is judged to be once per month.

[c] BPJ (b) = a researcher or maintenance worker is judged to visit at most once per week over several years to collect samples or data, or make minor repairs to walkways, platforms, or fences.

The recreational scenario exposure frequency of 12 days per year is equal to 3.4% of the residential PRG value of 350 days per year shown in Table 5-1. An EPA recommendation for the average percent of time spent outdoors, for individuals 12 years and older, is about 6% (EPA, 1997b, Section 15.4.1). Because younger children visiting the wildlife refuge on a regular basis would only be likely to do so with a parent or guardian, this value is also pertinent to children in this application. The fact that the value employed for the recreational exposure frequency at a single location equates to more then 50% of the total outdoor time of an average individual is a good indication that this is a protective estimate.

The relationship of exposure frequency to receptor chemical intake is linear because exposure frequency is a parameter in all three soil exposure pathways: incidental soil ingestion, dust inhalation, and dermal absorption. Chemical intake is a weight-averaged value that is usually expressed as a rate with units of milligram of chemical per kilogram body weight per day. On the basis of exposure frequency alone, yearly chemical intake associated with the site recreational scenario will be approximately 30 times lower (350/12) than intake associated with the residential PRG scenario.

Differences in chemical intake between the site occupational scenario and residential PRG scenario will vary because the residential scenario incorporates children and the occupational scenario does not. The yearly intake for adults in the residential PRG scenario is seven times greater (350/50) than in the site occupational scenario based on differences in exposure frequency. However, body weight averaged intake is higher for children than adults. Assuming an average body weight of 15 kg and 70 kg for children and adults, respectively (EPA Region IX, 2000), child yearly intake under the residential PRG scenario will be approximately 33 times greater than that for the adult worker due solely to differences in exposure frequency and body weight (350/50 multiplied by 70/15). For noncarcinogens, residential PRG values are based on child exposure, so the protective bias due to using residential PRGs for the site-specific occupational scenario is the factor of 33 described above. For carcinogens, exposure over the 30-year residential period employed in calculating PRGs is averaged assuming six years as a child and 24 years as an adult. Using protectiveness factors of 7 and 33 for adults and children, respectively, this equates to a factor of approximately 12 for carcinogens (7 multiplied by 24/30, plus 33 multiplied by 6/30) . The use of residential PRG values for this screening assessment therefore introduces protective bias when applied to the adult worker for both noncarcinogens and carcinogens.

The effect of the protective bias introduced via exposure frequency (days per year) increases linearly according to exposure duration because total intake is the product of yearly chemical intake and the number of years the receptor is exposed. Upper-bound estimates of exposure duration for occupational and residential scenarios are 25 and 30 years, respectively (EPA Region IX, 2000). Recreational activities may be assumed to have a 30-year exposure duration by analogy to residential (EPA, 1991). The effect of exposure duration in increasing the protective bias of the screening is therefore only slight (30/25), and is limited to the occupational scenario.

5.3 RESULTS OF HUMAN HEALTH SCREENING

In this section of the screening assessment, maximum and average site sediment COPC concentrations are compared to EPA Region IX residential PRG values. When average and/or maximum site concentrations exceed PRG values, or when PRG values for specific chemicals are unavailable, an evaluation of the significance of these occurrences is provided. The uncertainty associated with the results of the human health screening is discussed in Section 5.4.

Maximum and average sediment concentrations for COPCs identified in Section 5.1 are compared to chemical-specific PRG values in Table 5-2. Possible chemicals of concern are indicated in bold font. Reasons for identification as a possible chemical of concern include reported concentrations or detection limits exceeding the chemical-specific PRG, or the lack of a PRG value.

Table 5-2. Identification of Possible Chemicals of Concern

Chemical	Number of Samples	Number of Detects	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	PRG (mg/kg)
Acenaphthene	8	0	0.43[a]	N.C.[b]	3,700
Acenaphthylene	8	0	**0.43**[a]	N.C.	**N.A.**[c]
Aldrin	7	0	0.0022[a]	N.C.	0.029
Aluminum	4	4	18,800	12,112.5	76,000
Anthracene	8	0	0.43[a]	N.C.	22,000
Antimony[d]	6	0	1.6[a]	N.C.	31
Arsenic	8	8	**13**	**5.93**	**0.39**
Barium	4	4	116	74.28	5,400
Benz(a)anthracene	8	2	0.43[a]	0.108	0.62
Benzo(a)pyrene	8	2	**0.43**[a]	**0.108**	**0.062**
Benzo(b)fluoranthene	8	2	0.43[a]	0.133	0.62
Benzo(g,h,i)perylene	8	2	**0.45**	**0.145**	**N.A.**
Benzo(k)fluoranthene	8	2	0.43[a]	0.106	6.2
Beryllium	8	4	0.59	0.28	150
BHC[e], alpha	7	0	0.0022[a]	N.C.	0.009
BHC[e], beta	7	1	0.094[a]	0.021	0.32
BHC[e], delta	7	0	**0.094**[a]	N.C.	**N.A.**
BHC[e], gamma (Lindane)	7	0	0.0022[a]	N.C.	0.44
Cadmium[f]	8	2	1.3	0.23	37 (9)
Chlordane, alpha	7	2	0.0022	0.00086	1.6
Chlordane, gamma	7	4	0.0039	0.0016	1.6
Chromium[g]	8	8	150	74.2	210
Chrysene	8	2	0.43[a]	0.119	62
Cobalt	4	3	13.7	8.65	4,700
Copper	8	8	59.8	27.15	2,900
4,4'-DDD	7	3	0.098	0.0108	2.4
4,4'-DDE	7	3	0.008	0.0037	1.7
4,4'-DDT	7	2	0.056	0.010	1.7
Dibenz(a,h)anthracene	8	1	**0.43**[a]	**0.123**	**0.062**
Dibutyl tin	7	0	0.005[a]	N.C.	18
Dieldrin	7	0	0.0043[a]	N.C.	0.03

Table 5-2 (continued). Identification of Possible Chemicals of Concern

Chemical	Number of Samples	Number of Detects	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	PRG (mg/kg)
Endosulfan I[h]	7	1	0.004	0.00123	370
Endosulfan II[h]	7	0	0.0043[a]	N.C.	370
Endosulfan sulfate[h]	7	0	0.0043[a]	N.C.	370
Endrin	7	0	0.0043[a]	N.C.	18
Endrin aldehyde[i]	7	1	0.013	0.00316	18
Endrin ketone[i]	7	0	0.0047[a]	N.C.	18
Fluoranthene	8	4	0.43[a]	0.131	2,300
Fluorene	8	0	0.43[a]	N.C.	2,600
Heptachlor	7	0	0.094[a]	N.C.	0.11
Heptachlor epoxide	7	0	0.0022[a]	N.C.	0.053
Indeno(1,2,3-cd)pyrene	8	2	0.43[a]	0.139	0.62
Iron	3	3	**25,500**	19,033	**23,000**
Lead	8	8	78	33.15	400
Manganese	4	4	375	234	1,800
Mercury[j]	8	7	0.68	0.29	23
Methylnaphthalene (2-)	8	0	**0.43**[a]	N.C.	**N.A.**
Methoxychlor	7	0	0.022[a]	N.C.	310
Molybdenum	4	3	2.5	1.57	390
Monobutyl tin	6	0	0.005[a]	N.C.	18
Naphthalene	8	0	0.43[a]	N.C.	56
Nickel[k]	8	8	110	55.63	1,600
Phenanthrene	8	0	**0.43**[a]	N.C.	**N.A.**
Pyrene	8	4	0.43[a]	0.148	2,300
Selenium	8	1	1.1[a]	0.29	390
Silver	8	4	1.6	0.53	390
Tetrabutyl tin[l]	7	0	0.005[a]	N.C.	18
Thallium	8	2	1.6	0.53	5.2
Toxaphene	7	0	0.22[a]	N.C.	0.44

Table 5-2 (continued). Identification of Possible Chemicals of Concern

Chemical	Number of Samples	Number of Detects	Maximum Concentration (mg/kg)	Average Concentration (mg/kg)	PRG (mg/kg)
Tributyl tin[l]	7	1	0.025	0.0054	18
Vanadium	4	4	68.1	43.88	550
Zinc	8	8	190	81.86	23,000

[a] N.A. = not available.

[b] N.C. = not calculated. (Not detected in any sample).

[c] Maximum reported detection limit.

[d] As "antimony and compounds" in EPA Region IX PRG table.

[e] Benzene hexachloride (BHC) is entered as hexachlorocyclohexane in the PRG tables.

[f] Value in parentheses is the "CAL-modified PRG" values provided in the EPA Region IX PRG table.

[g] As "total chromium (1:6 ratio of Cr VI:Cr III)" in EPA Region IX PRG table.

[h] As "endosulfan" in EPA Region IX PRG table.

[i] As "endrin" in EPA Region IX PRG table.

[j] As "mercury and compounds" in EPA Region IX PRG table.

[k] As "nickel (soluble salts)" in EPA Region IX PRG table.

[l] As "tributyl tin oxide" (organic tin) in EPA Region IX PRG table.

Nine specific chemicals were identified as possible chemicals of concern in Table 5-2. Among these chemicals, five were so identified because EPA has not published toxicity criteria for the chemicals. Consequently, EPA Region IX has not published a PRG value for these chemicals. These chemicals included: acenaphthylene, benzo(g,h,i)perylene, delta-BHC, 2-methylnaphthalene, and phenanthrene. In accordance with EPA guidance (EPA 1989, Section 8.4), the potential consequences of the lack of toxicological criteria for these five chemicals are evaluated in this assessment. The potential health risks related to these five chemicals are discussed by comparison of site concentrations to surrogate chemical PRGs. Arsenic, benzo(a)pyrene, and dibenz(a,h)anthracene had maximum detected values (or a detection limit) and average chemical concentrations exceeding their respective PRG values. Iron exceeded its PRG only for the maximum detected concentration. The potential health risks related to these four chemicals are discussed by comparison to ambient levels.

Evaluation of Acenaphthylene, Benzo(g,h,i)perylene, delta-BHC, 2-Methylnaphthalene and Phenanthrene by Use of Surrogates

As indicated in Table 5-2, PRGs have not been developed for acenaphthylene, benzo(g,h,i)perylene, delta-BHC, 2-methylnaphthalene or phenanthrene. Acenaphthylene and acenaphthene are virtually identical PAHs. Both are three-ring compounds where two of the rings are six-carbon and the third is five-carbon. The only difference between the compounds is that acenaphthylene has an additional carbon double bond in the five-carbon ring structure.

Therefore, acenaphthene is chosen as a surrogate chemical for acenaphthylene. As observable in Table 5-2, the acenaphthene PRG is thousands of times higher than the maximum concentration for acenaphthylene. Therefore, acenaphthylene is unlikely to pose a health risk at the Runway Wetland.

Benzo(g,h,i)perylene, a six-ring PAH, consists of two "nested" phenanthrene molecules each containing three rings. Benzo(g,h,i)perylene and phenanthrene share the similar trait of containing a "bay" region (an area on the molecule where carcinogenically reactive epoxides might form) without evidence of carcinogenicity in the available animal data. The four-ring PAH pyrene is selected as a toxicity surrogate for these PAHs as it is most similar in structure among the PAHs that do not exhibit carcinogenicity. As observable in Table 5-2, the pyrene PRG is thousands of times higher than the maximum concentrations of phenanthrene and benzo(g,h,i)perylene. Therefore, these chemicals are also unlikely to pose a health risk at the Runway Wetland.

Naphthalene is selected as an appropriate surrogate chemical for 2-methylnapthalene because it is the parent molecule, differing only by the substitution of a methyl group in place of a hydrogen atom on one of the two benzene rings comprising naphthalene. Neither naphthalene nor 2-methylnapthalene were detected in any site samples and their maximum detection limits (0.43 mg/kg) were well below the naphthalene PRG of 56 mg/kg. On this basis, 2-methylnapthalene is considered unlikely to pose a health risk at the Runway Wetland.

EPA Region IX publishes PRGs for three isomers of BHC (alpha, beta, and gamma) as well as "technical grade" BHC. The range of the residential PRG values is 0.086 mg/kg (alpha isomer) to 0.42 mg/kg (gamma isomer). The maximum detection limit for delta-BHC was 0.094 mg/kg, which is approximately equal to the lowest PRG for the three isomers. Delta-BHC was not detected in any sample. Only a single detection of any of the three BHC isomers was reported, and this value (0.0016 mg/kg for beta-BHC in sample number 013-RWW-007) is J-qualified and suspect because it is slightly below the nominal BHC detection limit of 0.0022 mg/kg for Contract Laboratory Program routine organic chemical analysis. For these reasons, both the presence of any BHC compounds in site sediments and any potential associated health risks are unlikely.

Evaluation of Arsenic, Benzo(a)pyrene, Dibenz(a,h)anthracene and Iron by Use of Ambient Data

With the exception of iron, the residential PRG values of these chemicals are based on carcinogenic effects. The iron PRG is based on a provisional toxicity value that limits intake of iron to approximately the same rate associated with the recommended daily allowance for females aged 11 to 50 years (EPA, 1996a). The residential PRG is approximately at the midpoint of the average and maximum site iron concentrations.

Average and maximum site concentrations for these chemicals, excepting arsenic, exceed corresponding PRGs by at most a factor of approximately two. Site concentrations of arsenic, however, are approximately 14 (mean concentration) to 33 times (maximum concentration) higher than the arsenic PRG. Therefore, one may conclude that the majority of potential cancer

risk associated with exposure to the chemicals with detected concentrations exceeding a PRG value is due to arsenic.

Ambient sediment concentration data are available for arsenic, iron, benzo(a)pyrene and dibenz(a,h)anthracene. Maximum and mean site sediment chemical concentrations are compared to upper tolerance limit (UTL) and mean ambient concentrations in Table 5-3. Derivation of the mean ambient concentrations and UTLs is discussed in Appendix A of this report. San Francisco estuary ambient sediment UTL concentrations developed by the Regional Water Quality Control Board (RWQCB) were obtained from Table 3 (<100% fines) of Ambient Concentrations of Toxic Chemicals in Sediments (RWQCB, 1998) for use in this screening. The use of the RWQCB ambient data for this screening was discussed and agreed to with the BTAG during a teleconference on October 2, 2001. The details of this agreement are provided in Appendix C.

Table 5-3. Comparison of Site Sediment Chemical Concentrations with Ambient Levels

Chemical	Maximum Site Sediment Concentration (mg/kg)	Mean Site Sediment Concentration (mg/kg)	RWQCB UTL Value (mg/kg)	Mean Ambient Concentration (mg/kg)
Arsenic	13	5.93	15.3	10.68
Iron	25,500	19,033	N.A.[a]	37,744
Benzo(a)pyrene	0.43[b]	0.108	0.412	0.15605
Dibenz(a,h)anthracene	0.43[c]	0.123	0.0327	0.01908

[a] N.A. = not available.

[b] Maximum reported detection limit; the highest detected value was 0.15 mg/kg.

[c] Maximum reported detection limit; the only detected value was 0.12 mg/kg.

As is evident from Table 5-3, ambient levels of arsenic, iron, and benzo(a)pyrene are higher than the corresponding concentrations of these chemicals in Runway Wetland sediments. Dibenz(a,h)anthracene was the only chemical for which reported concentrations exceeded ambient values.

5.4 INTERPRETATION OF HUMAN HEALTH SCREENING

The results of the numerical comparisons of site data and EPA Region IX PRGs indicate that there is little or no potential for unacceptable chemical hazards due to sediment exposure, and that chemical cancer risk associated with site sediments is equal to or less than risk associated with ambient levels of these chemicals. As discussed in Section 4.4, chemical intake via chronic surface water exposure is not likely to be a complete exposure pathway. Therefore, the results of the human health risk screening indicate no potential for site-related chemical hazard or incremental cancer risk due to exposure to chemical contaminants.

The interpretation of the human health screening results provided here is consistent with recommendations regarding uncertainty assessment in Risk Assessment Guidance for Superfund (EPA, 1989). The two principal sources of uncertainty in the screening assessment are uncertainty in the average chemical concentrations in site sediments and uncertainty in the applicability of the available ambient chemical data for evaluating ambient contributions to site risks. These uncertainties were managed by introducing intentional protective bias in the selection of screening criteria and site-specific exposure assumptions. The nature of the uncertainties and compensating protective bias are discussed in the following paragraphs. Because this is a screening-level assessment, the EPA Region IX PRGs are used as definitive health-protective benchmarks; uncertainties and protective biases relating to assumptions underlying the PRGs are not explored.

Uncertainty in the Average Chemical Concentrations in Site Sediments

The Runway Wetland encompasses 27 acres with eight samples available to characterize site sediments. No sediment samples were collected in the northeast or southeast sections of the site, nor were any samples obtained from the debris piles or from sediment below the debris piles. The sediment samples were collected only within or near the ponds, with the exception of Locations RW004 and 025-001-001, located at the southwestern corner and northern border of the site, respectively (see Figure 3-1). All of the samples were surface samples with a maximum depth of 6 in. (16 cm). However, as discussed in Section 4, chemical concentrations in pond sediments are generally expected to be higher than in sediments from other on-site locations and, due to the lack of site operations or known sources of chemical constituents, there is no reason to expect chemical concentrations to be higher at depth. Additionally, as discussed below, the average site concentration used in the comparison to PRG values was biased high. For these reasons, the probability that actual site chemical concentrations are considerably higher than those evaluated in this screening assessment is low.

As discussed in Section 3.2, the average site concentration is a conservative estimate that uses the maximum value among replicate samples at any location to represent the chemical concentration at that sampling location. Uncertainty in the average concentration among site samples was introduced when some replicates were nondetects because the true value of a nondetect may range between zero and the detection limit. PAHs were not detected in most samples and certain PAHs are potentially associated with toxic chemical hazards. There is significant variability in the calculation of average site concentrations of these chemicals due to the range between zero and the detection limits. As discussed in Section 3.2, one-half the detection limit was used to represent nondetect values when calculating average concentrations. This is a protective assumption supported by EPA risk assessment guidance (EPA, 1989) and resulted in a high bias in the resulting PAH concentrations used in the screening assessment. For arsenic, which was detected in 100% of site samples, the issue of how to handle nondetects among the replicate samples is irrelevant. Since arsenic contributes the most to potential site cancer risk, the practical effect of uncertainty in the average chemical concentrations due to nondetect values is negligible for cancer risk.

Little uncertainty is introduced by the choice of surrogates for the five COPCs lacking PRG values because site concentrations are generally much lower than the surrogate PRGs. A possible exception is delta-BHC, where the highest detection limit among site samples slightly exceeds the lowest residential PRG values among the three BHC isomers for which PRG values are published. As discussed in Section 5.3, only one of the four BHC isomers (beta-BHC) was detected in sediments at the Runway Wetland, and in only a single sample at a concentration below the nominal detection limit. Because there is little evidence that BHC compounds are present in site sediments, and because of the protective bias in the choice of screening values, uncertainty in the surrogate used to represent the toxicity of delta-BHC is not significant.

Protective Bias in the Screening Criteria and Site Exposure Assumptions

EPA Region IX residential PRGs are based on RME conditions for residential land use. As described in Section 5.2, yearly chemical intake associated with site-specific occupational or recreational exposure to soil or sediment is likely to be significantly lower than that calculated using the exposure assumptions that are the basis of the residential PRGs. The difference between calculated chemical intake for the residential PRG and site-specific chemical intake can vary depending on whether the chemical is a carcinogen or not. Carcinogenic effects may occur over a lifetime even after exposure has stopped, so cumulative chemical exposure over the entire exposure duration (both as a child and adult) is evaluated. Noncarcinogenic health effects are evaluated only during the period of exposure, so PRGs are usually based on child exposure because children generally have higher dose rates than adults from environmental exposures. As stated in Section 5.2, the PRG exposure assumptions result in protectiveness factors of approximately 30 (noncarcinogens) and 12 (carcinogens) relative to occupational exposure. The protectiveness factor for recreational exposure is approximately 30 due solely to the discrepancy in the number of days spent on-site, which is the same across health effects.

The protectiveness factors summarized above indicate the relative magnitude of the protective bias in the screening assessment due to the choice of screening criteria. In fact, a more thorough evaluation would show that the degree of bias is even higher. For carcinogens, in particular, the bias introduced by the protectiveness in yearly chemical intake is multiplied by the number of years of exposure. Hence, the protectiveness factor of 12 noted above should be multiplied by the number of years of exposure. RME estimates of exposure duration for residence in one home and employment in one location are 30 and 25 years, respectively. The use of PRGs that incorporate child soil ingestion rates (which are greater than those for adults) also introduces a protective bias when applied to an occupational scenario.

As discussed in Section 5.2, the use of an exposure frequency of 12 days per year in the recreational scenario is also likely to be biased high relative to an average individual. The value of 12 days per year results in an amount of time spent outdoors that is 50% of the total amount of time an average individual spends outdoors.

Uncertainty in the Applicability of the Available Ambient Chemical Data

As shown in Table 5-3, the average site arsenic concentration is approximately two times lower than the mean of the ambient data set, and almost three times less than the UTL of the ambient data set, published by the RWQCB. This indicates that site risks due to arsenic exposure are below ambient levels. However, the average site arsenic concentration is still approximately 14 times higher than the arsenic residential PRG value. Hence, the applicability of the arsenic ambient data is a critical factor in determining whether site-related cancer risks may exist. It is generally recognized that ambient arsenic concentrations in the Bay area exceed risk-based thresholds such as the residential PRGs. For example, the City of Oakland has tabulated background metal concentrations from locations in California considered relevant to Oakland's geology. These California arsenic values range from 1.8 to 31 mg/kg www.oaklandpw.com/ulrprogram/metals.pdf. The arsenic values tabulated by the City of Oakland are consistent with the mean ambient concentration of 10.68 mg/kg shown in Table 5-3.

The concentrations of many analytes in the Runway Wetland data set are lower than concentrations presented in the ambient data set. In particular, iron concentrations in the Runway Wetland data set are lower than those in the ambient data. Because iron concentrations are commonly used to assess the comparability of the soil or sediment matrices across data sets, this suggests that metal concentrations in the two data sets are not strictly comparable. With regard to arsenic, this means that "ambient risk" being higher than site risk may simply be an artifact of the different sample matrices. However, because most data sets in the City of Oakland survey of ambient metal concentrations have higher soil arsenic concentrations that the Runway Wetland, it is reasonable to assume that cancer risk due to exposure to arsenic in ambient soil in the Alameda and Oakland area is indeed high relative to the Runway Wetland.

6.0 ECOLOGICAL RISK SCREENING

An ecological risk screening was performed for the Runway Wetland to determine if existing data indicated the need for a baseline ecological risk assessment (BERA). The ecological risk screening uses protective exposure and dosing assumptions to determine if site chemicals pose a sufficient potential risk to ecological receptors to warrant further investigation in a baseline ERA. The risk screening also identifies those contaminants of potential concern and exposure pathways that warrant further investigation. The risk screening for Runway Wetland was conducted in accordance with the US Environmental Protection Agency (EPA) Superfund Ecological Risk Assessment Guidance (EPA, 1997a) and Navy ERA guidelines (Navy, 1999b). Steps 1 and 2 of the 8-step EPA Superfund guidance encompass the screening portion of the ERA. The Runway Wetland risk screening also encompasses Step 3a of the EPA guidance, which encompasses the refinement of the list of chemicals of potential ecological concern (COPEC) by applying more site-specific assumptions to the screen. Tier 1 of the Navy ERA guidelines is equivalent to Steps 1, 2 and 3a of the 8-step EPA Superfund guidance. The ecological risk screening was conducted using existing surface sediment, surface water, and biological tissue data.

6.1 ECOLOGICAL RISK SCREENING METHODOLOGY

The ecological risk screening consists of the screening level problem formulation and ecological effects evaluation; the screening exposure estimate and risk calculation; and the refinement of the COPEC list. The screening problem formulation is summarized in Section 6.2. The screening exposure estimate and risk calculation was conducted in two parts. The first part involved comparing maximum concentrations of constituents in sediment to conservative sediment screening benchmarks. The methodologies and results of this comparison are presented in Section 6.3. Constituents that failed the initial comparison to screening thresholds were carried forward to the second part of the screening: food chain modeling to upper-trophic level receptors. In this step, daily doses of the remaining COPECs were calculated to nine upper trophic level receptors. The calculated doses were compared to available toxicity reference values (TRVs) for birds and mammals. The methodologies and results of the food chain modeling are presented in Section 6.4. Constituents failing the comparison to TRVs were carried forward to the COPEC refinement step of the ecological risk screening, which is discussed in Section 6.5. The protocol for conducting the ecological risk screening was presented to the Biological Technical Advisory Group (BTAG), discussed, and agreed upon during an October 2, 2001 teleconference. Appendix B presents the ecological screening protocol discussed with the BTAG.

6.2 ECOLOGICAL RISK SCREENING PROBLEM FORMULATION

The ecological risk screening presented in this section is based upon the conceptual site model described in Section 4, and the ecological setting presented in Section 2. The BTAG has agreed that it was reasonable to assume that no waste has been disposed into the Runway Wetland, and

there are no continuing sources of chemical constituents to the Runway Wetland. Potential exposure pathways to ecological receptors are summarized in Table 6-1.

Table 6-1. Summary of Ecological Exposure Pathways

Exposure Pathway	Plants	Animals
Respiration of vapors	Incomplete pathway	Incomplete pathway
Inhalation of airborne particulates	Not applicable	Secondary pathway
Plant uptake from soil/sediment and water	Primary pathway	Not applicable
Incidental ingestion of sediment/soil	Not applicable	Primary pathway
Ingestion of water	Not applicable	Primary pathway
Dermal contact/deposition	Secondary pathway	Secondary pathway
Foodstuff ingestion	Not applicable	Primary pathway

It is assumed that the primary exposure of ecological receptors to contaminants at the Runway Wetland is through ingestion of sediment/soil and water, and via food-chain uptake. For terrestrial animals, sediment was treated as soil for purposes of exposure through incidental ingestion. This is appropriate since the size of the ponds fluctuates seasonally, allowing sediments to be exposed to terrestrial receptors during dry times of the year and not all of the Runway Wetland is submerged land. Inhalation of vapors was considered an incomplete exposure pathway since volatile organic chemicals were not detected in the sediment or water., Inhalation of suspended particulate matter was considered a minor pathway because the upland areas are well vegetated, which inhibits airborne resuspension of soil or sediment particulates. A generalized food web for the Runway Wetland area is presented in Figure 6-1.

Given that the Runway Wetland provides suitable habitat for a number of bird and mammal species, potential risk to upper-trophic levels is a concern at the site. Rationale for selection of upper-trophic level receptors is provided in Section 6.4.

6.3 COMPARISON TO SCREENING BENCHMARKS

To arrive at an initial list of COPECs, a screening protocol was used that was consistent with the screening protocol developed for the Navy Sediment Work Group (SWG, 2000) and was acceptable to the BTAG. Constituents in sediment were first compared to sediment ecological screening benchmarks accepted by the Navy Sediment Work Group (SWG, 2000). The benchmarks used for the initial screen were thresholds based on published no observed effects levels (NOELs). When an available benchmark was based on a lowest observed effects level, the benchmark was multiplied by 0.1 to arrive at an estimated NOEL benchmark. The use of an uncertainty factor of 0.1 to arrive at a NOEL based benchmark was justified in the EPA ecological risk assessment guidance (EPA, 1999). Maximum surface sediment concentrations of each constituent were compared to SWG sediment screening benchmarks. If the maximum value

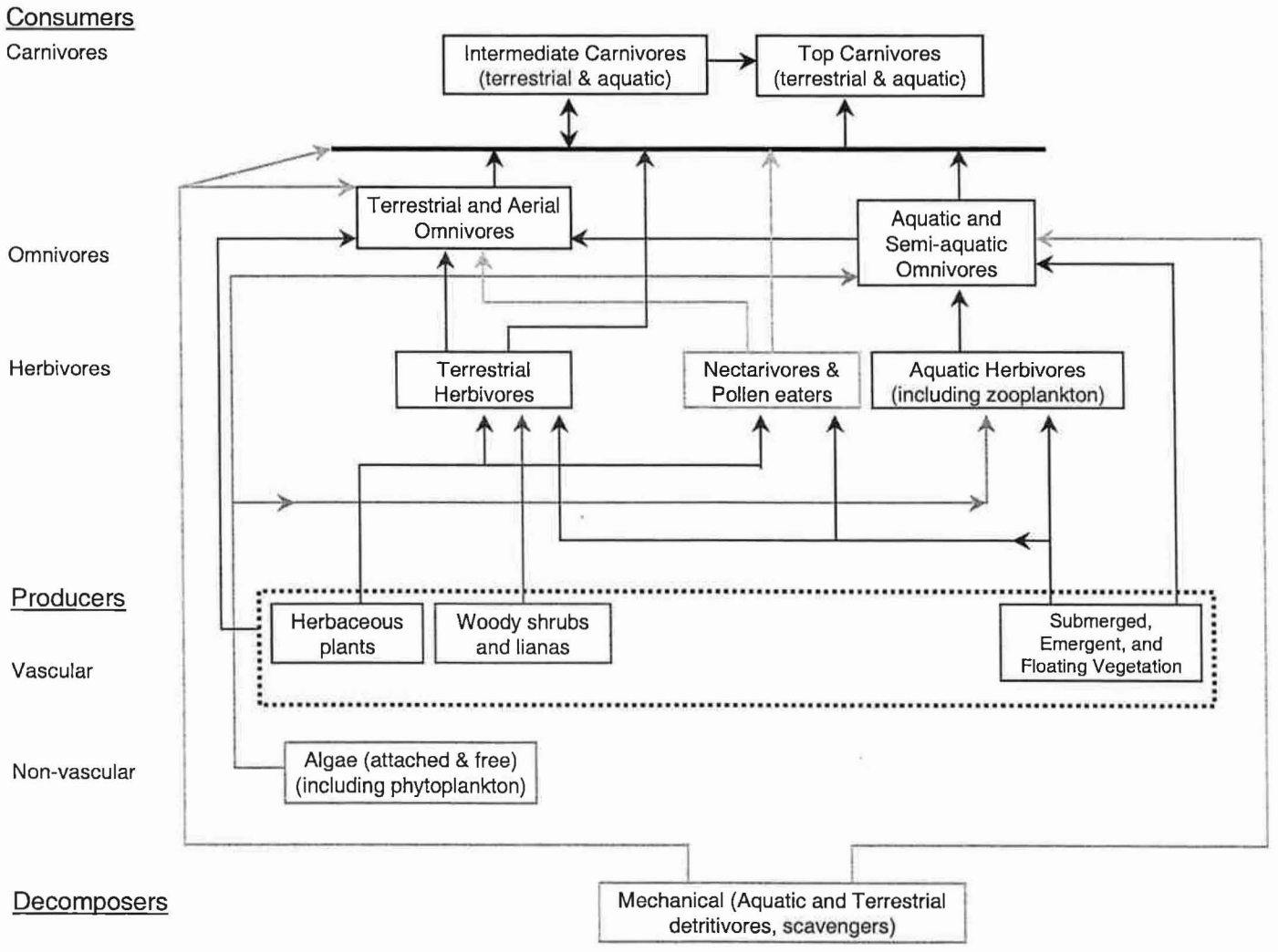


Figure 6-1. Runway Wetland food web

was a nondetect, the detection limit was compared to the screening benchmark. Any constituents with maximum detected concentrations or with detection limits exceeding their respective screening benchmarks were retained for dose modeling to food-chain receptors. Any constituents that are listed as bioaccumulating constituents by EPA Region IX (Hoffman, 1998) were retained for food-chain evaluation, even if the detected concentrations were less than the ecological screening benchmarks. Detected constituents for which screening benchmarks were not available were also retained for further evaluation. The analytes calcium, magnesium, potassium, and sodium were not retained as analytes due to their status as essential nutrients to animals and plants at the site.

Results of the sediment screening are presented in Table 6-2. 19 constituents were retained as COPECs due to detected concentrations exceeding screening benchmarks; 13 constituents were retained because they were detected and no screening benchmarks were available; 22 constituents were retained because their reporting limits for nondetects exceeded screening benchmarks; and 6 constituents were retained due to their status as bioaccumulators, even though the maximum detected values were less than screening benchmarks.

6.4 FOOD-CHAIN MODELING TO ECOLOGICAL RECEPTORS

Risk to upper trophic level receptors was assessed by constructing food-chain models to estimate daily dose to receptors and comparing that dose to avian and mammalian toxicity reference values (TRVs). Selection of receptors for the food-chain models was completed in agreement with the BTAG. Rationale for receptor selection and the exposure parameters for each receptor are presented in Section 6.4.1. Chemical-specific avian and mammalian TRVs chosen for the dose comparisons are discussed in Section 6.4.2. Dose calculations and TRV comparisons are presented in Section 6.4.3.

6.4.1 Ecological Receptor Selection for Food-Chain Models

Organisms for the food-chain models were chosen that were native or naturalized to the Alameda Point area, potentially foraged in the area year-round, and were amenable to having their common exposure pathways characterized by a food chain model for contaminant uptake. The list of organisms used as surrogates for the food-chain modeling was finalized after discussions with both the Alameda BRAC Closure Team (BCT) and the BTAG. The following list of receptors were identified for the screening-level ERA food-chain models:

- Red fox (mammalian carnivore)
- California ground squirrel (mammalian herbivore)
- Raccoon (mammalian omnivore)
- Great blue heron (avian carnivore, aquatic prey)
- Mallard (aquatic avian herbivore, omnivore, and invertebrate feeder)
- Alameda song sparrow (terrestrial avian omnivore)
- Red-tailed hawk (avian carnivore, terrestrial prey)

Table 6-2. Results of Sediment Screening: Comparison to Ecological Screening Benchmarks

Analyte	Detects/ Samples	Max (mg/kg)	Screening Threshold (mg/kg)	Source of Threshold[a]	Retain as COPC?	Reason Code[b]
Inorganics Constituents						
Aluminum	4/4	18800	No benchmark		Yes	2
Antimony	0/6	[1.6]	2	1	No	6
Arsenic	8/8	13	8.2	2	Yes	3
Barium	4/4	116	No benchmark		Yes	2
Beryllium	4/8	0.59	No benchmark		Yes	2
Cadmium	2/8	1.3	1.2	2	Yes	1
Chromium	8/8	150	81	2	Yes	1
Cobalt	3/4	13.7	No benchmark		Yes	2
Copper	8/8	59.8	34	2	Yes	3
Iron	3/3	25500	No benchmark		Yes	2
Lead	8/8	78	46.7	2	Yes	1
Manganese	4/4	375	No benchmark		Yes	2
Mercury	7/8	0.68	0.15	2	Yes	1
Molybdenum	3/4	2.5	No benchmark		Yes	2
Nickel	8/8	110	20.9	2	Yes	1
Selenium	1/8	[1.1]	0.7	2	Yes	1
Silver	4/8	1.6	1	2	Yes	1
Thallium	2/8	1.6	No benchmark		Yes	2
Vanadium	4/4	68.1	No benchmark		Yes	2
Zinc	8/8	190	150	2	Yes	1
Organic Constituents						
Benz(a)anthracene	2/8	[430]	261	2	Yes	4
Benzo(a)pyrene	2/8	[430]	430	2	Yes	3
Benzo(b)fluoranthene	2/8	[430]	No benchmark		Yes	4

Note: Values in brackets represent reporting limits for nondetects

[a] Sources of screening thresholds:

1. Effects range-low (ER-L) value from Long and Morgan, 1991.
2. ER-L from Long et al., 1995.

[b] Reason codes for retaining or eliminating a constituent as a COPEC:

1. Retained: Constituent was detected and exceeded screening threshold
2. Retained: No screening threshold available
3. Retained: Constituent does not exceed screening thresholds, but is recognized as a bioaccumulator by EPA Region IX.
4. Retained: Detection limits were greater than screening thresholds
5. Eliminated: Essential nutrient
6. Eliminated: Not detected and all detection limits less than screening thresholds

Table 6-2 (continued). Results of Sediment Screening: Comparison to Ecological Screening Benchmarks

Analyte	Detects/ Samples	Max (mg/kg)	Screening Threshold (mg/kg)	Source of Threshold[a]	Retain as COPC?	Reason Code[b]
Benzo(g,h,i)perylene	2/8	450	290	3	Yes	1
Benzo(k)fluoranthene	2/8	[430]	24	4	Yes	4
Chrysene	2/8	[430]	384	2	Yes	4
Dibenz(a,h)anthracene	1/8	[430]	63.4	2	Yes	1
Fluoranthene	4/8	[430]	600	2	Yes	3
Indeno(1,2,3-cd)pyrene	2/8	[430]	78	3	Yes	1
Pyrene	4/8	[430]	665	2	Yes	3
2-methylnaphthalene	0/8	[430]	70	2	Yes	4
Acenaphthene	0/8	[430]	16	2	Yes	4
Acenaphthylene	0/8	[430]	44	2	Yes	4
Anthracene	0/8	[430]	85.3	2	Yes	4
Fluorene	0/8	[430]	19	2	Yes	4
Naphthalene	0/8	[430]	160	2	Yes	4
Phenanthrene	0/8	[430]	240	2	Yes	4
Total PCB	3/7	180	22.7	2	Yes	1
4,4'-DDD	3/7	98	2	1	Yes	1
4,4'-DDE	3/7	8	2.2	2	Yes	1
4,4'-DDT	2/7	56	1	2	Yes	1
Aldrin	0/7	[2.2]	0.2[c]	4	Yes	4
Alpha-BHC	0/7	[2.2]	0.6[c]	4	Yes	4
Alpha-chlordane	2/7	2.2	0.5	1	Yes	1
Beta-BHC	1/7	[94]	0.5[c]	4	Yes	4

Note: Values in brackets represent reporting limits for nondetects

[a] Sources of screening thresholds:

1. Effects range-low (ER-L) value from Long and Morgan, 1991.
2. ER-L from Long et al., 1995.
3. Freshwater ER-L from EPA, 1996b.
4. Freshwater lowest effects level from Persuad, 1993 converted to NOEL by multiplying by an uncertainty factor of 0.1.

[b] Reason codes for retaining or eliminating a constituent as a COPEC:

1. Retained: Constituent was detected and exceeded screening threshold
2. Retained: No screening threshold available
3. Retained: Constituent does not exceed screening thresholds, but is recognized as a bioaccumulator by EPA Region IX.
4. Retained: Detection limits were greater than screening thresholds
5. Eliminated: Essential nutrient
6. Eliminated: Not detected and all detection limits less than screening thresholds
7. Eliminated: Not detected and no screening benchmarks available

[c] Not original number as reported in Persuad, 1993; converted to NOEL by multiplying by an uncertainty factor of 0.1

Table 6-2 (continued). Results of Sediment Screening: Comparison to Ecological Screening Benchmarks

Analyte	Detects/ Samples	Max (mg/kg)	Screening Threshold (mg/kg)	Source of Threshold[a]	Retain as COPC?	Reason Code[b]
Delta-BHC	0/7	[94]	No benchmark		No	7
Dieldrin	0/7	[4.3]	0.02	1	Yes	4
Endosulfan I	1/7	4	0.93	5	Yes	1
Endosulfan II	0/7	[4.3]	0.93	5	Yes	4
Endosulfan sulfate	0/7	[4.3]	No benchmark		No	7
Endrin	0/7	[4.3]	0.02	1	Yes	4
Endrin aldehyde	1/7	13	No benchmark		Yes	2
Endrin ketone	0/7	[4.7]	No benchmark		No	7
Gamma-BHC (lindane)	0/7	[2.2]	0.32	6	Yes	4
Gamma-chlordane	4/7	3.9	0.5	1	Yes	1
Heptachlor	0/7	[94]	No benchmark		No	7
Heptachlor epoxide	0/7	[2.2]	No benchmark		No	7
Methoxychlor	0/7	[22]	29.58	5	No	6
Toxaphene	0/7	[220]	0.51	5	Yes	4
1,2,4-trichlorobenzene	0/7	[430]	11290	5	No	6
1,2-dichlorobenzene	0/7	[430]	No benchmark		No	7
1,3-dichlorobenzene	0/7	[430]	No benchmark		No	7
1,4-dichlorobenzene	0/7	[430]	2970	5	No	6
2,2'-oxybis(1-chloropropane)	0/7	[430]	No benchmark		No	7
2,4,5-trichlorophenol	0/7	[1000]	No benchmark		No	7

Note: Values in brackets represent reporting limits for nondetects

[a] Sources of screening thresholds:

1. Effects range-low (ER-L) value from Long and Morgan, 1991.
2. ER-L from Long et al., 1995.
3. Freshwater ER-L from EPA, 1996b.
4. Freshwater lowest effects level from Persuad, 1993 converted to NOEL by multiplying by an uncertainty factor of 0.1.
5. EqP derived TRV based upon 1% organic carbon, 4.1 Kow (EPA, 1995) and marine ambient water quality criteria (AWQC).
6. Threshold effects level from MacDonald et al., 1996.

[b] Reason codes for retaining or eliminating a constituent as a COPEC:

1. Retained: Constituent was detected and exceeded screening threshold
2. Retained: No screening threshold available
3. Retained: Constituent does not exceed screening thresholds, but is recognized as a bioaccumulator by EPA Region IX.
4. Retained: Detection limits were greater than screening thresholds
5. Eliminated: Essential nutrient
6. Eliminated: Not detected and all detection limits less than screening thresholds
7. Eliminated: Not detected and no screening benchmarks available

Table 6-2 (continued). Results of Sediment Screening: Comparison to Ecological Screening Benchmarks

Analyte	Detects/ Samples	Max (mg/kg)	Screening Threshold (mg/kg)	Source of Threshold[a]	Retain as COPC?	Reason Code[b]
2,4,6-trichlorophenol	0/7	[670]	No benchmark		No	7
2,4-dichlorophenol	0/7	[430]	No benchmark		No	7
2,4-dimethylphenol	0/7	[430]	29	7	Yes	4
2,4-dinitrophenol	0/7	[1000]	No benchmark		No	7
2,4-dinitrotoluene	0/7	[670]	No benchmark		No	7
2,6-dinitrotoluene	0/7	[670]	No benchmark		No	7
2-chloronaphthalene	0/7	[430]	No benchmark		No	7
2-chlorophenol	1/7	[430]	57	8	Yes	1
2-methylphenol	0/7	[430]	63	7	Yes	4
2-nitroaniline	0/7	[1000]	No benchmark		No	7
2-nitrophenol	0/7	[670]	No benchmark		No	7
3,3'-dichlorobenzidine	0/7	[430]	No benchmark		No	7
3-nitroaniline	0/7	[1000]	No benchmark		No	7
4,6-dinitro-2-methylphenol	0/7	[1400]	No benchmark		No	7
4-bromophenyl-phenylether	0/7	[430]	No benchmark		No	7
4-chloro-3-methylphenol	0/7	[430]	No benchmark		No	7
4-chloroaniline	0/7	[430]	No benchmark		No	7
4-chlorophenyl-phenylether	0/7	[430]	No benchmark		No	7
4-methylphenol	0/7	[430]	670	7	No	6

Note: Values in brackets represent reporting limits for nondetects

[a] Sources of screening thresholds:

1. Effects range-low (ER-L) value from Long and Morgan, 1991.
2. ER-L from Long et al., 1995.
3. Freshwater ER-L from EPA, 1996b.
4. Freshwater lowest effects level from Persuad, 1993 converted to NOEL by multiplying by an uncertainty factor of 0.1.
5. EqP derived TRV based upon 1% organic carbon, 4.1 Kow (EPA, 1995) and marine ambient water quality criteria (AWQC).
6. Threshold effects level from MacDonald et al., 1996.
7. Washington State Sediment Quality Standard from Ginn and Pastorek, 1993.
8. EqP derived TRV based upon 1% organic carbon, 4.12 Kow (EPA, 1995) and freshwater AWQC.

[b] Reason codes for retaining or eliminating a constituent as a COPEC:

1. Retained: Constituent was detected and exceeded screening threshold
2. Retained: No screening threshold available
3. Retained: Constituent does not exceed screening thresholds, but is recognized as a bioaccumulator by EPA Region IX.
4. Retained: Detection limits were greater than screening thresholds
5. Eliminated: Essential nutrient
6. Eliminated: Not detected and all detection limits less than screening thresholds
7. Eliminated: Not detected and no screening benchmarks available

Table 6-2 (continued). Results of Sediment Screening: Comparison to Ecological Screening Benchmarks

Analyte	Detects/ Samples	Max (mg/kg)	Screening Threshold (mg/kg)	Source of Threshold[a]	Retain as COPC?	Reason Code[b]
4-nitroaniline	0/7	[1000]	No benchmark		No	7
4-nitrophenol	1/7	[1000]	No benchmark		Yes	2
Benzidine	0/4	[1400]	No benchmark		No	7
Benzoic acid	0/4	[1400]	650	7	Yes	4
Benzyl alcohol	0/4	[670]	No benchmark		No	7
Bis(2-chloroethoxy)methane	0/7	[430]	No benchmark		No	7
Bis(2-chloroethyl)ether	0/7	[430]	No benchmark		No	7
Bis(2-ethylhexyl)phthalate	1/7	[340]	No benchmark		Yes	2
Butylbenzylphthalate	0/7	[430]	2200	5	No	6
Carbazole	0/3	[430]	No benchmark		No	7
Di-n-butylphthalate	1/7	[430]	1157	5	No	6
Di-n-octylphthalate	0/7	[430]	No benchmark		No	7
Dibenzofuran	0/7	[430]	2290	8	No	6
Diethylphthalate	1/7	[430]	No benchmark		Yes	2
Dimethylphthalate	0/7	[430]	No benchmark		No	7
Hexachlorobenzene	0/7	[430]	No benchmark		No	7
Hexachlorobutadiene	0/7	[430]	No benchmark		No	7

Note: Values in brackets represent reporting limits for nondetects

[a] Sources of screening thresholds:

1. Effects range-low (ER-L) value from Long and Morgan, 1991.
2. ER-L from Long et al., 1995.
3. Freshwater ER-L from EPA, 1996b.
4. Freshwater lowest effects level from Persuad, 1993 converted to NOEL by multiplying by an uncertainty factor of 0.1.
5. EqP derived TRV based upon 1% organic carbon, 4.1 Kow (EPA, 1995) and marine ambient water quality criteria (AWQC).
6. Threshold effects level from MacDonald et al., 1996.
7. Washington State Sediment Quality Standard from Ginn and Pastorek, 1993.
8. EqP derived TRV based upon 1% organic carbon, 4.12 Kow (EPA, 1995) and freshwater AWQC.

[b] Reason codes for retaining or eliminating a constituent as a COPEC:

1. Retained: Constituent was detected and exceeded screening threshold
2. Retained: No screening threshold available
3. Retained: Constituent does not exceed screening thresholds, but is recognized as a bioaccumulator by EPA Region IX.
4. Retained: Detection limits were greater than screening thresholds
5. Eliminated: Essential nutrient
6. Eliminated: Not detected and all detection limits less than screening thresholds
7. Eliminated: Not detected and no screening benchmarks available

Table 6-2 (continued). Results of Sediment Screening: Comparison to Ecological Screening Benchmarks

Analyte	Detects/ Samples	Max (mg/kg)	Screening Threshold (mg/kg)	Source of Threshold[a]	Retain as COPC?	Reason Code[b]
Hexachlorocyclopentadiene	0/7	[670]	No benchmark		No	7
Hexachloroethane	0/7	[430]	No benchmark		No	7
Isophorone	0/7	[430]	No benchmark		No	7
N-nitroso-di-n-propylamine	0/7	[430]	No benchmark		No	7
N-nitrosodiphenylamine (1)	0/7	[430]	No benchmark		No	7
Nitrobenzene	0/7	[430]	No benchmark		No	7
Pentachlorophenol	0/7	[1000]	7969	5	No	6
Phenol	0/7	[430]	420	7	Yes	4
Dibutyl tin	0/7	[5]	25.1		No	6
Monobutyl tin	0/6	[5]	25.1		No	6
Tetrabutyl tin	0/7	[5]	25.1		No	6
Tributyl tin	1/7	25	25.1		Yes	3

Note: Values in brackets represent reporting limits for nondetects

[a] Sources of screening thresholds:

1. Effects range-low (ER-L) value from Long and Morgan, 1991.
2. ER-L from Long et al., 1995.
3. Freshwater ER-L from EPA, 1996b.
4. Freshwater lowest effects level from Persuad, 1993 converted to NOEL by multiplying by an uncertainty factor of 0.1.
5. EqP derived TRV based upon 1% organic carbon, 4.1 Kow (EPA, 1995) and marine ambient water quality criteria (AWQC).
6. Threshold effects level from MacDonald et al., 1996.
7. Washington State Sediment Quality Standard from Ginn and Pastorek, 1993.

[b] Reason codes for retaining or eliminating a constituent as a COPEC:

1. Retained: Constituent was detected and exceeded screening threshold
2. Retained: No screening threshold available
3. Retained: Constituent does not exceed screening thresholds, but is recognized as a bioaccumulator by EPA Region IX.
4. Retained: Detection limits were greater than screening thresholds
5. Eliminated: Essential nutrient
6. Eliminated: Not detected and all detection limits less than screening thresholds
7. Eliminated: Not detected and no screening benchmarks available

Each of the vertebrate ecological receptors identified for the screening assessment was chosen for several reasons. The red fox was chosen as a suitable mammalian carnivore, as it is fully naturalized to the area, and a top consumer of other terrestrial vertebrates. Although not currently found at Alameda Point, the red fox does occur at other locations in the East Bay area, and it is likely only a matter of time before it colonizes Alameda Point. Although the red fox's diet is somewhat omnivorous, it was modeled as a strict carnivore of terrestrial vertebrates. The red fox was included as the top-level consumer at the request of the BTAG. The California ground

squirrel was chosen as a mammalian herbivore, as it is a resident in all terrestrial environs and wetland margins of Alameda Point, including the Runway Wetland. The California ground squirrel is a broad-category consumer of terrestrial and emergent vegetation (including high marsh species) with a small proportion of invertebrates in the diet. The California ground squirrel is likely an important prey item for avian and mammalian predators at Alameda Point, including red-tailed hawks and red foxes. The raccoon was a likely choice for a mammalian omnivore, as it has a notoriously variable diet of plant materials, and vertebrate and invertebrate flesh. Raccoons have successfully colonized Alameda Point.

The mallard was considered in three trophic roles as an aquatic avian receptor: herbivore, omnivore (plants and invertebrates), and as a strict invertebrate feeder. With separate consideration of food chain models for this duck, the mallard covers several trophic categories of the functional food chain. The USFWS requested modeling the mallard as a strict invertebrate feeder because nesting female mallards are known to eat a diet comprised largely of invertebrates (Jim Haas, USFWS, Personal Communication). Mallards are known to use the ponds at the Runway Wetland, and nesting behavior has been observed at other areas of Alameda Point.

The Alameda song sparrow represents terrestrial avian omnivores that feed on both invertebrates and plant material. The Alameda song sparrow has been observed at the Runway Wetland. The Alameda song sparrow is also a California species of special concern.

The red-tailed hawk is resident at Alameda Point, where it probably feeds primarily on rodents and rabbits. It is a top terrestrial avian consumer and has been witnessed hunting over the Runway Wetland. The number of red-tailed hawks at Alameda Point increases in the winter when the resident population is joined by migrant birds.

The great blue heron is considered in the same top food chain position as the red-tailed hawk, but for flesh consumption in aquatic environs. Great blue herons are a common wading piscivore (fish eater) in the area of the Runway Wetland. Although great blue herons will eat a variety of fish, amphibians, invertebrates, small mammals, and even other birds, they are being modeled as strict piscivores for the purposes of this screening-level ERA.

The endangered least tern is a piscivorous bird that nests on the runways to the north of Runway Wetland. However, its preferred feeding areas are lagoons or the near-shore open ocean where small fish are abundant (Rigney and Granholm, undated). The small size and seasonal nature of the wetland ponds make them unlikely foraging habitat for least terns, and therefore the great blue heron is a better surrogate for piscivorous birds in the Runway Wetland area.

Exposure parameters for all receptors and the sources and rationale for the chosen parameters are presented in Tables 6-3 through 6-11. An attempt was made to use exposure parameters consistent with the conservative nature of a screening-level assessment. Site use factors (SUFs) for all receptors were set equal to one, indicating that all foraging is done within the boundaries of the Runway Wetland. When published ingestion rates were available for receptors, the maximum published ingestion rate was used. When published ingestion rates were not available, ingestion rates were calculated using the appropriate ingestion equations from the EPA Wildlife Exposure Factors Handbook (EPA, 1993).

Table 6-3. Exposure Parameters for Mallard (Herbivore Model)

Exposure Parameter	Source	Abbreviation	Unit	Values for Mallard
Body weight[a]	1 (average of all reported adult wts.)	BW	kg	1.162
Ingestion rate[b]	Calculated	IR	kg/kg/day	0.052
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.06
Water ingestion rate[d]	1 (Calculated average)	WIR	l/kg/day	0.057
Daily water ingestion[e]	Calculated	DI_{water}	l/day	0.066
Percent of soil/sediment in diet[f]	2	%Soil	percent	3.3
Daily soil/sediment ingestion[g]	Calculated	DI_{soil}	kg/day	0.002
Percent plants in diet[h]	Modeled as herbivore	%Plant	percent	96.7
Daily plant material ingestion[i]	Modeled	DI_{plant}	kg/day	0.058
Percent invertebrates in diet[j]	—	%Invert	percent	—
Daily invertebrate ingestion[k]	—	DI_{invert}	kg/day	—
Percent flesh in diet[l]	—	%Flesh	percent	—
Daily flesh ingestion[m]	—	DI_{flesh}	kg/day	—
Home range[n]	1 (average, Minnesota study)	HR	acres (ac)	580
Foraging range[o]	1 (minimum, Minnesota study)	FR	ac	40
RW area[p]	Calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[q]	Conservative value for screening	SUF	unitless	1

Note: The herbivore model for the mallard is a strictly hypothetical model with respect to ingestion of plant material.

Sources:

1. Allometry based on equation 3-5, from EPA, 1993.
2. Beyer, W. N., E. E. Connor, and S. Gerould, 1994.

[a] Body weight: Mean of all reported adult weights. Selection of the mean was supported by graphical analysis of available data and calculation of mean and median values.

[b] Ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($IR = DI_{total}/BW$).This number, given the assumptions of body weight, represents an expectation of the average rate of foodstuffs ingestion by a mallard adult of average body weight.

[c] Daily ingestion: This value was calculated as DI_{total} (g/day) $= 0.301 \cdot BW(\text{g})^{0.751}$ dry weight (equation 3-5 for non-passerines, EPA, 1993 [1]). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[d] Water ingestion rate: Calculated as the mean of two reported values: one of each male and female.

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= WIR \cdot BW$ (kg). (Note: 1 kg water = 1 liter). This value is in keeping with the assumptions regarding the mean body weight.

[f] Percent of soil/sediment in diet: Based on the study of mallards by Beyer et al., 1994 (2).

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent dietary soil ingestion and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: In the case of the mallard modeled as an herbivore, the diet is considered to be solely from plants (and soil). Calculated as $(100 - \%soil) = \%plant$.

[i] Daily plant material ingestion: Calculated as $\%plant \cdot DI_{total} = DI_{plant}$.

[j] Percent invertebrates in diet: Considered zero in the herbivore model.

[k] Daily invertebrate ingestion: Not applicable.

[l] Percent flesh in diet: Not applicable.

[m] Daily flesh ingestion: Not applicable.

[n] Home range: Calculated from values (two: male and female) reported in EPA, 1993 (1), for mallards studied on a Minnesota wetland. The Minnesota study included inspection of both male and female home ranges, unlike other reported studies.

[o] Foraging range: Considered the smallest of the reported values from the EPA, 1993 (1) summary of the Minnesota wetlands study. Defense of territory is usually only during a breeding season and solely by the male. Territories are small and defended (generally) only against other mallards. Studies cited in Zeiner et al., 1988–1990 imply that the choice of small home and foraging ranges may underestimate those for the average mallard. However, some mallards on the Runway Wetland may be resident year-round, and would likely maintain relatively small territories due to the limitation of suitable habitat in the wetland.

[p] RW area: Calculated from geographic information system data.

[q] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-4. Exposure Parameters for Mallard (Omnivore Model)

Exposure Parameter	Source	Abbreviation	Unit	Values for Mallard
Body weight[a]	1 (average of all reported adult wts.)	BW	kg	1.162
Ingestion rate[b]	calculated	IR	kg/kg/day	0.052
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.06
Water ingestion rate[d]	1 (Calculated average)	WIR	l/kg/day	0.057
Daily water ingestion[e]	calculated	DI_{water}	l/day	0.066
Percent of soil/sediment in diet[f]	2	%Soil	percent	3.3
Daily soil/sediment ingestion[g]	calculated	DI_{soil}	kg/day	0.002
Percent plants in diet[h]	modeled as omnivore	%Plant	percent	48.35
Daily plant material ingestion[i]	modeled	DI_{plant}	kg/day	0.026
Percent invertebrates in diet[j]	modeled as omnivore	%Invert	percent	48.35
Daily invertebrate ingestion[k]	modeled	DI_{invert}	kg/day	0.026
Percent flesh in diet[l]	—	%Flesh	percent	—
Daily flesh ingestion[m]	—	DI_{flesh}	kg/day	—
Home range[n]	1 (average, Minnesota study)	HR	ac	580
Foraging range[o]	1 (minimum, Minnesota study)	FR	ac	40
RW area[p]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[q]	conservative value for screening	SUF	unitless	1

Note: The omnivore model for the mallard is a strictly hypothetical model with respect to ingestion of plant and invertebrate materials. A more realistic assessment of the omnivory of mallards comes from source (3) that estimates the diet of a mallard to be about 90% plant material and 10% invertebrates.

Sources:

1. Allometry based on equation 3-5, from EPA, 1993.
2. Beyer, W. N., E. E. Connor, and S. Gerould, 1994.

[a] Body weight: Mean of all reported adult weights. Selection of the mean was supported by graphical analysis of available data and calculation of mean and median values.

[b] Ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($IR = DI_{total}/BW$). This number, given the assumptions of body weight, represents an expectation of the average rate of foodstuffs ingestion by a mallard adult of average body weight.

[c] Daily ingestion: This value was calculated as DI_{total} (g/day) $= 0.301 \cdot BW(\text{g})^{0.751}$ dry weight (equation 3-5 for non-passerines, EPA, 1993 [1]). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is

provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[d] Water ingestion rate: Calculated as the mean of two reported values: one of each male and female.

[e] Daily water ingestion: This value was calculated as $DI_{water}\ (\text{l/day}) = WIR \cdot BW(\text{kg})$. (Note: 1 kg water = 1 liter). This value is in keeping with the assumptions regarding the mean body weight.

[f] Percent of soil/sediment in diet: Based on the study of mallards by Beyer et al., 1994 (2).

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent dietary soil ingestion and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: In the case of the mallard modeled as an omnivore, 50% of the diet is considered to be from plants (and soil). Calculated as $(100 - \%soil)/2 = \%plant$. However, this is an idealized omnivore diet for a mallard, as Zeiner et al., 1988–1990 citing others state "About 90% of diet is plant material; mostly grains, seeds and leaves of aquatic plants, grasses, and other green vegetation. Remaining diet mostly aquatic insects, but includes snails, small crustaceans, earthworms, tadpoles, and small fish".

[i] Daily plant material ingestion: Calculated as $\%plant \cdot DI_{total} = DI_{plant}$.

[j] Percent invertebrates in diet: In the case of the mallard modeled as an omnivore, 50% of the diet is considered to be from invertebrates (and soil). Calculated as $(100 - \%soil)/2 = \%invert$. See also "Percent plants in diet", above.

[k] Daily invertebrate ingestion: Calculated as $\%invert \cdot DI_{total} = DI_{invert}$.

[l] Percent flesh in diet: Not applicable.

[m] Daily flesh ingestion: Not applicable.

[n] Home range: Calculated from values (two: male and female) reported in EPA, 1993 (1), for mallards studied on a Minnesota wetland. The Minnesota study included inspection of both male and female home ranges, unlike other reported studies.

[o] Foraging range: Considered the smallest of the reported values from the EPA, 1993 (1) summary of the Minnesota wetlands study. Defense of territory is usually only during a breeding season and solely by the male. Territories are small and defended (generally) only against other mallards. Studies cited in Zeiner et al., 1988–1990 imply that the choice of small home and foraging ranges may underestimate those for the average mallard. However, some mallards on the Runway Wetland may be resident year-round, and would likely maintain relatively small territories due to the limitation of suitable habitat in the wetland.

[p] RW area: Calculated from geographic information system data.

[q] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-5. Exposure Parameters For Mallard (Invertebrate Carnivore Model)

Exposure Parameter	Source	Abbreviation	Unit	Values for Mallard
Body weight[a]	1 (average of all reported adult wts.)	BW	kg	1.162
Ingestion rate[b]	calculated	IR	kg/kg/day	0.052
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.06
Water ingestion rate[d]	1 (Calculated average)	WIR	l/kg/day	0.057
Daily water ingestion[e]	calculated	DI_{water}	l/day	0.066
Percent of soil/sediment in diet[f]	2	%Soil	percent	3.3
Daily soil/sediment ingestion[g]	calculated	DI_{soil}	kg/day	0.002
Percent plants in diet[h]	—	%Plant	percent	—
Daily plant material ingestion[i]	—	DI_{plant}	kg/day	—
Percent invertebrates in diet[j]	modeled as invertebrate carnivore	%Invert	percent	96.7
Daily invertebrate ingestion[k]	modeled	DI_{invert}	kg/day	0.058
Percent flesh in diet[l]	—	%Flesh	percent	—
Daily flesh ingestion[m]	—	DI_{flesh}	kg/day	—
Home range[n]	1 (average, Minnesota study)	HR	ac	580
Foraging range[o]	1 (minimum, Minnesota study)	FR	ac	40
RW area[p]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[q]	conservative value for screening	SUF	unitless	1

Note: The invertebrate carnivore model for the mallard is a strictly hypothetical model with respect to ingestion of foodstuffs.

Sources:

1. Allometry based on equation 3-5, from EPA, 1993.
2. Beyer, W. N., E. E. Connor, and S. Gerould, 1994.

[a] Body weight: Mean of all reported adult weights. Selection of the mean was supported by graphical analysis of available data and calculation of mean and median values.

[b] Ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($IR = DI_{total}/BW$). This number, given the assumptions of body weight, represents an expectation of the average rate of foodstuffs ingestion by a mallard adult of average body weight.

[c] Daily ingestion: This value was calculated as DI_{total} (g/day) $= 0.301 \cdot BW(g)^{0.751}$ dry weight (equation 3-5 for non-passerines, EPA, 1993 [1]). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression

is provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[d] Water ingestion rate: Calculated as the mean of two reported values: one of each male and female.

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= WIR \cdot BW$(kg). (Note: 1 kg water = 1 liter). This value is in keeping with the assumptions regarding the mean body weight.

[f] Percent of soil/sediment in diet: Based on the study of mallards by Beyer et al., 1994 (2).

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent dietary soil ingestion and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: Considered to be zero with mallard modeled as an invertebrate carnivore.

[i] Daily plant material ingestion: Not applicable.

[j] Percent invertebrates in diet: In the case of the mallard modeled as an invertebrate carnivore, the diet is considered to be solely from plants (and soil). Calculated as $(100 - \%soil) = \%invert$.

[k] Daily invertebrate ingestion: Calculated as $\%invert \cdot DI_{total} = DI_{invert}$.

[l] Percent flesh in diet: Not applicable.

[m] Daily flesh ingestion: Not applicable.

[n] Home range: Calculated from values (two: male and female) reported in EPA, 1993 (1), for mallards studied on a Minnesota wetland. The Minnesota study included inspection of both male and female home ranges, unlike other reported studies.

[o] Foraging range: Considered the smallest of the reported values from the EPA, 1993 (1) summary of the Minnesota wetlands study. Defense of territory is usually only during a breeding season and solely by the male. Territories are small and defended (generally) only against other mallards. Studies cited in Zeiner et al., 1988–1990 imply that the choice of small home and foraging ranges may underestimate those for the average mallard. However, some mallards on the Runway Wetland may be resident year-round, and would likely maintain relatively small territories due to the limitation of suitable habitat in the wetland.

[p] RW area: Calculated from geographic information system data

[q] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-6. Exposure Parameters for Great Blue Heron

Exposure Parameter	Source	Abbreviation	Unit	Values for Great Blue Heron
Body weight[a]	1 (average of all reported adult wts.)	BW	kg	2.336
Ingestion rate[b]	1	IR	kg/kg/day	0.18
Daily ingestion[c]	calculated	DI_{total}	kg/day	0.42
Water ingestion rate[d]	1	WIR	l/kg/day	0.045
Daily water ingestion[e]	calculated	DI_{water}	l/day	0.11
Percent of soil/sediment in diet[f]	2[g]	%Soil	percent	2
Daily soil/sediment ingestion[h]	calculated	DI_{soil}	kg/day	0.0084
Percent plants in diet[i]	—	%Plant	percent	—
Daily plant material ingestion[j]	—	DI_{plant}	kg/day	—
Percent invertebrates in diet[k]	—	%Invert	percent	—
Daily invertebrate ingestion[l]	—	DI_{invert}	kg/day	—
Percent flesh in diet[m]	3[n]	%Flesh	percent	98
Daily flesh ingestion[o]	calculated	DI_{flesh}	kg/day	0.41
Home range[p]	1, 3	HR	—	Up to 25 km from nest
Foraging range[q]	1 (minimum reported)	FR	ac	1.5
RW area[r]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[s]	conservative value for screening	SUF	unitless	1

Sources:

1. EPA, 1993.
2. Based on reported values of blue-winged teal and ring-necked duck, from Beyer, W. N., E. E. Connor, and S. Gerould, 1994. (see footnote f)
3. Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, 1988–1990. Online at http://www.dfg.ca.gov/whdab/cwhr/cawildlife.html.

[a] Body weight: Mean of all reported adult weights. With only three data points, the mean body weight will provide the most unbiased estimate of the average adult.

[b] Ingestion rate: This was a single value provided in EPA, 1993 (1). This value is supported by information provided in "daily ingestion", below.

[c] Daily ingestion: This value was calculated as DI_{total} (kg/day) = BW(kg) · IR dry weight. This finding is supported by the calculation of the daily ingestion of foodstuffs by wading birds (Kushlan equation, p. 2-4 of EPA, 1993 [1]) which yields a result of 0.41 kg/day. Results are in keeping with the assumptions regarding the mean body weight.

[d] Water ingestion rate: A single reported value from EPA, 1993 (1).

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= WIR \cdot BW$(kg). (Note: 1 kg water = 1 liter). This finding is supported by calculation of the daily water ingestion utilizing equation 3-15 of EPA, 1993 (1). This value is also in keeping with the assumptions regarding the mean body weight.

[f] Percent of soil/sediment in diet: Based on the study of blue-winged teal and ring-necked duck by Beyer et al., 1994 (2). No information was available for great blue heron. The blue-winged teal and ring-necked duck values were deemed most appropriate since these ducks, like the great blue heron, gather food items (invertebrates and plant material) out of the sediment and therefore likely have a similar percentage of incidental sediment ingestion.

[g] No information was available for great blue heron. The blue-winged teal and ring-necked duck values were deemed most appropriate since these ducks, like the great blue heron, gather food items (invertebrates and plant material) out of the sediment and therefore likely have a similar percentage of incidental sediment ingestion.

[h] Daily soil/sediment ingestion: Calculated as $\%soil \cdot DI_{total} = DI_{soil}$.

[i] Percent plants in diet: Not applicable

[j] Daily plant material ingestion: Not applicable.

[k] Percent invertebrates in diet: Zeiner et al., 1988–1990 (3) estimates that the great blue heron's diet is approximately 75% fish and 25% other flesh, including invertebrates, although the latter is not specified for percentage; thus the diet will be considered 100% flesh (less soil).

[l] Daily invertebrate ingestion: Not applicable.

[m] Percent flesh in diet: Zeiner et al., 1988–1990 (3) estimates that the great blue heron's diet is approximately 75% fish and 25% other flesh.

[n] Source (3) estimates that the great blue heron's diet is approximately 75% fish and 25% other flesh, including invertebrates, although the latter is not specified for percentage.

[o] Daily flesh ingestion: Calculated as $\%flesh \cdot DI_{total} = DI_{flesh}$.

[p] Home range: Home ranges for the great blue heron are reported by EPA, 1993 (1) and Zeiner et al., 1988–1990 (3) as being enormous, with distances of up to 25 km from roosting to foraging sites.

[q] Foraging range: Great blue herons, as other birds, may become habituated to foraging in a primary location. The EPA (1993) (1) reports feeding territories as small as 1.5 ac; thus, small foraging ranges were chosen for the Runway Wetland based on literature cited and the potential that certain individuals may visit the area, and defend their territory habitually as local residents.

[r] RW area: Calculated from geographic information system data.

[s] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-7. Exposure Parameters for Red Fox

Exposure Parameter	Source	Abbreviation	Unit	Values for Red Fox
Body weight[a]	1	BW	kg	4.54
Ingestion rate[b]	1	IR	kg/kg/day	0.075
Daily ingestion[c]	calculated	DI_{total}	kg/day	0.34
Water ingestion rate[d]	1	WIR	l/kg/day	0.085
Daily water ingestion[e]	calculated	DI_{water}	l/day	0.39
Percent of soil/sediment in diet[f]	2	%Soil	percent	2.8
Daily soil/sediment ingestion[g]	Calculated	DI_{soil}	kg/day	0.01
Percent plants in diet[h]	—	%Plant	percent	—
Daily plant material ingestion[i]	—	DI_{plant}	kg/day	—
Percent invertebrates in diet[j]	—	%Invert	percent	—
Daily invertebrate ingestion[k]	—	DI_{invert}	kg/day	—
Percent flesh in diet[l]	2	%Flesh	percent	97.2
Daily flesh ingestion[m]	Calculated	DI_{flesh}	kg/day	0.33
Home range[n]	3	HR	ac	277
Foraging range[o]	3	FR	ac	277
RW area[p]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[q]	conservative value for screening	SUF	unitless	1

Sources:

1. EPA, 1993.
2. Beyer, W. N., E. E. Connor, and S. Gerould, 1994.
3. Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, 1988–1990. Online at http://www.dfg.ca.gov/whdab/cwhr/cawildlife.html.

[a] Body weight: Body weight was calculated as an average of the reported mean weights from EPA, 1993 (1). This represented nonparous adults measured in the midwestern US spring and autumn. The red fox is feral in California and there is no reason to believe that its populations vary greatly from those occupying similar habitat elsewhere in the US

[b] Ingestion rate: The maximum reported ingestion rate for adults before whelp was chosen from EPA, 1993 (1). Although this number was slightly higher than that for a non-breeding individual (reported as 0.069 kg/kg/day), it was felt that the higher rate was within reason for an average individual in habitat abundant with food resources.

[c] Daily ingestion: This value was calculated as $BW \cdot IR = DI_{total}$. Thus, the daily ingestion is dependent on the ingestion rate, and therefore slightly higher than that for a non-breeding individual.

[d] Water ingestion rate: Calculated as the average of the reported values for males and females. In this case, where two values were reported, the average and the median were the same.

[e] Daily water ingestion: Calculated on the basis of the reported water ingestion rates for males and females.

[f] Percent of soil/sediment in diet: From study of red foxes by Beyer et al., 1994 (2).

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent soil ingestion in diet and the daily ingestion ($\%soil \cdot DI = DI_{soil}$).

[h] Percent plants in diet: Although red foxes commonly ingest plant matter (primarily berries and nuts), the most important constituents of their diets are vertebrate prey (mammals and birds). Thus, plant matter was considered a negligible percentage of the red fox diet.

[i] Daily plant material ingestion: Not applicable.

[j] Percent invertebrates in diet: Although red foxes commonly ingest invertebrates (primarily insects), this is mostly opportunistic behavior, as the most important constituents of their diets are vertebrate prey (mammals and birds). Thus, invertebrates were considered a negligible percentage of the red fox diet.

[k] Daily invertebrate ingestion: Not applicable.

[l] Percent flesh in diet: The most important constituents of red fox's diets are vertebrate prey (mammals and birds). Calculated as $100 - \%soil = \%flesh$.

[m] Daily flesh ingestion: Calculated as $\%flesh \cdot DI = DI_{flesh}$.

[n] Home range: EPA, 1993 (1) reports that red fox home ranges can vary greatly from roughly 50 to 3000 ac. EPA also reports that home ranges are relatively small in urban areas. However, Zeiner et al., 1988–1990 (3) and the USFS (1996), indicate that small red fox home ranges are in the realm of 150 to 300 ac. 277 ac was chosen from Zeiner et al. as the lowest reported value from a western North America (British Columbia) population.

[o] Foraging range: Foraging ranges, by all indications, are equivalent to the home range for red foxes.

[p] RW area: Calculated from geographic information system data.

[q] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-8. Exposure Parameters for California Ground Squirrel

Exposure Parameter	Source	Abbreviation	Unit	Values for California Ground Squirrel
Body weight[a]	4 (median)	BW	kg	0.73
Ingestion rate[b]	calculated	IR	kg/kg/day	0.095
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.069
Water ingestion rate[d]	calculated	WIR	l/kg/day	0.10
Daily water ingestion[e]	1 (calculated)	DI_{water}	l/day	0.075
Percent of soil/sediment in diet[f]	2	%Soil	percent	8
Daily soil/sediment ingestion[g]	calculated	DI_{soil}	kg/day	0.006
Percent plants in diet[h]	5	%Plant	percent	91
Daily plant material ingestion[i]	calculated	DI_{plant}	kg/day	0.063
Percent invertebrates in diet[j]	5	%Invert	percent	1
Daily invertebrate ingestion[k]	calculated	DI_{invert}	kg/day	0.007
Percent flesh in diet[l]	—	%Flesh	percent	—
Daily flesh ingestion[m]	—	DI_{flesh}	kg/day	—
Home range[n]	3 (av. of male and female)	HR	ac	0.5
Foraging range[o]	3 (inferred)	FR	ac	0.5
RW area[p]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[q]	conservative value for screening	SUF	unitless	1

Sources:

1. Allometry based on equations 3-9 and 3-17, from EPA, 1993.
2. Based on black-tailed prairie dog, from Beyer, W. N., E. E. Connor, and S. Gerould, 1994.
3. Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, 1988–1990. Online at http://www.dfg.ca.gov/whdab/cwhr/cawildlife.html.
4. Burt, W. H. and R. P. Grossenheider, 1976.
5. USFS, 1996. Online at http://www.fs.fed.us/database/feis/ (updated March 12, 1998).

[a] Body weight: Body weight was calculated as the median adult weight reported in Burt and Grossenheider, 1976 (4). Given normally distributed body weights and only a simple range, the median will also represent an average prior expectation for a sampled population.

[b] Ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($IR = DI_{total} / BW$).

[c] Daily ingestion: This value was calculated as $DI\,(\text{g/day}) = 0.577 \cdot BW(\text{g})^{0.727}$ dry weight (equation 3-9 for herbivores, EPA, 1993 [1]). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is

provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[d] Water ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($WIR = DI_{water} / BW$).

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= 0.099 \cdot BW(\text{kg})^{0.90}$ (equation 3-17 for all mammals, EPA, 1993 [1]). (Note: 1 kg water = 1 liter). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[f] Percent of soil/sediment in diet: Based on the study of black-tailed prairie dogs by Beyer et al., 1994 (2). Black-tailed prairie dogs are also obligate burrowers and are primarily herbivorous. Values of soil ingestion were reported to be much higher in the black-tailed vs. white-tailed prairie dog. Without specific information, such as percent of forage obtained underground, etc., there was no reason to believe that the California ground squirrel would consume less soil than the black-tailed prairie dog. Conversely, based on species accounts provided by Zeiner et al., 1988–1990 (3), relatively high ingestion rates of soil (as with the black-tailed prairie dog) might be expected for the squirrel.

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent soil ingestion in diet and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: The USFS (1996) (5) reports Townsend's ground squirrels (*Spermophilus townsendii*) to be primarily herbivorous, but with a distinct proportion of invertebrates in their diet (1%). Since the California ground squirrel is a congener of the Townsend's ground squirrel, and has similar foraging and burrowing habits, it is reasonable to expect the same approximate distribution of foodstuffs. Calculated as $100 - \%soil - \%invert = \%plant$.

[i] Daily plant material ingestion: Calculated as $\%plant \cdot DI_{total} = DI_{plant}$.

[j] Percent invertebrates in diet: The USFS (1996) (5) reports Townsend's ground squirrels (*Spermophilus townsendii*) to be primarily herbivorous, but with a distinct proportion of invertebrates in their diet (1% reported). Since the California ground squirrel is a congener of the Townsend's ground squirrel, and has similar foraging and burrowing habits, it is reasonable to expect the same approximate distribution of foodstuffs.

[k] Daily invertebrate ingestion: Calculated as $\%invert \cdot DI_{total} = DI_{invert}$.

[l] Percent flesh in diet: California ground squirrels do not generally eat flesh, although some cannibalism has been reported. This is not considered a significant fraction of the squirrels' diet.

[m] Daily flesh ingestion: Not applicable.

[n] Home range: Calculated from Zeiner et al., 1988–1990 (3) as the average of males and females for California populations. Home ranges in this species significantly overlap.

[o] Foraging range: Foraging ranges were inferred to be the same as home ranges. The home range is small and squirrels are active foragers nearly wherever they go.

[p] RW area: Calculated from geographic information system data.

[q] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-9. Exposure Parameters for Raccoon

Exposure Parameter	Source	Abbreviation	Unit	Values for Raccoon
Body weight[a]	1 (median of all reported adult wts.)	BW	kg	6.0
Ingestion rate[b]	calculated	IR	kg/kg/day	0.05
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.3
Water ingestion rate[d]	1	WIR	l/kg/day	0.083
Daily water ingestion[e]	calculated	DI_{water}	l/day	0.5
Percent of soil/sediment in diet[f]	2	%Soil	percent	9.4
Daily soil/sediment ingestion[g]	calculated	DI_{soil}	kg/day	0.03
Percent plants in diet[h]	1,3,5 (estimated)	%Plant	percent	30.2[i]
Daily plant material ingestion[j]	calculated	DI_{plant}	kg/day	0.091
Percent invertebrates in diet[k]	1,3,5 (estimated)	%Invert	percent	30.2[i]
Daily invertebrate ingestion[l]	calculated	DI_{invert}	kg/day	0.091
Percent flesh in diet[m]	1,3,5 (estimated)	%Flesh	percent	30.2[i]
Daily flesh ingestion[n]	calculated	DI_{flesh}	kg/day	0.091
Home range[o]	5	HR	ac	384[p]
Foraging range[q]	1	FR	ac	39[p]
RW area[r]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[s]	conservative value for screening	SUF	unitless	1

Sources:

1. Allometry based on equation 3-7, from EPA, 1993.
2. Beyer, W. N., E. E. Connor, and S. Gerould, 1994.
3. Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, 1988–1990. Online at http://www.dfg.ca.gov/whdab/cwhr/cawildlife.html.
5. USFS, 1996. Online at http://www.fs.fed.us/database/feis/ [Updated March 12, 1998].

[a] Body weight: Body weight was calculated as the median adult weight reported in EPA, 1993 (1). The mean and median were calculated, and the median was used, as it was slightly greater (6.0 vs. 5.8); the median is a reasonable expectation for the average of a sampled population.

[b] Ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($IR = DI_{total} / BW$).

[c] Daily ingestion: This value was calculated as $DI\ (\text{kg/day}) = 0.0687 \cdot BW(\text{kg})^{0.822}$ dry weight (equation 3-7 for all mammals, EPA, 1993 [1]). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is provided for calculation of the mean of such values; this is in keeping with the assumptions regarding body weight.

[d] Water ingestion rate: This value was back-calculated from the daily water ingestion and the body weight ($WIR = DI_{water} / BW$).

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= 0.099 \cdot BW(\text{kg})^{0.90}$ (equation 3-17 for all mammals, EPA, 1993 [1]). (Note: 1 kg water = 1 liter). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is provided for calculation of the mean of such values; this is in keeping with the assumptions regarding body weight.

[f] Percent of soil/sediment in diet: Based on study of raccoons by Beyer et al., 1994 (2).

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent soil ingestion in diet and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: Sources (EPA, 1993 [1]; Zeiner et al., 1988–1990 [3]; USFS, 1996 [5]) indicate that the diet of raccoons is highly variable and opportunistically based. There is no reason to assume that raccoons have anything but a fairly mixed diet in the area of Alameda, with equal proportions of plants, invertebrates, and flesh on a per annum basis. Calculated as $(100 - \%soil)/3 = \%plant$.

[i] Raccoons are known to have extremely variable and seasonally dependent diets (1,3,5).

[j] Daily plant material ingestion: Calculated as $\%plant \cdot DI_{total} = DI_{plant}$.

[k] Percent invertebrates in diet: Sources (EPA, 1993 [1]; Zeiner et al., 1988–1990 [3]; USFS, 1996 [5]) indicate that the diet of raccoons is highly variable and opportunistically based. There is no reason to assume that raccoons have anything but a fairly mixed diet in the area of Alameda, with equal proportions of plants, invertebrates, and flesh on a per annum basis. Calculated as $(100 - \%soil)/3 = \%invert$.

[l] Daily invertebrate ingestion: Calculated as $\%invert \cdot DI_{total} = DI_{invert}$.

[m] Percent flesh in diet: All sources (EPA, 1993 [1]; Zeiner et al., 1988–1990 [3]; USFS, 1996 [5]) indicate that the diet of raccoons is highly variable and opportunistically based. There is no reason to assume that raccoons have anything but a fairly mixed diet in the area of Alameda, with equal proportions of plants, invertebrates, and flesh on a per annum basis. Calculated as $(100 - \%soil)/3 = \%flesh$.

[n] Daily flesh ingestion: Calculated as $\%flesh \cdot DI_{total} = DI_{flesh}$.

[o] Home range: Raccoons have widely varying home and foraging ranges. EPA reports that home ranges of a "few hundred hectares" appears to be the most common. USFS reports home ranges in the range of 0.6 to 1.9 mi^2 (384 to 1216 ac), the lower of which might be a low estimate of the EPA description. In the case of the Runway Wetland, the island may be somewhat restrictive of their ranging habits, therefore, the 384 ac home range estimate was adopted. Home ranges of familial groups often overlap.

[p] Raccoons have widely varying home and foraging ranges. These can depend strongly on the areas topography and habitat availability (EPA, 1993 [1]; Zeiner et al., 1988–1990 [3]; USFS, 1996 [5]).

[q] Foraging range: Raccoons have widely varying home and foraging ranges. These can depend strongly on sex, the areas topography, habitat availability, and seasonable variability of foodstuffs (EPA, 1993 [1]; Zeiner et al., 1988–1990 [3]; USFS, 1996 [5]). However, home ranges for local island populations off of the coast of Georgia are reported to be quite small (relatively); these small home ranges serve well as a lower interval size estimate of foraging range, as raccoons, albeit gregarious, are otherwise defensive of limited foraging resources and will defend small territories.

[r] RW area: Calculated from geographic information system data.

[s] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-10. Exposure Parameters for Alameda Song Sparrow (Omnivore Model)

Exposure Parameter	Source	Abbreviation	Unit	Values for Alameda Song Sparrow
Body weight[a]	6	BW	kg	0.02
Ingestion rate[b]	calculated	IR	kg/kg/day	0.25
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.0051
Water ingestion rate[d]	calculated	WIR	l/kg/day	0.21
Daily water ingestion[e]	1 (calculated)	DI_{water}	l/day	0.0043
Percent of soil/sediment in diet[f]	2	%Soil	percent	9.3
Daily soil/sediment ingestion[g]	calculated	DI_{soil}	kg/day	0.0005
Percent plants in diet[h]	modeled as omnivore	%Plant	percent	45.35
Daily plant material ingestion[i]	modeled	DI_{plant}	kg/day	0.0023
Percent invertebrates in diet[j]	modeled as omnivore	%Invert	percent	45.35
Daily invertebrate ingestion[k]	modeled	DI_{invert}	kg/day	0.0023
Percent flesh in diet[l]	—	%Flesh	percent	—
Daily flesh ingestion[m]	—	DI_{flesh}	kg/day	—
Home range[n]	3 (coastal island population)	HR	ac	0.12
Foraging range[o]	3 (San Francisco Bay Salt Marshes)	FR	ac	0.1
RW area[p]	Navy	AR RW	ac	27.4
Site use factor (max of 1)[q]	conservative value for screening	SUF	AR RW (ac)/FR (ac)	1

Sources:

1. Allometry based on equations 3-4 and 3-15, from EPA, 1993.
2. Based on wild turkey, from Beyer, W. N., E. E. Connor, and S. Gerould, 1994.
3. Zeiner, D. C., W. F. Laudenslayer Jr., K. E. Mayer, and M. White, 1988–1990. Online at http://www.dfg.ca.gov/whdab/cwhr/cawildlife.html
6. Dunning, J. B., 1993. CRC Handbook of Avian Body Masses. CRC Press, Boca Raton, FL.

[a] Body weight: Mean value is for male and female adults during nesting, post-nesting, and winter, from Dunning, 1993 (6).

[b] Ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($IR = DI_{total} / BW$).

[c] Daily ingestion: This value was calculated as DI_{total} (g/day) $= 0.398 \cdot BW(\text{g})^{0.850}$ dry weight (equation 3-4 for passerines, EPA, 1993 [1]). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is

provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[d] Water ingestion rate: This value was back-calculated from the daily ingestion and the body weight ($WIR = DI_{water} / BW$).

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= 0.059 \cdot BW(\text{kg})^{0.67}$ (equation 3-15 for all birds, EPA, 1993 [1]). (Note: 1 kg water = 1 liter). This equation is adapted from Nagy, 1987: Nagy, K. A. 1987. "Field metabolic rate and food requirement scaling in mammals and birds." Ecological Monographs 57 (2): 111-128. The regression is provided for calculation of the mean of such values; this is in keeping with the assumptions regarding the mean body weight.

[f] Percent of soil/sediment in diet: Based on the study of turkeys by Beyer et al., 1994 (2). Turkeys share dietary habits with Alameda song sparrows, i.e., a mixture of primarily seeds and insects. Actual soil ingested is likely higher for turkeys than for Alameda song sparrows, as the latter are not obligate ground feeders. Without species-specific information, values reported for turkeys are most likely to serve as surrogate for Alameda song sparrow.

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent soil ingestion in diet and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: In the case of the Alameda song sparrow modeled as an omnivore, 50% of the diet is considered to be from plants (and soil). Calculated as $(100 - \%soil)/2 = \%plant$.

[i] Daily plant material ingestion: Calculated as $\%plant \cdot DI_{total} = DI_{plant}$.

[j] Percent invertebrates in diet: In the case of the Alameda song sparrow modeled as an omnivore, 50% of the diet is considered to be from invertebrates (and soil). Calculated as $(100 - \%soil)/2 = \%invert$.

[k] Daily invertebrate ingestion: Calculated as $(\%invert \cdot DI_{total} = DI_{invert})$.

[l] Percent flesh in diet: Not applicable.

[m] Daily flesh ingestion: Not applicable.

[n] Home range: Zeiner et al., 1988–1990 (3) report a value of 0.12 ac for song sparrows from an island population off British Columbia. Giving the potential geographic, climatic, and forage similarities, this appeared to be the most reasonable choice for the size of a home range.

[o] Foraging range: Foraging range was reported in Zeiner et al. for song sparrows in a "San Francisco Bay salt marsh" as 0.1 ac; this appeared to be the most reasonable choice for the size of a foraging range.

[p] RW area: Calculated form geographic information system data.

[q] Site use factor : Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

Table 6-11. Exposure Parameters for Red-Tailed Hawk

Exposure Parameter	Source	Abbreviation	Unit	Values for Red-Tailed Hawk
Body weight[a]	1	BW	kg	1.134
Ingestion rate[b]	1	IR	kg/kg/day	0.11
Daily ingestion[c]	1 (calculated)	DI_{total}	kg/day	0.12
Water ingestion rate[d]	1 (average)	WIR	l/kg/day	0.057
Daily water ingestion[e]	calculated	DI_{water}	l/day	0.065
Percent of soil/sediment in diet[f]	2	%Soil	percent	2.8
Daily soil/sediment ingestion[g]	calculated	DI_{soil}	kg/day	0.0035
Percent plants in diet[h]	—	%Plant	percent	—
Daily plant material ingestion[i]	—	DI_{plant}	kg/day	—
Percent invertebrates in diet[j]	—	%Invert	percent	—
Daily invertebrate ingestion[k]	—	DI_{invert}	kg/day	—
Percent flesh in diet[l]	1, 3, 5	%Flesh	percent	97.2
Daily flesh ingestion[m]	1	DI_{flesh}	kg/day	0.12
Home range[n]	1, 3	HR	ac	180
Foraging range[o]	1, 3	FR	ac	60
RW area[p]	calculated from GIS	AR RW	ac	27.4
Site use factor (max of 1)[q]	conservative value for screening	SUF	AR RW (ac)/FR (ac)	1

Sources:

1. EPA, 1993.
2. Based on red fox, from Beyer, W. N., E. E. Connor, and S. Gerould, 1994. (see footnote f below)
3. Zeiner, D.C., W.F. Laudenslayer Jr., K. E. Mayer, and M. White, 1988–1990. Online at http://www.dfg.ca.gov/whdab/cwhr/cawildlife.html. Sacramento, CA. *Buteo jamaicensis* (red-tailed hawk).
5. USFS, 1996. Online at http://www.fs.fed.us/database/feis/ [Updated March 12, 1998].

[a] Body weight: Mean of all reported adult weights. Selection of the mean was supported by graphical analysis of available data and calculation of mean and median values.

[b] Ingestion rate: This is the maximum daily ingestion rate reported by EPA, 1993 (1). Of three reported values, the second (middle) value was 0.10, so the maximum did not appear to be an unreasonable value. EPA, 1993 (1) reports only values for captive birds. Potentially, these values could be greater than those for wild birds, based on foodstuff availability, or lower, based on physiological demand (wild birds being more active).

[c] Daily ingestion: This value was calculated as $DI_{total} = BW \cdot IR$ dry weight. Equation 3-3 and 3-5 (for all birds and non-passerines, respectively) indicate that the calculated ingestion rate is roughly twice that of what the allometry predicts, thus indicating an overestimate resulting from an inflated ingestion rate (IR) observed from captive birds.

[d] Water ingestion rate: This is the average (of two values: male and female) daily water ingestion reported by EPA, 1993 (1).

[e] Daily water ingestion: This value was calculated as DI_{water} (l/day) $= WIR \cdot BW$(kg). (Note: 1 kg water = 1 liter). This number, given the assumptions of body weight, represents an expectation of the average daily water ingestion by a red-tailed hawk adult of average body weight.

[f] Percent of soil/sediment in diet: Based on the study of red fox by Beyer et al., 1994 (2). Beyer et al. do not provide direct study of any avian birds of prey. However, the diet of the red fox is remarkably similar to that of a red-tailed hawk, consequently, this value was chosen.

[g] Daily soil/sediment ingestion: Calculated on the basis of the reported percent dietary soil ingestion and the daily ingestion ($\%soil \cdot DI_{total} = DI_{soil}$).

[h] Percent plants in diet: Red-tailed hawks are considered strict carnivores.

[i] Daily plant material ingestion: Not applicable.

[j] Percent invertebrates in diet: Red-tailed hawks are not considered even minor insectivores.

[k] Daily invertebrate ingestion: Not applicable.

[l] Percent flesh in diet: Red-tailed hawks are considered obligate flesh eaters. Calculated as $100 - \%soil = \%flesh$.

[m] Daily flesh ingestion: Calculated as $\%flesh \cdot DI_{total} = DI_{flesh}$.

[n] Home range: EPA, 1993 (1) and Zeiner et al., 1988–1990 (3) report home ranges of greatly varying size. There are many factors that play a role in determining the size of a red-tailed hawk's home range, including the food base, number of hunting perches in the area, age and sex of individuals, pair establishment, maternal/paternal state, migratory status, etceteras. All else being equal, non-migratory individuals tend to have smaller home ranges than migratory birds. Early studies (cited in EPA, 1993 [1] and Zeiner et al., 1988–1990 [3]) indicate that home ranges may be relatively small, but sources do not agree about interpretation. Later studies (cited in EPA, 1993 [1]) indicate that for the most part, red-tailed hawks have home ranges that vary from a "few hundred to over 1500 hectares" in size. With contradictory material, the stance was adopted that home ranges for the most sedentary and territorial of individuals may be rather small (for the species); thus the lowest maximum mean value reported in EPA, 1993 (1) (from a California-based study) was adopted for the home range size, and the minimum mean value (based on the same resource) was adopted for the foraging range, even though home ranges rarely overlap significantly for members of this species.

[o] Foraging range: See "home range" above.

[p] RW area: Calculated from geographical information system data

[q] Site use factor: Ecological Risk Assessment Guidance for Superfund (EPA, 1997a) recommends a site use factor of 1 for all receptors in a screening-level assessment.

6.4.2 Selection of Toxicity Reference Values for Food-Chain Models

The Navy has derived TRVs for birds and mammals from published toxicological data for 20 chemicals commonly found at Navy Installations in San Francisco Bay (Navy, 1998b). The derived TRVs include low TRVs based upon chronic no effects levels, and high TRVs based upon approximately the mid-range of all sublethal effects levels for a particular chemical. Since the Navy-derived TRVs include only a subset of the chemicals that failed the initial comparison to screening benchmarks, TRVs from other published sources were used to fill in the gaps. Specifically, Los Alamos National Laboratory's (LANL's) Environmental Restoration Project has developed a database of toxicological literature and identified No Observed Effects Levels (NOELs) for many organic and inorganic constituents for birds and mammals (LANL, 2000). The NOELs identified in the LANL database are generic mammalian and avian NOELs based upon a wide range of toxicological literature, and hence are as applicable at Alameda Point as elsewhere in North America. These NOELs are equivalent to the Navy low TRVs. Using this approach, mammalian TRVs were identified for 52 of the 60 chemical constituents that failed the initial comparison to screening benchmarks. Avian TRVs were identified for 30 of the 60 chemical constituents that failed initial comparison to screening benchmarks. The difference in the number of TRVs identified for mammals versus birds is due mainly to the fact that no avian TRVs for individual PAH constituents were found in the literature. TRVs selected for use in the food chain comparisons are presented in Table 6-12.

Table 6-12. TRVs Used in Food-Chain Model Dose Comparisons

Analyte	High TRV - Mammal (mg/kg·d)	Low TRV - Mammal (mg/kg·d)	Mammal TRV Source	High TRV - Bird (mg/kg·d)	Low TRV - Bird (mg/kg·d)	Bird TRV Source
4,4'-DDD	16	0.83	Navy, 1998b	n/a	0.0093	Navy, 1998b
4,4'-DDE	16	0.83	Navy, 1998b	0.6	0.0093	Navy, 1998b
4,4'-DDT	16	0.83	Navy, 1998b	1.5	0.0093	Navy, 1998b
Aluminum	n/a*	1.93	LANL, 2000	n/a	110	LANL, 2000
Arsenic	4.7	0.32	Navy, 1998b	22.01	5.5	Navy, 1998b
Barium	n/a	0.55	LANL, 2000	n/a	12.6	LANL, 2000
Beryllium	n/a	0.66	LANL, 2000	n/a	n/a	
Cadmium	2.64	0.06	Navy, 1998b	10.43	0.081	Navy, 1998b
Chromium	n/a	3.3	LANL, 2000	n/a	3.8	LANL, 2000
Cobalt	20	1.2	Navy, 1998b	n/a	0.02	LANL, 2000
Copper	631.58	2.67	Navy, 1998b	56.26	2.3	Navy, 1998b
Iron	n/a	n/a		n/a	n/a	
Lead	240.64	0.0015	Navy, 1998b	8.75	0.0141	Navy, 1998b
Manganese	159.09	13.7	Navy, 1998b	776	77.6	Navy, 1998b
Mercury	4	0.25	Navy, 1998b	0.18	0.0397	Navy, 1998b

Table 6-12 (continued). TRVs Used in Food-Chain Model Dose Comparisons

Analyte	High TRV - Mammal (mg/kg·d)	Low TRV - Mammal (mg/kg·d)	Mammal TRV Source	High TRV - Bird (mg/kg·d)	Low TRV - Bird (mg/kg·d)	Bird TRV Source
Molybdenum	n/a	n/a		n/a	n/a	
Nickel	31.6	0.133	Navy, 1998b	56.26	1.36	Navy, 1998b
Selenium	1.21	0.05	Navy, 1998b	0.93	0.23	Navy, 1998b
Silver	n/a	2	LANL, 2000	n/a	5.44	LANL, 2000
Thallium	1.43	0.48	Navy, 1998b	n/a	n/a	
Vanadium	n/a	2.1	LANL, 2000	n/a	1.1	LANL, 2000
Zinc	411.4	9.6	Navy, 1998b	172	17.2	Navy, 1998b
Benz(a)anthracene	n/a	1.7	LANL, 2000	n/a	n/a	
Benzo(a)pyrene	32.79	1.31	Navy, 1998b	n/a	n/a	
Benzo(b)fluoranthene	n/a	4	LANL, 2000	n/a	n/a	
Benzo(g,h,i)perylene	n/a	7.2	LANL, 2000	n/a	n/a	
Benzo(k)fluoranthene	n/a	7.2	LANL, 2000	n/a	n/a	
Chrysene	n/a	1.7	LANL, 2000	n/a	n/a	
Dibenz(a,h)anthracene	n/a	1.33	LANL, 2000	n/a	n/a	
Fluoranthene	n/a	12.5	LANL, 2000	n/a	n/a	
Indeno(1,2,3-cd)pyrene	n/a	7.2	LANL, 2000	n/a	n/a	
Pyrene	n/a	7.5	LANL, 2000	n/a	n/a	
2-methylnaphthalene	n/a	2.5	LANL, 2000	n/a	n/a	
Acenaphthene	n/a	70	LANL, 2000	n/a	n/a	
Acenaphthylene	n/a	70	LANL, 2000	n/a	n/a	
Anthracene	n/a	1000	LANL, 2000	n/a	n/a	
Fluorene	n/a	12.5	LANL, 2000	n/a	n/a	
Naphthalene	150	50	Navy, 1998b	n/a	0.139	LANL, 2000
Phenanthrene	n/a	51.4	LANL, 2000	n/a	n/a	
Total PCB	1.28	0.36	Navy, 1998b	1.27	0.091	Navy, 1998b
Aldrin	1	0.1	Navy, 1998b	n/a	n/a	
Alpha-chlordane	n/a	1.175	LANL, 2000	n/a	2.1	LANL, 2000
Beta-BHC	n/a	0.4	LANL, 2000	n/a	n/a	
Dieldrin	n/a	0.02	LANL, 2000	n/a	0.077	LANL, 2000
Endosulfan I	n/a	1.5	LANL, 2000	n/a	10	LANL, 2000
Endosulfan II	n/a	1.5	LANL, 2000	n/a	10	LANL, 2000
Endrin	n/a	0.092	LANL, 2000	n/a	0.01	LANL, 2000
Endrin aldehyde	n/a	n/a		n/a	n/a	
Gamma-BHC (lindane)	3.75	0.05	Navy 1998	n/a	0.56	LANL, 2000

Table 6-12 (continued). TRVs Used in Food-Chain Model Dose Comparisons

Analyte	High TRV - Mammal (mg/kg·d)	Low TRV - Mammal (mg/kg·d)	Mammal TRV Source	High TRV - Bird (mg/kg·d)	Low TRV - Bird (mg/kg·d)	Bird TRV Source
Gamma-chlordane	n/a	1.175	LANL, 2000	n/a	2.1	LANL, 2000
Toxaphene	n/a	8	LANL, 2000	n/a	10	LANL, 2000
2,4-dimethylphenol	n/a	n/a		n/a	n/a	
2-chlorophenol	n/a	0.5	LANL, 2000	n/a	11.3	LANL, 2000
2-methylphenol	n/a	n/a		n/a	n/a	
4-nitrophenol	n/a	n/a		n/a	n/a	
Benzoic acid	n/a	4	LANL, 2000	n/a	n/a	
Bis(2-ethylhexyl)phthalate	n/a	18	LANL, 2000	n/a	1.1	LANL, 2000
Diethylphthalate	n/a	n/a		n/a	n/a	
Phenol	n/a	60	LANL, 2000	n/a	n/a	
Tributyl tin	n/a	n/a		45.85	0.735	Navy, 1998b

*n/a = not available

6.4.3 Food Chain Dose Calculations and Comparisons to TRVs

The conceptual site model for the Runway Wetland assumes that maximum exposure of contaminants to receptors is through ingestion of contaminated media and foodstuffs. Although each receptor possesses unique exposure parameters (Tables 6-3 through 6-11), the fundamental model for calculating dose through the food chain is the same for each. The food chain model is presented in the equation below.

$$Dose = \sum_i \frac{(DI_i \cdot C_i \cdot TF_i) \cdot SUF}{BW}$$

where:

Dose is the dose *rate* measured in milligram contaminant per kilogram receptor body weight per day (mg/kg/day);

DI is the daily ingestion of foodstuffs/soil/water measured in kilograms foodstuffs/soil/water per day (kg/day);

C is the *media-specific* concentration of contaminant measured in milligram contaminant per kilogram of foodstuffs/soil/water (mg/kg);

TF is the *media-specific* transfer factor for the uptake of contaminants from foodstuffs/soil/water measured in milligrams contaminant per milligram receptor tissue

(mg/mg, "unitless"); for a screening-level ERA, TF was assumed equal to 1.0, meaning that 100% of the contaminant was anabolized (transferred) into receptor tissues;

SUF is the receptor's site use factor. For a screening-level ERA, the SUF is assumed equal to 1.0, meaning that the receptor acquires 100% of its foodstuffs from the Runway Wetland.

BW is the organism's body weight in kilograms;

i is an index for the various media ingested (foodstuffs/soil/water).

Note that no "food chain multiplier" is necessary for the food chain model, as there are no trophic discontinuities in the model (i.e., the dose is calculated directly from concentrations of contaminants measured in the specific foodstuffs).

Dose was calculated based upon the maximum concentrations of each constituent observed in sediment, water, and biological tissue samples. Eight of the semivolatile organic compound COPECs (2,4-dimethylphenol, 2-chlorophenol, 2-methylphenol, 4-nitrophenol, benzoic acid, bis(2-ethylhexyl)phthalate, diethylphthalate, and phenol) were not analyzed in plant, mammal, or invertebrate tissue, so dose to receptors is based solely on incidental sediment ingestion using the maximum concentration in the sediment for these eight constituents. These constituents, with the exception of benzoic acid, were analyzed in fish tissue, which was used to calculate average and maximum doses to the great blue heron. Maximum dose was divided by the low TRV and the high TRV when available, resulting in the calculation of a maximum of two hazard quotients (HQs) for each COPEC. HQ1 is the maximum calculated dose divided by the high TRV; and HQ2 is the maximum calculated dose divided by the low TRV. HQ2 is the most conservative of the hazard quotient calculations, and any constituent with an HQ2 greater than 1 was retained for further evaluation in the COPEC refinement step of the risk screening (Section 6.5). Likewise, constituents with HQ2 less than 1 were dropped from further consideration. Since HQ1 values were based upon low effects range TRVs, they are presented as a relative means of bounding potential risk at the site.

6.4.3.1 Dose Calculations and Comparisons to TRVs for the Mallard

Dose calculations and HQ calculations for the mallard modeled as a strict herbivore are presented in Table 6-13. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, cobalt, lead, and manganese had HQ2 values (maximum dose divided by low TRV) exceeding 1. These four constituents were retained as COPECs for further evaluation in the COPEC refinement step of the risk screening. Constituents for which TRVs were not available are also discussed in the COPEC refinement. No calculated maximum doses to the herbivorous mallard exceeded high TRVs, meaning that all HQ1 values were less than 1.

Dose calculations and HQ calculations for the mallard modeled with an omnivorous diet of plants and invertebrates are presented in Table 6-14. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, cobalt, and lead had HQ2 values (maximum

dose divided by low TRV) exceeding 1. These three constituents are addressed further in the COPEC refinement step. No calculated maximum doses to the omnivorous mallard exceeded high TRVs, meaning that all HQ1 values were less than 1.

Dose calculations and HQ calculations for the mallard modeled as a strict invertebrate feeder are presented in Table 6-15. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Cobalt and lead had HQ2 values (maximum dose divided by low TRV) exceeding 1. No calculated maximum doses to the invertebrate feeding mallard exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which avian TRVs were available had any mallard HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the mallard in any of its modeled forms.

Table 6-13. HQ Calculations for Mallard (Herbivore Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.0002	n/a	0.0093	n/a	0.025
4,4'-DDE	3.72E-05	0.6	0.0093	6.2E-05	0.004
4,4'-DDT	0.0001	1.5	0.0093	7.99E-05	0.013
Aluminum	155.44	n/a	110	n/a	1.413
Arsenic	0.457	22.01	5.5	0.021	0.083
Barium	1.864	n/a	12.6	n/a	0.148
Beryllium	0.024	n/a	n/a	n/a	n/a
Cadmium	0.050	10.43	0.081	0.005	0.616
Chromium	0.670	n/a	3.8	n/a	0.176
Cobalt	0.173	n/a	0.02	n/a	8.633
Copper	1.036	56.26	2.3	0.018	0.450
Iron	244.98	n/a	n/a	n/a	n/a
Lead	1.014	8.75	0.0141	0.116	71.89
Manganese	95.79	776	77.6	0.123	1.23
Mercury	0.005	0.18	0.0397	0.029	0.134
Molybdenum	0.136	n/a	n/a	n/a	n/a
Nickel	1.081	56.26	1.36	0.019	0.795
Selenium	0.113	0.93	0.23	0.122	0.493
Silver	0.004	n/a	5.44	n/a	0.0007
Thallium	0.007	n/a	n/a	n/a	n/a
Vanadium	0.941	n/a	1.1	n/a	0.856

Table 6-13 (continued). HQ Calculations for Mallard (Herbivore Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	2.20	172	17.2	0.013	0.128
Benz(a)anthracene	0.001	n/a	n/a	n/a	n/a
Benzo(a)pyrene	0.001	n/a	n/a	n/a	n/a
Benzo(b)fluoranthene	0.002	n/a	n/a	n/a	n/a
Benzo(g,h,i)perylene	0.002	n/a	n/a	n/a	n/a
Benzo(k)fluoranthene	0.002	n/a	n/a	n/a	n/a
Chrysene	0.002	n/a	n/a	n/a	n/a
Dibenz(a,h)anthracene	0.001	n/a	n/a	n/a	n/a
Fluoranthene	0.002	n/a	n/a	n/a	n/a
Indeno(1,2,3-cd)pyrene	0.002	n/a	n/a	n/a	n/a
Pyrene	0.002	n/a	n/a	n/a	n/a
2-methylnaphthalene	0.0008	n/a	n/a	n/a	n/a
Acenaphthene	0.0006	n/a	n/a	n/a	n/a
Acenaphthylene	0.0006	n/a	n/a	n/a	n/a
Anthracene	0.0006	n/a	n/a	n/a	n/a
Fluorene	0.0006	n/a	n/a	n/a	n/a
Naphthalene	0.001	n/a	0.139	n/a	0.009
Phenanthrene	0.002	n/a	n/a	n/a	n/a
Total PCB	0.001	1.27	0.091	0.0009	0.013
Aldrin	1.6E-05	n/a	n/a	n/a	n/a
Alpha-chlordane	6.5E-05	n/a	2.1	n/a	3.1E-05
Beta-BHC	0.0001029	n/a	n/a	n/a	n/a
Dieldrin	2.7E-05	n/a	0.077	n/a	0.0004

Table 6-13 (continued). HQ Calculations for Mallard (Herbivore Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	4.3E-05	n/a	10	n/a	4.3E-06
Endosulfan II	2.7E-05	n/a	10	n/a	2.7E-06
Endrin	2.7E-05	n/a	0.01	n/a	0.003
Endrin aldehyde	4.6E-05	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	2.4E-05	n/a	0.56	n/a	4.3E-05
Gamma-chlordane	3.2E-05	n/a	2.1	n/a	1.5E-05
Toxaphene	0.002	n/a	n/a	n/a	n/a
2,4-dimethylphenol	0.0004	n/a	n/a	n/a	n/a
2-chlorophenol	0.0004	n/a	11.3	n/a	3.27E-05
2-methylphenol	0.0004	n/a	n/a	n/a	n/a
4-nitrophenol	0.0009	n/a	n/a	n/a	n/a
Benzoic acid	0.001	n/a	n/a	n/a	n/a
Bis(2-ethylhexyl)phthalate	0.0004	n/a	1.1	n/a	0.0003
Diethylphthalate	0.0004	n/a	n/a	n/a	n/a
Phenol	0.0004	n/a	n/a	n/a	n/a
Tributyl tin	0.0007	45.85	0.735	1.5E-05	0.0009

Note: Constituents with at least one HQ>1 are shaded in gray in the table.

n/a = not available. No TRV was available, so no HQ could be calculated.

Table 6-14. HQ Calculations for Mallard (Omnivore Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.0003	n/a	0.0093	n/a	0.031
4,4'-DDE	0.0003	0.6	0.0093	0.0005	0.035
4,4'-DDT	0.0002	1.5	0.0093	0.0001	0.020
Aluminum	117.88	n/a	110	n/a	1.072
Arsenic	0.359	22.01	5.5	0.016	0.065
Barium	1.466	n/a	12.6	n/a	0.116
Beryllium	0.017	n/a	n/a	n/a	n/a
Cadmium	0.046	10.43	0.081	0.004	0.571
Chromium	0.537	n/a	3.8	n/a	0.141
Cobalt	0.131	n/a	0.02	n/a	6.552
Copper	1.519	56.26	2.3	0.027	0.660
Iron	187.87	n/a	n/a	n/a	n/a
Lead	0.771	8.75	0.0141	0.088	54.66
Manganese	75.95	776	77.6	0.098	0.979
Mercury	0.010	0.18	0.0397	0.056	0.255
Molybdenum	0.124	n/a	n/a	n/a	n/a
Nickel	0.831	56.26	1.36	0.015	0.611
Selenium	0.113	0.93	0.23	0.122	0.493
Silver	0.014	n/a	5.44	n/a	0.003
Thallium	0.006	n/a	n/a	n/a	n/a
Vanadium	0.704	n/a	1.1	n/a	0.640

Table 6-14 (continued). HQ Calculations for Mallard (Omnivore Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	4.421	172	17.2	0.026	0.257
Benz(a)anthracene	0.001	n/a	n/a	n/a	n/a
Benzo(a)pyrene	0.001	n/a	n/a	n/a	n/a
Benzo(b)fluoranthene	0.002	n/a	n/a	n/a	n/a
Benzo(g,h,i)perylene	0.002	n/a	n/a	n/a	n/a
Benzo(k)fluoranthene	0.002	n/a	n/a	n/a	n/a
Chrysene	0.002	n/a	n/a	n/a	n/a
Dibenz(a,h)anthracene	0.001	n/a	n/a	n/a	n/a
Fluoranthene	0.002	n/a	n/a	n/a	n/a
Indeno(1,2,3-cd)pyrene	0.002	n/a	n/a	n/a	n/a
Pyrene	0.002	n/a	n/a	n/a	n/a
2-methylnaphthalene	0.001	n/a	n/a	n/a	n/a
Acenaphthene	0.001	n/a	n/a	n/a	n/a
Acenaphthylene	0.001	n/a	n/a	n/a	n/a
Anthracene	0.001	n/a	n/a	n/a	n/a
Fluorene	0.001	n/a	n/a	n/a	n/a
Naphthalene	0.001	n/a	0.139	n/a	0.009
Phenanthrene	0.002	n/a	n/a	n/a	n/a
Total PCB	0.002	1.27	0.091	0.002	0.026
Aldrin	2.8E-05	n/a	n/a	n/a	n/a
Alpha-chlordane	6.6E-05	n/a	2.1	n/a	3.1E-05
Beta-BHC	0.0001	n/a	n/a	n/a	n/a
Dieldrin	0.0001	n/a	0.077	n/a	0.002

Table 6-14 (continued). HQ Calculations for Mallard (Omnivore Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	4.9E-05	n/a	10	n/a	4.9E-06
Endosulfan II	6.1E-05	n/a	10	n/a	6.1E-06
Endrin	3.9E-05	n/a	0.01	n/a	0.004
Endrin aldehyde	5.8E-05	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	3.4E-05	n/a	0.56	n/a	6.1E-05
Gamma-chlordane	4.5E-05	n/a	2.1	n/a	2.2E-05
Toxaphene	0.003	n/a	n/a	n/a	n/a
2,4-dimethylphenol	0.0004	n/a	n/a	n/a	n/a
2-chlorophenol	0.0004	n/a	11.3	n/a	3.3E-05
2-methylphenol	0.0004	n/a	n/a	n/a	n/a
4-nitrophenol	0.001	n/a	n/a	n/a	n/a
Benzoic acid	0.001	n/a	n/a	n/a	n/a
Bis(2-ethylhexyl)phthalate	0.0004	n/a	1.1	n/a	0.0003
Diethylphthalate	0.0004	n/a	n/a	n/a	n/a
Phenol	0.0004	n/a	n/a	n/a	n/a
Tributyl tin	0.0005	45.85	0.735	1.022E-05	0.0006

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

Table 6-15. HQ Calculations for Mallard (Invertebrate Feeder Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.0004	n/a	0.0093	n/a	0.041
4,4'-DDE	0.001	0.6	0.0093	0.001	0.086
4,4'-DDT	0.0003	1.5	0.0093	0.0002	0.032
Aluminum	41.62	n/a	110	n/a	0.378
Arsenic	0.148	22.01	5.5	0.007	0.027
Barium	0.617	n/a	12.6	n/a	0.049
Beryllium	0.003	n/a	n/a	n/a	n/a
Cadmium	0.035	10.43	0.081	0.003	0.430
Chromium	0.268	n/a	3.8	n/a	0.071
Cobalt	0.045	n/a	0.02	n/a	2.256
Copper	2.22	56.26	2.3	0.039	0.965
Iron	70.35	n/a	n/a	n/a	n/a
Lead	0.268	8.75	0.0141	0.031	19.03
Manganese	32.31	776	77.6	0.042	0.416
Mercury	0.018	0.18	0.0397	0.098	0.445
Molybdenum	0.089	n/a	n/a	n/a	n/a
Nickel	0.315	56.26	1.36	0.006	0.232
Selenium	0.101	0.93	0.23	0.109	0.439
Silver	0.032	n/a	5.44	n/a	0.006
Thallium	0.005	n/a	n/a	n/a	n/a
Vanadium	0.217	n/a	1.1	n/a	0.198

Table 6-15 (continued). HQ Calculations for Mallard (Invertebrate Feeder Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	7.915	172	17.2	0.046	0.460
Benz(a)anthracene	0.001	n/a	n/a	n/a	n/a
Benzo(a)pyrene	0.001	n/a	n/a	n/a	n/a
Benzo(b)fluoranthene	0.001	n/a	n/a	n/a	n/a
Benzo(g,h,i)perylene	0.001	n/a	n/a	n/a	n/a
Benzo(k)fluoranthene	0.002	n/a	n/a	n/a	n/a
Chrysene	0.001	n/a	n/a	n/a	n/a
Dibenz(a,h)anthracene	0.001	n/a	n/a	n/a	n/a
Fluoranthene	0.001	n/a	n/a	n/a	n/a
Indeno(1,2,3-cd)pyrene	0.002	n/a	n/a	n/a	n/a
Pyrene	0.001	n/a	n/a	n/a	n/a
2-methylnaphthalene	0.001	n/a	n/a	n/a	n/a
Acenaphthene	0.001	n/a	n/a	n/a	n/a
Acenaphthylene	0.001	n/a	n/a	n/a	n/a
Anthracene	0.001	n/a	n/a	n/a	n/a
Fluorene	0.001	n/a	n/a	n/a	n/a
Naphthalene	0.001	n/a	0.139	n/a	0.008
Phenanthrene	0.001	n/a	n/a	n/a	n/a
Total PCB	0.004	1.27	0.091	0.003	0.046
Aldrin	4.8E-05	n/a	n/a	n/a	n/a
Alpha-chlordane	6.3E-05	n/a	2.1	n/a	3E-05
Beta-BHC	0.0002	n/a	n/a	n/a	n/a
Dieldrin	0.0004	n/a	0.077	n/a	0.005

Table 6-15 (continued). HQ Calculations for Mallard (Invertebrate Feeder Model)

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	5.5E-05	n/a	10	n/a	5.5E-06
Endosulfan II	0.0001	n/a	10	n/a	1.1E-05
Endrin	5.6E-05	n/a	0.01	n/a	0.006
Endrin aldehyde	7.5E-05	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	4.8E-05	n/a	0.56	n/a	8.6E-05
Gamma-chlordane	6.6E-05	n/a	2.1	n/a	3.1E-05
Toxaphene	0.003	n/a	n/a	n/a	n/a
2,4-dimethylphenol	0.0004	n/a	n/a	n/a	n/a
2-chlorophenol	0.0004	n/a	11.3	n/a	3.3E-05
2-methylphenol	0.0004	n/a	n/a	n/a	n/a
4-nitrophenol	0.001	n/a	n/a	n/a	n/a
Benzoic acid	0.001	n/a	n/a	n/a	n/a
Bis(2-ethylhexyl)phthalate	0.0004	n/a	1.1	n/a	0.0003
Diethylphthalate	0.0004	n/a	n/a	n/a	n/a
Phenol	0.0004	n/a	n/a	n/a	n/a
Tributyl tin	4. 4E-05	45.85	0.735	9.7-07	6.0E-05

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

6.4.3.2 Dose Calculations and TRV Comparisons for the Great Blue Heron

Dose calculations and HQ calculations for the great blue heron modeled as a strict piscivore are presented in Table 6-16. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Cobalt, lead, mercury, nickel, and zinc had HQ2 values (maximum dose divided by low TRV) exceeding 1. These five constituents are retained for further evaluation in COPEC refinement. No calculated maximum doses to the great blue heron exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which avian TRVs were available had any great blue heron HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the great blue heron at the Runway Wetland.

6.4.3.3 Dose Calculations and TRV Comparisons for the California Ground Squirrel

Dose calculations and HQ calculations for the California ground squirrel are presented in Table 6-17. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, arsenic, barium, cadmium, copper, lead, manganese, nickel, selenium, and vanadium had HQ2 values (maximum dose divided by low TRV) exceeding 1. The ten inorganic constituents with an HQ exceeding 1 are addressed further in COPEC refinement. No calculated maximum doses to the California ground squirrel exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which mammalian TRVs were available had any California ground squirrel HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the California ground squirrel at the Runway Wetland.

6.4.3.4 Dose Calculations and TRV Comparisons for the Raccoon

Dose calculations and HQ calculations for the raccoon are presented in Table 6-18. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, barium, lead, manganese, nickel, selenium, and zinc had HQ2 values (maximum dose divided by low TRV) exceeding 1. These seven constituents are addressed further in the COPEC refinement step of the risk screening. No calculated maximum doses to the raccoon exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which mammalian TRVs were available had any raccoon HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the raccoon at the Runway Wetland.

Table 6-16. HQ Calculations for Great Blue Heron

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.004	n/a	0.0093	n/a	0.393
4,4'-DDE	0.006	0.6	0.0093	0.010	0.650
4,4'-DDT	0.0005	1.5	0.0093	0.0004	0.059
Aluminum	79.93	n/a	110	n/a	0.727
Arsenic	0.751	22.01	5.5	0.034	0.136
Barium	1.810	n/a	12.6	n/a	0.144
Beryllium	0.009	n/a	n/a	n/a	n/a
Cadmium	0.031	10.43	0.081	0.003	0.383
Chromium	0.542	n/a	3.8	n/a	0.143
Cobalt	0.128	n/a	0.02	n/a	6.406
Copper	1.757	56.26	2.3	0.031	0.764
Iron	125.83	n/a	n/a	n/a	n/a
Lead	0.423	8.75	0.0141	0.048	29.97
Manganese	45.22	776	77.6	0.058	0.583
Mercury	0.076	0.18	0.0397	0.425	1.925
Molybdenum	0.035	n/a	n/a	n/a	n/a
Nickel	1.595	56.26	1.36	0.028	1.173
Selenium	0.106	0.93	0.23	0.114	0.461
Silver	0.027	n/a	5.44	n/a	0.005
Thallium	0.023	n/a	n/a	n/a	n/a
Vanadium	0.260	n/a	1.1	n/a	0.236

Table 6-16 (continued). HQ Calculations for Great Blue Heron

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	39.10	172	17.2	0.227	2.273
Benz(a)anthracene	0.318	n/a	n/a	n/a	n/a
Benzo(a)pyrene	0.318	n/a	n/a	n/a	n/a
Benzo(b)fluoranthene	0.318	n/a	n/a	n/a	n/a
Benzo(g,h,i)perylene	0.038	n/a	n/a	n/a	n/a
Benzo(k)fluoranthene	0.318	n/a	n/a	n/a	n/a
Chrysene	0.318	n/a	n/a	n/a	n/a
Dibenz(a,h)anthracene	0.318	n/a	n/a	n/a	n/a
Fluoranthene	0.318	n/a	n/a	n/a	n/a
Indeno(1,2,3-cd)pyrene	0.319	n/a	n/a	n/a	n/a
Pyrene	0.318	n/a	n/a	n/a	n/a
2-methylnaphthalene	0.008	n/a	n/a	n/a	n/a
Acenaphthene	0.318	n/a	n/a	n/a	n/a
Acenaphthylene	0.318	n/a	n/a	n/a	n/a
Anthracene	0.318	n/a	n/a	n/a	n/a
Fluorene	0.318	n/a	n/a	n/a	n/a
Naphthalene	0.010	n/a	0.139	n/a	0.075
Phenanthrene	0.009	n/a	n/a	n/a	n/a
Total PCB	0.016	1.27	0.091	0.014	0.193
Aldrin	0.002	n/a	n/a	n/a	n/a
Alpha-chlordane	0.0002	n/a	2.1	n/a	9.3E-05
Beta-BHC	0.002	n/a	n/a	n/a	n/a
Dieldrin	0.002	n/a	0.077	n/a	0.026

Table 6-16 (continued). HQ Calculations for Great Blue Heron

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	0.002	n/a	10	n/a	0.0002
Endosulfan II	0.002	n/a	10	n/a	0.0002
Endrin	0.002	n/a	0.01	n/a	0.169
Endrin aldehyde	0.0004	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	0.002	n/a	0.56	n/a	0.003
Gamma-chlordane	0.0002	n/a	2.1	n/a	8.8E-05
Toxaphene	0.102	n/a	n/a	n/a	n/a
2,4-dimethylphenol	0.318	n/a	n/a	n/a	n/a
2-chlorophenol	0.318	n/a	11.3	n/a	0.028
2-methylphenol	0.318	n/a	n/a	n/a	n/a
4-nitrophenol	0.319	n/a	n/a	n/a	n/a
Benzoic acid	0.002	n/a	n/a	n/a	n/a
Bis(2-ethylhexyl)phthalate	0.318	n/a	1.1	n/a	0.289
Diethylphthalate	0.318	n/a	n/a	n/a	n/a
Phenol	0.318	n/a	n/a	n/a	n/a
Tributyl tin	0.001	45.85	0.735	3.267E-05	0.002

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

Table 6-17. HQ Calculations for California Ground Squirrel

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.001	16	0.83	6.2E-05	0.001
4,4'-DDE	0.0003	16	0.83	1.7E-05	0.0003
4,4'-DDT	0.001	16	0.83	3.4E-05	0.001
Aluminum	440.02	n/a	1.93	n/a	228
Arsenic	1.133	4.7	0.32	0.241	3.541
Barium	4.870	n/a	0.55	n/a	8.854
Beryllium	0.058	n/a	0.66	n/a	0.088
Cadmium	0.127	2.64	0.06	0.048	2.113
Chromium	2.185	n/a	3.3	n/a	0.662
Cobalt	0.460	20	1.2	0.023	0.384
Copper	3.048	631.58	2.67	0.005	1.142
Iron	678.21	n/a	n/a	n/a	n/a
Lead	2.694	240.64	0.0015	0.011	1795.9
Manganese	228.49	159.09	13.7	1.436	16.68
Mercury	0.018	4	0.25	0.005	0.073
Molybdenum	0.340	n/a	n/a	n/a	n/a
Nickel	2.984	31.6	0.133	0.094	22.44
Selenium	0.283	1.21	0.05	0.234	5.657
Silver	0.021	n/a	2	n/a	0.010
Thallium	0.023	1.43	0.48	0.016	0.050
Vanadium	2.478	n/a	2.1	n/a	1.180

Table 6-17 (continued). HQ Calculations for California Ground Squirrel

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	7.336	411.4	9.6	0.018	0.764
Benz(a)anthracene	0.004	n/a	1.7	n/a	0.002
Benzo(a)pyrene	0.004	32.79	1.31	0.0001	0.003
Benzo(b)fluoranthene	0.005	n/a	4	n/a	0.001
Benzo(g,h,i)perylene	0.006	n/a	7.2	n/a	0.001
Benzo(k)fluoranthene	0.005	n/a	7.2	n/a	0.001
Chrysene	0.006	n/a	1.7	n/a	0.003
Dibenz(a,h)anthracene	0.004	n/a	1.33	n/a	0.003
Fluoranthene	0.006	n/a	12.5	n/a	0.0005
Indeno(1,2,3-cd)pyrene	0.006	n/a	7.2	n/a	0.001
Pyrene	0.006	n/a	7.5	n/a	0.001
2-methylnaphthalene	0.003	n/a	2.5	n/a	0.001
Acenaphthene	0.002	n/a	70	n/a	3.3E-05
Acenaphthylene	0.002	n/a	70	n/a	3.4E-05
Anthracene	0.002	n/a	1000	n/a	2.3E-06
Fluorene	0.002	n/a	12.5	n/a	0.0002
Naphthalene	0.004	150	50	2.6E-05	7.9E-05
Phenanthrene	0.005	n/a	51.4	n/a	9.0E-05
Total PCB	0.004	1.28	0.36	0.003	0.010
Aldrin	4.9E-05	1	0.1	4.9E-05	0.0005
Alpha-chlordane	0.0002	n/a	1.175	n/a	0.0001
Beta-BHC	0.0005	n/a	0.4	n/a	0.001
Dieldrin	0.0001	n/a	0.02	n/a	0.007

Table 6-17 (continued). HQ Calculations for California Ground Squirrel

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	0.0001	n/a	1.5	n/a	8.3E-05
Endosulfan II	9.1E-05	n/a	1.5	n/a	6.1E-05
Endrin	8.0E-05	n/a	0.092	n/a	0.001
Endrin aldehyde	0.0002	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	6.8E-05	3.75	0.05	1.8E-05	0.001
Gamma-chlordane	9.2E-05	n/a	1.175	n/a	7.8E-05
Toxaphene	0.006	n/a	8	n/a	0.001
2,4-dimethylphenol	0.002	n/a	n/a	n/a	n/a
2-chlorophenol	0.002	n/a	0.5	n/a	0.004
2-methylphenol	0.002	n/a	n/a	n/a	n/a
4-nitrophenol	0.004	n/a	n/a	n/a	n/a
Benzoic acid	0.006	n/a	4	n/a	0.001
Bis(2-ethylhexyl)phthalate	0.002	n/a	18	n/a	9.8E-05
Diethylphthalate	0.002	n/a	n/a	n/a	n/a
Phenol	0.002	n/a	60	n/a	2.9E-05
Tributyl tin	0.002	n/a	n/a	n/a	n/a

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

Table 6-18. HQ Calculations for Raccoon

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.001	16	0.83	4.8E-05	0.001
4,4'-DDE	0.0004	16	0.83	2.4E-05	0.0005
4,4'-DDT	0.0005	16	0.83	3.2E-05	0.001
Aluminum	156.24	n/a	1.93	n/a	80.95
Arsenic	0.312	4.7	0.32	0.066	0.974
Barium	1.566	n/a	0.55	n/a	2.846
Beryllium	0.013	n/a	0.66	n/a	0.020
Cadmium	0.038	2.64	0.06	0.014	0.627
Chromium	0.954	n/a	3.3	n/a	0.289
Cobalt	0.142	20	1.2	0.007	0.118
Copper	1.483	631.58	2.67	0.002	0.555
Iron	221.45	n/a	n/a	n/a	n/a
Lead	0.822	240.64	0.0015	0.003	548.1
Manganese	50.47	159.09	13.7	0.317	3.68
Mercury	0.011	4	0.25	0.003	0.046
Molybdenum	0.103	n/a	n/a	n/a	n/a
Nickel	1.078	31.6	0.133	0.034	8.105
Selenium	0.102	1.21	0.05	0.084	2.031
Silver	0.019	n/a	2	n/a	0.009
Thallium	0.011	1.43	0.48	0.008	0.023
Vanadium	0.728	n/a	2.1	n/a	0.347

Table 6-18 (continued). HQ Calculations for Raccoon

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	10.22	411.4	9.6	0.0248	1.064
Benz(a)anthracene	0.002	n/a	1.7	n/a	0.001
Benzo(a)pyrene	0.002	32.79	1.31	6.3E-05	0.002
Benzo(b)fluoranthene	0.002	n/a	4	n/a	0.001
Benzo(g,h,i)perylene	0.002	n/a	7.2	n/a	0.0003
Benzo(k)fluoranthene	0.003	n/a	7.2	n/a	0.0004
Chrysene	0.003	n/a	1.7	n/a	0.001
Dibenz(a,h)anthracene	0.002	n/a	1.33	n/a	0.002
Fluoranthene	0.002	n/a	12.5	n/a	0.0002
Indeno(1,2,3-cd)pyrene	0.003	n/a	7.2	n/a	0.0004
Pyrene	0.002	n/a	7.5	n/a	0.0003
2-methylnaphthalene	0.002	n/a	2.5	n/a	0.001
Acenaphthene	0.002	n/a	70	n/a	2.6E-05
Acenaphthylene	0.002	n/a	70	n/a	2.6E-05
Anthracene	0.002	n/a	1000	n/a	1.8E-06
Fluorene	0.002	n/a	12.5	n/a	0.0001
Naphthalene	0.002	150	50	1.3E-05	4.0E-05
Phenanthrene	0.002	n/a	51.4	n/a	4.4E-05
Total PCB	0.003	1.28	0.36	0.002	0.007
Aldrin	7.24E-05	1	0.1	7.2E-05	0.001
Alpha-chlordane	0.0003	n/a	1.175	n/a	0.0003
Beta-BHC	0.0005	n/a	0.4	n/a	0.001
Dieldrin	0.0002	n/a	0.02	n/a	0.011

Table 6-18 (continued). HQ Calculations for Raccoon

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	9.7E-05	n/a	1.5	n/a	6.5E-05
Endosulfan II	8.8E-05	n/a	1.5	n/a	5.9E-05
Endrin	8.4E-05	n/a	0.092	n/a	0.001
Endrin aldehyde	0.0001	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	5.7E-05	3.75	0.05	1.5E-05	0.001
Gamma-chlordane	0.0001	n/a	1.175	n/a	8.8E-05
Toxaphene	0.005	n/a	8	n/a	0.001
2,4-dimethylphenol	0.001	n/a	n/a	n/a	n/a
2-chlorophenol	0.001	n/a	0.5	n/a	0.002
2-methylphenol	0.001	n/a	n/a	n/a	n/a
4-nitrophenol	0.002	n/a	n/a	n/a	n/a
Benzoic acid	0.003	n/a	4	n/a	0.001
Bis(2-ethylhexyl)phthalate	0.001	n/a	18	n/a	6.0E-05
Diethylphthalate	0.001	n/a	n/a	n/a	n/a
Phenol	0.001	n/a	60	n/a	1.8E-05
Tributyl tin	0.0004	n/a	n/a	n/a	n/a

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

6.4.3.5 Dose Calculations and TRV Comparisons for the Red Fox

Dose calculations and HQ calculations for the red fox are presented in Table 6-19. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, barium, lead, nickel, selenium, and zinc had HQ2 values (maximum dose divided by low TRV) exceeding 1. These constituents are addressed further in the COPEC refinement. No calculated maximum doses to the red fox exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which mammalian TRVs were available had any red fox HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the red fox at the Runway Wetland.

6.4.3.6 Dose Calculations and TRV Comparisons for the Alameda Song Sparrow

Dose calculations and HQ calculations for the Alameda song sparrow are presented in Table 6-20. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, vanadium, and zinc had HQ2 values (maximum dose divided by low TRV) exceeding 1. These constituents were retained for further evaluation in the COPEC refinement step of the risk screening. No calculated maximum doses to the Alameda song sparrow exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which avian TRVs were available had any Alameda song sparrow HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the Alameda song sparrow at the Runway Wetland.

6.4.3.7 Dose Calculations and TRV Comparisons for Red-Tailed Hawk

Dose calculations and HQ calculations for the red-tailed hawk are presented in Table 6-21. Constituents with at least one HQ greater than 1 are shaded in gray in the table. Aluminum, cobalt, lead, and zinc had HQ2 values (maximum dose divided by low TRV) exceeding 1. All of the constituents with HQ values exceeding 1 are addressed further in the risk characterization. No calculated maximum doses to the red-tailed hawk exceeded high TRVs, meaning that all HQ1 values were less than 1.

No organic constituents for which avian TRVs were available had any red-tailed hawk HQ values greater than 1, and organic constituents were not considered further in assessing potential risk to the red-tailed hawk at the Runway Wetland.

Table 6-19. HQ Calculations for Red Fox

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.001	16	0.83	6.8E-05	0.001
4,4'-DDE	0.0005	16	0.83	3.1E-05	0.001
4,4'-DDT	0.001	16	0.83	5.6E-05	0.001
Aluminum	87.17	n/a	1.93	n/a	45.17
Arsenic	0.182	4.7	0.32	0.039	0.569
Barium	1.132	n/a	0.55	n/a	2.058
Beryllium	0.004	n/a	0.66	n/a	0.006
Cadmium	0.012	2.64	0.06	0.004	0.197
Chromium	0.491	n/a	3.3	n/a	0.149
Cobalt	0.061	20	1.2	0.003	0.051
Copper	0.911	631.58	2.67	0.001	0.341
Iron	77.34	n/a	n/a	n/a	n/a
Lead	0.340	240.64	0.0015	0.001	226.4
Manganese	2.814	159.09	13.7	0.018	0.205
Mercury	0.008	4	0.25	0.002	0.032
Molybdenum	0.059	n/a	n/a	n/a	n/a
Nickel	0.855	31.6	0.133	0.027	6.425
Selenium	0.110	1.21	0.05	0.091	2.209
Silver	0.009	n/a	2	n/a	0.005
Thallium	0.006	1.43	0.48	0.005	0.014
Vanadium	0.260	n/a	2.1	n/a	0.124

Table 6-19 (continued). HQ Calculations for Red Fox

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	30.15	411.4	9.6	0.073283	3.14
Benz(a)anthracene	0.002	n/a	1.7	n/a	0.001
Benzo(a)pyrene	0.002	32.79	1.31	5.98E-05	0.001
Benzo(b)fluoranthene	0.002	n/a	4	n/a	0.0005
Benzo(g,h,i)perylene	0.002	n/a	7.2	n/a	0.0003
Benzo(k)fluoranthene	0.002	n/a	7.2	n/a	0.0003
Chrysene	0.002	n/a	1.7	n/a	0.001
Dibenz(a,h)anthracene	0.002	n/a	1.33	n/a	0.001
Fluoranthene	0.002	n/a	12.5	n/a	0.0002
Indeno(1,2,3-cd)pyrene	0.002	n/a	7.2	n/a	0.0003
Pyrene	0.002	n/a	7.5	n/a	0.0003
2-methylnaphthalene	0.002	n/a	2.5	n/a	0.001
Acenaphthene	0.002	n/a	70	n/a	2.8E-05
Acenaphthylene	0.002	n/a	70	n/a	2.8E-05
Anthracene	0.002	n/a	1000	n/a	2.0E-06
Fluorene	0.002	n/a	12.5	n/a	0.0002
Naphthalene	0.002	150	50	1.21E-05	3.6E-05
Phenanthrene	0.002	n/a	51.4	n/a	3.8E-05
Total PCB	0.004	1.28	0.36	0.003112	0.011
Aldrin	0.0002	1	0.1	0.000223	0.002
Alpha-chlordane	0.001	n/a	1.175	n/a	0.001
Beta-BHC	0.001	n/a	0.4	n/a	0.003
Dieldrin	0.0004	n/a	0.02	n/a	0.022

Table 6-19 (continued). HQ Calculations for Red Fox

Analyte	Max Dose (mg/kg·d)	High Mammal TRV (mg/kg·d)	Low Mammal TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	0.0002	n/a	1.5	n/a	0.0002
Endosulfan II	0.0002	n/a	1.5	n/a	0.0001
Endrin	0.0002	n/a	0.092	n/a	0.002
Endrin aldehyde	0.0003	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	0.0001	3.75	0.05	3.6E-05	0.003
Gamma-chlordane	0.0002	n/a	1.175	n/a	0.0002
Toxaphene	0.011	n/a	8	n/a	0.001
2,4-dimethylphenol	0.0005	n/a	n/a	n/a	n/a
2-chlorophenol	0.0005	n/a	0.5	n/a	0.001
2-methylphenol	0.0005	n/a	n/a	n/a	n/a
4-nitrophenol	0.001	n/a	n/a	n/a	n/a
Benzoic acid	0.002	n/a	4	n/a	0.0004
Bis(2-ethylhexyl)phthalate	0.0005	n/a	18	n/a	2.6E-05
Diethylphthalate	0.0005	n/a	n/a	n/a	n/a
Phenol	0.0005	n/a	60	n/a	7.9E-06
Tributyl tin	5.7E-05	n/a	n/a	n/a	n/a

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

Table 6-20. HQ Calculations for the Alameda Song Sparrow

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.003	n/a	0.0093	n/a	0.337
4,4'-DDE	0.002	0.6	0.0093	0.0034467	0.222
4,4'-DDT	0.002	1.5	0.0093	0.0012893	0.208
Aluminum	869.4	n/a	110	n/a	7.903
Arsenic	1.949	22.01	5.5	0.0885445	0.354
Barium	8.971	n/a	12.6	n/a	0.712
Beryllium	0.089	n/a	n/a	n/a	n/a
Cadmium	0.254	10.43	0.081	0.0243372	3.134
Chromium	5.039	n/a	3.8	n/a	1.326
Cobalt	0.850	n/a	0.02	n/a	42.50
Copper	9.237	56.26	2.3	0.1641875	4.016
Iron	1316.1	n/a	n/a	n/a	n/a
Lead	4.960	8.75	0.0141	0.5668315	351.8
Manganese	374.6	776	77.6	0.4827078	4.827
Mercury	0.068	0.18	0.0397	0.3758542	1.704
Molybdenum	0.662	n/a	n/a	n/a	n/a
Nickel	5.78	56.26	1.36	0.102716	4.249
Selenium	0.589	0.93	0.23	0.6336425	2.562
Silver	0.110	n/a	5.44	n/a	0.020
Thallium	0.058	n/a	n/a	n/a	n/a
Vanadium	4.464	n/a	1.1	n/a	4.058

Table 6-20 (continued). HQ Calculations for the Alameda Song Sparrow

Analyte	Max Dose (mg/kg-d)	High Avian TRV (mg/kg-d)	Low Avian TRV (mg/kg-d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	27.98	172	17.2	0.163	1.627
Benz(a)anthracene	0.010	n/a	n/a	n/a	n/a
Benzo(a)pyrene	0.010	n/a	n/a	n/a	n/a
Benzo(b)fluoranthene	0.011	n/a	n/a	n/a	n/a
Benzo(g,h,i)perylene	0.013	n/a	n/a	n/a	n/a
Benzo(k)fluoranthene	0.013	n/a	n/a	n/a	n/a
Chrysene	0.013	n/a	n/a	n/a	n/a
Dibenz(a,h)anthracene	0.011	n/a	n/a	n/a	n/a
Fluoranthene	0.013	n/a	n/a	n/a	n/a
Indeno(1,2,3-cd)pyrene	0.015	n/a	n/a	n/a	n/a
Pyrene	0.012	n/a	n/a	n/a	n/a
2-methylnaphthalene	0.009	n/a	n/a	n/a	n/a
Acenaphthene	0.009	n/a	n/a	n/a	n/a
Acenaphthylene	0.009	n/a	n/a	n/a	n/a
Anthracene	0.009	n/a	n/a	n/a	n/a
Fluorene	0.009	n/a	n/a	n/a	n/a
Naphthalene	0.010	n/a	0.139	n/a	0.069
Phenanthrene	0.011	n/a	n/a	n/a	n/a
Total PCB	0.013	1.27	0.091	0.010	0.146
Aldrin	0.0002	n/a	n/a	n/a	n/a
Alpha-chlordane	0.0004	n/a	2.1	n/a	0.0002
Beta-BHC	0.002	n/a	n/a	n/a	n/a
Dieldrin	0.001	n/a	0.077	n/a	0.013

Table 6-20 (continued). HQ Calculations for the Alameda Song Sparrow

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	0.0003	n/a	10	n/a	3.2E-05
Endosulfan II	0.0004	n/a	10	n/a	3.8E-05
Endrin	0.0002	n/a	0.01	n/a	0.024
Endrin aldehyde	0.0005	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	0.0002	n/a	0.56	n/a	0.0004
Gamma-chlordane	0.0003	n/a	2.1	n/a	0.0001
Toxaphene	0.016	n/a	10	n/a	0.002
2,4-dimethylphenol	0.005	n/a	n/a	n/a	n/a
2-chlorophenol	0.005	n/a	11.3	n/a	0.0005
2-methylphenol	0.005	n/a	n/a	n/a	n/a
4-nitrophenol	0.012	n/a	n/a	n/a	n/a
Benzoic acid	0.017	n/a	n/a	n/a	n/a
Bis(2-ethylhexyl)phthalate	0.005	n/a	1.1	n/a	0.005
Diethylphthalate	0.005	n/a	n/a	n/a	n/a
Phenol	0.005	n/a	n/a	n/a	n/a
Tributyl tin	0.003	45.85	0.735	5.7E-05	0.004

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

Table 6-21. HQ Calculations for Red-Tailed Hawk

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
4,4'-DDD	0.002	n/a	0.0093	n/a	0.169
4,4'-DDE	0.001	0.6	0.0093	0.001	0.077
4,4'-DDT	0.001	1.5	0.0093	0.001	0.138
Aluminum	124.6	n/a	110	n/a	1.133
Arsenic	0.263	22.01	5.5	0.012	0.048
Barium	1.631	n/a	12.6	n/a	0.129
Beryllium	0.006	n/a	n/a	n/a	n/a
Cadmium	0.017	10.43	0.081	0.002	0.208
Chromium	0.696	n/a	3.8	n/a	0.183
Cobalt	0.087	n/a	0.02	n/a	4.340
Copper	1.318	56.26	2.3	0.023	0.573
Iron	109.5	n/a	n/a	n/a	n/a
Lead	0.484	8.75	0.0141	0.055	34.36
Manganese	4.026	776	77.6	0.005	0.052
Mercury	0.012	0.18	0.0397	0.065	0.293
Molybdenum	0.086	n/a	n/a	n/a	n/a
Nickel	1.230	56.26	1.36	0.022	0.904
Selenium	0.161	0.93	0.23	0.173	0.698
Silver	0.013	n/a	5.44	n/a	0.002
Thallium	0.009	n/a	n/a	n/a	n/a
Vanadium	0.369	n/a	1.1	n/a	0.336

Table 6-21 (continued). HQ Calculations for Red-Tailed Hawk

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Zinc	43.87	172	17.2	0.255	2.55
Benz(a)anthracene	0.003	n/a	n/a	n/a	n/a
Benzo(a)pyrene	0.003	n/a	n/a	n/a	n/a
Benzo(b)fluoranthene	0.003	n/a	n/a	n/a	n/a
Benzo(g,h,i)perylene	0.003	n/a	n/a	n/a	n/a
Benzo(k)fluoranthene	0.003	n/a	n/a	n/a	n/a
Chrysene	0.003	n/a	n/a	n/a	n/a
Dibenz(a,h)anthracene	0.003	n/a	n/a	n/a	n/a
Fluoranthene	0.003	n/a	n/a	n/a	n/a
Indeno(1,2,3-cd)pyrene	0.003	n/a	n/a	n/a	n/a
Pyrene	0.003	n/a	n/a	n/a	n/a
2-methylnaphthalene	0.003	n/a	n/a	n/a	n/a
Acenaphthene	0.003	n/a	n/a	n/a	n/a
Acenaphthylene	0.003	n/a	n/a	n/a	n/a
Anthracene	0.003	n/a	n/a	n/a	n/a
Fluorene	0.003	n/a	n/a	n/a	n/a
Naphthalene	0.002	n/a	0.139	n/a	0.018
Phenanthrene	0.003	n/a	n/a	n/a	n/a
Total PCB	0.006	1.27	0.091	0.005	0.064
Aldrin	0.0003	n/a	n/a	n/a	n/a
Alpha-chlordane	0.002	n/a	2.1	n/a	0.001
Beta-BHC	0.001	n/a	n/a	n/a	n/a
Dieldrin	0.001	n/a	0.077	n/a	0.008

Table 6-21 (continued). HQ Calculations for Red-Tailed Hawk

Analyte	Max Dose (mg/kg·d)	High Avian TRV (mg/kg·d)	Low Avian TRV (mg/kg·d)	HQ1 (Max Dose/ High TRV)	HQ2 (Max Dose/ Low TRV)
Endosulfan I	0.0003	n/a	10	n/a	3.3E-05
Endosulfan II	0.0002	n/a	10	n/a	2.3E-05
Endrin	0.0003	n/a	0.01	n/a	0.033
Endrin aldehyde	0.0004	n/a	n/a	n/a	n/a
Gamma-BHC (lindane)	0.0002	n/a	0.56	n/a	0.0003
Gamma-chlordane	0.0003	n/a	2.1	n/a	0.0002
Toxaphene	0.017	n/a	n/a	n/a	n/a
2,4-dimethylphenol	0.001	n/a	n/a	n/a	n/a
2-chlorophenol	0.001	n/a	11.3	n/a	5.9E-05
2-methylphenol	0.001	n/a	n/a	n/a	n/a
4-nitrophenol	0.002	n/a	n/a	n/a	n/a
Benzoic acid	0.002	n/a	n/a	n/a	n/a
Bis(2-ethylhexyl)phthalate	0.001	n/a	1.1	n/a	0.001
Diethylphthalate	0.001	n/a	n/a	n/a	n/a
Phenol	0.001	n/a	n/a	n/a	n/a
Tributyl tin	7.9E-05	45.85	0.735	1.7E-06	0.0001

Note: Constituents with at least one HQ>1 are shaded in gray in the table.
n/a = not available. No TRV was available, so no HQ could be calculated.

6.5 COPEC REFINEMENT

Constituents that failed comparison to screening benchmarks and had food-chain HQs greater than 1 were carried forward to COPEC refinement, which is Step 3a of the ecological risk process (EPA, 1997a; Navy, 1999b). The COPEC refinement process for the Runway Wetland calculated doses to the food chain receptors using average COPEC concentrations in sediment, water, and tissue, instead of the maximum values used in Section 6.4.3.

A second COPEC refinement method involves calculating doses based upon the average or the 95% UCL of mean concentrations of chemicals in site media instead of maximum observed concentrations. While maximum doses are intended to reflect a worst-case scenario, average daily doses reflect to represent a more reasonable ingestion scenario for site receptors. For COPECs that had HQ values greater than 1 based upon maximum observed concentrations at Runway Wetland, food-chain doses were calculated again using conservative average concentrations of chemicals in sediment, surface water, and biological tissue (see Section 3 and Appendix A). As discussed in Section 3, an average dose was calculated instead of a 95% UCL on the mean due to the limited number of samples. No average dose was calculated for invertebrate tissue because there were only three samples collected from Runway Wetland. As such, the maximum chemical concentrations in invertebrate tissue were used in all invertebrate-feeding models. As detailed in Section 6.4.3, fourteen inorganic constituents (aluminum, arsenic, barium, cadmium, chromium, cobalt, copper, lead, manganese, mercury, nickel, selenium, vanadium, and zinc) had HQ2 values greater than 1 for at least one food chain receptor based upon maximum calculated doses. For these constituents, two additional HQs were calculated using the average calculated doses. HQ3 represents the average calculated dose divided by the high TRV, and HQ4 represents the average calculated dose divided by the low TRV. HQ calculations comparing average doses to high and low TRVs are presented in Table 6-22. HQ3 values were less than 1 for all constituents. As Table 6-22 illustrates, aluminum, cadmium, copper, manganese, mercury, nickel, vanadium and zinc have HQ4 values less than 1 for some, but not all, receptors using average doses instead of maximum doses. Only chromium HQs are reduced to less than 1 for all receptors by using average doses. Because the use of average doses instead of maximum doses did not result in the elimination of most COPECs, the 14 inorganic constituents mentioned above, as well as all constituents for which TRVs were not available, are discussed further in the risk characterization (Section 6.6).

Table 6-22. Calculation of Food-Chain Hazard Quotients Using Average Daily Doses

Analyte	Avg Dose (mg/kg·d)	Max Dose (mg/kg·d)	High TRV (mg/kg·d)	Low TRV (mg/kg·d)	HQ3 (Avg Dose/High TRV)	HQ4 (Avg Dose/Low TRV)
Mallard (Herbivore Model)						
Aluminum	41.31	155.4	na	110	na	0.376
Cobalt	0.044	0.173	na	0.02	na	2.224
Lead	0.241	1.014	8.75	0.0141	0.028	17.08
Manganese	15.57	95.79	776	77.6	0.020	0.201
Mallard (Omnivore Model)						
Aluminum	37.96	117.9	na	110	na	0.345
Cobalt	0.043	0.131	na	0.02	na	2.135
Lead	0.229	0.771	8.75	0.0141	0.026	16.21
Mallard (Invertebrate Feeder Model)						
Cobalt	0.036	0.045	na	0.02	na	1.821
Lead	0.187	0.268	8.75	0.0141	0.021	13.29
Great Blue Heron						
Cobalt	0.050	0.128	na	0.02	na	2.480
Lead	0.156	0.423	8.75	0.0141	0.018	11.04
Mercury	0.021	0.076	0.18	0.0397	0.118	0.534
Nickel	0.397	1.595	56.26	1.36	0.007	0.292
Zinc	9.181	39.10	172	17.2	0.053	0.534

Table 6-22 (continued). Calculation of Food-Chain Hazard Quotients Using Average Daily Doses

Analyte	Avg Dose (mg/kg·d)	Max Dose (mg/kg·d)	High TRV (mg/kg·d)	Low TRV (mg/kg·d)	HQ3 (Avg Dose/High TRV)	HQ4 (Avg Dose/Low TRV)
California Ground Squirrel						
Aluminum	148.5	440.0		1.93		76.93
Arsenic	0.459	1.133	4.7	0.32	0.098	1.433
Barium	2.819	4.870		0.55		5.126
Cadmium	0.041	0.127	2.64	0.06	0.015	0.682
Copper	1.478	3.048	631.58	2.67	0.002	0.554
Lead	0.713	2.694	240.64	0.0015	0.003	475.3
Manganese	42.97	228.5	159.09	13.7	0.270	3.136
Nickel	0.972	2.984	31.6	0.133	0.031	7.311
Selenium	0.213	0.283	1.21	0.05	0.176	4.258
Vanadium	0.724	2.478		2.1		0.345
Raccoon						
Aluminum	74.48	156.2		1.93		38.59
Barium	1.003	1.565		0.55		1.824
Lead	0.292	0.822	240.64	0.0015	0.001	195.0
Manganese	17.12	50.47	159.09	13.7	0.108	1.249
Nickel	0.490	1.078	31.6	0.133	0.015	3.682
Selenium	0.088	0.102	1.21	0.05	0.073	1.766
Zinc	5.829	10.22	411.4	9.6	0.014	0.607
Red Fox						
Aluminum	40.10	87.17		1.93		20.78
Barium	0.786	1.132		0.55		1.429

Table 6-22 (continued). Calculation of Food-Chain Hazard Quotients Using Average Daily Doses

Analyte	Avg Dose (mg/kg·d)	Max Dose (mg/kg·d)	High TRV (mg/kg·d)	Low TRV (mg/kg·d)	HQ3 (Avg Dose/High TRV)	HQ4 (Avg Dose/Low TRV)
Lead	0.166	0.340	240.64	0.0015	0.001	111.0
Nickel	0.556	0.855	31.6	0.133	0.018	4.181
Selenium	0.110	0.110	1.21	0.05	0.091	2.197
Zinc	12.83	30.15	411.4	9.6	0.031	1.337
Alameda Song Sparrow						
Aluminum	387.0	869.4		110		3.518
Cadmium	0.124	0.254	10.43	0.081	0.012	1.526
Chromium	2.061	5.039		3.8		0.542
Cobalt	0.357	0.850		0.02		17.83
Copper	6.670	9.237	56.26	2.3	0.119	2.900
Lead	1.661	4.960	8.75	0.0141	0.190	117.8
Manganese	125.4	374.6	776	77.6	0.162	1.616
Mercury	0.048	0.068	0.18	0.0397	0.266	1.207
Nickel	2.317	5.779	56.26	1.36	0.041	1.703
Selenium	0.492	0.589	0.93	0.23	0.529	2.141
Vanadium	1.786	4.464		1.1		1.623
Zinc	23.15	27.98	172	17.2	0.135	1.346
Red-tailed Hawk						
Aluminum	56.90	124.6		110		0.517
Cobalt	0.056	0.087		0.02		2.776
Lead	0.238	0.484	8.75	0.0141	0.027	16.91
Zinc	18.67	43.87	172	17.2	0.109	1.086

6.6 RISK CHARACTERIZATION AND UNCERTAINTY ANALYSIS

Constituents that Failed TRV Comparisons

The food chain derived HQs for COPECs retained from the food-chain modeling are summarized by receptor in Table 6-23. The risk characterization will focus on each constituent individually. All of the constituents discussed in this section had calculated doses exceeding low TRVs. No constituent at Runway Wetland had calculated doses exceeding high TRVs. The risk characterization includes discussion of Runway Wetland sediment concentrations and comparison to San Francisco Bay ambient sediment conditions. Since Runway Wetland was created from dredged near-shore material, the chemical concentrations observed in the Runway Wetland sediment may be due to the placement of dredged material that had been impacted by other operations at Alameda Point, or they may represent San Francisco Bay ambient conditions. Comparison to ambient data for San Francisco Bay will help determine which of these scenarios is most likely. This approach was discussed and agreed to with the BTAG in a conference call on October 2, 2001.

The Navy has also published guidance for incorporating bioavailability adjustments in risk assessments (Battelle and Exponent, 2000). This guidance contains a range of recommended bioavailability adjustments for select metals (arsenic, cadmium, chromium, lead, mercury). The effects of bioavailability adjustments for those metals on the results of the food chain models are discussed below.

Following discussion of ambient comparisons and bioavailability adjustments, any remaining sources of uncertainty associated with the finding for each chemical constituent are discussed.

Aluminum: The food-chain models show that average and maximum calculated doses for aluminum exceed low TRVs for a number of receptors, particularly the mammals. No high (effects level) TRVs were available for aluminum. The San Francisco Bay Regional Water Quality Control Board (RWQCB) published Upper Tolerance Limits (UTLs) for San Francisco Bay sediments (RWQCB, 1998), but UTLs were not published for aluminum. Aluminum data for bay sediments are available from the regional monitoring program (RMP), however, and distributional comparisons between the Runway Wetland data set and the RMP data set (see Appendix A) show no differences between aluminum concentrations in Runway Wetland sediments and San Francisco Bay sediments. As aluminum is an abundant crustal element and the Runway Wetland sediments are not different from San Francisco Bay sediments as a whole, it is very unlikely that aluminum at the Runway Wetland poses a risk greater than that posed by ambient conditions in the San Francisco Bay area.

Arsenic: The California ground squirrel was the only receptor that had an arsenic HQ greater than 1, with a HQ2 of 3.54. Navy guidance for incorporating bioavailability adjustments (Battelle and Exponent, 2000) provides a range of bioavailability of arsenic, from 18.3 % to 80%. Applying the 80% bioavailability adjustment as the most protective adjustment does not reduce the HQ2 for California ground squirrel to less than one. The RWQCB has published a UTL of 15.3 mg/kg for arsenic in San Francisco Bay sediments. The maximum concentration of arsenic observed in

Table 6-23. Summary of Food-Chain HQs by Receptor for COPECs Retained from Food-Chain Modeling

Analyte	Mallard (Herbivore)		Mallard (Omnivore)		Mallard (Insect-ivore)		Great Blue Heron		CA Ground Squirrel		Raccoon		Red Fox		Song Sparrow		Red-Tailed Hawk	
	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2	HQ4	HQ2
Aluminum	<1.0	1.41	<1.0	1.07	<1.0	<1.0	<1.0	<1.0	76.93	227.99	38.59	80.95	20.78	45.17	3.52	7.90	<1.0	1.13
Arsenic	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.43	3.54	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Barium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.13	8.85	1.82	2.85	1.43	2.06	<1.0	<1.0	<1.0	<1.0
Cadmium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.11	<1.0	<1.0	<1.0	<1.0	1.52	3.133	<1.0	<1.0
Chromium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.33	<1.0	<1.0
Cobalt	2.22	8.63	2.13	6.55	1.82	2.26	2.48	6.41	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17.83	42.50	2.78	4.34
Copper	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.14	<1.0	<1.0	<1.0	<1.0	2.90	4.02	<1.0	<1.0
Lead	17.08	71.89	16.21	54.66	13.29	19.03	11.04	29.97	475.29	1795.87	194.98	548.11	110.97	226.36	117.77	351.76	16.92	34.36
Manganese	<1.0	1.23	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.13	16.67	1.25	3.68	<1.0	<1.0	1.62	4.83	<1.0	<1.0
Mercury	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.92	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.20	1.70	<1.0	<1.0
Nickel	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.17	7.31	22.43	3.68	8.10	4.18	6.43	1.70	4.25	<1.0	<1.0
Selenium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.26	5.66	1.77	2.03	2.20	2.21	2.14	2.56	<1.0	<1.0
Vanadium	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.18	<1.0	<1.0	<1.0	<1.0	1.62	4.06	<1.0	<1.0
Zinc	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.27	<1.0	<1.0	<1.0	1.06	1.34	3.14	1.35	1.63	1.09	2.55

Runway Wetland sediments is 13.0 mg/kg. Anderson (1998) reported background arsenic in soils in the southern San Francisco Bay area ranging from 6.0 to 9.2 mg/kg, while the City of Oakland Urban Land Redevelopment Program reported area background levels of arsenic as high as 19 mg/kg (see City of Oakland, Public Works Department Survey at www.oaklandpw.com/ulrprogram/metals.pdf). Since arsenic concentrations at the Runway Wetland are within the range of San Francisco Bay ambient conditions for both soils and sediment, it is unlikely that arsenic at the Runway Wetland poses a risk greater than that posed by ambient conditions in the San Francisco Bay area.

Barium: Barium was detected in all sediment and tissue samples at the Runway Wetland, and has HQ4 values and HQ2 values greater than 1 for all three of the terrestrial mammal receptors. The RMP does not have ambient data for barium in San Francisco Bay, so no comparisons could be made to ambient conditions. Likewise, high TRVs were not available for barium. There is no known source of barium contamination at the Runway Wetland. The primary source of uncertainty associated with the food-chain modeling results is likely an overly conservative mammalian TRV. The mammalian TRV for barium (0.55 mg/kg) is over 20 times lower than the avian TRV of 12.6 mg/kg. Substituting the lowest observed barium concentrations at the Runway Wetland into the ground squirrel food- chain model still results in an HQ greater than 1. Given the lack of a source term for barium at the Runway Wetland, observed concentrations are likely reflective of an ambient condition.

Cadmium: Cadmium had HQ2 values exceeding 1 for the California ground squirrel and the Alameda song sparrow (2.11 and 3.13, respectively). The maximum observed cadmium concentration in sediment (1.3 mg/kg) was just above the ecological screening benchmark of 1.2 mg/kg, and for comparison purposes, well below the effects range-median (ER-M) value for cadmium of 9.6 mg/kg (Long et al., 1995). Because cadmium was detected in less than 50% of the sediment samples, distributional comparisons to ambient conditions could not be conducted. The maximum observed concentration of cadmium in Runway Wetland sediment was greater than the San Francisco Bay UTL of 0.33 mg/kg. Navy guidance for incorporating bioavailability adjustments (Battelle and Exponent, 2000) states that cadmium in soil and sediment is generally about 33% bioavailable. Applying a 0.33 bioavailability adjustment to cadmium concentrations in the food chain models lowers the HQ2 for California ground squirrel to less than 1, while the Alameda song sparrow HQ2 becomes 1.04. Due to the conservative nature of the low TRVs used to calculate the HQ2 values, it is likely that risk to receptors from cadmium at Runway Wetland is minimal.

Chromium: The TRV comparisons for chromium indicate that the chemical may be present at concentrations that are a risk to the Alameda song sparrow, with an HQ2 of 1.33. Distributional comparisons to ambient conditions show that concentrations of chromium in the Runway Wetland are higher than ambient. Navy guidance for incorporating bioavailability adjustments (Battelle and Exponent, 2000) does not recommend making bioavailability adjustments for chromium unless the valence state is known. Since no information is available regarding the valence state of chromium in Runway Wetland, no bioavailability adjustment can be made. Since the HQ2 comparison uses the maximum dose compared to the low TRV, this is a conservative estimator of

risk. With a HQ2 so close to 1, it is likely that chromium poses a negligible risk to ecological receptors at Runway Wetland.

Cobalt: TRV comparisons for cobalt indicate that maximum and average calculated doses exceed low TRVs for all avian receptors. Cobalt is a natural constituent of soil and seawater, and is also produced as a by-product of burning coal and oil, aircraft and automobile exhaust, and in the paint industry. No ambient or background data is available for cobalt in San Francisco Bay, although Sandia National Laboratory reports background levels of cobalt in soils ranging from 1 to 17 ppm across the US (www.sandia.gov/eesector/gs/gc/na/ cobaltsoillevels.html). Higher levels of cobalt are associated with volcanic areas and areas with high natural levels of other metals such as copper, nickel, manganese, and arsenic. The levels in the Runway Wetland range from 8.8 to 13.7 ppm, and probably represent ambient levels.

Copper: The California ground squirrel had an HQ2 greater than 1 (HQ2 = 1.14), and Alameda song sparrow HQ2 and HQ4 values also exceeded 1. The RWQCB has published a UTL of 68.1 mg/kg for copper in San Francisco Bay sediments. The maximum concentration of copper observed in Runway Wetland sediments is 59.8 mg/kg. Since copper concentrations at the Runway Wetland are within the range of San Francisco Bay ambient conditions, copper at the Runway Wetland does not pose a risk greater than that posed by ambient conditions in the San Francisco Bay, or other areas where ambient dredge spoils have been deposited.

Lead: Maximum and average calculated doses exceed low TRVs for all avian and mammalian receptors. The maximum detected concentration of lead in Runway Wetland sediments is 78 mg/kg, which is higher than both the ER-L and the UTL (46.7 mg/kg and 43.2 mg/kg, respectively), but lower than the ER-M of 218 mg/kg. Navy bioavailability guidance reports a range of bioavailability for lead of 24% to 40% (Battelle and Exponent, 2000). Applying a 40% bioavailability factor to lead concentrations at Runway Wetland does not reduce any of the HQ2 values to less than one. The primary source of uncertainty associated with the lead results is likely due to overly conservative low TRVs. In the past, lead has been difficult to deal with in food-chain models due to the disparity between the high and low Navy-chosen TRVs. To illustrate the conservative nature of the low Navy avian TRV for lead, the incidental ingestion of soil at half the ambient lead UTL, with no food-chain exposure, results in the Alameda song sparrow having an HQ of over 38.0. Performing the same calculation for California ground squirrel results in an HQ of over 118. In other words, to achieve a California ground squirrel HQ of less than one, levels of lead in sediment would have to be less than 0.18 mg/kg. This indicates that the low mammalian and avian TRVs are unrealistic for use in food-chain models. For comparison purposes, alternative NOEL-based TRVs were obtained from the LANL Ecorisk Database (LANL 2000). The LANL NOEL-based TRVs were 5.1 mg/kg-d for birds, and 5.8 mg/kg-d for mammals (as compared to Navy low TRVs of 0.0141 mg/kg-d for birds and 0.0015 mg/kg-d for mammals). Using the LANL values as an example of more realistic low TRVs, no receptors fail average or maximum dose comparisons to lead TRVs.

Manganese: The food-chain models show that average and maximum calculated doses for manganese exceed low TRVs for the California ground squirrel, raccoon, and Alameda song sparrow. The maximum calculated dose also exceeds the low manganese TRV for the mallard modeled as an omnivore. No high (effects level) TRVs were available for manganese, which is an

abundant chemical constituent in marine waters and sediments. Although UTLs for manganese in San Francisco Bay sediments have not been published, manganese data for bay sediments are available from the RMP. Distributional comparisons between the Runway Wetland data set and the RMP data set (see Appendix A) show no differences between manganese concentrations in Runway Wetland sediments and San Francisco Bay sediments. As manganese is an abundant element in marine systems, and the Runway Wetland sediments are not different from San Francisco Bay sediments as a whole, manganese at the Runway Wetland does not pose a risk greater than that posed by ambient conditions in the San Francisco Bay area.

Mercury: Average and maximum calculated doses of mercury to the Alameda song sparrow exceeded low avian TRVs (HQ4 = 1.21, HQ2 = 1.70). The maximum calculated dose to the great blue heron also exceeded avian TRVs (HQ2 = 1.92). The maximum detected concentration of mercury in Runway Wetland sediment was 0.68 mg/kg, which is higher than the UTL of 0.43 mg/kg, and close to the ER-M of 0.71 mg/kg. The mean concentration of mercury in wetland sediments was 0.28 mg/kg. The risk to the great blue heron is being driven by the maximum mercury concentration observed in fish tissue, which is from the only fish sample collected during the 1998 sampling campaign. The 1998 fish sample had mercury concentrations an order of magnitude higher than concentrations reported from any of the five fish samples collected in 1997. Three of the 1997 samples were collected from the same pond (West Pond) as the 1998 sample, so the reasons for the observed differences are unclear. Navy bioavailability guidance indicates that the bioavailability of mercury in soil and sediment ranges from 10% to 30% (Battelle and Exponent, 2000). Applying a 30% bioavailability factor to the Alameda Song Sparrow model reduces the most conservative HQ to 0.511. Applying the same factor to the Great Blue Heron model reduces the HQ2 to 0.577. The results of the screening assessment suggest that mercury in the Runway Wetland may pose a minimal risk to ecological receptors.

Nickel: The food-chain models show that average and maximum calculated doses of nickel to the California ground squirrel, raccoon, red fox, and Alameda song sparrow exceed low TRVs. The maximum calculated dose to the great blue heron also exceeds the low nickel TRV. The RWQCB has published an UTL of 112 mg/kg for nickel in San Francisco Bay sediments. The maximum concentration of nickel observed in Runway Wetland sediments is 110 mg/kg. Since nickel concentrations at the Runway Wetland are within the range of San Francisco Bay ambient conditions, it is very unlikely that nickel at the Runway Wetland poses a risk greater than that posed by ambient conditions in the San Francisco Bay, or other areas where ambient dredge spoils have been deposited.

Selenium: The food-chain models show that average and maximum calculated doses of selenium to the California ground squirrel, raccoon, red fox, and Alameda song sparrow exceeded low TRVs. Selenium was only detected in one sediment sample, and was never detected in tissue samples. An examination of the food-chain calculations shows that the risk is driven by the detection limits for selenium in tissue, where one-half the reported detection limit is used due to the lack of detected concentrations. The lack of adequate detection limits for selenium in tissue represents a data gap, albeit a small one. The maximum reported detection limit for selenium in Runway Wetland sediment is less than the ER-M of 1.4 mg/kg, and the average reported detection

limit is less than the ER-L of 0.7 mg/kg, making it unlikely that selenium present at the Runway Wetland poses a risk to ecological receptors.

Vanadium: The food-chain models show that average and maximum calculated doses of vanadium to the Alameda song sparrow exceeded low TRVs. The maximum calculated dose to the California ground squirrel also exceeded the low TRV for vanadium. No ecological screening levels exist for vanadium, and as with selenium, the food-chain model results are driven by elevated reporting limits in tissue samples. Since vanadium was not detected in any of the tissue samples, and vanadium is not a bioaccumulating constituent, concentrations in tissue would be expected to be minimal. Therefore it is unlikely that vanadium poses an ecological risk at Runway Wetland.

Zinc: The food-chain models show that average and maximum calculated doses of zinc to the raccoon, red fox, Alameda song sparrow, and red-tailed hawk exceeded low TRVs. The maximum calculated dose to the great blue heron also exceeded the low TRV for zinc. The maximum detected concentration of zinc in Runway Wetland sediments was 190 mg/kg, which is above the UTL of 158 mg/kg, but well below the ER-M of 410 mg/kg. Distributional comparisons of the Runway Wetland dataset to the RMP ambient dataset showed no statistical difference between the distributions (see Section 3 and Appendix A). The highest HQ observed was 3.14, and most of the HQs that exceeded 1 had values between one and two. These results indicate that zinc may pose a potential risk to ecological receptors at the Runway Wetland, but that the risk is not statistically different from that posed by ambient concentrations.

Constituents Without TRVs

The following constituents had no mammal or avian TRVs or sediment screening benchmarks for comparison purposes: iron, molybdenum, endrin aldehyde, 2-methylphenol, 2,4-dimethylphenol, 4-nitrophenol, and diethylphthalate. Iron is an abundant crustal element and is common in both seawater and marine sediments. Iron was analyzed for in three sediment samples at the Runway Wetland. Reported concentrations for all three samples fell within the range of RMP ambient data, so it is unlikely that iron poses an ecological risk at Runway Wetland.

Molybdenum was measured in three of four Runway Wetland sediment samples and was not measured by the RMP in their ambient samples. Molybdenum is an essential micronutrient for plant growth, and according to Vitosh et al. (1994), the normal range of molybdenum in plant tissues is 0.8 to 5.0 ppm. The maximum observed molybdenum concentration in Runway Wetland plants was 3.5 ppm, and the mean concentration in Runway Wetland plant tissue was 2.0 ppm, well within the normal range cited above. Molybdenum toxicity to grazing ruminants has been noted at plant concentrations between 10 and 20 ppm. Although ruminants are not among the species of concern at Runway Wetland, no other toxicity information for molybdenum in plant tissues was found. The ruminant toxicity information does have applicability to Runway Wetland mammalian herbivores if considered in the context of body weight normalized ingestion rate. Assuming that a cow has an average daily ingestion rate of 0.45 kg/kg-d, which is about half that of California ground squirrel, molybdenum toxicity could be inferred to be manifested at levels 50% lower than observed in ruminants. This would mean that toxicity to California ground squirrel could be expected at plant tissue concentrations between 5 and 10 ppm, higher than those

observed at Runway Wetland. All available information indicates that molybdenum does not pose a risk to ecological receptors at Runway Wetland.

Endrin aldehyde is an impurity and breakdown product associated with the pesticide endrin. Endrin aldehyde was detected in one sediment sample and five fish samples at the Runway Wetland. Very little is known about the toxicity of endrin aldehyde to humans or animals, and no information is available about its fate in the environment. However, given the calculated doses of endrin aldehyde to ecological receptors, and the low TRV for the parent compound, endrin, endrin aldehyde would have to be fifteen times more toxic than its parent compound to result in even the most conservative HQ calculation approximating one. It is therefore unlikely that endrin aldehyde poses a risk at the Runway Wetland.

2-Methylphenol was not detected in sediment or fish tissue at the Runway Wetland, and was not analyzed in plant, invertebrate, or mammal tissue. It has been carried forward only because detection limits in sediment exceeded the sediment screening threshold. 2-Methylphenol is a common chemical used in nonhousehold liquid detergents, and there is no reason to expect it to occur in Runway Wetland sediments, water, or tissue. 2-Methylphenol is thus eliminated from further consideration at the Runway Wetland.

2,4-Dimethylphenol was not detected in sediment or fish tissue at the Runway Wetland, and was not analyzed in plant, invertebrate, or mammal tissue. It has been carried forward only because detection limits in sediment exceeded the sediment screening threshold. 2,4-Dimethylphenol is used in the manufacture of a variety of products, including pharmaceuticals, plastics, resins, solvents, insecticides, and fungicides. No releases of any of these compounds have occurred at the Runway Wetland, and any 2,4-dimethylphenol that may occur there would likely be representative of non-point source anthropogenic activities in the area. Therefore, 2,3-dimethylphenol is not considered further as a COPEC at Runway Wetland.

4-Nitrophenol was detected in one sediment sample at the Runway Wetland. It was not detected in fish tissue samples, and was not analyzed in plant, invertebrate, or mammal tissue samples. 4-Nitrophenol is primarily used as the active ingredient in the fungicide paranitrophenol, and is a breakdown product of the pesticide methyl parathion. No sediment screening benchmarks, avian TRVs, or mammalian TRVs are available for 4-nitrophenol. 4-Nitrophenol is moderately soluble in water and degrades relatively quickly in aquatic systems. Approximately 98.6% of 4-nitrophenol will eventually end up in water, where it has a half-life of 2 to 20 days. Only about 0.5% of 4-nitrophenol remains in aquatic sediments and terrestrial soils (www.earthsystems.org/gopher/toxics/4-Nitrophenol). EPA Region IV recommends a soil screening threshold of 7000 micrograms of 4-nitrophenol per kilogram of soil (EPA Region IV, 2000), which is above the maximum reported detection limit of 1000 µg/kg observed in Runway Wetland sediments. For these reasons, 4-nitrophenol can be eliminated as a COPEC at the Runway Wetland.

Diethylphthalate, a common component of plastics, was detected in one sediment sample at the Runway Wetland. It was not detected in fish tissue samples, and was not analyzed in plant, invertebrate, or mammal tissue samples. Although no sediment screening benchmarks, avian TRVs, or mammalian TRVs are available for diethylphthalate, the EPA Region IV recommended

soil screening level for diethylphthalate is 100 mg/kg (EPA Region IV, 2000), more than 200 times the maximum reported value (detection limit) at the Runway Wetland. For this reason, diethylphthalate is not considered further as a COPEC at the Runway Wetland.

6.7 CONCLUSIONS OF THE ECOLOGICAL RISK SCREENING

In the first step of the ecological risk screening, 60 constituents exceeded conservative, risk-based screening thresholds, or were retained for lack of screening thresholds. Those sixty constituents were evaluated further in the food chain modeling to upper-trophic level receptors, where maximum doses to receptors were compared to low and high TRVs (when available). Fourteen inorganic constituents had calculated maximum doses higher than TRVs. These fourteen constituents, along with seven constituents for which TRVs were not available, were examined individually in the risk characterization. The seven constituents for which TRVs were not available were found not to be of concern based upon a number of reasons, including likelihood of occurrence, examination of toxicity mechanisms, and examination of other available screening benchmarks. Five of the inorganic constituents that had calculated doses greater than TRVs (aluminum, arsenic, copper, manganese, and nickel) were found be present at levels comparable to those found under ambient conditions in San Francisco Bay. Although two of the constituents, selenium and vanadium, were found to exceed TRVs, the reason for the exceedances were the use of non-detect values as surrogates in the evaluation process. It should be emphasized that knowledge of site history gives no reason to indicate that concentrations of selenium and vanadium at the Runway Wetland represent anything other than ambient conditions. Barium and cobalt calculated doses were also greater than their TRVs. An examination of sediment concentrations of both constituents indicates that concentrations are consistent with published ambient or background levels across the US, and there is no reason to believe that a release of these constituents has occurred at the Runway Wetland.

It was demonstrated in the discussion that the Navy low TRV for lead is extremely conservative. Alternative low (NOEL-based) TRVs were identified from the Los Alamos National Laboratory Ecorisk Database. Use of these alternative low TRVs resulted in no TRV exceedances for lead.

Cadmium, chromium, mercury, and zinc doses exceeded the most conservative of the TRV comparisons, and concentrations of these constituents at the Runway Wetland were higher than ambient conditions around San Francisco Bay. Analysis of the spatial distribution of these four metals showed that the highest concentrations were in the northern portion of the west pond around sampling location R3, which is also the location of the bioassay station that exhibited unacceptable amphipod mortality. Application of Navy recommended bioavailability factors for mercury reduced all HQs to less than one, while the application of the recommended bioavailability factor for cadmium did not reduce all HQs to less than 1.

The conclusions of the ecological risk screening are that the magnitude and extent of any risk is likely too small to impact populations of any of the animals that utilize Runway Wetland and Alameda Point. For the conservative evaluations carried out, any potential risk to ecological receptors may be attributed to elevated levels of cadmium, chromium and zinc in the northern portion of the west pond at Runway Wetland. However, the area of concern is small and likely limited to individual animals with small home ranges that potentially frequent the site.

7.0 CONCLUSIONS

The results of data review (Section 3) indicate that few chemical constituents in Runway Wetland sediments are likely present in concentrations greater than those observed in sediments representative of ambient conditions. The fact that site data are generally consistent with ambient concentrations combined with historical knowledge that no Navy operations were conducted at the Runway Wetland supports the conclusion that no site-related releases have occurred at the Runway Wetland. This human and ecological risk screening, that utilizes several conservative exposure scenarios and assumptions, is meant to support the fact that no significant risks exist at the Runway Wetland at Alameda Point. Human health risks were evaluated for a future land use as an ecological preserve. Visitors to the preserve and workers were evaluated as potential receptors. Potentially complete chronic exposure pathways for both receptor populations included incidental soil ingestion, dust inhalation, and dermal absorption from soil. The conclusion of the human health screening assessment is that there is no potential for significant site-related adverse health effects due to chemical exposures under future land use as an ecological preserve.

The screening-level ecological risk assessment followed protocols consistent with EPA Superfund Ecological Risk Assessment Guidance and US Navy Tier 1 guidelines for ecological risk assessment. Maximum site chemical concentrations were first compared to risk-based screening thresholds accepted by the Navy Sediment Work Group. Sixty chemicals were identified as potentially of concern via these comparisons. These 60 chemicals were then evaluated for potential risks to upper trophic level receptors by comparing average daily doses (calculated via a food-chain model) for selected indicator species to toxicity reference values (TRVs). The indicator species included the red fox, raccoon, California ground squirrel, red-tailed hawk, great blue heron, mallard duck, and Alameda song sparrow. Exposure parameters chosen for the food-chain modeling of average daily doses were intentionally biased to be protective in keeping with the screening nature of the ecological risk assessment. Average daily doses were compared to both "lower-bound" and "high" TRV values. The conclusion of the ecological risk screening was that site-wide ecological risks at the Runway Wetland are likely to be negligible, although slight risk is possible to individual animals with small home ranges that may forage in the northern portion of the west pond. However, the magnitude and extent of the risk is likely too small to impact populations of any plants or animals that utilize Runway Wetland or Alameda Point.

Based of the results of the risk screening presented in this report, it is apparent that, even under the conservative set of assumptions used in the evaluations, no significant risks exists for either the human or ecological receptors associated with the Runway Wetland at Alameda Point.

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Appendix A

Runway Wetland Dataset Documentation

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A.0 RUNWAY WETLAND DATASET DOCUMENTATION

The Runway Wetland data were downloaded from the Battelle Duxbury Navy Sediment Work Group database and stored in a temporary data set. These data were then input into a permanent working data set and modifications were made in order for these data to conform to conventions used for other Navy data sets. Field attributes, date format, analyte names, sample matrix designation, and reporting units were made consistent to those in other Navy data sets. For example, one of the analytical laboratories had reported tissue sample results on a wet weight basis, and these results were converted to dry weight.

Other information was added to the data set to facilitate data reporting. An analytical suite assignment was made based on analyte name. A field was created to hold information on preparation method for water samples, i.e., whether or not the sample had been filtered prior to analysis. Another field was created to store information on the type of tissue sample, e.g., terrestrial plant, mouse hide, or fish.

Separate data tables are included for each sampling matrix (sediment, surface water, tissue, porewater) at the end of Appendix A.

A.1 DERIVED DATA SET

Runway Wetland sediment samples collected in 1993 and 1994 had laboratory replicate samples run; samples collected in other years had no replicate samples. To support human and ecological assessments, the replicate samples were collapsed into a single result for a particular station, collection date, and analyte. For the purposes of box plots and background comparison tests, a dataset was used that handled replicates according to the following protocol. The maximum detected concentration for the station, collection date, and analyte was used if one or more replicate results was classified as a "detect". If there were no detects, the maximum detection limit among replicates was used. The detection status of a station, collection date, and analyte result was assigned based on whether the selected result was classified as a "detect" or "nondetect".

For the purpose of data summary, an "overall mean" was also calculated. The overall mean averages the results from all stations, including maximum detected concentrations and one half of the detection limits of nondetects according to the following protocol. A station result is represented by the maximum detect if the result was classified as a detect, else by the average of one half the detection limits if the result was classified as a nondetect.

For polychlorinated biphenyls (PCBs) summed or total measurements were used in the box plots and background comparison tests. For sediment, surface water and porewater samples, total PCB was the sum of seven aroclors (aroclor-1016, aroclor -1221, aroclor -1232, aroclor-1242, aroclor-1248, aroclor-1254 aroclor-1260). For total PCBs in tissues, total PCB was two times the sum of eighteen congeners: PCB008, PCB018, PCB028, PCB044, PCB052, PCB066, PCB101, PCB105, PCB118, PCB128, PCB138, PCB153, PCB170, PCB180, PCB187, PCB195, PCB206, PCB209. The derived results for a particular station, collection date, and analyte were summed.

All results classified as "nondetect" used in a sum were given a value of zero before summation. Use of zeroes for nondetects is consistent with the procedure used for total PCB in the published Regional Monitoring Program (RMP) and Bay Protection and Toxic Cleanup Program (BPTCP) data sets.

To calculate the overall mean for data summary, the constituents in the sums were treated as described above. To include an upper bound on the results in data summary, the sum using maximum detection limits was also recorded.

A.2 SURFACE SEDIMENT BOX PLOTS

Figures A-1 through A-16 show side-by-side box plots for surface sediment chemicals of potential ecological concern (COPECs) for Runway Wetland along with the ambient or reference data sets, as available. The total number of samples and the number of detected concentrations are shown in the margin text on the x-axis as "N/D". Detected and non-detected concentrations are plotted, with non-detects plotted at the reported detection limit. Various comparison values, such as the ambient upper tolerance limit, are also plotted on each plot as horizontal lines, where the comparison value is within the range of site concentrations. Those comparison values that exceed the range of concentrations at the site or in the ambient data set are not plotted. The legend is in the middle of each page, between the first and second rows of box plots.

A.3 STATISTICAL DISTRIBUTION SHIFT TESTS (BACKGROUND COMPARISON TESTS) FOR SEDIMENTS

The surface sediment chemistry results for constituents that were retained as COPECs were statistically compared to those from reference locations to determine if the distribution of site concentrations is 'shifted' in part or in whole to the right (to higher concentrations) of the reference distribution. This comparison involved the use of a set of distribution shift tests (background comparison tests) including: the t-test, Gehan test, quantile test, and slippage test. Each of these is described in more detail below.

A.3.1 Reference Data Set

Whenever available, the data used to represent ambient conditions are the sediment chemistry results collected by the following CA regulatory programs: BPTCP and San Francisco Estuary Institute (SFEI) RMP. All available sediment chemistry results from 1993 through 1997 from stations classified as ambient in the Ambient Sediment Chemistry report ("Ambient Concentrations of Toxic Chemicals in Sediments", April 1998, Regional Water Quality Control Board) are used. The BPTCP stations were Paradise Cove, San Pablo Bay Island #1, San Pablo Bay Tubbs Island, North South Bay and South South Bay. The RMP stations were Alameda, Davis Point, Dumbarton Bridge, Grizzly Bay, Honker Bay, Horseshoe Bay, Oyster Point, Pacheco Creek, Petaluma River, Pinole Point, Point Isabel, Red Rock, Richardson Bay, Sacramento River, San Bruno Shoal, San Joaquin River, San Pablo Bay, South Bay, and Yerba Buena Island.

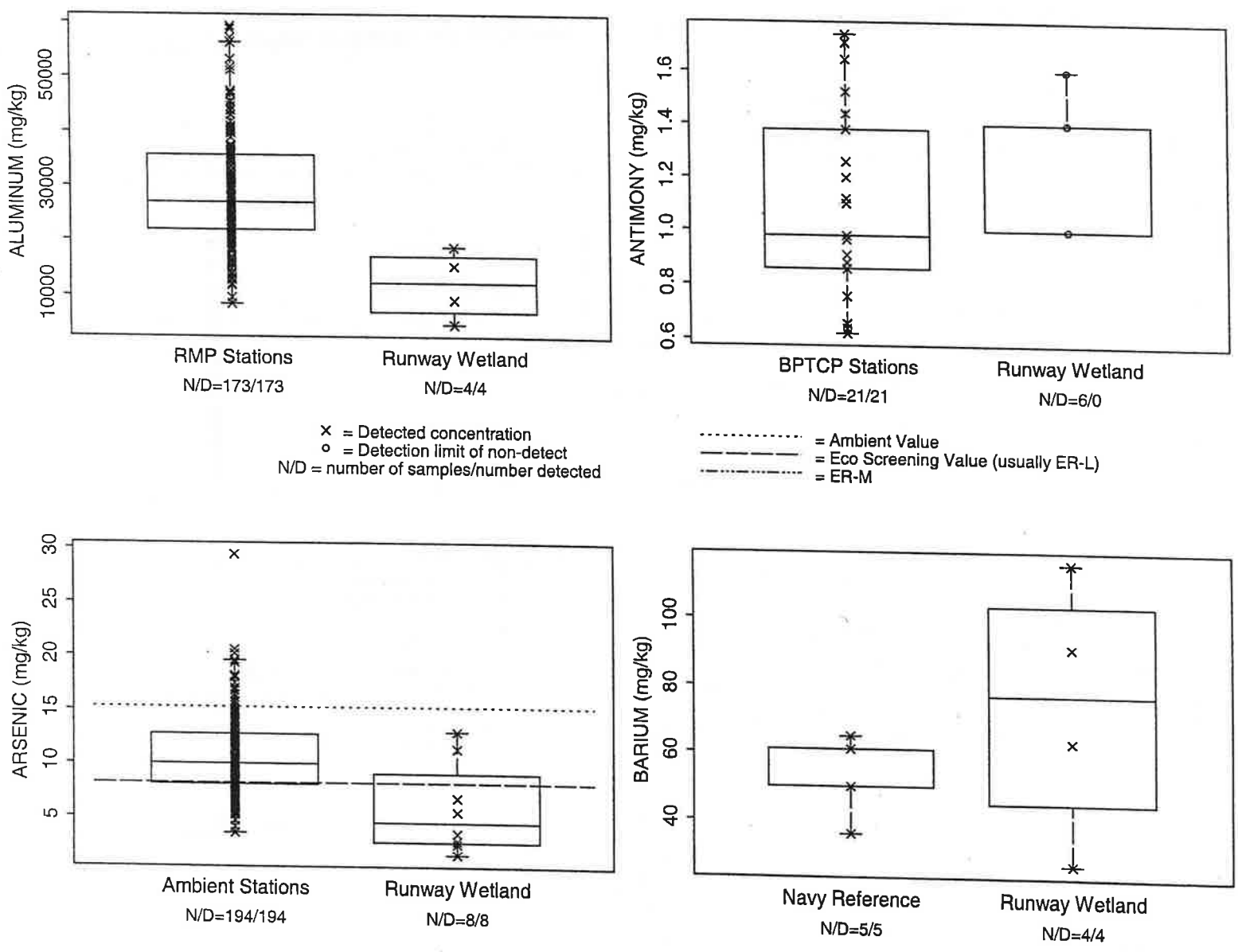

Figure A-1. Box plots of surface sediment concentrations of aluminum, antimony, arsenic, and barium

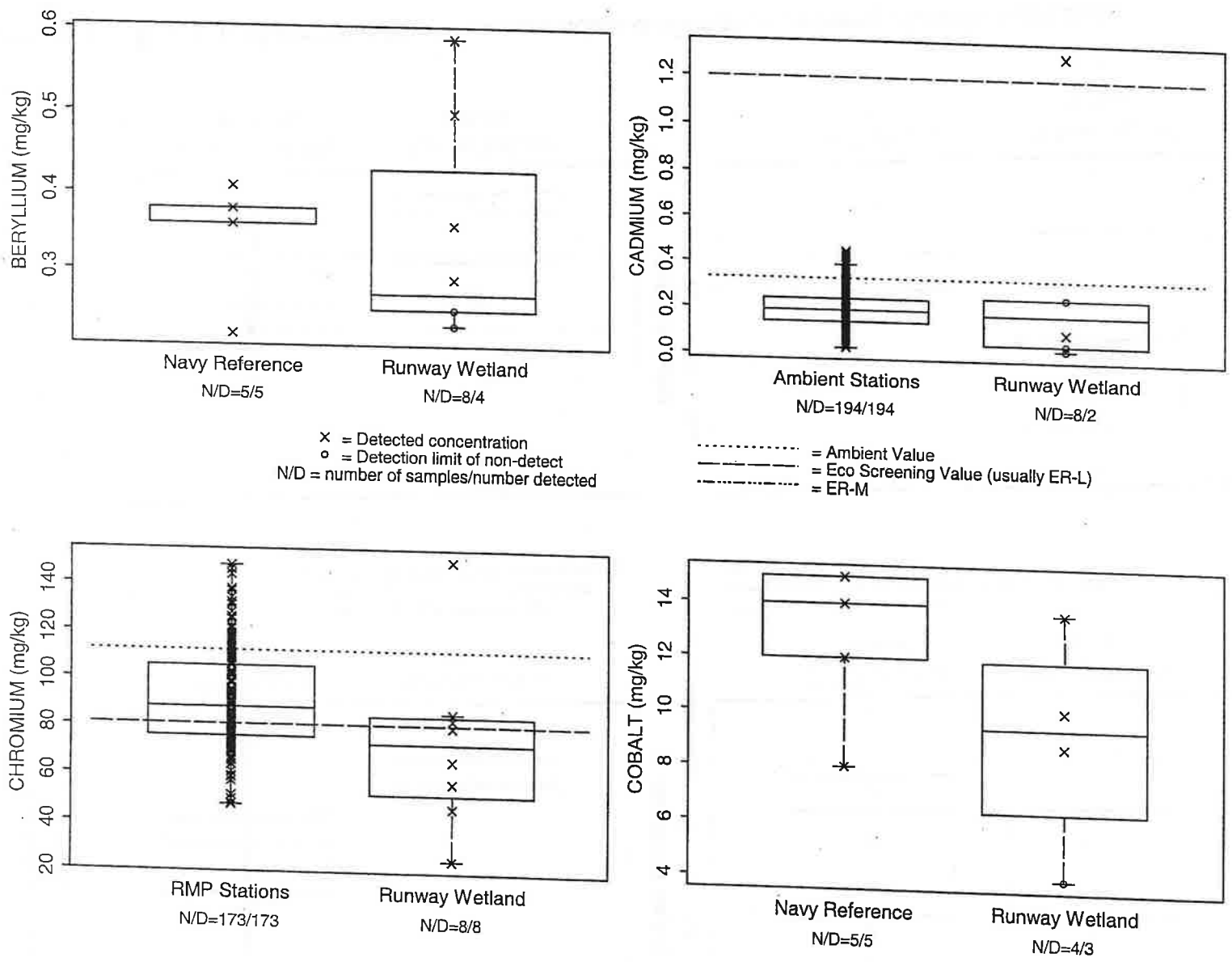

Figure A-2. Box plots of surface sediment concentrations of beryllium, cadmium, chromium, and cobalt

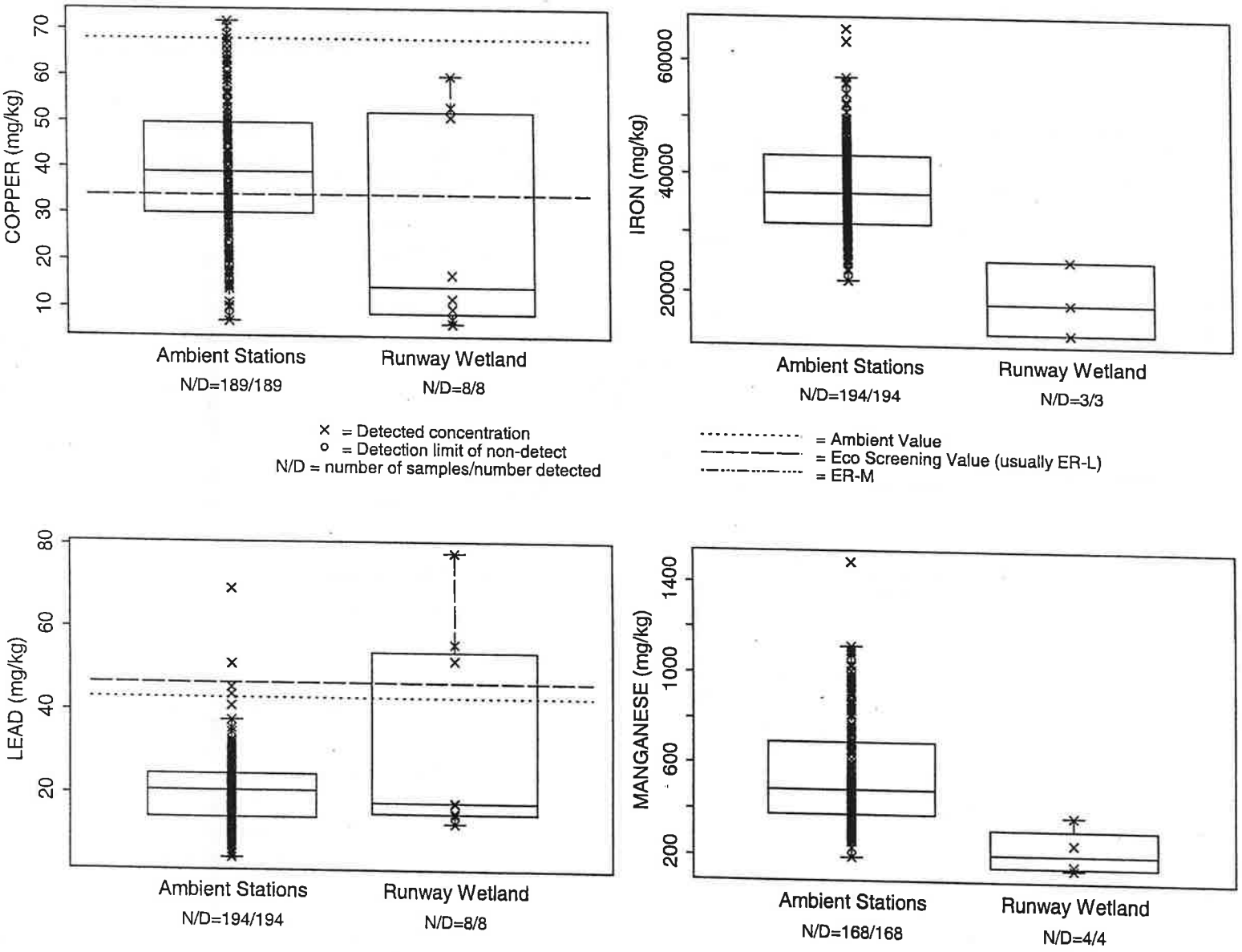

Figure A-3. Box plots of surface sediment concentrations of copper, iron, lead, and manganese

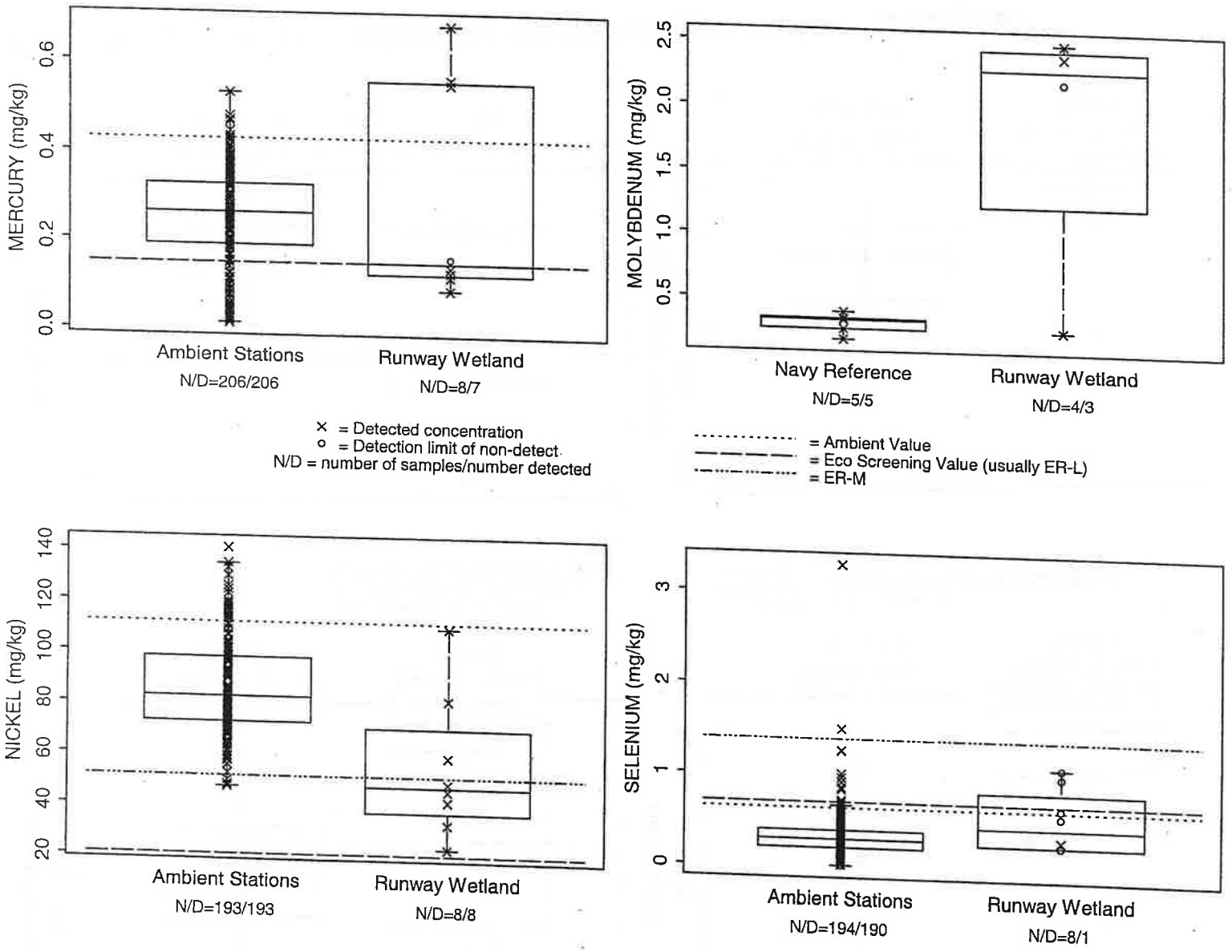

Figure A-4. Box plots of surface sediment concentrations of mercury, molybdenum, nickel, and selenium

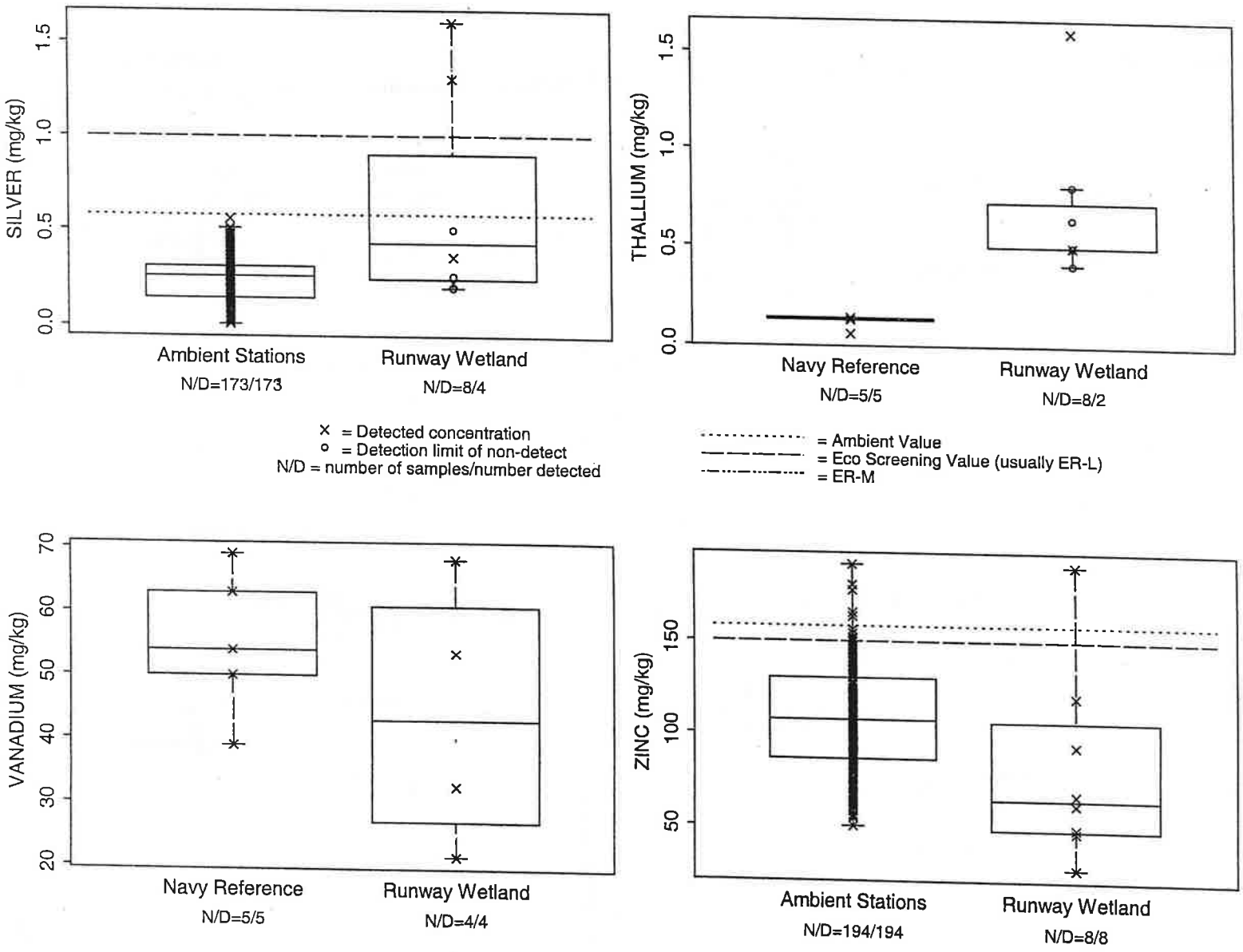

Figure A-5. Box plots of surface sediment concentrations of silver, thallium, vanadium, and zinc

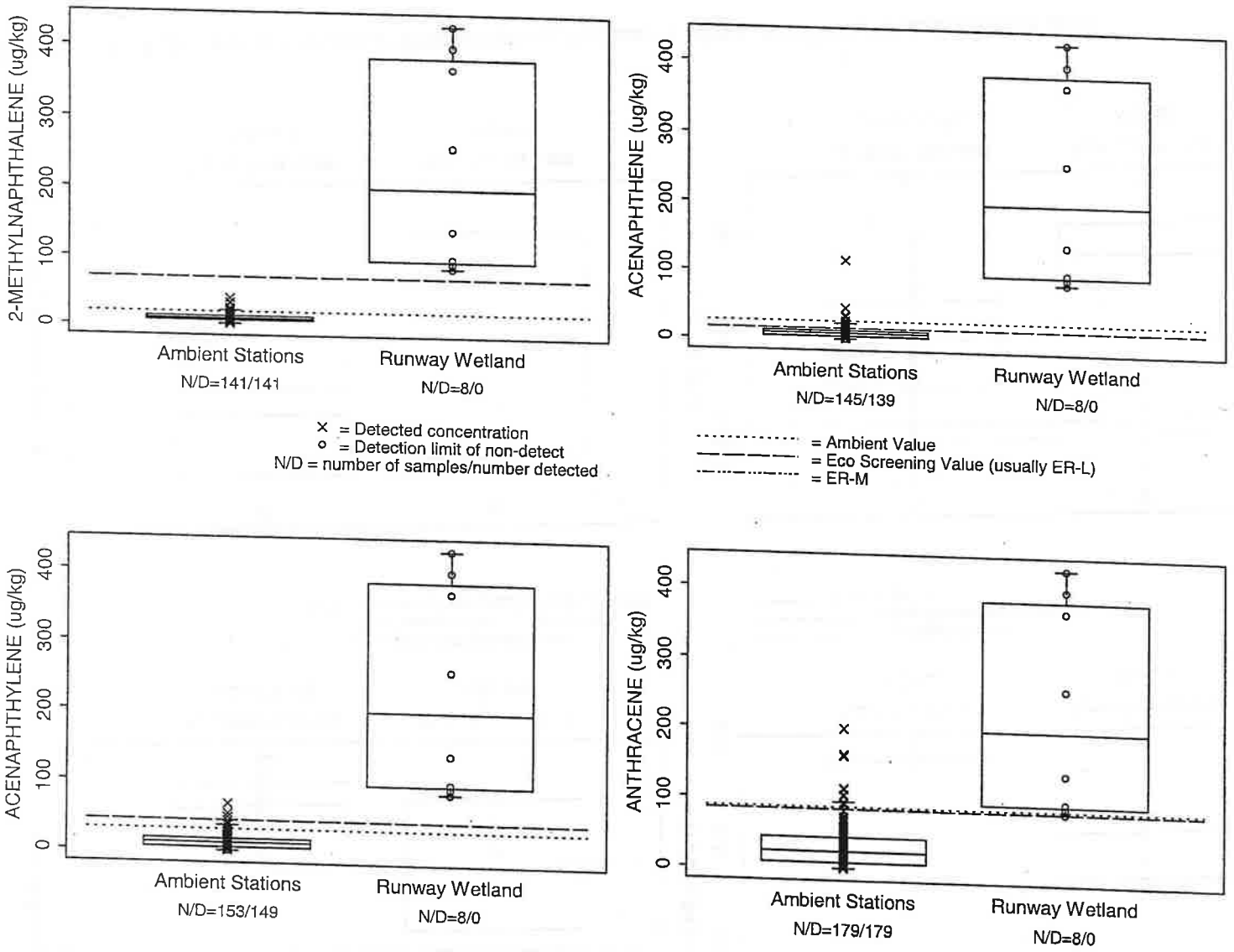

Figure A-6. Box plots of surface sediment concentrations of 2-methylnaphthalene, acenaphthene, acenaphthylene, and anthracene

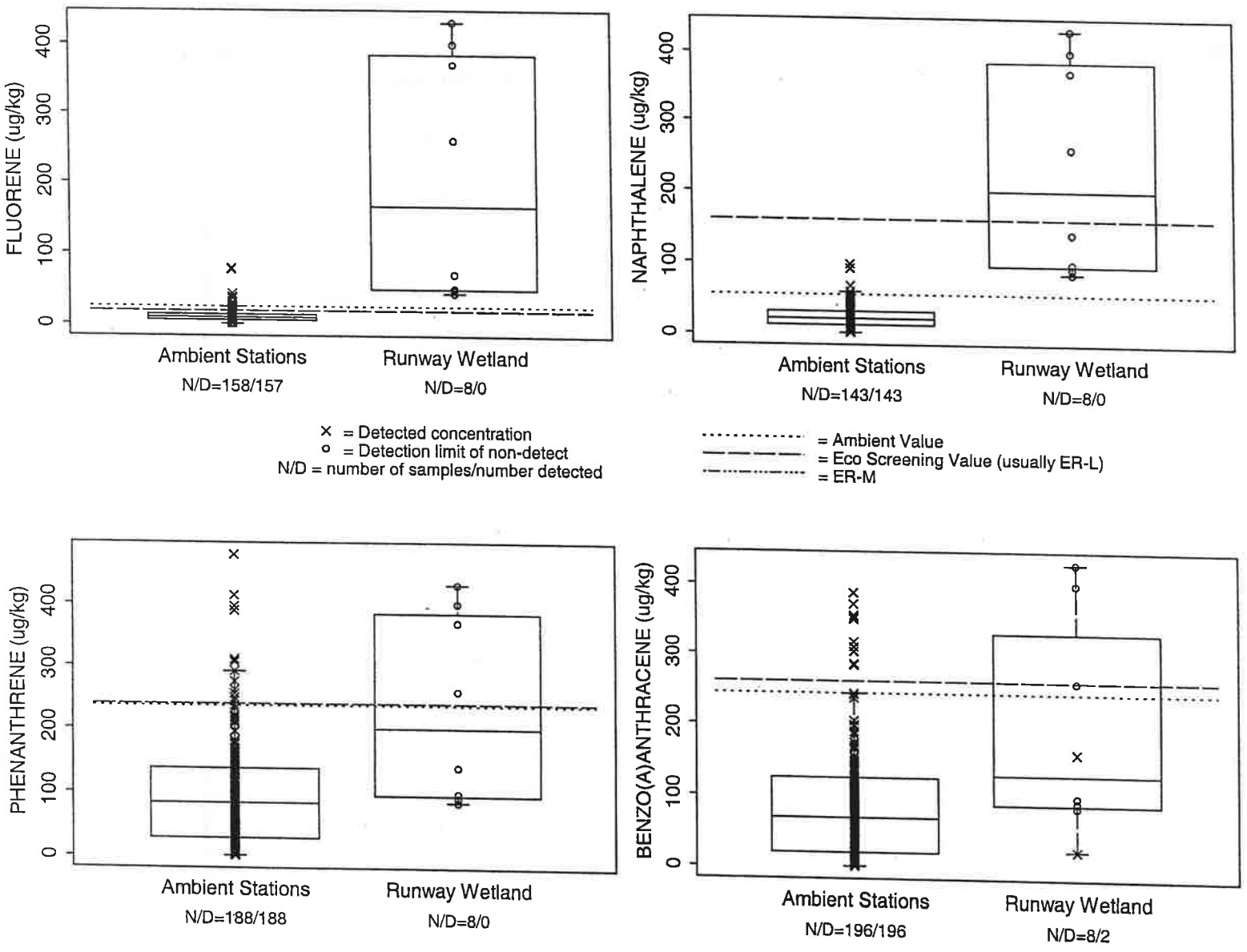

Figure A-7. Box plots of surface sediment concentrations of fluorene, naphthalene, phenanthrene, and benz(a)anthracene

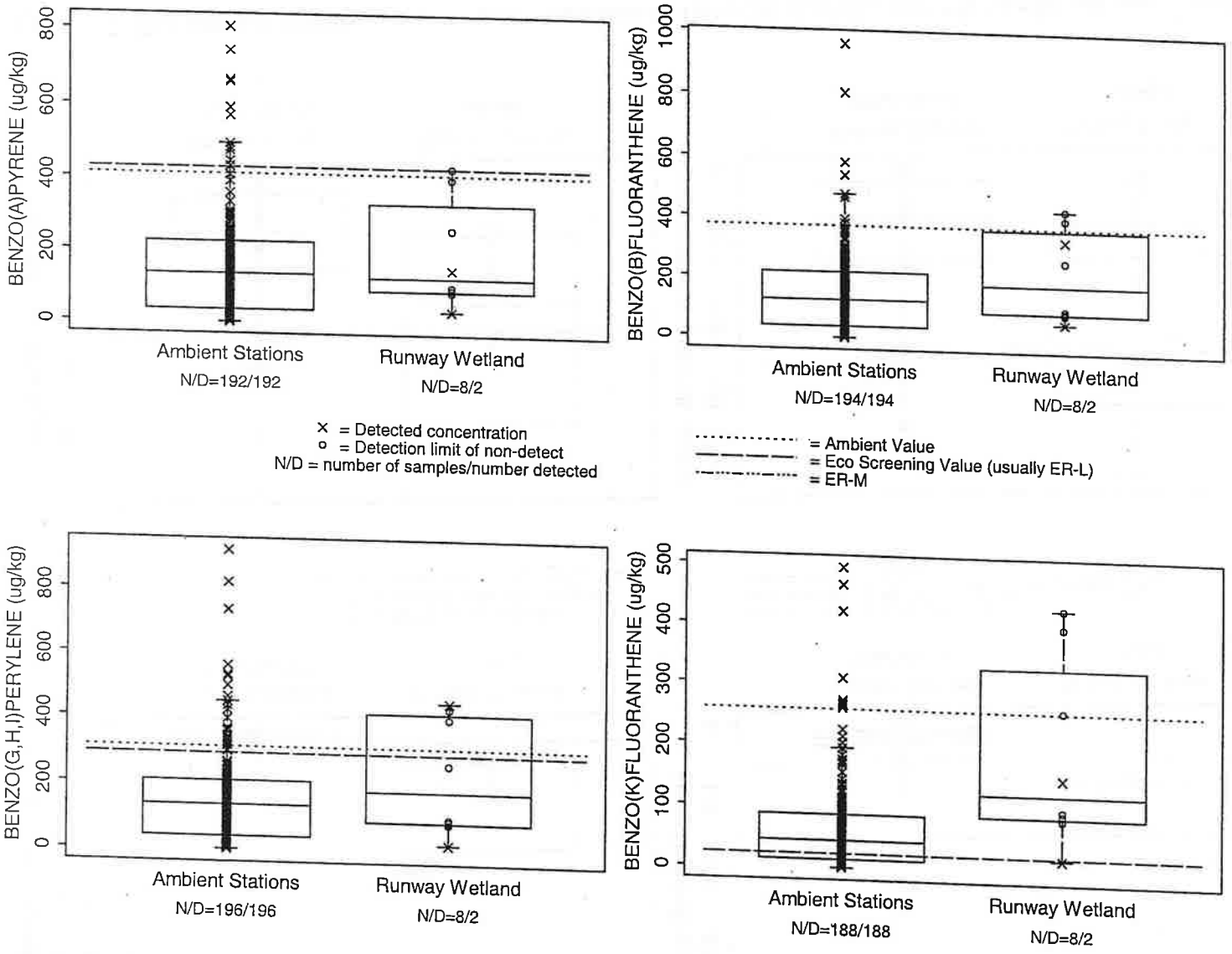

Figure A-8. Box plots of surface sediment concentrations of benzo(a)pyrene, benzo(b)fluoranthene, benzo(g,h,i)perylene, and benzo(k)fluoranthene

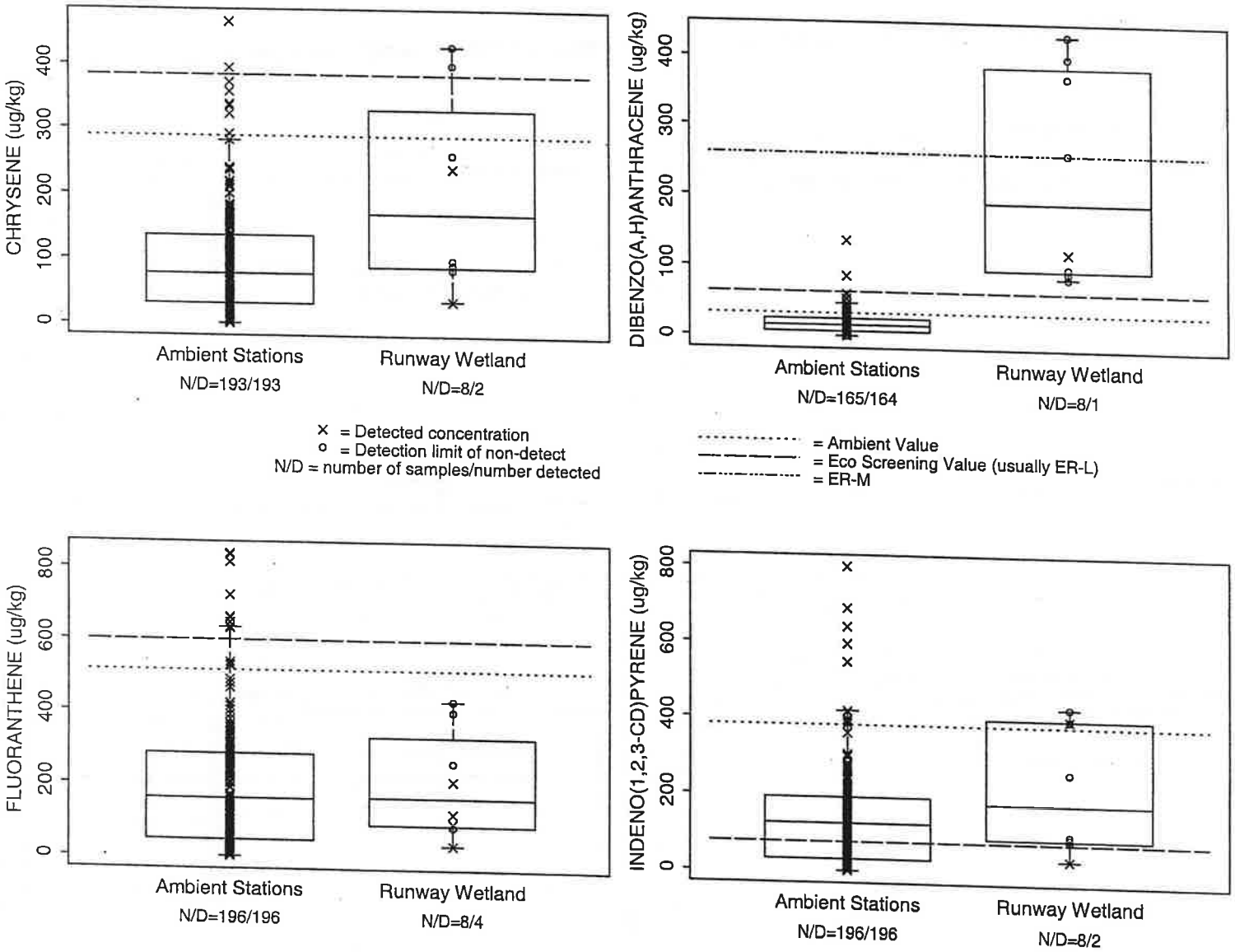

Figure A-9. Box plots of surface sediment concentrations of chrysene, dibenz(a,h)anthracene, fluoranthene, and indeno(1,2,3-cd)pyrene

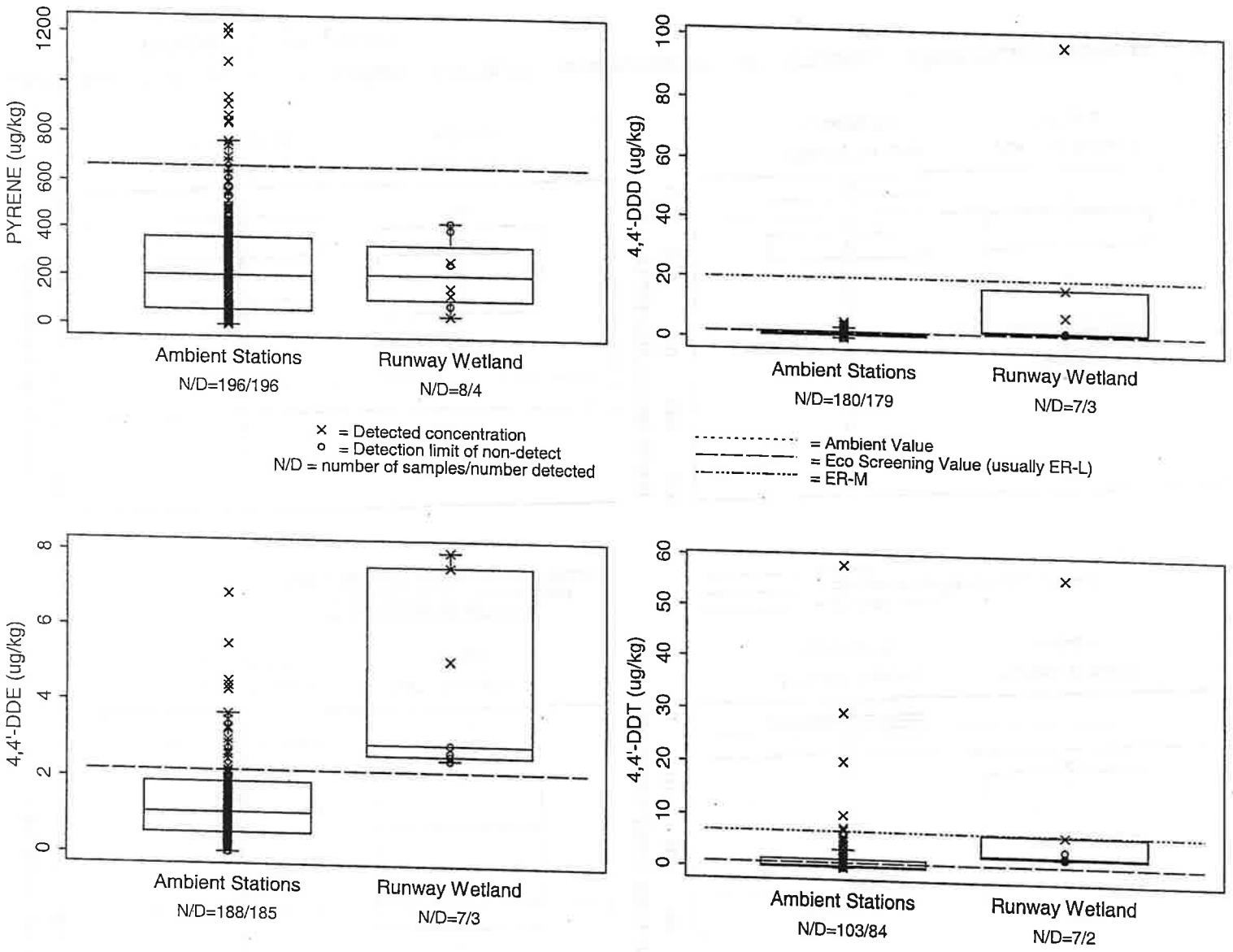

Figure A-10. Box plots of surface sediment concentrations of pyrene; 4,4'-DDD; 4,4'-DDE; and 4,4'-DDT

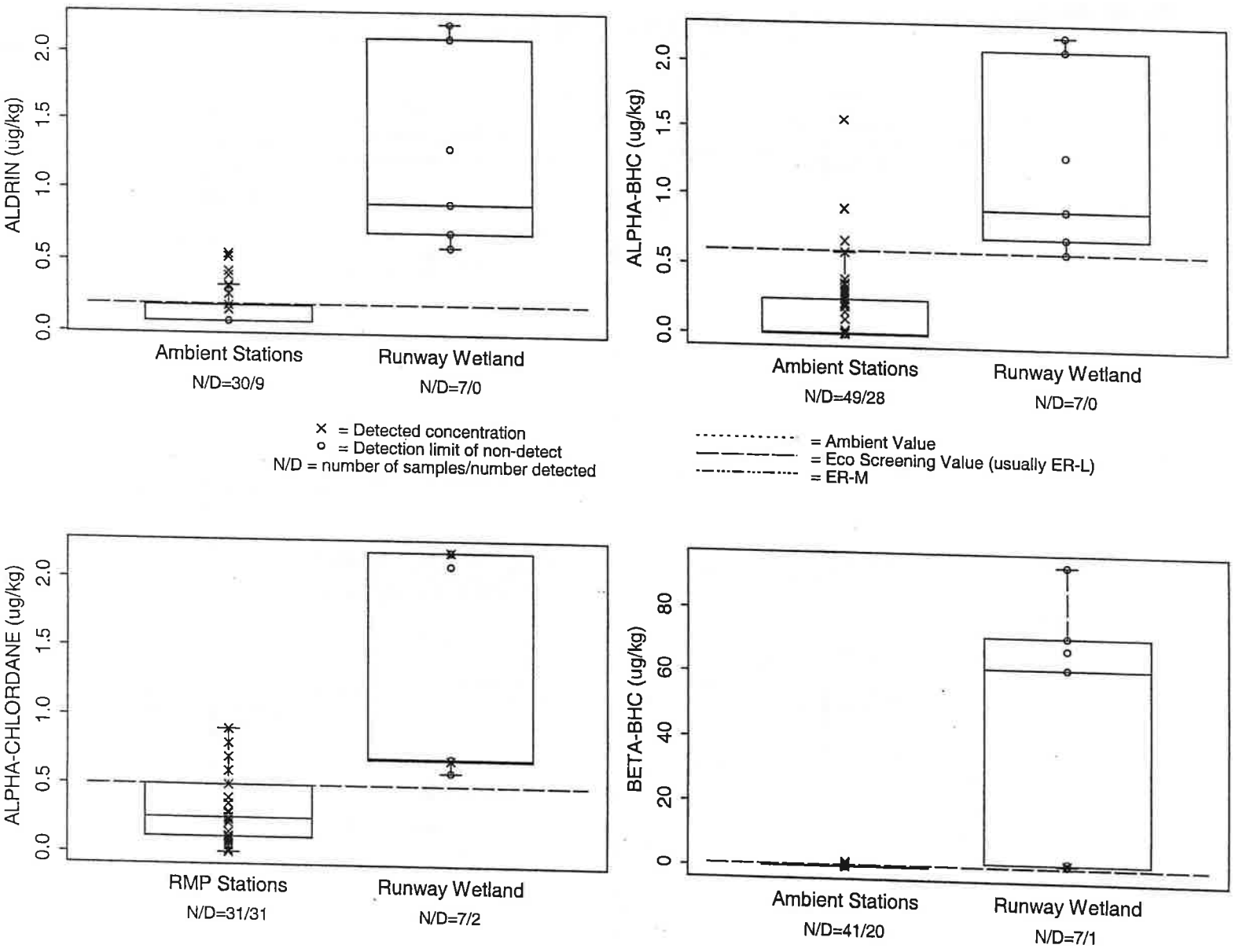

Figure A-11. Box plots of surface sediment concentrations of aldrin, alpha-BHC, alpha-chlordane, and beta-BHC

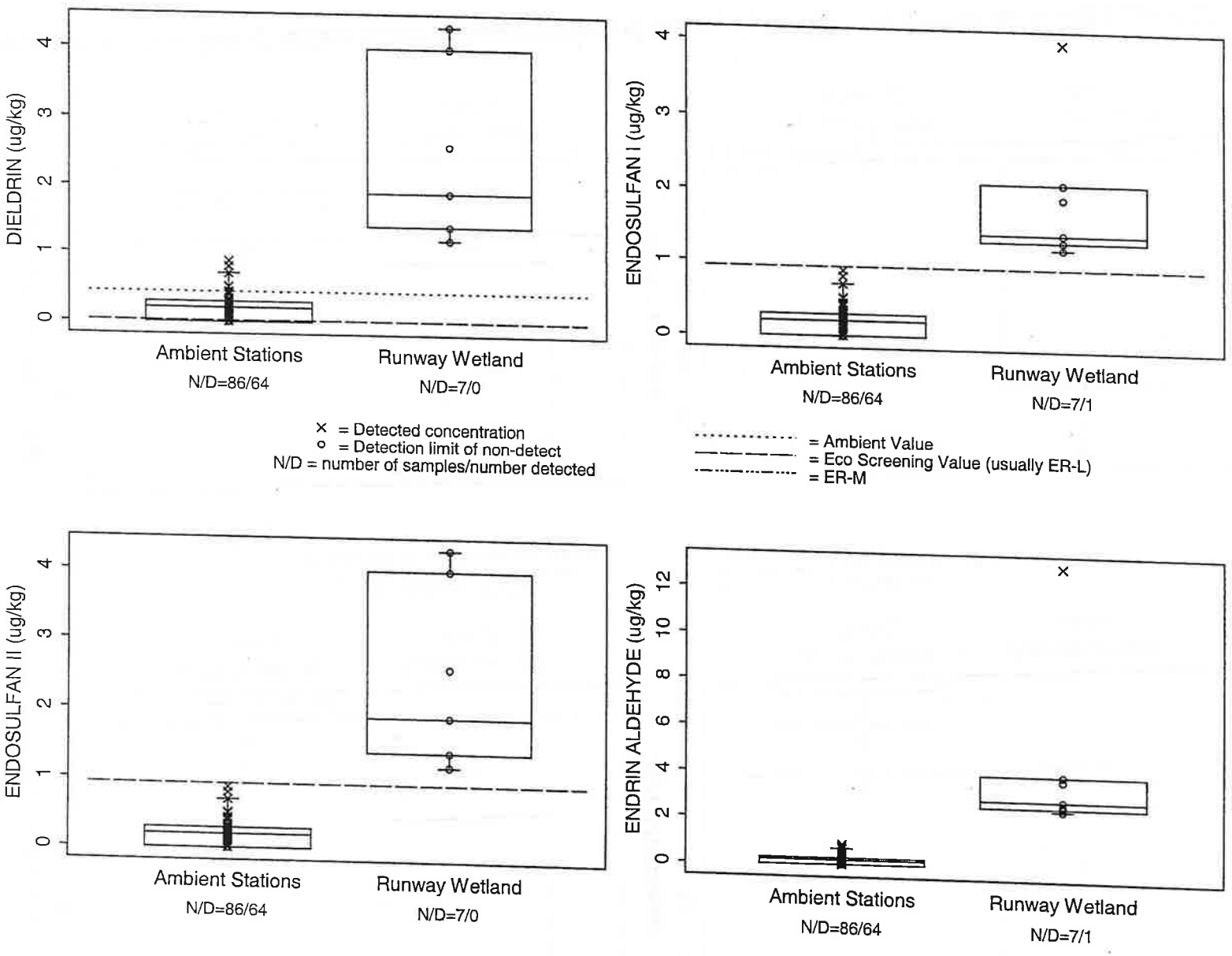

Figure A-12. Box plots of surface sediment concentrations of dieldrin, endosulfan I, endosulfan II, and endrin aldehyde

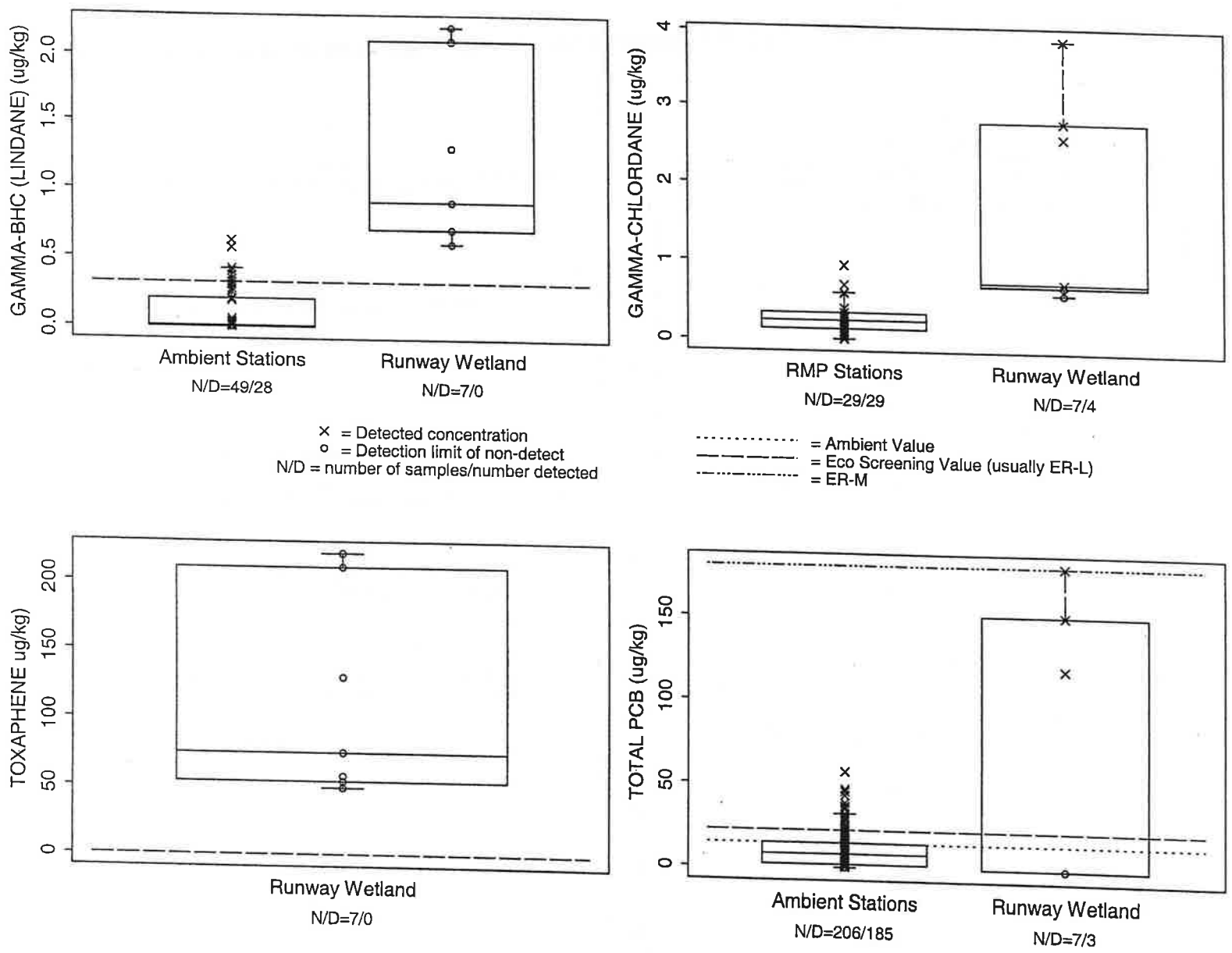

Figure A-13. Box plots of surface sediment concentrations of gamma-BHC, gamma-chlordane, toxaphene, and total PCB

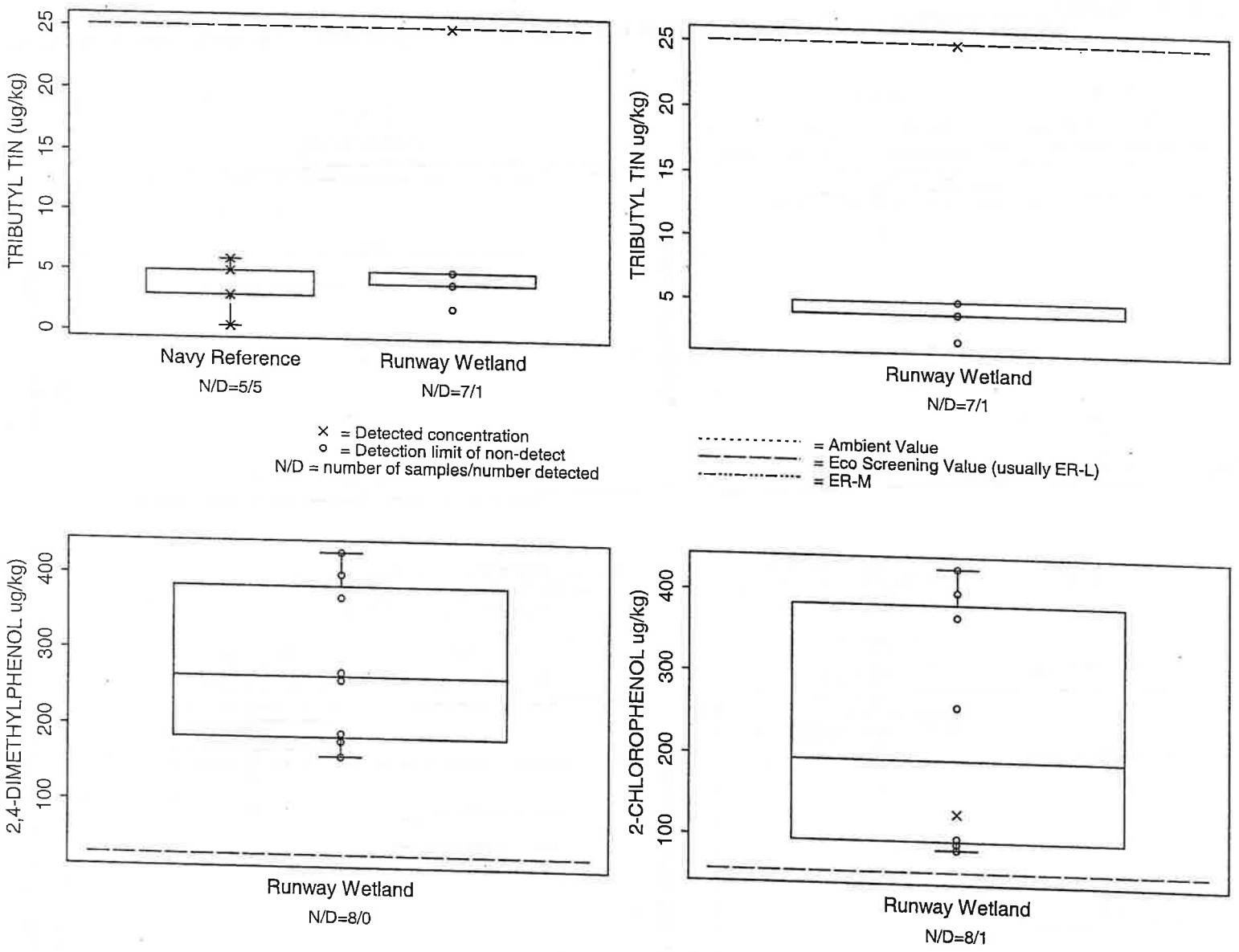

Figure A-14. Box plots of surface sediment concentrations of tributyl tin, 2,4-dimethylphenol, and 2-chlorophenol

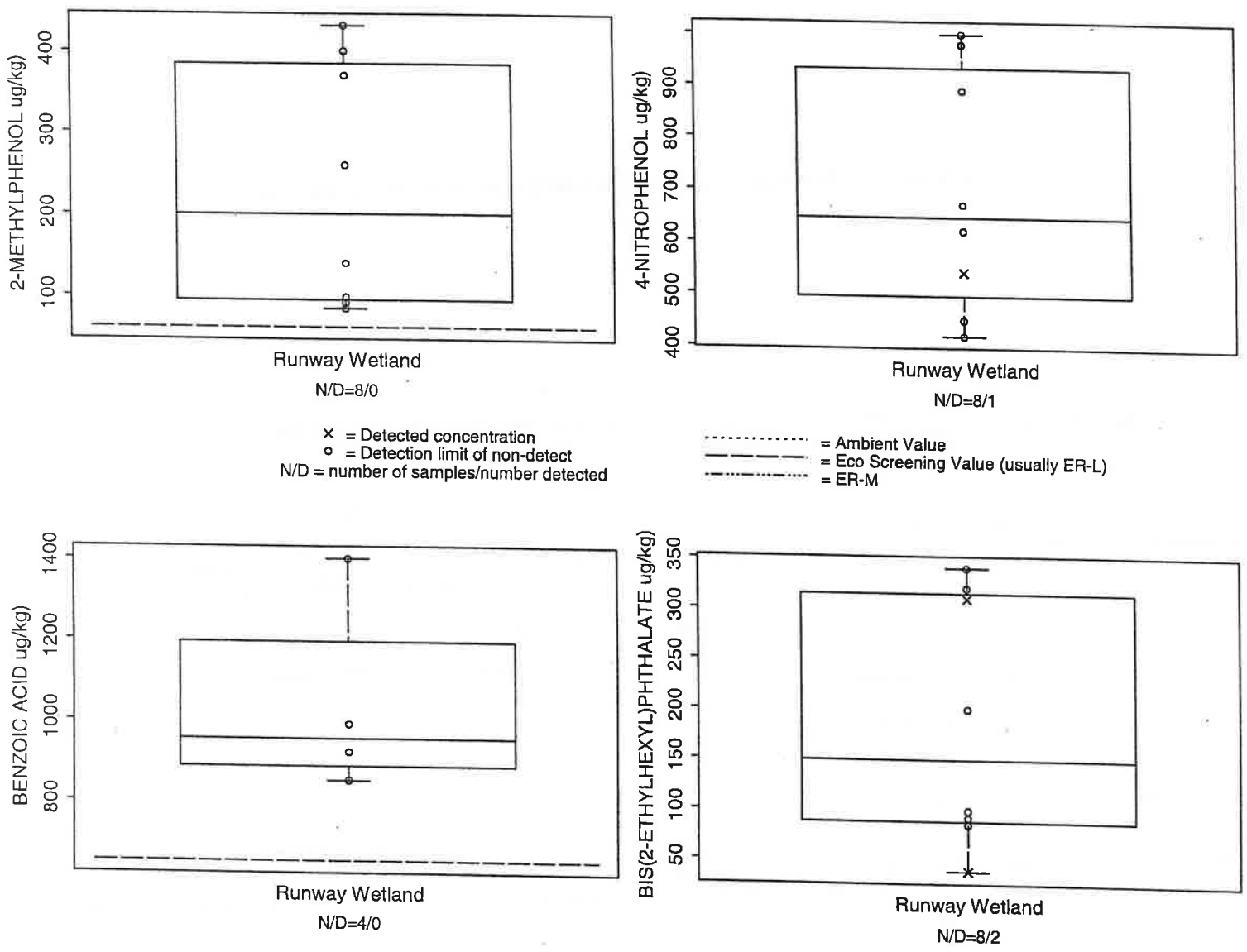

Figure A-15. Box plots of surface sediment concentrations of 2-methylphenol, 4-nitrophenol, benzoic acid, and bis(2-ethylhexyl)phthalate

Figure A-16. Box plots of surface sediment concentrations of diethylphthalate and phenol

A.3.2 Data Issues

For aluminum and chromium, only the RMP results are used in distribution shift tests. For those metals the BPTCP samples were presumed analyzed by a more rigorous or total method and the BPTCP results were not considered comparable to the RMP or Runway Wetland results. The statistician's report ("San Francisco Bay Sediment Criteria Project Ambient Analysis Report", March 1998, Smith and Riege, EcoAnalysis, Inc.) includes ambient value results for chromium and for chromium (hydrofluoric [HF] acid). The HF acid digestion breaks down the sediment lattice/matrix and results in a complete measurement. All other analytes with calculated ambient values (inorganic and organic) were based on the combined data from RMP and BPTCP. In reviewing the ambient results by station, by agency, and with respect to percent fines, the RMP and BPTCP data appear to be comparable for all analytes (except chromium and aluminum). This observation supports the approach of combining results for the purpose of calculating ambient values (no ambient value was calculated for aluminum) and for the purpose of background comparisons. Because the aluminum results from BPTCP appear to be systematically greater than those of RMP, it was decided to use only RMP results for comparison to site results.

For inorganic analytes that were not analyzed by the RMP or BPTCP (barium, beryllium, cobalt, molybdenum, thallium, and vanadium), the Navy results from samples taken at five SF Bay reference stations in 1998 were used. These stations correspond to five ambient locations that have been sampled by the regulatory agencies. They are 1) North South Bay (BPTCP station number 20013), 2) Alameda (SFEI RMP station number BB70), 3) Oakland Enterance (location offshore from Western Bayside used by Chapman et al. [Chapman, Dexter, and Long, 1987, "Synoptic measures of sediment contamination, toxicity and infaunal community composition (the Sediment Quality Triad) in San Francisco Bay" Marine Ecology – Progress Series, vol 37:75-96] and near location used by National Oceanic and Atmospheric Administration (NOAA) station SFBOA), 4) Yerba Buena (RMP station number BC11), and 5) Paradise Cove (BPTCP station number 20005).

Detection limits were reported for Runway Wetland results, whereas the RMP and BPTCP databases have coded values for nondetects and no reported detection limits. Rather than remove the RMP and BPTCP nondetects, a value of half the smallest detected concentration for a specific analyte was used as the detection limit. This seems appropriate the analytical methods used for the ambient station data were sensitive and reasonably low detection limits can be assumed. For the analytes (selenium and many organics) that had some nondetect results in the ambient data, the methods also detected numerous small concentrations, and the difference between zero and half the smallest detected concentration is inconsequential.

A.3.3 Background Comparison Tests

Instead of comparing individual site concentrations to a single screening or threshold value representing ambient or background concentrations (ambient values), distribution shift tests compare site data to the entire distribution of background concentrations. A distribution shift test

is used to determine whether site data are systematically greater than reference/ambient data. Several types of distribution shift tests are available. The result of performing each statistical test on two data sets (one that represents ambient and one that represents the site) is a test statistic and an associated significance level (also known as a p-value). The significance level is the probability that the test statistic would be as large or larger than the one produced if the two data sets were from the same distribution (both were from the background distribution). A small significance level indicates that it is not likely that the two data sets came from the same distribution. It is standard to consider "small" to be less than 0.05 (i.e., such a large test statistic would occur by chance less than one out of 20 times when the sampled populations are the same).

The t-test and Gehan test are best suited for assessing complete shifts (of central location) in the distributions. The t-test tests equality of the two population means and the Gehan test tests equality of the two population medians. The Quantile test is better suited for assessing shifts of a subset (upper tail) of the distributions. If the differences between two distributions appear to occur far into the tails, a nonparametric test called the slippage test is performed.

Student t-test. This parametric two-sample test determines whether the mean concentration of site population is statistically greater than the mean concentration of ambient population (Gilbert, 1989). It is the most powerful test when each population is distributed normally. The t-test performs well for some deviations from normality but, in the absence of normality, increased power may be obtained through nonparametric methods. An approximate t-test, Welch's "t'-test", is performed when the two data sets have unequal variances.

Wilcoxon rank sum test (or Mann-Whitney U-test). This test is the nonparametric equivalent to the t-test (Gilbert 1987; Gilbert and Simpson 1992). The Wilcoxon test pools site and background data into one aggregate set and determines whether the average rank of the site data is greater than that of the background data. The Wilcoxon test is recommended when nondetects are relatively infrequent (less than 10%) and all have the same detection limit. The nondetects are treated as tied at a value less than the smallest detected concentration. The Wilcoxon rank sum test will have about the same or more power than the t-test for most distributions (Gilbert and Simpson, 1992).

Gehan test. When, as is frequently the case for environmental data, some of the data are "censored" or reported as below a detection limit, and especially when not all the detection limits are identical, the Gehan modification to the Wilcoxon rank sum test is useful. The Gehan test uses a modified ranking of sample results to accommodate nondetected chemicals together with detected values, and then applies the Wilcoxon rank sum test. The Gehan test is recommended when nondetects are relatively frequent (greater than 10% and less than 50%). It handles data sets with nondetects reported at multiple detection limits in a statistically robust manner (Gehan 1965; Millard and Deverel 1988). If there are no non-detects in the data, then the Gehan test is equivalent to the more familiar Wilcoxon rank sum test.

Quantile test. The quantile test determines whether more of the observations in the top 20% of the combined data set come from the site data set than would be expected by chance, given the

relative sizes of the site and background data sets. If the relative proportion of the two populations being tested is different in the top 20% of the data than in the remainder of the data, the site concentration distribution may be partially shifted.

Slippage test. This test is based on the maximum observed concentration in the background data set and the number ("n") of site concentrations that exceed the maximum concentration in the background set (Gilbert and Simpson 1990, pages 5-8). The result (p-value) of the slippage test is the probability that "n" site samples (or more) exceed the maximum background concentration by chance alone. The test accounts for the number of samples in each data set (number of samples from the site and number of samples from background) and determines the probability of "n" (or more) exceedances if the two data sets came from identical distributions.

A.3.4 Distribution Shift Tests Results

The tests were performed to compare the Runway Wetland results with those of the reference set. The full set of distribution shift tests (t-test, Gehan test, quantile test, slippage test) was performed for each analyte (or sum of organics). An analyte was considered to fail if any of the p-values were less than 0.05. A "failure" indicates evidence of an upward shift in the site distribution. A "pass" indicates that the site and reference distributions are similar (not significantly different). The tests were not performed if the proportion of detects was less than 50% in either of the two data sets, the reference set or the Runway Wetland set. Tests were performed for all analytes that did not pass the initial screen at Runway Wetland so long as the analyte had a reference set (stations sampled by RMP and/or BPTCP and/or Navy collected SF Bay Reference Locations). Analytes without reference sets could not be evaluated and are noted below the tables. Additional comments on test results for an analyte are listed as footnotes.

The following tables provide information per test for Runway Wetland for each analyte. The tables are organized by suite or sets of suites. The reported test results in the tables are the p-values associated with the listed distribution shift tests. A significant difference is concluded if the p-value<0.05.

Headings and Abbreviations Used in Tables:

Area N: the count of samples analyzed for the Runway Wetland.

Area D: the count of detected results for the Runway Wetland

Detect rate: the proportion of detected results per samples analyzed (if rate<0.5, tests not run)

Ref Set: the source of the reference data set, including: RMP, Amb=RMP and BPTCP,

Navy Ref: the Navy collected samples from 5 reference locations

Ref N: the count of samples analyzed in the reference data set

Ref D: the count of detected results in the reference data set

Pass: (overall conclusion) P=analyte passes all tests, F=analyte fails at least one test, na = detection rate is <50% (test not run; possible data gap)

Table A-1. Results of Distribution Shift Tests for Inorganic Constituents in Surface Sediment at Runway Wetland

Analyte	Area N	Area Detects	Detect Rate	Ref. Set	Ref. N	Ref. Detects	Pass	Test P-Values				Note
								Gehan	Quantile	Slippage	t-test	
Aluminum	4	4	1	RMP	173	173	P	0.9984	1	1	0.9952	
Antimony	6	0	0	BPTCP	21	21	na					1
Arsenic	8	8	1	Amb	194	194	P	0.9982	1	1	0.9923	
Barium	4	4	1	Ref	5	5	P	0.1956	0.1667	0.1667	0.1874	2
Beryllium	8	4	0.5	Ref	5	5	P	0.7976	0.359	0.359	0.8059	
Cadmium	8	2	0.25	Amb	194	194	na					3
Chromium	8	8	1	Amb	173	173	F	0.9695	0.837	0.0442	0.871	
Cobalt	4	3	0.75	Ref	5	5	P	0.9443	1	1	0.8964	2
Copper	8	8	1	Amb	189	189	P	0.9478	0.4937	1	0.9111	
Iron	3	3	1	RMP	194	194	P	0.9983	1	1	0.9844	
Lead	8	8	1	Amb	194	194	F	0.2706	0.1953	0.0396	0.09736	
Manganese	4	4	1	Amb	168	168	P	0.9986	1	1	0.9971	
Mercury	8	7	0.875	Amb	206	206	F	0.5886	0.202	3.48E-05	0.317	
Molybdenum	4	3	0.75	Ref	5	5	P	0.1946	0.1667	0.1071	0.05013	
Nickel	8	8	1	Amb	193	193	P	0.9989	0.8365	1	0.99	
Selenium	8	1	0.125	Amb	194	190	na					3
Silver	8	4	0.5	Amb	173	173	F	0.2504	0.1968	0.001719	0.1068	3
Thallium	8	2	0.25	Ref	5	5	na					3
Vanadium	4	4	1	Ref	5	5	P	0.8044	0.7222	0.4444	0.7986	2
Zinc	8	8	1	Amb	194	194	P	0.9879	0.8348	1	0.8943	

Notes:

1-Antimony was analyzed by BPTCP, not RMP. There are too few detects to run the tests. When modified tests are run (treating the reported detection limits at Runway Wetland as detected values) the tests conclude a pass. For a qualitative visual interpretation, see box plots

2-The numbers of samples at the site (4) and reference areas (5) are too small to support strong conclusions. For a qualitative visual comparison or interpretation, see the box plots.

3-There are too few detects to run the tests. When modified tests that treat the reported detection limits at Runway Wetland as detected values, the tests conclude a failure. For a qualitative visual interpretation, see box plots.

Lead and chromium fail a single distribution shift test (slippage test) because one concentration (out of 8) is larger than the largest concentration at Ambient Stations. In both cases, the magnitude of the exceedance is small. The maximum concentration of chromium at Runway Wetland is 150 mg/kg compared to 148 mg/kg at Ambient stations. The maximum concentration of lead at Runway Wetland is 78 compared to 69.3 mg/kg at Ambient stations. The appearance of the box plots for lead and chromium at the Wetland and Ambient Stations supports a conclusion that the site is not elevated above ambient conditions.

Cadmium fails the slippage test only because one station had a maximum detected concentration (1.3 mg/kg) more than double the maximum observed at Ambient stations (0.45 mg/kg). This stations replicate samples were also larger than the maximum ambient concentration. This is evidence to support that cadmium is elevated at this location (R3).

Silver fails the slippage test because the detected concentrations at two stations (R2 1.6 mg/kg; R3 1.3 mg/kg) exceed the maximum concentration at Ambient Stations (0.56 mg/kg). It should be noted that the results among laboratory replicates at the two Wetland stations are inconsistent. The replicates include a single large detected concentration and three nondetects at 0.5 mg/kg. This amount of heterogeneity is unusual, but we conclude that silver concentrations exceed those found at Ambient Stations.

Table A-2. Results of Distribution Shift Tests for Pesticide and Organo Tin Constituents and Total PCBs in Surface Sediments at Runway Wetland

Analyte	Area N	Area Detects	Detect Rate	Ref. Set	Ref. N	Ref. Detects	Pass	Test P-Values			
								Gehan	Quantile	Slippage	t-test
4,4'-DDD	7	3	0.429	Amb	180	179	na				
4,4'-DDE	7	3	0.429	Amb	188	185	na				
4,4'-DDT	7	2	0.286	Amb	103	84	na				
Aldrin	7	0	0	Amb	30	9	na				
Alpha-BHC	7	0	0.000	Amb	49	28	na				
Alpha-chlordane	7	2	0.286	Amb	31	31	na				
Beta-BHC	7	1	0.143	Amb	41	20	na				
Dieldrin	7	0	0	Amb	86	64	na				
Endosulfan I	7	1	0.143	BPTCP	21	0	na				
Endosulfan II	7	0	0	BPTCP	21	1	na				
Endrin	7	0	0	Amb	38	17	na				
Gamma-BHC (lindane)	7	0	0.000	Amb	49	28	na				
Gamma-chlordane	7	4	0.571	Amb	29	29	F	0.0170	0.0164	0.0049	0.0152
Toxaphene	7	0	0	BPTCP	21	0	na				
Total PCB	7	3	0.429	Amb	206	185	na				
Tributyl tin	7	1	0.143	BPTCP	19	10	na				
Tributyl tin	7	1	0.143	Navy Ref	5	5	na				

Notes:

There was no reference set for endrin aldehyde so background comparisons were not performed. Only gamma-chlordane had sufficient detection rates at Runway Wetland and Ambient Stations to perform the tests. Runway Wetland gamma-Chlordane failed all tests due to three detected concentrations that were larger than the largest concentration reported for the Ambient Stations (stations R3, RW002, RW003). The other pesticides were rarely detected but had, with the lone exception of 4,4'-DDT, one or more reported detection limits larger than the maximum concentration reported at ambient stations. These pesticides would fail a modified test that used the detection limits of non-detects as if they were detected concentrations. For a visual comparison see the box plots.

Total PCBs had an insufficient detection rate to perform the tests but included results at three stations (R3, RW002, RW003) with sums of detected concentrations that exceeded the maximum sums observed at Ambient Stations. Modified tests that used the detection limits of non-detects as if they were detected concentrations would fail. For a visual comparison see the box plots.

Tributyl tin had an insufficient detection rate to perform the tests. Modified tests using the detection limits of non-detects as if they were detected concentrations would conclude a fail against Ambient Stations, but would conclude a pass against 1998 Navy Reference Locations.

Table A-3. Results of Distribution Shift Tests for PAH and Other SVOC Constituents in Surface Sediment at Runway Wetland

Analyte	Area N	Area Detects	Detect Rate	Ref. Set	Ref. N	Ref. Detects	Pass	Test P-Values				Note
								Gehan	Quantile	Slippage	t-test	
LMW PAHs												
2-Methylnaphthalene	8	0	0	Amb	141	141	na					1
Acenaphthene	8	0	0	Amb	145	139	na					1
Acenaphthylene	8	0	0	Amb	153	149	na					1
Anthracene	8	0	0	Amb	179	179	na					1
Fluorene	8	0	0	Amb	158	157	na					1
Naphthalene	8	0	0	Amb	143	143	na					1
Phenanthrene	8	0	0	Amb	188	188	na					1
HMW PAHs												2
Benz(a)anthracene	8	2	0.25	Amb	196	196	na					2
Benzo(a)pyrene	8	2	0.25	Amb	192	192	na					3
Benzo(b)fluoranthene	8	2	0.25	Amb	194	194	na					3
Benzo(g,h,i)perylene	8	2	0.25	Amb	196	196	na					3
Benzo(k)fluoranthene	8	2	0.25	Amb	188	188	na					2
Chrysene	8	2	0.25	Amb	193	193	na					2
Dibenz(a,h)anthracene	8	1	0.125	Amb	165	164	na					1
Fluoranthene	8	4	0.5	Amb	196	196	P	0.8891	1.0000	1.0000	0.9748	3
Indeno(1,2,3-cd)pyrene	8	2	0.25	Amb	196	196	na					3
Pyrene	8	4	0.5	Amb	196	196	P	0.9232	1.0000	1.0000	0.9966	3

Notes:

1-Analyte had an insufficient detection rate to perform the tests, but the reported detection limits considerably larger than the reported concentrations at Ambient Stations. Modified tests with the detection limits of non-detects treated as detected concentrations would fail. The inadequate detection limits indicate a data gap.

2-Analyte had an insufficient detection rate to perform the tests, and few (0 or 2) reported detection limits larger than the reported concentrations at Ambient Stations. Modified tests with the detection limits of non-detects treated as detected concentrations would fail, but tests with half detection limits for non-detects would pass. The tests that fail are due to a difference in medians (Gehan test) when comparing to a large Ambient set; the small difference is statistically different but may not indicate a practical difference. This sensitivity of the tests to the treatment of the Wetland detection limits further support the idea that any difference is minor.

3-Analyte had an insufficient detection rate to perform the tests, but no reported detection limits are larger than the reported concentrations at Ambient Stations. Modified tests with the detection limits of non-detects treated as detected concentrations would pass.

Table A-4. Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0039	25	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0039	50	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0039	25	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0039	25	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0039	25	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0039	25	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0039	25	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0039	2.5	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0039	2.5	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0039	2.5	U	UG/KG
R1	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0039	1	U	MG/KG
R1	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0039	2.2		MG/KG
R1	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0039	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0039	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0039	55		MG/KG
R1	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0039	7.6		MG/KG
R1	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0039	8.4		MG/KG
R1	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0039	0.05		MG/KG
R1	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0039	38		MG/KG
R1	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0039	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0039	0.5	U	MG/KG
R1	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0039	0.5	U	MG/KG
R1	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0039	29		MG/KG
R1	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0039	20	U	MG/KG
R1	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0039	20		%MST

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0039	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0039	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0039	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0039	63	U	UG/KG
R1	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0039	63	U	UG/KG
R1	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0039	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0039	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0039	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0039	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0039	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0039	2.5	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0039	3.1	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0039	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0039	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0039	63	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0039	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0039	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0039	50	U	UG/KG
R1	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0039	1	U	PCI/G
R1	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0039	3		PCI/G
R1	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0039	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0039	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0039	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0039	5	U	UG/KG
R1	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0039	3000		MG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0040	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0040	53	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0040	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0040	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0040	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0040	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0040	26	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0040	2.6	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0040	2.6	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0040	2.6	U	UG/KG
R1	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0040	1	U	MG/KG
R1	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0040	2.9		MG/KG
R1	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0040	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0040	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0040	80		MG/KG
R1	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0040	9.3		MG/KG
R1	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0040	13		MG/KG
R1	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0040	0.09		MG/KG
R1	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0040	42		MG/KG
R1	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0040	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0040	0.5	U	MG/KG
R1	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0040	0.5	J	MG/KG
R1	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0040	48		MG/KG
R1	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0040	20	U	MG/KG
R1	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0040	24		%MST
R1	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0040	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0040	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0040	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0040	66	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0040	66	U	UG/KG
R1	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0040	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0040	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0040	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0040	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0040	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0040	2.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0040	3.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0040	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0040	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0040	66	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0040	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0040	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0040	53	U	UG/KG
R1	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0040	1.2		PCI/G
R1	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0040	1.4		PCI/G
R1	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0040	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0040	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0040	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0040	5	U	UG/KG
R1	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0040	4000		MG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0041	27	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0041	54	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0041	27	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0041	27	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0041	27	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0041	27	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0041	27	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0041	2.7	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0041	2.7	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0041	2.7	U	UG/KG
R1	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0041	1	U	MG/KG
R1	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0041	2.9		MG/KG
R1	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0041	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0041	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0041	74		MG/KG
R1	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0041	9.8		MG/KG
R1	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0041	18		MG/KG
R1	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0041	0.09		MG/KG
R1	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0041	42		MG/KG
R1	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0041	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0041	0.5	U	MG/KG
R1	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0041	0.5	J	MG/KG
R1	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0041	49		MG/KG
R1	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0041	25		MG/KG
R1	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0041	26		%MST
R1	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0041	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0041	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0041	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0041	68	U	UG/KG
R1	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0041	68	U	UG/KG
R1	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0041	1.4	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0041	1.4	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0041	1.4	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0041	1.4	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0041	1.4	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0041	2.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0041	3.4	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0041	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0041	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0041	68	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0041	0.7	U	UG/KG
R1	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0041	1.4	U	UG/KG
R1	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0041	54	U	UG/KG
R1	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0041	2		PCI/G
R1	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0041	2		PCI/G
R1	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0041	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0041	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0041	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0041	5	U	UG/KG
R1	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0041	6000		MG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0044	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0044	51	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0044	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0044	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0044	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0044	26	U	UG/KG
R1	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0044	26	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0044	2.6	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0044	2.6	U	UG/KG
R1	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0044	2.6	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0044	1	U	MG/KG
R1	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0044	2.3		MG/KG
R1	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0044	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0044	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0044	58		MG/KG
R1	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0044	7.2		MG/KG
R1	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0044	11		MG/KG
R1	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0044	0.05		MG/KG
R1	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0044	35		MG/KG
R1	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0044	0.25	U	MG/KG
R1	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0044	0.5	U	MG/KG
R1	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0044	0.5	J	MG/KG
R1	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0044	32		MG/KG
R1	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0044	20	U	MG/KG
R1	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0044	22		%MST
R1	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0044	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0044	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0044	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0044	64	U	UG/KG
R1	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0044	64	U	UG/KG
R1	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0044	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0044	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0044	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0044	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0044	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0044	2.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0044	3.2	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0044	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0044	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0044	64	U	UG/KG
R1	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0044	0.6	U	UG/KG
R1	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0044	1.3	U	UG/KG
R1	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0044	51	U	UG/KG
R1	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0044	2		PCI/G
R1	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0044	1		PCI/G
R1	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0044	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0044	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0044	5	U	UG/KG
R1	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0044	5	U	UG/KG
R1	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0044	4000		MG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL0119	93	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL0119	49	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL0119	28		%MST
R1	4/7/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0119	280	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0119	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0119	930	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0119	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL0119	280	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL0119	930	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL0119	930	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0119	250	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0119	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0119	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL0119	93	U	UG/KG
R1	4/7/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0119	460	U	UG/KG
R1	4/7/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL0119	180	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0120	99	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0120	160		UG/KG
R1	4/7/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL0120	51	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL0120	32		%MST
R1	4/7/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0120	290	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0120	190	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0120	490	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0120	990	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0120	190	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL0120	290	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL0120	540		UG/KG
R1	4/7/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL0120	990	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL0120	990	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0120	290	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL0120	99	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0120	190	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0120	190	U	UG/KG
R1	4/7/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL0120	99	U	UG/KG
R1	4/7/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0120	490	U	UG/KG
R1	4/7/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL0120	190	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0121	95		UG/KG
R1	4/7/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL0121	110		UG/KG
R1	4/7/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL0121	47	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL0121	26		%MST
R1	4/7/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0121	270	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0121	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0121	910	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0121	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL0121	270	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0121	91	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/7/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL0121	910	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL0121	910	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0121	190	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0121	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0121	450	U	UG/KG
R1	4/7/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL0121	180	U	UG/KG
R1	4/7/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0121	91	U	UG/KG
R1	4/7/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL0121	450	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0045	180	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0045	29	U	UG/KG
								58	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0045	29	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0045	29	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0045	29	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0045	29	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0045	29	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0045	2.9	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0045	2.9	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0045	2.9	U	UG/KG
R2	4/13/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0045	1	U	MG/KG
R2	4/13/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0045	3.6		MG/KG
R2	4/13/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0045	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0045	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0045	83		MG/KG
R2	4/13/93	0	0.3	METAL	COPPER	7210	PRC93XXX0045	12		MG/KG
R2	4/13/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0045	15		MG/KG
R2	4/13/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0045	0.14		MG/KG
R2	4/13/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0045	49		MG/KG
R2	4/13/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0045	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	SILVER	7761	PRC93XXX0045	0.5	U	MG/KG
R2	4/13/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0045	0.5	UJ	MG/KG
R2	4/13/93	0	0.3	METAL	ZINC	7950	PRC93XXX0045	62		MG/KG
R2	4/13/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0045	22		MG/KG
R2	4/13/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0045	31		%MST
R2	4/13/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0045	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0045	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0045	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0045	72	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0045	72	U	UG/KG
R2	4/13/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0045	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0045	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0045	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0045	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0045	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0045	2.9	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0045	3.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0045	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0045	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0045	72	U	UG/KG
R2	4/13/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0045	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0045	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0045	58	U	UG/KG
R2	4/13/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0045	1.6		PCI/G
R2	4/13/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0045	2.5		PCI/G
R2	4/13/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0045	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0045	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0045	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0045	5	U	UG/KG
R2	4/13/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0045	5000		MG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0046	28	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0046	56	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0046	28	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0046	28	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0046	28	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0046	28	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0046	28	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0046	2.8	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0046	2.8	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0046	2.8	U	UG/KG
R2	4/13/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0046	1	U	MG/KG
R2	4/13/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0046	3.2		MG/KG
R2	4/13/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0046	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0046	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0046	72		MG/KG
R2	4/13/93	0	0.3	METAL	COPPER	7210	PRC93XXX0046	12		MG/KG
R2	4/13/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0046	13		MG/KG
R2	4/13/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0046	0.14		MG/KG
R2	4/13/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0046	48		MG/KG
R2	4/13/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0046	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	SILVER	7761	PRC93XXX0046	0.5	U	MG/KG
R2	4/13/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0046	0.5	UJ	MG/KG
R2	4/13/93	0	0.3	METAL	ZINC	7950	PRC93XXX0046	60		MG/KG
R2	4/13/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0046	28		MG/KG
R2	4/13/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0046	28		%MST
R2	4/13/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0046	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0046	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0046	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0046	69	U	UG/KG
R2	4/13/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0046	69	U	UG/KG
R2	4/13/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0046	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0046	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0046	1.4	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0046	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0046	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0046	2.8	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0046	3.5	U	UG/KG
R2	4/13/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0046	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0046	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0046	69	U	UG/KG
R2	4/13/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0046	0.7	U	UG/KG
R2	4/13/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0046	1.4	U	UG/KG
R2	4/13/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0046	56	U	UG/KG
R2	4/13/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0046	1	U	PCI/G
R2	4/13/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0046	4		PCI/G
R2	4/13/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0046	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0046	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0046	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0046	5	U	UG/KG
R2	4/13/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0046	4000		MG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0047	26	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0047	52	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0047	26	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0047	26	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0047	26	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0047	26	U	UG/KG
R2	4/13/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0047	26	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0047	2.6	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0047	2.6	U	UG/KG
R2	4/13/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0047	2.6	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0047	1	U	MG/KG
R2	4/13/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0047	2.7		MG/KG
R2	4/13/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0047	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0047	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0047	64		MG/KG
R2	4/13/93	0	0.3	METAL	COPPER	7210	PRC93XXX0047	8.1		MG/KG
R2	4/13/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0047	12		MG/KG
R2	4/13/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0047	0.06		MG/KG
R2	4/13/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0047	38		MG/KG
R2	4/13/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0047	0.25	U	MG/KG
R2	4/13/93	0	0.3	METAL	SILVER	7761	PRC93XXX0047	1.6		MG/KG
R2	4/13/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0047	0.5	UJ	MG/KG
R2	4/13/93	0	0.3	METAL	ZINC	7950	PRC93XXX0047	46		MG/KG
R2	4/13/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0047	20	U	MG/KG
R2	4/13/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0047	23		%MST
R2	4/13/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0047	0.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0047	0.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0047	0.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0047	65	U	UG/KG
R2	4/13/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0047	65	U	UG/KG
R2	4/13/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0047	1.3	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0047	1.3	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0047	1.3	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0047	1.3	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0047	2.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0047	3.2	U	UG/KG
R2	4/13/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0047	3.2	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0047	0.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0047	0.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0047	65	U	UG/KG
R2	4/13/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0047	0.6	U	UG/KG
R2	4/13/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0047	1.3	U	UG/KG
R2	4/13/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0047	52	U	UG/KG
R2	4/13/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0047	1.3		PCI/G
R2	4/13/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0047	1.8		PCI/G
R2	4/13/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0047	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0047	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0047	5	U	UG/KG
R2	4/13/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0047	5	U	UG/KG
R2	4/13/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0047	4000		MG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL0122	91	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL0122	47	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL0122	26		%MST
R2	4/7/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0122	270	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0122	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0122	910	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0122	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL0122	270	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL0122	910	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL0122	910	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0122	110	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0122	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0122	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL0122	91	U	UG/KG
R2	4/7/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0122	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL0122	180	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0123	92	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0123	120		UG/KG
R2	4/7/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL0123	130		UG/KG
R2	4/7/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL0123	48	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL0123	27		%MST
R2	4/7/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0123	270	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0123	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0123	450	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0123	920	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0123	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL0123	270	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL0123	920	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL0123	920	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0123	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL0123	92	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0123	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0123	180	U	UG/KG
R2	4/7/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL0123	92	U	UG/KG
R2	4/7/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0123	450	U	UG/KG
R2	4/7/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL0123	180	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL0124	46	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL0124	24		%MST
R2	4/7/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0124	260	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0124	170	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0124	880	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL0124	170	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0124	260	U	UG/KG
R2	4/7/94	0	0.3	SVOA			PRC94SVL0124	88	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/7/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL0124	880	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL0124	880	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0124	130	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0124	170	U	UG/KG
R2	4/7/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0124	430	U	UG/KG
R2	4/7/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL0124	170	U	UG/KG
R2	4/7/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0124	88	U	UG/KG
R2	4/7/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL0124	430	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0050	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0050	74	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0050	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0050	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0050	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0050	69		UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0050	37	U	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0050	41	J	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0050	4.1		UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0050	3.7	U	UG/KG
R3	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0050	1	U	MG/KG
R3	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0050	7.6		MG/KG
R3	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0050	0.48		MG/KG
R3	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0050	1.3		MG/KG
R3	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0050	150		MG/KG
R3	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0050	51		MG/KG
R3	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0050	52		MG/KG
R3	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0050	0.52		MG/KG
R3	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0050	110		MG/KG
R3	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0050	0.26		MG/KG
R3	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0050	1.3		MG/KG
R3	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0050	0.5	UJ	MG/KG
R3	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0050	190		MG/KG
R3	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0050	73		MG/KG
R3	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0050	46		%MST
R3	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0050	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0050	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0050	1.1		UG/KG
R3	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0050	93	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0050	93	U	UG/KG
R3	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0050	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0050	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0050	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0050	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0050	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0050	3.7	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0050	4.6	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0050	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0050	1.9		UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0050	93	U	UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0050	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0050	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0050	74	U	UG/KG
R3	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0050	1.5		PCI/G
R3	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0050	6		PCI/G
R3	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0050	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0050	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0050	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0050	5	U	UG/KG
R3	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0050	9000		MG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0051	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0051	74	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0051	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0051	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0051	37	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0051	180		UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0051	37	U	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0051	31	J	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0051	8		UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0051	56		UG/KG
R3	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0051	1	U	MG/KG
R3	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0051	8.4		MG/KG
R3	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0051	0.51		MG/KG
R3	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0051	0.68		MG/KG
R3	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0051	150		MG/KG
R3	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0051	45		MG/KG
R3	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0051	30		MG/KG
R3	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0051	0.51		MG/KG
R3	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0051	100		MG/KG
R3	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0051	0.28		MG/KG
R3	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0051	0.5	U	MG/KG
R3	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0051	0.5	UJ	MG/KG
R3	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0051	180		MG/KG
R3	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0051	90		MG/KG
R3	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0051	46		%MST
R3	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0051	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0051	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0051	2.2		UG/KG
R3	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0051	93	U	UG/KG
R3	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0051	93	U	UG/KG
R3	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0051	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0051	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0051	1.9	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0051	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0051	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0051	3.7	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0051	4.6	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0051	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0051	3.9		UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0051	93	U	UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0051	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0051	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0051	74	U	UG/KG
R3	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0051	3		PCI/G
R3	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0051	6.8		PCI/G
R3	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0051	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0051	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0051	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0051	5	U	UG/KG
R3	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0051	19000		MG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0052	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0052	75	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0052	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0052	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0052	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0052	110		UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0052	38	U	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0052	3.8	U	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0052	7		UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0052	3.8	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0052	1	U	MG/KG
R3	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0052	12		MG/KG
R3	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0052	0.51		MG/KG
R3	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0052	0.62		MG/KG
R3	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0052	150		MG/KG
R3	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0052	46		MG/KG
R3	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0052	45		MG/KG
R3	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0052	0.53		MG/KG
R3	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0052	110		MG/KG
R3	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0052	0.31		MG/KG
R3	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0052	0.5	U	MG/KG
R3	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0052	0.5	UJ	MG/KG
R3	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0052	180		MG/KG
R3	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0052	77		MG/KG
R3	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0052	47		%MST
R3	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0052	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0052	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0052	1.1		UG/KG
R3	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0052	94	U	UG/KG
R3	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0052	94	U	UG/KG
R3	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0052	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0052	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0052	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0052	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0052	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0052	3.8	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0052	4.7	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0052	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0052	3.8		UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0052	94	U	UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0052	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0052	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0052	75	U	UG/KG
R3	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0052	1	U	PCI/G
R3	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0052	0.8		PCI/G
R3	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0052	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0052	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0052	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0052	25		UG/KG
R3	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0052	19000		MG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0055	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0055	75	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0055	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0055	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0055	38	U	UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0055	130		UG/KG
R3	4/14/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0055	38	U	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0055	98	J	UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0055	7.2		UG/KG
R3	4/14/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0055	3.8	U	UG/KG
R3	4/14/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0055	1	U	MG/KG
R3	4/14/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0055	13		MG/KG
R3	4/14/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0055	0.59		MG/KG
R3	4/14/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0055	0.87		MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0055	150		MG/KG
R3	4/14/93	0	0.3	METAL	COPPER	7210	PRC93XXX0055	40		MG/KG
R3	4/14/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0055	51		MG/KG
R3	4/14/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0055	0.56		MG/KG
R3	4/14/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0055	110		MG/KG
R3	4/14/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0055	0.28		MG/KG
R3	4/14/93	0	0.3	METAL	SILVER	7761	PRC93XXX0055	0.5	U	MG/KG
R3	4/14/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0055	0.5	UJ	MG/KG
R3	4/14/93	0	0.3	METAL	ZINC	7950	PRC93XXX0055	170		MG/KG
R3	4/14/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0055	79		MG/KG
R3	4/14/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0055	47		%MST
R3	4/14/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0055	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0055	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0055	1.3		UG/KG
R3	4/14/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0055	94	U	UG/KG
R3	4/14/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0055	94	U	UG/KG
R3	4/14/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0055	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0055	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0055	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0055	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0055	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0055	3.8	U	UG/KG
R3	4/14/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0055	4.7	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0055	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0055	0.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0055	94	U	UG/KG
R3	4/14/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0055	0.9	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	4/14/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0055	1.9	U	UG/KG
R3	4/14/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0055	75	U	UG/KG
R3	4/14/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0055	1	U	PCI/G
R3	4/14/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0055	6		PCI/G
R3	4/14/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0055	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0055	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0055	5	U	UG/KG
R3	4/14/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0055	5	U	UG/KG
R3	4/14/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0055	15000		MG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1061	290		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1061	160		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1061	170		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1061	190		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1061	220		UG/KG
R3	3/31/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1061	71	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1061	51		%MST

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1061	410	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1061	270	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1061	1400	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1061	270	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1061	410	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1061	670	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1061	1400	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1061	1400	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1061	310		UG/KG
R3	3/31/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1061	270	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1061	270	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1061	140	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1061	670	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1061	270	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1062	230		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1062	140		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1062	130	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1062	140		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1062	210		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1062	270		UG/KG
R3	3/31/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1062	67	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1062	48		%MST
R3	3/31/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1062	380	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1062	250	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1062	130		UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1062	1300	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1062	250	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1062	380	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1062	1300	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1062	1300	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1062	230		UG/KG
R3	3/31/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1062	140		UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1062	250	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1062	250	U	UG/KG
R3	3/31/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1062	130	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1062	630	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1062	250	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1063	160		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1063	330		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1063	450		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1063	150		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1063	240		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1063	120		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1063	210		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1063	400		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1063	240		UG/KG
R3	3/31/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1063	60	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1063	42		%MST
R3	3/31/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1063	120	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1063	340	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1063	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1063	1200	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1063	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1063	340	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1063	1200	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1063	1200	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1063	170		UG/KG
R3	3/31/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1063	190		UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1063	120		UG/KG
R3	3/31/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1063	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1063	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1063	120	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1063	570	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1063	220	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1064	150		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1064	180		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1064	230		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1064	110	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1064	110		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1064	180		UG/KG
R3	3/31/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1064	180		UG/KG
R3	3/31/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1064	58	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1064	40		%MST
R3	3/31/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1064	330	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1064	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1064	110	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1064	1100	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1064	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1064	330	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1064	1100	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1064	1100	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1064	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1064	550	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3	3/31/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1064	220	U	UG/KG
R3	3/31/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1064	110	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1064	550	U	UG/KG
R3	3/31/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1064	220	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0056	24	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0056	49	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0056	24	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0056	24	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0056	24	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0056	24	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0056	24	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0056	2.4	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0056	2.4	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0056	2.4	U	UG/KG
R4	4/13/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0056	1	U	MG/KG
R4	4/13/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0056	2.6		MG/KG
R4	4/13/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0056	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0056	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0056	57		MG/KG
R4	4/13/93	0	0.3	METAL	COPPER	7210	PRC93XXX0056	6.7		MG/KG
R4	4/13/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0056	13		MG/KG
R4	4/13/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0056	0.07		MG/KG
R4	4/13/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0056	33		MG/KG
R4	4/13/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0056	0.25	U	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	4/13/93	0	0.3	METAL	SILVER	7761	PRC93XXX0056	0.5	U	MG/KG
R4	4/13/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0056	0.5	UJ	MG/KG
R4	4/13/93	0	0.3	METAL	ZINC	7950	PRC93XXX0056	47		MG/KG
R4	4/13/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0056	20	U	MG/KG
R4	4/13/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0056	18		%MST
R4	4/13/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0056	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0056	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0056	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0056	61	U	UG/KG
R4	4/13/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0056	61	U	UG/KG
R4	4/13/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0056	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0056	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0056	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0056	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0056	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0056	2.4	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0056	3	U	UG/KG
R4	4/13/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0056	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0056	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0056	61	U	UG/KG
R4	4/13/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0056	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0056	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0056	49	U	UG/KG
R4	4/13/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0056	1	U	PCI/G
R4	4/13/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0056	1.3		PCI/G
R4	4/13/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0056	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0056	5	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	4/13/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0056	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0056	5	U	UG/KG
R4	4/13/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0056	1000	U	MG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0057	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0057	49	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0057	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0057	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0057	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0057	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0057	25	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0057	2.5	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0057	2.5	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0057	2.5	U	UG/KG
R4	4/13/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0057	1	U	MG/KG
R4	4/13/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0057	1.9		MG/KG
R4	4/13/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0057	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0057	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0057	49		MG/KG
R4	4/13/93	0	0.3	METAL	COPPER	7210	PRC93XXX0057	4.8		MG/KG
R4	4/13/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0057	9.7		MG/KG
R4	4/13/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0057	0.05		MG/KG
R4	4/13/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0057	31		MG/KG
R4	4/13/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0057	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	SILVER	7761	PRC93XXX0057	0.5	U	MG/KG
R4	4/13/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0057	0.5	UJ	MG/KG
R4	4/13/93	0	0.3	METAL	ZINC	7950	PRC93XXX0057	43		MG/KG
R4	4/13/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0057	20	U	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	4/13/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0057	19		%MST
R4	4/13/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0057	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0057	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0057	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0057	62	U	UG/KG
R4	4/13/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0057	62	U	UG/KG
R4	4/13/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0057	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0057	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0057	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0057	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0057	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0057	2.5	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0057	3.1	U	UG/KG
R4	4/13/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0057	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0057	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0057	62	U	UG/KG
R4	4/13/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0057	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0057	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0057	49	U	UG/KG
R4	4/13/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0057	2.8		PCI/G
R4	4/13/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0057	6		PCI/G
R4	4/13/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0057	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0057	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0057	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0057	5	U	UG/KG
R4	4/13/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0057	1000	U	MG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1016	8080	PRC93XXX0058	25	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1221	8080	PRC93XXX0058	49	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1232	8080	PRC93XXX0058	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1242	8080	PRC93XXX0058	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1248	8080	PRC93XXX0058	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1254	8080	PRC93XXX0058	25	U	UG/KG
R4	4/13/93	0	0.3	AROCLOR	AROCLOR-1260	8080	PRC93XXX0058	25	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93XXX0058	2.5	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93XXX0058	2.5	U	UG/KG
R4	4/13/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93XXX0058	2.5	U	UG/KG
R4	4/13/93	0	0.3	METAL	ANTIMONY	7041	PRC93XXX0058	1	U	MG/KG
R4	4/13/93	0	0.3	METAL	ARSENIC	7061	PRC93XXX0058	2		MG/KG
R4	4/13/93	0	0.3	METAL	BERYLLIUM	7091	PRC93XXX0058	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93XXX0058	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	CHROMIUM	7190	PRC93XXX0058	56		MG/KG
R4	4/13/93	0	0.3	METAL	COPPER	7210	PRC93XXX0058	5.7		MG/KG
R4	4/13/93	0	0.3	METAL	LEAD	7420/7421	PRC93XXX0058	9.8		MG/KG
R4	4/13/93	0	0.3	METAL	MERCURY	7470	PRC93XXX0058	0.13		MG/KG
R4	4/13/93	0	0.3	METAL	NICKEL	7520	PRC93XXX0058	33		MG/KG
R4	4/13/93	0	0.3	METAL	SELENIUM	7741	PRC93XXX0058	0.25	U	MG/KG
R4	4/13/93	0	0.3	METAL	SILVER	7761	PRC93XXX0058	0.5	U	MG/KG
R4	4/13/93	0	0.3	METAL	THALLIUM	7841	PRC93XXX0058	0.5	UJ	MG/KG
R4	4/13/93	0	0.3	METAL	ZINC	7950	PRC93XXX0058	43		MG/KG
R4	4/13/93	0	0.3	OG	OIL & GREASE	SM 5520F	PRC93XXX0058	20	U	MG/KG
R4	4/13/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93XXX0058	19		%MST
R4	4/13/93	0	0.3	PEST	ALDRIN	8080	PRC93XXX0058	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93XXX0058	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93XXX0058	0.6	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	4/13/93	0	0.3	PEST	BETA-BHC	8080	PRC93XXX0058	62	U	UG/KG
R4	4/13/93	0	0.3	PEST	DELTA-BHC	8080	PRC93XXX0058	62	U	UG/KG
R4	4/13/93	0	0.3	PEST	DIELDRIN	8080	PRC93XXX0058	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93XXX0058	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93XXX0058	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93XXX0058	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN	8080	PRC93XXX0058	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93XXX0058	2.5	U	UG/KG
R4	4/13/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93XXX0058	3.1	U	UG/KG
R4	4/13/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93XXX0058	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93XXX0058	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93XXX0058	62	U	UG/KG
R4	4/13/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93XXX0058	0.6	U	UG/KG
R4	4/13/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93XXX0058	1.2	U	UG/KG
R4	4/13/93	0	0.3	PEST	TOXAPHENE	8080	PRC93XXX0058	49	U	UG/KG
R4	4/13/93	0	0.3	RAD	GROSS ALPHA	900	PRC93XXX0058	1	U	PCI/G
R4	4/13/93	0	0.3	RAD	GROSS BETA	900	PRC93XXX0058	1.2		PCI/G
R4	4/13/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0058	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0058	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0058	5	U	UG/KG
R4	4/13/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0058	5	U	UG/KG
R4	4/13/93	0	0.3	TOC	TOTAL ORGANIC CARBON	415.2	PRC93XXX0058	1000	U	MG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1175	80	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1175	42	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1175	16		%MST
R4	5/2/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1175	240	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1175	150	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1175	80	UJ	UG/KG
								80	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1175	800	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1175	150	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1175	240	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1175	800	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1175	800	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1175	260	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1175	150	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1175	150	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1175	80	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1175	390	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1175	150	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1176	43	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1176	19		%MST
R4	5/2/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1176	83	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1176	250	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1176	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1176	830	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1176	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1176	250	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1176	830	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1176	830	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1176	830	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1176	120	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1176	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1176	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1176	83	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1176	410	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1176	160	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	CHRYSENE	8270	PRC94SVL1177	85	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	FLUORANTHENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH HIGH	PYRENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ACENAPHTHENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	ANTHRACENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	FLUORENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	NAPHTHALENE	8270	PRC94SVL1177	44	UJ	UG/KG
R4	5/2/94	0	0.3	PAH LOW	PHENANTHRENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL1177	21		%MST
R4	5/2/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL1177	250	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL1177	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-METHYLPHENOL	8270	PRC94SVL1177	85	UJ	UG/KG
							PRC94SVL1177	85	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	SVOA	2-NITROANILINE	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	2-NITROPHENOL	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	3-NITROANILINE	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL1177	850	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL1177	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLOROANILINE	8270	PRC94SVL1177	250	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-METHYLPHENOL	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-NITROANILINE	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	4-NITROPHENOL	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZIDINE	8270	PRC94SVL1177	850	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZOIC ACID	8270	PRC94SVL1177	850	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL1177	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIBENZOFURAN	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL1177	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL1177	420	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R4	5/2/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	PRC94SVL1177	160	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	ISOPHORONE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	NITROBENZENE	8270	PRC94SVL1177	85	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL1177	420	UJ	UG/KG
R4	5/2/94	0	0.3	SVOA	PHENOL	8270	PRC94SVL1177	160	UJ	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	ACENAPHTHENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	ACENAPHTHYLENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	ANTHRACENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	BENZO(A)ANTHRACENE	CLP	S025-0001-0001	24.00	J	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	BENZO(A)PYRENE	CLP	S025-0001-0001	32.00	J	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	BENZO(B)FLUORANTHENE	CLP	S025-0001-0001	56.00	J	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP	S025-0001-0001	22.00	J	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	BENZO(K)FLUORANTHENE	CLP	S025-0001-0001	21.00	J	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP	S025-0001-0001	38.00	J	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	BUTYLBENZYLPHTHALATE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	CARBAZOLE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	CHRYSENE	CLP	S025-0001-0001	36.00	J	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-CHLORO-3-METHYLPHENOL	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-CHLOROANILINE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	2-CHLOROPHENOL	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	1,2-DICHLOROBENZENE	CLP	S025-0001-0001	370.00	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
S025-0001	5/9/95	0	0.5	SVOA	1,3-DICHLOROBENZENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	1,4-DICHLOROBENZENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	DIBENZOFURAN	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	DIETHYLPHTHALATE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	DIMETHYLPHTHALATE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	2,4-DIMETHYLPHENOL	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	DI-N-BUTYLPHTHALATE	CLP	S025-0001-0001	19.00	J	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	DI-N-OCTYLPHTHALATE	CLP	S025-0001-0001	390.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	2,4-DINITROTOLUENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	FLUORANTHENE	CLP	S025-0001-0001	34.00	J	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	FLUORENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP	S025-0001-0001	35.00	J	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	ISOPHORONE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	2-METHYLNAPHTHALENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	2-METHYLPHENOL	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-METHYLPHENOL	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	NAPHTHALENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-NITROANILINE	CLP	S025-0001-0001	890.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	4-NITROPHENOL	CLP	S025-0001-0001	890.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	PENTACHLOROPHENOL	CLP	S025-0001-0001	890.00	U	UG/KG
S025-0001	5/9/95	0	0.5	PAH LOW	PHENANTHRENE	CLP	S025-0001-0001	370.00	U	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	PHENOL	CLP	S025-0001-0001	20.00	J	UG/KG
S025-0001	5/9/95	0	0.5	PAH HIGH	PYRENE	CLP	S025-0001-0001	41.00	J	UG/KG
S025-0001	5/9/95	0	0.5	SVOA	1,2,4-TRICHLOROBENZENE	CLP	S025-0001-0001	370.00	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
S025-0001	5/9/95	0	0.5	METAL	SILVER	CLP	S025-0001-0001	0.20	UJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	ALUMINUM	CLP	S025-0001-0001	#####	*	MG/KG
S025-0001	5/9/95	0	0.5	METAL	ARSENIC	CLP	S025-0001-0001	1.60	BJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	BARIUM	CLP	S025-0001-0001	26.90	BJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	BERYLLIUM	CLP	S025-0001-0001	0.29	B	MG/KG
S025-0001	5/9/95	0	0.5	METAL	CADMIUM	CLP	S025-0001-0001	0.10	BJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	COBALT	CLP	S025-0001-0001	4.00	U	MG/KG
S025-0001	5/9/95	0	0.5	METAL	CHROMIUM	CLP	S025-0001-0001	24.90	EJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	COPPER	CLP	S025-0001-0001	7.70		MG/KG
S025-0001	5/9/95	0	0.5	METAL	MERCURY	CLP	S025-0001-0001	0.16	UN	MG/KG
S025-0001	5/9/95	0	0.5	METAL	MAGNESIUM	CLP	S025-0001-0001	#####		MG/KG
S025-0001	5/9/95	0	0.5	METAL	MANGANESE	CLP	S025-0001-0001	144.00		MG/KG
S025-0001	5/9/95	0	0.5	METAL	MOLYBDENUM	CLP	S025-0001-0001	2.20	U	MG/KG
S025-0001	5/9/95	0	0.5	METAL	NICKEL	CLP	S025-0001-0001	23.50		MG/KG
S025-0001	5/9/95	0	0.5	METAL	LEAD	CLP	S025-0001-0001	15.50	J	MG/KG
S025-0001	5/9/95	0	0.5	METAL	ANTIMONY	CLP	S025-0001-0001	1.40	UNJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	SELENIUM	CLP	S025-0001-0001	0.57	UJ	MG/KG
S025-0001	5/9/95	0	0.5	METAL	THALLIUM	CLP	S025-0001-0001	1.60	B	MG/KG
S025-0001	5/9/95	0	0.5	METAL	VANADIUM	CLP	S025-0001-0001	21.40		MG/KG
S025-0001	5/9/95	0	0.5	METAL	ZINC	CLP	S025-0001-0001	26.90		MG/KG
S025-0001	5/9/95	0	0.5	TPH	DIESEL RANGE ORGANICS	CLP	S025-0001-0001	11.00	U	MG/KG
S025-0001	5/9/95	0	0.5	TPH	GASOLINE RANGE ORGANICS	CLP	S025-0001-0001	0.60	U	MG/KG
S025-0001	5/9/95	0	0.5	TPH	MOTOR OIL RANGE ORGANICS	CLP	S025-0001-0001	41.00	YJ	MG/KG
RW002	2/18/97	0	0.5	AMMONIA	AMMONIA	350.1	013-RWW-003	58.8		MG/KG
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-003	40	U	UG/KG
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-003	82	U	UG/KG
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-003	40	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-003	40	U	UG/KG
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-003	40	U	UG/KG
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-003	65		UG/KG
RW002	2/18/97	0	0.5	AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-003	54		UG/KG
RW002	2/18/97	0	0.5	AVS	ACID VOLATILE SULFIDES	EPA DRAFT AVS	013-RWW-003	250		MG/KG
RW002	2/18/97	0	0.5	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	013-RWW-003	980		MG/KG
RW002	2/18/97	0	0.5	DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-003	8		UG/KG
RW002	2/18/97	0	0.5	DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-003	5.1		UG/KG
RW002	2/18/97	0	0.5	DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	METAL	ALUMINUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	4080		MG/KG
RW002	2/18/97	0	0.5	METAL	ANTIMONY	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.16	U	MG/KG
RW002	2/18/97	0	0.5	METAL	ARSENIC	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	1.8		MG/KG
RW002	2/18/97	0	0.5	METAL	BARIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	28.2	J	MG/KG
RW002	2/18/97	0	0.5	METAL	BERYLLIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.15	J	MG/KG
RW002	2/18/97	0	0.5	METAL	CADMIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.9		MG/KG
RW002	2/18/97	0	0.5	METAL	CALCIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	1740	J	MG/KG
RW002	2/18/97	0	0.5	METAL	CHROMIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	17.5	J	MG/KG
RW002	2/18/97	0	0.5	METAL	COBALT	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	5	J	MG/KG
RW002	2/18/97	0	0.5	METAL	COPPER	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	30.7	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	METAL	IRON	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	7710	J	MG/KG
RW002	2/18/97	0	0.5	METAL	LEAD	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	63.2	J	MG/KG
RW002	2/18/97	0	0.5	METAL	MAGNESIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	4800		MG/KG
RW002	2/18/97	0	0.5	METAL	MANGANESE	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	196	J	MG/KG
RW002	2/18/97	0	0.5	METAL	MERCURY	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.02		MG/KG
RW002	2/18/97	0	0.5	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.054	U	MG/KG
RW002	2/18/97	0	0.5	METAL	NICKEL	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	28	J	MG/KG
RW002	2/18/97	0	0.5	METAL	POTASSIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	2140	J	MG/KG
RW002	2/18/97	0	0.5	METAL	SELENIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.085	U	MG/KG
RW002	2/18/97	0	0.5	METAL	SILVER	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.15	J	MG/KG
RW002	2/18/97	0	0.5	METAL	SODIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	11100	J	MG/KG
RW002	2/18/97	0	0.5	METAL	THALLIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	0.39		MG/KG
RW002	2/18/97	0	0.5	METAL	VANADIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	27.2	J	MG/KG
RW002	2/18/97	0	0.5	METAL	ZINC	CLP INORGANICS-ROUT-SEMETAL	013-RWW-003	66.1	J	MG/KG
RW002	2/18/97	0	0.5	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	15400		MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	1	R	MG/KG
RW002	2/18/97	0	0.5	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	6.8		MG/KG
RW002	2/18/97	0	0.5	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	116		MG/KG
RW002	2/18/97	0	0.5	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	0.36	J	MG/KG
RW002	2/18/97	0	0.5	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	0.05	UJ	MG/KG
RW002	2/18/97	0	0.5	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	3190		MG/KG
RW002	2/18/97	0	0.5	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	66.2	J	MG/KG
RW002	2/18/97	0	0.5	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	10.1	J	MG/KG
RW002	2/18/97	0	0.5	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	53.2		MG/KG
RW002	2/18/97	0	0.5	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	18300		MG/KG
RW002	2/18/97	0	0.5	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	56		MG/KG
RW002	2/18/97	0	0.5	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	9210		MG/KG
RW002	2/18/97	0	0.5	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	375	J	MG/KG
RW002	2/18/97	0	0.5	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	0.68		MG/KG
RW002	2/18/97	0	0.5	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	2.4	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	59.4		MG/KG
RW002	2/18/97	0	0.5	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	5220	J	MG/KG
RW002	2/18/97	0	0.5	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	1	U	MG/KG
RW002	2/18/97	0	0.5	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	0.36	J	MG/KG
RW002	2/18/97	0	0.5	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	18000	J	MG/KG
RW002	2/18/97	0	0.5	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	0.64	U	MG/KG
RW002	2/18/97	0	0.5	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	53.5		MG/KG
RW002	2/18/97	0	0.5	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-003	93		MG/KG
RW002	2/18/97	0	0.5	PAH HIGH	BENZO(A)ANTHRACENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	BENZO(A)PYRENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	BENZO(B)FLUORANTHENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	BENZO(K)FLUORANTHENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	CHRYSENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	FLUORANTHENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH HIGH	PYRENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH LOW	2-METHYLNAPHTHALENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH LOW	ACENAPHTHENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH LOW	ACENAPHTHYLENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	PAH LOW	ANTHRACENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH LOW	FLUORENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH LOW	NAPHTHALENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PAH LOW	PHENANTHRENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	PCM	PERCENT MOISTURE	CLP Inorganics	013-RWW-003	59.4		%MST
RW002	2/18/97	0	0.5	PEST	ALDRIN	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	BETA-BHC	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	DIELDRIN	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ENDRIN	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-003	2.6		UG/KG
RW002	2/18/97	0	0.5	PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-003	2.1	U	UG/KG
RW002	2/18/97	0	0.5	PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-003	21	U	UG/KG
RW002	2/18/97	0	0.5	PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-003	210	U	UG/KG
RW002	2/18/97	0	0.5	SAL	SALINITY	SM 2520B	013-RWW-003	5.5		PPT
RW002	2/18/97	0	0.5	SULFIDE	SULFIDE	9030	013-RWW-003	150		MG/KG
RW002	2/18/97	0	0.5	SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	1,2-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	SVOA	1,3-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	1,4-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Rout	013-RWW-003	980	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,4-DICHLOROPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,4-DINITROPHENOL	CLP Organics-Rout	013-RWW-003	980	UJ	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,4-DINITROTOLUENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2,6-DINITROTOLUENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2-CHLORONAPHTHALENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2-CHLOROPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2-METHYLPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2-NITROANILINE	CLP Organics-Rout	013-RWW-003	980	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	2-NITROPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	3-NITROANILINE	CLP Organics-Rout	013-RWW-003	980	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Rout	013-RWW-003	980	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-CHLOROANILINE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-METHYLPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-NITROANILINE	CLP Organics-Rout	013-RWW-003	980	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	4-NITROPHENOL	CLP Organics-Rout	013-RWW-003	980	UJ	UG/KG
RW002	2/18/97	0	0.5	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Rout	013-RWW-003	400	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	0	0.5	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Rout	013-RWW-003	320	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	CARBAZOLE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	DIBENZOFURAN	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	DIETHYLPHTHALATE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	DIMETHYLPHTHALATE	CLP.Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	HEXACHLOROBENZENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	HEXACHLOROBUTADIENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	HEXACHLOROETHANE	CLP Organics-Rout	013-RWW-003	400	UJ	UG/KG
RW002	2/18/97	0	0.5	SVOA	ISOPHORONE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	NITROBENZENE	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	PENTACHLOROPHENOL	CLP Organics-Rout	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	SVOA	PHENOL	CLP Organics-Rout	013-RWW-003	980	U	UG/KG
RW002	2/18/97	0	0.5	TBT	DIBUTYL TIN	TBT	013-RWW-003	400	U	UG/KG
RW002	2/18/97	0	0.5	TBT	MONOBUTYL TIN	TBT	013-RWW-003	3	U	UG/KG
RW002	2/18/97	0	0.5	TBT	TETRABUTYL TIN	TBT	013-RWW-003	3	U	UG/KG
RW002	2/18/97	0	0.5	TBT	TRIBUTYL TIN	TBT	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	TOC	TOTAL ORGANIC CARBON	9060	013-RWW-003	4	U	UG/KG
RW002	2/18/97	0	0.5	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-003	59500		MG/KG
RW002	2/18/97	0	0.5	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-003	25	U	MG/KG
RW002	2/18/97	0	0.5	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-003	1	U	MG/KG
RW003	2/18/97	0	0.5	AMMONIA	AMMONIA	350.1	013-RWW-003	84	J	MG/KG
							013-RWW-007	80.8		MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-007	43	U	UG/KG
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-007	88	U	UG/KG
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-007	43	U	UG/KG
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-007	43	U	UG/KG
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-007	43	U	UG/KG
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-007	75	J	UG/KG
RW003	2/18/97	0	0.5	AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-007	76		UG/KG
RW003	2/18/97	0	0.5	AVS	ACID VOLATILE SULFIDES	EPA DRAFT AVS	013-RWW-007	236		MG/KG
RW003	2/18/97	0	0.5	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	013-RWW-007	1100		MG/KG
RW003	2/18/97	0	0.5	DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-007	17		UG/KG
RW003	2/18/97	0	0.5	DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-007	7.6		UG/KG
RW003	2/18/97	0	0.5	DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-007	6.8	J	UG/KG
RW003	2/18/97	0	0.5	METAL	ALUMINUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	4290		MG/KG
RW003	2/18/97	0	0.5	METAL	ANTIMONY	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.17	U	MG/KG
RW003	2/18/97	0	0.5	METAL	ARSENIC	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	2.1		MG/KG
RW003	2/18/97	0	0.5	METAL	BARIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	25.7	J	MG/KG
RW003	2/18/97	0	0.5	METAL	BERYLLIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.2		MG/KG
RW003	2/18/97	0	0.5	METAL	CADMIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.53		MG/KG
RW003	2/18/97	0	0.5	METAL	CALCIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	1800	J	MG/KG
RW003	2/18/97	0	0.5	METAL	CHROMIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	18	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	METAL	COBALT	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	5.3	J	MG/KG
RW003	2/18/97	0	0.5	METAL	COPPER	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	32.5	J	MG/KG
RW003	2/18/97	0	0.5	METAL	IRON	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	8450	J	MG/KG
RW003	2/18/97	0	0.5	METAL	LEAD	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	57	J	MG/KG
RW003	2/18/97	0	0.5	METAL	MAGNESIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	5120		MG/KG
RW003	2/18/97	0	0.5	METAL	MANGANESE	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	108	J	MG/KG
RW003	2/18/97	0	0.5	METAL	MERCURY	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.018		MG/KG
RW003	2/18/97	0	0.5	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.056	U	MG/KG
RW003	2/18/97	0	0.5	METAL	NICKEL	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	30.3	J	MG/KG
RW003	2/18/97	0	0.5	METAL	POTASSIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	2100	J	MG/KG
RW003	2/18/97	0	0.5	METAL	SELENIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.089	U	MG/KG
RW003	2/18/97	0	0.5	METAL	SILVER	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.11	J	MG/KG
RW003	2/18/97	0	0.5	METAL	SODIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	11600	J	MG/KG
RW003	2/18/97	0	0.5	METAL	THALLIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	0.27	J	MG/KG
RW003	2/18/97	0	0.5	METAL	VANADIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	30.4	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	METAL	ZINC	CLP INORGANICS-ROUT-SEMETAL	013-RWW-007	60.6	J	MG/KG
RW003	2/18/97	0	0.5	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	18800		MG/KG
RW003	2/18/97	0	0.5	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	1.6	UJ	MG/KG
RW003	2/18/97	0	0.5	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	11.4		MG/KG
RW003	2/18/97	0	0.5	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	91.1	J	MG/KG
RW003	2/18/97	0	0.5	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	0.5	J	MG/KG
RW003	2/18/97	0	0.5	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	0.05	UJ	MG/KG
RW003	2/18/97	0	0.5	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	3350		MG/KG
RW003	2/18/97	0	0.5	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	85.7	J	MG/KG
RW003	2/18/97	0	0.5	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	13.7	J	MG/KG
RW003	2/18/97	0	0.5	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	59.8		MG/KG
RW003	2/18/97	0	0.5	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	25500		MG/KG
RW003	2/18/97	0	0.5	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	78		MG/KG
RW003	2/18/97	0	0.5	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	11500		MG/KG
RW003	2/18/97	0	0.5	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	256	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	0.55		MG/KG
RW003	2/18/97	0	0.5	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	2.5	J	MG/KG
RW003	2/18/97	0	0.5	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	81.9		MG/KG
RW003	2/18/97	0	0.5	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	6160	J	MG/KG
RW003	2/18/97	0	0.5	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	1.1	U	MG/KG
RW003	2/18/97	0	0.5	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	0.26	U	MG/KG
RW003	2/18/97	0	0.5	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	15000	J	MG/KG
RW003	2/18/97	0	0.5	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	0.81	UJ	MG/KG
RW003	2/18/97	0	0.5	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	68.1		MG/KG
RW003	2/18/97	0	0.5	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-007	120		MG/KG
RW003	2/18/97	0	0.5	PAH HIGH	BENZO(A)ANTHRACENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	BENZO(A)PYRENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	BENZO(B)FLUORANTHENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	BENZO(K)FLUORANTHENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	CHRYSENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	FLUORANTHENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH HIGH	PYRENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	PAH LOW	2-METHYLNAPHTHALENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH LOW	ACENAPHTHENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH LOW	ACENAPHTHYLENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH LOW	ANTHRACENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH LOW	FLUORENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH LOW	NAPHTHALENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PAH LOW	PHENANTHRENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	PCM	PERCENT MOISTURE	CLP Inorganics	013-RWW-007	61.6		%MST
RW003	2/18/97	0	0.5	PEST	ALDRIN	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	BETA-BHC	CLP Organics-Rout	013-RWW-007	1.6	J	UG/KG
RW003	2/18/97	0	0.5	PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	DIELDRIN	CLP Organics-Rout	013-RWW-007	4.3	U	UG/KG
RW003	2/18/97	0	0.5	PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-007	4	J	UG/KG
RW003	2/18/97	0	0.5	PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-007	4.3	U	UG/KG
RW003	2/18/97	0	0.5	PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-007	4.3	U	UG/KG
RW003	2/18/97	0	0.5	PEST	ENDRIN	CLP Organics-Rout	013-RWW-007	4.3	U	UG/KG
RW003	2/18/97	0	0.5	PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-007	13		UG/KG
RW003	2/18/97	0	0.5	PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-007	4.3	U	UG/KG
RW003	2/18/97	0	0.5	PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-007	2.8	J	UG/KG
RW003	2/18/97	0	0.5	PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-007	2.2	U	UG/KG
RW003	2/18/97	0	0.5	PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-007	22	U	UG/KG
RW003	2/18/97	0	0.5	PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-007	220	U	UG/KG
RW003	2/18/97	0	0.5	SAL	SALINITY	SM 2520B	013-RWW-007	5.7		PPT

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	SULFIDE	SULFIDE	9030	013-RWW-007	189		MG/KG
RW003	2/18/97	0	0.5	SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	1,2-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	1,3-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	1,4-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Rout	013-RWW-007	1000	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,4-DICHLOROPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,4-DINITROPHENOL	CLP Organics-Rout	013-RWW-007	1000	UJ	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,4-DINITROTOLUENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2,6-DINITROTOLUENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2-CHLORONAPHTHALENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2-CHLOROPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2-METHYLPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2-NITROANILINE	CLP Organics-Rout	013-RWW-007	1000	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	2-NITROPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Rout	013-RWW-007	430	UJ	UG/KG
RW003	2/18/97	0	0.5	SVOA	3-NITROANILINE	CLP Organics-Rout	013-RWW-007	1000	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Rout	013-RWW-007	1000	UJ	UG/KG
RW003	2/18/97	0	0.5	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	4-CHLOROANILINE	CLP Organics-Rout	013-RWW-007	430	UJ	UG/KG
RW003	2/18/97	0	0.5	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	4-METHYLPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	4-NITROANILINE	CLP Organics-Rout	013-RWW-007	1000	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	SVOA	4-NITROPHENOL	CLP Organics-Rout	013-RWW-007	1000	UJ	UG/KG
RW003	2/18/97	0	0.5	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Rout	013-RWW-007	340	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	CARBAZOLE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	DIBENZOFURAN	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	DIETHYLPHTHALATE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	DIMETHYLPHTHALATE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	HEXACHLOROBENZENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	HEXACHLOROBUTADIENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	HEXACHLOROETHANE	CLP Organics-Rout	013-RWW-007	430	UJ	UG/KG
RW003	2/18/97	0	0.5	SVOA	ISOPHORONE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	NITROBENZENE	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	PENTACHLOROPHENOL	CLP Organics-Rout	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	SVOA	PHENOL	CLP Organics-Rout	013-RWW-007	1000	U	UG/KG
RW003	2/18/97	0	0.5	TBT	DIBUTYL TIN	TBT	013-RWW-007	430	U	UG/KG
RW003	2/18/97	0	0.5	TBT	MONOBUTYL TIN	TBT	013-RWW-007	4	U	UG/KG
RW003	2/18/97	0	0.5	TBT	TETRABUTYL TIN	TBT	013-RWW-007	3	U	UG/KG
RW003	2/18/97	0	0.5	TBT	TRIBUTYL TIN	TBT	013-RWW-007	5	U	UG/KG
RW003	2/18/97	0	0.5	TOC	TOTAL ORGANIC CARBON	9060	013-RWW-007	4	U	UG/KG
RW003	2/18/97	0	0.5	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-007	68800		MG/KG
								30	U	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	0	0.5	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-007	2	UJ	MG/KG
RW003	2/18/97	0	0.5	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-007	64	J	MG/KG
RW004	2/19/97	0	0.5	AMMONIA	AMMONIA	350.1	013-RWW-011	41.8		MG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-011	26	U	UG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-011	52	U	UG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-011	26	U	UG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-011	26	U	UG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-011	26	U	UG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-011	26	U	UG/KG
RW004	2/19/97	0	0.5	AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-011	26	U	UG/KG
RW004	2/19/97	0	0.5	AVS	ACID VOLATILE SULFIDES	EPA DRAFT AVS	013-RWW-011	6.4		MG/KG
RW004	2/19/97	0	0.5	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	013-RWW-011	210	U	MG/KG
RW004	2/19/97	0	0.5	DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	METAL	ALUMINUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	1650		MG/KG
RW004	2/19/97	0	0.5	METAL	ANTIMONY	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.082	U	MG/KG
RW004	2/19/97	0	0.5	METAL	ARSENIC	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.77		MG/KG
RW004	2/19/97	0	0.5	METAL	BARIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	8	J	MG/KG
RW004	2/19/97	0	0.5	METAL	BERYLLIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.062	J	MG/KG
RW004	2/19/97	0	0.5	METAL	CADMIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.3		MG/KG
RW004	2/19/97	0	0.5	METAL	CALCIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	641	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	METAL	CHROMIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	9.4	J	MG/KG
RW004	2/19/97	0	0.5	METAL	COBALT	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	2.3	J	MG/KG
RW004	2/19/97	0	0.5	METAL	COPPER	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	7.5	J	MG/KG
RW004	2/19/97	0	0.5	METAL	IRON	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	3310	J	MG/KG
RW004	2/19/97	0	0.5	METAL	LEAD	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	9.9	J	MG/KG
RW004	2/19/97	0	0.5	METAL	MAGNESIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	1530		MG/KG
RW004	2/19/97	0	0.5	METAL	MANGANESE	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	62.3	J	MG/KG
RW004	2/19/97	0	0.5	METAL	MERCURY	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.034		MG/KG
RW004	2/19/97	0	0.5	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.027	U	MG/KG
RW004	2/19/97	0	0.5	METAL	NICKEL	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	13.4	J	MG/KG
RW004	2/19/97	0	0.5	METAL	POTASSIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	523	J	MG/KG
RW004	2/19/97	0	0.5	METAL	SELENIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.044	U	MG/KG
RW004	2/19/97	0	0.5	METAL	SILVER	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.1	J	MG/KG
RW004	2/19/97	0	0.5	METAL	SODIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	1720	J	MG/KG
RW004	2/19/97	0	0.5	METAL	THALLIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	0.13	J	MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	METAL	VANADIUM	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	8.3	J	MG/KG
RW004	2/19/97	0	0.5	METAL	ZINC	CLP INORGANICS-ROUT-SEMETAL	013-RWW-011	26.8	J	MG/KG
RW004	2/19/97	0	0.5	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	9310		MG/KG
RW004	2/19/97	0	0.5	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.66	R	MG/KG
RW004	2/19/97	0	0.5	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	5.5		MG/KG
RW004	2/19/97	0	0.5	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	63.1		MG/KG
RW004	2/19/97	0	0.5	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.23	UJ	MG/KG
RW004	2/19/97	0	0.5	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.03	UJ	MG/KG
RW004	2/19/97	0	0.5	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	2280		MG/KG
RW004	2/19/97	0	0.5	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	46.6	J	MG/KG
RW004	2/19/97	0	0.5	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	8.8	J	MG/KG
RW004	2/19/97	0	0.5	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	17		MG/KG
RW004	2/19/97	0	0.5	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	13300		MG/KG
RW004	2/19/97	0	0.5	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	17.7		MG/KG
RW004	2/19/97	0	0.5	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	5110		MG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	161	J	MG/KG
RW004	2/19/97	0	0.5	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.12	J	MG/KG
RW004	2/19/97	0	0.5	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.26	J	MG/KG
RW004	2/19/97	0	0.5	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	46.2		MG/KG
RW004	2/19/97	0	0.5	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	1970	J	MG/KG
RW004	2/19/97	0	0.5	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.66	U	MG/KG
RW004	2/19/97	0	0.5	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.23	J	MG/KG
RW004	2/19/97	0	0.5	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	2900	J	MG/KG
RW004	2/19/97	0	0.5	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	0.41	U	MG/KG
RW004	2/19/97	0	0.5	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	32.5		MG/KG
RW004	2/19/97	0	0.5	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-011	67		MG/KG
RW004	2/19/97	0	0.5	PAH HIGH	BENZO(A)ANTHRACENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	BENZO(A)PYRENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	BENZO(B)FLUORANTHENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	BENZO(K)FLUORANTHENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	CHRYSENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	FLUORANTHENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH HIGH	PYRENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	2-METHYLNAPHTHALENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	ACENAPHTHENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	ACENAPHTHYLENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	ANTHRACENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	FLUORENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	NAPHTHALENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PAH LOW	PHENANTHRENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	PCM	PERCENT MOISTURE	CLP Inorganics	013-RWW-011	36.1		%MST
RW004	2/19/97	0	0.5	PEST	ALDRIN	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-011	0.69	J	UG/KG
RW004	2/19/97	0	0.5	PEST	BETA-BHC	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	DIELDRIN	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ENDRIN	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-011	2.6	U	UG/KG
RW004	2/19/97	0	0.5	PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-011	0.74	J	UG/KG
RW004	2/19/97	0	0.5	PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-011	1.3	U	UG/KG
RW004	2/19/97	0	0.5	PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-011	13	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-011	130	U	UG/KG
RW004	2/19/97	0	0.5	PH	PH	9040/9045	013-RWW-011	7.7		UNITS
RW004	2/19/97	0	0.5	SAL	SALINITY	SM 2520B	013-RWW-011	2.8		PPT
RW004	2/19/97	0	0.5	SULFIDE	SULFIDE	9030	013-RWW-011	6.5	U	MG/KG
RW004	2/19/97	0	0.5	SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	1,2-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	1,3-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	1,4-DICHLOROBENZENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Rout	013-RWW-011	620	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,4-DICHLOROPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,4-DINITROPHENOL	CLP Organics-Rout	013-RWW-011	620	UJ	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,4-DINITROTOLUENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2,6-DINITROTOLUENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2-CHLORONAPHTHALENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2-CHLOROPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2-METHYLPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2-NITROANILINE	CLP Organics-Rout	013-RWW-011	620	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	2-NITROPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Rout	013-RWW-011	260	UJ	UG/KG
RW004	2/19/97	0	0.5	SVOA	3-NITROANILINE	CLP Organics-Rout	013-RWW-011	620	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Rout	013-RWW-011	620	UJ	UG/KG
RW004	2/19/97	0	0.5	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	4-CHLOROANILINE	CLP Organics-Rout	013-RWW-011	260	UJ	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	4-METHYLPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	4-NITROANILINE	CLP Organics-Rout	013-RWW-011	620	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	4-NITROPHENOL	CLP Organics-Rout	013-RWW-011	620	UJ	UG/KG
RW004	2/19/97	0	0.5	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Rout	013-RWW-011	200	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	CARBAZOLE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	DIBENZOFURAN	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	DIETHYLPHTHALATE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	DIMETHYLPHTHALATE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	HEXACHLOROBENZENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	HEXACHLOROBUTADIENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	HEXACHLOROETHANE	CLP Organics-Rout	013-RWW-011	260	UJ	UG/KG
RW004	2/19/97	0	0.5	SVOA	ISOPHORONE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	NITROBENZENE	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	PENTACHLOROPHENOL	CLP Organics-Rout	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	SVOA	PHENOL	CLP Organics-Rout	013-RWW-011	620	U	UG/KG
RW004	2/19/97	0	0.5	TBT	DIBUTYL TIN	TBT	013-RWW-011	260	U	UG/KG
RW004	2/19/97	0	0.5	TBT	MONOBUTYL TIN	TBT	013-RWW-011	2	U	UG/KG
RW004	2/19/97	0	0.5	TBT	TETRABUTYL TIN	TBT	013-RWW-011	1	R	UG/KG
							013-RWW-011	2	U	UG/KG

Table A-4 (continued). Data Table for Sediment

Station	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	0	0.5	TBT	TRIBUTYL TIN	TBT	013-RWW-011	2	U	UG/KG
RW004	2/19/97	0	0.5	TOC	TOTAL ORGANIC CARBON	9060	013-RWW-011	267		MG/KG
RW004	2/19/97	0	0.5	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-011	13	U	MG/KG
RW004	2/19/97	0	0.5	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-011	0.6	U	MG/KG
RW004	2/19/97	0	0.5	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-011	18	J	MG/KG

Table A-5. Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Filtered	METAL	ARSENIC	206.3	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Filtered	METAL	MERCURY	245.1	PRC93XXX0024	0.5	U	UG/L
R1	4/13/93	Filtered	METAL	SELENIUM	270.3	PRC93XXX0024	5	U	UG/L
R1	4/13/93	Filtered	METAL	ANTIMONY	6020	PRC93XXX0024	3	U	UG/L
R1	4/13/93	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0024	5	U	UG/L
R1	4/13/93	Filtered	METAL	CADMIUM	6020	PRC93XXX0024	5	U	UG/L
R1	4/13/93	Filtered	METAL	COPPER	6020	PRC93XXX0024	25	U	UG/L
R1	4/13/93	Filtered	METAL	LEAD	6020	PRC93XXX0024	3	U	UG/L
R1	4/13/93	Filtered	METAL	NICKEL	6020	PRC93XXX0024	40	U	UG/L
R1	4/13/93	Filtered	METAL	SILVER	6020	PRC93XXX0024	10	UJ	UG/L
R1	4/13/93	Filtered	METAL	THALLIUM	6020	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Filtered	METAL	ZINC	6020	PRC93XXX0024	150		UG/L
R1	4/13/93	Filtered	METAL	ARSENIC	206.3	PRC93XXX0025	10	U	UG/L
R1	4/13/93	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0025	10	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Filtered	METAL	MERCURY	245.1	PRC93XXX0025	0.5	U	UG/L
R1	4/13/93	Filtered	METAL	SELENIUM	270.3	PRC93XXX0025	5	U	UG/L
R1	4/13/93	Filtered	METAL	ANTIMONY	6020	PRC93XXX0025	3	U	UG/L
R1	4/13/93	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0025	5	U	UG/L
R1	4/13/93	Filtered	METAL	CADMIUM	6020	PRC93XXX0025	5	U	UG/L
R1	4/13/93	Filtered	METAL	COPPER	6020	PRC93XXX0025	25	U	UG/L
R1	4/13/93	Filtered	METAL	LEAD	6020	PRC93XXX0025	3	U	UG/L
R1	4/13/93	Filtered	METAL	NICKEL	6020	PRC93XXX0025	40	U	UG/L
R1	4/13/93	Filtered	METAL	SILVER	6020	PRC93XXX0025	10	UJ	UG/L
R1	4/13/93	Filtered	METAL	THALLIUM	6020	PRC93XXX0025	10	U	UG/L
R1	4/13/93	Filtered	METAL	ZINC	6020	PRC93XXX0025	28		UG/L
R1	4/13/93	Filtered	METAL	ARSENIC	206.3	PRC93XXX0026	10	U	UG/L
R1	4/13/93	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0026	73		UG/L
R1	4/13/93	Filtered	METAL	MERCURY	245.1	PRC93XXX0026	0.5	U	UG/L
R1	4/13/93	Filtered	METAL	SELENIUM	270.3	PRC93XXX0026	5	U	UG/L
R1	4/13/93	Filtered	METAL	ANTIMONY	6020	PRC93XXX0026	3	U	UG/L
R1	4/13/93	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0026	5	U	UG/L
R1	4/13/93	Filtered	METAL	CADMIUM	6020	PRC93XXX0026	5	U	UG/L
R1	4/13/93	Filtered	METAL	COPPER	6020	PRC93XXX0026	25	U	UG/L
R1	4/13/93	Filtered	METAL	LEAD	6020	PRC93XXX0026	3	U	UG/L
R1	4/13/93	Filtered	METAL	NICKEL	6020	PRC93XXX0026	190		UG/L
R1	4/13/93	Filtered	METAL	SILVER	6020	PRC93XXX0026	10	UJ	UG/L
R1	4/13/93	Filtered	METAL	THALLIUM	6020	PRC93XXX0026	10	U	UG/L
R1	4/13/93	Filtered	METAL	ZINC	6020	PRC93XXX0026	49		UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0024	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0024	2	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0024	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0024	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0024	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0024	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0024	1	U	UG/L
R1	4/13/93	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0024	14		MG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0024	23000		UG/L
R1	4/13/93	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0024	0.5	U	UG/L
R1	4/13/93	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0024	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0024	3	U	UG/L
R1	4/13/93	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0024	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0024	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	COPPER	6020	PRC93XXX0024	25	U	UG/L
R1	4/13/93	Unfiltered	METAL	LEAD	6020	PRC93XXX0024	3	U	UG/L
R1	4/13/93	Unfiltered	METAL	NICKEL	6020	PRC93XXX0024	40	U	UG/L
R1	4/13/93	Unfiltered	METAL	SILVER	6020	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	THALLIUM	6020	PRC93XXX0024	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	ZINC	6020	PRC93XXX0024	20	U	UG/L
R1	4/13/93	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0024	440		MG/L
R1	4/13/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0024	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0024	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0024	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0024	0.05	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0024	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0024	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0024	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0024	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0024	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0024	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0024	0.5	U	UG/L
R1	4/13/93	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0024	2	U	UG/L
R1	4/13/93	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0024	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0024	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0024	5	U	NG/L
R1	4/13/93	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0024	5	U	NG/L
R1	4/13/93	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0024	50		MG/L
R1	4/13/93	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0024	500	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0024	40		MG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0025	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0025	2	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0025	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0025	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0025	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0025	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0025	1	U	UG/L
R1	4/13/93	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0025	9		MG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0025	24000		UG/L
R1	4/13/93	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0025	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0025	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0025	0.5	U	UG/L
R1	4/13/93	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0025	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0025	3	U	UG/L
R1	4/13/93	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0025	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0025	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	COPPER	6020	PRC93XXX0025	25	U	UG/L
R1	4/13/93	Unfiltered	METAL	LEAD	6020	PRC93XXX0025	3	U	UG/L
R1	4/13/93	Unfiltered	METAL	NICKEL	6020	PRC93XXX0025	40	U	UG/L
R1	4/13/93	Unfiltered	METAL	SILVER	6020	PRC93XXX0025	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	THALLIUM	6020	PRC93XXX0025	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	ZINC	6020	PRC93XXX0025	20	U	UG/L
R1	4/13/93	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0025	540		MG/L
R1	4/13/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0025	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0025	0.1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0025	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0025	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0025	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0025	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0025	2	U	UG/L
R1	4/13/93	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0025	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0025	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0025	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0025	5	U	NG/L
R1	4/13/93	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0025	53		MG/L
R1	4/13/93	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0025	500	U	UG/L
R1	4/13/93	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0025	46		MG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0026	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0026	2	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0026	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0026	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0026	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0026	1	U	UG/L
R1	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0026	1	U	UG/L
R1	4/13/93	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0026	22		MG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0026	0.1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0026	24000		UG/L
R1	4/13/93	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0026	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0026	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0026	0.5	U	UG/L
R1	4/13/93	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0026	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0026	3	U	UG/L
R1	4/13/93	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0026	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0026	5	U	UG/L
R1	4/13/93	Unfiltered	METAL	COPPER	6020	PRC93XXX0026	25	U	UG/L
R1	4/13/93	Unfiltered	METAL	LEAD	6020	PRC93XXX0026	3	U	UG/L
R1	4/13/93	Unfiltered	METAL	NICKEL	6020	PRC93XXX0026	40	U	UG/L
R1	4/13/93	Unfiltered	METAL	SILVER	6020	PRC93XXX0026	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	THALLIUM	6020	PRC93XXX0026	10	U	UG/L
R1	4/13/93	Unfiltered	METAL	ZINC	6020	PRC93XXX0026	20	U	UG/L
R1	4/13/93	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0026	760		MG/L
R1	4/13/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0026	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0026	0.1	U	UG/L
R1	4/13/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0026	0.1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/13/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0026	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0026	0.05	U	UG/L
R1	4/13/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0026	0.5	U	UG/L
R1	4/13/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0026	2	U	UG/L
R1	4/13/93	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0026	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0026	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0026	5	U	NG/L
R1	4/13/93	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0026	5	U	NG/L
R1	4/13/93	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0026	56		MG/L
R1	4/13/93	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0026	500	U	UG/L
R1	4/13/93	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0026	44		MG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0050	1	U	UG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0050	2	U	UG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0050	1	U	UG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0050	1	U	UG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0050	1	U	UG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0050	1	U	UG/L
R1	6/2/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0050	1	U	UG/L
R1	6/2/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0050	0.05	U	UG/L
R1	6/2/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0050	0.05	U	UG/L
R1	6/2/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0050	0.5	U	UG/L
R1	6/2/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0050	0.05	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	6/2/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0050	0.05	U	UG/L
R1	6/2/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0050	0.1	U	UG/L
R1	6/2/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0050	0.05	U	UG/L
R1	6/2/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0050	0.5	U	UG/L
R1	6/2/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0050	0.05	U	UG/L
R1	6/2/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0050	0.05	U	UG/L
R1	6/2/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0050	0.5	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0214	2	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	CHRYSENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	PYRENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ANTHRACENE	8270	PRC94SVL0214	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	PAH LOW	FLUORENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	NAPHTHALENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	PHENANTHRENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0214	3	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0214	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-METHYLPHENOL	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-NITROANILINE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-NITROPHENOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	3-NITROANILINE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0214	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLOROANILINE	8270	PRC94SVL0214	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0214	3	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-METHYLPHENOL	8270	PRC94SVL0214	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	SVOA	4-NITROANILINE	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-NITROPHENOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZIDINE	8270	PRC94SVL0214	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZOIC ACID	8270	PRC94SVL0214	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIBENZOFURAN	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0214	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	ISOPHORONE	8270	PRC94SVL0214	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	NITROBENZENE	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0214	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	PHENOL	8270	PRC94SVL0214	5	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0214	2	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0215	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	CHRYSENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	PYRENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ANTHRACENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	FLUORENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	NAPHTHALENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	PHENANTHRENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0215	3	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0215	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-METHYLPHENOL	8270	PRC94SVL0215	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	SVOA	2-NITROANILINE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-NITROPHENOL	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	3-NITROANILINE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0215	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0215	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLOROANILINE	8270	PRC94SVL0215	3	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-METHYLPHENOL	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-NITROANILINE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-NITROPHENOL	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZIDINE	8270	PRC94SVL0215	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZOIC ACID	8270	PRC94SVL0215	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIBENZOFURAN	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0215	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0215	2	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	SVOA	ISOPHORONE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	NITROBENZENE	8270	PRC94SVL0215	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0215	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	PHENOL	8270	PRC94SVL0215	2	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	CHRYSENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH HIGH	PYRENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	ANTHRACENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	FLUORENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	NAPHTHALENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	PAH LOW	PHENANTHRENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0216	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0216	3	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0216	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-METHYLPHENOL	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-NITROANILINE	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	2-NITROPHENOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	3-NITROANILINE	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0216	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0216	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLOROANILINE	8270	PRC94SVL0216	3	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-METHYLPHENOL	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-NITROANILINE	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	4-NITROPHENOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZIDINE	8270	PRC94SVL0216	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZOIC ACID	8270	PRC94SVL0216	10	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0216	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	4/20/94	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0216	4	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIBENZOFURAN	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0216	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0216	2	U	UG/L
R1	4/20/94	Unfiltered	SVOA	ISOPHORONE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	NITROBENZENE	8270	PRC94SVL0216	1	U	UG/L
R1	4/20/94	Unfiltered	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0216	5	U	UG/L
R1	4/20/94	Unfiltered	SVOA	PHENOL	8270	PRC94SVL0216	2	U	UG/L
R1	6/2/95	Filtered	METAL	ARSENIC	206.3	PRC93XXX0050	11		UG/L
R1	6/2/95	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0050	10	U	UG/L
R1	6/2/95	Filtered	METAL	MERCURY	245.1	PRC93XXX0050	0.5	U	UG/L
R1	6/2/95	Filtered	METAL	SELENIUM	270.3	PRC93XXX0050	5	U	UG/L
R1	6/2/95	Filtered	METAL	ANTIMONY	6020	PRC93XXX0050	3	U	UG/L
R1	6/2/95	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0050	5	U	UG/L
R1	6/2/95	Filtered	METAL	CADMIUM	6020	PRC93XXX0050	5	U	UG/L
R1	6/2/95	Filtered	METAL	COPPER	6020	PRC93XXX0050	25	U	UG/L
R1	6/2/95	Filtered	METAL	LEAD	6020	PRC93XXX0050	3	U	UG/L
R1	6/2/95	Filtered	METAL	NICKEL	6020	PRC93XXX0050	40	U	UG/L
R1	6/2/95	Filtered	METAL	SILVER	6020	PRC93XXX0050	10	U	UG/L
R1	6/2/95	Filtered	METAL	TITANIUM	6020	PRC93XXX0050	10	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R1	6/2/95	Filtered	METAL	ZINC	6020	PRC93XXX0050	20	U	UG/L
R1	6/2/95	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0050	180	JE	MG/L
R1	6/2/95	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0050	39000		UG/L
R1	6/2/95	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0050	11		UG/L
R1	6/2/95	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0050	10	U	UG/L
R1	6/2/95	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0050	0.5	UJ	UG/L
R1	6/2/95	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0050	5	U	UG/L
R1	6/2/95	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0050	3	UJ	UG/L
R1	6/2/95	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0050	5	U	UG/L
R1	6/2/95	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0050	5	U	UG/L
R1	6/2/95	Unfiltered	METAL	COPPER	6020	PRC93XXX0050	25	U	UG/L
R1	6/2/95	Unfiltered	METAL	LEAD	6020	PRC93XXX0050	3	UJ	UG/L
R1	6/2/95	Unfiltered	METAL	NICKEL	6020	PRC93XXX0050	40	U	UG/L
R1	6/2/95	Unfiltered	METAL	SILVER	6020	PRC93XXX0050	10	U	UG/L
R1	6/2/95	Unfiltered	METAL	TITANIUM	6020	PRC93XXX0050	10	U	UG/L
R1	6/2/95	Unfiltered	METAL	ZINC	6020	PRC93XXX0050	20	U	UG/L
R1	6/2/95	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0050	1400		MG/L
R1	6/2/95	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0050	6		NG/L
R1	6/2/95	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0050	5	U	NG/L
R1	6/2/95	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0050	5	U	NG/L
R1	6/2/95	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0050	24		NG/L
R1	6/2/95	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0050	66		MG/L
R1	6/2/95	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0050	500	U	UG/L
R1	6/2/95	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0050	120		MG/L
R2	4/13/93	Filtered	METAL	ARSENIC	206.3	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Filtered	METAL	MERCURY	245.1	PRC93XXX0027	0.5	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Filtered	METAL	SELENIUM	270.3	PRC93XXX0027	5	U	UG/L
R2	4/13/93	Filtered	METAL	ANTIMONY	6020	PRC93XXX0027	3	U	UG/L
R2	4/13/93	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0027	5	U	UG/L
R2	4/13/93	Filtered	METAL	CADMIUM	6020	PRC93XXX0027	5	U	UG/L
R2	4/13/93	Filtered	METAL	COPPER	6020	PRC93XXX0027	25	U	UG/L
R2	4/13/93	Filtered	METAL	LEAD	6020	PRC93XXX0027	3	U	UG/L
R2	4/13/93	Filtered	METAL	NICKEL	6020	PRC93XXX0027	40	U	UG/L
R2	4/13/93	Filtered	METAL	SILVER	6020	PRC93XXX0027	10	UJ	UG/L
R2	4/13/93	Filtered	METAL	THALLIUM	6020	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Filtered	METAL	ZINC	6020	PRC93XXX0027	140		UG/L
R2	4/13/93	Filtered	METAL	ARSENIC	206.3	PRC93XXX0028	10	U	UG/L
R2	4/13/93	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0028	10	U	UG/L
R2	4/13/93	Filtered	METAL	MERCURY	245.1	PRC93XXX0028	0.5	U	UG/L
R2	4/13/93	Filtered	METAL	SELENIUM	270.3	PRC93XXX0028	5	U	UG/L
R2	4/13/93	Filtered	METAL	ANTIMONY	6020	PRC93XXX0028	3	U	UG/L
R2	4/13/93	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0028	5	U	UG/L
R2	4/13/93	Filtered	METAL	CADMIUM	6020	PRC93XXX0028	5	U	UG/L
R2	4/13/93	Filtered	METAL	COPPER	6020	PRC93XXX0028	25	U	UG/L
R2	4/13/93	Filtered	METAL	LEAD	6020	PRC93XXX0028	3	U	UG/L
R2	4/13/93	Filtered	METAL	NICKEL	6020	PRC93XXX0028	40	U	UG/L
R2	4/13/93	Filtered	METAL	SILVER	6020	PRC93XXX0028	10	UJ	UG/L
R2	4/13/93	Filtered	METAL	THALLIUM	6020	PRC93XXX0028	10	U	UG/L
R2	4/13/93	Filtered	METAL	ZINC	6020	PRC93XXX0028	100		UG/L
R2	4/13/93	Filtered	METAL	ARSENIC	206.3	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Filtered	METAL	CHROMIUM	218.2	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Filtered	METAL	MERCURY	245.1	PRC93XXX0029	0.5	U	UG/L
R2	4/13/93	Filtered	METAL	SELENIUM	270.3	PRC93XXX0029	5	U	UG/L
R2	4/13/93	Filtered	METAL	ANTIMONY	6020	PRC93XXX0029	3	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Filtered	METAL	BERYLLIUM	6020	PRC93XXX0029	5	U	UG/L
R2	4/13/93	Filtered	METAL	CADMIUM	6020	PRC93XXX0029	5	U	UG/L
R2	4/13/93	Filtered	METAL	COPPER	6020	PRC93XXX0029	25	U	UG/L
R2	4/13/93	Filtered	METAL	LEAD	6020	PRC93XXX0029	3	U	UG/L
R2	4/13/93	Filtered	METAL	NICKEL	6020	PRC93XXX0029	40	U	UG/L
R2	4/13/93	Filtered	METAL	SILVER	6020	PRC93XXX0029	10	UJ	UG/L
R2	4/13/93	Filtered	METAL	THALLIUM	6020	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Filtered	METAL	ZINC	6020	PRC93XXX0029	58		UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0027	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0027	2	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0027	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0027	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0027	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0027	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0027	1	U	UG/L
R2	4/13/93	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0027	15		MG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0027	34000		UG/L
R2	4/13/93	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0027	0.5	U	UG/L
R2	4/13/93	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0027	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0027	3	U	UG/L
R2	4/13/93	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0027	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0027	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	COPPER	6020	PRC93XXX0027	25	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Unfiltered	METAL	LEAD	6020	PRC93XXX0027	3	U	UG/L
R2	4/13/93	Unfiltered	METAL	NICKEL	6020	PRC93XXX0027	40	U	UG/L
R2	4/13/93	Unfiltered	METAL	SILVER	6020	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	THALLIUM	6020	PRC93XXX0027	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	ZINC	6020	PRC93XXX0027	20	U	UG/L
R2	4/13/93	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0027	440		MG/L
R2	4/13/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0027	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0027	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0027	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0027	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0027	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0027	2	U	UG/L
R2	4/13/93	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0027	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0027	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0027	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0027	5	U	NG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0027	49		MG/L
R2	4/13/93	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0027	500	U	UG/L
R2	4/13/93	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0027	18		MG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0028	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0028	2	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0028	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0028	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0028	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0028	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0028	1	U	UG/L
R2	4/13/93	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0028	15		MG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0028	31000		UG/L
R2	4/13/93	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0028	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0028	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0028	0.5	U	UG/L
R2	4/13/93	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0028	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0028	3	U	UG/L
R2	4/13/93	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0028	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0028	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	COPPER	6020	PRC93XXX0028	25	U	UG/L
R2	4/13/93	Unfiltered	METAL	LEAD	6020	PRC93XXX0028	4.6		UG/L
R2	4/13/93	Unfiltered	METAL	NICKEL	6020	PRC93XXX0028	40	U	UG/L
R2	4/13/93	Unfiltered	METAL	SILVER	6020	PRC93XXX0028	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	THALLIUM	6020	PRC93XXX0028	10	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Unfiltered	METAL	ZINC	6020	PRC93XXX0028	20	U	UG/L
R2	4/13/93	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0028	410		MG/L
R2	4/13/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0028	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0028	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0028	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0028	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0028	0.5	U	UG/L
R2	4/13/93	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0028	2	U	UG/L
R2	4/13/93	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0028	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0028	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0028	5	U	NG/L
R2	4/13/93	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0028	43		MG/L
R2	4/13/93	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0028	500	U	UG/L
R2	4/13/93	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0028	24		MG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1016	608	PRC93XXX0029	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1221	608	PRC93XXX0029	2	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1232	608	PRC93XXX0029	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1242	608	PRC93XXX0029	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1248	608	PRC93XXX0029	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1254	608	PRC93XXX0029	1	U	UG/L
R2	4/13/93	Unfiltered	AROCLOR	AROCLOR-1260	608	PRC93XXX0029	1	U	UG/L
R2	4/13/93	Unfiltered	BOD	BIOCHEMICAL OXYGEN DEMAND	405.1	PRC93XXX0029	16		MG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDD	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDE	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	DDT 44	4,4'-DDT	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	415.1	PRC93XXX0029	33000		UG/L
R2	4/13/93	Unfiltered	METAL	ARSENIC	206.3	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	CHROMIUM	218.2	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	MERCURY	245.1	PRC93XXX0029	0.5	U	UG/L
R2	4/13/93	Unfiltered	METAL	SELENIUM	270.3	PRC93XXX0029	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	ANTIMONY	6020	PRC93XXX0029	3	U	UG/L
R2	4/13/93	Unfiltered	METAL	BERYLLIUM	6020	PRC93XXX0029	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	CADMIUM	6020	PRC93XXX0029	5	U	UG/L
R2	4/13/93	Unfiltered	METAL	COPPER	6020	PRC93XXX0029	25	U	UG/L
R2	4/13/93	Unfiltered	METAL	LEAD	6020	PRC93XXX0029	3	U	UG/L
R2	4/13/93	Unfiltered	METAL	NICKEL	6020	PRC93XXX0029	40	U	UG/L
R2	4/13/93	Unfiltered	METAL	SILVER	6020	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	THALLIUM	6020	PRC93XXX0029	10	U	UG/L
R2	4/13/93	Unfiltered	METAL	ZINC	6020	PRC93XXX0029	20	U	UG/L
R2	4/13/93	Unfiltered	OXYD	COD (TOTAL)	410.1	PRC93XXX0029	390		MG/L
R2	4/13/93	Unfiltered	PEST	ALDRIN	608	PRC93XXX0029	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	ALPHA-BHC	608	PRC93XXX0029	0.05	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/13/93	Unfiltered	PEST	ALPHA-CHLORDANE	608	PRC93XXX0029	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	BETA-BHC	608	PRC93XXX0029	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	DELTA-BHC	608	PRC93XXX0029	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	DIELDRIN	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN I	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN II	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDOSULFAN SULFATE	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN ALDEHYDE	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	ENDRIN KETONE	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	GAMMA-BHC (LINDANE)	608	PRC93XXX0029	0.1	U	UG/L
R2	4/13/93	Unfiltered	PEST	GAMMA-CHLORDANE	608	PRC93XXX0029	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	HEPTACHLOR	608	PRC93XXX0029	0.5	U	UG/L
R2	4/13/93	Unfiltered	PEST	HEPTACHLOR EPOXIDE	608	PRC93XXX0029	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	METHOXYCHLOR	608	PRC93XXX0029	0.05	U	UG/L
R2	4/13/93	Unfiltered	PEST	TOXAPHENE	608	PRC93XXX0029	0.5	U	UG/L
R2	4/13/93	Unfiltered	TBT	DIBUTYL TIN	GC/FPD	PRC93XXX0029	2	U	UG/L
R2	4/13/93	Unfiltered	TBT	MONOBUTYL TIN	GC/FPD	PRC93XXX0029	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	TETRABUTYL TIN	GC/FPD	PRC93XXX0029	5	U	NG/L
R2	4/13/93	Unfiltered	TBT	TRIBUTYL TIN	GC/FPD	PRC93XXX0029	5	U	NG/L
R2	4/13/93	Unfiltered	TOC	TOTAL ORGANIC CARBON	415.1	PRC93XXX0029	47		MG/L
R2	4/13/93	Unfiltered	TRPH	TOTAL RECOVERABLE PETROLEUM HYDROCARBONS	418.1	PRC93XXX0029	500	U	UG/L
R2	4/13/93	Unfiltered	TSS	TOTAL SUSPENDED SOLIDS	160.1	PRC93XXX0029	36		MG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0217	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	CHRYSENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	PYRENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ANTHRACENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	FLUORENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	NAPHTHALENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	PHENANTHRENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0217	3	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0217	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-METHYLPHENOL	8270	PRC94SVL0217	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	SVOA	2-NITROANILINE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-NITROPHENOL	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	3-NITROANILINE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0217	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0217	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLOROANILINE	8270	PRC94SVL0217	3	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-METHYLPHENOL	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-NITROANILINE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-NITROPHENOL	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZIDINE	8270	PRC94SVL0217	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZOIC ACID	8270	PRC94SVL0217	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIBENZOFURAN	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0217	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0217	2	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	SVOA	ISOPHORONE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	NITROBENZENE	8270	PRC94SVL0217	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0217	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	PHENOL	8270	PRC94SVL0217	2	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	CHRYSENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	PYRENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ANTHRACENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	FLUORENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	NAPHTHALENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	PHENANTHRENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0218	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0218	3	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0218	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-METHYLPHENOL	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-NITROANILINE	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-NITROPHENOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	3-NITROANILINE	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0218	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0218	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLOROANILINE	8270	PRC94SVL0218	3	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-METHYLPHENOL	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-NITROANILINE	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-NITROPHENOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZIDINE	8270	PRC94SVL0218	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZOIC ACID	8270	PRC94SVL0218	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0218	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIBENZOFURAN	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0218	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0218	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	ISOPHORONE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	NITROBENZENE	8270	PRC94SVL0218	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0218	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	PHENOL	8270	PRC94SVL0218	2	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(A)PYRENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	CHRYSENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	FLUORANTHENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH HIGH	PYRENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ACENAPHTHENE	8270	PRC94SVL0219	1	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	PAH LOW	ACENAPHTHYLENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	ANTHRACENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	FLUORENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	NAPHTHALENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	PAH LOW	PHENANTHRENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,2-DICHLOROBENZENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,3-DICHLOROBENZENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	1,4-DICHLOROBENZENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DICHLOROPHENOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	8270	PRC94SVL0219	3	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DINITROPHENOL	8270	PRC94SVL0219	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,4-DINITROTOLUENE	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2,6-DINITROTOLUENE	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-CHLORONAPHTHALENE	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-CHLOROPHENOL	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-METHYLPHENOL	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-NITROANILINE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	2-NITROPHENOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	3-NITROANILINE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	PRC94SVL0219	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-CHLOROANILINE	8270	PRC94SVL0219	2	U	UG/L
							3	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R2	4/20/94	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-METHYLPHENOL	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-NITROANILINE	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	4-NITROPHENOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZIDINE	8270	PRC94SVL0219	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZOIC ACID	8270	PRC94SVL0219	10	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BENZYL ALCOHOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	PRC94SVL0219	2.1		UG/L
R2	4/20/94	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	8270	PRC94SVL0219	7.7	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIBENZOFURAN	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	DIETHYLPHTHALATE	8270	PRC94SVL0219	1.7		UG/L
R2	4/20/94	Unfiltered	SVOA	DIMETHYLPHTHALATE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROBENZENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROBUTADIENE	8270	PRC94SVL0219	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	HEXACHLOROETHANE	8270	PRC94SVL0219	2	U	UG/L
R2	4/20/94	Unfiltered	SVOA	ISOPHORONE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	NITROBENZENE	8270	PRC94SVL0219	1	U	UG/L
R2	4/20/94	Unfiltered	SVOA	PENTACHLOROPHENOL	8270	PRC94SVL0219	5	U	UG/L
R2	4/20/94	Unfiltered	SVOA	PHENOL	8270	PRC94SVL0219	2	U	UG/L
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1016	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1221	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1232	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1242	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1248	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1254	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L
RW002	2/18/97	Unfiltered	AROCLOR	AROCLOR-1260	CLP ORGANICS-ROUT	013-RWW-019	0.2	U	UG/L
RW002	2/18/97	Unfiltered	DDT 44	4,4'-DDD	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	DDT 44	4,4'-DDE	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	DDT 44	4,4'-DDT	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	DISSOLVED OXYGEN	DISSOLVED OXYGEN	SM 4500	013-RWW-019	5.2		MG/L
RW002	2/18/97	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	9060	013-RWW-019	23.4		UG/L
RW002	2/18/97	Unfiltered	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	418		UG/L
RW002	2/18/97	Unfiltered	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	2.1	U	UG/L
RW002	2/18/97	Unfiltered	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	2.2	J	UG/L
RW002	2/18/97	Unfiltered	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	25.9	J	UG/L
RW002	2/18/97	Unfiltered	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	0.02	UJ	UG/L
RW002	2/18/97	Unfiltered	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	0.39	UJ	UG/L
RW002	2/18/97	Unfiltered	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	82300		UG/L
RW002	2/18/97	Unfiltered	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	2.1	J	UG/L
RW002	2/18/97	Unfiltered	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	1.2	J	UG/L
RW002	2/18/97	Unfiltered	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	7.9	J	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	Unfiltered	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	1040		UG/L
RW002	2/18/97	Unfiltered	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	4.9		UG/L
RW002	2/18/97	Unfiltered	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	262000		UG/L
RW002	2/18/97	Unfiltered	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	94.2		UG/L
RW002	2/18/97	Unfiltered	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	0.1	U	UG/L
RW002	2/18/97	Unfiltered	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	2.7	UJ	UG/L
RW002	2/18/97	Unfiltered	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	9.2	J	UG/L
RW002	2/18/97	Unfiltered	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	101000		UG/L
RW002	2/18/97	Unfiltered	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	2.1	U	UG/L
RW002	2/18/97	Unfiltered	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	0.5	U	UG/L
RW002	2/18/97	Unfiltered	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	2220000		UG/L
RW002	2/18/97	Unfiltered	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	1.3	U	UG/L
RW002	2/18/97	Unfiltered	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	3		UG/L
RW002	2/18/97	Unfiltered	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-019	26	UJ	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	BENZO(A)PYRENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	CHRYSENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH HIGH	PYRENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	ACENAPHTHENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	ACENAPHTHYLENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	FLUORENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	NAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PAH LOW	PHENANTHRENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ALDRIN	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ALPHA-BHC	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ALPHA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	BETA-BHC	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	DELTA-BHC	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	DIELDRIN	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ENDOSULFAN I	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ENDOSULFAN II	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ENDOSULFAN SULFATE	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ENDRIN	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ENDRIN ALDEHYDE	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	PEST	ENDRIN KETONE	CLP ORGANICS-ROUT	013-RWW-019	0.02	U	UG/L
RW002	2/18/97	Unfiltered	PEST	GAMMA-BHC (LINDANE)	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	GAMMA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	Unfiltered	PEST	HEPTACHLOR	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	HEPTACHLOR EPOXIDE	CLP ORGANICS-ROUT	013-RWW-019	0.01	U	UG/L
RW002	2/18/97	Unfiltered	PEST	METHOXYCHLOR	CLP ORGANICS-ROUT	013-RWW-019	0.1	U	UG/L
RW002	2/18/97	Unfiltered	PEST	TOXAPHENE	CLP ORGANICS-ROUT	013-RWW-019	1	U	UG/L
RW002	2/18/97	Unfiltered	PH	PH	9040/9045	013-RWW-019	8.1		UNITS
RW002	2/18/97	Unfiltered	SULFIDE	SULFIDE	376.2	013-RWW-019	0.05	U	MG/L
RW002	2/18/97	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	1,2-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	1,3-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	1,4-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	20	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,4-DICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,4-DINITROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	20	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,4-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2,6-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2-CHLORONAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2-CHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-019	20	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	2-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	CLP ORGANICS-ROUT	013-RWW-019	5	UJ	UG/L
RW002	2/18/97	Unfiltered	SVOA	3-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-019	20	UJ	UG/L
RW002	2/18/97	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-019	20	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	Unfiltered	SVOA	4-CHLOROANILINE	CLP ORGANICS-ROUT	013-RWW-019	5	UJ	UG/L
RW002	2/18/97	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	4-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	4-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-019	20	UJ	UG/L
RW002	2/18/97	Unfiltered	SVOA	4-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	20	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP ORGANICS-ROUT	013-RWW-019	4	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	CARBAZOLE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	DIBENZOFURAN	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	DIETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	DIMETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	HEXACHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	HEXACHLOROBUTADIENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	HEXACHLOROETHANE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	ISOPHORONE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	NITROBENZENE	CLP ORGANICS-ROUT	013-RWW-019	5	UJ	UG/L
RW002	2/18/97	Unfiltered	SVOA	PENTACHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	SVOA	PHENOL	CLP ORGANICS-ROUT	013-RWW-019	20	U	UG/L
RW002	2/18/97	Unfiltered	TBT	DIBUTYL TIN	TBT	013-RWW-019	5	U	UG/L
RW002	2/18/97	Unfiltered	TBT	MONOBUTYL TIN	TBT	013-RWW-019	38	U	NG/L
RW002	2/18/97	Unfiltered	TBT	TETRABUTYL TIN	TBT	013-RWW-019	31	U	NG/L
						013-RWW-019	50	U	NG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	Unfiltered	TBT	TRIBUTYL TIN	TBT	013-RWW-019	44	U	NG/L
RW002	2/18/97	Unfiltered	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-019	100	U	UG/L
RW002	2/18/97	Unfiltered	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-019	50	U	UG/L
RW002	2/18/97	Unfiltered	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-019	270	J	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1016	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1221	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1232	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1242	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1248	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1254	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	AROCLOR	AROCLOR-1260	CLP ORGANICS-ROUT	013-RWW-020	0.2	U	UG/L
RW006	2/19/97	Unfiltered	DDT 44	4,4'-DDD	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	DDT 44	4,4'-DDE	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	DDT 44	4,4'-DDT	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	DISSOLVED OXYGEN	DISSOLVED OXYGEN	SM 4500	013-RWW-020	6.3		MG/L
RW006	2/19/97	Unfiltered	DOC	DISSOLVED ORGANIC CARBON	9060	013-RWW-020	29.5		UG/L
RW006	2/19/97	Unfiltered	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	480		UG/L
RW006	2/19/97	Unfiltered	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	2.1	U	UG/L
RW006	2/19/97	Unfiltered	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	3.7	J	UG/L
RW006	2/19/97	Unfiltered	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	47.6	J	UG/L
RW006	2/19/97	Unfiltered	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	0.02	UJ	UG/L
RW006	2/19/97	Unfiltered	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	0.28	UJ	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	2/19/97	Unfiltered	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	70000		UG/L
RW006	2/19/97	Unfiltered	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	3.4	J	UG/L
RW006	2/19/97	Unfiltered	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	1.4	J	UG/L
RW006	2/19/97	Unfiltered	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	7.6	J	UG/L
RW006	2/19/97	Unfiltered	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	982		UG/L
RW006	2/19/97	Unfiltered	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	6.4		UG/L
RW006	2/19/97	Unfiltered	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	167000		UG/L
RW006	2/19/97	Unfiltered	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	378		UG/L
RW006	2/19/97	Unfiltered	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	0.1	U	UG/L
RW006	2/19/97	Unfiltered	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	2.7	UJ	UG/L
RW006	2/19/97	Unfiltered	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	10.8	J	UG/L
RW006	2/19/97	Unfiltered	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	66900		UG/L
RW006	2/19/97	Unfiltered	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	2.5	J	UG/L
RW006	2/19/97	Unfiltered	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	0.5	U	UG/L
RW006	2/19/97	Unfiltered	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	1410000		UG/L
RW006	2/19/97	Unfiltered	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	1.3	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	2/19/97	Unfiltered	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	6.6		UG/L
RW006	2/19/97	Unfiltered	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-020	28.4	UJ	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	BENZO(A)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	BENZO(A)PYRENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	BENZO(B)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	BENZO(K)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	CHRYSENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH HIGH	PYRENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	2-METHYLNAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	ACENAPHTHENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	ACENAPHTHYLENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	FLUORENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	NAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PAH LOW	PHENANTHRENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ALDRIN	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ALPHA-BHC	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ALPHA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	BETA-BHC	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	DELTA-BHC	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	DIELDRIN	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ENDOSULFAN I	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	2/19/97	Unfiltered	PEST	ENDOSULFAN II	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ENDOSULFAN SULFATE	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ENDRIN	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ENDRIN ALDEHYDE	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	PEST	ENDRIN KETONE	CLP ORGANICS-ROUT	013-RWW-020	0.02	U	UG/L
RW006	2/19/97	Unfiltered	PEST	GAMMA-BHC (LINDANE)	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	GAMMA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	HEPTACHLOR	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	HEPTACHLOR EPOXIDE	CLP ORGANICS-ROUT	013-RWW-020	0.01	U	UG/L
RW006	2/19/97	Unfiltered	PEST	METHOXYCHLOR	CLP ORGANICS-ROUT	013-RWW-020	0.1	U	UG/L
RW006	2/19/97	Unfiltered	PEST	TOXAPHENE	CLP ORGANICS-ROUT	013-RWW-020	1	U	UG/L
RW006	2/19/97	Unfiltered	PH	PH	9040/9045	013-RWW-020	8.4		UNITS
RW006	2/19/97	Unfiltered	SULFIDE	SULFIDE	376.2	013-RWW-020	0.05	U	MG/L
RW006	2/19/97	Unfiltered	SVOA	1,2,4-TRICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	1,2-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	1,3-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	1,4-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,4,5-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	20	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,4,6-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,4-DICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,4-DIMETHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,4-DINITROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	20	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,4-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2,6-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2-CHLORONAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2-CHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	2/19/97	Unfiltered	SVOA	2-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-020	20	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	2-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	3,3'-DICHLOROBENZIDINE	CLP ORGANICS-ROUT	013-RWW-020	5	UJ	UG/L
RW006	2/19/97	Unfiltered	SVOA	3-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-020	20	UJ	UG/L
RW006	2/19/97	Unfiltered	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-020	20	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-CHLORO-3-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-CHLOROANILINE	CLP ORGANICS-ROUT	013-RWW-020	5	UJ	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-020	20	UJ	UG/L
RW006	2/19/97	Unfiltered	SVOA	4-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	20	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP ORGANICS-ROUT	013-RWW-020	4	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	BUTYLBENZYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	CARBAZOLE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	DI-N-BUTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	DI-N-OCTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	DIBENZOFURAN	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	DIETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	DIMETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	HEXACHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	HEXACHLOROBUTADIENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	HEXACHLOROETHANE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	ISOPHORONE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L

Table A-5 (continued). Data Table for Surface Water

Station	Date	Sample Preparation	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	2/19/97	Unfiltered	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP ORGANICS-ROUT	013-RWW-020	5	UJ	UG/L
RW006	2/19/97	Unfiltered	SVOA	NITROBENZENE	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	PENTACHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-020	20	U	UG/L
RW006	2/19/97	Unfiltered	SVOA	PHENOL	CLP ORGANICS-ROUT	013-RWW-020	5	U	UG/L
RW006	2/19/97	Unfiltered	TBT	DIBUTYL TIN	TBT	013-RWW-020	38	U	NG/L
RW006	2/19/97	Unfiltered	TBT	MONOBUTYL TIN	TBT	013-RWW-020	31	U	NG/L
RW006	2/19/97	Unfiltered	TBT	TETRABUTYL TIN	TBT	013-RWW-020	50	U	NG/L
RW006	2/19/97	Unfiltered	TBT	TRIBUTYL TIN	TBT	013-RWW-020	44	U	NG/L
RW006	2/19/97	Unfiltered	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-020	100	U	UG/L
RW006	2/19/97	Unfiltered	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-020	50	U	UG/L
RW006	2/19/97	Unfiltered	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-020	280	J	UG/L

Table A-6. Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
Lowland	Terrestrial Invertebrate	9/10/98			METAL	ALUMINUM	6010	124-RWW-018	92	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	ANTIMONY	6010	124-RWW-018	0.05	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	ARSENIC	6010	124-RWW-018	1.1	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	BARIUM	6010	124-RWW-018	8		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	BERYLLIUM	6010	124-RWW-018	0.05	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	CADMIUM	6010	124-RWW-018	0.3		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	CALCIUM	6010	124-RWW-018	6621		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	CHROMIUM	6010	124-RWW-018	0.2	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	COBALT	6010	124-RWW-018	0.32	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	COPPER	6010	124-RWW-018	23		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	IRON	6010	124-RWW-018	200		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	LEAD	6010	124-RWW-018	0.62	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	MAGNESIUM	6010	124-RWW-018	1260		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	MANGANESE	6010	124-RWW-018	97		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	MERCURY	6010	124-RWW-018	0.09		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
Lowland	Terrestrial Invertebrate	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-018	0.67		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	NICKEL	6010	124-RWW-018	1.8	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	POTASSIUM	6010	124-RWW-018	5471		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	SELENIUM	6010	124-RWW-018	2	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	SILVER	6010	124-RWW-018	0.11	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	SODIUM	6010	124-RWW-018	5218	J	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	THALLIUM	6010	124-RWW-018	0.05	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	TIN	6010	124-RWW-018	2	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	VANADIUM	6010	124-RWW-018	2	U	MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			METAL	ZINC	6010	124-RWW-018	94		MG/KG
Lowland	Terrestrial Invertebrate	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-018	56.5		%MST
R01	Terrestrial Plant	9/1/98	0		CON	PCB101	8082	124-RWW-001	0.6	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB105	8082	124-RWW-001	0.2	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB118	8082	124-RWW-001	0.8	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB128	8082	124-RWW-001	0.2	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB138	8082	124-RWW-001	0.9		UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB153	8082	124-RWW-001	0.6	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB170	8082	124-RWW-001	0.17	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB18	8082	124-RWW-001	0.2	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Terrestrial Plant	9/1/98	0		CON	PCB180	8082	124-RWW-001	0.2	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB187	8082	124-RWW-001	0.13	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB195	8082	124-RWW-001	0.2	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB206	8082	124-RWW-001	0.15	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB209	8082	124-RWW-001	0.15	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB28	8082	124-RWW-001	0.13	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB44	8082	124-RWW-001	0.15	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB52	8082	124-RWW-001	0.2	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB66	8082	124-RWW-001	0.6	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		CON	PCB8	8082	124-RWW-001	0.2	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	ALUMINUM	6010	124-RWW-001	79		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	ANTIMONY	6010	124-RWW-001	0.09	J	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	ARSENIC	6010	124-RWW-001	2.6		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	BARIUM	6010	124-RWW-001	37.9		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	BERYLLIUM	6010	124-RWW-001	0.04		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	CADMIUM	6010	124-RWW-001	0.11		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	CALCIUM	6010	124-RWW-001	7100		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	CHROMIUM	6010	124-RWW-001	0.8	U	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	COBALT	6010	124-RWW-001	0.3		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	COPPER	6010	124-RWW-001	8.9		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	IRON	6010	124-RWW-001	111		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Terrestrial Plant	9/1/98	0		METAL	LEAD	6010	124-RWW-001	1.7		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	MAGNESIUM	6010	124-RWW-001	1620		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	MANGANESE	6010	124-RWW-001	17.7		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	MERCURY	6010	124-RWW-001	0.011	J	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	MOLYBDENUM	6010	124-RWW-001	1.15		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	NICKEL	6010	124-RWW-001	2.3		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	POTASSIUM	6010	124-RWW-001	8456		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	SELENIUM	6010	124-RWW-001	4	UJ	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	SILVER	6010	124-RWW-001	0.009	J	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	SODIUM	6010	124-RWW-001	2731		MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	THALLIUM	6010	124-RWW-001	0.011	U	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	TIN	6010	124-RWW-001	0.9	U	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	VANADIUM	6010	124-RWW-001	0.9	J	MG/KG
R01	Terrestrial Plant	9/1/98	0		METAL	ZINC	6010	124-RWW-001	32		MG/KG
R01	Terrestrial Plant	9/1/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-001	1.5	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-001	1.3	R	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-001	1.5	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-001	1.7	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-001	2	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-001	1.5	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-001	2	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-001	2	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	CHRYSENE	PAH_SIM	124-RWW-001	4	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-001	6	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	FLUORANTHENE	PAH_SIM	124-RWW-001	11	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-001	1.7	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH High	PERYLENE	PAH_SIM	124-RWW-001	1.3	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Terrestrial Plant	9/1/98	0		PAH High	PYRENE	PAH_SIM	124-RWW-001	8	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-001	6	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-001	1.5	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-001	1.5	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	ANTHRACENE	PAH_SIM	124-RWW-001	1.5	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	FLUORENE	PAH_SIM	124-RWW-001	1.5	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-001	13	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-001	17	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-001	46.9		%MST
R01	Terrestrial Plant	9/1/98	0		PCS	PERCENT SOLIDS	FREEZE DRY	124-RWW-001	53.1		%SLD
R01	Terrestrial Plant	9/1/98	0		PEST	ALDRIN	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ALPHA-BHC	8081A	124-RWW-001	0.4	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	BETA-BHC	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	CHLORDANE	8081A	124-RWW-001	19	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	DELTA-BHC	8081A	124-RWW-001	0.4	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	DIELDRIN	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ENDRIN	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-001	0.4	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	HEPTACHLOR	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-001	0.4	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Terrestrial Plant	9/1/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	MIREX	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	TOXAPHENE	8081A	124-RWW-001	38	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-001	0.4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-001	2	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-001	1.1	J	UG/KG
R01	Terrestrial Plant	9/1/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-001	1.5	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-001	4	UJ	UG/KG
R01	Terrestrial Plant	9/1/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-001	4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-001	8	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-001	4	U	UG/KG
R01	Terrestrial Plant	9/1/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-001	17		UG/KG
R01	Mouse	9/8/98			CON	PCB101	8082	124-RWW-002	1.5	R	UG/KG
R01	Mouse	9/8/98			CON	PCB105	8082	124-RWW-002	1.8	J	UG/KG
R01	Mouse	9/8/98			CON	PCB118	8082	124-RWW-002	0.3	J	UG/KG
R01	Mouse	9/8/98			CON	PCB128	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB138	8082	124-RWW-002	1.8	J	UG/KG
R01	Mouse	9/8/98			CON	PCB153	8082	124-RWW-002	3	J	UG/KG
R01	Mouse	9/8/98			CON	PCB170	8082	124-RWW-002	0.3	J	UG/KG
R01	Mouse	9/8/98			CON	PCB18	8082	124-RWW-002	1.5	R	UG/KG
R01	Mouse	9/8/98			CON	PCB180	8082	124-RWW-002	1.5	J	UG/KG
R01	Mouse	9/8/98			CON	PCB187	8082	124-RWW-002	1.2	J	UG/KG
R01	Mouse	9/8/98			CON	PCB195	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB206	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB209	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB28	8082	124-RWW-002	1.5	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Mouse	9/8/98			CON	PCB44	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB52	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB66	8082	124-RWW-002	1.5	UJ	UG/KG
R01	Mouse	9/8/98			CON	PCB8	8082	124-RWW-002	0.6	R	UG/KG
R01	Mouse	9/8/98			DDT 24	2,4'-DDD	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			DDT 24	2,4'-DDE	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			DDT 24	2,4'-DDT	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			DDT 44	4,4'-DDD	8081A	124-RWW-002	6	U	UG/KG
R01	Mouse	9/8/98			DDT 44	4,4'-DDE	8081A	124-RWW-002	5.8	J	UG/KG
R01	Mouse	9/8/98			DDT 44	4,4'-DDT	8081A	124-RWW-002	3	UJ	UG/KG
R01	Mouse	9/8/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-002	6.17	J	%
R01	Mouse	9/8/98			METAL	ALUMINUM	6010	124-RWW-002	125	J	MG/KG
R01	Mouse	9/8/98			METAL	ANTIMONY	6010	124-RWW-002	0.06	U	MG/KG
R01	Mouse	9/8/98			METAL	ARSENIC	6010	124-RWW-002	1.5	U	MG/KG
R01	Mouse	9/8/98			METAL	BARIUM	6010	124-RWW-002	6.7		MG/KG
R01	Mouse	9/8/98			METAL	BERYLLIUM	6010	124-RWW-002	0.06	U	MG/KG
R01	Mouse	9/8/98			METAL	CADMIUM	6010	124-RWW-002	0.12		MG/KG
R01	Mouse	9/8/98			METAL	CALCIUM	6010	124-RWW-002	31098		MG/KG
R01	Mouse	9/8/98			METAL	CHROMIUM	6010	124-RWW-002	3	U	MG/KG
R01	Mouse	9/8/98			METAL	COBALT	6010	124-RWW-002	0.24		MG/KG
R01	Mouse	9/8/98			METAL	COPPER	6010	124-RWW-002	8.2		MG/KG
R01	Mouse	9/8/98			METAL	IRON	6010	124-RWW-002	216		MG/KG
R01	Mouse	9/8/98			METAL	LEAD	6010	124-RWW-002	1.8		MG/KG
R01	Mouse	9/8/98			METAL	MAGNESIUM	6010	124-RWW-002	1375		MG/KG
R01	Mouse	9/8/98			METAL	MANGANESE	6010	124-RWW-002	7.9		MG/KG
R01	Mouse	9/8/98			METAL	MERCURY	6010	124-RWW-002	0.06		MG/KG
R01	Mouse	9/8/98			METAL	MOLYBDENUM	6010	124-RWW-002	0.58		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Mouse	9/8/98			METAL	NICKEL	6010	124-RWW-002	5.5		MG/KG
R01	Mouse	9/8/98			METAL	POTASSIUM	6010	124-RWW-002	9726		MG/KG
R01	Mouse	9/8/98			METAL	SELENIUM	6010	124-RWW-002	3	U	MG/KG
R01	Mouse	9/8/98			METAL	SILVER	6010	124-RWW-002	0.06	U	MG/KG
R01	Mouse	9/8/98			METAL	SODIUM	6010	124-RWW-002	3994		MG/KG
R01	Mouse	9/8/98			METAL	THALLIUM	6010	124-RWW-002	0.06	U	MG/KG
R01	Mouse	9/8/98			METAL	TIN	6010	124-RWW-002	3	U	MG/KG
R01	Mouse	9/8/98			METAL	VANADIUM	6010	124-RWW-002	3	U	MG/KG
R01	Mouse	9/8/98			METAL	ZINC	6010	124-RWW-002	88		MG/KG
R01	Mouse	9/8/98			PAH	BIPHENYL	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	PERYLENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH High	PYRENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	MOUSE	9/8/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-002	30	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Mouse	9/8/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-002	67.2		%MST
R01	Mouse	9/8/98			PEST	ALDRIN	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ALPHA-BHC	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-002	6	U	UG/KG
R01	Mouse	9/8/98			PEST	BETA-BHC	8081A	124-RWW-002	12.5	J	UG/KG
R01	Mouse	9/8/98			PEST	CHLORDANE	8081A	124-RWW-002	76	U	UG/KG
R01	Mouse	9/8/98			PEST	DELTA-BHC	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	DIELDRIN	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ENDOSULFAN I	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ENDOSULFAN II	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ENDRIN	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	ENDRIN KETONE	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-002	3	UJ	UG/KG
R01	Mouse	9/8/98			PEST	HEPTACHLOR	8081A	124-RWW-002	6.4	J	UG/KG
R01	Mouse	9/8/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	METHOXYCHLOR	8081A	124-RWW-002	3	UJ	UG/KG
R01	Mouse	9/8/98			PEST	MIREX	8081A	124-RWW-002	152	U	UG/KG
R01	Mouse	9/8/98			PEST	TOXAPHENE	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-002	3	U	UG/KG
R01	Mouse	9/8/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-002			

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R01	Mouse	9/8/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-002	30	U	UG/KG
R01	Mouse	9/8/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-002	15	U	UG/KG
R01	Mouse	9/8/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-002	15	U	UG/KG
R01	Mouse	9/8/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-002	15	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-002	15	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB101	8082	124-RWW-003	0.2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB105	8082	124-RWW-003	0.1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB118	8082	124-RWW-003	0.2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB128	8082	124-RWW-003	0.1	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB138	8082	124-RWW-003	0.3	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB153	8082	124-RWW-003	0.2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB170	8082	124-RWW-003	0.1	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB18	8082	124-RWW-003	0.1	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB180	8082	124-RWW-003	0.09	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB187	8082	124-RWW-003	0.08	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB195	8082	124-RWW-003	0.1	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB206	8082	124-RWW-003	0.09	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB209	8082	124-RWW-003	0.09	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB28	8082	124-RWW-003	0.08	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB44	8082	124-RWW-003	0.08	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB52	8082	124-RWW-003	0.08	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB66	8082	124-RWW-003	0.2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		CON	PCB8	8082	124-RWW-003	0.1	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-003	0.2	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	ALUMINUM	6010	124-RWW-003	109		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	ANTIMONY	6010	124-RWW-003	0.24	J	MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	ARSENIC	6010	124-RWW-003	1.2		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	BARIUM	6010	124-RWW-003	44.4		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	BERYLLIUM	6010	124-RWW-003	0.04		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	CADMIUM	6010	124-RWW-003	0.08		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	CALCIUM	6010	124-RWW-003	6834		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	CHROMIUM	6010	124-RWW-003	1		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	COBALT	6010	124-RWW-003	0.2		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	COPPER	6010	124-RWW-003	8.5		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	IRON	6010	124-RWW-003	236		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	LEAD	6010	124-RWW-003	2.83		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	MAGNESIUM	6010	124-RWW-003	1670		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	MANGANESE	6010	124-RWW-003	14.4		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	MERCURY	6010	124-RWW-003	0.01		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	MOLYBDENUM	6010	124-RWW-003	2.24		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	NICKEL	6010	124-RWW-003	3.1		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	POTASSIUM	6010	124-RWW-003	12773		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	SELENIUM	6010	124-RWW-003	3	UJ	MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	SILVER	6010	124-RWW-003	0.005	J	MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	SODIUM	6010	124-RWW-003	6681		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	THALLIUM	6010	124-RWW-003	0.007	U	MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	TIN	6010	124-RWW-003	0.5	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Terrestrial Plant	9/1/98	0		METAL	VANADIUM	6010	124-RWW-003	2		MG/KG
R02	Terrestrial Plant	9/1/98	0		METAL	ZINC	6010	124-RWW-003	23		MG/KG
R02	Terrestrial Plant	9/1/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-003	0.9	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-003	0.8	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-003	1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-003	1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-003	2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-003	1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-003	3	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-003	2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	CHRYSENE	PAH_SIM	124-RWW-003	4	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-003	4	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	FLUORANTHENE	PAH_SIM	124-RWW-003	11	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-003	2	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	PERYLENE	PAH_SIM	124-RWW-003	0.8	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH High	PYRENE	PAH_SIM	124-RWW-003	8	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-003	4	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-003	0.9	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-003	0.9	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	ANTHRACENE	PAH_SIM	124-RWW-003	0.9	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	FLUORENE	PAH_SIM	124-RWW-003	1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-003	10	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-003	12	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-003	8.4		%MST
R02	Terrestrial Plant	9/1/98	0		PCS	PERCENT SOLIDS	FREEZE DRY	124-RWW-003	91.6		%SLD
R02	Terrestrial Plant	9/1/98	0		PEST	ALDRIN	8081A	124-RWW-003	0.3	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ALPHA-BHC	8081A	124-RWW-003	0.2	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Terrestrial Plant	9/1/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	BETA-BHC	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	CHLORDANE	8081A	124-RWW-003	11	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	DELTA-BHC	8081A	124-RWW-003	0.2	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	DIELDRIN	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ENDRIN	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-003	0.2	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	HEPTACHLOR	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	MIREX	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	TOXAPHENE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-003	22	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-003	0.2	U	UG/KG
R02	Terrestrial Plant	9/1/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-003	1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-003	1	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-003	0.9	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-003	2	UJ	UG/KG
R02	Terrestrial Plant	9/1/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-003	3	J	UG/KG
R02	Terrestrial Plant	9/1/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-003	4	U	UG/KG
									2	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Terrestrial Plant	9/1/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-003	13		UG/KG
R02	Mouse	9/8/98			CON	PCB101	8082	124-RWW-004	1.5	R	UG/KG
R02	Mouse	9/8/98			CON	PCB105	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB118	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB128	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB138	8082	124-RWW-004	0.9	J	UG/KG
R02	Mouse	9/8/98			CON	PCB153	8082	124-RWW-004	0.6	J	UG/KG
R02	Mouse	9/8/98			CON	PCB170	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB18	8082	124-RWW-004	1.5	R	UG/KG
R02	Mouse	9/8/98			CON	PCB180	8082	124-RWW-004	0.6	J	UG/KG
R02	Mouse	9/8/98			CON	PCB187	8082	124-RWW-004	0.21	J	UG/KG
R02	Mouse	9/8/98			CON	PCB195	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB206	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB209	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB28	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB44	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB52	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB66	8082	124-RWW-004	1.5	UJ	UG/KG
R02	Mouse	9/8/98			CON	PCB8	8082	124-RWW-004	1.5	R	UG/KG
R02	Mouse	9/8/98			DDT 24	2,4'-DDD	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			DDT 24	2,4'-DDE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			DDT 24	2,4'-DDT	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			DDT 44	4,4'-DDD	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			DDT 44	4,4'-DDE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			DDT 44	4,4'-DDT	8081A	124-RWW-004	12	UJ	UG/KG
R02	Mouse	9/8/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-004	6.44	J	%
R02	Mouse	9/8/98			METAL	ALUMINUM	6010	124-RWW-004	71	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Mouse	9/8/98			METAL	ANTIMONY	6010	124-RWW-004	0.06	U	MG/KG
R02	Mouse	9/8/98			METAL	ARSENIC	6010	124-RWW-004	1.5	U	MG/KG
R02	Mouse	9/8/98			METAL	BARIUM	6010	124-RWW-004	12		MG/KG
R02	Mouse	9/8/98			METAL	BERYLLIUM	6010	124-RWW-004	0.06	U	MG/KG
R02	Mouse	9/8/98			METAL	CADMIUM	6010	124-RWW-004	0.12		MG/KG
R02	Mouse	9/8/98			METAL	CALCIUM	6010	124-RWW-004	24908		MG/KG
R02	Mouse	9/8/98			METAL	CHROMIUM	6010	124-RWW-004	1.2	J	MG/KG
R02	Mouse	9/8/98			METAL	COBALT	6010	124-RWW-004	0.25		MG/KG
R02	Mouse	9/8/98			METAL	COPPER	6010	124-RWW-004	10.7		MG/KG
R02	Mouse	9/8/98			METAL	IRON	6010	124-RWW-004	264		MG/KG
R02	Mouse	9/8/98			METAL	LEAD	6010	124-RWW-004	0.9		MG/KG
R02	Mouse	9/8/98			METAL	MAGNESIUM	6010	124-RWW-004	1390		MG/KG
R02	Mouse	9/8/98			METAL	MANGANESE	6010	124-RWW-004	10.4		MG/KG
R02	Mouse	9/8/98			METAL	MERCURY	6010	124-RWW-004	0.015	J	MG/KG
R02	Mouse	9/8/98			METAL	MOLYBDENUM	6010	124-RWW-004	0.74		MG/KG
R02	Mouse	9/8/98			METAL	NICKEL	6010	124-RWW-004	5.2		MG/KG
R02	Mouse	9/8/98			METAL	POTASSIUM	6010	124-RWW-004	9080		MG/KG
R02	Mouse	9/8/98			METAL	SELENIUM	6010	124-RWW-004	3	U	MG/KG
R02	Mouse	9/8/98			METAL	SILVER	6010	124-RWW-004	0.06	U	MG/KG
R02	Mouse	9/8/98			METAL	SODIUM	6010	124-RWW-004	3896		MG/KG
R02	Mouse	9/8/98			METAL	THALLIUM	6010	124-RWW-004	0.06	U	MG/KG
R02	Mouse	9/8/98			METAL	TIN	6010	124-RWW-004	3	U	MG/KG
R02	Mouse	9/8/98			METAL	VANADIUM	6010	124-RWW-004	3	U	MG/KG
R02	Mouse	9/8/98			METAL	ZINC	6010	124-RWW-004	132		MG/KG
R02	Mouse	9/8/98			PAH	BIPHENYL	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-004	31	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Mouse	9/8/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	PERYLENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH High	PYRENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-004	67.4		%MST
R02	Mouse	9/8/98			PEST	ALDRIN	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ALPHA-BHC	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	BETA-BHC	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	CHLORDANE	8081A	124-RWW-004	77	U	UG/KG
R02	Mouse	9/8/98			PEST	DELTA-BHC	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	DIELDRIN	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ENDOSULFAN I	8081A	124-RWW-004	3	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R02	Mouse	9/8/98			PEST	ENDOSULFAN II	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ENDRIN	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	ENDRIN KETONE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-004	1.8		UG/KG
R02	Mouse	9/8/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	HEPTACHLOR	8081A	124-RWW-004	3	UJ	UG/KG
R02	Mouse	9/8/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-004	9.5		UG/KG
R02	Mouse	9/8/98			PEST	METHOXYCHLOR	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			PEST	MIREX	8081A	124-RWW-004	3	UJ	UG/KG
R02	Mouse	9/8/98			PEST	TOXAPHENE	8081A	124-RWW-004	153	U	UG/KG
R02	Mouse	9/8/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-004	3	U	UG/KG
R02	Mouse	9/8/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-004	31	U	UG/KG
R02	Mouse	9/8/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-004	77	U	UG/KG
R02	Mouse	9/8/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-004	77	U	UG/KG
R02	Mouse	9/8/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-004	77	UJ	UG/KG
R02	Mouse	9/8/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-004	77	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB101	8082	124-RWW-005	0.27	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB105	8082	124-RWW-005	0.43	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB118	8082	124-RWW-005	0.43	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB128	8082	124-RWW-005	0.5	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB138	8082	124-RWW-005	1.1	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB153	8082	124-RWW-005	0.37	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB170	8082	124-RWW-005	0.48	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB18	8082	124-RWW-005	0.5	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB180	8082	124-RWW-005	0.37	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB187	8082	124-RWW-005	0.37	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB195	8082	124-RWW-005	0.5	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB206	8082	124-RWW-005	0.43	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB209	8082	124-RWW-005	0.43	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB28	8082	124-RWW-005	0.37	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB44	8082	124-RWW-005	0.37	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB52	8082	124-RWW-005	0.37	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB66	8082	124-RWW-005	0.37	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		CON	PCB8	8082	124-RWW-005	0.5	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	ALUMINUM	6010	124-RWW-005	80		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	ANTIMONY	6010	124-RWW-005	0.16	J	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	ARSENIC	6010	124-RWW-005	8.6		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	BARIUM	6010	124-RWW-005	3.7		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	BERYLLIUM	6010	124-RWW-005	0.11	U	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	CADMIUM	6010	124-RWW-005	0.7		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	CALCIUM	6010	124-RWW-005	4385		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	CHROMIUM	6010	124-RWW-005	2.1	U	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	COBALT	6010	124-RWW-005	0.32		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		METAL	COPPER	6010	124-RWW-005	5.9		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	IRON	6010	124-RWW-005	203		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	LEAD	6010	124-RWW-005	1.82		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	MAGNESIUM	6010	124-RWW-005	8663		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	MANGANESE	6010	124-RWW-005	123		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	MERCURY	6010	124-RWW-005	0.027	U	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	MOLYBDENUM	6010	124-RWW-005	0.59		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	NICKEL	6010	124-RWW-005	2.1		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	POTASSIUM	6010	124-RWW-005	12406		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	SELENIUM	6010	124-RWW-005	5	UJ	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	SILVER	6010	124-RWW-005	0.021	U	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	SODIUM	6010	124-RWW-005	115508		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	THALLIUM	6010	124-RWW-005	0.11		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	TIN	6010	124-RWW-005	2.7	U	MG/KG
R03	Emergent Wetland Plant	9/1/98	0		METAL	VANADIUM	6010	124-RWW-005	1.6	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		METAL	ZINC	6010	124-RWW-005	21		MG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-005	4.3	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-005	3.7	R	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-005	3.7	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(A)PYRENE	PAH_SIM	124-RWW-005	3.7	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-005	3.2	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(E)PYRENE	PAH_SIM	124-RWW-005	2.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-005	4.3	J	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-005	5	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	CHRYSENE	PAH_SIM	124-RWW-005	5	J	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-005	21		UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	FLUORANTHENE	PAH_SIM	124-RWW-005	11	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-005	3.7	J	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	PERYLENE	PAH_SIM	124-RWW-005	3.7	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH HIGH	PYRENE	PAH_SIM	124-RWW-005	11	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-005	5	J	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	ACENAPHTHENE	PAH_SIM	124-RWW-005	4.3	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	ACENAPHTHYLENE	PAH_SIM	124-RWW-005	4.3	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	ANTHRACENE	PAH_SIM	124-RWW-005	4.3	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	FLUORENE	PAH_SIM	124-RWW-005	3.2	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	NAPHTHALENE	PAH_SIM	124-RWW-005	16	J	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PAH LOW	PHENANTHRENE	PAH_SIM	124-RWW-005	16	J	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-005	81.3		%MST
R03	Emergent Wetland Plant	9/1/98	0		PCS	PERCENT SOLIDS	FREEZE DRY	124-RWW-005	18.7		%SLD
R03	Emergent Wetland Plant	9/1/98	0		PEST	ALDRIN	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ALPHA-BHC	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-005	2.1	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	BETA-BHC	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	CHLORDANE	8081A	124-RWW-005	53	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	DELTA-BHC	8081A	124-RWW-005	1.1	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		PEST	DIELDRIN	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-005	1.1	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-005	1.1	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	HEPTACHLOR	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	MIREX	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	TOXAPHENE	8081A	124-RWW-005	107	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-005	1.1	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Emergent Wetland Plant	9/1/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-005	1.1	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-005	4.3	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-005	3.2	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-005	4.3	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-005	11	UJ	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-005	11	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-005	64		UG/KG
R03	Emergent Wetland Plant	9/1/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-005	11	U	UG/KG
R03	Emergent Wetland Plant	9/1/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-005	21	U	UG/KG
R03	Mouse	9/8/98			CON	PCB101	8082	124-RWW-006	1.5	R	UG/KG
R03	Mouse	9/8/98			CON	PCB105	8082	124-RWW-006	0.28	J	UG/KG
R03	Mouse	9/8/98			CON	PCB118	8082	124-RWW-006	0.6	J	UG/KG
R03	Mouse	9/8/98			CON	PCB128	8082	124-RWW-006	0.3	J	UG/KG
R03	Mouse	9/8/98			CON	PCB138	8082	124-RWW-006	2.2	J	UG/KG
R03	Mouse	9/8/98			CON	PCB153	8082	124-RWW-006	4.3	J	UG/KG
R03	Mouse	9/8/98			CON	PCB170	8082	124-RWW-006	1.5	UJ	UG/KG
R03	Mouse	9/8/98			CON	PCB18	8082	124-RWW-006	1.5	R	UG/KG
R03	Mouse	9/8/98			CON	PCB180	8082	124-RWW-006	3	J	UG/KG
R03	Mouse	9/8/98			CON	PCB187	8082	124-RWW-006	2.2	J	UG/KG
R03	Mouse	9/8/98			CON	PCB195	8082	124-RWW-006	1.5	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Mouse	9/8/98			CON	PCB206	8082	124-RWW-006	0.25	J	UG/KG
R03	Mouse	9/8/98			CON	PCB209	8082	124-RWW-006	1.5	UJ	UG/KG
R03	Mouse	9/8/98			CON	PCB28	8082	124-RWW-006	1.5	UJ	UG/KG
R03	Mouse	9/8/98			CON	PCB44	8082	124-RWW-006	1.5	UJ	UG/KG
R03	Mouse	9/8/98			CON	PCB52	8082	124-RWW-006	1.5	UJ	UG/KG
R03	Mouse	9/8/98			CON	PCB66	8082	124-RWW-006	1.5	UJ	UG/KG
R03	Mouse	9/8/98			CON	PCB8	8082	124-RWW-006	0.3	R	UG/KG
R03	Mouse	9/8/98			DDT 24	2,4'-DDD	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			DDT 24	2,4'-DDE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			DDT 24	2,4'-DDT	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			DDT 44	4,4'-DDD	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			DDT 44	4,4'-DDE	8081A	124-RWW-006	6.5		UG/KG
R03	Mouse	9/8/98			DDT 44	4,4'-DDT	8081A	124-RWW-006	6	UJ	UG/KG
R03	Mouse	9/8/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-006	6.22	J	%
R03	Mouse	9/8/98			METAL	ALUMINUM	6010	124-RWW-006	183	J	MG/KG
R03	Mouse	9/8/98			METAL	ANTIMONY	6010	124-RWW-006	0.06	U	MG/KG
R03	Mouse	9/8/98			METAL	ARSENIC	6010	124-RWW-006	1.5	U	MG/KG
R03	Mouse	9/8/98			METAL	BARIUM	6010	124-RWW-006	9.6		MG/KG
R03	Mouse	9/8/98			METAL	BERYLLIUM	6010	124-RWW-006	0.06	U	MG/KG
R03	Mouse	9/8/98			METAL	CADMIUM	6010	124-RWW-006	0.12		MG/KG
R03	Mouse	9/8/98			METAL	CALCIUM	6010	124-RWW-006	39009		MG/KG
R03	Mouse	9/8/98			METAL	CHROMIUM	6010	124-RWW-006	2.2	J	MG/KG
R03	Mouse	9/8/98			METAL	COBALT	6010	124-RWW-006	0.3		MG/KG
R03	Mouse	9/8/98			METAL	COPPER	6010	124-RWW-006	9.6		MG/KG
R03	Mouse	9/8/98			METAL	IRON	6010	124-RWW-006	272		MG/KG
R03	Mouse	9/8/98			METAL	LEAD	6010	124-RWW-006	1.61		MG/KG
R03	Mouse	9/8/98			METAL	MAGNESIUM	6010	124-RWW-006	1430		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Mouse	9/8/98			METAL	MANGANESE	6010	124-RWW-006	8.4		MG/KG
R03	Mouse	9/8/98			METAL	MERCURY	6010	124-RWW-006	0.09		MG/KG
R03	Mouse	9/8/98			METAL	MOLYBDENUM	6010	124-RWW-006	0.68		MG/KG
R03	Mouse	9/8/98			METAL	NICKEL	6010	124-RWW-006	7.7		MG/KG
R03	Mouse	9/8/98			METAL	POTASSIUM	6010	124-RWW-006	9505		MG/KG
R03	Mouse	9/8/98			METAL	SELENIUM	6010	124-RWW-006	3	U	MG/KG
R03	Mouse	9/8/98			METAL	SILVER	6010	124-RWW-006	0.06	U	MG/KG
R03	Mouse	9/8/98			METAL	SODIUM	6010	124-RWW-006	4241		MG/KG
R03	Mouse	9/8/98			METAL	THALLIUM	6010	124-RWW-006	0.06	U	MG/KG
R03	Mouse	9/8/98			METAL	TIN	6010	124-RWW-006	3	U	MG/KG
R03	Mouse	9/8/98			METAL	VANADIUM	6010	124-RWW-006	3	U	MG/KG
R03	Mouse	9/8/98			METAL	ZINC	6010	124-RWW-006	155		MG/KG
R03	Mouse	9/8/98			PAH	BIPHENYL	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	PERYLENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH High	PYRENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-006	31	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Mouse	9/8/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-006	67.7		%MST
R03	Mouse	9/8/98			PEST	ALDRIN	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ALPHA-BHC	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	BETA-BHC	8081A	124-RWW-006	9	U	UG/KG
R03	Mouse	9/8/98			PEST	CHLORDANE	8081A	124-RWW-006	77	U	UG/KG
R03	Mouse	9/8/98			PEST	DELTA-BHC	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	DIELDRIN	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ENDOSULFAN I	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ENDOSULFAN II	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ENDRIN	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	ENDRIN KETONE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	HEPTACHLOR	8081A	124-RWW-006	3	UJ	UG/KG
R03	Mouse	9/8/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-006	9	U	UG/KG
R03	Mouse	9/8/98			PEST	METHOXYCHLOR	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			PEST	MIREX	8081A	124-RWW-006	3	UJ	UG/KG
R03	Mouse	9/8/98			PEST	TOXAPHENE	8081A	124-RWW-006	155	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R03	Mouse	9/8/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-006	3	U	UG/KG
R03	Mouse	9/8/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-006	31	U	UG/KG
R03	Mouse	9/8/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-006	15	U	UG/KG
R03	Mouse	9/8/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-006	15	U	UG/KG
R03	Mouse	9/8/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-006	15	UJ	UG/KG
R03	Mouse	9/8/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-006	15	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB101	8082	124-RWW-007	0.8	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB105	8082	124-RWW-007	0.3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB118	8082	124-RWW-007	0.8	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB128	8082	124-RWW-007	0.3	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB138	8082	124-RWW-007	1.4	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB153	8082	124-RWW-007	0.8	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB170	8082	124-RWW-007	0.25	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB18	8082	124-RWW-007	0.3	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB180	8082	124-RWW-007	0.3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB187	8082	124-RWW-007	0.19	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB195	8082	124-RWW-007	0.3	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB206	8082	124-RWW-007	0.22	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB209	8082	124-RWW-007	0.22	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB28	8082	124-RWW-007	0.19	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB44	8082	124-RWW-007	0.3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB52	8082	124-RWW-007	0.3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB66	8082	124-RWW-007	0.8	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		CON	PCB8	8082	124-RWW-007	0.3	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	ALUMINUM	6010	124-RWW-007	68		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		METAL	ANTIMONY	6010	124-RWW-007	0.11	J	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	ARSENIC	6010	124-RWW-007	2.2		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	BARIUM	6010	124-RWW-007	31.5		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	BERYLLIUM	6010	124-RWW-007	0.05		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	CADMIUM	6010	124-RWW-007	0.16		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	CALCIUM	6010	124-RWW-007	5726		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	CHROMIUM	6010	124-RWW-007	1.1	U	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	COBALT	6010	124-RWW-007	0.44		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	COPPER	6010	124-RWW-007	9		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	IRON	6010	124-RWW-007	167		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	LEAD	6010	124-RWW-007	1.75		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	MAGNESIUM	6010	124-RWW-007	4630		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	MANGANESE	6010	124-RWW-007	109.9		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	MERCURY	6010	124-RWW-007	0.014	U	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	MOLYBDENUM	6010	124-RWW-007	2.11		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		METAL	NICKEL	6010	124-RWW-007	4.7		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	POTASSIUM	6010	124-RWW-007	14904		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	SELENIUM	6010	124-RWW-007	5	UJ	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	SILVER	6010	124-RWW-007	0.011	U	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	SODIUM	6010	124-RWW-007	16521		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	THALLIUM	6010	124-RWW-007	0.016	U	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	TIN	6010	124-RWW-007	1.4	U	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	VANADIUM	6010	124-RWW-007	0.8	U	MG/KG
R04	Emergent Wetland Plant	9/1/98	0		METAL	ZINC	6010	124-RWW-007	49		MG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-007	2.2	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-007	1.9	R	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-007	3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(A)PYRENE	PAH_SIM	124-RWW-007	3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-007	3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(E)PYRENE	PAH_SIM	124-RWW-007	3	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-007	5	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-007	3	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	CHRYSENE	PAH_SIM	124-RWW-007	8	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-007	25	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	FLUORANTHENE	PAH_SIM	124-RWW-007	14	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-007	3	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	PERYLENE	PAH_SIM	124-RWW-007	1.9	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH HIGH	PYRENE	PAH_SIM	124-RWW-007	11	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-007	8	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	ACENAPHTHENE	PAH_SIM	124-RWW-007	2.2	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	ACENAPHTHYLENE	PAH_SIM	124-RWW-007	2.2	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	ANTHRACENE	PAH_SIM	124-RWW-007	2.2	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	FLUORENE	PAH_SIM	124-RWW-007	1.6	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	NAPHTHALENE	PAH_SIM	124-RWW-007	14	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PAH LOW	PHENANTHRENE	PAH_SIM	124-RWW-007	16	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-007	63.5		%MST
R04	Emergent Wetland Plant	9/1/98	0		PCS	PERCENT SOLIDS	FREEZE DRY	124-RWW-007	36.5		%SLD
R04	Emergent Wetland Plant	9/1/98	0		PEST	ALDRIN	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ALPHA-BHC	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-007	2.5	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	BETA-BHC	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	CHLORDANE	8081A	124-RWW-007	27	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	DELTA-BHC	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	DIELDRIN	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-007	0.5	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-007	0.5	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-007	0.5	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	HEPTACHLOR	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	MIREX	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	TOXAPHENE	8081A	124-RWW-007	55	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-007	1.4	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-007	0.5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-007	2.2	J	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-007	1.6	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-007	2.2	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-007	5	UJ	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-007	5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-007	11	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Emergent Wetland Plant	9/1/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-007	5	U	UG/KG
R04	Emergent Wetland Plant	9/1/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-007	11	U	UG/KG
R04	Mouse	9/10/98			CON	PCB101	8082	124-RWW-008	2.1	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB105	8082	124-RWW-008	1.5	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB118	8082	124-RWW-008	1.5	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB128	8082	124-RWW-008	1.5	U	UG/KG
R04	Mouse	9/10/98			CON	PCB138	8082	124-RWW-008	1.8	U	UG/KG
R04	Mouse	9/10/98			CON	PCB153	8082	124-RWW-008	2.4	U	UG/KG
R04	Mouse	9/10/98			CON	PCB170	8082	124-RWW-008	1.5	U	UG/KG
R04	Mouse	9/10/98			CON	PCB18	8082	124-RWW-008	1.5	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB180	8082	124-RWW-008	1.2	J	UG/KG
R04	Mouse	9/10/98			CON	PCB187	8082	124-RWW-008	0.6	J	UG/KG
R04	Mouse	9/10/98			CON	PCB195	8082	124-RWW-008	1.5	U	UG/KG
R04	Mouse	9/10/98			CON	PCB206	8082	124-RWW-008	1.5	U	UG/KG
R04	Mouse	9/10/98			CON	PCB209	8082	124-RWW-008	1.5	U	UG/KG
R04	Mouse	9/10/98			CON	PCB28	8082	124-RWW-008	1.5	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB44	8082	124-RWW-008	3.9	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB52	8082	124-RWW-008	4.2	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB66	8082	124-RWW-008	3.6	UJ	UG/KG
R04	Mouse	9/10/98			CON	PCB8	8082	124-RWW-008	0.3	J	UG/KG
R04	Mouse	9/10/98			DDT 24	2,4'-DDD	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			DDT 24	2,4'-DDE	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			DDT 24	2,4'-DDT	8081A	124-RWW-008	24	U	UG/KG
R04	Mouse	9/10/98			DDT 44	4,4'-DDD	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			DDT 44	4,4'-DDE	8081A	124-RWW-008	1.8	J	UG/KG
R04	Mouse	9/10/98			DDT 44	4,4'-DDT	8081A	124-RWW-008	6	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Mouse	9/10/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-008	7.31	J	%
R04	Mouse	9/10/98			METAL	ALUMINUM	6010	124-RWW-008	60	J	MG/KG
R04	Mouse	9/10/98			METAL	ANTIMONY	6010	124-RWW-008	0.06	U	MG/KG
R04	Mouse	9/10/98			METAL	ARSENIC	6010	124-RWW-008	1.5	U	MG/KG
R04	Mouse	9/10/98			METAL	BARIUM	6010	124-RWW-008	7.3		MG/KG
R04	Mouse	9/10/98			METAL	BERYLLIUM	6010	124-RWW-008	0.06	U	MG/KG
R04	Mouse	9/10/98			METAL	CADMIUM	6010	124-RWW-008	0.09	J	MG/KG
R04	Mouse	9/10/98			METAL	CALCIUM	6010	124-RWW-008	35952		MG/KG
R04	Mouse	9/10/98			METAL	CHROMIUM	6010	124-RWW-008	1.5	J	MG/KG
R04	Mouse	9/10/98			METAL	COBALT	6010	124-RWW-008	0.21	J	MG/KG
R04	Mouse	9/10/98			METAL	COPPER	6010	124-RWW-008	6		MG/KG
R04	Mouse	9/10/98			METAL	IRON	6010	124-RWW-008	224		MG/KG
R04	Mouse	9/10/98			METAL	LEAD	6010	124-RWW-008	2.3	J	MG/KG
R04	Mouse	9/10/98			METAL	MAGNESIUM	6010	124-RWW-008	1502		MG/KG
R04	Mouse	9/10/98			METAL	MANGANESE	6010	124-RWW-008	7.6		MG/KG
R04	Mouse	9/10/98			METAL	MERCURY	6010	124-RWW-008	0.024	J	MG/KG
R04	Mouse	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-008	0.57		MG/KG
R04	Mouse	9/10/98			METAL	NICKEL	6010	124-RWW-008	4.5	J	MG/KG
R04	Mouse	9/10/98			METAL	POTASSIUM	6010	124-RWW-008	8822		MG/KG
R04	Mouse	9/10/98			METAL	SELENIUM	6010	124-RWW-008	3	UJ	MG/KG
R04	Mouse	9/10/98			METAL	SILVER	6010	124-RWW-008	0.06	U	MG/KG
R04	Mouse	9/10/98			METAL	SODIUM	6010	124-RWW-008	3867		MG/KG
R04	Mouse	9/10/98			METAL	THALLIUM	6010	124-RWW-008	0.06	U	MG/KG
R04	Mouse	9/10/98			METAL	TIN	6010	124-RWW-008	3	U	MG/KG
R04	Mouse	9/10/98			METAL	VANADIUM	6010	124-RWW-008	3	U	MG/KG
R04	Mouse	9/10/98			METAL	ZINC	6010	124-RWW-008	142		MG/KG
R04	Mouse	9/10/98			PAH	BIPHENYL	PAH_SIM	124-RWW-008	30	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Mouse	9/10/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-008	30	R	UG/KG
R04	Mouse	9/10/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	PERYLENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH High	PYRENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-008	30	R	UG/KG
R04	Mouse	9/10/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-008	66.9		%MST
R04	Mouse	9/10/98			PEST	ALDRIN	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	ALPHA-BHC	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	BETA-BHC	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	CHLORDANE	8081A	124-RWW-008	76	U	UG/KG
R04	Mouse	9/10/98			PEST	DELTA-BHC	8081A	124-RWW-008	3	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Mouse	9/10/98			PEST	DIELDRIN	8081A	124-RWW-008	3	J	UG/KG
R04	Mouse	9/10/98			PEST	ENDOSULFAN I	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	ENDOSULFAN II	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	ENDRIN	8081A	124-RWW-008	3		UG/KG
R04	Mouse	9/10/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-008	6	U	UG/KG
R04	Mouse	9/10/98			PEST	ENDRIN KETONE	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	HEPTACHLOR	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-008	9		UG/KG
R04	Mouse	9/10/98			PEST	METHOXYCHLOR	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			PEST	MIREX	8081A	124-RWW-008	3	UJ	UG/KG
R04	Mouse	9/10/98			PEST	TOXAPHENE	8081A	124-RWW-008	151	U	UG/KG
R04	Mouse	9/10/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-008	3	U	UG/KG
R04	Mouse	9/10/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-008	30	U	UG/KG
R04	Mouse	9/10/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-008	24	U	UG/KG
R04	Mouse	9/10/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-008	24	J	UG/KG
R04	Mouse	9/10/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-008	9	J	UG/KG
R04	Mouse	9/10/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-008	24	U	UG/KG
R04	Mouse Hide	9/10/98			METAL	ALUMINUM	6010	124-RWW-008H	57	J	MG/KG
R04	Mouse Hide	9/10/98			METAL	ANTIMONY	6010	124-RWW-008H	0.05	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	ARSENIC	6010	124-RWW-008H	0.8	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R04	Mouse Hide	9/10/98			METAL	BARIUM	6010	124-RWW-008H	1.3	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	BERYLLIUM	6010	124-RWW-008H	0.05	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	CADMIUM	6010	124-RWW-008H	0.08	J	MG/KG
R04	Mouse Hide	9/10/98			METAL	CALCIUM	6010	124-RWW-008H	770		MG/KG
R04	Mouse Hide	9/10/98			METAL	CHROMIUM	6010	124-RWW-008H	3	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	COBALT	6010	124-RWW-008H	0.08	J	MG/KG
R04	Mouse Hide	9/10/98			METAL	COPPER	6010	124-RWW-008H	5.4		MG/KG
R04	Mouse Hide	9/10/98			METAL	IRON	6010	124-RWW-008H	207		MG/KG
R04	Mouse Hide	9/10/98			METAL	LEAD	6010	124-RWW-008H	0.62	J	MG/KG
R04	Mouse Hide	9/10/98			METAL	MAGNESIUM	6010	124-RWW-008H	522		MG/KG
R04	Mouse Hide	9/10/98			METAL	MANGANESE	6010	124-RWW-008H	3.9		MG/KG
R04	Mouse Hide	9/10/98			METAL	MERCURY	6010	124-RWW-008H	0.05		MG/KG
R04	Mouse Hide	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-008H	0.49		MG/KG
R04	Mouse Hide	9/10/98			METAL	NICKEL	6010	124-RWW-008H	1.16	J	MG/KG
R04	Mouse Hide	9/10/98			METAL	POTASSIUM	6010	124-RWW-008H	5736		MG/KG
R04	Mouse Hide	9/10/98			METAL	SELENIUM	6010	124-RWW-008H	3	UJ	MG/KG
R04	Mouse Hide	9/10/98			METAL	SILVER	6010	124-RWW-008H	0.05	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	SODIUM	6010	124-RWW-008H	3411		MG/KG
R04	Mouse Hide	9/10/98			METAL	THALLIUM	6010	124-RWW-008H	0.05	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	TIN	6010	124-RWW-008H	3	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	VANADIUM	6010	124-RWW-008H	3	U	MG/KG
R04	Mouse Hide	9/10/98			METAL	ZINC	6010	124-RWW-008H	103		MG/KG
R04	Mouse Hide	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-008H	61.3		%MST
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB101	8082	124-RWW-009	0.3	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB105	8082	124-RWW-009	0.2	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB118	8082	124-RWW-009	0.5	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB128	8082	124-RWW-009	0.2	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB138	8082	124-RWW-009	0.7	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB153	8082	124-RWW-009	0.3	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB170	8082	124-RWW-009	0.16	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB18	8082	124-RWW-009	0.2	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB180	8082	124-RWW-009	0.2	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB187	8082	124-RWW-009	0.12	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB195	8082	124-RWW-009	0.2	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB206	8082	124-RWW-009	0.14	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB209	8082	124-RWW-009	0.14	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB28	8082	124-RWW-009	0.12	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB44	8082	124-RWW-009	0.16	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB52	8082	124-RWW-009	0.2	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB66	8082	124-RWW-009	0.3	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		CON	PCB8	8082	124-RWW-009	0.2	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-009	0.5	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	ALUMINUM	6010	124-RWW-009	155		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	ANTIMONY	6010	124-RWW-009	0.12	J	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	ARSENIC	6010	124-RWW-009	4.7		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	BARIUM	6010	124-RWW-009	6.1		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	BERYLLIUM	6010	124-RWW-009	0.03	U	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	CADMIUM	6010	124-RWW-009	0.05		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	CALCIUM	6010	124-RWW-009	1622		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	CHROMIUM	6010	124-RWW-009	1.2	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		METAL	COBALT	6010	124-RWW-009	0.14		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	COPPER	6010	124-RWW-009	5.9		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	IRON	6010	124-RWW-009	305		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	LEAD	6010	124-RWW-009	2.51		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	MAGNESIUM	6010	124-RWW-009	2578		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	MANGANESE	6010	124-RWW-009	10.8		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	MERCURY	6010	124-RWW-009	0.014	J	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	MOLYBDENUM	6010	124-RWW-009	1.83		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	NICKEL	6010	124-RWW-009	1.4		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	POTASSIUM	6010	124-RWW-009	8746		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	SELENIUM	6010	124-RWW-009	3	UJ	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	SILVER	6010	124-RWW-009	0.02	J	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	SODIUM	6010	124-RWW-009	35714		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	THALLIUM	6010	124-RWW-009	0.01	U	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	TIN	6010	124-RWW-009	0.9	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		METAL	VANADIUM	6010	124-RWW-009	1.4	J	MG/KG
R05	Emergent Wetland Plant	9/1/98	0		METAL	ZINC	6010	124-RWW-009	30		MG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-009	1.4	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-009	1.2	R	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-009	3		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(A)PYRENE	PAH_SIM	124-RWW-009	5		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-009	5		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(E)PYRENE	PAH_SIM	124-RWW-009	5		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-009	9		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-009	5		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	CHRYSENE	PAH_SIM	124-RWW-009	12		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-009	3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	FLUORANTHENE	PAH_SIM	124-RWW-009	24		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-009	5		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	PERYLENE	PAH_SIM	124-RWW-009	1.2	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		PAH HIGH	PYRENE	PAH_SIM	124-RWW-009	17		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-009	7	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	ACENAPHTHENE	PAH_SIM	124-RWW-009	1.4	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	ACENAPHTHYLENE	PAH_SIM	124-RWW-009	1.4	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	ANTHRACENE	PAH_SIM	124-RWW-009	1.4	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	FLUORENE	PAH_SIM	124-RWW-009	2	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	NAPHTHALENE	PAH_SIM	124-RWW-009	14	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PAH LOW	PHENANTHRENE	PAH_SIM	124-RWW-009	26	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-009	42.6		%MST
R05	Emergent Wetland Plant	9/1/98	0		PCS	PERCENT SOLIDS	FREEZE DRY	124-RWW-009	57.4		%SLD
R05	Emergent Wetland Plant	9/1/98	0		PEST	ALDRIN	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ALPHA-BHC	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-009	0.9	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	BETA-BHC	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	CHLORDANE	8081A	124-RWW-009	17	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		PEST	DELTA-BHC	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	DIELDRIN	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-009	0.3	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-009	0.3	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-009	0.3	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	HEPTACHLOR	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	MIREX	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		PEST	TOXAPHENE	8081A	124-RWW-009	35	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Emergent Wetland Plant	9/1/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-009	1		UG/KG
R05	Emergent Wetland Plant	9/1/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-009	0.3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-009	2	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-009	2	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-009	1.4	UJ	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-009	5	J	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-009	3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-009	7	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-009	3	U	UG/KG
R05	Emergent Wetland Plant	9/1/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-009	10		UG/KG
R05	Mouse	9/10/98			DDT 24	2,4'-DDD	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			DDT 24	2,4'-DDE	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			DDT 24	2,4'-DDT	8081A	124-RWW-010	13	U	UG/KG
R05	Mouse	9/10/98			DDT 44	4,4'-DDD	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			DDT 44	4,4'-DDE	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			DDT 44	4,4'-DDT	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-010	4.39	J	%
R05	Mouse	9/10/98			METAL	ALUMINUM	6010	124-RWW-010	49	J	MG/KG
R05	Mouse	9/10/98			METAL	ANTIMONY	6010	124-RWW-010	0.07	U	MG/KG
R05	Mouse	9/10/98			METAL	ARSENIC	6010	124-RWW-010	1.6	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Mouse	9/10/98			METAL	BARIUM	6010	124-RWW-010	6.3		MG/KG
R05	Mouse	9/10/98			METAL	BERYLLIUM	6010	124-RWW-010	0.07	U	MG/KG
R05	Mouse	9/10/98			METAL	CADMIUM	6010	124-RWW-010	0.07	UJ	MG/KG
R05	Mouse	9/10/98			METAL	CALCIUM	6010	124-RWW-010	39803		MG/KG
R05	Mouse	9/10/98			METAL	CHROMIUM	6010	124-RWW-010	2	J	MG/KG
R05	Mouse	9/10/98			METAL	COBALT	6010	124-RWW-010	0.23	J	MG/KG
R05	Mouse	9/10/98			METAL	COPPER	6010	124-RWW-010	12.8		MG/KG
R05	Mouse	9/10/98			METAL	IRON	6010	124-RWW-010	237		MG/KG
R05	Mouse	9/10/98			METAL	LEAD	6010	124-RWW-010	1.61	J	MG/KG
R05	Mouse	9/10/98			METAL	MAGNESIUM	6010	124-RWW-010	1355		MG/KG
R05	Mouse	9/10/98			METAL	MANGANESE	6010	124-RWW-010	5.3		MG/KG
R05	Mouse	9/10/98			METAL	MERCURY	6010	124-RWW-010	0.46		MG/KG
R05	Mouse	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-010	0.46		MG/KG
R05	Mouse	9/10/98			METAL	NICKEL	6010	124-RWW-010	6.05	J	MG/KG
R05	Mouse	9/10/98			METAL	POTASSIUM	6010	124-RWW-010	9868		MG/KG
R05	Mouse	9/10/98			METAL	SELENIUM	6010	124-RWW-010	3	UJ	MG/KG
R05	Mouse	9/10/98			METAL	SILVER	6010	124-RWW-010	0.07	U	MG/KG
R05	Mouse	9/10/98			METAL	SODIUM	6010	124-RWW-010	4178		MG/KG
R05	Mouse	9/10/98			METAL	THALLIUM	6010	124-RWW-010	0.07	U	MG/KG
R05	Mouse	9/10/98			METAL	TIN	6010	124-RWW-010	3	U	MG/KG
R05	Mouse	9/10/98			METAL	VANADIUM	6010	124-RWW-010	3	U	MG/KG
R05	Mouse	9/10/98			METAL	ZINC	6010	124-RWW-010	194		MG/KG
R05	Mouse	9/10/98			PAH	BIPHENYL	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-010	33	R	UG/KG
R05	Mouse	9/10/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-010	33	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Mouse	9/10/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	PERYLENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH High	PYRENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-010	33	R	UG/KG
R05	Mouse	9/10/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-010	69.6		%MST
R05	Mouse	9/10/98			PEST	ALDRIN	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	ALPHA-BHC	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-010	10		UG/KG
R05	Mouse	9/10/98			PEST	BETA-BHC	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	CHLORDANE	8081A	124-RWW-010	82	U	UG/KG
R05	Mouse	9/10/98			PEST	DELTA-BHC	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	DIELDRIN	8081A	124-RWW-010	3	J	UG/KG
R05	Mouse	9/10/98			PEST	ENDOSULFAN I	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	ENDOSULFAN II	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-010	7	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Mouse	9/10/98			PEST	ENDRIN	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	ENDRIN KETONE	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	HEPTACHLOR	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-010	7	J	UG/KG
R05	Mouse	9/10/98			PEST	METHOXYCHLOR	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			PEST	MIREX	8081A	124-RWW-010	7	UJ	UG/KG
R05	Mouse	9/10/98			PEST	TOXAPHENE	8081A	124-RWW-010	164	U	UG/KG
R05	Mouse	9/10/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-010	7	U	UG/KG
R05	Mouse	9/10/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-010	33	U	UG/KG
R05	Mouse	9/10/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-010	26	U	UG/KG
R05	Mouse	9/10/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-010	10	J	UG/KG
R05	Mouse	9/10/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-010	26	U	UG/KG
R05	Mouse	9/10/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-010	26	U	UG/KG
R05	Rat	9/10/98			CON	PCB101	8082	124-RWW-016	4.9	UJ	UG/KG
R05	Rat	9/10/98			CON	PCB105	8082	124-RWW-016	1.7	UJ	UG/KG
R05	Rat	9/10/98			CON	PCB118	8082	124-RWW-016	3.8	UJ	UG/KG
R05	Rat	9/10/98			CON	PCB128	8082	124-RWW-016	0.3	J	UG/KG
R05	Rat	9/10/98			CON	PCB138	8082	124-RWW-016	7.7	U	UG/KG
R05	Rat	9/10/98			CON	PCB153	8082	124-RWW-016	29.4	U	UG/KG
R05	Rat	9/10/98			CON	PCB170	8082	124-RWW-016	3.8	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Rat	9/10/98			CON	PCB18	8082	124-RWW-016	1.7	UJ	UG/KG
R05	Rat	9/10/98			CON	PCB180	8082	124-RWW-016	12.2	U	UG/KG
R05	Rat	9/10/98			CON	PCB187	8082	124-RWW-016	11.9	U	UG/KG
R05	Rat	9/10/98			CON	PCB195	8082	124-RWW-016	1.7	U	UG/KG
R05	Rat	9/10/98			CON	PCB206	8082	124-RWW-016	0.7	J	UG/KG
R05	Rat	9/10/98			CON	PCB209	8082	124-RWW-016	1.7	U	UG/KG
R05	Rat	9/10/98			CON	PCB28	8082	124-RWW-016	1.7	U	UG/KG
R05	Rat	9/10/98			CON	PCB44	8082	124-RWW-016	0.24	U	UG/KG
R05	Rat	9/10/98			CON	PCB52	8082	124-RWW-016	1.7	U	UG/KG
R05	Rat	9/10/98			CON	PCB66	8082	124-RWW-016	1.7	UJ	UG/KG
R05	Rat	9/10/98			CON	PCB8	8082	124-RWW-016	1.7	UJ	UG/KG
R05	Rat	9/10/98			DDT 24	2,4'-DDD	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			DDT 24	2,4'-DDE	8081A	124-RWW-016	7	UJ	UG/KG
R05	Rat	9/10/98			DDT 24	2,4'-DDT	8081A	124-RWW-016	21	J	UG/KG
R05	Rat	9/10/98			DDT 44	4,4'-DDD	8081A	124-RWW-016	24	UJ	UG/KG
R05	Rat	9/10/98			DDT 44	4,4'-DDE	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			DDT 44	4,4'-DDT	8081A	124-RWW-016	14	UJ	UG/KG
R05	Rat	9/10/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-016	2.58	J	%
R05	Rat	9/10/98			METAL	ALUMINUM	6010	124-RWW-016	629	J	MG/KG
R05	Rat	9/10/98			METAL	ANTIMONY	6010	124-RWW-016	0.07	U	MG/KG
R05	Rat	9/10/98			METAL	ARSENIC	6010	124-RWW-016	2.1		MG/KG
R05	Rat	9/10/98			METAL	BARIUM	6010	124-RWW-016	4.5		MG/KG
R05	Rat	9/10/98			METAL	BERYLLIUM	6010	124-RWW-016	0.07	U	MG/KG
R05	Rat	9/10/98			METAL	CADMIUM	6010	124-RWW-016	0.1	J	MG/KG
R05	Rat	9/10/98			METAL	CALCIUM	6010	124-RWW-016	58741		MG/KG
R05	Rat	9/10/98			METAL	CHROMIUM	6010	124-RWW-016	2.1	J	MG/KG
R05	Rat	9/10/98			METAL	COBALT	6010	124-RWW-016	0.42	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Rat	9/10/98			METAL	COPPER	6010	124-RWW-016	9.1		MG/KG
R05	Rat	9/10/98			METAL	IRON	6010	124-RWW-016	290		MG/KG
R05	Rat	9/10/98			METAL	LEAD	6010	124-RWW-016	0.91	J	MG/KG
R05	Rat	9/10/98			METAL	MAGNESIUM	6010	124-RWW-016	2206		MG/KG
R05	Rat	9/10/98			METAL	MANGANESE	6010	124-RWW-016	26.9		MG/KG
R05	Rat	9/10/98			METAL	MERCURY	6010	124-RWW-016	0.07		MG/KG
R05	Rat	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-016	0.45		MG/KG
R05	Rat	9/10/98			METAL	NICKEL	6010	124-RWW-016	8.4	J	MG/KG
R05	Rat	9/10/98			METAL	POTASSIUM	6010	124-RWW-016	9755		MG/KG
R05	Rat	9/10/98			METAL	SELENIUM	6010	124-RWW-016	3	UJ	MG/KG
R05	Rat	9/10/98			METAL	SILVER	6010	124-RWW-016	0.07		MG/KG
R05	Rat	9/10/98			METAL	SODIUM	6010	124-RWW-016	4930		MG/KG
R05	Rat	9/10/98			METAL	THALLIUM	6010	124-RWW-016	0.07	U	MG/KG
R05	Rat	9/10/98			METAL	TIN	6010	124-RWW-016	3	U	MG/KG
R05	Rat	9/10/98			METAL	VANADIUM	6010	124-RWW-016	3	U	MG/KG
R05	Rat	9/10/98			METAL	ZINC	6010	124-RWW-016	409		MG/KG
R05	Rat	9/10/98			PAH	BIPHENYL	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-016	35	R	UG/KG
R05	Rat	9/10/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-016	35	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Rat	9/10/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	PERYLENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH High	PYRENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-016	35	R	UG/KG
R05	Rat	9/10/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-016	71.4		%MST
R05	Rat	9/10/98			PEST	ALDRIN	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	ALPHA-BHC	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-016	10	J	UG/KG
R05	Rat	9/10/98			PEST	BETA-BHC	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	CHLORDANE	8081A	124-RWW-016	87	UJ	UG/KG
R05	Rat	9/10/98			PEST	DELTA-BHC	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	DIELDRIN	8081A	124-RWW-016	2.8	J	UG/KG
R05	Rat	9/10/98			PEST	ENDOSULFAN I	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	ENDOSULFAN II	8081A	124-RWW-016	2.1	J	UG/KG
R05	Rat	9/10/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	ENDRIN	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	ENDRIN KETONE	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	HEPTACHLOR	8081A	124-RWW-016	3	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R05	Rat	9/10/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-016	7	UJ	UG/KG
R05	Rat	9/10/98			PEST	METHOXYCHLOR	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			PEST	MIREX	8081A	124-RWW-016	1.7	UJ	UG/KG
R05	Rat	9/10/98			PEST	TOXAPHENE	8081A	124-RWW-016	175	UJ	UG/KG
R05	Rat	9/10/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-016	3	UJ	UG/KG
R05	Rat	9/10/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-016	35	U	UG/KG
R05	Rat	9/10/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-016	17	U	UG/KG
R05	Rat	9/10/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-016	17	U	UG/KG
R05	Rat	9/10/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-016	17	U	UG/KG
R05	Rat	9/10/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-016	17	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB101	8082	124-RWW-011	0.5	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB105	8082	124-RWW-011	0.19	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB118	8082	124-RWW-011	0.5	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB128	8082	124-RWW-011	0.2	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB138	8082	124-RWW-011	0.5	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB153	8082	124-RWW-011	0.2	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB170	8082	124-RWW-011	0.21	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB18	8082	124-RWW-011	0.2	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB180	8082	124-RWW-011	0.17	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB187	8082	124-RWW-011	0.17	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB195	8082	124-RWW-011	0.2	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB206	8082	124-RWW-011	0.19	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB209	8082	124-RWW-011	0.19	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Terrestrial Plant	9/1/98	0		CON	PCB28	8082	124-RWW-011	0.17	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB44	8082	124-RWW-011	0.17	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB52	8082	124-RWW-011	0.17	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB66	8082	124-RWW-011	0.5	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		CON	PCB8	8082	124-RWW-011	0.2	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	ALUMINUM	6010	124-RWW-011	43		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	ANTIMONY	6010	124-RWW-011	0.07	J	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	ARSENIC	6010	124-RWW-011	0.7	J	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	BARIUM	6010	124-RWW-011	20.6		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	BERYLLIUM	6010	124-RWW-011	0.05	U	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	CADMIUM	6010	124-RWW-011	0.31		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	CALCIUM	6010	124-RWW-011	7820		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	CHROMIUM	6010	124-RWW-011	0.9	J	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	COBALT	6010	124-RWW-011	0.14		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	COPPER	6010	124-RWW-011	6.4		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	IRON	6010	124-RWW-011	114		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	LEAD	6010	124-RWW-011	0.92		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	MAGNESIUM	6010	124-RWW-011	1609		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	MANGANESE	6010	124-RWW-011	17.3		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	MERCURY	6010	124-RWW-011	0.012	J	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	MOLYBDENUM	6010	124-RWW-011	3.51		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Terrestrial Plant	9/1/98	0		METAL	NICKEL	6010	124-RWW-011	3.1		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	POTASSIUM	6010	124-RWW-011	13863		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	SELENIUM	6010	124-RWW-011	5	UJ	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	SILVER	6010	124-RWW-011	0.009	U	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	SODIUM	6010	124-RWW-011	1296		MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	THALLIUM	6010	124-RWW-011	0.014	U	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	TIN	6010	124-RWW-011	1.2	U	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	VANADIUM	6010	124-RWW-011	0.7	U	MG/KG
R06	Terrestrial Plant	9/1/98	0		METAL	ZINC	6010	124-RWW-011	21		MG/KG
R06	Terrestrial Plant	9/1/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-011	1.9	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-011	1.7	R	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-011	1.9	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-011	1.7	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-011	1.9	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-011	1.4	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-011	1.7	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-011	2	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	CHRYSENE	PAH_SIM	124-RWW-011	5	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-011	5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	FLUORANTHENE	PAH_SIM	124-RWW-011	9	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-011	1.2	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	PERYLENE	PAH_SIM	124-RWW-011	1.7	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH High	PYRENE	PAH_SIM	124-RWW-011	7	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-011	9	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-011	1.9	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-011	1.9	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH Low	ANTHRACENE	PAH_SIM	124-RWW-011	1.9	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Terrestrial Plant	9/1/98	0		PAH Low	FLUORENE	PAH_SIM	124-RWW-011	1.4	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-011	21	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-011	12	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-011	57.8		%MST
R06	Terrestrial Plant	9/1/98	0		PCS	PERCENT SOLIDS	FREEZE DRY	124-RWW-011	42.2		%SLD
R06	Terrestrial Plant	9/1/98	0		PEST	ALDRIN	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ALPHA-BHC	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-011	1.4	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	BETA-BHC	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	CHLORDANE	8081A	124-RWW-011	24	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	DELTA-BHC	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	DIELDRIN	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-011	0.9	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ENDRIN	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-011	0.5	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-011	0.5	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	HEPTACHLOR	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	MIREX	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	TOXAPHENE	8081A	124-RWW-011	47	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-011	0.5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-011	0.5	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Terrestrial Plant	9/1/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-011	2	J	UG/KG
R06	Terrestrial Plant	9/1/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-011	1.4	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-011	1.9	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-011	5	UJ	UG/KG
R06	Terrestrial Plant	9/1/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-011	5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-011	9	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-011	5	U	UG/KG
R06	Terrestrial Plant	9/1/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-011	9	U	UG/KG
R06	Mouse	9/10/98			DDT 24	2,4'-DDD	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			DDT 24	2,4'-DDE	8081A	124-RWW-012	12	UJ	UG/KG
R06	Mouse	9/10/98			DDT 24	2,4'-DDT	8081A	124-RWW-012	9	UJ	UG/KG
R06	Mouse	9/10/98			DDT 44	4,4'-DDD	8081A	124-RWW-012	9	UJ	UG/KG
R06	Mouse	9/10/98			DDT 44	4,4'-DDE	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			DDT 44	4,4'-DDT	8081A	124-RWW-012	21	UJ	UG/KG
R06	Mouse	9/10/98			LIPIDS	LIPIDS	Bligh And Dyer	124-RWW-012	6.89	J	%
R06	Mouse	9/10/98			METAL	ALUMINUM	6010	124-RWW-012	37	J	MG/KG
R06	Mouse	9/10/98			METAL	ANTIMONY	6010	124-RWW-012	0.06	U	MG/KG
R06	Mouse	9/10/98			METAL	ARSENIC	6010	124-RWW-012	1.5	U	MG/KG
R06	Mouse	9/10/98			METAL	BARIUM	6010	124-RWW-012	11		MG/KG
R06	Mouse	9/10/98			METAL	BERYLLIUM	6010	124-RWW-012	0.06	U	MG/KG
R06	Mouse	9/10/98			METAL	CADMIUM	6010	124-RWW-012	0.06	UJ	MG/KG
R06	Mouse	9/10/98			METAL	CALCIUM	6010	124-RWW-012	39144		MG/KG
R06	Mouse	9/10/98			METAL	CHROMIUM	6010	124-RWW-012	1.5	J	MG/KG
R06	Mouse	9/10/98			METAL	COBALT	6010	124-RWW-012	0.21	J	MG/KG
R06	Mouse	9/10/98			METAL	COPPER	6010	124-RWW-012	9.5		MG/KG
R06	Mouse	9/10/98			METAL	IRON	6010	124-RWW-012	217		MG/KG
R06	Mouse	9/10/98			METAL	LEAD	6010	124-RWW-012	0.55	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Mouse	9/10/98			METAL	MAGNESIUM	6010	124-RWW-012	1431		MG/KG
R06	Mouse	9/10/98			METAL	MANGANESE	6010	124-RWW-012	6.4		MG/KG
R06	Mouse	9/10/98			METAL	MERCURY	6010	124-RWW-012	0.06		MG/KG
R06	Mouse	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-012	0.49		MG/KG
R06	Mouse	9/10/98			METAL	NICKEL	6010	124-RWW-012	4.6	J	MG/KG
R06	Mouse	9/10/98			METAL	POTASSIUM	6010	124-RWW-012	9480		MG/KG
R06	Mouse	9/10/98			METAL	SELENIUM	6010	124-RWW-012	3	UJ	MG/KG
R06	Mouse	9/10/98			METAL	SILVER	6010	124-RWW-012	0.06	U	MG/KG
R06	Mouse	9/10/98			METAL	SODIUM	6010	124-RWW-012	3792		MG/KG
R06	Mouse	9/10/98			METAL	THALLIUM	6010	124-RWW-012	0.06	U	MG/KG
R06	Mouse	9/10/98			METAL	TIN	6010	124-RWW-012	3	U	MG/KG
R06	Mouse	9/10/98			METAL	VANADIUM	6010	124-RWW-012	3	U	MG/KG
R06	Mouse	9/10/98			METAL	ZINC	6010	124-RWW-012	119		MG/KG
R06	Mouse	9/10/98			PAH	BIPHENYL	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-012	31	R	UG/KG
R06	Mouse	9/10/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	PERYLENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH High	PYRENE	PAH_SIM	124-RWW-012	31	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Mouse	9/10/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-012	31	R	UG/KG
R06	Mouse	9/10/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-012	67.3		%MST
R06	Mouse	9/10/98			PEST	ALDRIN	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ALPHA-BHC	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-012	18	J	UG/KG
R06	Mouse	9/10/98			PEST	BETA-BHC	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	CHLORDANE	8081A	124-RWW-012	153	UJ	UG/KG
R06	Mouse	9/10/98			PEST	DELTA-BHC	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	DIELDRIN	8081A	124-RWW-012	6	J	UG/KG
R06	Mouse	9/10/98			PEST	ENDOSULFAN I	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ENDOSULFAN II	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ENDRIN	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	ENDRIN KETONE	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	HEPTACHLOR	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-012	12	UJ	UG/KG
R06	Mouse	9/10/98			PEST	METHOXYCHLOR	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			PEST	MIREX	8081A	124-RWW-012	6	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R06	Mouse	9/10/98			PEST	TOXAPHENE	8081A	124-RWW-012	306	UJ	UG/KG
R06	Mouse	9/10/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-012	6	UJ	UG/KG
R06	Mouse	9/10/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R06	Mouse	9/10/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-012	31	U	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB101	8082	124-RWW-015	1.7	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB105	8082	124-RWW-015	0.6	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB118	8082	124-RWW-015	1.7	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB128	8082	124-RWW-015	0.6	R	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB138	8082	124-RWW-015	3.3	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB153	8082	124-RWW-015	2.2	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB170	8082	124-RWW-015	0.6	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB18	8082	124-RWW-015	0.6	R	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB180	8082	124-RWW-015	1.1	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB187	8082	124-RWW-015	0.6	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB195	8082	124-RWW-015	0.6	R	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB206	8082	124-RWW-015	0.44	R	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB209	8082	124-RWW-015	0.44	UJ	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB28	8082	124-RWW-015	0.39	R	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB44	8082	124-RWW-015	0.39	R	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB52	8082	124-RWW-015	0.6	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB66	8082	124-RWW-015	1.1	J	UG/KG
R07	Submerged Plant	9/4/98	0		CON	PCB8	8082	124-RWW-015	0.6	R	UG/KG
R07	Submerged Plant	9/4/98	0		DDT 24	2,4'-DDD	8081A	124-RWW-015	7.2		UG/KG
R07	Submerged Plant	9/4/98	0		DDT 24	2,4'-DDE	8081A	124-RWW-015	1.1	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Submerged Plant	9/4/98	0		DDT 24	2,4'-DDT	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		DDT 44	4,4'-DDD	8081A	124-RWW-015	1.7	J	UG/KG
R07	Submerged Plant	9/4/98	0		DDT 44	4,4'-DDE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		DDT 44	4,4'-DDT	8081A	124-RWW-015	1.1	R	UG/KG
R07	Submerged Plant	9/4/98	0		METAL	ALUMINUM	FREEZE DRY	124-RWW-015	3287		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	ANTIMONY	FREEZE DRY	124-RWW-015	0.22	J	MG/KG
R07	Submerged Plant	9/4/98	0		METAL	ARSENIC	FREEZE DRY	124-RWW-015	11.6		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	BARIUM	FREEZE DRY	124-RWW-015	28.2		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	BERYLLIUM	FREEZE DRY	124-RWW-015	0.61		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	CADMIUM	FREEZE DRY	124-RWW-015	1.27		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	CALCIUM	FREEZE DRY	124-RWW-015	21602		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	CHROMIUM	FREEZE DRY	124-RWW-015	11		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	COBALT	FREEZE DRY	124-RWW-015	3.98		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	COPPER	FREEZE DRY	124-RWW-015	24.9		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	IRON	FREEZE DRY	124-RWW-015	5370		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	LEAD	FREEZE DRY	124-RWW-015	23.48		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	MAGNESIUM	FREEZE DRY	124-RWW-015	26851		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	MANGANESE	FREEZE DRY	124-RWW-015	2541		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	MERCURY	FREEZE DRY	124-RWW-015	0.11		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	MOLYBDENUM	FREEZE DRY	124-RWW-015	2.8	J	MG/KG
R07	Submerged Plant	9/4/98	0		METAL	NICKEL	FREEZE DRY	124-RWW-015	23.8		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	POTASSIUM	FREEZE DRY	124-RWW-015	4873		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	SELENIUM	FREEZE DRY	124-RWW-015	6	UJ	MG/KG
R07	Submerged Plant	9/4/98	0		METAL	SILVER	FREEZE DRY	124-RWW-015	0.17	UJ	MG/KG
R07	Submerged Plant	9/4/98	0		METAL	SODIUM	FREEZE DRY	124-RWW-015	80110		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	THALLIUM	FREEZE DRY	124-RWW-015	0.033	U	MG/KG
R07	Submerged Plant	9/4/98	0		METAL	TIN	FREEZE DRY	124-RWW-015	2.8	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Submerged Plant	9/4/98	0		METAL	VANADIUM	FREEZE DRY	124-RWW-015	22		MG/KG
R07	Submerged Plant	9/4/98	0		METAL	ZINC	FREEZE DRY	124-RWW-015	50		MG/KG
R07	Submerged Plant	9/4/98	0		PAH	BIPHENYL	PAH_SIM	124-RWW-015	4.4	U	UG/KG
R07	Submerged Plant	9/4/98	0		PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-015	3.9	R	UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-015	17		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-015	17		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-015	28		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-015	22		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-015	39		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-015	22		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	CHRYSENE	PAH_SIM	124-RWW-015	39		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-015	11	J	UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	FLUORANTHENE	PAH_SIM	124-RWW-015	44		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-015	22		UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	PERYLENE	PAH_SIM	124-RWW-015	4.4	J	UG/KG
R07	Submerged Plant	9/4/98	0		PAH High	PYRENE	PAH_SIM	124-RWW-015	39		UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-015	6	J	UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-015	4.4	U	UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-015	4.4	U	UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	ANTHRACENE	PAH_SIM	124-RWW-015	4.4	U	UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	FLUORENE	PAH_SIM	124-RWW-015	3.3	U	UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-015	11	UJ	UG/KG
R07	Submerged Plant	9/4/98	0		PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-015	28		UG/KG
R07	Submerged Plant	9/4/98	0		PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-015	81.9		%MST
R07	Submerged Plant	9/4/98	0		PCS	PERCENT SOLIDS	PERCENT SOLIDS T	124-RWW-015	18.1		%SLD
R07	Submerged Plant	9/4/98	0		PEST	ALDRIN	8081A	124-RWW-015	1.1	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Submerged Plant	9/4/98	0		PEST	ALPHA-BHC	8081A	124-RWW-015	1.1	UJ	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ALPHA-CHLORDANE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	BETA-BHC	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	CHLORDANE	8081A	124-RWW-015	55	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	DELTA-BHC	8081A	124-RWW-015	1.1	UJ	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	DIELDRIN	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ENDOSULFAN I	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ENDOSULFAN II	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ENDOSULFAN SULFATE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ENDRIN	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ENDRIN ALDEHYDE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	ENDRIN KETONE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-015	1.1	R	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	GAMMA-CHLORDANE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	HEPTACHLOR	8081A	124-RWW-015	1.1	UJ	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	METHOXYCHLOR	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	MIREX	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	TOXAPHENE	8081A	124-RWW-015	110	U	UG/KG
R07	Submerged Plant	9/4/98	0		PEST	TRANS-NONACHLOR	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		SVOA	HEXACHLOROBENZENE	8081A	124-RWW-015	1.1	U	UG/KG
R07	Submerged Plant	9/4/98	0		SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-015	4.4	U	UG/KG
R07	Submerged Plant	9/4/98	0		SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-015	3.9	J	UG/KG
R07	Submerged Plant	9/4/98	0		SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-015	4.4	U	UG/KG
R07	Submerged Plant	9/4/98	0		SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-015	22		UG/KG
R07	Submerged Plant	9/4/98	0		TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-015	17	J	UG/KG
R07	Submerged Plant	9/4/98	0		TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-015	22	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Submerged Plant	9/4/98	0		TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-015	11	U	UG/KG
R07	Submerged Plant	9/4/98	0		TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-015	22	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB101	8082	124-RWW-013	11	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB105	8082	124-RWW-013	5.4		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB118	8082	124-RWW-013	12.3		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB128	8082	124-RWW-013	4		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB138	8082	124-RWW-013	19.2		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB153	8082	124-RWW-013	19.6	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB170	8082	124-RWW-013	4.7	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB18	8082	124-RWW-013	0.4	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB180	8082	124-RWW-013	7.6		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB187	8082	124-RWW-013	5.8		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB195	8082	124-RWW-013	1.8	UJ	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB206	8082	124-RWW-013	0.7	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB209	8082	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB28	8082	124-RWW-013	1.4	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Aquatic Invertebrate	9/10/98			CON	PCB44	8082	124-RWW-013	2.2		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB52	8082	124-RWW-013	2.2		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB66	8082	124-RWW-013	5.8		UG/KG
R07	Aquatic Invertebrate	9/10/98			CON	PCB8	8082	124-RWW-013	1.8	UJ	UG/KG
R07	Aquatic Invertebrate	9/10/98			DDT 24	2,4'-DDD	8081A	124-RWW-013	9.4		UG/KG
R07	Aquatic Invertebrate	9/10/98			DDT 24	2,4'-DDE	8081A	124-RWW-013	8.3		UG/KG
R07	Aquatic Invertebrate	9/10/98			DDT 24	2,4'-DDT	8081A	124-RWW-013	4.7		UG/KG
R07	Aquatic Invertebrate	9/10/98			DDT 44	4,4'-DDD	8081A	124-RWW-013	8.3	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			DDT 44	4,4'-DDE	8081A	124-RWW-013	15.6	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			DDT 44	4,4'-DDT	8081A	124-RWW-013	4		UG/KG
R07	Aquatic Invertebrate	9/10/98			LIPIDS	LIPIDS	BLIGH AND DYER	124-RWW-013	4.58	J	%
R07	Aquatic Invertebrate	9/10/98			METAL	ALUMINUM	6010	124-RWW-013	185	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	ANTIMONY	6010	124-RWW-013	0.07	U	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	ARSENIC	6010	124-RWW-013	2.5		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	BARIUM	6010	124-RWW-013	11.6		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Aquatic Invertebrate	9/10/98			METAL	BERYLLIUM	6010	124-RWW-013	0.07	U	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	CADMIUM	6010	124-RWW-013	0.43		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	CALCIUM	6010	124-RWW-013	2435		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	CHROMIUM	6010	124-RWW-013	0.4	U	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	COBALT	6010	124-RWW-013	0.43	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	COPPER	6010	124-RWW-013	28.6		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	IRON	6010	124-RWW-013	529		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	LEAD	6010	124-RWW-013	1.99	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	MAGNESIUM	6010	124-RWW-013	1815		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	MANGANESE	6010	124-RWW-013	634		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	MERCURY	6010	124-RWW-013	0.33		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-013	0.65		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	NICKEL	6010	124-RWW-013	2.5	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	POTASSIUM	6010	124-RWW-013	7609		MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	SELENIUM	6010	124-RWW-013	4	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Aquatic Invertebrate	9/10/98			METAL	SILVER	6010	124-RWW-013	0.58	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	SODIUM	6010	124-RWW-013	8986	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	THALLIUM	6010	124-RWW-013	0.07	U	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	TIN	6010	124-RWW-013	4	U	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	VANADIUM	6010	124-RWW-013	1.4	J	MG/KG
R07	Aquatic Invertebrate	9/10/98			METAL	ZINC	6010	124-RWW-013	152		MG/KG
R07	Aquatic Invertebrate	9/10/98			PAH	BIPHENYL	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	BENZO(A)PYRENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	BENZO(E)PYRENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	CHRYSENE	PAH_SIM	124-RWW-013	36	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	FLUORANTHENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	PERYLENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH HIGH	PYRENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-013	14	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	ACENAPHTHENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	ACENAPHTHYLENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	ANTHRACENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	FLUORENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	NAPHTHALENE	PAH_SIM	124-RWW-013	11	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			PAH LOW	PHENANTHRENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-013	72.4		%MST
R07	Aquatic Invertebrate	9/10/98			PEST	ALDRIN	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ALPHA-BHC	8081A	124-RWW-013	1.8	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Aquatic Invertebrate	9/10/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	BETA-BHC	8081A	124-RWW-013	4.7	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	CHLORDANE	8081A	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	DELTA-BHC	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	DIELDRIN	8081A	124-RWW-013	14.9	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ENDOSULFAN I	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ENDOSULFAN II	8081A	124-RWW-013	4.3	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ENDRIN	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	ENDRIN KETONE	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	HEPTACHLOR	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-013	5.1	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Aquatic Invertebrate	9/10/98			PEST	METHOXYCHLOR	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	MIREX	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	TOXAPHENE	8081A	124-RWW-013	109	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-013	1.8	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-013	2.9	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-013	36	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-013	14	J	UG/KG
R07	Aquatic Invertebrate	9/10/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-013	91	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-013	91	U	UG/KG
R07	Aquatic Invertebrate	9/10/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-013	91	U	UG/KG
R07	Fish	9/10/98			DDT 24	2,4'-DDD	8081A	124-RWW-014	27.6		UG/KG
R07	Fish	9/10/98			DDT 24	2,4'-DDE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			DDT 24	2,4'-DDT	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			DDT 44	4,4'-DDD	8081A	124-RWW-014	18.8		UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Fish	9/10/98			DDT 44	4,4'-DDE	8081A	124-RWW-014	34.1	J	UG/KG
R07	Fish	9/10/98			DDT 44	4,4'-DDT	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			LIPIDS	LIPIDS	BLIGH AND DYER	124-RWW-014	3.84	J	%
R07	Fish	9/10/98			METAL	ALUMINUM	6010	124-RWW-014	88	J	MG/KG
R07	Fish	9/10/98			METAL	ANTIMONY	6010	124-RWW-014	0.08	U	MG/KG
R07	Fish	9/10/98			METAL	ARSENIC	6010	124-RWW-014	4		MG/KG
R07	Fish	9/10/98			METAL	BARIUM	6010	124-RWW-014	8		MG/KG
R07	Fish	9/10/98			METAL	BERYLLIUM	6010	124-RWW-014	0.08	U	MG/KG
R07	Fish	9/10/98			METAL	CADMIUM	6010	124-RWW-014	0.15		MG/KG
R07	Fish	9/10/98			METAL	CALCIUM	6010	124-RWW-014	49425		MG/KG
R07	Fish	9/10/98			METAL	CHROMIUM	6010	124-RWW-014	4	U	MG/KG
R07	Fish	9/10/98			METAL	COBALT	6010	124-RWW-014	0.46	J	MG/KG
R07	Fish	9/10/98			METAL	COPPER	6010	124-RWW-014	8.8		MG/KG
R07	Fish	9/10/98			METAL	IRON	6010	124-RWW-014	218		MG/KG
R07	Fish	9/10/98			METAL	LEAD	6010	124-RWW-014	0.88	J	MG/KG
R07	Fish	9/10/98			METAL	MAGNESIUM	6010	124-RWW-014	5785		MG/KG
R07	Fish	9/10/98			METAL	MANGANESE	6010	124-RWW-014	249		MG/KG
R07	Fish	9/10/98			METAL	MERCURY	6010	124-RWW-014	0.42		MG/KG
R07	Fish	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-014	0.15		MG/KG
R07	Fish	9/10/98			METAL	NICKEL	6010	124-RWW-014	6.9	J	MG/KG
R07	Fish	9/10/98			METAL	POTASSIUM	6010	124-RWW-014	3602		MG/KG
R07	Fish	9/10/98			METAL	SELENIUM	6010	124-RWW-014	4	U	MG/KG
R07	Fish	9/10/98			METAL	SILVER	6010	124-RWW-014	0.08	UJ	MG/KG
R07	Fish	9/10/98			METAL	SODIUM	6010	124-RWW-014	36092	J	MG/KG
R07	Fish	9/10/98			METAL	THALLIUM	6010	124-RWW-014	0.08	U	MG/KG
R07	Fish	9/10/98			METAL	TIN	6010	124-RWW-014	4	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Fish	9/10/98			METAL	VANADIUM	6010	124-RWW-014	4	U	MG/KG
R07	Fish	9/10/98			METAL	ZINC	6010	124-RWW-014	218		MG/KG
R07	Fish	9/10/98			PAH	BIPHENYL	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH	DIBENZOTHIOPHENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	BENZO(A)ANTHRACENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	BENZO(A)PYRENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	BENZO(B)FLUORANTHENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	BENZO(E)PYRENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	BENZO(G,H,I)PERYLENE	PAH_SIM	124-RWW-014	207		UG/KG
R07	Fish	9/10/98			PAH High	BENZO(K)FLUORANTHENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	CHRYSENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	DIBENZO(A,H)ANTHRACENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	FLUORANTHENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	INDENO(1,2,3-CD)PYRENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	PERYLENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH High	PYRENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH Low	2-METHYLNAPHTHALENE	PAH_SIM	124-RWW-014	38		UG/KG
R07	Fish	9/10/98			PAH Low	ACENAPHTHENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH Low	ACENAPHTHYLENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH Low	ANTHRACENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH Low	FLUORENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			PAH Low	NAPHTHALENE	PAH_SIM	124-RWW-014	54		UG/KG
R07	Fish	9/10/98			PAH Low	PHENANTHRENE	PAH_SIM	124-RWW-014	46		UG/KG
R07	Fish	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-014	73.9		%MST
R07	Fish	9/10/98			PEST	ALDRIN	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ALPHA-BHC	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ALPHA-CHLORDANE	8081A	124-RWW-014	19	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R07	Fish	9/10/98			PEST	BETA-BHC	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	CHLORDANE	8081A	124-RWW-014	383	U	UG/KG
R07	Fish	9/10/98			PEST	DELTA-BHC	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	DIELDRIN	8081A	124-RWW-014	23	U	UG/KG
R07	Fish	9/10/98			PEST	ENDOSULFAN I	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ENDOSULFAN II	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ENDOSULFAN SULFATE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ENDRIN	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ENDRIN ALDEHYDE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	ENDRIN KETONE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	GAMMA-BHC (LINDANE)	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	GAMMA-CHLORDANE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	HEPTACHLOR	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	HEPTACHLOR EPOXIDE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	METHOXYCHLOR	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	MIREX	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			PEST	TOXAPHENE	8081A	124-RWW-014	1149	U	UG/KG
R07	Fish	9/10/98			PEST	TRANS-NONACHLOR	8081A	124-RWW-014	6.5	J	UG/KG
R07	Fish	9/10/98			SVOA	HEXACHLOROBENZENE	8081A	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			SVOA	1-METHYLNAPHTHALENE	PAH_SIM	124-RWW-014	19	J	UG/KG
R07	Fish	9/10/98			SVOA	1-METHYLPHENANTHRENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			SVOA	2,3,5-TRIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			SVOA	2,6-DIMETHYLNAPHTHALENE	PAH_SIM	124-RWW-014	38	U	UG/KG
R07	Fish	9/10/98			TBT	DIBUTYL TIN	BUTYLTINS-GC	124-RWW-014	8	J	UG/KG
R07	Fish	9/10/98			TBT	N-BUTYLTIN	BUTYLTINS-GC	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			TBT	TETRABUTYL TIN	BUTYLTINS-GC	124-RWW-014	19	U	UG/KG
R07	Fish	9/10/98			TBT	TRIBUTYL TIN	BUTYLTINS-GC	124-RWW-014	8	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1016	8080	PRC93BIO0050	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1221	8080	PRC93BIO0050	360	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1232	8080	PRC93BIO0050	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1242	8080	PRC93BIO0050	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1248	8080	PRC93BIO0050	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1254	8080	PRC93BIO0050	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1260	8080	PRC93BIO0050	180	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93BIO0050	18	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93BIO0050	18	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93BIO0050	18	UJ	UG/KG
R3		4/15/93	0	0.3	METAL	ANTIMONY	7041	PRC93BIO0050	1	U	MG/KG
R3		4/15/93	0	0.3	METAL	ARSENIC	7061	PRC93BIO0050	24		MG/KG
R3		4/15/93	0	0.3	METAL	BERYLLIUM	7091	PRC93BIO0050	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93BIO0050	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CHROMIUM	7190	PRC93BIO0050	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	COPPER	7210	PRC93BIO0050	10		MG/KG
R3		4/15/93	0	0.3	METAL	LEAD	7420/7421	PRC93BIO0050	2.9	J	MG/KG
R3		4/15/93	0	0.3	METAL	MERCURY	7470	PRC93BIO0050	0.15		MG/KG
R3		4/15/93	0	0.3	METAL	NICKEL	7520	PRC93BIO0050	6.1		MG/KG
R3		4/15/93	0	0.3	METAL	SELENIUM	7741	PRC93BIO0050	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	SILVER	7761	PRC93BIO0050	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	THALLIUM	7841	PRC93BIO0050	0.5	UJ	MG/KG
R3		4/15/93	0	0.3	METAL	ZINC	7950	PRC93BIO0050	74		MG/KG
R3		4/15/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93BIO0050	89		%MST
R3		4/15/93	0	0.3	PEST	ALDRIN	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93BIO0050	4.5	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	PEST	BETA-BHC	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DELTA-BHC	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DIELDRIN	8080	PRC93BIO0050	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93BIO0050	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93BIO0050	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93BIO0050	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN	8080	PRC93BIO0050	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93BIO0050	18	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93BIO0050	23	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93BIO0050	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93BIO0050	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	TOXAPHENE	8080	PRC93BIO0050	360	UJ	UG/KG
R3		4/15/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93BIO0050	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93BIO0050	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93BIO0050	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93BIO0050	5	U	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1016	8080	PRC93BIO0051	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1221	8080	PRC93BIO0051	400	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1232	8080	PRC93BIO0051	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1242	8080	PRC93BIO0051	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1248	8080	PRC93BIO0051	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1254	8080	PRC93BIO0051	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1260	8080	PRC93BIO0051	200	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93BIO0051	20	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93BIO0051	20	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93BIO0051	20	UJ	UG/KG
R3		4/15/93	0	0.3	METAL	ANTIMONY	7041	PRC93BIO0051	1	U	MG/KG
R3		4/15/93	0	0.3	METAL	ARSENIC	7061	PRC93BIO0051	26		MG/KG
R3		4/15/93	0	0.3	METAL	BERYLLIUM	7091	PRC93BIO0051	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93BIO0051	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CHROMIUM	7190	PRC93BIO0051	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	COPPER	7210	PRC93BIO0051	12		MG/KG
R3		4/15/93	0	0.3	METAL	LEAD	7420/7421	PRC93BIO0051	3.4	J	MG/KG
R3		4/15/93	0	0.3	METAL	MERCURY	7470	PRC93BIO0051	0.15		MG/KG
R3		4/15/93	0	0.3	METAL	NICKEL	7520	PRC93BIO0051	5.5		MG/KG
R3		4/15/93	0	0.3	METAL	SELENIUM	7741	PRC93BIO0051	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	SILVER	7761	PRC93BIO0051	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	THALLIUM	7841	PRC93BIO0051	0.5	UJ	MG/KG
R3		4/15/93	0	0.3	METAL	ZINC	7950	PRC93BIO0051	85		MG/KG
R3		4/15/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93BIO0051	90		%MST
R3		4/15/93	0	0.3	PEST	ALDRIN	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	BETA-BHC	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DELTA-BHC	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DIELDRIN	8080	PRC93BIO0051	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93BIO0051	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93BIO0051	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93BIO0051	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN	8080	PRC93BIO0051	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93BIO0051	20	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93BIO0051	25	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93BIO0051	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93BIO0051	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	TOXAPHENE	8080	PRC93BIO0051	400	UJ	UG/KG
R3		4/15/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93BIO0051	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93BIO0051	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93BIO0051	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93BIO0051	5	U	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1016	8080	PRC93BIO0052	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1221	8080	PRC93BIO0052	360	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1232	8080	PRC93BIO0052	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1242	8080	PRC93BIO0052	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1248	8080	PRC93BIO0052	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1254	8080	PRC93BIO0052	180	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1260	8080	PRC93BIO0052	180	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93BIO0052	18	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93BIO0052	18	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93BIO0052	18	UJ	UG/KG
R3		4/15/93	0	0.3	METAL	ANTIMONY	7041	PRC93BIO0052	1	U	MG/KG
R3		4/15/93	0	0.3	METAL	ARSENIC	7061	PRC93BIO0052	26		MG/KG
R3		4/15/93	0	0.3	METAL	BERYLLIUM	7091	PRC93BIO0052	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93BIO0052	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CHROMIUM	7190	PRC93BIO0052	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	COPPER	7210	PRC93BIO0052	12		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	METAL	LEAD	7420/7421	PRC93BIO0052	3.4	J	MG/KG
R3		4/15/93	0	0.3	METAL	MERCURY	7470	PRC93BIO0052	0.17		MG/KG
R3		4/15/93	0	0.3	METAL	NICKEL	7520	PRC93BIO0052	7.1		MG/KG
R3		4/15/93	0	0.3	METAL	SELENIUM	7741	PRC93BIO0052	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	SILVER	7761	PRC93BIO0052	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	THALLIUM	7841	PRC93BIO0052	0.5	UJ	MG/KG
R3		4/15/93	0	0.3	METAL	ZINC	7950	PRC93BIO0052	94		MG/KG
R3		4/15/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93BIO0052	89		%MST
R3		4/15/93	0	0.3	PEST	ALDRIN	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	BETA-BHC	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DELTA-BHC	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DIELDRIN	8080	PRC93BIO0052	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93BIO0052	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93BIO0052	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93BIO0052	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN	8080	PRC93BIO0052	23	J	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93BIO0052	18	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93BIO0052	23	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93BIO0052	4.5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93BIO0052	9.1	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	TOXAPHENE	8080	PRC93BIO0052	360	UJ	UG/KG
R3		4/15/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93BIO0052	5	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93BIO0052	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93BIO0052	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93BIO0052	5	U	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1016	8080	PRC93BIO0053	170	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1221	8080	PRC93BIO0053	330	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1232	8080	PRC93BIO0053	170	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1242	8080	PRC93BIO0053	170	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1248	8080	PRC93BIO0053	170	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1254	8080	PRC93BIO0053	340	J	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1260	8080	PRC93BIO0053	170	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93BIO0053	60	J	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93BIO0053	30	J	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93BIO0053	17	UJ	UG/KG
R3		4/15/93	0	0.3	METAL	ANTIMONY	7041	PRC93BIO0053	1	UJ	MG/KG
R3		4/15/93	0	0.3	METAL	ARSENIC	7061	PRC93BIO0053	23		MG/KG
R3		4/15/93	0	0.3	METAL	BERYLLIUM	7091	PRC93BIO0053	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93BIO0053	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CHROMIUM	7190	PRC93BIO0053	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	COPPER	7210	PRC93BIO0053	11	J	MG/KG
R3		4/15/93	0	0.3	METAL	LEAD	7420/7421	PRC93BIO0053	2.9		MG/KG
R3		4/15/93	0	0.3	METAL	MERCURY	7470	PRC93BIO0053	0.15		MG/KG
R3		4/15/93	0	0.3	METAL	NICKEL	7520	PRC93BIO0053	6		MG/KG
R3		4/15/93	0	0.3	METAL	SELENIUM	7741	PRC93BIO0053	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	SILVER	7761	PRC93BIO0053	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	THALLIUM	7841	PRC93BIO0053	0.5	UJ	MG/KG
R3		4/15/93	0	0.3	METAL	ZINC	7950	PRC93BIO0053	98		MG/KG
R3		4/15/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93BIO0053	88		%MST

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	PEST	ALDRIN	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	BETA-BHC	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DELTA-BHC	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DIELDRIN	8080	PRC93BIO0053	8.3	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93BIO0053	8.3	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93BIO0053	8.3	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93BIO0053	8.3	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN	8080	PRC93BIO0053	8.3	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93BIO0053	17	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93BIO0053	21	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93BIO0053	4.2	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93BIO0053	8.3	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	TOXAPHENE	8080	PRC93BIO0053	330	UJ	UG/KG
R3		4/15/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93BIO0053	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93BIO0053	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93BIO0053	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93BIO0053	5	U	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1016	8080	PRC93BIO0054	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1221	8080	PRC93BIO0054	400	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1232	8080	PRC93BIO0054	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1242	8080	PRC93BIO0054	200	UJ	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1248	8080	PRC93BIO0054	200	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1254	8080	PRC93BIO0054	200	J	UG/KG
R3		4/15/93	0	0.3	Aroclor	AROCLOR-1260	8080	PRC93BIO0054	200	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDD	8080	PRC93BIO0054	54	J	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDE	8080	PRC93BIO0054	20	UJ	UG/KG
R3		4/15/93	0	0.3	DDT 44	4,4'-DDT	8080	PRC93BIO0054	20	UJ	UG/KG
R3		4/15/93	0	0.3	METAL	ANTIMONY	7041	PRC93BIO0054	1	U	MG/KG
R3		4/15/93	0	0.3	METAL	ARSENIC	7061	PRC93BIO0054	23		MG/KG
R3		4/15/93	0	0.3	METAL	BERYLLIUM	7091	PRC93BIO0054	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CADMIUM	7130/7131	PRC93BIO0054	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	CHROMIUM	7190	PRC93BIO0054	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	COPPER	7210	PRC93BIO0054	11		MG/KG
R3		4/15/93	0	0.3	METAL	LEAD	7420/7421	PRC93BIO0054	2.1	J	MG/KG
R3		4/15/93	0	0.3	METAL	MERCURY	7470	PRC93BIO0054	0.2		MG/KG
R3		4/15/93	0	0.3	METAL	NICKEL	7520	PRC93BIO0054	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	SELENIUM	7741	PRC93BIO0054	0.25	U	MG/KG
R3		4/15/93	0	0.3	METAL	SILVER	7761	PRC93BIO0054	0.5	U	MG/KG
R3		4/15/93	0	0.3	METAL	THALLIUM	7841	PRC93BIO0054	0.5	UJ	MG/KG
R3		4/15/93	0	0.3	METAL	ZINC	7950	PRC93BIO0054	89		MG/KG
R3		4/15/93	0	0.3	PCM	PERCENT MOISTURE	160.3	PRC93BIO0054	90		%MST
R3		4/15/93	0	0.3	PEST	ALDRIN	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-BHC	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ALPHA-CHLORDANE	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	BETA-BHC	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DELTA-BHC	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	DIELDRIN	8080	PRC93BIO0054	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN I	8080	PRC93BIO0054	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDOSULFAN II	8080	PRC93BIO0054	10	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		4/15/93	0	0.3	PEST	ENDOSULFAN SULFATE	8080	PRC93BIO0054	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN	8080	PRC93BIO0054	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN ALDEHYDE	8080	PRC93BIO0054	20	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	ENDRIN KETONE	8080	PRC93BIO0054	25	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-BHC (LINDANE)	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	GAMMA-CHLORDANE	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	HEPTACHLOR EPOXIDE	8080	PRC93BIO0054	5	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	METHOXYCHLOR	8080	PRC93BIO0054	10	UJ	UG/KG
R3		4/15/93	0	0.3	PEST	TOXAPHENE	8080	PRC93BIO0054	400	UJ	UG/KG
R3		4/15/93	0	0.3	TBT	DIBUTYL TIN	GC/FPD	PRC93BIO0054	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	MONOBUTYL TIN	GC/FPD	PRC93BIO0054	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TETRABUTYL TIN	GC/FPD	PRC93BIO0054	5	U	UG/KG
R3		4/15/93	0	0.3	TBT	TRIBUTYL TIN	GC/FPD	PRC93BIO0054	5	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)ANTHRACENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)PYRENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(B)FLUORANTHENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(G,H,I)PERYLENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(K)FLUORANTHENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	CHRYSENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	DIBENZO(A,H)ANTHRACENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	FLUORANTHENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	INDENO(1,2,3-CD)PYRENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	PYRENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	2-METHYLNAPHTHALENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHYLENE	8270	R3 REP1	610	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	PAH Low	ANTHRACENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	FLUORENE	8270	R3 REP1	320	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	NAPHTHALENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	PHENANTHRENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	PCM	PERCENT MOISTURE	160.3	R3 REP1	89		%MST
R3		5/6/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	R3 REP1	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	R3 REP1	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-METHYLPHENOL	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROANILINE	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROPHENOL	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3-NITROANILINE	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	R3 REP1	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	R3 REP1	1200	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	4-CHLOROANILINE	8270	R3 REP1	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-METHYLPHENOL	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROANILINE	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROPHENOL	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZIDINE	8270	R3 REP1	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZOIC ACID	8270	R3 REP1	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	R3 REP1	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	R3 REP1	31000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIBENZOFURAN	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	R3 REP1	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	R3 REP1	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	R3 REP1	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	ISOPHORONE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	NITROBENZENE	8270	R3 REP1	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	R3 REP1	3000	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	PHENOL	8270	R3 REP1	1300	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)ANTHRACENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)PYRENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(B)FLUORANTHENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(G,H,I)PERYLENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(K)FLUORANTHENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	CHRYSENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	DIBENZO(A,H)ANTHRACENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	FLUORANTHENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	INDENO(1,2,3-CD)PYRENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	PYRENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	2-METHYLNAPHTHALENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHYLENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ANTHRACENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	FLUORENE	8270	R3 REP2	320	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	NAPHTHALENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	PHENANTHRENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	PCM	PERCENT MOISTURE	160.3	R3 REP2	89		%MST
R3		5/6/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	R3 REP2	1800	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	R3 REP2	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-METHYLPHENOL	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROANILINE	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROPHENOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3-NITROANILINE	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	R3 REP2	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	R3 REP2	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROANILINE	8270	R3 REP2	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-METHYLPHENOL	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROANILINE	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROPHENOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZIDINE	8270	R3 REP2	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZOIC ACID	8270	R3 REP2	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	R3 REP2	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	R3 REP2	31000	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	R3 REP2	800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIBENZOFURAN	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	R3 REP2	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	R3 REP2	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	ISOPHORONE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	NITROBENZENE	8270	R3 REP2	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	R3 REP2	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PHENOL	8270	R3 REP2	1200	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)ANTHRACENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)PYRENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(B)FLUORANTHENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(G,H,I)PERYLENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(K)FLUORANTHENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	CHRYSENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	DIBENZO(A,H)ANTHRACENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	FLUORANTHENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	INDENO(1,2,3-CD)PYRENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	PYRENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	2-METHYLNAPHTHALENE	8270	R3 REP3	610	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHYLENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ANTHRACENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	FLUORENE	8270	R3 REP3	320	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	NAPHTHALENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	PHENANTHRENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	PCM	PERCENT MOISTURE	160.3	R3 REP3	89		%MST
R3		5/6/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	R3 REP3	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	R3 REP3	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-METHYLPHENOL	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROANILINE	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROPHENOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3-NITROANILINE	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	R3 REP3	6100	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	R3 REP3	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROANILINE	8270	R3 REP3	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-METHYLPHENOL	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROANILINE	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROPHENOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZIDINE	8270	R3 REP3	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZOIC ACID	8270	R3 REP3	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	R3 REP3	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	R3 REP3	31000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIBENZOFURAN	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	R3 REP3	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	R3 REP3	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	ISOPHORONE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	R3 REP3	610	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	NITROBENZENE	8270	R3 REP3	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	R3 REP3	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PHENOL	8270	R3 REP3	1200	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)ANTHRACENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)PYRENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(B)FLUORANTHENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(G,H,I)PERYLENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(K)FLUORANTHENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	CHRYSENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	DIBENZO(A,H)ANTHRACENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	FLUORANTHENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	INDENO(1,2,3-CD)PYRENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	PYRENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	2-METHYLNAPHTHALENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHYLENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ANTHRACENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	FLUORENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	NAPHTHALENE	8270	R3 REP4	320	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	PHENANTHRENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	PCM	PERCENT MOISTURE	160.3	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	R3 REP4	89		%MST
R3		5/6/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	R3 REP4	3000	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	R3 REP4	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	R3 REP4	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-METHYLPHENOL	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROANILINE	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROPHENOL	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3-NITROANILINE	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	R3 REP4	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	R3 REP4	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROANILINE	8270	R3 REP4	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-METHYLPHENOL	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROANILINE	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROPHENOL	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZIDINE	8270	R3 REP4	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZOIC ACID	8270	R3 REP4	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	R3 REP4	610	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	R3 REP4	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	R3 REP4	31000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	R3 REP4	2100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIBENZOFURAN	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	R3 REP4	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	ISOPHORONE	8270	R3 REP4	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	NITROBENZENE	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	R3 REP4	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PHENOL	8270	R3 REP4	3000	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)ANTHRACENE	8270	R3 REP4	1200	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(A)PYRENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(B)FLUORANTHENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(G,H,I)PERYLENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	BENZO(K)FLUORANTHENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	CHRYSENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	DIBENZO(A,H)ANTHRACENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	FLUORANTHENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	INDENO(1,2,3-CD)PYRENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH High	PYRENE	8270	R3 REP5	610	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	PAH Low	2-METHYLNAPHTHALENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ACENAPHTHYLENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	ANTHRACENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	FLUORENE	8270	R3 REP5	320	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	NAPHTHALENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PAH Low	PHENANTHRENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	PCM	PERCENT MOISTURE	160.3	R3 REP5	89		%MST
R3		5/6/94	0	0.3	SVOA	1,2,4-TRICHLOROBENZENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,2-DICHLOROBENZENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,3-DICHLOROBENZENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	1,4-DICHLOROBENZENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,5-TRICHLOROPHENOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4,6-TRICHLOROPHENOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DICHLOROPHENOL	8270	R3 REP5	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DIMETHYLPHENOL	8270	R3 REP5	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROPHENOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,4-DINITROTOLUENE	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2,6-DINITROTOLUENE	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLORONAPHTHALENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-CHLOROPHENOL	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-METHYLPHENOL	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROANILINE	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	2-NITROPHENOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3,3'-DICHLOROBENZIDINE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	3-NITROANILINE	8270	R3 REP5	3000	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	4,6-DINITRO-2-METHYLPHENOL	8270	R3 REP5	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-BROMOPHENYL-PHENYLETHER	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLORO-3-METHYLPHENOL	8270	R3 REP5	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROANILINE	8270	R3 REP5	1800	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-CHLOROPHENYL-PHENYLETHER	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-METHYLPHENOL	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROANILINE	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	4-NITROPHENOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZIDINE	8270	R3 REP5	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZOIC ACID	8270	R3 REP5	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BENZYL ALCOHOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHOXY)METHANE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-CHLOROETHYL)ETHER	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	8270	R3 REP5	6100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	BUTYLBENZYLPHTHALATE	8270	R3 REP5	31000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-BUTYLPHTHALATE	8270	R3 REP5	1100	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DI-N-OCTYLPHTHALATE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	DIBENZOFURAN	8270	R3 REP5	610		UG/KG
R3		5/6/94	0	0.3	SVOA	DIETHYLPHTHALATE	8270	R3 REP5	630		UG/KG
R3		5/6/94	0	0.3	SVOA	DIMETHYLPHTHALATE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBENZENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROBUTADIENE	8270	R3 REP5	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROCYCLOPENTADIENE	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	HEXACHLOROETHANE	8270	R3 REP5	1200	U	UG/KG
R3		5/6/94	0	0.3	SVOA	ISOPHORONE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	N-NITROSO-DI-N-PROPYLAMINE	8270	R3 REP5	610	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
R3		5/6/94	0	0.3	SVOA	N-NITROSODIPHENYLAMINE (1)	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	NITROBENZENE	8270	R3 REP5	610	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PENTACHLOROPHENOL	8270	R3 REP5	3000	U	UG/KG
R3		5/6/94	0	0.3	SVOA	PHENOL	8270	R3 REP5	1200	U	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1016	CLP Organics-Rout	013-RWW-002	17	U	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1221	CLP Organics-Rout	013-RWW-002	33	U	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1232	CLP Organics-Rout	013-RWW-002	17	U	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1242	CLP Organics-Rout	013-RWW-002	17	U	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1248	CLP Organics-Rout	013-RWW-002	17	U	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1254	CLP Organics-Rout	013-RWW-002	16	J	UG/KG
RW001	Pacific Herring	2/18/97			Aroclor	AROCLOR-1260	CLP Organics-Rout	013-RWW-002	12	J	UG/KG
RW001	Pacific Herring	2/18/97			DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-002	1	J	UG/KG
RW001	Pacific Herring	2/18/97			DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-002	4		UG/KG
RW001	Pacific Herring	2/18/97			DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-002	1	J	UG/KG
RW001	Pacific Herring	2/18/97			METAL	ALUMINUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	11.8	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	ANTIMONY	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.17	U	MG/KG
RW001	Pacific Herring	2/18/97			METAL	ARSENIC	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.28	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	BARIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.82	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	BERYLLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.01	U	MG/KG
RW001	Pacific Herring	2/18/97			METAL	CADMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.039	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	CALCIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	5150		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW001	Pacific Herring	2/18/97			METAL	CHROMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.14	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	COBALT	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.089	UJ	MG/KG
RW001	Pacific Herring	2/18/97			METAL	COPPER	CLP Inorganics-Rout-Tmetal	013-RWW-002	1.1	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	IRON	CLP Inorganics-Rout-Tmetal	013-RWW-002	40.8		MG/KG
RW001	Pacific Herring	2/18/97			METAL	LEAD	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.17		MG/KG
RW001	Pacific Herring	2/18/97			METAL	MAGNESIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	411		MG/KG
RW001	Pacific Herring	2/18/97			METAL	MANGANESE	CLP Inorganics-Rout-Tmetal	013-RWW-002	10.1		MG/KG
RW001	Pacific Herring	2/18/97			METAL	MERCURY	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.041	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	MOLYBDENUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.064	U	MG/KG
RW001	Pacific Herring	2/18/97			METAL	NICKEL	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.1	U	MG/KG
RW001	Pacific Herring	2/18/97			METAL	POTASSIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	3330		MG/KG
RW001	Pacific Herring	2/18/97			METAL	SELENIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.59		MG/KG
RW001	Pacific Herring	2/18/97			METAL	SILVER	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.074	U	MG/KG
RW001	Pacific Herring	2/18/97			METAL	SODIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	1460		MG/KG
RW001	Pacific Herring	2/18/97			METAL	THALLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.2	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW001	Pacific Herring	2/18/97			METAL	VANADIUM	CLP Inorganics-Rout-Tmetal	013-RWW-002	0.11	J	MG/KG
RW001	Pacific Herring	2/18/97			METAL	ZINC	CLP Inorganics-Rout-Tmetal	013-RWW-002	17.5		MG/KG
RW001	Pacific Herring	2/18/97			PAH High	BENZO(A)ANTHRACENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	BENZO(A)PYRENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	BENZO(B)FLUORANTHENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	BENZO(G,H,I)PERYLENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	BENZO(K)FLUORANTHENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	CHRYSENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	DIBENZO(A,H)ANTHRACENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	FLUORANTHENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	INDENO(1,2,3-CD)PYRENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH High	PYRENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	2-METHYLNAPHTHALENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	ACENAPHTHENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	ACENAPHTHYLENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	ANTHRACENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	FLUORENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	NAPHTHALENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PAH Low	PHENANTHRENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ALDRIN	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-002	0.6	J	UG/KG
RW001	Pacific Herring	2/18/97			PEST	BETA-BHC	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	DIELDRIN	CLP Organics-Rout	013-RWW-002	2	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW001	Pacific Herring	2/18/97			PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-002	2	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-002	2	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ENDRIN	CLP Organics-Rout	013-RWW-002	2	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-002	1	J	UG/KG
RW001	Pacific Herring	2/18/97			PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-002	2	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-002	0.8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-002	8	U	UG/KG
RW001	Pacific Herring	2/18/97			PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-002	83	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	1,2-DICHLOROBENZENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	1,3-DICHLOROBENZENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	1,4-DICHLOROBENZENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-002	1600	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,4-DICHLOROPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Low	013-RWW-002	660	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,4-DINITROPHENOL	CLP Organics-Low	013-RWW-002	1600	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,4-DINITROTOLUENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2,6-DINITROTOLUENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2-CHLORONAPHTHALENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2-CHLOROPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2-METHYLPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	2-NITROANILINE	CLP Organics-Low	013-RWW-002	1600	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW001	Pacific Herring	2/18/97			SVOA	2-NITROPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Low	013-RWW-002	660	R	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	3-NITROANILINE	CLP Organics-Low	013-RWW-002	1600	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Low	013-RWW-002	1600	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-CHLOROANILINE	CLP Organics-Low	013-RWW-002	660	R	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-METHYLPHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-NITROANILINE	CLP Organics-Low	013-RWW-002	1600	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	4-NITROPHENOL	CLP Organics-Low	013-RWW-002	1600	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	CARBAZOLE	CLP Organics-Low	013-RWW-002	660	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	DIBENZOFURAN	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	DIETHYLPHTHALATE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	DIMETHYLPHTHALATE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	HEXACHLOROBENZENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	HEXACHLOROBUTADIENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Low	013-RWW-002	660	R	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	HEXACHLOROETHANE	CLP Organics-Low	013-RWW-002	660	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW001	Pacific Herring	2/18/97			SVOA	ISOPHORONE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Low	013-RWW-002	660	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	NITROBENZENE	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	PENTACHLOROPHENOL	CLP Organics-Low	013-RWW-002	1600	UJ	UG/KG
RW001	Pacific Herring	2/18/97			SVOA	PHENOL	CLP Organics-Low	013-RWW-002	660	U	UG/KG
RW001	Pacific Herring	2/18/97			TBT	DIBUTYL TIN	Tbt	013-RWW-002	2	U	UG/KG
RW001	Pacific Herring	2/18/97			TBT	MONOBUTYL TIN	Tbt	013-RWW-002	1	U	UG/KG
RW001	Pacific Herring	2/18/97			TBT	TETRABUTYL TIN	Tbt	013-RWW-002	4	U	UG/KG
RW001	Pacific Herring	2/18/97			TBT	TRIBUTYL TIN	Tbt	013-RWW-002	2	J	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-001	19	U	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-001	38	U	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-001	19	U	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-001	19	U	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-001	19	U	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-001	18	J	UG/KG
RW001	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-001	19	U	UG/KG
RW001	Pacific Herring	2/19/97			DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-001	4		UG/KG
RW001	Pacific Herring	2/19/97			DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-001	2	J	UG/KG
RW001	Pacific Herring	2/19/97			METAL	MERCURY	CLP Inorganics-Rout-Tmetal	013-RWW-001	0.02	U	MG/KG
RW001	Pacific Herring	2/19/97			PEST	ALDRIN	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	BETA-BHC	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-001	1	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW001	Pacific Herring	2/19/97			PEST	DIELDRIN	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ENDRIN	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-001	2	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-001	1	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-001	10	U	UG/KG
RW001	Pacific Herring	2/19/97			PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-001	95	U	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-006	17	U	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-006	33	U	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-006	17	U	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-006	17	U	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-006	17	U	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-006	12	J	UG/KG
RW002	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-006	11	J	UG/KG
RW002	Pacific Herring	2/19/97			DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-006	1	J	UG/KG
RW002	Pacific Herring	2/19/97			DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-006	3		UG/KG
RW002	Pacific Herring	2/19/97			DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-006	0.9	J	UG/KG
RW002	Pacific Herring	2/19/97			METAL	ALUMINUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	10.5	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	ANTIMONY	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.17	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	Pacific Herring	2/19/97			METAL	ARSENIC	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.37	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	BARIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.82	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	BERYLLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.01	U	MG/KG
RW002	Pacific Herring	2/19/97			METAL	CADMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.05	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	CALCIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	5410		MG/KG
RW002	Pacific Herring	2/19/97			METAL	CHROMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.16	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	COBALT	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.088	UJ	MG/KG
RW002	Pacific Herring	2/19/97			METAL	COPPER	CLP Inorganics-Rout-Tmetal	013-RWW-006	1.1	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	IRON	CLP Inorganics-Rout-Tmetal	013-RWW-006	46		MG/KG
RW002	Pacific Herring	2/19/97			METAL	LEAD	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.16		MG/KG
RW002	Pacific Herring	2/19/97			METAL	MAGNESIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	405		MG/KG
RW002	Pacific Herring	2/19/97			METAL	MANGANESE	CLP Inorganics-Rout-Tmetal	013-RWW-006	9.7		MG/KG
RW002	Pacific Herring	2/19/97			METAL	MERCURY	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.045	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	MOLYBDENUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.064	U	MG/KG
RW002	Pacific Herring	2/19/97			METAL	NICKEL	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.1	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	Pacific Herring	2/19/97			METAL	POTASSIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	3500		MG/KG
RW002	Pacific Herring	2/19/97			METAL	SELENIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.58		MG/KG
RW002	Pacific Herring	2/19/97			METAL	SILVER	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.12	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	SODIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	1340		MG/KG
RW002	Pacific Herring	2/19/97			METAL	THALLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.2	U	MG/KG
RW002	Pacific Herring	2/19/97			METAL	VANADIUM	CLP Inorganics-Rout-Tmetal	013-RWW-006	0.1	J	MG/KG
RW002	Pacific Herring	2/19/97			METAL	ZINC	CLP Inorganics-Rout-Tmetal	013-RWW-006	17.7		MG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	BENZO(A)ANTHRACENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	BENZO(A)PYRENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	BENZO(B)FLUORANTHENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	BENZO(G,H,I)PERYLENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	BENZO(K)FLUORANTHENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	CHRYSENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	FLUORANTHENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	Pacific Herring	2/19/97			PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH HIGH	PYRENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	2-METHYLNAPHTHALENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	ACENAPHTHENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	ACENAPHTHYLENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	ANTHRACENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	FLUORENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	NAPHTHALENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PAH LOW	PHENANTHRENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ALDRIN	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-006	0.6	J	UG/KG
RW002	Pacific Herring	2/19/97			PEST	BETA-BHC	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	DIELDRIN	CLP Organics-Rout	013-RWW-006	2	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-006	2	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-006	2	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ENDRIN	CLP Organics-Rout	013-RWW-006	2	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-006	0.9	J	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	Pacific Herring	2/19/97			PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-006	2	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-006	0.8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-006	8	U	UG/KG
RW002	Pacific Herring	2/19/97			PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-006	83	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	1,2-DICHLOROBENZENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	1,3-DICHLOROBENZENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	1,4-DICHLOROBENZENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-006	8700	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,4-DICHLOROPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Low	013-RWW-006	3600	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,4-DINITROPHENOL	CLP Organics-Low	013-RWW-006	8700	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,4-DINITROTOLUENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2,6-DINITROTOLUENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2-CHLORONAPHTHALENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2-CHLOROPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2-METHYLPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2-NITROANILINE	CLP Organics-Low	013-RWW-006	8700	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	2-NITROPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Low	013-RWW-006	3600	R	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	3-NITROANILINE	CLP Organics-Low	013-RWW-006	8700	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Low	013-RWW-006	8700	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	Pacific Herring	2/19/97			SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4-CHLOROANILINE	CLP Organics-Low	013-RWW-006	3600	R	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4-METHYLPHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4-NITROANILINE	CLP Organics-Low	013-RWW-006	8700	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	4-NITROPHENOL	CLP Organics-Low	013-RWW-006	8700	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	CARBAZOLE	CLP Organics-Low	013-RWW-006	3600	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	DIBENZOFURAN	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	DIETHYLPHTHALATE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	DIMETHYLPHTHALATE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	HEXACHLOROBENZENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	HEXACHLOROBUTADIENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Low	013-RWW-006	3600	R	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	HEXACHLOROETHANE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	ISOPHORONE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Low	013-RWW-006	3600	UJ	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	NITROBENZENE	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			SVOA	PENTACHLOROPHENOL	CLP Organics-Low	013-RWW-006	8700	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	Pacific Herring	2/19/97			SVOA	PHENOL	CLP Organics-Low	013-RWW-006	3600	U	UG/KG
RW002	Pacific Herring	2/19/97			TBT	DIBUTYL TIN	Tbt	013-RWW-006	2	U	UG/KG
RW002	Pacific Herring	2/19/97			TBT	MONOBUTYL TIN	Tbt	013-RWW-006	1	U	UG/KG
RW002	Pacific Herring	2/19/97			TBT	TETRABUTYL TIN	Tbt	013-RWW-006	3	U	UG/KG
RW002	Pacific Herring	2/19/97			TBT	TRIBUTYL TIN	Tbt	013-RWW-006	2	J	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-010	17	U	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-010	33	U	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-010	17	U	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-010	17	U	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-010	17	U	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-010	15	J	UG/KG
RW003	Pacific Herring	2/19/97			AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-010	12	J	UG/KG
RW003	Pacific Herring	2/19/97			DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-010	1	J	UG/KG
RW003	Pacific Herring	2/19/97			DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-010	4		UG/KG
RW003	Pacific Herring	2/19/97			DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-010	1	J	UG/KG
RW003	Pacific Herring	2/19/97			METAL	ALUMINUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	7.1	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	ANTIMONY	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.17	U	MG/KG
RW003	Pacific Herring	2/19/97			METAL	ARSENIC	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.35	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	BARIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.8	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	BERYLLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.01	U	MG/KG
RW003	Pacific Herring	2/19/97			METAL	CADMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.046	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	CALCIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	5320		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	Pacific Herring	2/19/97			METAL	CHROMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.15	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	COBALT	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.088	UJ	MG/KG
RW003	Pacific Herring	2/19/97			METAL	COPPER	CLP Inorganics-Rout-Tmetal	013-RWW-010	1.2	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	IRON	CLP Inorganics-Rout-Tmetal	013-RWW-010	45.3		MG/KG
RW003	Pacific Herring	2/19/97			METAL	LEAD	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.23		MG/KG
RW003	Pacific Herring	2/19/97			METAL	MAGNESIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	404		MG/KG
RW003	Pacific Herring	2/19/97			METAL	MANGANESE	CLP Inorganics-Rout-Tmetal	013-RWW-010	10.4		MG/KG
RW003	Pacific Herring	2/19/97			METAL	MERCURY	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.042	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	MOLYBDENUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.064	U	MG/KG
RW003	Pacific Herring	2/19/97			METAL	NICKEL	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.1	U	MG/KG
RW003	Pacific Herring	2/19/97			METAL	POTASSIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	3330		MG/KG
RW003	Pacific Herring	2/19/97			METAL	SELENIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.58		MG/KG
RW003	Pacific Herring	2/19/97			METAL	SILVER	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.12	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	SODIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	1410		MG/KG
RW003	Pacific Herring	2/19/97			METAL	THALLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.2	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	Pacific Herring	2/19/97			METAL	VANADIUM	CLP Inorganics-Rout-Tmetal	013-RWW-010	0.098	J	MG/KG
RW003	Pacific Herring	2/19/97			METAL	ZINC	CLP Inorganics-Rout-Tmetal	013-RWW-010	17.7		MG/KG
RW003	Pacific Herring	2/19/97			PAH High	BENZO(A)ANTHRACENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	BENZO(A)PYRENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	BENZO(B)FLUORANTHENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	BENZO(G,H,I)PERYLENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	BENZO(K)FLUORANTHENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	CHRYSENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	DIBENZO(A,H)ANTHRACENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	FLUORANTHENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	INDENO(1,2,3-CD)PYRENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH High	PYRENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	2-METHYLNAPHTHALENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	ACENAPHTHENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	ACENAPHTHYLENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	ANTHRACENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	FLUORENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	NAPHTHALENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PAH Low	PHENANTHRENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ALDRIN	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-010	0.6	J	UG/KG
RW003	Pacific Herring	2/19/97			PEST	BETA-BHC	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	DIELDRIN	CLP Organics-Rout	013-RWW-010	2	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	Pacific Herring	2/19/97			PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-010	2	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-010	2	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ENDRIN	CLP Organics-Rout	013-RWW-010	2	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-010	1	J	UG/KG
RW003	Pacific Herring	2/19/97			PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-010	2	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-010	0.8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-010	8	U	UG/KG
RW003	Pacific Herring	2/19/97			PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-010	83	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	1,2-DICHLOROBENZENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	1,3-DICHLOROBENZENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	1,4-DICHLOROBENZENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-010	7300	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,4-DICHLOROPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Low	013-RWW-010	3000	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,4-DINITROPHENOL	CLP Organics-Low	013-RWW-010	7300	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,4-DINITROTOLUENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2,6-DINITROTOLUENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2-CHLORONAPHTHALENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2-CHLOROPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2-METHYLPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	2-NITROANILINE	CLP Organics-Low	013-RWW-010	7300	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	Pacific Herring	2/19/97			SVOA	2-NITROPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Low	013-RWW-010	3000	R	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	3-NITROANILINE	CLP Organics-Low	013-RWW-010	7300	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Low	013-RWW-010	7300	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-CHLOROANILINE	CLP Organics-Low	013-RWW-010	3000	R	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-METHYLPHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-NITROANILINE	CLP Organics-Low	013-RWW-010	7300	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	4-NITROPHENOL	CLP Organics-Low	013-RWW-010	7300	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Low	013-RWW-010	3000	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	CARBAZOLE	CLP Organics-Low	013-RWW-010	3000	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	DIBENZOFURAN	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	DIETHYLPHTHALATE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	DIMETHYLPHTHALATE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	HEXACHLOROBENZENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	HEXACHLOROBUTADIENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Low	013-RWW-010	3000	R	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	HEXACHLOROETHANE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	ISOPHORONE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	Pacific Herring	2/19/97			SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Low	013-RWW-010	3000	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	NITROBENZENE	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	PENTACHLOROPHENOL	CLP Organics-Low	013-RWW-010	7300	UJ	UG/KG
RW003	Pacific Herring	2/19/97			SVOA	PHENOL	CLP Organics-Low	013-RWW-010	3000	U	UG/KG
RW003	Pacific Herring	2/19/97			TBT	DIBUTYL TIN	TBT	013-RWW-010	3	U	UG/KG
RW003	Pacific Herring	2/19/97			TBT	MONOBUTYL TIN	TBT	013-RWW-010	2	U	UG/KG
RW003	Pacific Herring	2/19/97			TBT	TETRABUTYL TIN	TBT	013-RWW-010	4	U	UG/KG
RW003	Pacific Herring	2/19/97			TBT	TRIBUTYL TIN	TBT	013-RWW-010	4	J	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1016	CLP Organics-Rout	013-RWW-016	17	U	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1221	CLP Organics-Rout	013-RWW-016	33	U	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1232	CLP Organics-Rout	013-RWW-016	17	U	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1242	CLP Organics-Rout	013-RWW-016	17	U	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1248	CLP Organics-Rout	013-RWW-016	17	U	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1254	CLP Organics-Rout	013-RWW-016	27	J	UG/KG
RW005	Pacific Herring	2/21/97			Aroclor	AROCLOR-1260	CLP Organics-Rout	013-RWW-016	22	J	UG/KG
RW005	Pacific Herring	2/21/97			DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-016	4		UG/KG
RW005	Pacific Herring	2/21/97			DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-016	7		UG/KG
RW005	Pacific Herring	2/21/97			DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-016	2	J	UG/KG
RW005	Pacific Herring	2/21/97			METAL	ALUMINUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	6.6	J	MG/KG
RW005	Pacific Herring	2/21/97			METAL	ANTIMONY	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.16	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	ARSENIC	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.17	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	BARIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	1.3	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW005	Pacific Herring	2/21/97			METAL	BERYLLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.009	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	CADMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.05	J	MG/KG
RW005	Pacific Herring	2/21/97			METAL	CALCIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	3810		MG/KG
RW005	Pacific Herring	2/21/97			METAL	CHROMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.16	J	MG/KG
RW005	Pacific Herring	2/21/97			METAL	COBALT	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.085	UJ	MG/KG
RW005	Pacific Herring	2/21/97			METAL	COPPER	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.7	J	MG/KG
RW005	Pacific Herring	2/21/97			METAL	IRON	CLP Inorganics-Rout-Tmetal	013-RWW-016	21		MG/KG
RW005	Pacific Herring	2/21/97			METAL	LEAD	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.11	J	MG/KG
RW005	Pacific Herring	2/21/97			METAL	MAGNESIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	363		MG/KG
RW005	Pacific Herring	2/21/97			METAL	MANGANESE	CLP Inorganics-Rout-Tmetal	013-RWW-016	12		MG/KG
RW005	Pacific Herring	2/21/97			METAL	MERCURY	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.062	J	MG/KG
RW005	Pacific Herring	2/21/97			METAL	MOLYBDENUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.065	UJ	MG/KG
RW005	Pacific Herring	2/21/97			METAL	NICKEL	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.099	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	POTASSIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	3870		MG/KG
RW005	Pacific Herring	2/21/97			METAL	SELENIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.44		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW005	Pacific Herring	2/21/97			METAL	SILVER	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.07	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	SODIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	905		MG/KG
RW005	Pacific Herring	2/21/97			METAL	THALLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.19	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	VANADIUM	CLP Inorganics-Rout-Tmetal	013-RWW-016	0.08	U	MG/KG
RW005	Pacific Herring	2/21/97			METAL	ZINC	CLP Inorganics-Rout-Tmetal	013-RWW-016	16.4		MG/KG
RW005	Pacific Herring	2/21/97			PAH High	BENZO(A)ANTHRACENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	BENZO(A)PYRENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	BENZO(B)FLUORANTHENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	BENZO(G,H,I)PERYLENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	BENZO(K)FLUORANTHENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	CHRYSENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	DIBENZO(A,H)ANTHRACENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	FLUORANTHENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	INDENO(1,2,3-CD)PYRENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH High	PYRENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	2-METHYLNAPHTHALENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	ACENAPHTHENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	ACENAPHTHYLENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	ANTHRACENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	FLUORENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	NAPHTHALENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			PAH Low	PHENANTHRENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ALDRIN	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW005	Pacific Herring	2/21/97			PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-016	1	J	UG/KG
RW005	Pacific Herring	2/21/97			PEST	BETA-BHC	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	DIELDRIN	CLP Organics-Rout	013-RWW-016	2	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-016	2	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-016	2	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ENDRIN	CLP Organics-Rout	013-RWW-016	2	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-016	2	J	UG/KG
RW005	Pacific Herring	2/21/97			PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-016	2	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-016	0.9		UG/KG
RW005	Pacific Herring	2/21/97			PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-016	0.8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-016	8	U	UG/KG
RW005	Pacific Herring	2/21/97			PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-016	83	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	1,2-DICHLOROBENZENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	1,3-DICHLOROBENZENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	1,4-DICHLOROBENZENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-016	1600	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,4-DICHLOROPHENOL	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,4-DINITROPHENOL	CLP Organics-Low	013-RWW-016	1600	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW005	Pacific Herring	2/21/97			SVOA	2,4-DINITROTOLUENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2,6-DINITROTOLUENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2-CHLORONAPHTHALENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2-CHLOROPHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2-METHYLPHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2-NITROANILINE	CLP Organics-Low	013-RWW-016	1600	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	2-NITROPHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Low	013-RWW-016	660	R	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	3-NITROANILINE	CLP Organics-Low	013-RWW-016	1600	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Low	013-RWW-016	1600	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-CHLOROANILINE	CLP Organics-Low	013-RWW-016	660	R	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-METHYLPHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-NITROANILINE	CLP Organics-Low	013-RWW-016	1600	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	4-NITROPHENOL	CLP Organics-Low	013-RWW-016	1600	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	CARBAZOLE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	DIBENZOFURAN	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	DIETHYLPHTHALATE	CLP Organics-Low	013-RWW-016	660	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW005	Pacific Herring	2/21/97			SVOA	DIMETHYLPHTHALATE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	HEXACHLOROBENZENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	HEXACHLOROBUTADIENE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Low	013-RWW-016	660	R	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	HEXACHLOROETHANE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	ISOPHORONE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	NITROBENZENE	CLP Organics-Low	013-RWW-016	660	U	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	PENTACHLOROPHENOL	CLP Organics-Low	013-RWW-016	1600	UJ	UG/KG
RW005	Pacific Herring	2/21/97			SVOA	PHENOL	CLP Organics-Low	013-RWW-016	660	UJ	UG/KG
RW005	Pacific Herring	2/21/97			TBT	DIBUTYL TIN	TBT	013-RWW-016	3	U	UG/KG
RW005	Pacific Herring	2/21/97			TBT	MONOBUTYL TIN	TBT	013-RWW-016	2	U	UG/KG
RW005	Pacific Herring	2/21/97			TBT	TETRABUTYL TIN	TBT	013-RWW-016	4	U	UG/KG
RW005	Pacific Herring	2/21/97			TBT	TRIBUTYL TIN	Tbt	013-RWW-016	5	J	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1016	CLP Organics-Rout	013-RWW-018	17	U	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1221	CLP Organics-Rout	013-RWW-018	33	U	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1232	CLP Organics-Rout	013-RWW-018	17	U	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1242	CLP Organics-Rout	013-RWW-018	17	U	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1248	CLP Organics-Rout	013-RWW-018	17	U	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1254	CLP Organics-Rout	013-RWW-018	22	J	UG/KG
RW006	Pacific Herring	2/21/97			AROCLOR	AROCLOR-1260	CLP Organics-Rout	013-RWW-018	18		UG/KG
RW006	Pacific Herring	2/21/97			DDT 44	4,4'-DDD	CLP Organics-Rout	013-RWW-018	3		UG/KG
RW006	Pacific Herring	2/21/97			DDT 44	4,4'-DDE	CLP Organics-Rout	013-RWW-018	6	J	UG/KG
RW006	Pacific Herring	2/21/97			DDT 44	4,4'-DDT	CLP Organics-Rout	013-RWW-018	2	J	UG/KG
RW006	Pacific Herring	2/21/97			METAL	ALUMINUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	13.9	J	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	Pacific Herring	2/21/97			METAL	ANTIMONY	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.17	U	MG/KG
RW006	Pacific Herring	2/21/97			METAL	ARSENIC	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.18	U	MG/KG
RW006	Pacific Herring	2/21/97			METAL	BARIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	1.3	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	BERYLLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.01	U	MG/KG
RW006	Pacific Herring	2/21/97			METAL	CADMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.05	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	CALCIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	3560		MG/KG
RW006	Pacific Herring	2/21/97			METAL	CHROMIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.15	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	COBALT	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.085	UJ	MG/KG
RW006	Pacific Herring	2/21/97			METAL	COPPER	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.7	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	IRON	CLP Inorganics-Rout-Tmetal	013-RWW-018	34.1		MG/KG
RW006	Pacific Herring	2/21/97			METAL	LEAD	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.12	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	MAGNESIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	355		MG/KG
RW006	Pacific Herring	2/21/97			METAL	MANGANESE	CLP Inorganics-Rout-Tmetal	013-RWW-018	11.6		MG/KG
RW006	Pacific Herring	2/21/97			METAL	MERCURY	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.078	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	MOLYBDENUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.062	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	Pacific Herring	2/21/97			METAL	NICKEL	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.1	U	MG/KG
RW006	Pacific Herring	2/21/97			METAL	POTASSIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	3870		MG/KG
RW006	Pacific Herring	2/21/97			METAL	SELENIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.49		MG/KG
RW006	Pacific Herring	2/21/97			METAL	SILVER	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.071	U	MG/KG
RW006	Pacific Herring	2/21/97			METAL	SODIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	908		MG/KG
RW006	Pacific Herring	2/21/97			METAL	THALLIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.19	U	MG/KG
RW006	Pacific Herring	2/21/97			METAL	VANADIUM	CLP Inorganics-Rout-Tmetal	013-RWW-018	0.15	J	MG/KG
RW006	Pacific Herring	2/21/97			METAL	ZINC	CLP Inorganics-Rout-Tmetal	013-RWW-018	15.9		MG/KG
RW006	Pacific Herring	2/21/97			PAH High	BENZO(A)ANTHRACENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	BENZO(A)PYRENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	BENZO(B)FLUORANTHENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	BENZO(G,H,I)PERYLENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	BENZO(K)FLUORANTHENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	CHRYSENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	DIBENZO(A,H)ANTHRACENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	FLUORANTHENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	INDENO(1,2,3-CD)PYRENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH High	PYRENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH Low	2-METHYLNAPHTHALENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH Low	ACENAPHTHENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH Low	ACENAPHTHYLENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	Pacific Herring	2/21/97			PAH Low	ANTHRACENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH Low	FLUORENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH Low	NAPHTHALENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PAH Low	PHENANTHRENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ALDRIN	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ALPHA-BHC	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ALPHA-CHLORDANE	CLP Organics-Rout	013-RWW-018	1	J	UG/KG
RW006	Pacific Herring	2/21/97			PEST	BETA-BHC	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	DELTA-BHC	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	DIELDRIN	CLP Organics-Rout	013-RWW-018	2	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ENDOSULFAN I	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ENDOSULFAN II	CLP Organics-Rout	013-RWW-018	2	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ENDOSULFAN SULFATE	CLP Organics-Rout	013-RWW-018	2	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ENDRIN	CLP Organics-Rout	013-RWW-018	2	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ENDRIN ALDEHYDE	CLP Organics-Rout	013-RWW-018	1	J	UG/KG
RW006	Pacific Herring	2/21/97			PEST	ENDRIN KETONE	CLP Organics-Rout	013-RWW-018	2	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	GAMMA-BHC (LINDANE)	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	GAMMA-CHLORDANE	CLP Organics-Rout	013-RWW-018	0.7	J	UG/KG
RW006	Pacific Herring	2/21/97			PEST	HEPTACHLOR	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	HEPTACHLOR EPOXIDE	CLP Organics-Rout	013-RWW-018	0.8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	METHOXYCHLOR	CLP Organics-Rout	013-RWW-018	8	U	UG/KG
RW006	Pacific Herring	2/21/97			PEST	TOXAPHENE	CLP Organics-Rout	013-RWW-018	83	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	1,2,4-TRICHLOROBENZENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	1,2-DICHLOROBENZENE	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	1,3-DICHLOROBENZENE	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	1,4-DICHLOROBENZENE	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	Pacific Herring	2/21/97			SVOA	2,4,5-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-018	3200	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,4,6-TRICHLOROPHENOL	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,4-DICHLOROPHENOL	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,4-DIMETHYLPHENOL	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,4-DINITROPHENOL	CLP Organics-Low	013-RWW-018	3200	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,4-DINITROTOLUENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2,6-DINITROTOLUENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2-CHLORONAPHTHALENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2-CHLOROPHENOL	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2-METHYLPHENOL	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2-NITROANILINE	CLP Organics-Low	013-RWW-018	3200	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	2-NITROPHENOL	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	3,3'-DICHLOROBENZIDINE	CLP Organics-Low	013-RWW-018	1300	R	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	3-NITROANILINE	CLP Organics-Low	013-RWW-018	3200	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP Organics-Low	013-RWW-018	3200	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-BROMOPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-CHLORO-3-METHYLPHENOL	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-CHLOROANILINE	CLP Organics-Low	013-RWW-018	1300	R	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-METHYLPHENOL	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-NITROANILINE	CLP Organics-Low	013-RWW-018	3200	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	4-NITROPHENOL	CLP Organics-Low	013-RWW-018	3200	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	BIS(2-CHLOROETHYL)ETHER	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	BUTYLBENZYLPHTHALATE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW006	Pacific Herring	2/21/97			SVOA	CARBAZOLE	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	DI-N-BUTYLPHTHALATE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	DI-N-OCTYLPHTHALATE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	DIBENZOFURAN	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	DIETHYLPHTHALATE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	DIMETHYLPHTHALATE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	HEXACHLOROBENZENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	HEXACHLOROBUTADIENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	HEXACHLOROCYCLOPENTADIENE	CLP Organics-Low	013-RWW-018	1300	R	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	HEXACHLOROETHANE	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	ISOPHORONE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	N-NITROSODIPHENYLAMINE (1)	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	NITROBENZENE	CLP Organics-Low	013-RWW-018	1300	U	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	PENTACHLOROPHENOL	CLP Organics-Low	013-RWW-018	3200	UJ	UG/KG
RW006	Pacific Herring	2/21/97			SVOA	PHENOL	CLP Organics-Low	013-RWW-018	1300	UJ	UG/KG
RW006	Pacific Herring	2/21/97			TBT	DIBUTYL TIN	TBT	013-RWW-018	2	U	UG/KG
RW006	Pacific Herring	2/21/97			TBT	MONOBUTYL TIN	TBT	013-RWW-018	1	U	UG/KG
RW006	Pacific Herring	2/21/97			TBT	TETRABUTYL TIN	TBT	013-RWW-018	3	U	UG/KG
RW006	Pacific Herring	2/21/97			TBT	TRIBUTYL TIN	TBT	013-RWW-018	5	J	UG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	ALUMINUM	6010	124-RWW-017	91	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	ANTIMONY	6010	124-RWW-017	0.07		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	ARSENIC	6010	124-RWW-017	0.4	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	BARIUM	6010	124-RWW-017	8.3		MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	BERYLLIUM	6010	124-RWW-017	0.07	U	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	CADMIUM	6010	124-RWW-017	0.65		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	CALCIUM	6010	124-RWW-017	1428		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	CHROMIUM	6010	124-RWW-017	0.4	U	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	COBALT	6010	124-RWW-017	0.18	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	COPPER	6010	124-RWW-017	42.4		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	IRON	6010	124-RWW-017	239		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	LEAD	6010	124-RWW-017	2.68	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	MAGNESIUM	6010	124-RWW-017	1438		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	MANGANESE	6010	124-RWW-017	45.3		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	MERCURY	6010	124-RWW-017	0.033	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	MOLYBDENUM	6010	124-RWW-017	1.7		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	NICKEL	6010	124-RWW-017	1.1	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	POTASSIUM	6010	124-RWW-017	9855		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	SELENIUM	6010	124-RWW-017	4	U	MG/KG

Table A-6 (continued). Data Table for Tissue

Station	Tissue Sample Type	Date	Depth Interval Top (ft)	Depth Interval Bottom (ft)	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	SILVER	6010	124-RWW-017	0.033	UJ	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	SODIUM	6010	124-RWW-017	1812	J	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	THALLIUM	6010	124-RWW-017	0.07	U	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	TIN	6010	124-RWW-017	4	U	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	VANADIUM	6010	124-RWW-017	4	U	MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			METAL	ZINC	6010	124-RWW-017	149		MG/KG
UPLAND	Terrestrial Invertebrate	9/10/98			PCM	PERCENT MOISTURE	FREEZE DRY	124-RWW-017	72.4		%MST

Table A-7. Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	AROCLOR	AROCLOR-1016	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	AROCLOR	AROCLOR-1221	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	AROCLOR	AROCLOR-1232	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	AROCLOR	AROCLOR-1242	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	AROCLOR	AROCLOR-1248	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	AROCLOR	AROCLOR-1254	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	AROCLOR	AROCLOR-1260	CLP ORGANICS-ROUT	013-RWW-004	0.2	U	UG/L
RW002	2/18/97	DDT 44	4,4'-DDD	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	DDT 44	4,4'-DDE	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	DDT 44	4,4'-DDT	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	D OXYGEN	DISSOLVED OXYGEN	SM 4500	013-RWW-004	6.8		MG/L
RW002	2/18/97	DOC	DISSOLVED ORGANIC CARBON	9060	013-RWW-004	46.1		UG/L
RW002	2/18/97	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	230	UJ	UG/L
RW002	2/18/97	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	2.1	U	UG/L
RW002	2/18/97	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	19.5		UG/L
RW002	2/18/97	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	53.9	J	UG/L
RW002	2/18/97	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	0.04	UJ	UG/L
RW002	2/18/97	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	0.13	UJ	UG/L
RW002	2/18/97	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	181000		UG/L
RW002	2/18/97	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	2.1	J	UG/L
RW002	2/18/97	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	5.1	J	UG/L
RW002	2/18/97	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	22.5	J	UG/L
RW002	2/18/97	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	2620		UG/L
RW002	2/18/97	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	10.6		UG/L
RW002	2/18/97	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	876000		UG/L
RW002	2/18/97	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	7110		UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	0.86		UG/L
RW002	2/18/97	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	19.3		UG/L
RW002	2/18/97	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	17.7		UG/L
RW002	2/18/97	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	216000		UG/L
RW002	2/18/97	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	2.5	J	UG/L
RW002	2/18/97	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	0.5	U	UG/L
RW002	2/18/97	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	6370000		UG/L
RW002	2/18/97	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	1.3	U	UG/L
RW002	2/18/97	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	7.1		UG/L
RW002	2/18/97	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-004	27.8	UJ	UG/L
RW002	2/18/97	PAH HIGH	BENZO(A)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	BENZO(A)PYRENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	BENZO(B)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	BENZO(K)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	CHRYSENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH HIGH	PYRENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	2-METHYLNAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	ACENAPHTHENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	ACENAPHTHYLENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	FLUORENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	NAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PAH LOW	PHENANTHRENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	PEST	ALDRIN	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	PEST	ALPHA-BHC	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	ALPHA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	BETA-BHC	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	DELTA-BHC	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	DIELDRIN	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	PEST	ENDOSULFAN I	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	ENDOSULFAN II	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	PEST	ENDOSULFAN SULFATE	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	PEST	ENDRIN	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	PEST	ENDRIN ALDEHYDE	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	PEST	ENDRIN KETONE	CLP ORGANICS-ROUT	013-RWW-004	0.02	U	UG/L
RW002	2/18/97	PEST	GAMMA-BHC (LINDANE)	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	GAMMA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	HEPTACHLOR	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	HEPTACHLOR EPOXIDE	CLP ORGANICS-ROUT	013-RWW-004	0.01	U	UG/L
RW002	2/18/97	PEST	METHOXYCHLOR	CLP ORGANICS-ROUT	013-RWW-004	0.1	U	UG/L
RW002	2/18/97	PEST	TOXAPHENE	CLP ORGANICS-ROUT	013-RWW-004	1	U	UG/L
RW002	2/18/97	PH	PH	9040/9045	013-RWW-004	6.9		
RW002	2/18/97	SULFIDE	SULFIDE	376.2	013-RWW-004	0.05	U	MG/L
RW002	2/18/97	SVOA	1,2,4-TRICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	1,2-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	1,3-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	1,4-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2,4,5-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	20	U	UG/L
RW002	2/18/97	SVOA	2,4,6-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2,4-DICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2,4-DIMETHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	SVOA	2,4-DINITROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	20	U	UG/L
RW002	2/18/97	SVOA	2,4-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2,6-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2-CHLORONAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2-CHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	2-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-004	20	U	UG/L
RW002	2/18/97	SVOA	2-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	3,3'-DICHLOROBENZIDINE	CLP ORGANICS-ROUT	013-RWW-004	5	UJ	UG/L
RW002	2/18/97	SVOA	3-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-004	20	UJ	UG/L
RW002	2/18/97	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-004	20	U	UG/L
RW002	2/18/97	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	4-CHLORO-3-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	4-CHLOROANILINE	CLP ORGANICS-ROUT	013-RWW-004	5	UJ	UG/L
RW002	2/18/97	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	4-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	4-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-004	20	UJ	UG/L
RW002	2/18/97	SVOA	4-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	20	U	UG/L
RW002	2/18/97	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP ORGANICS-ROUT	013-RWW-004	4	U	UG/L
RW002	2/18/97	SVOA	BUTYLBENZYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	CARBAZOLE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	DI-N-BUTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	DI-N-OCTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW002	2/18/97	SVOA	DIBENZOFURAN	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	DIETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	DIMETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	HEXACHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	HEXACHLOROBUTADIENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	HEXACHLOROETHANE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	ISOPHORONE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP ORGANICS-ROUT	013-RWW-004	5	UJ	UG/L
RW002	2/18/97	SVOA	NITROBENZENE	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	SVOA	PENTACHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-004	20	U	UG/L
RW002	2/18/97	SVOA	PHENOL	CLP ORGANICS-ROUT	013-RWW-004	5	U	UG/L
RW002	2/18/97	TBT	DIBUTYL TIN	TBT	013-RWW-004	38	U	NG/L
RW002	2/18/97	TBT	MONOBUTYL TIN	TBT	013-RWW-004	31	U	NG/L
RW002	2/18/97	TBT	TETRABUTYL TIN	TBT	013-RWW-004	50	U	NG/L
RW002	2/18/97	TBT	TRIBUTYL TIN	TBT	013-RWW-004	44	U	NG/L
RW002	2/18/97	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-004	100	U	UG/L
RW002	2/18/97	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-004	50	U	UG/L
RW002	2/18/97	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-004	160	J	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1016	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1221	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1232	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1242	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1248	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1254	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	AROCLOR	AROCLOR-1260	CLP ORGANICS-ROUT	013-RWW-008	0.2	UJ	UG/L
RW003	2/18/97	DDT 44	4,4'-DDD	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	DDT 44	4,4'-DDE	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	DDT 44	4,4'-DDT	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	D OXYGEN	DISSOLVED OXYGEN	SM 4500	013-RWW-008	6.3		MG/L
RW003	2/18/97	DOC	DISSOLVED ORGANIC CARBON	9060	013-RWW-008	32.3		UG/L
RW003	2/18/97	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	196	UJ	UG/L
RW003	2/18/97	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	2.1	U	UG/L
RW003	2/18/97	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	13.5	J	UG/L
RW003	2/18/97	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	39.3	J	UG/L
RW003	2/18/97	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	0.05	UJ	UG/L
RW003	2/18/97	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	0.1	U	UG/L
RW003	2/18/97	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	150000		UG/L
RW003	2/18/97	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	1.6	J	UG/L
RW003	2/18/97	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	6	J	UG/L
RW003	2/18/97	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	21.5	J	UG/L
RW003	2/18/97	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	3460		UG/L
RW003	2/18/97	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	11		UG/L
RW003	2/18/97	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	722000		UG/L
RW003	2/18/97	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	3830		UG/L
RW003	2/18/97	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	0.6		UG/L
RW003	2/18/97	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	7.9	J	UG/L
RW003	2/18/97	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	15.6	J	UG/L
RW003	2/18/97	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	161000		UG/L
RW003	2/18/97	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	2.9	J	UG/L
RW003	2/18/97	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	0.5	U	UG/L
RW003	2/18/97	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	5090000		UG/L
RW003	2/18/97	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	2	UJ	UG/L
RW003	2/18/97	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	6.9		UG/L
RW003	2/18/97	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-008	26	UJ	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	PAH HIGH	BENZO(A)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	BENZO(A)PYRENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	BENZO(B)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	BENZO(K)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	CHRYSENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH HIGH	PYRENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	2-METHYLNAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	ACENAPHTHENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	ACENAPHTHYLENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	FLUORENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	NAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PAH LOW	PHENANTHRENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	PEST	ALDRIN	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	ALPHA-BHC	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	ALPHA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	BETA-BHC	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	DELTA-BHC	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	DIELDRIN	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	PEST	ENDOSULFAN I	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	ENDOSULFAN II	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	PEST	ENDOSULFAN SULFATE	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	PEST	ENDRIN	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	PEST	ENDRIN ALDEHYDE	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	PEST	ENDRIN KETONE	CLP ORGANICS-ROUT	013-RWW-008	0.02	UJ	UG/L
RW003	2/18/97	PEST	GAMMA-BHC (LINDANE)	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	GAMMA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	HEPTACHLOR	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	HEPTACHLOR EPOXIDE	CLP ORGANICS-ROUT	013-RWW-008	0.01	UJ	UG/L
RW003	2/18/97	PEST	METHOXYCHLOR	CLP ORGANICS-ROUT	013-RWW-008	0.1	UJ	UG/L
RW003	2/18/97	PEST	TOXAPHENE	CLP ORGANICS-ROUT	013-RWW-008	1	UJ	UG/L
RW003	2/18/97	PH	PH	9040/9045	013-RWW-008	7		UNITS
RW003	2/18/97	SULFIDE	SULFIDE	376.2	013-RWW-008	0.05	U	MG/L
RW003	2/18/97	SVOA	1,2,4-TRICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	1,2-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	1,3-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	1,4-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2,4,5-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	20	U	UG/L
RW003	2/18/97	SVOA	2,4,6-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2,4-DICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2,4-DIMETHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2,4-DINITROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	20	U	UG/L
RW003	2/18/97	SVOA	2,4-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2,6-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2-CHLORONAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2-CHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	2-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-008	20	U	UG/L
RW003	2/18/97	SVOA	2-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	3,3'-DICHLOROBENZIDINE	CLP ORGANICS-ROUT	013-RWW-008	5	UJ	UG/L
RW003	2/18/97	SVOA	3-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-008	20	UJ	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-008	20	U	UG/L
RW003	2/18/97	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	4-CHLORO-3-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	4-CHLOROANILINE	CLP ORGANICS-ROUT	013-RWW-008	5	UJ	UG/L
RW003	2/18/97	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	4-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	4-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-008	20	UJ	UG/L
RW003	2/18/97	SVOA	4-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	20	U	UG/L
RW003	2/18/97	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP ORGANICS-ROUT	013-RWW-008	4	U	UG/L
RW003	2/18/97	SVOA	BUTYLBENZYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	CARBAZOLE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	DI-N-BUTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	DI-N-OCTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	DIBENZOFURAN	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	DIETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	DIMETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	HEXACHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	HEXACHLOROBUTADIENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	HEXACHLOROETHANE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	ISOPHORONE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP ORGANICS-ROUT	013-RWW-008	5	UJ	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW003	2/18/97	SVOA	NITROBENZENE	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	SVOA	PENTACHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-008	20	U	UG/L
RW003	2/18/97	SVOA	PHENOL	CLP ORGANICS-ROUT	013-RWW-008	5	U	UG/L
RW003	2/18/97	TBT	DIBUTYL TIN	TBT	013-RWW-008	38	U	NG/L
RW003	2/18/97	TBT	MONOBUTYL TIN	TBT	013-RWW-008	31	U	NG/L
RW003	2/18/97	TBT	TETRABUTYL TIN	TBT	013-RWW-008	50	U	NG/L
RW003	2/18/97	TBT	TRIBUTYL TIN	TBT	013-RWW-008	44	U	NG/L
RW003	2/18/97	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-008	100	U	UG/L
RW003	2/18/97	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-008	50	U	UG/L
RW003	2/18/97	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-008	240	J	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1016	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1221	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1232	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1242	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1248	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1254	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	AROCLOR	AROCLOR-1260	CLP ORGANICS-ROUT	013-RWW-012	0.2	U	UG/L
RW004	2/19/97	DDT 44	4,4'-DDD	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	DDT 44	4,4'-DDE	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	DDT 44	4,4'-DDT	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	D OXYGEN	DISSOLVED OXYGEN	SM 4500	013-RWW-012	5		MG/L
RW004	2/19/97	DOC	DISSOLVED ORGANIC CARBON	9060	013-RWW-012	17.8		UG/L
RW004	2/19/97	METAL	ALUMINUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	105	UJ	UG/L
RW004	2/19/97	METAL	ANTIMONY	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	10.5	UJ	UG/L
RW004	2/19/97	METAL	ARSENIC	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	9.5	U	UG/L
RW004	2/19/97	METAL	BARIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	53.5	J	UG/L
RW004	2/19/97	METAL	BERYLLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	0.1	UJ	UG/L
RW004	2/19/97	METAL	CADMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	0.5	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	METAL	CALCIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	173000		UG/L
RW004	2/19/97	METAL	CHROMIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	2	U	UG/L
RW004	2/19/97	METAL	COBALT	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	2	U	UG/L
RW004	2/19/97	METAL	COPPER	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	2.5	U	UG/L
RW004	2/19/97	METAL	IRON	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	5410		UG/L
RW004	2/19/97	METAL	LEAD	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	5.5	U	UG/L
RW004	2/19/97	METAL	MAGNESIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	514000		UG/L
RW004	2/19/97	METAL	MANGANESE	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	3080		UG/L
RW004	2/19/97	METAL	MERCURY	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	0.12	J	UG/L
RW004	2/19/97	METAL	MOLYBDENUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	11.9	J	UG/L
RW004	2/19/97	METAL	NICKEL	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	4.7	J	UG/L
RW004	2/19/97	METAL	POTASSIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	182000		UG/L
RW004	2/19/97	METAL	SELENIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	2.1	U	UG/L
RW004	2/19/97	METAL	SILVER	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	2.5	U	UG/L
RW004	2/19/97	METAL	SODIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	4350000		UG/L
RW004	2/19/97	METAL	THALLIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	6.5	U	UG/L
RW004	2/19/97	METAL	VANADIUM	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	3	U	UG/L
RW004	2/19/97	METAL	ZINC	CLP INORGANICS-ROUT-TMETAL	013-RWW-012	26.9	UJ	UG/L
RW004	2/19/97	PAH HIGH	BENZO(A)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	BENZO(A)PYRENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	BENZO(B)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	BENZO(G,H,I)PERYLENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	BENZO(K)FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	CHRYSENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	DIBENZO(A,H)ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	FLUORANTHENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	INDENO(1,2,3-CD)PYRENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH HIGH	PYRENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	PAH LOW	2-METHYLNAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH LOW	ACENAPHTHENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH LOW	ACENAPHTHYLENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH LOW	ANTHRACENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH LOW	FLUORENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH LOW	NAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PAH LOW	PHENANTHRENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	PEST	ALDRIN	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	ALPHA-BHC	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	ALPHA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	BETA-BHC	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	DELTA-BHC	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	DIELDRIN	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	PEST	ENDOSULFAN I	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	ENDOSULFAN II	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	PEST	ENDOSULFAN SULFATE	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	PEST	ENDRIN	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	PEST	ENDRIN ALDEHYDE	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	PEST	ENDRIN KETONE	CLP ORGANICS-ROUT	013-RWW-012	0.02	U	UG/L
RW004	2/19/97	PEST	GAMMA-BHC (LINDANE)	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	GAMMA-CHLORDANE	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	HEPTACHLOR	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	HEPTACHLOR EPOXIDE	CLP ORGANICS-ROUT	013-RWW-012	0.01	U	UG/L
RW004	2/19/97	PEST	METHOXYCHLOR	CLP ORGANICS-ROUT	013-RWW-012	0.1	U	UG/L
RW004	2/19/97	PEST	TOXAPHENE	CLP ORGANICS-ROUT	013-RWW-012	1	U	UG/L
RW004	2/19/97	PH	PH	9040/9045	013-RWW-012	6.8		UNITS
RW004	2/19/97	SULFIDE	SULFIDE	376.2	013-RWW-012	0.05	U	MG/L
RW004	2/19/97	SVOA	1,2,4-TRICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	SVOA	1,2-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	1,3-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	1,4-DICHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2,2'-OXYBIS(1-CHLOROPROPANE)	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2,4,5-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	20	U	UG/L
RW004	2/19/97	SVOA	2,4,6-TRICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2,4-DICHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2,4-DIMETHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2,4-DINITROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	20	U	UG/L
RW004	2/19/97	SVOA	2,4-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2,6-DINITROTOLUENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2-CHLORONAPHTHALENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2-CHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	2-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-012	20	U	UG/L
RW004	2/19/97	SVOA	2-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	3,3'-DICHLOROBENZIDINE	CLP ORGANICS-ROUT	013-RWW-012	5	UJ	UG/L
RW004	2/19/97	SVOA	3-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-012	20	UJ	UG/L
RW004	2/19/97	SVOA	4,6-DINITRO-2-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-012	20	U	UG/L
RW004	2/19/97	SVOA	4-BROMOPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	4-CHLORO-3-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	4-CHLOROANILINE	CLP ORGANICS-ROUT	013-RWW-012	5	UJ	UG/L
RW004	2/19/97	SVOA	4-CHLOROPHENYL-PHENYLETHER	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	4-METHYLPHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	4-NITROANILINE	CLP ORGANICS-ROUT	013-RWW-012	20	UJ	UG/L
RW004	2/19/97	SVOA	4-NITROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	20	U	UG/L

Table A-7 (continued). Data Table for Porewater

Station	Date	Analytical Suite	Analyte	Analytical Method	Sample Number	Result	Qualifier	Unit
RW004	2/19/97	SVOA	BIS(2-CHLOROETHOXY)METHANE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	BIS(2-CHLOROETHYL)ETHER	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	BIS(2-ETHYLHEXYL)PHTHALATE	CLP ORGANICS-ROUT	013-RWW-012	4	U	UG/L
RW004	2/19/97	SVOA	BUTYLBENZYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	CARBAZOLE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	DI-N-BUTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	DI-N-OCTYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	DIBENZOFURAN	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	DIETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	DIMETHYLPHTHALATE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	HEXACHLOROBENZENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	HEXACHLOROBUTADIENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	HEXACHLOROCYCLOPENTADIENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	HEXACHLOROETHANE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	ISOPHORONE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	N-NITROSO-DI-N-PROPYLAMINE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	N-NITROSODIPHENYLAMINE (1)	CLP ORGANICS-ROUT	013-RWW-012	5	UJ	UG/L
RW004	2/19/97	SVOA	NITROBENZENE	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	SVOA	PENTACHLOROPHENOL	CLP ORGANICS-ROUT	013-RWW-012	20	U	UG/L
RW004	2/19/97	SVOA	PHENOL	CLP ORGANICS-ROUT	013-RWW-012	5	U	UG/L
RW004	2/19/97	TBT	DIBUTYL TIN	TBT	013-RWW-012	38	U	NG/L
RW004	2/19/97	TBT	MONOBUTYL TIN	TBT	013-RWW-012	31	U	NG/L
RW004	2/19/97	TBT	TETRABUTYL TIN	TBT	013-RWW-012	50	U	NG/L
RW004	2/19/97	TBT	TRIBUTYL TIN	TBT	013-RWW-012	44	U	NG/L
RW004	2/19/97	TPH	DIESEL RANGE ORGANICS	CLP ORGANICS	013-RWW-012	100	U	UG/L
RW004	2/19/97	TPH	GASOLINE RANGE ORGANICS	CLP ORGANICS	013-RWW-012	50	U	UG/L
RW004	2/19/97	TPH	MOTOR OIL RANGE ORGANICS	CLP ORGANICS	013-RWW-012	1900	J	UG/L

Appendix B

Runway Wetland Ecological Screening and COPC Refinement Process

Appendix B. Runway Wetland Ecological Screening and COPC Refinement Process

Introduction

The purpose of this document is to provide a defined **structure** to clarify and document the ecological risk assessment screening and refinement process for sediments and water. It is proposed that the screening-level ecological risk assessment at the Alameda Runway Wetland be conducted using this process. This proposed process is intended to promote consistency and agreement in the identification of chemicals of ecological concern (COPC). The screening process, as presented in this document, tracks the Ecological Risk Assessment Guidance for Superfund (ERAGS) (EPA 1997), and the Navy Ecological Risk Assessment Policy (Navy 1999a). Additionally, the process is consistent with the EPA June 2001 ECO Update, "The Role of Screening-Level Risk assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments" (EPA 2001). The process encompasses the Screening-level Problem Formulation and Ecological Effects Evaluation (ERAGS Step 1), Screening-level Exposure Estimate and Risk Calculation (ERAGS Step 2), and Refinement of the List of Constituents of Potential Concern (the first portion of ERAGS Step 3)(see Figure B-1). This process does **not** represent a change in any guidance or policy, but presents the screening process in the context of specific decisions, and provides a methodology to document site screening. This screening process tracks Tier 1and a portion of Tier 2 of the Navy's 3-tiered Ecological Risk Assessment Process (detailed at http://web.ead.anl.gov/ecorisk/process/).

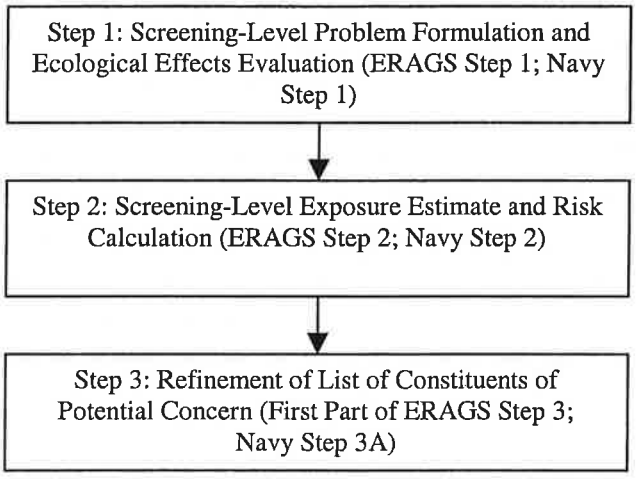

Figure B-1. Overview of the Ecological Screening Process

Step 1: Screening-Level Problem Formulation and Ecological Effects Evaluation

Screening-Level Problem Formulation

The first part of this step involves the screening-level problem formulation and ecological effects evaluation. The screening-level problem formulation consists of five activities:

- Description of environmental setting and contaminants known or suspected at the site.
- Description of potential contaminant fate and transport mechanisms at the site.
- Ecotoxicity evaluation of potential contaminants at the site.
- Identification of potentially complete ecological exposure pathways at the site.
- Selection of screening-level assessment endpoints.

These five activities set the stage for the screening-level risk assessment, and allow the risk assessor and risk manager to compile all known historical information and data for a site and evaluate the current conditions at the site. As part of Step 1 activities, an "Ecological Assessment Checklist" such as that provided in ERAGS Appendix A should be completed to help focus and plan the screening-level risk assessment. The five activities of the screening-level problem formulation are discussed further in the following paragraphs. For additional information on each of these activities, refer to the section of ERAGS (EPA 1997) referenced for each activity.

Description of Environmental Setting and Contaminants Known or Suspected at the Site (ERAGS Section 1.2.1). The description of the environmental setting of the site will be based upon information from both historic sources (reports, maps, photos) and the initial site visit. The description will include the site layout and topography, habitat descriptions, descriptions of disturbed/man-made areas, current, historic, and future land uses, observations of plants and animals present at the site, and a description of soil/sediment/water types. Completion of the "Ecological Assessment Checklist" mentioned above will typically greatly facilitate the completion of this activity and assist in merging the perspectives of all parties on this initial conceptual site model (CSM), and identify any differences needing resolution. The initial list of chemical constituents at Runway Wetland will be compiled from data collected during previous site investigations and adequacy of these data (spatial and temporal) to support a screen shall be discussed with site decision-makers.

Description of Potential Environmental Fate and Transport Mechanisms (ERAGS Section 1.2.2). Potential chemical constituent migration pathways will be identified for the site. These pathways could include air or wind-borne transport, erosion, surface water runoff, ground water, food-chain transport (bioaccumulation), etc. Discussion of chemical fate in the environment will consider the propensity for physical and biological degradation of contaminants, including the formation of daughter products, and the likelihood that chemical constituents will be readily metabolized or sequestered by organisms.

Ecotoxicity Evaluation of Potential Contaminants at the Site (ERAGS Section 1.2.3). Understanding the toxicity mechanisms of potential chemical constituents is helpful in understanding potential exposure pathways and focusing the selection of appropriate screening-level assessment and measurement endpoints. It is important to understand whether a constituent's mode of action makes it particularly toxic to certain groups of organisms (e.g. mammals vs. fish, or vertebrates vs. invertebrates), and what are the potential toxic effects (e.g. death, growth reduction, reproductive/developmental effects, etc.).

Identification of Potentially Complete Exposure Pathways (ERAGS Section 1.2.4). The exposure pathway is the route by which the chemical constituent is taken-up by the receptor. Examples of potential exposure routes are direct ingestion of media, root uptake by plants, direct contact/dermal absorption from water or sediment, and food-chain uptake. Identification of potentially complete exposure pathways is made from information gathered during the site visit, and may involve the best professional judgment of the risk assessor. A key component of identifying potential risk is that there must be chemical constituents present, **and** there must be complete exposure pathways. If there are **no** complete exposure pathways, there is no risk, even if chemical constituents are present at the site. The exposure pathway evaluation will include consideration of potential future exposure pathways as well as current exposure pathways. For instance, if no current pathway exists because an immobile constituent is under a building, the likelihood that a complete pathway will exist if that building is removed should be considered. Completed exposure pathways for the Runway Wetland were agreed upon with the BTAG during a conference call on August 8, 2000.

Selection of Screening-level Assessment Endpoints and Measurement Endpoints (ERAGS Section 1.2.5). Screening-level assessment endpoints are **any** adverse effects on ecological receptors, including effects on threatened and endangered species, populations, communities, habitats, and sensitive environments. Screening level measurement endpoints will be consistent with the identified toxicity mechanisms and exposure pathways. Screening level assessment and measurement endpoints for the Runway Wetland have already been agreed upon with the BTAG (conference call on August 8, 2000).

Screening-Level Ecological Effects Evaluation

The second part of Step 1 is the screening-level ecological effects evaluation, including the selection of screening ecotoxicity values (hereafter called screening values). Screening values should be chosen for each contaminant that has a complete exposure pathway to a receptor. Sediment screening values for the Runway Wetland will be taken from the following hierarchy of sources:

1. Effects Range Low (ER-L) or Threshold Effects Level (TEL) values from Long and Morgan (1991), Long et al. (1995) and MacDonald et al. (1996);
2. Washington State, Apparent Effects Threshold (AET), sediment quality standard (Ginn and Pastorak 1992);

3. ER-L, TEL and Lowest Effects Level (LEL) values based on toxicity studies using freshwater sediments (EPA 1996c; Persuad et al. 1993);

4. SSB's calculated from marine Ambient Water Quality Criteria (AWQC) or from water quality values presented in NOAA's Screening Quick Reference Table (SQuiRT; Buchman 1998), according to the Equilibrium Partitioning (EqP) approach (EPA 1996a);

5. SSB's calculated from freshwater Great Lakes Tier I or Tier II water quality criteria (EPA 1995b), according to the Equilibrium Partitioning (EqP) approach (EPA 1996a);

If a literature reported toxicity value is based upon a lowest effect level (LEL), a NOAEL-based value will be approximated by multiplying the LEL-based value by an uncertainty factor of 0.1. Use of this uncertainty factor is justified in ERAGS Section 1.3.1. A list of proposed sediment screening values based upon the above hierarchy is presented in Attachment A. Constituents present at the site that do not have ecological screening values available from the above hierarchy of sources are automatically carried forward to the COPC refinement step of the baseline ecological risk assessment (BERA).

Step 1 Uncertainty Discussion

The final part of Step 1 will be a consideration and discussion of the uncertainties associated with the screening-level problem formulation. These uncertainties may include, but are not limited to, uncertainties associated with knowledge of operational history of the site and the potential constituents present; uncertainties associated with exposure pathways and selection of endpoints; uncertainties associated with ecotoxicological modes of action of constituents present at the site; uncertainties associated with the adequacy of the type and number of samples available to represent the site; and uncertainties associated with information taken from the literature and extrapolations used in choosing screening values. Of particular note in discussing uncertainties associated with ecotoxicological effects are possible synergistic or antagonistic effects of multiple chemical constituents in combination. The uncertainties associated with the conservative assumptions built into the derivation of screening levels (100% bioavailability, 100% exposure, etc) will also be discussed as a part of the Step 1 uncertainties.

Step 2: Screening-Level Exposure Estimate and Risk Calculation

Screening-Level Exposure Estimate

In the screening-level exposure estimates and risk calculations, only completed exposure pathways will be evaluated, but incomplete pathways will be documented as these may result in a possible land use constraint for this site. As steps 1 and 2 are a screening-level risk assessment, it is incumbent that only the most conservative assumptions be used in the estimation of exposure levels. If the selected screening benchmarks account for bioaccumulation to higher trophic levels, the most conservative exposure assumptions are already built into the benchmarks, and the screening-level assessment can proceed to the risk calculation. However, the screening values from the hierarchy presented above generally do not account for bioaccumulation, so all bioaccumulative constituents at the Runway Wetland will be evaluated

through the construction of screening-level food-chain models. Bioaccumulative compounds of interest are presented in Attachment B. Food-chain models attempt to estimate doses to representative upper trophic level receptors using maximum constituent concentrations in sediment and biological tissue (plant, invertebrate, fish, and mouse tissues) and highest reported receptor ingestion rates, lowest reported receptor body weights, and area use factors equal to 1. Hazard quotients will be calculated for each constituent by comparing maximum estimated doses to food-chain receptors to appropriate NOAEL-based Toxicity Reference Values (TRVs). NOAEL-based TRVs developed by the Navy (EFA West 1998) will be used preferentially, but TRVs from other literature sources will be proposed for constituents for which the Navy has not developed TRVs. Appropriate food-chain level receptors for the Runway Wetland were identified and presented to the BTAG during a conference call on August 8, 2000.

Screening-Level Risk Calculation

In the screening-level risk calculation, the maximum observed concentration in media is divided by the media-specific screening-value, or the maximum estimated food-chain dose is divided by the appropriate NOAEL-based TRV to calculate a hazard quotient (HQ). If the constituent was not detected, or if laboratory reported detection limits in some samples are higher than detected concentrations, then the HQ is calculated by dividing the detection limit by the screening value or NOAEL-based TRV. If the HQ $\geq$ 1 for a given constituent, that constituent is designated a COPC and is carried forward to the COPC refinement step (Step 3 A). If the HQ $<$ 1 for a given constituent, that constituent is dropped from further evaluation.

Step 2 Uncertainty Discussion

The uncertainty discussion for Step 2 will include a discussion of the uncertainty associated with literature derived exposure parameters used in the exposure estimates. Examples include uncertainties associated with receptor body weights, ingestion rates, and diet compositions. Uncertainties associated with any extrapolations used to arrive at exposure parameters will be discussed. It is important to note that uncertainties can have both positive and negative effects on the screening results, i.e. the uncertainties may cause the actual HQs to be lower or higher than calculated.

Step 2 Scientific Management Decision Point (SMDP)

At the end of Step 2, the risk manager and the risk assessor must decide if the results of the initial site screen indicate that the site warrants further investigation. As stated in ERAGS Section 2.4, there are three possible decisions at this point in the risk assessment process:

1. Screening results suggest that ecological risk is negligible and there is no need for further investigation or remediation.
2. Screening results indicate a potential for ecological risk, and a more thorough assessment is warranted.
3. Screening results are inadequate to make a decision at this point.

Figure B-2 presents the decision flow process for the Step 2 SMDP. If the Step 2 screening results are deemed inadequate to make a decision, a work plan should be developed to collect sufficient data so the screening process can be completed. The risk of arriving at a conclusion that the results of the screening assessment are inadequate to make a decision will be decreased if an assessment of data adequacy is made in conjunction with the BTAG before beginning the screening assessment. Although spatially limited, the assumption is being made that historical Runway Wetland data are adequate for conducting screening assessments, as no evidence exists that past base operations resulted in releases at the site. It is also assumed that the construction debris pile is not a source of hazardous waste at Runway Wetland. If the results of Steps 1 and 2 indicate that risk is negligible, then a No Action decision will be considered for Runway Wetland. If the results of Steps 1 and 2 indicate that potential risk exists, then all constituents at the site with HQs ≥ 1 will be carried forward as constituents of potential concern (COPCs) to the COPC refinement step (Step 3A) of the baseline risk assessment. This SMDP finding will be made formal among the decision-making parties before continuing to a "No Action" record of decision or to Step 3A.

Step 3A: Refinement of the List of Constituents of Potential Concern

In ERAGS, the first part of the baseline ecological risk assessment problem formulation is the "refinement" of the preliminary COPC list using more realistic, yet still conservative assumptions. This refinement, covered in Section 3.2 of ERAGs, is informally known as Step 3A ERAGS. The Navy in their Ecological Risk Assessment Policy dated 5 April 1999 officially recognizes Step 3A as the COPC refinement step. ERAGS does not provide detail on specific methodologies and direction that can be used to focus the list of COPCs, but does provide a general discussion of the process. ERAGS states simply that Step 3A "should consider how the HQs would change if more realistic conservative assumptions were used instead", and that for those constituents for which the HQs are < 1 using the new assumptions, "the lead risk assessor and risk manager should discuss and agree on which can be eliminated from further consideration." The EPA ECO Update published June 2001 (EPA 2001) provides direction for considering background, frequency of detection, and dietary considerations as methods for COPC refinement. Figure B-3 illustrates a COPC refinement and focusing process for Runway Wetland that is consistent with Navy policy and guidance. The individual aspects this refinement process are discussed in the following paragraphs. An important assumption in all of the Step 3A activities is that there is agreement that **the available data adequately represents the site**. Although as mentioned previously, Runway Wetland data are spatially limited, there is no reason to believe that the available data are not representative of the site since there is no history of operations that would have resulted in releases at the site. Past operations have resulted in only construction debris being deposited at the Runway Wetland site.

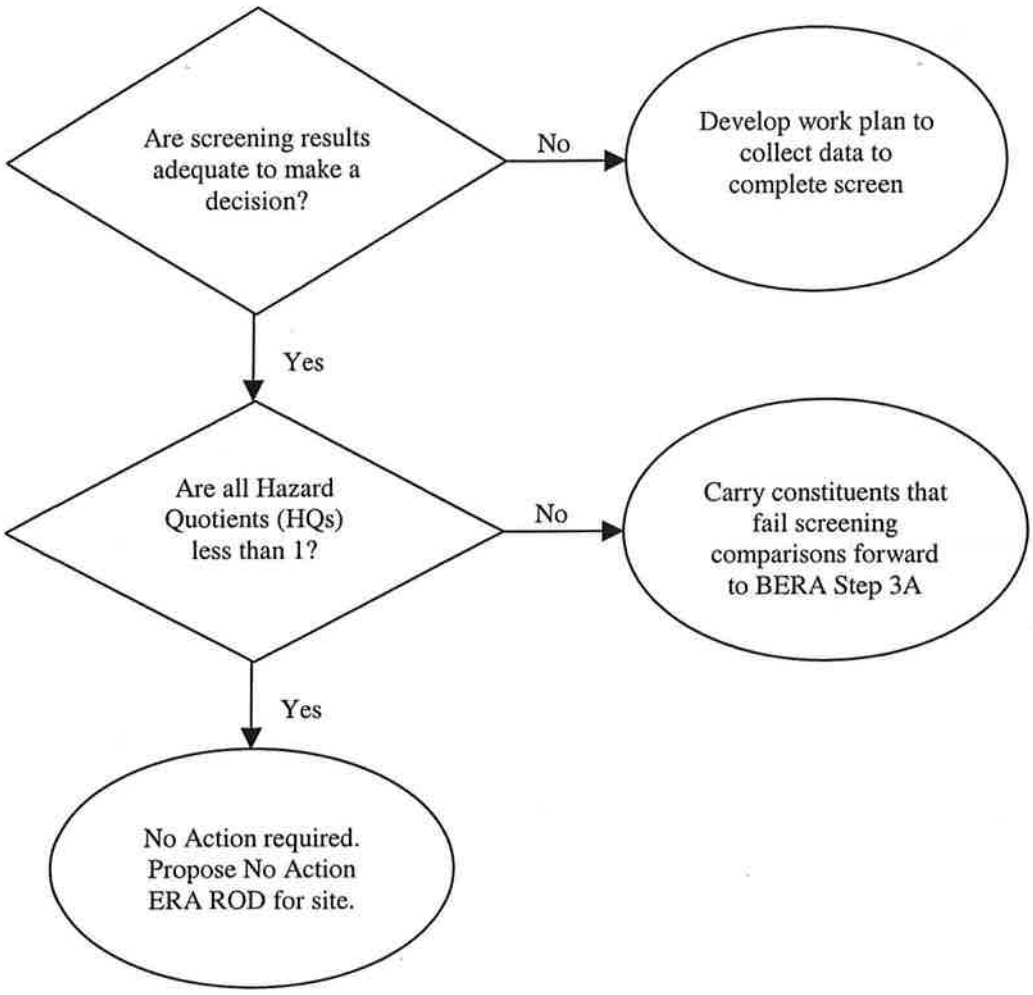

Figure B-2. Step 2 SMDP Decision Process

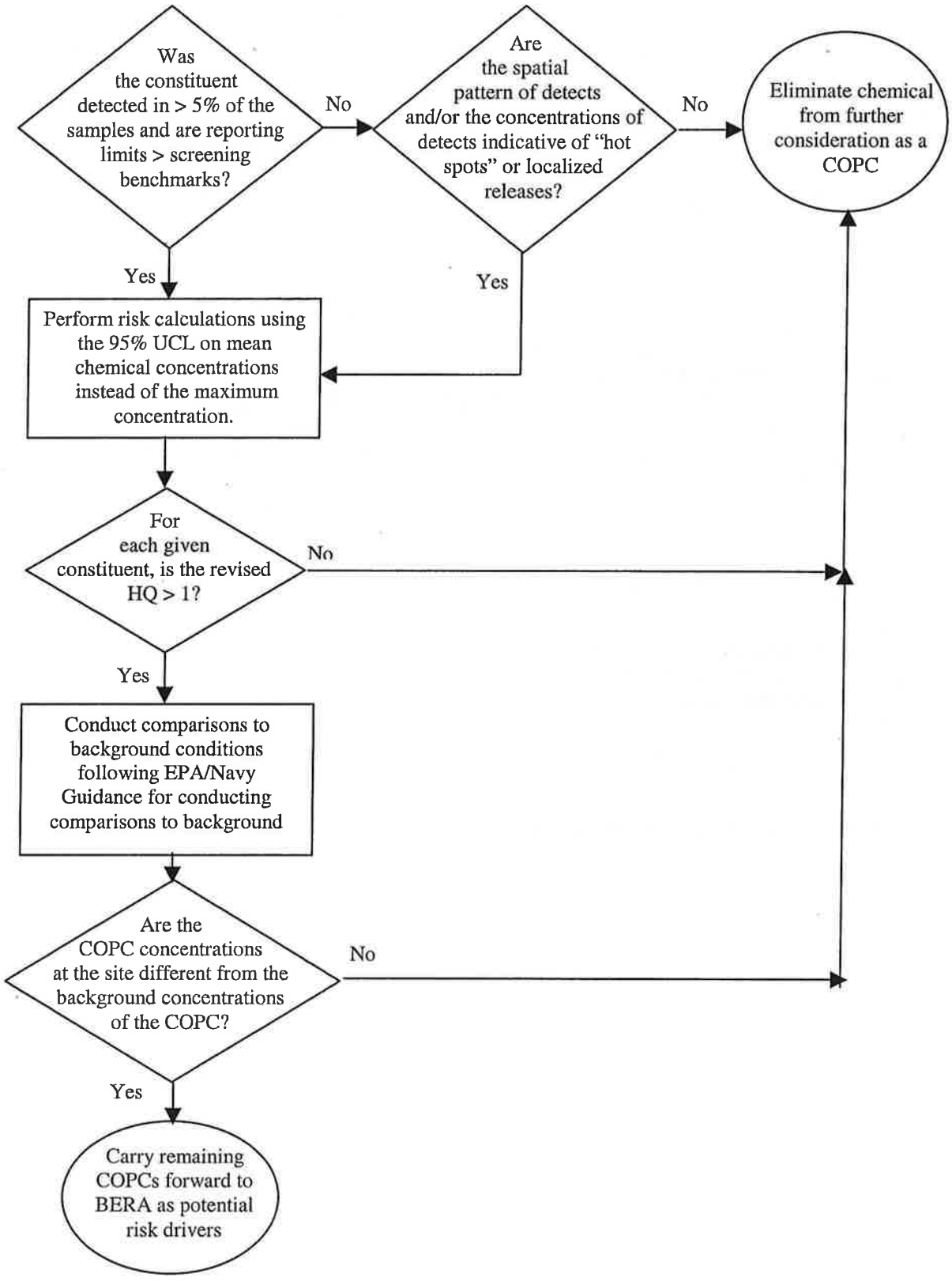

Figure B-3. COPC Refinement and Focusing Decision Flow Diagram

Spatial Distribution and Frequency of Detects. The first COPC refinement method involves examining the spatial distribution and frequency of detects for each individual COPC carried forward from Step 2. Human health risk assessments use a general rule of thumb that if the constituent is detected in less than 5% of the samples, it can be eliminated from further consideration. The support for this approach is provided in Section 5.9.3 of Part A of the Risk Assessment Guidance for Superfund (RAGS)(EPA 1989) and the June 2001 ECO Update (EPA 2001). However, as stated in the referenced ECO Update, it is not adequate to look solely at the frequency of detects as a means of eliminating constituents from further evaluation. The spatial distribution of detects and the concentration of the detects must also be taken into consideration. In order to eliminate COPCs based upon low frequency of detect, **all** of the following conditions **must** be met:

1. The COPC must have been detected in less than 5% of the samples. If fewer than 20 samples have been taken, this refinement activity cannot be used.

2. The total number of detects **plus** the total number of laboratory reported detection limits exceeding the screening value must be less than 5% of the total samples. For example, if the COPC was detected in 3% of the samples, but reporting limits exceeded the screening value in an additional 4% of the samples, the COPC should be retained because potentially 7% of the samples could exceed screening values.

3. The detected constituent concentrations and spatial distribution must not be indicative of a potential "hotspot" or localized release, e.g. findings are confirmed by other adjacent findings.

If the above conditions are met, the risk assessor should document the rationale for removing the COPCs from further consideration based upon low frequency of detects. If any of the above conditions are not met, the COPC should be retained for further evaluation. **Since fewer than 20 sediment samples were taken at Runway Wetland, this refinement method cannot be applied at the site.**

Use of 95% UCL of Mean Concentrations of COPCs. In this refinement activity, the risk calculations from Step 2 are revised using the 95% UCL of mean concentrations in media at Runway Wetland to compare to media-specific screening values and to calculate food-chain doses to upper-trophic level receptors. When calculating the 95% UCL, the distribution of the data must be taken into consideration. For instance, if the data are log normally distributed instead of normally distributed, then a log normal transformation should be performed before calculating the 95% UCL. Also, the calculation of the 95% UCL should take into consideration if "hot spots" are present, since using a 95% UCL comparison could dilute the potential effect of these "hot spots". If the HQs from the revised calculations are less than 1, the risk assessor and risk manager should agree on which constituents can be removed, and document the reason for removing them.

Comparison to Site or Regional Background Conditions. The final step of the Step 3A COPC refinement and focusing process is the comparison to site or regional background conditions.

EPA (2001) states that "comparison with background levels generally cannot be used to remove contaminants of concern owing to the need to fully characterize site risk", but that background comparisons "can be used effectively to focus the baseline risk assessment". This step is only possible if an **adequate** background data set can be identified. For the Runway Wetland, it is proposed to use the San Francisco Bay ambient data set compiled by the Regional Monitoring Program to conduct background comparisons. Use of this dataset is appropriate as the entire runway wetland area represents dredged fill material. The background data set should represent similar physical conditions as found at the site (e.g. similar grain size, TOC, pH, etc.). There is some debate over the appropriate time to consider background conditions during the risk assessment process, but Navy policy for using background data states that the comparison to background should occur during Step 3A of the ecological risk assessment (Navy 2000b). The Navy has also published guidance for conducting comparisons and determining the adequacy of the historical data for such comparisons to background during environmental investigations (Navy 1999b). The Navy guidance advocates comparing the entire distribution of site data to the entire distribution of background data in lieu of defining ambient as a single point, and details appropriate statistical methods for conducting such comparisons. The adequacy of the background data set for conducting comparisons is determined by the statistical methodologies used for the comparisons. The statistical tests recommended in the Navy Background Guidance all require that certain assumptions regarding data distributions, frequency of detects, and sample size be met for the comparisons to be valid. Constituents at the Runway Wetland which fail comparison to screening values but which are not statistically different from background will be discussed further in the risk characterization step.

Step 3A Uncertainty Discussion

The uncertainty discussion of Step 3A should discuss uncertainties associated with all of the refinement tools used during this step. These may include uncertainties associated with data variability and representativeness, uncertainties associated with literature derived estimates of bioavailability, and uncertainties associated with the background data set and the comparisons of site data to background data. The potential impacts of these uncertainties on the COPC refinement process should also be discussed.

The Runway Wetland screening calculations in Steps 2 and 3A assume that the concentrations of constituents in the media of concern are 100% bioavailable to ecological receptors. This is generally not the case for chemical constituents in soil and sediment, with some portion of the chemicals being bound to the sediment/soil matrix and unavailable for uptake or not totally absorbed by the risk target. Uncertainties associated with the bioavailable portion of COPCs will be discussed for all constituents remaining after the COPC refinement step. Adjustments can be made in Step 3A to account for that portion of COPCs that are unavailable under typical site conditions. The Navy has published guidance for incorporating bioavailability adjustments into human health and ecological risk assessments (Navy 2000a). To date the Navy guidance only addresses bioavailability of metals, although bioavailability adjustments for various organic COPCs may be available from other literature sources.

Step 3A Scientific Management Decision Point (SMDP)

At the end of Step 3A, COPCs eliminated during the refinement process and the reasons for removing them will be documented and agreement will be reached with the site decision makers on the final list of COPCs to be carried forward to the rest of the BERA. If no COPCs remain after Step 3A, further evaluation of the Runway Wetland under the auspices of a BERA are unnecessary, and a No Action ERA ROD will be proposed for the site. This SMDP finding needs to be made formal among the decision-making parties before continuing to a "No Action" record of decision or to Step 3A. Agreement on specific criteria of the SMDP must be negotiated and met prior to proceeding. .

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Attachment A: List of Proposed Ecological Screening Values for Sediment

Analyte	CAS #	Type	Sediment Screening Benchmark[a]		Source
Antimony	7440360	inorg	2.00	mg/kg	ERL (Long and Morgan 1991)
Arsenic	7440382	inorg	8.20	mg/kg	ERL (Long et al. 1995)
Barium	7440393	inorg	n/a		
Beryllium	7440417	inorg	n/a		
Cadmium	7440439	inorg	1.20	mg/kg	ERL (Long et al. 1995)
Chromium	7440473	inorg	81.00	mg/kg	ERL (Long et al. 1995)
Cobalt	7440484	inorg	n/a		
Copper	7440508	inorg	34.00	mg/kg	ERL (Long et al. 1995)
Lead	7439921	inorg	46.70	mg/kg	ERL (Long et al. 1995)
Mercury	7439976	inorg	0.15	mg/kg	ERL (Long et al. 1995)
Molybdenum	7439987	inorg	n/a		
Nickel	7440020	inorg	20.90	mg/kg	ERL (Long et al. 1995)
Selenium	7782492	inorg	n/a		
Silver	7440224	inorg	1.00	mg/kg	ERL (Long et al. 1995)
Thallium	7440280	inorg	n/a		
Vanadium	7440622	inorg	n/a		
Zinc	7440666	inorg	150.00	mg/kg	ERL (Long et al. 1995)
Cyanide	57125	inorg	n/a		
Tributyltin, TBT	688733	organotin	n/a		
Tributyltin, TBT	56573854	organotin	n/a		
Acenapthene	83329	pah	16.00	(µg/kg)	ERL (Long et al. 1995)
Acenaphthylene	208968	pah	44.00	(µg/kg)	ERL (Long et al. 1995)
Anthracene	120127	pah	85.30	(µg/kg)	ERL (Long et al. 1995)
Benzo(a)anthracene	56553	pah	261.00	(µg/kg)	ERL (Long et al. 1995)
Benzo(a)pyrene	50328	pah	430	(µg/kg)	ERL (Long et al. 1995)
Benzo(b)fluoranthene	205992	pah	n/a		
Benzo(g,h,i)perylene	191242	pah	290	(µg/kg)	*Freshwater ERL based on 14-day C.riparius test (EPA 1996c)*
Benzo(k)fluoranthene	207089	pah	240	(µg/kg)	*Freshwater LEL (Persuad et al. 1993)*
Benzo(b,k)fluoranthene		pah	27.20	(µg/kg)	*Freshwater TEL based on 28-day H.azteca test (EPA 1996c)*
Chrysene	218019	pah	384	(µg/kg)	ERL (Long et al. 1995)
Dibenz(a,h)anthracene	53703	pah	63.40	(µg/kg)	ERL (Long et al. 1995)
Dibenzofuran	132649	pah	2,290	(µg/kg)	*EqP-derived TRV based on 1% OC, 4.12 Kow (Jones et al. 1997), and freshwater toxicity data*
Fluoranthene	86737	pah	600	(µg/kg)	ERL (Long et al. 1995)
Fluorene	206440	pah	19	(µg/kg)	ERL (Long et al. 1995)
Indeno(1,2,3-cd)pyrene	193395	pah	78	(µg/kg)	*Freshwater ERL based on 14-day H.azteca test (EPA 1996c)*
Methylnaphthalene[2-]	91576	pah	70	(µg/kg)	ERL (Long et al. 1995)
Naphthalene	91203	pah	160	(µg/kg)	ERL (Long et al. 1995)
Phenanthrene	85018	pah	240	(µg/kg)	ERL (Long et al. 1995)
Pyrene	129000	pah	665	(µg/kg)	ERL (Long et al. 1995)
Total PCBs		pcb	22.7	(µg/kg)	ERL (Long et al. 1995)
4,4'-DDD	72548	pest	2.00	(µg/kg)	ERL (Long and Morgan 1991)
4,4'-DDE	72559	pest	2.20	(µg/kg)	ERL (Long et al. 1995)
DDT, Total	50293	pest	1.58	(µg/kg)	ERL for total DDT's (Long et al. 1995)
Aldrin	309002	pest	2.00	(µg/kg)	*Freshwater LEL (Persaud et al 1993)*
BHC-alpha	319846	pest	6.00	(µg/kg)	*Freshwater LEL (Persaud et al 1993)*
BHC-beta	319857	pest	5.00	(µg/kg)	*Freshwater LEL (Persaud et al 1993)*
BHC-gamma (Lindane)	58899	pest	0.32	(µg/kg)	TEL (MacDonald et al. 1996)
BHC-delta	319868	pest	n/a		
Chlordane	57749	pest	0.50	(µg/kg)	ERL (Long and Morgan 1991)
Dieldrin	60571	pest	0.02	(µg/kg)	ERL (Long and Morgan 1991)
Endosulfan I	959988	pest	0.93	(µg/kg)	EqP-derived TRV based on 1% OC, 4.1 Kow (EPA 1995a), and marine AWQC
Endosulfan II	33213659	pest	0.93	(µg/kg)	EqP-derived TRV based on 1% OC, 4.1 Kow (EPA 1995a), and marine AWQC

Analyte	CAS #	Type	Sediment Screening Benchmark[a]		Source
Endosulfan sulfate	1031078	pest	n/a		
Endrin	72208	pest	0.02	(µg/kg)	ERL (Long and Morgan 1991)
Endrin aldehyde	7421934	pest	n/a		
Endrin ketone	53494705	pest	n/a		
Guthion	86500	pest	n/a		
Heptachlor	76448	pest	n/a		
Heptachlor Epoxide	1024573	pest	n/a		
Methoxychlor	72435	pest	29.58	(µg/kg)	EqP-derived TRV based on 1% OC, 5.08 Kow (EPA 1995a), and marine AWQC
Mirex	2385855	pest	1.55	(µg/kg)	EqP-derived TRV based on 1% OC, 5.28 Kow (EPA 1995a), and marine AWQC
Toxaphene	8001352	pest	0.51	(µg/kg)	EqP-derived TRV based on 1% OC, 5.5 Kow (EPA 1995a), and marine AWQC
Sulfide, H_2S	7783064	sulfide	n/a		
Benzoic acid	65850	svocs	650	(µg/kg)	Washington state sediment quality standard (Ginn and Pastorak 1993)
Bis(2-ethylhexyl)phthalate	117817	svocs	n/a		
Butyl benzyl phthalate	85687	svocs	2,200	(µg/kg)	EqP-derived TRV based on 1% OC, 4.84 Kow (EPA 1995a), and marine toxicity data
Carbazole	86748	svocs	n/a		
Chloro-3-methylphenol[4-]	59507	svocs	n/a		
Chlorobenzene	108907	svocs	681	(µg/kg)	EqP-derived TRV based on 1% OC, 2.86 Kow (EPA 1995a), and marine toxicity data
Chlorophenol[2-]	95578	svocs	57	(µg/kg)	*EqP-derived TRV based on 1% OC, 2.15 Kow (EPA 1995a), and freshwater toxicity data*
Di-n-butylphthalate	84742	svocs	1,157	(µg/kg)	EqP-derived TRV based on 1% OC, 4.61 Kow (EPA 1995a), and marine toxicity data
Di-n-octylphthalate	117840	svocs	n/a		
Dibenzofuran	132649	svocs	2,290	(µg/kg)	*EqP-derived TRV based on 1% OC, 4.12 Kow (EPA 1995a), and freshwater toxicity data*
Dimethylphthalate	131113	svocs	n/a		
Dinitrotoluene[2,4-]	12142	svocs	n/a		
Methyl phenol[2-]	95487	svocs	63	(µg/kg)	Washington state sediment quality standard (Ginn and Pastorak 1993)
Methyl phenol[4-]	106445	svocs	670	(µg/kg)	Washington state sediment quality standard (Ginn and Pastorak 1993)
Dimethyl phenol[2,4-]	105679	svocs	29	(µg/kg)	Washington state sediment quality standard (Ginn and Pastorak 1993)
Nitrobenzene	98953	svocs	n/a		
Pentachlorophenol	87865	svocs	7,969	(µg/kg)	EqP-derived TRV based on 1% OC, 5.09 Kow (EPA 1995a), and marine AWQC
Phenol	108952	svocs	420	(µg/kg)	Washington state sediment quality standard (Ginn and Pastorak 1993)
Acetone	67641	vocs	n/a		
Benzene	71432	vocs	56.50	(µg/kg)	*EqP-derived TRV based on 1% OC, 2.13 Kow (EPA 1995a), and freshwater toxicity data*
Butanone[2-]	78933	vocs	n/a		
Carbon tetrachloride	56235	vocs	7,244	(µg/kg)	EqP-derived TRV based on 1% OC, 2.73 Kow (EPA 1995a), and marine toxicity data
Chloroform	67663	vocs	n/a		
Dichlorobenzene[1,4-]	106467	vocs	2,970	(µg/kg)	EqP-derived TRV based on 1% OC, 3.42 Kow (EPA 1995a), and marine toxicity data
Methylene chloride	75092	vocs	n/a		
Tetrachloroethane[1,1,2,2-]	79345	vocs	202	(µg/kg)	EqP-derived TRV based on 1% OC, 2.39 Kow (EPA 1995a), and marine toxicity data
Tetrachloroethene	127184	vocs	190	(µg/kg)	EqP-derived TRV based on 1% OC, 2.67 Kow (EPA 1995a), and marine toxicity data
Toluene	108883	vocs	187	(µg/kg)	EqP-derived TRV based on 1% OC, 2.75 Kow (EPA 1995a), and marine toxicity data
Trichlorobenzene[1,2,4-]	120821	vocs	11,290	(µg/kg)	EqP-derived TRV based on 1% OC, 4.01 Kow (EPA 1995a),

Analyte	CAS #	Type	Sediment Screening Benchmark[a]		Source
					and marine toxicity data
Trichloroethane[1,1,1-]	71556	vocs	856	(µg/kg)	EqP-derived TRV based on 1% OC, 2.48 Kow (EPA 1995a), and marine toxicity data
Trichloroethene	79016	vocs	1,620	(µg/kg)	*EqP-derived TRV based on 1% OC, 2.71 Kow (EPA 1995a), and freshwater toxicity data*
Xylenes	1330207	vocs	1,127	(µg/kg)	*EqP-derived TRV based on 1% OC,3.17 Kow (EPA 1995a), and freshwater toxicity data*

a = Sediment Screening Benchmarks (SSB) are based on reported chronic values for marine systems unless otherwise stated

Attachment B. Bioaccumulative Compounds Of Concern[1]

Metals
arsenic
cadmium
chromium
copper
lead
mercury (methyl)
nickel
selenium
silver
zinc

Butyltins
tributyltin (oxide)

PAHs
anthracene
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i,)perylene
chrysene
dibenzo(a,h)anthracene
fluoranthene
fluorene
indeno(1,2,3-cd)pyrene
pyrene

Pesticides
aldrin
chlordane (alpha, gamma, and total)
2,4-DDD
4,4-DDD
2,4-DDE
4,4-DDE
2,4-DDT
4,4-DDT
dieldrin
endosulfan I
endosulfan I
endrin
heptachlor
heptachlor epoxide
alpha-BHC
beta-BHC
delta-BHC
gamma-BHC (lindane)
methoxychlor
toxaphene

PCBs (Aroclors)
Aroclor-1016
Aroclor-1221
Aroclor-1232
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1260
Aroclor-1268

PCBs (Congeners)
PCB 8
PCB 18
PCB 28
PCB 44
PCB 52
PCB 66
PCB 77
PCB 81
PCB 101
PCB 105
PCB 118
PCB 126
PCB 128
PCB 138
PCB 153
PCB 156
PCB 169
PCB 170
PCB 180
PCB 187
PCB 195
PCB 206
PCB 209

Dioxins/Furans
2,3,7,8-tetrachlordibenzo-p-dioxin
2,3,7,8-tetrachlorodibenzofuran
1,2,3,7,8-pentachlorodibenzo-p-dioxin
2,3,4,7,8-pentachlordibenzofuran
1,2,3,7,8- pentachlordibenzofuran
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin
1,2,3,4,7,8-hexachlorodibenzofuran

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[1] The list of bioaccumulative compounds is taken from the "Region 9" column of Table 3 in Hoffman (1998).

Appendix C

Minutes of 2 October 2001
Runway Wetland BTAG Conference Call

Appendix C. Minutes of 2 October 2001 Runway Wetland BTAG Conference Call

Participants

Ned Black, EPA Region IX

Jim Haas, U.S. Fish and Wildlife Service

Charlie Huang, California Dept. of Fish and Game

Greg McDermott, Neptune and Company

Dan Michael, Neptune and Company

Rick Weissenborn, Navy EFDSW

Not Present

Jim Polisini, DTSC

Laurie Sullivan, NOAA

Minutes

The purpose of the call was to discuss and get BTAG feedback and acceptance on the document entitled "Runway Wetland Ecological Screening and COPC Refinement Process". Greg McDermott opened the call by stating that the process outlined in the document was to be used to conduct an ecological screening assessment at the Runway Wetlands at Alameda Point, and stated that the process is consistent with EPA ERAGS, Navy ecological risk assessment guidance, and the EPA ECO Update on screening and COPC refinement issued June 2001. Mr. McDermott then summarized the types and numbers of available data at the Runway Wetland, and stressed that in order for the screening assessment to be successful, the following assumptions must be accepted by all parties: 1) available data are representative of the site, and 2) the construction debris pile at the site is not a source of hazardous chemicals to the Runway Wetland. Mr. McDermott stated that the first assumption is defensible because the operational history at Runway Wetland does not indicate any activities that would have resulted in chemical releases to the site. He also stated that the second assumption was valid because visual examination of the construction debris revealed it to be comprised of the mainly broken concrete, with lesser amounts of asphalt and scrap metal. Ned Black stated that although he did not have a map of sampling location in front of him and hence was working from memory, he agreed that the available samples were representative of the site and was willing to buy into the two assumptions put forth by Mr. McDermott. Mr. McDermott then asked if everyone was in agreement that the two assumptions were reasonable, and there were **no** dissenting opinions.

Mr. McDermott then outlined Step 1 of the screening process document, and pointed out that it was lifted directly from ERAGS. Jim Haas recognized that the BTAG had already reviewed the

exposure parameters presented in Appendix C, and Mr. McDermott stated that the only parameter that had changed was the Site Use Factor, which was set at one for all receptors to be consistent with the conservative nature of a screening assessment. Charlie Huang asked why the mallard was being used as a measurement endpoint for invertebrate feeding birds. Mr. Haas stated that he had suggested using mallard in that role since female mallards eat primarily invertebrates during the breeding season. Ned Black stated that he had concerns with the hierarchy used to select sediment screening values, in particular the fact that Apparent Effects Thresholds (AETs) developed by Washington State were second in the hierarchy. Mr. Black stated that he did not feel that the methods used to derive AETs made them suitable to use as screening benchmarks. He did recognize that it probably would not make a difference at Runway Wetland, as AET-derived benchmarks were only used for a few volatile organic constituents unlikely to be found at Runway Wetland. Mr. Black then asked if the Navy wanted the BTAG to provide formal comments on the screening document. Rick Weissenborn said that the Navy would accept comments on the document. Mr. McDermott summarized the BTAG comments on Step 1 and asked for other comments on Step 1. No other comments were received and consensus was reached that the process for Step 1 was acceptable to all (with the exception of using AETs as screening benchmarks). ACTION: Neptune and Company will determine if any chemical constituents with benchmarks based on AETs would alter endpoints established for the Alameda Runway Wetlands and advise the Navy for determination of an alternative ecological screening benchmark.

Mr. McDermott outlined Step 2 of the screening process document, again stating that it was entirely consistent with ERAGS and Navy guidance. He stated that maximum chemical concentrations from sediment, surface water and tissue data would be used to calculate doses to food chain receptors. Jim Haas stated that using TRVs from alternative sources for constituents that did not have Navy-derived TRVs was a good idea that would help reduce uncertainties associated with the food chain models. Rick Weissenborn suggested that a table of alternative TRVs and supporting documentation would be prepared and submitted to the BTAG prior to submission of the Runway Wetland screening report. The BTAG members agreed that this was a good idea that would allow for discussion of the TRVs prior to review of the report. ACTION: Neptune and Company will provide the table to Mr. Weissenborn for distribution to the BTAG. The BTAG had no other comments on Step 2, and consensus was reached that the outlined process was acceptable to all.

Mr. McDermott stated that ERAGS provided no more than a cursory treatment of Step 3A, COPC refinement, but that the recently issued EPA ECO Update (June 2001) provided a more in depth discussion focusing on three areas – magnitude and distribution of detects, bioavailability, and background. Mr. McDermott stated that magnitude and distribution of detects would not be used as a COPC focusing criteria at Runway Wetland, because there were inadequate sample numbers to apply the "5% rule" to this site. The COPC focusing process then suggests using a statistic other than the maximum, such as the 95% UCL on the mean, to calculate doses and compare to screening thresholds and TRVs. Charlie Huang stated that he thought the use of anything less than the maximum would violate the conservative assumptions of the screening

assessment. Mr. McDermott stated that the maximum would be used in Step 2, and the use of the 95% UCL in Step 3A would allow a bound to be placed on the HQ calculation, and would give the risk manager an indication of how sensitive the result was to the dose input. Mr. McDermott then suggested that instead of being used to dismiss COPCs outright, the results of this focusing criterion would be discussed in the uncertainty analysis. Mr. Huang agreed that this was an acceptable process. The third focusing criterion presented was comparison to background conditions. Mr. McDermott started by saying that the June 2001 ECO Update recognizes that although comparison to background should not be used to dismiss COPCs outright due to the need to fully characterize site risk, it could be used to focus baseline risk assessments. Mr. McDermott stated that the goal at Runway Wetland was to compare COPC concentrations to background concentrations and discuss the results in the uncertainty analysis and risk characterization section of the screening assessment. ACTION: Ned Black stated that although he did not have a problem with the proposed approach, he wanted an opportunity to run it past his superiors in Region IX. Mr. McDermott pointed out that the proposed background evaluation approach uses the RMP dataset for San Francisco Bay as the background dataset. The BTAG agreed that this approach was acceptable, with the caveat that DTSC might want to comment on the proposed approach. ACTION: Rick Weissenborn will solicit additional comments on the screening process document from DTSC and NOAA. The final Step 3A focusing criterion to be discussed was the issue of bioavailability. Mr. McDermott stated that the Navy has guidance for making bioavailability adjustments in risk assessments, but only for inorganic constituents. The Navy guidance provides a range of numbers for a constituent, and at Runway Wetland the proposal is to follow the Navy guidance, but provide a discussion of bioavailablity in the uncertainty discussion only for those constituents remaining after the completion of Step 3A. All on the call agreed that this was an acceptable approach.

Ned Black thanked the Navy for the opportunity to review and discuss the screening document prior to implementation of the screening assessment. He also stated that he felt it was a well-written, concise explanation of the screening process. This sentiment was seconded by the other BTAG members present on the call.

The following Action Items were identified during the call:

- Neptune and Company will determine if any chemical constituents with benchmarks based on AETs would alter endpoints established for the Alameda Runway Wetlands and advise the Navy for determination of an alternative ecological screening benchmark.
- Rick Weissenborn will solicit comments on the screening document from Jim Polisini and Laurie Sullivan.
- Neptune and Company will provide the Navy with a table of alternative TRVs and supporting documentation for distribution to the BTAG.
- The BTAG will provide formal comments on the "Runway Wetland Ecological Screening and COPC Refinement Process".

Appendix L
Response to Agency Comments

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RESPONSE TO COMMENTS ON
DRAFT SITE INSPECTION REPORT, TRANSFER PARCELS FED-1A, FED-1B, AND FED-2C
ALAMEDA POINT, ALAMEDA, CALIFORNIA
DATED MAY 2008
CTO-FNZ0 COMMENTS FROM CDFG, C, HUANG, 7/31/2008

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 1. DFG-OSPR appreciates this opportunity to provide guidance on the planned cleanup at Alameda Point. This memorandum will serve to inform the Navy of our continuing interest in coordinating any natural resource issues, as one of the designated State natural resource Trustees. This may be necessary should release(s) of any hazardous materials at the subject site affect State natural resources.	**Response to General Comment 1.** Comment noted.
General Comment 2. DFG-OSPR concurred with the review provided by Dr. James Polisini of the Department of Toxic Substances Control (DTSC) on July 9, 2008. The DFG has only a few new comments on the above document beyond those expressed by DTSC.	**Response to General Comment 2.** Comment noted.
General Comment 3. DTSC deferred to DFG's consultation for the Runway Wetland. If VA) changes future use of Transfer Parcels FED-IA, FED-2Bl and FED-2C, wetland delineation should be performed for Runway Wetland. DFG-OSPR reiterates that the Navy should recognize that DFG consistently uses the U.S. Fish and Wildlife Service (USFWS) definition of wetland in its wetland policy (http://www.fgc.ca.gov/policy/p4misc.asp#WETLANDS). The DFG wetland policy is a To-Be-Considered guideline which recommends that wetland characterization utilize USFWS definition of wetlands (USFWS, 1979). The USFWS definition utilizes hydric soils, saturation or inundation, and vegetative criteria. The USFWS definition requires the presence of only one of these criteria (rather than all three) in order to classify an area as a wetland. Therefore, the USFWS criteria for wetland characterization are more stringent than the U.S. Army Corp of Engineers (USACE) criteria. In order to uphold the DFG policy, DFG-OSPR must utilize USFWS criteria for wetland delineation at Alameda Point and other Base Realignment and Closure (BRAC) sites.	**Response to General Comment 3.** Comment noted. Currently there are no plans to develop the Runway Wetland. If actions are planned for the site that may adversely impact the wetland area, wetland delineation may be recommended.

RESPONSE TO COMMENTS ON
DRAFT SITE INSPECTION REPORT, TRANSFER PARCELS FED-1A, FED-1B, AND FED-2C
ALAMEDA POINT, ALAMEDA, CALIFORNIA
DATED MAY 2008
CTO-FNZ0 COMMENTS FROM CDFG, C, HUANG, 7/31/2008

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. ***Page 2-4, Section 2.4.2.*** The potential for a groundwater to surface water connection is a critical component of the ERA. This relationship should be clearly established in the ERA.	**Response to Specific Comment 1.** The potential for a groundwater to surface water connection is stated in the ERA in Sections 6.2.6 and G1.6.2. A statement to this effect will also be added to Section 2.4.2.
Specific Comment 2. ***Page 2-7, Section 2.6***. "Barren" and "Urban" are not habitat types. Please modify the habitat description for the sites as consisting of developed areas which include roads, parking lots and concrete runways.	**Response to Specific Comment 2.** Barren and Urban are habitat types as described by California Department of Fish and Game (CDFG) (2001) and Mayer and Laudenslayer, Jr. (1988), as noted in Section G1.2.
Specific Comment 3. ***Page 6-17, Section 6.3***. It is not clear from the discussion on this page how the Runway Wetland was characterized. DFG-OSPR strongly recommends that the wetland delineation be made by a qualified biologist in case future VA use may change the size, habitat diversity, or biological resources of the site. The biologist should use site information and background materials to prepare what is commonly referred to as a "Wetland Delineation Report." DFG-OSPR recommends the following outline to present the project information in a report format (US Army Corps of Engineers, 1987). **I. Summary** **II. Introduction** A. Description of Project B. Purpose of Assessment **III. Project Setting** A. Vegetation community B. Hydrology C. Soils	**Response to Specific Comment 3.** Comment noted. If actions are planned for the site that may adversely impact the wetland area, wetland delineation may be recommended.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 3 (Continued). **IV. Methodology** A. Pre-survey investigations B. Field survey **V. Results** A. Summary table of wetland impacts B. Wetland functions and values 1. Description of existing functions and values 2. Potential impacts **VI. Discussion** A. Avoidance and minimization recommendations B. Mitigation recommendations **VII. References Cited** **VIII. Personal Communications Cited** **IX. Appendices** A. Project maps showing proposed USFWS and USACE jurisdictional areas (1:100 scale map preferred) B. Data Forms - Wetland Delineation C. National Wetlands Inventory map, where available	
Specific Comment 4. ***Page G-8, Section G1.5.1***. Why is the inhalation pathway not included? The contaminants of potential ecological concern for the parcels would be expected to be available through inhaled dust particulates.	**Response to Specific Comment 4.** As noted in Section G1.5.1, inhalation exposure is not evaluated due to insufficient exposure and toxicity data available in the scientific literature to develop an adequate model. In addition, the exposure via inhalation is generally considered to be much smaller compared to the exposure due to ingestion, which is evaluated for each receptor.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 5. ***Page G-11, Section G2.2.*** For chemicals without Navy-Biological Technical Advisory Group toxicity reference values (TRVs), please clarify what selection criteria (e.g. database size, related species, or statistical significance) were applied for chemicals with multiple TRVs.	**Response to Specific Comment 5.** Non- Biological Technical Advisory Group (BTAG) TRVs were selected from readily available data review documents such as Sample et al. (1996) from Oak Ridge National Laboratory, U.S. EPA's Integrated Risk Information System (IRIS), and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profiles. If multiple toxicity values were found, the most conservative value was used.
Specific Comment 6. ***Page G-13, Section G3.2***. It is not clear how bioaccumulation factors from Oak Ridge National Laboratory (ORNL) were applied in all dose calculations. Please use the equations for those chemicals covered by the ORNL documents for plants, soil invertebrates, and small mammals. Please note that these equations are based on dry, not wet weight. Please identify for which contaminants a wet-to-dry weight conversion was necessary.	**Response to Specific Comment 6.** Terrestrial receptors were modeled with ingestion rates and bioaccumulation factors (BAFs) in dry-weight units. As noted in Table G-10, Nagy's dry-weight equations were used to estimate ingestion rates. The ORNL BAFs are noted as dry-weight as well; see footnotes to Table G-8. Therefore, the units are consistent and no conversion of units was necessary. It should be noted that the aquatic-dependent receptors (aquatic birds and mammals) were modeled with ingestion rates and BAFs in wet-weight units. Nagy's wet-weight equations were used to estimate ingestion rates (Table G-11). BAFs used to estimate aquatic prey concentrations, such as for fish, are based on wet-weight units (Table G-9). Therefore, no unit conversion was necessary for these dose estimates.
Specific Comment 7. ***Page G-15, Section G4***. Through Attachment GI, DFG-OSPR was able to verify the ecologically-based hazard quotient (HQ). The calculated HQs for plants, soil invertebrates, mammals (deer mouse and California ground squirrel), and birds (Alameda Song Sparrow, American Robin, and Red-tailed Hawk) were checked at random and found to be arithmetically correct.	**Response to Specific Comment 7.** Comment noted.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 8. ***Pages G-21 to G-22***. Individual exposure pathways were considered separately rather than being evaluated together as part of the overall exposure. For any chemical-receptor combination with a HQ greater than one, all exposure pathways should be considered in the Step 3A risk refinement.	**Response to Specific Comment 8.** The selected receptors were evaluated separately. However, the exposure pathways for a particular receptor were evaluated together. This approach was used for both the screening-level assessment as well as for the refined assessment. For example, for a particular chemical-receptor combination (terrestrial) the exposure pathways due to ingestion of soil, plant material, invertebrates, or small mammals were added together in the exposure model. Section G3.5 describes the dose calculation as including all ingested media (i.e., soil, food types).

EDITORIAL COMMENT	RESPONSE TO EDITORIAL COMMENTS
Editorial Comment. Page G-22, Line 5. It seems that "aquatic wildlife" should be "wildlife."	**Response to Editorial Comment.** Section G7.2, first paragraph, last sentence (page G-22) will be revised as noted.

CONCLUSIONS	RESPONSE TO CONCLUSIONS
As detailed above, the report has several deficiencies that should be addressed. DFG-OSPR recommends that the Navy provide a revised report that clearly addresses these deficiencies.	The comments identify many items that have been clarified by the above responses. The responses make note of report sections containing relevant supporting information. A revised report will be prepared including the revisions noted above.
If VA changes the future use of Transfer Parcels FED-IA, FED-2B, and FED-2C, a wetland delineation should be performed for Runway Wetland. Once prepared, we request additional time to review and evaluate the wetland delineation report. In the meantime, the Navy may proceed with FED-2B, with the clear understanding that additional action may be required after DFG reviews the formal wetland delineation.	Comment noted.

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References:

California Department of Fish and Game. 2001. California Wildlife Habitat Relationships System. Wildlife Habitats. Available at http://www.dfg.ca.gov/whdab/html/wildlife_habitats.html. April.

Mayer, K.E., and W.F. Laudenslayer, Jr. 1988. A Guide to Wildlife Habitats of California. State of California, The Resources Agency, Department of Forestry and Fire Protection. Available at http://www.dfg.ca.gov/whdab/html/wildlife_habitats.html.

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COMMENTS	RESPONSE TO COMMENTS
Comment 1. The California Department of Public Health-Environmental Management Branch (CDPH-EMB) is concerned that the Navy is including a northwestern panhandle section of Parcel FED-1A, between IR Site #1 and IR Site #2, to be considered as an integral part of Parcel FED-1A. Given the past histories of the general areas of IR Sites #1 and #2 as waste disposal sites for Alameda NAS, the approximately 10-11 acre, panhandle section of land could share a similar history with one, or both, of these IR sites. While the Site Inspection Report (SIR) does mention the inclusion of the panhandle with Parcel FED-1A, the SIR is vague in the removal process of the panhandle area from its original association with IR Site #1, as per SIR, Section 3.1.4. Please provide justification for the Navy's decision on the removal of the Parcel FED-1A panhandle area from IR Site #1.	**Response to Comment 1.** The panhandle area between Sites #1 and #2 was not included in the initial drawing of the borders of IR Sites #1 and #2 because it is not part of either landfill, and no contamination/debris was known to have been placed there. For clarification, the following parenthetical expression included in Section 3.1.4 will be removed: "(an area originally included in IR Site #1 and referred to as 'the Runway Area' and later removed from IR Site #1)". However, a radiological survey is currently being conducted in the unpaved areas of the panhandle.

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COMMENTS	RESPONSE TO COMMENTS
Comment 2. Section 3.1.4 states that the validity of the soil data from a previous 1990 radionuclide sampling event for Parcel FED-1A was "not known". Please provide explanations for the following: a. How could locations for the 2007 resampling for radionuclides be determined by "Areas within Transfer Parcel FED-1A at which elevated radium-226 levels in soil were previously measured" if the validity of the previously measured soil data for these locations was unknown? This appears to validate the soil data where the elevated radium-226 levels were located, and contradicts the Navy's assertion that the previous sampling data had unknown validity. b. Did the aforementioned 1990 sampling event provide analyses of radionuclides in groundwater? Was the validity of the groundwater data from the original 1990 sampling event unknown? Please include groundwater sampling with the soil sampling explanation in Section 3.1.4, fifth paragraph. c. Please provide the data sets for the 1990 and follow-up 2007 radionuclide soils and groundwater sampling events for all parcels affected by this SIR. Some of the radiological data presented in the included compact disc (CD) appears incomplete and "J-flagged" as estimates. d. In Section 4.6, "Radionuclides", it appears that the Navy did not obtain any radiological background data from the panhandle section of FED-1A, but has included the radiological background data from a previous investigation from IR Site #1. Was the panhandle section of Parcel FED-1A included as part of the IR Site #1 investigation or was the panhandle section excluded from IR Site #1 when the IR Site #1 background data was obtained? e. According to Section 3.1.13, "soil from nine previously sampled locations was resampled" for the 2007 investigation. Please provide justification on how nine (9) locations could determine the radiological environment of the approximately 400 acres of Parcel FED-1A. f. Was the soil from the 9 locations resampled, as in, physically resampled on-site or were the soil samples from 1990 re-analyzed in 2007?	**Response to Comment 2.** a. FED-1A was determined to be non-radiologically impacted based on historical radiological data from 1990. Because the validity of the soil data is not known, in 2007 the Navy resampled areas that exceeded the current release criteria of 1 picocuries per gram (pCi/g) above established background. The Navy resampled these locations to determine if contamination is present. The data showed no exceedances above the release criteria and no further investigation is required. b. Groundwater sampling was conducted during the Site #1 and 2 Remedial Investigation/Feasibility Study (RI/FS), and no information regarding the validity of these data is known. The results of that sampling are presented on page 3-21 (for DRA-01) and page 3-22 (for M108-B). For clarification, the following sentence is added to the fifth paragraph of Section 3.1.4: "The results of the groundwater sampling are presented in Section 3.2.1.2 for EBS Parcel 23 and Section 3.2.1.3 for EBS Parcel 24. No information regarding the data validation for these samples is known." c. The requested data will be presented on the CD. d. The panhandle section was included in the background survey of Site #1. A radiological survey is currently being conducted in the unpaved areas of the panhandle. e. The intent of the 2007 investigation was to verify the prior results. f. New soil samples were collected in 2000 from the same locations and hipped to the laboratory for analysis.

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COMMENTS	RESPONSE TO COMMENTS
Comment 3. Section 4.6, "Radionuclides" reports 0.54 picocuries per gram (pCi/g) as a maximum detection of radium-226 from the 2007 investigation, but Table G-2 reports a radium-226 maximum detection of 5.9 pCi/g. Please provide an explanation for this conflict of information.	**Response to Comment 3.** The result presented on Table G-2 is from the earlier (1990) investigation and as such represents an extremely conservative input parameter to the ecological risk assessment.
Comment 4. Based upon the current information made available in this SIR, CDPH-EMB cannot concur with the Navy's conclusion that FED-1A, in general, and the panhandle section of FED-1A, in particular, do not need further radiological evaluation. Additional detailed information would be needed for CDPH-EMB concurrence with the recommendations and conclusions of this document. Therefore, given the current lack of radiological information, a human health risk assessment for radiological constituents should not be excluded from this SIR. Has the Navy included the radiological background data in any human health risk assessment for a scenario, such as, construction workers, etc.?	**Response to Comment 4** The Navy included the radiological background data for the Human Health Risk Assessment for IR Site 32 under the residential land use scenario. The activities were within the background range, and Applicable or Relevant and Appropriate Requirements (ARARs) for radionuclides were met, so the radionuclides were not recommended for further evaluation in the Feasibility Study (FS). However, a radiological survey is currently being conducted in the unpaved areas of the panhandle.
Comment 5. Since the panhandle section of FED-1A does contain two Areas of Concern (AOC 1 and AOC 2), the Navy should consider reconfiguring Parcel FED-1A with the removal and redesignation of the panhandle section as a potentially radiologically impacted site needing further radiological investigation.	**Response to Comment 5.** Based on the results from the radiological characterization conducted at FED-1A, the parcel does not appear to be radiologically impacted since the activities are within the established background. However, in April 2010 the Navy collected soil samples for radionuclide analysis from seven locations within FED-1A and FED-2B. These sample locations were selected in collaboration with the agencies. In addition, a radiological survey is currently being conducted in the unpaved areas of the panhandle.
Comment 6. It has been the position of CDPH-EMB that radiologically impacted sites, subject to future transfer from a Federal entity to a non-Federal entity, be remediated to no less than unrestricted use in the site's final condition.	**Response to Comment 6.** Comment noted. No response necessary.

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CTO-FZN0 COMMENTS FROM DTSC-DOT LOFSTROM, 8/12/08

COMMENTS	RESPONSE TO COMMENTS
Comment 1. The document cited above (draft SI Report) states that residential risks are hypothetical. However, the draft SI Report also states that the Veteran's Administration currently plans to build a long-term care facility within the transfer parcels. Residents of a long-term care facility are considered a sensitive population, and it is not clear that this group was carefully considered in completing the human health risk evaluation.	**Response to Comment 1.** The approach used to calculate human health risk in the Draft Site Inspection Report is protective of sensitive populations including potential future use as a long-term care facility. U.S. Environmental Protection Agency (U.S. EPA) and California Environmental Protection Agency (Cal/EPA) risk assessment methodology is designed to be protective of sensitive individuals including children and the elderly. The analysis provided additional level of protection in the likelihood that any patients in a long-term health care facility will have less exposure than assumed in the calculation of risk. While it is unlikely that any patient in a long-term care facility would have routine contact with soil or sediment, this pathway was used to calculate potential human health risk. For example, the risk of 2 x 10^{-6} at Parcel 25 in sediment is due to the assumption that a hypothetical child and an adult person daily ingests sediment, 350 days a year for 24 years as an adult and 6 years as a child. The risk is based on two samples with polychlorinated biphenyls (PCBs) below the residential Preliminary Remediation Goals (PRGs) and one sample of chromium, also below the residential PRG.

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COMMENTS	RESPONSE TO COMMENTS
Comment 2. The draft SI Report states that a portion of Environmental Baseline Survey (EBS) Parcel 23 was historically used for fire-fighter training. The fire-fighter training area is not designated on the figures, so it is unclear as to whether soil and groundwater samples were collected and analyzed to investigate potential contamination associated with that activity, particularly volatile organic compounds. The fire-fighter training area should either be investigated or carried forward into a remedial investigation.	**Response to Comment 2.** The EBS states that the fire-fighting foam was used on aircraft in various open space areas in EBS Parcel 23; however, the constituents of the fire-fighting foam were not known (IT, 2001). At the time of the EBS, no recommendation to collect samples was put forth. However, the fire-fighting activities area was evaluated as part of the 2010 Expanded SI Investigation. As part of this investigation, 35 boreholes were advanced in an approximate 500-foot grid pattern across the suspected fire-fighting training area (Open Space II) in Transfer Parcel FED-1A. Two soil samples were collected from each borehole and analyzed for petroleum constituents using silica gel cleanups (i.e., Total Petroleum Hydrocarbon [TPH]-gasoline, TPH-diesel, and TPH-motor-oil), Target Compound List Volatile Organic Compounds (TCL VOCs), dioxins/furans, and eight Resource Conservation and Recovery Act (RCRA) Metals, as described in the expanded SI Work Plan (CH2M HILL, 2010). The analytical results for these areas will be presented in the Draft Final SI Report.
Comment 3. EBS Parcel 26 in FED-2B is a small site, as stated in the draft SI Report, and thus it would likely be minimal effort to collect some representative samples from the parcel itself, rather than defer to the nearby EBS parcel 25. Please consider collecting representative samples from Parcel 26.	**Response to Comment 3.** During the 1994 EBS, there was no staining or evidence of chemical use or storage observed in EBS Parcel 26. Consequently, no parcel-specific target areas were identified in the EBS. In addition, no significant staining was observed during the aerial photograph review conducted during preparation of the Draft SI Report. Because EBS Parcel 26 has no history of industrial use or any use other than a wetland open space, samples from adjacent EBS Parcel 25 are adequate for characterization and risk evaluation. Therefore, no additional sampling at EBS Parcel 26 is recommended.

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COMMENTS	RESPONSE TO COMMENTS
Comment 4. DTSC concurs with the Navy's use of the 2004 Region 9 Preliminary Remedial Goals (PRGs) rather than the more recently published June 2008 National Screening Levels. The 2008 National Screening Level table was the combined efforts of Regions 3, 6, and 9, and the California-modified PRGs, which were in the former Region 9 PRG table, are not considered in the 2008 tables. Additionally, the June 2008 National Screening Levels Tables are listed as 'Beta release' indicating they are not final. Please continue to use the 2004 Region 9 PRGs until they are reviewed by the DTSC Human and Ecological Risk Division (HERD).	**Response to Comment 4.** Comment noted.
Comment 5. The DTSC HERD provided comments on the Alameda Point pink, yellow and blue soil background data sets in a memorandum dated June 12, 2006. The Navy has yet to respond to the HERD memorandum except to state in various reports (including the draft SI Report) that if the methodology used to evaluate the site were modified as recommended in the DTSC memorandum, the results of the human health risk screening evaluation would change only slightly, and the conclusions and recommendation of the report would not change. DTSC disagrees with this conclusion, particularly with respect to the screening level ecological risk assessment completed for the draft SI Report. The methodology outlined in the DTSC HERD memorandum impacts whether some metals at certain concentrations are considered as an outlier or as background, which can further impact selection of chemicals of concern. This topic is specifically discussed in the July 9, 2008 HERD memorandum, comment Number 15, on the draft SI Report, and remains an outstanding issue at Alameda Point.	**Response to Comment 5.** The HERD Specific Comment 15 recommends that chromium, for which the maximum wildlife refined Hazard Quotient (HQ) is 2, not be dropped as a soil constituent of potential environmental concern (COPEC). Retaining chromium as a soil COPEC would not change the Environmental Risk Assessment (ERA) conclusions, which identify five other COPECs that are not expected to cause adverse ecological effects due to low refined HQs, low frequency of detection, or similarity to Alameda Point background concentrations. The HERD Specific Comment 15 recommends that chromium (maximum refined HQ is less than 1) and lead (maximum refined HQ is 2) not be dropped as groundwater COPECs. Retaining chromium and lead as groundwater COPECs would not change the ERA conclusions, which identify two other COPECs that are not expected to cause adverse ecological effects due to low refined HQs or low frequency of detection.

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COMMENTS	RESPONSE TO COMMENTS
Comment 6. The status of Installation Restoration Site 33 is unclear. It should be clearly stated that the Navy is recommending that IR Site 33 (as redefined in the draft SI Report) proceed forward to a remedial investigation.	**Response to Comment 6.** Installation Restoration (IR) Site 33 was further investigated as part of the 2010 Expanded SI as described in the Expanded SI Work Plan (CH2M HILL, 2010). As part of this investigation, four step-out boreholes were advanced at each previous sample locations 32FED-1A-31, 32FED-1A-38, 32FED-1A-47, 32FED-1A-58, and 32FED-1A-67 where polycyclic aromatic hydrocarbons (PAHs) were detected above screening levels. Four soil samples were collected from each borehole, composited from the following intervals: 0 to 5 feet below ground surface (bgs), 0.5 to 2.0 feet bgs, and 4.0 to 8.0 feet bgs, following the Alameda Point PAH collection guidelines as outlined in the Draft Final Work Plan for PAH Background Determination and PAH-specific SIs for Alameda Point (Bechtel 2002). Soil samples were analyzed for PAHs. The analytical results will be presented in the Draft Final SI Report.
Comment 7. The Draft SI Report states that the VA intends to construct a cemetery at the northern end of Transfer Parcel FED-1A. This seems unlikely, given the shallow groundwater at the site. Please clarify whether the VA truly intends to construct a cemetery or whether this was a transcription error, and that the VA actually intends to construct a columbarium rather than a cemetery.	**Response to Comment 7.** As the Navy understands the Veteran's Administration (VA's) plans, a columbarium is planned. The text of the Draft Final SI Report will be revised to indicate this clarification.

References:

Bechtel Environmental, Inc. (Bechtel). 2002. Draft Final Work Plan for PAH Background Determination and PAH-specific SIs for Alameda Point.

CH2M HILL. 2010. Final Expanded Site Inspection Work Plan, Transfer Parcels EDC-12, EDC-17, FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California. March.

International Technology Corporation (IT). 2001. Environmental Baseline Survey Data Evaluation Summary – Final, Alameda Point, California. January.

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CTO-FZN0

Comments from J. Polisini, HERD 7/9/2008, rec'd 8/5/08

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comments. The methodology employed for the Human Health Risk Assessment (HHRA) and the Ecological Risk Assessment (ERA) utilizes a staged approach moving from screening to site-specific, more detailed, evaluation. HERD has only a few additional requirements for the general methodology applied and/or the risk assessment information provided. The Veteran's Administration (VA) requested, in 2006, a 'Federal-to-Federal' property transfer of Transfer Parcel FED-1A (Section 1.4.1, page 1-3), Transfer Parcel FED-2B (Section 1.4.2, page 1-4) and Transfer Parcel FED-2C (Section 1.4.3, page 14) 'so future use is not currently known' for the last two parcels. This raises several natural resource trustee issues for DTSC, as a delegated California natural resource co-trustee under CERCLA with the California Department of Fish and Game, in addition to technical issues of the ERA.	**Response to General Comments.** Comment noted. No response necessary.

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Comments from J. Polisini, HERD 7/9/2008, rec'd 8/5/08

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. U.S. Environmental Protection Agency (U.S. EPA) Region 9 Preliminary Remediation Goals (PRGs) and San Francisco Regional Water Quality Control Board (SFRWQCB) Environmental Screening Levels (ESLs) are used to evaluate cancer risk and/or non-cancer hazard based on comparison to media concentrations (Section 5, page 5-1). Use of the groundwater ESLs for indoor air exposure evaluates only the contribution of groundwater and ignores any contribution from contaminated soils to indoor air (Figure 5-1). In fact, the SFRWQCB ESL document warns that any contribution from contaminated soil is not included. HERD requires the Johnson and Ettinger model be applied directly to develop the indoor air concentration which can then be used to estimate cancer risk and/or non-cancer hazard.	**Response to Specific Comment 1.** It is correct that the current version of the ESLs do not include soil concentrations protective of indoor air. Both DTSC and U.S. EPA consider soil data unreliable for estimating indoor air concentrations. The DTSC model of Johnson and Ettinger does not provide a method of calculating indoor air risk based on soil but the U.S. EPA version does. The U.S. EPA version of Johnson and Ettinger model was used in the 2005 version of the ESLs to calculate soil levels protective of indoor air. These values are conservative and assume shallow sandy soil. These values are not substantially different than would be calculated using a current version of Johnson and Ettinger with a default of sandy soil. Nonetheless, to address Human and Ecological Risk Division's (HERD's) concern, the Navy proposes to include the 2005 ESLs for soil protective of indoor air (Table E-1b, SFRWQCB, 2005) as appropriate for a screening level risk evaluation conducted as part of an SI.
Specific Comment 2. No sample data exists for EBS Parcel 26 and EBS Parcel 25 sample results are substituted as 'representative' of EBS Parcel 26 (Section 5, page 5-1). This is a data gap that should be considered when evaluating the results of the HHRA for FED-2B.	**Response to Specific Comment 2.** The report no longer presents human health risk results for either EBS parcels 25 or 26. These parcels have been classified as wetlands habitat and are not evaluated in the HHRA because human exposure would be insignificant in a wetland habitat.
Specific Comment 3. The soil Exposure Point Concentration (EPC) is calculated based on soil sample results obtained from the surface to 10 feet below ground surface (bgs) (Section 5.3, page 5-3) which conforms to HERD HHRA guidance. This comment is meant for the DTSC Project Manager and no response is required from the Navy or Navy contractor.	**Response to Specific Comment 3.** No response required.

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<tr><th>SPECIFIC COMMENTS</th><th>RESPONSE TO SPECIFIC COMMENTS</th></tr>
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Specific Comment 4.

The Toxicity Equivalency Factors (TEFs) listed for Polycyclic Aromatic Hydrocarbons (PAHs) (Table 4-4) differ from the Cal/EPA TEFs for benzo(k)fluoroanthene and chrysene:

Polycyclic Aromatic Hydrocarbon	CalEPA TEF	TEF Listed
Benz(a)pyrene	1.0	1.0
Benzo(a)anthracene	0.1	0.1
Benzo(b)fluoranthene	0.1	0.1
Benzo(k)fluoranthene	**0.1**	**0.01**
Dibenz(a,h)anthracene*	0.34	1.0
Indeno(1,2,3-c,d)perylene	0.1	0.1
Chrysene	**0.01**	**0.001**
* Cal/EPA TEF not required as EPA TEF more protective		

This information is offered for completeness as the most health-protective PRG appears to have been used, whether U.S. EPA Region 9 or Cal/EPA, in estimation of risk for these compounds.

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Response to Specific Comment 4.

No response required.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 5. Incremental cancer risk and/or incremental non-cancer hazard is estimated by subtracting the risk and/or hazard associated with 'ambient' concentrations from the total risk and/or hazard (Section 5.2, page 5-2). While the refined ERA compared the maximum concentration to the range of 'ambient' concentrations to determine elements in excess of 'background' (See Specific Comment number 15 below), there appears to be no indication for the HHRA of whether the method used to determine if an inorganic element in soil exceeded 'ambient' involves: 1) a statistical test of the site-related concentrations to the 'ambient' data set; or 2) a comparison of the some site-related metric (e.g., the maximum site concentration) to an 'ambient' concentration. There are tables presenting the 95th percentile values for the 'pink' and 'yellow' soil 'background levels' (Tables 3-2 and 3-3) and the 95th percentile shallow groundwater 'background' (Table 3-4). There is also a statement that 'background comparison calculations for this SI were completed in a manner consistent with all previously approved SI reports, rather than as outline in DTSC's memorandum of June 12, 2006 (Section 5.5, page 5-6). Please provide a description of the 'background comparison' methodology used.	**Response to Specific Comment 5.** The following sentence will be added to the last paragraph of Section 5.2: "Metals were categorized as below background if the maximum concentrations were equal to or less than the 95th percentile in the Alameda Point data set (TtEMI 2004)."
Specific Comment 6. Approximately 2.5 acres of grassland in FED-1A is described as potential seasonal wetland habitat, based on similar appearance to delineated seasonal wetlands at adjacent Installation Restoration (IR) Site 1 and 2 and Transfer Parcel EDC-3 (Section 6.2.1, page 6-6), although a wetland delineation has not been performed. A wetland delineation should be performed for these grassland areas, using California Department of Fish and Game (DFG) wetland delineation methodology, to complete the terrestrial ERA.	**Response to Specific Comment 6.** Although wetland delineations are not typically performed as part of ERAs at Alameda Point, an updated Wetland Delineation and Preliminary Jurisdictional Determination Report was published by the Department of Veterans Affairs Facilities in August 2008 (EDAW 2008). The report confirms that the area has few native plants, but instead is dominated by nonnative plants, primarily of Mediterranean origin. In addition, the report describes the Runway wetland as follows: "The grassland found in the Runway Wetland area is typical of the nonnative grasslands across the project site, with some areas of the grassland well developed and other areas where the vegetation appears stunted."

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 7. Other than to note individual ERA steps and assumptions for the DTSC Project Manager, HERD has no comment on the following items: a. Percolation to groundwater is viewed as minimal for paved areas of FED-1A (Section 6.2.4, page 6-8). This is a routine ERA assumption for in-place pavements. b. The results from soil samples taken from the surface to 6 feet bgs were used to develop the soil Exposure Point Concentration (EPC) (Section 6.2.6, page 6-9) per HERD ERA guidance. c. The vertebrate representative species include a reasonable range of feeding guilds (Section 6.2.6, page 6-9) given the suite of Contaminants of Potential Ecological Concern (COPECs). d. The range of aquatic vertebrate representative species includes a reasonable range of feeding guilds (Section 6.2.6, page 6-10) to assess ecological hazard associated with groundwater release to surface waters given the suite of groundwater COPECs. e. HERD agrees with the hierarchy for selection of avian and mammalian Toxicity Reference Values (TRVs) presented (Section 6.2.6, page 6-10). f. The use of the maximum detected soil concentration as the EPC (Section 6.2.6, page 6-10) for the Screening-Level Ecological Risk Assessment (SLERA) is protective. g. The pairing of the minimum Body Weight (BW) with the maximum prey Ingestion Rate (IR_{prey}) (Section 6.2.6, page 6-10) produces the maximum intake rate of COPECs in the SLERA and is protective. h. Use of the 95 percent upper confidence limit on the arithmetic mean (95UCL) as the EPC for the refined ERA (Section 6.2.6, page 6-10) is standard practice for ERAs and is protective at the level of a site-specific ERA. i. Mean BW coupled with mean IR_{prey} are used (Section 6.2.6, page 6-11) in the refined site-specific ERA provides a protective reasonable median estimate of intake. This comment is meant for the DTSC Project Manager and no response is required from the Navy or Navy contractor.	**Response to Specific Comment 7.** No response required.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 8. Lowest Observable Adverse Effect Level (LOAEL) TRVs are used in the refined site-specific ERA in place of the No Observable Adverse Effect Level (NOAEL) TRVs used in the SLERA (Section 6.2.6, page 6-11). The EPC for the refined site-specific ERA are the 95 percent upper confidence limit on the mean, rather than the maximum concentration used in the SLERA (Section 6.2.6, page 6-10). HQs greater than 1 for the refined site-specific ERA are, therefore, at intake levels associated with adverse effects within the constraints of the SLERA factors (e.g., Site Use Factors of 1). This comment is meant for the DTSC Project Manager and no response is required from the Navy or Navy contractor.	**Response to Specific Comment 8.** No response required.
Specific Comment 9. The California Least Tern nesting area in FED-1A is approximately 1400 feet from Transfer Parcel FED-2B, which contains the Runway Wetland (Section 6.3.2, page 6-12). It is difficult to imagine how the range of proposed potential VA uses could be implemented without disturbing the nesting activities of the California Least Tern. As a delegated California natural resource co-trustee, DTSC should defer to the California Department of Fish and Game (DFG), the other delegated California natural resource co-trustee, and the U.S. Fish and Wildlife Service (USFWS), the federal natural resource trustee, for evaluation of potential impacts to this endangered species. The USFWS should be requested to provide a revised Biological Opinion (BO) as the 1999 BO (Section 6.2.3, page 6-7) could not have addressed potential impacts associated with the with proposed VA uses outlined in the 2006 'Federal-to-Federal' property transfer request.	**Response to Specific Comment 9.** No response required. The Navy understands that the USFWS is currently preparing a revised BO.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 10. The Runway Wetland in Transfer Parcel FED-2B occupies approximately 27 acres which includes approximately 19 acres of salt marsh (Section 6.3, page 6-11). This sensitive habitat provides habitat for many species of shorebirds and waterfowl (Section 6.3.2, page 6-12). Any future VA use which decreases the size, habitat diversity or use by biological resources may require on-site or off-site mitigation or replacement. HERD recommends consultation with the California DFG, the other California co-trustee for natural resources, and the USFWS.	**Response to Specific Comment 10.** Comment noted. No response required.
Specific Comment 11. The Ecological Evaluation of Transfer Parcel FED-2C consists of an evaluation of potential sensitive habitats, special-status species and exposure pathways. The presence of pavement precludes current exposure and is the basis for concluding that there is no current ecological hazard due to lack of exposure (Section 6.4.5, page 6-17). Changes in future use which involve removal of pavement, and therefore allow future exposure, would require re-evaluation of the Ecological Evaluation of Transfer Parcel FED-2C.	**Response to Specific Comment 11.** As noted in Section 4, no chemicals were present at concentrations above screening criteria in Transfer Parcel FED-2C. However, chemical concentrations were reported above screening criteria for both Transfer Parcels FED-1A and FED-2B. The ecological risk assessments conducted for Transfer Parcels FED-1A and FED-2B indicated no unacceptable risks. Therefore, it is expected that the chemical concentrations of FED-2C do not represent a potential ecological risk, and changes associated with future use would not require re-evaluation.

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SPECIFIC COMMENTS HHRA (APPENDIX B)	RESPONSE TO SPECIFIC COMMENTS HHRA (APPENDIX B)
Specific Comment 12. Incremental cancer risk and/or hazard associated with exposure to indoor air is estimated based on SFRWQCB Environmental Screening Levels (ESLs) (Section 5, page 5-1) for groundwater. This ignores any contribution to indoor air from contaminated soil. The footnotes of the ESL tables contained in this report (Attachment B) state 'Soil gas data should be collected for additional evaluation of potential indoor-air impacts at sites with significant areas of VOC-contaminated soil'. In the absence of soil gas measurements or sub-slab soil gas measurements, HERD requires that the Johnson and Ettinger model, as modified by site-specific criteria, be used to estimate indoor air exposure from both contaminated groundwater and contaminated soil for estimation of cancer risk and/or hazard via the indoor air inhalation exposure pathway.	**Response to Specific Comment 12.** It is correct that the current version of the ESLs do not include soil concentrations protective of indoor air. Both DTSC and U.S. EPA consider soil data unreliable for estimating indoor air concentrations. The DTSC model of Johnson and Ettinger does not provide a method of calculating indoor air risk based on soil but the U.S. EPA version does. The U.S. EPA version of the Johnson and Ettinger model was used in the 2005 version of the ESLs to calculate soil levels protective of indoor air. These values are conservative and assume shallow sandy soil. These values are not substantially different than would be calculated using a current version of Johnson and Ettinger with a default of sandy soil. Nonetheless, to address HERD's concern, the Navy proposes to include the 2005 ESLs for soil protective of indoor air (Table E-1b, SFRWQCB, 2005) as appropriate for a screening level risk evaluation conducted as part of an SI.
Specific Comment 13. The U.S. EPA Region 9 PRG values were checked and: a. The surrogate chemicals proposed for those Contaminants of Potential Concern (COPCs) lacking PRGs (Table B-1, B-4, B-7, B-12, B-15) are acceptable. b. A subset of the residential soil screening concentrations used to estimate cancer risk and/or non-cancer hazard (Tables B-1, B-4, B-7, B-12, B-15) were checked and found to be accurate. c. A subset of the groundwater screening concentrations used to estimate cancer risk and/or non-cancer hazard (Tables B-2, B-5, B-8, B-13, B-16) were checked and found to be accurate. This comment is meant for the DTSC Project Manager and no response is required from the Navy or Navy contractor.	**Response to Specific Comment 13.** No response required.

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SPECIFIC COMMENTS ERA (APPENDIX G)	RESPONSE TO SPECIFIC COMMENTS ERA (APPENDIX G)
Specific Comment 14. HERD has reviewed the detailed information and calculations for the Screening-Level Ecological Risk Assessment (SLERA) and the refined site-specific ERA for Transfer Parcel FED-1A and has no comment on these components: a. The categorization of relevant ecological habitats (Section G1.2.1, page G-3) is sufficiently encompassing. b. The compilation of potentially-exposed threatened, endangered and species of special concern (Section G1.2.2, page G-5; Table G-1) appears complete. c. The list of soil Contaminants of Potential Ecological Concern (COPECs) is developed considering all chemicals reported at least once in the surface to 6 feet below ground surface (bgs) interval (Section G1.3.1, page G-6; Table G-2) as recommended by HERD for an SLERA. d. Groundwater COPECs include all chemicals detected at least once (Section G1.3.2, page G-6; Table G-3; Table G-3) which is protective. e. Exposure pathways evaluated include all those commonly evaluated for terrestrial receptors (Section G1.5.1, page G-8) and exposure of aquatic vertebrate and non-vertebrate receptors in surrounding surface waters (Section G1.5.2, page G-9). f. The group of terrestrial communities (e.g., plants and soil invertebrates; Table G-4) and terrestrial vertebrate species encompasses a sufficient group of feeding guilds (Section G1.6.1, page G-9) given the group of COPECs and exposure pathways. g. The aquatic biota communities and aquatic vertebrate species encompass a sufficient group of trophic components and feeding guilds given the group of COPECs and exposure pathways (Section G1.62, page G-10). h. The hierarchy for selecting vertebrate Toxicity Reference Values (TRVs), with priority given to the U.S. EPA Region 9 Biological Technical Assistance Group (BTAG) TRVs (Section G2.2, page G-10) is acceptable to HERD. A subset of the vertebrate TRVs (Table G-5 and G-6), were checked and found to be arithmetically accurate. i. A subset of the toxicity values for aquatic life (Table G-7) were checked and found to be arithmetically accurate. j. The decision criterion on implementation of allometric adjustment of the TRV for differences in Body Weight (BW) (Section G2.2, page G-11) is the criterion recommended by HERD, as is the allometric equation.	**Response to Specific Comment 14.** No response required.

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SPECIFIC COMMENTS ERA (APPENDIX G)	RESPONSE TO SPECIFIC COMMENTS ERA (APPENDIX G)
Specific Comment 14 (continued). k. Radionuclide benchmarks, from the Department of Energy, for vertebrate terrestrial receptors are acceptable to HERD. l. The sources for the soil-to-plant, soil-to-invertebrate and soil-to-mammal Bioaccumulation Factors (BAFs) for terrestrial components (Section G3.2, page G-13; Table G-8) and the BAFs are acceptable to HERD. m. The Food Chain Multiplier (FCM) used to develop aquatic tissue concentrations (Section G3.4.2, page G-14; Table G-9) is the largest FCM for trophic levels 3 and 4 of the EPA model and is therefore protective given the likely aquatic biological community structure. In addition, the maximum groundwater COPEC concentration (Section G3.3, page G-13) is used as the basis for the tissue calculation, which is also protective. n. Exposure Factors for vertebrate receptors are selected from the EPA Wildlife Exposure Factors Handbook (EPA, 1993) and the Cal/EPA California Wildlife Biology Exposure Factor and Toxicity Database (Cal/EPA, 2002) (Section G3.5, page G-15; Tables G-10 and G-11). o. Vertebrate Exposure Factors for terrestrial wildlife receptors (Table G-10) and aquatic wildlife species (Table G-11) were checked and are reasonable protective values. Food Ingestion Rates (IR_{food}) are calculated based on Body Weight (BW) using the most recent applicable regression reference (Nagy, 2001). p. The EPC is modified from the maximum concentration in the SLERA to the 95 percent Upper Confidence Limit on the arithmetic mean for the refined site-specific ERA (Section G6.1, page G-20). This is a reasonable common refined ERA modification. q. Groundwater concentrations are restricted to groundwater concentrations within 100 feet of the shoreline for the refined ERA (Section 6.2, page G-21). This is a reasonable refined ERA modification. r. Average Exposure Factors (Section G6.3, page G-21) are used for terrestrial wildlife (Table G-17) and aquatic wildlife (Table G-18) exposure factors. Although there is less uncertainty in the Site Use Factor (SUF) adjustment for terrestrial receptors than there is for aquatic wildlife receptors, these are reasonable refined ERA modifications. These comments are meant for the DTSC Project Manager and no response is required from the Navy or Navy contractor.	

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Specific Comment 15. A comparison to soil (Section G6.1, page G-20) and groundwater (Section G6.2, page G-21) 'background' concentrations is performed as part of the refined site-specific ERA. This comparison is of the maximum soil concentration and maximum groundwater concentration to the soil 'background' data set and the groundwater 'background' data set. This maximum comparison makes any 'outliers' in the soil or groundwater 'background' data sets a significant contributor to the selection of COPECs for the refined site-specific ERA. The soil background datasets commonly termed 'pink' (Table 3-2) and 'yellow' (Table 3-3) are listed as applicable to the Transfer Parcels evaluated in this document. HERD commented on the NASA 'pink', 'yellow' and 'blue' soil 'background' data sets in a HERD memorandum dated June 12, 2006. The Navy has yet to respond to the HERD June 12, 2006 soil 'ambient' memorandum except to state that they 'disagree' with the methodology employed. The 'yellow' soil 'background' data set contains no obvious outliers for those COPECs likely to contribute to ecological hazard. The 'pink' soil 'background' data set contains one potential outlier of 15.4 milligram per kilogram (mg/kg) arsenic, four potential outliers between 53.4 mg/kg and 66.7 mg/kg chromium and two potential outliers of 70.7 mg/kg and 165 mg/kg lead. The 'pink' chromium 'background' potential outliers would indicate that chromium should not be dropped as a soil COPEC (Section G6.1, page G-20). The NASA groundwater 'background' data set contains one potential outlier of 82.8 micrograms per liter (µg/L) chromium and 1 potential outlier of 28.4 µg/L lead. The arsenic groundwater 'background' data set does not appear to contain outliers. The groundwater 'background' data set potential outliers for chromium and lead would indicate that chromium and lead should not be dropped as groundwater COPECs (Section G6.2, page G-21).	**Response to Specific Comment 15.** The comment recommends that chromium not be dropped as a soil COPEC. The maximum terrestrial wildlife hazard quotient (HQ) for chromium is 2. Retaining chromium as a soil COPEC would not change the ERA conclusions, which identify five other COPECs that are not expected to cause adverse ecological effects due to low refined HQs, low frequency of detection, or similarity to Alameda Point background concentrations. The comment recommends that chromium and lead not be dropped as groundwater COPECs. The maximum aquatic receptor HQ for chromium is less than 1. The maximum aquatic receptor HQ for lead is 2. Retaining chromium and lead as groundwater COPECs would not change the ERA conclusions, which identify two other COPECs that are not expected to cause adverse ecological effects due to low refined HQs or low frequency of detection. The chromium and lead risk estimates are not expected to change the ERA conclusion. No changes will be made in the document.
Specific Comment 16. The HQs presented for the refined site-specific ERA (Section G7, page G-21) indicate some potential ecological hazard at the LOAEL concentration with a degree of uncertainty associated with these predictions. The HQs associated with the NOAEL concentrations are all less than one. Predicted ecological hazard is, therefore, in the uncertain area between no obvious adverse effect and some slight potential for adverse effects. The potential adverse effects, posed by the VA list of future uses, on sensitive protected species, such as the largest nesting colony of the California Least Tern, and potential loss of use of known and potential	**Response to Specific Comment 16.** The Navy agrees that the potential effects associated with land development would appear to be more significant than those associated with chemical concentrations at FED-1A, FED-2B, and FED-2C.

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SPECIFIC COMMENTS ERA (APPENDIX G)	RESPONSE TO SPECIFIC COMMENTS ERA (APPENDIX G)
wetlands, would appear a more significant threat than exposure to FED-1A, FED-2B and FED-2C contaminants.	

CONCUSIONS	RESPONSE TO CONCLUSIONS
Conclusions. HERD has only minor recommendations for the risk assessment methodology, results and presentation. However, the HHRA results for multiple exposure areas are within the 'risk management range' and removal actions within FED-2C may impact the conclusions of the ERA which are based mainly the lack of ecological exposure due to complete cover by pavement. The potential transfer to the Veteran's Administration, and associated changes in future use, raises several HHRA and natural resource co-trustee issues: 1. HERD recommends that risk management decisions regarding No Further Action based on the HHRA results within the 'risk management range' be given special consideration given the potential for development of extended care facilities for patients in compromised health. 2. HERD recommends that the California co-trustee for natural resources be requested to perform a wetland delineation for the approximately 2.5 acres of grassland in FED-1A described as potential seasonal wetland. 3. HERD recommends that the USFWS, a federal natural resource trustee, be asked to revise the 1999 Biological Opinion (BO) to address potential impacts to the California Least Tern nesting colony in light of potential future VA development of the area. Any future VA use which decreases the size, habitat diversity or use of the 19 acre Runway Wetland salt marsh in FED-2B by biological resources may require on-site or off-site mitigation or replacement.	**Response to Conclusions.** As noted in Response to Specific Comment 11, chemical concentrations at FED-2C are generally less than the chemical concentrations at FED-1A and FED-2B. Therefore, FED-2C is not likely to represent a potential ecological risk, and removal actions at FED-2C are not expected to affect this conclusion. 1. The Navy understands that an extended care facility is no longer being planned for FED-1A. However, note that the risk evaluation is based on a U.S. EPA process that is designed to protect sensitive populations such as patients in a health care facility. 2. The Navy may recommend that a wetland delineation be performed by the natural resources trustees. 3. The Navy may recommend that the USFWS provide a revised Biological Opinion. The Navy may recommend that the use of the Runway Wetland by biological resources will be considered with any future use of the area.

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References:

California Regional Water Quality Control Board, San Francisco Bay Region. 2005. *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater.*

EDAW, Inc. 2008. Wetland Delineation and Preliminary Jurisdictional Determination, Proposed Department of Veterans Affairs Facilities at the former NAS Alameda, Alameda County, California. August 13.

Tetra Tech EM Inc. (TtEMI). 2004. Final Remedial Investigation Report, Sites 6, 7, 8 and 16, Alameda Point, Alameda, California. November 18.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 1. Installation Restoration (IR) Site 33 is within the boundaries of Transfer Parcels FED-1A and FED-2B, but the past usage and/or reasons for designating this area as an IR site have not been described in the text of Draft Site Inspection Report, Transfer Parcels FED-1A, FED-2B and FED-2C (the SI Report). Please add this information to the SI Report.	**Response to General Comment 1.** The following information is presented in the Executive Summary on page ES-1: "IR Site 33 is a tentatively identified IR site that is located entirely within the boundaries of Transfer Parcels FED-1A and FED-2B. The portion of Transfer Parcel FED-1A included within IR Site 33 extends north from the southern boundary of Transfer Parcel FED-1A and was identified to address polycyclic aromatic hydrocarbons (PAHs) detected in soil. All of Transfer Parcel FED-2B was included in IR Site 33 to address potentially outstanding ecological issues in the wetlands portion of the transfer parcel. This Draft SI Report (Bechtel 2008) evaluates the existing information regarding IR Site 33 and provides recommendations for the modification of the site boundaries." This information is also included in Section 1 of the Draft SI Report (Bechtel, 2008).
General Comment 2. The SI Report does not include any cross-sections or a groundwater elevation map. Several monitoring wells have been constructed in these transfer parcels and in adjacent IR Sites, so information for creating these figures should be available. Please include at least one area-specific cross-section and a groundwater elevation map in the next version of the SI Report.	**Response to General Comment 2.** The boring logs from the 2002/2003 PAH investigation are included in Appendix D of the Draft SI Report (Bechtel, 2008). Groundwater elevation maps for Winter 2007 and Spring 2008 are included in the Expanded SI Work Plan (CH2M HILL, 2010) and will be included in the Draft Final SI Report.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 3. In the discussion regarding past investigations and sampling events, multiple areas of stained soil are described, but many of these areas were not sampled to determine total petroleum hydrocarbon (TPH) levels. It is unclear how it was determined which stained areas would be sampled and which would not. All stained areas may not contain the same concentration or even the same type of TPH, so each area should be sampled in order to determine the need for further action or investigation. Please clarify why some stained soil areas were sampled while others were not.	**Response to General Comment 3.** Historical samples were collected as described in the Environmental Baseline Survey (EBS) based on the visual observation in concert with information regarding past historical uses of the area. Samples were not collected during the EBS if the agencies and Navy agreed there was not information that historical uses of a particular area warranted sampling at the time of the EBS. However, during the 2010 field investigation, stained areas within the FED-1A, 2B, and 2C transfer parcels were evaluated as part of the aircraft parking and staining evaluation as outlined in the Expanded SI Work Plan (CH2M HILL, 2010). In summary, the aircraft parking and staining evaluation included: 1) an historical aerial photograph survey that identified additional areas of aircraft parking and maintenance and/or areas showing signs of staining; 2) review of available total petroleum hydrocarbons (TPH) and volatile organic compounds (VOC) data within and surrounding the identified areas; 3) a site reconnaissance was conducted of the identified areas; and 4) soil and groundwater samples were collected from the areas and analyzed for petroleum constituents using silica gel cleanups (i.e., TPH-gasoline, TPH-diesel, TPH-motor-oil), VOCs, and PAHs. The conclusions of the aircraft parking and staining evaluation, including the analytical results will be presented in the Draft Final SI Report.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 4. Based on Figure 4-3, it appears that sampling has not been done in the vicinity of many of the aboveground storage tanks (ASTs) located in Parcel 23. It is unclear how a decision regarding the need for further action could be made based on data that has not been collected in the vicinity of the ASTs. For example, there were no samples in the vicinity of AST 483B. There is a sample location about 500 feet (ft) northwest (M104-A) and a location about 700 ft east (M109-A), but no closer sample locations are displayed on the figure. Clearly data from so far away should not be used to make recommendations regarding AST 483B. Please recommend TPH sampling in the vicinity of each AST. In addition, it is likely that lead-based paint (LBP) was used on many of the ASTs, but there is no discussion of sandblasting and repainting the ASTs, and samples for metals (lead, cadmium and other metals associated with paint) have not been collected, based on Figure 4-6. Since sandblasting and chipping or peeling LBP can result in release of lead and other metals to the environment, sampling should be done in the vicinity of each AST to evaluate whether lead is present at levels that pose risk to human health or the environment. If an AST is located on pavement and it can be documented that the area was paved prior to AST installation, sampling should be done in the nearest channel or area where surface runoff would have carried and possibly deposited paint chips. Please recommend sampling for lead and other paint-related metals in the vicinity of each AST, and areas that would have received runoff.	**Response to General Comment 4.** There are a total of 13 Solid Waste Management Units (SWMUs) (former ASTs) in EBS Parcel 23. Seven of the former ASTs were associated with aircraft-arresting devices and contained diesel fuel (30-gallon former ASTs 483A, 483B, 485B, 495A, 495B, 599A, and 599B), three were stand-alone ASTs that contained diesel fuel (100-gallon former AST 467B, 200-gallon former AST 496, and 1,000-gallon former AST 499), two contained liquid oxygen (6,000-gallon former ASTs 407A and 407B), and one contained aviation gasoline (5,000-gallon former AST 488). During the 2010 Expanded SI Investigation, two boreholes were advanced on either side of each former AST and two soil samples were collected from each borehole. In addition, discrete direct-push groundwater samples were collected at two depth intervals from one borehole at former ASTs 467B, 483A, 483B, 485B, 495A, 495B, 496, 499, and 599A. Soil samples were analyzed for TPH-diesel, TPH-motor-oil, VOCs, PAHs, Title 22 metals, and PCBs (only at the five former ASTs associated with the aircraft-arresting devices) and groundwater samples were analyzed for TPH-diesel, TPH-motor-oil, VOCs, PAHs, and Title 22 metals. The analytical results for this sampling will be presented in the Draft Final SI Report. Sampling was performed in accordance with the approved Expanded SI Work Plan.

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General Comment 5. The last sentence of Section 3.1.4.3 states that the types and quantities of waste possibly disposed in the northern portion of the Runway Wetland are unknown. It is unclear how an area can be adequately assessed for further action if this area has not been investigated to determine if waste disposal occurred. At a minimum, it appears that test pits or borings with samples should be completed to determine whether waste disposal occurred. Please recommend this area for investigation to determine if waste disposal occurred in the elevated area within the northern portion of the Runway Wetland area.	**Response to General Comment 5.** The last sentence of Section 3.1.4.3 reflects what was known at the time that the "Follow-on Ecological Assessment Work Plan/Field Sampling Plan" was prepared. Section 3.1.4.3 summarizes the Environmental Risk Assessment (ERA) report and follow-on work plans prepared in 1996. The results of further investigation at the Runway Wetland are presented in the "Runway Wetland Human Health and Ecological Risk Screening Report," which is summarized in Section 3.1.4.7. According to the discussion presented in the Runway Wetland Risk Screening Report, debris was placed in an elevated area in the northeastern portion of this site. The debris was reported to consist of concrete, asphalt, and sheet-type metal, and there is no evidence that hazardous materials or municipal solid wastes were placed in the area. Section 3.1.4.3 will be revised deleting the last sentence. Section 3.1.4.7 will be revised adding text that indicates the nature of materials that were disposed of at the northeastern elevated area of the Runway Wetland.
General Comment 6. Other data gaps include the lack of soil samples that were analyzed for polychlorinated biphenyls (PCBs) in the vicinity of Building 100 (the Transformer Vault) and in the vicinity of each of the arresting gear structures and ASTs associated with the arresting gear mechanism, since PCBs were used in hydraulic fluid. Please acknowledge these data gaps in the text of the SI Report and recommend sampling for PCBs in the vicinity of these structures.	**Response to General Comment 6.** The operations at Building 100 are documented in the EBS (IT, 2001). The transformer switches were found not to contain PCBs. And because all related equipment was removed from the building during the Phase 1 EBS, the Navy did not recommend further sampling in the EBS. However, in response to U.S. Environmental Protection Agency (U.S. EPA) comments, six concrete chip samples were collected from the floor of the building and analyzed for PCBs during the 2010 Expanded SI Investigation. The analytical results from this sampling will be presented in the Draft Final SI Report. In addition, soil samples were collected at the arresting gear structures and ASTs associated with arresting gear mechanism as part of the 2010 Expanded SI Investigation. The sampling that occurred at the arresting gear structures and ASTs is summarized in the response to General Comment 4. The analytical results for this sampling will be presented in the Draft Final SI Report.

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General Comment 7. Given the "approximate groundwater flow direction" arrows, monitor well DRA01 and Hydropunch locations HPRA23-A through HPRA23-E are located upgradient of washdown area (WD) 259, so the analytical results from these locations should not be considered representative of groundwater concentrations associated with WD-259. Since groundwater contamination is associated with other washdown areas at Alameda Point, groundwater samples from the areas immediately south and east of WD-259 should be collected to evaluate whether groundwater is impacted by volatile organic compounds (VOCs). Please recommend collection of groundwater samples east and south of WD-259.	**Response to General Comment 7.** Two boreholes, one to the east and one to the south, were advanced adjacent to Washdown 259 during the 2010 Expanded SI Investigation. Soil and groundwater samples were collected from each borehole, as outlined in the Expanded SI Work Plan (CH2M HILL, 2010). Soil and grab groundwater samples were analyzed for VOCs. The analytical results for this sampling will be presented in the Draft Final SI Report.
General Comment 8. Various sections of the text state sediment samples collected from manholes are not "representative of site activities or indicative of current site conditions;" however, the manhole samples could potentially provide information about fate and transport of contaminants via surface water. Much of the surface water collects in the storm drain system, so sediment collected there could provide information about what types and concentrations of contaminants are being transported into San Francisco Bay. In addition, it is unclear why manhole samples (6 primary samples and 1 duplicate) were collected if the results could not be used to characterize the parcels. Further, it is unclear if sediment will be removed from the manholes to reduce the potential for transport of contaminated sediment to the Bay. Please discuss (in the SI Report) the data quality objectives for collecting manhole sediment samples and how the data from the samples can be applied to the characterization of the transfer parcels. Please also clarify whether sediment will be removed from the manholes and under which program this will be accomplished.	**Response to General Comment 8.** The various sections of the text where it is stated that sediment samples collected from manholes are not "representative of site activities or indicative of current site conditions" will be revised to state that the sediment samples collected in 1994 have been subsequently removed as part of the storm sewer system cleaning that was performed by the Navy between 1995 and 1996. Six primary and one field duplicate sediment samples were collected from manholes in November and December 1994. The storm sewer system was cleaned by the Navy between 1995 and 1996 and field activities are summarized in the *Storm Drain Cleaning Project 1995-1996, Summary Report*, *Naval Air Station Alameda,* dated September 1996 (Ecology and Environment, Inc. 1996). The sediment samples collected from manholes in 1994 were removed as part of the storm sewer cleaning. Following the removal of sediment from the storm sewers, the cleaned sewer lines were inspected using closed-circuit television surveys. A Storm Water Pollution Prevention Plan (SWPPP) was developed for the site in 1993 and revised in 1996 and 1997 (TtEMI 2000). In addition to conductance, pH, total suspended solids, total organic carbon, metals, and oil and grease, storm water samples were also analyzed for benzene, toluene, ethylbenzene, xylenes, SVOCs, and TPHs. Samples were also collected for PCBs at one location; however, no PCBs were detected in analyzed samples. The 1996 and 1997 storm water report stated that water quality problems were

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	not observed to be associated with industrial activities at Alameda Point. The report also stated that oil and grease were regularly observed at outfalls Q, J, P. O, K, and M and potential impacts were associated with IR sites and USTs (TtEMI 2000). Benzene, toluene, ethylbenzene, and xylenes were detected in storm water samples collected in 1996 and 1997 at maximum concentrations of 3 micrograms per liter (µg/L), 10 µg/L, 1.9 µg/L, and 160 µg/L, respectively. Various SVOCs were detected, with 2-methylnaphthalene detected at the highest concentration at 26 µg/L. 1,1,1-Trichloroethane was detected at a maximum concentration of 39 µg/L. TPH-gasoline was detected at a maximum concentration of 1,200 µg/L. In 1998, the City of Alameda assumed responsibility for monitoring storm water discharges from Alameda Point (TtEMI 2000).

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General Comment 9. The SI Report should include an additional figure to depict the location of various site activities, such as munitions storage and fire-fighting activities, which are not clearly denoted on the existing figures. Please provide an additional figure that displays this information.	**Response to General Comment 9.** The munitions storage areas and fire-fighting activities area are shown on figures in the Expanded SI Work Plan and will also be shown in figures in the Draft Final SI Report. These areas were evaluated as part of the 2010 Expanded SI Investigation. The following are summaries of the field activities in each of the areas: • Ten boreholes were advanced near the front door of Buildings 50, 51, 56, 57, 58, and 270 (former munitions storage buildings), near the pervious grab groundwater location (023-0039), and randomly placed near the former munitions storage lockers. Two soil samples were collected from each borehole and analyzed for explosives, as outlined in the Expanded SI Work Plan (CH2M HILL, 2010). • Thirty-five boreholes were advanced in an approximate 500-foot grid pattern across the suspected fire-fighting training area (Open Space II) in Transfer Parcel FED-1A. Two soil samples were collected from each borehole and analyzed for petroleum constituents using silica gel cleanups (i.e., TPH-gasoline, TPH-diesel, and TPH-motor-oil), TCL VOCs, dioxins/furans, and eight Resource Conservation and Recovery Act (RCRA) Metals, as described in the Expanded SI Work Plan (CH2M HILL, 2010). The analytical results for these areas will be presented in the Draft Final SI Report.

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General Comment 10. It is unclear how the screening criteria used during the Environmental Baseline Survey (EBS) compare to the criteria used in the SI Report or if EBS data were rescreened using current criteria. If current criteria are lower, then the EBS data needs to be rescreened and the text in Section 3 should be revised to discuss the EBS analytical data results compared to current screening criteria. Please clarify if the EBS data was rescreened using current screening criteria or perform this screening and discuss the EBS analytical data that exceeds current criteria in the text of Section 3.	**Response to General Comment 10.** Data from all previous investigations (including the EBS) were re-screened using regulatory criteria as described on page 4-1 of the Draft SI Report (Bechtel, 2008). Appendix F also provides a detailed explanation of the re-screening process and the interpretation made if the prior detection limits were not low enough for comparison using current regulatory screening criteria.
General Comment 11. Separate comments on the Executive Summary have not been prepared. Please revise the Executive Summary to reflect changes made to the SI Report.	**Response to General Comment 11.** Comment noted. No response necessary.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. **Section 1.4.1, Transfer Parcel FED-1A, Page 1-3 and Section 3.2.1.2, EBS Parcel 23, Page 3-17:** The text of Section 1.4.1 states land within Parcel FED-1A was used for magazines; however, it does not appear that any soil analyses included compounds associated with munitions constituents. Although staining was not noted during the 1994 EBS and spills were not documented, releases could have occurred prior to the institution of the Resource Conservation and Recovery Act (RCRA), particularly since munitions constituents were detected in groundwater. Please revise the text to clarify if any investigation focusing on munitions constituents in soil was completed for Transfer Parcel FED-1A. If not, please identify this data gap and recommend sampling and analyzing soil for munitions constituents in the vicinity of each former magazine.	**Response to Specific Comment 1.** The former munitions storage areas were evaluated as part of the 2010 Expanded SI Investigation. The sampling that occurred in the former munitions storage areas is summarized in the response to General Comment 9. The analytical results for this area will be presented in the Draft Final SI Report.
Specific Comment 2. **Section 1.4.1, Transfer Parcel FED-1A, Page 1-3 and Section 3.1.7, Property Transfer, Page 3-10:** Potential future usage of FED-1A as specified in Section 1.4.1 includes a Department of Veterans Affairs (VA) outpatient clinic, a long-term care facility and a national cemetery, but these intended uses include sensitive receptors as well as the potential for future soil excavation. According to Section 3.1.7, the Environmental Summary Document (ESD) concluded FED-1A was suitable for usage as a wildlife refuge, but this is no longer the intended usage. It is unclear if the new VA reuse plans are addressed in the investigation of this parcel, since the investigation was originally designed to cover the reuse as a wildlife issue. Please include a discussion in the text about the impact of the change in reuse on the assessment of the need for further action.	**Response to Specific Comment 2.** The SI evaluation process is designed to review the existing data for a site and to assess whether there are areas requiring further evaluation. As described in Section 5, the human health risk screening evaluation conducted for this SI evaluated the potential exposure pathways including residential receptors. No change to the human health risk evaluation is required based on any change in reuse since the residential exposure scenario is the most conservative.

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Specific Comment 3. **Section 1.4.2, Transfer Parcel FED-2B, Page 1-4:** According to the text, the future use of Parcel FED-2B is unknown, but other sections of the SI Report assume reuse as a wildlife refuge. Please ensure the text presents the reuse of FED-2B consistently.	**Response to Specific Comment 3.** The discussions of the future use of Transfer Parcel FED-2B in the Executive Summary and Section 1.4.2 of the main SI Report include the statement that future use is unknown owing to the 2006 formal VA request for a federal-to-federal transfer of Transfer Parcels FED-1A, -2B, and -2C. However, this information was not carried through to Appendix G, the ecological risk assessment for Transfer Parcel FED-1A. Section G1.1, Paragraph 4 – the first sentence will be replaced with the following two sentences: "Transfer Parcel FED-1A is approximately 400 acres and is located in the western portion of Alameda Point (Figure G-2). Transfer Parcel FED-1A was previously designated for future use as a wildlife refuge, but the future use of this parcel is currently unknown because of a request by the Department of Veterans' Affairs in 2006 for a "Federal-to-Federal" transfer of the property to allow reuse of the land for an outpatient clinic, a long-term care facility, and a national columbarium." Section G1.6.1, Paragraph 2 – the 1st and 3rd sentences will be changed to read: "Representative terrestrial receptors were selected based on a review of current site conditions, various potential reuse plans, and potential habitat. The future use of Transfer Parcel FED-1A is currently unknown, as discussed in Section G1.1."
Specific Comment 4. **Section 2.4.2, Hydrogeology at Alameda Point and Transfer Parcels FED-1A FED-2B FED-2C, Page 2-4:** No naturally occurring streams are present at Alameda Point, but the text does not discuss man-made streams or drainage ditches. These structures would be collection points for surface water as well as any contaminants carried by surface water. Please discuss the location and extent of man-made streams and drainage ditches, particular within the three transfer parcels. Please also clarify if any investigations included these features. Finally, please include a topographic map or a figure that includes surface runoff flow directions.	**Response to Specific Comment 4.** Any known information regarding surface water flow is included on Figure 3-2, Site Features.

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Specific Comment 5. **Section 3.1.11, Underground Storage Tank Removal and the Least Tern Nesting Site, Page 3-11:** Confirmation samples at the excavation site were analyzed for TPH, VOCs, polycyclic aromatic hydrocarbons (PAHs) and lead, but only the results of the TPH samples are discussed in the text. Please briefly discuss the analytical results in this section.	**Response to Specific Comment 5.** The following sentence will be added as the second to the last sentence of Section 3.1.11: "None of the other confirmation sample results exceeded the removal cleanup criteria."
Specific Comment 6. **Section 3.1.14, Supplemental Aerial Photograph Review, Page 3-12:** Aerial photographs to support the discussion in this section should be included in the SI Report. Without these aerial photographs it is not possible to evaluate the text in this section or whether sufficient sampling has been done. Please include aerial photographs in the next version of the SI Report.	**Response to Specific Comment 6.** The Navy included aerial photographs in the Expanded SI Work Plan. In addition, the Navy will include the aerial photographs in the Draft Final SI Report.
Specific Comment 7. **Section 3.2.1.2, EBS Parcel 23, Pages 3-17 and 3-18:** This section discusses potential sources of staining observed on aerial photographs in areas where aircraft were parked, refueled and maintained, but does not acknowledge that degreasing aircraft cowlings, fuselages, and other surfaces may have resulted in surface staining below aircraft. Early military aircraft did not have good engine seals so surfaces behind the engines were oily and appeared dirty; since this was unsightly and could have interfered with lift (i.e., flight), oily stains were removed routinely. If stains surrounding aircraft or outlines of aircraft can be seen on the aerial photographs, it is likely that aircraft were degreased in the parking areas. Please revise the text to acknowledge that aircraft degreasing in parking areas may have resulted in surface staining.	**Response to Specific Comment 7.** The following sentence will be added to the last sentence of the first incomplete paragraph at the top of Page 3-18: "Aircraft degreasing may also have occurred at these parking aprons." The parking aprons were evaluated as part of the 2010 Expanded SI Investigation and analytical results for these areas will be presented in the Draft Final SI Report. .

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Specific Comment 8. **Section 3.2.1.2, EBS Parcel 23, Page 3-18:** Fire-fighting activities resulted in residual foam in various areas of the open space in Parcel 23; however, the composition is unknown and it is unclear if these areas were investigated for potential contamination resulting from the foam. Please clarify whether contaminants associated fire-fighting activities in the open space of Parcel 23 were investigated or propose sampling in these areas to resolve this data gap.	**Response to Specific Comment 8.** The fire-fighting activities in the open space in Parcel 23 were evaluated as part of the 2010 Expanded SI Investigation. The sampling that occurred in the suspected fire-fighting training area is summarized in the response to General Comment 9. The analytical results for this area will be presented in the Draft Final SI Report.
Specific Comment 9. **Section 3.2.1.2, EBS Parcel 23, Page 3-19:** Groundwater samples were collected from the former munitions storage area, but no soil samples were taken from this area. This lack of soil data for the former munitions storage area is a data gap that needs to be assessed before recommendations can be made regarding the area. Please address this potential data gap.	**Response to Specific Comment 9.** The former munitions storage areas were evaluated as part of the 2010 Expanded SI Investigation. The sampling that occurred in the former munitions storage areas is summarized in the response to General Comment 9. The analytical results for this area will be presented in the Draft Final SI Report.
Specific Comment 10. **Section 3.2.1.2, EBS Parcel 23, Page 3-21; Section 3.2.2.1, EBS Parcel 25, Page 3-22:** The text concludes that radium, which was detected above the maximum contaminant level (MCL) at concentrations of 5 and 10.95 picoCuries per liter (pCi/L) in groundwater samples collected from DRA-01 and M108-B, respectively, is attributable to naturally occurring conditions, but radium has not been detected at high concentrations in most areas of the landfills where radium dials and devices were disposed. Therefore, it is unclear elevated concentrations of radium can be considered naturally occurring. The basis for the attribution is not discussed in the text. Please discuss the basis for attributing elevated concentrations of radium to natural conditions in detail, including explaining why radium 226 was detected in groundwater beneath these EBS parcels but was not detected at elevated concentrations in the radium dial and device disposal areas.	**Response to Specific Comment 10.** Monitoring wells DRA-01 and M108-B were scheduled to be sampled for radionuclides in Spring 2010 as part of the Alameda Point Basewide Groundwater Monitoring Program; however, since these wells are located near a nesting colony of California Least Terns they were not able to be sampled this Spring. These monitoring wells will be samples during the next Alameda Point Basewide Groundwater Monitoring Program.

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Specific Comment 11. **Section 3.2.2.1, EBS Parcel 25, Page 3-22:** The past usage of Parcel 25 is not discussed in the text. Please include information about any past activities or operations that may have occurred at Parcel 25 in the text.	**Response to Specific Comment 11.** Very little information is available about the past usage of EBS Parcel 25, except for the general statements in the EBS (IT, 2001) that the parcel was formerly a wetland or a wildlife habitat. In the EBS Building Summary table associated with the EBS, the prior uses listed for the parcel also included "industrial," but no further information was included to support that description. The SI text notes that three concrete pads were present in this parcel, of which two were empty and one had formerly held a wind meter. No further information regarding these pads is available. The following sentence will be added after the first sentence of Section 3.2.2.1: "The EBS (IT, 2001) listed former uses of this parcel as 'industrial/wetlands/least tern habitat' but offered no historical details of industrial activities at the site." Additionally, Table 3-1 will be modified to add the three concrete pads as former structures in EBS Parcel 25.
Specific Comment 12. **Section 3.2.2.1, EBS Parcel 25, Page 3-23:** Three concrete pads formerly located in Parcel 25 are briefly discussed in the text; however, there is no information about their usage, when or why they were removed from the parcel. Please revise the text to include a description of the past usage of the concrete pads, as well as information about when and why the pads were removed.	**Response to Specific Comment 12.** Please refer to the response to Specific Comment 11.
Specific Comment 13. **Section 3.2.3, Transfer Parcel FED-2C, Page 3-25:** The text states that analytes were not detected above screening criteria in the final groundwater samples, which implies that analytes were detected above screening criteria in the previous rounds of sampling. Also, it appears that data from only two rounds of sampling was included in Appendix A. Please discuss all analytes that were detected above screening criteria in all groundwater samples collected from this parcel and include all three rounds of groundwater sampling in Appendix A.	**Response to Specific Comment 13.** The statement on page 3-25 (2nd full paragraph) regarding the final round of monitoring well sampling results is related to the IR Site 26 RI (Bechtel, 2003). All three rounds of groundwater sampling results for monitoring well 26SW02 will be presented in Appendix A in the Draft Final SI Report. No analytes were reported above the screening criteria in all three rounds of monitoring well sampling.

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Specific Comment 14. **Section 3.3.2, EBS Parcel 23, Page 3-26:** The discussion of Solid Waste Management Unit (SWMU) WD 259 appears somewhat incomplete. The text states rinse water from the wash pad would have been channeled into the storm drain system, rather than surrounding soil and groundwater; however, the channels themselves are not discussed as potential areas of contamination. If the channels are unlined, then the soil within the channel areas could be contaminated. Even if the channels are lined (with concrete or some other material) there is potential for cracks that would have allowed for contaminated wash water to seep into the soil. Please provide information about the integrity of the channels, including whether there are cracks or joints if the channels were lined with concrete or propose sampling the channels.	**Response to Specific Comment 14.** During the 2010 Expanded SI Investigation, the concrete trench drain (i.e., channel) located in the center of Washdown 259 was cleaned to remove debris and standing water. After cleaning, the trench drain was inspected for weak areas (i.e., cracked concrete). Two boreholes were advanced within the trench drain and soil samples were collected from each borehole and analyzed for VOCs, as outlined in the Expanded SI Work Plan (CH2M HILL, 2010). The observations of the trench drain inspection along with the analytical results will be presented in the Draft Final SI Report.
Specific Comment 15. **Table 3-1, Buildings, Structures, and Open Spaces at Transfer Parcels FED-1A, FED-2B, and FED-2C and Figure 3-2, Site Features in Transfer Parcels FED-1A, FED-2B, and FED-2C:** Table 3-1 includes OTH023-2, but Table 3-1 does not. Figure 3-2 includes OTH023-3, but this feature is not included in Table 3-1. Please resolve these discrepancies.	**Response to Specific Comment 15.** OTH023-2 is included in Table 3-1 and on Figure 3-2. OTH023-3 was originally included on Figure 3-2 because it appeared in the GIS; however, no mention of this building has been found in the EBS (IT, 2001), and therefore it will be removed from Figure 3-2.
Specific Comment 16. **Section 4.1, Volatile Organic Compounds, Page 4-3:** Since two VOCs (vinyl chloride and 1,2-dichloroethane) were detected in groundwater and the proposed reuse will involve construction of a hospital and other occupied structures, the maximum detected concentrations of these VOCs and trends in VOC concentrations should also be discussed. Further, since the evaluation of groundwater only included the most recent round of basewide groundwater monitoring program (BGMP) sampling, VOCs detected in any round of BGMP sampling in any of the wells within these transfer parcels should be discussed in the text. Please revise Section 4.1 to discuss all VOCs detected in groundwater samples collected during each round of groundwater sampling that has been conducted in these transfer parcels, including the maximum detected concentrations and trends.	**Response to Specific Comment 16.** VOC results are documented in the historical groundwater data presented in Appendix A. The summary on page 4-3 contains the results from the most recent groundwater monitoring and these are also the maximum detected levels of VOCs, as noted in Table 4-2.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 17. **Section 4.6, Radionuclides, Page 4-7:** The statement that "low levels of radionuclides were reported above detection limits in groundwater samples" conflicts with statements in previous sections that radium concentrations in samples from two wells exceeded the MCL. Please revise the text to state that radium was detected above the MCL.	**Response to Specific Comment 17.** Monitoring wells DRA-01 and M108-B (radium concentrations exceeded the MCL in these two wells) were scheduled to be sampled for radionuclides in Spring 2010 as part of the Alameda Point Basewide Groundwater Monitoring Program; however, since these wells are located near a nesting colony of California Least Terns they were not able to be sampled this Spring. These monitoring wells will be samples during the next Alameda Point Basewide Groundwater Monitoring Program.
Specific Comment 18. **Section 7, Conclusions and Recommendation; Appendix F, Comparison of Detection Limits and Screening Criteria, Section F1.0, Detection Limit Exceedances in Soil, Page F-1 and Appendix F, Comparison of Detection Limits and Screening Criteria, Section F2.0, Detection Limit Exceedances in Groundwater, Page F-2:** According to the text, detection limits exceeded screening criteria for four chemical classes, including TPH, semi volatile organic compounds (SVOCs), pesticides/ PCBs and metals. If the detection limit is greater than the screening criteria, then the non-detect data could potentially be above screening levels. The main text of the SI Report does not accurately represent which contaminants occur above screening level, and non-representative data should not be used to make decisions regarding need for further action. For example, there are no recommendations for additional sampling for metals or pesticides in Section 7. Similarly, text in Section F2.0 states that detection limits exceed screening criteria for five chemical classes: VOCs, TPH, SVOCs, pesticides/PCBs and metals. Please discuss the potential need for additional soil and groundwater analyses for all chemical classes and locations where detection limits exceeded screening criteria before recommendations are made regarding the need for further action at the transfer parcels.	**Response to Specific Comment 18.** Specific recommendations for additional sampling are not typically provided in an SI Report. Rather, the SI process typically provides a recommendation for further evaluation and/or the identification of an Area of Concern (AOC). The subsections following the statement on Page F-2 noting that there are several classes of chemicals for which the detection limits exceeded the applicable screening criteria are explained in detail. No further recommendations for characterization were made based on the rationale provided.

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Specific Comment 19. **Section 7.1.2, EBS Parcel 23, Pages 7-3 and 7-4:** The text on page 7-3 states that EBS locations with elevated PAHs with benzo(a)pyrene (BaP) equivalent concentrations that exceed the Alameda Point-specific screening criterion were not considered because subsequent sampling using a more sensitive method did not report PAH levels above this criterion, but given the heterogeneity of soil samples, and the fact that the subsequent samples were not co-located, the earlier data should not be discounted. Further, the elevated PAH concentrations occurred in surface soil samples, which are more likely to pose risk to human health and environmental receptors. Please include (i.e., do not discount) earlier PAH data and if necessary, propose additional areas of concern (AOCs) to address this contamination.	**Response to Specific Comment 19.** The decision to disregard the earlier PAH data due to reliability issues was made by the Base Realignment and Closure Cleanup Team (BCT) a number of years ago and the PAH study conducted in 2002/2003 was intended to replace this data set with more reliable data. The protocol for the grid density and the depths of the soil samples to be collected for the 2002/2003 PAH investigation was intended by the BCT members to be of sufficient quantity to replace the earlier data set. The earlier data set is provided in Appendix A for informational purposes; however a recommendation for an additional AOC is not made based on this data due to its poor quality. Using the data from the 2002/2003 PAH investigation to make recommendations for AOCs is consistent with the intent of the investigation objective.
Specific Comment 20. **Section 7.1.2, EBS Parcel 23, Page 7-3:** The text at the end of the second paragraph states "this area has been previously identified as requiring further evaluation," and as a result has not "been identified as an AOC in this SI Report;" however, it is unclear if this includes the three locations outside of IR Site 33 with elevated concentrations or if it refers only to the area within IR Site 33 site boundaries. In addition, the investigation during which the area was previously evaluated is not specified. Please clarify whether the three locations outside IR Site 33 are included and provide the specific title of the document containing the evaluation of this area.	**Response to Specific Comment 20.** There are three locations outside the boundaries of IR Site 33 which have shown elevated PAH concentrations in soil. These are locations WB-3, WB-4 and 32FED-1A-74. Since an explanation of the recommendation for no further evaluation for the area around 32FED-1A-74 is provided on page 7-4, sixth paragraph, the following revision will be made to page 7-3 to clarify the recommendation for no further evaluation on the other two locations. On Page 7-3, Section 7.1.2, the second and third sentences of the third paragraph will be revised as follows: "Two locations within EBS Parcel 23 but outside of IR Site 33 (WB-3 and WB-4) also had PAHs above the site-specific criterion for residential use. These occurrences of elevated PAHs in soil outside the boundaries of IR Site 33 were superseded by samples collected during subsequent PAH studies that used a more sensitive analytical method and did not show elevated concentrations."

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 21. **Section 7.3.1, EBS Parcel 25, Page 7-6:** The summary and recommendations in this section are inconsistent with the statements in Section 3.1.4.3 that indicate that wastes may have been disposed in an elevated area in the northern portion of the Runway Wetland area. This area should be investigated to evaluate whether waste disposal occurred in this area. Please revise the text to discuss the possible waste disposal and recommend an investigation of this area.	**Response to Specific Comment 21.** As presented in the Response to General Comment 5, the statements in Section 3.1.4.3 reflect what was known at the time that the "Follow-on Ecological Assessment Work Plan/Field Sampling Plan" was prepared. Section 3.1.4.3 summarizes the ERA report and follow-on work plans prepared in 1996. The results of further investigation at the Runway Wetland are presented in the "Runway Wetland Human Health and Ecological Risk Screening Report," which is summarized in Section 3.1.4.7. According to discussion in the Runway Wetland Risk Screening Report, debris was placed in an elevated area in the northeastern portion of this site consisting of concrete, asphalt, and sheet-type metal, and there is no evidence that hazardous materials or municipal solid wastes were placed in the area. Sections 3.1.4.3 and 3.1.4.7 will be revised as described in the Response to General Comment 5. Therefore, additional investigation of this site is not necessary.
Specific Comment 22. **Attachment A, Solid Waste Management Unit Report for Transfer Parcel FED-1A:** This appendix does not include the evaluation information for 11 of 14 SWMUs. Since this SI Report was prepared to summarize environmental conditions in transfer parcels FED-1A, FED-2B and FED-2C, all of the SWMUs should be included. Please include profiles for the other 11 SWMUs.	**Response to Specific Comment 22.** Attachment A, the Solid Waste Management Unit Report (Sultech, 2005) is a reference document and will not be modified. Information on the 14 SWMUs is presented in Section 3.3 which includes a detailed summary provided on Table 3-5.

MINOR COMMENT	RESPONSE TO MINOR COMMENT
Minor Comment 1. **Section 3.2.1.2, EBS Parcel 23, Page 3-21:** The text refers to adjacent IR Sites 1 and 32, but IR Site 32 is not adjacent to Parcel 23, or any part of FED-1A. Please revise the text to remove this reference or explain how IR Site 32 is adjacent to Parcel 23.	**Response to Minor Comment 1.** The reference to IR Site 32 is a typographical error and will be revised to "IR Site 2."

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
HUMAN HEALTH RISK EVALUATION	
General Comment 1. The methodology described in Section 5, Human Health Risk Evaluation (HHRE), lacks sufficient detail. Further discussion should be included regarding the "published risk-based guidelines" referenced throughout Section 5. Specifically, the screening criteria (e.g., preliminary remediation goals [PRGs - residential, industrial, tap water], MCLs, environmental screening levels [ESLs], etc.) should be identified in a single section, along with appropriate reference citations. Furthermore, the applicability of each risk-based guideline to the relevant data sets (e.g., soil, groundwater, and sediment) and exposure pathways (e.g., direct contact, indoor air) should be presented in the text and reflected in the decision processes illustrated in Figures 5-2 through 5-4. Please address these issues.	**Response to General Comment 1.** References to the published risk-based guidelines used to calculate the risk, and the exposure pathways and media that these guidelines are designed to address have been added. The risk-based guidelines are only used to calculate the risk. The guidelines themselves do not have a role in the decision processes illustrated in Figures 5-2 through 5-4 so no changes to the figures will be made.
General Comment 2. The 2004 Region 9 PRGs have been replaced by National Screening Levels, which are now located on the Oak Ridge National Laboratory website (http://epa-prgs.ornl.gov/chemicals/index.shtml). This table was the combined efforts of Regions 3, 6, and 9, which have maintained regional tables on the Internet. The June 2008 National Screening Levels represent a collaborative effort among the three regions and provide the user with the best information that EPA has available. In addition, the website has a calculator function allowing the user to change defaults. This function is especially important in calculating cancer risks and non-cancer hazards from non-traditional exposure scenarios. Please acknowledge the availability of more current values and discuss in the uncertainty analysis the impacts of the availability of new toxicity information on the current conclusions in the HHRE.	**Response to General Comment 2.** Use of the 2004 Region 9 Preliminary Remediation Goals (PRGs) in calculating cancer risks and non-cancer hazards has been replaced by the 2010 Regional Screening Levels (RSLs). The more current values reflect new toxicity information.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 3. The HHRE incorporates several unconventional risk assessment practices. For example, when a total cancer risk or non-cancer hazard exceeds the target level, "risks and hazards from metals with concentrations below background concentrations were subtracted" to obtain an incremental cancer risk or non-cancer hazard that is then compared to the target level. While this approach allows for the identification of site-related chemicals of concern, risk management decisions must be based on cumulative cancer risk and non-cancer hazard results. Comparison to naturally-occurring, non-anthropogenic background concentrations is analogous to a risk management decision. Consideration of this type of approach too early in the process will undermine the risk manager's understanding of total risk and hazard. Incremental risk results that do not exceed target levels cannot be the basis for no further action if total risk is elevated. Please provide total cancer risk and total non-cancer hazard calculations.	**Response to General Comment 3.** The total risk including metals present at ambient concentrations is discussed in Section 5 and the results are also presented on the tables in Appendix B. Total risk will be revised with data from the 2010 Investigation.
General Comment 4. The HHRE uses soil data from samples collected between the surface and 10 feet below ground surface (ft bgs); however, it is unlikely that current human receptors not engaging in intrusive or earth-moving activities would be exposed to impacted soil much deeper than ground surface. The evaluation should incorporate soil data collected from a shallower depth interval based on current and future land uses and a deeper depth interval (e.g., 0 to 10 ft bgs) under potential future land use based on the likelihood that deeper soils will be mixed with shallow soils and pulled to the surface during site redevelopment activities. Please provide risk calculations for a shallower soil interval (e.g., 0 to 2 ft bgs). Further, based on the likelihood that Transfer Parcels FED-1A, FED-2B, and FED-2C will be redeveloped in the future, a construction scenario should be included in the uncertainty analysis to address the potential for a construction worker receptor to be more greatly exposed to impacted soil during intrusive and earth-moving activities. Please include a construction scenario in the uncertainty analysis.	**Response to General Comment 4.** The risk is based on the maximum concentration from the surface to 10 feet and is more conservative then basing the risk on the maximum concentration from the surface to two-foot depth. Therefore, decisions based on these risk results will be protective of the surface to the two-foot interval. For this screening level evaluation that used protective assumptions such as the maximum concentration, residential exposure from the surface to 10-foot depth is considered protective of a construction worker also. No changes will be made to the SI Report.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 5. Appendix B, Human-Health Risk Evaluation Results, contains several inconsistencies regarding the relevant footnotes that are presented and acronyms/abbreviations are that defined in each table. Examples are presented in the Specific Comments. Please ensure that the appropriate notes and acronyms/abbreviations appear beneath the tables for clarity.	**Response to General Comment 5.** All inconsistencies will be addressed.

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. **Section 5, Human Health Risk Evaluation, Page 5-1:** The second paragraph of Section 5 introduces the conceptual site model (CSM) for the human health risk evaluation. Please clarify that the CSM illustrates "human health exposures".	**Response to Specific Comment 1.** This revision will be made as requested.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 2. **Section 5, Human Health Risk Evaluation, Page 5-1; and Figure 5-1, Human Health Conceptual Site Model:** Section 5 and Figure 5-1 present the CSM used in the human health risk evaluation. However, the text and figure contain discrepancies and are incomplete, as detailed below: a. Figure 5-1 illustrates that the industrial exposure scenario consists of ingestion of soil, inhalation of particulates in outdoor air, dermal contact with soil, and inhalation of vapors in outdoor air. However, the second paragraph of Section 5 does not include inhalation of particulates as a potential exposure pathway for current workers. Please resolve this discrepancy by revising the text to include inhalation of particulates under the industrial exposure scenario and ensure that this exposure route was considered in the risk calculations. b. Section 5 presents potential exposure pathways for current workers and future child and adult residents. However, Figure 5-1 does not distinguish between current and future land uses. Please revise Figure 5-1 to illustrate the various exposures scenarios based on current and future land use. Specifically, assuming there are currently no occupied buildings on Transfer Parcels FED-1A, FED-2B, or FED-2C, current land use should be evaluated based on an outdoor industrial worker; and future land use should be evaluated based on child and adult residents, as well as an indoor industrial worker due to the likelihood that VA medical facilities will be constructed. Please update the HHRE as appropriate.	**Response to Specific Comment 2.** a. These revisions have been made as requested and any discrepancies were resolved. The exposure pathway for inhalation of particulates by an industrial worker was considered for EBS Parcel 26 of FED 2-B. The HHRE conducted for this SI evaluated the potential exposure pathways including residential receptors. No change to the HHRE is required based on any change in reuse since the residential exposure scenario is the most conservative. b. There is no difference in exposure between a current and future receptor. The risks are protective of current and future uses.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 3. **Section 5.2, Decision Process, Page 5-2:** The second paragraph in Section 5.2 describes the approach of subtracting cancer risks and non-cancer hazards from metals with concentrations below background concentrations to obtain an incremental cancer risk or non-cancer hazard. Please provide a reference for the background data set for Alameda Point and include a discussion of how metals concentrations were determined to be below or above background (e.g., by simple comparison, statistical test, etc.).	**Response to Specific Comment 3.** The following information will be added to Section 5.2, Page 5-2 in the last paragraph: "Metals were categorized as below background if the maximum concentrations were equal to or less than the 95th percentile in the Alameda Point background data set (TtEMI, 2004)."
Specific Comment 4. **Section 5.4.1, Methodology, Page 5-3:** The first paragraph in Section 5.4.1 presents the approach used to calculate cancer risks and non-cancer hazards. Please clarify the equation by stating that the risk values were calculated by "dividing the EPC by the residential risk-based guideline and multiplying the product by the target cancer risk or hazard index (U.S. EPA 1989)." Furthermore, it is noted that ESLs developed by California's Environmental Protection Agency (CalEPA), San Francisco Bay Regional Water Quality Control Board (Water Board) were used as the risk-based guidelines for evaluating groundwater risks. The ESLs are based on a non-cancer hazard index (HI) of 0.2 while the PRG is based on an HI of 1.0. However, the methodology does not explain how non-cancer hazards were evaluated for the different health-based levels. This section requires significant revisions to clearly communicate how the different risk and HI estimates were calculated to address the different types of screening levels. Further, the EPA Region 9 PRGs and the Water Board ESLs were last updated in 2004 and 2007, respectively; thus, it is possible that the most current toxicity values have not been incorporated into the risk assessment. Please include a toxicity assessment to explain the source of the toxicity values and whether the risk results would change if the most current toxicity values were included in the risk assessment.	**Response to Specific Comment 4.** This section will be significantly revised to explain how the cancer risk and noncancer hazards were calculated. Based on General Comment 2, a discussion of updated toxicity values and the impact on the risks will be added to the Uncertainty Analysis as part of the discussion of RSLs. A separate toxicity section is not proposed for inclusion because published risk-based guidelines were used and toxicity values were not identified as part of the risk evaluation. Instead, the toxicity values embedded in the published risk-based guidelines were used. The sources of the toxicity values for the several lists of published risk-based guidelines were not identified.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 5. **Section 5.4.2, Risk Evaluation Results, Page 5-5:** The last sentence in Section 5.4.2 refers to "Total and incremental (background) soil risk," which suggests that incremental and background soil risks are equivalent. However, this is not the case. Please revise this sentence to clarify that incremental soil risks represent total risk less background metals risk.	**Response to Specific Comment 5.** The sentence will be revised as requested.
Specific Comment 6. **Table 5-1, Cancer Risk and Noncancer Hazard Indices:** Please revise Table 5-1 to address the following: a. Include additional columns that present the risks and hazards associated with background metals that are subtracted from "Total Risk for Soil" and "Total Hazard for Soil" to calculate "Incremental Risk for Soil" and "Incremental Hazard for Soil", respectively. b. Provide a reference citation or documentation for footnote "a", which states that radionuclide data were not evaluated in this SI because they were within background concentrations. c. Clarify in the notes beneath the table and in the text the rationale for footnote "i", which indicates that industrial PRGs were only used in the risk evaluation for EBS Parcel 25 in FED-2B. It suggests that the industrial exposure scenario was not evaluated for the other EBS Parcels. d. Ensure that the values listed in the table match the values presented in Appendix B. For example, the incremental risk for groundwater for FED-1A should be $1E^{-04}$ (see Table B-2), not $7E^{-05}$.	**Response to Specific Comment 6.** a. The text will be clarified to explain that the incremental risk is calculated by removing metals found at concentrations consistent with background rather than by calculating a background risk. Therefore, the change requested does not apply. b. The reference for the radiological sampling will be added to the tables once the report is completed. c. "Residential" was added to the title to clarify that only the risks footnoted "i" are industrial. d. The values in the tables were verified and the error noted by U.S. EPA appears to be the only one.
Specific Comment 7. **Appendix B, Table B-1, Screening-Level Risk Results – Soil:** Table B-1 contains acronyms and abbreviations that were not used, namely "ESL - environmental screening level (for indoor air, Water Board 2007)" and "ESLadj - noncancer values multiplied by 5 to adjust target hazard quotient to 1." Please remove these acronyms from Table B-1 and incorporate them in the appropriate tables. Please also add a discussion to the text on the approach of multiplying noncancer-based ESLs to adjust target hazard quotients (HQs) to 1.	**Response to Specific Comment 7.** Acronyms will be revised to represent each table as appropriate and discussion will be added to the text to explain derivation of hazard quotient (HQ) values based on ESLs.

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Specific Comment 8. **Appendix B, Table B-3, Screening-Level Risk Results – Shallow Groundwater (Indoor Air):** The acronyms/abbreviations present "PRG" and "U.S. EPA", which do not appear in the table. Furthermore, ESL, the source for all the risk-based guidelines presented in this table, is not included in the list of acronyms/abbreviations nor could the screening levels be located in Appendix B. Please ensure that the relevant acronyms/abbreviations are defined and that any clarifying information (e.g., the approach of multiplying non-cancer-based ESLs by 5 to adjust target hazard quotients to 1) is included in each table as appropriate. In addition, a copy of the screening levels or reference to the appropriate ESL table (e.g., Table F-1a, Groundwater Screening Levels) should be included.	**Response to Specific Comment 8.** The text and tables will be revised to ensure that the relevant acronyms/abbreviations are defined and that any clarifying information (e.g., the approach of multiplying non-cancer-based ESLs by 5 to adjust target hazard quotients to one) is included in each table as appropriate.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
SCREENING LEVEL ECOLOGICAL RISK ASSESSMENT	
General Comment 1. The SI Report provides a summary of risk findings associated with transfer parcels FED-1A, FED-2B and FED-2C and relies upon a historically-derived Screening Level Ecological Risk Assessment (SLERA) for the FED-2B transfer parcel. The text indicates that the SLERA and agency comments on the report were reviewed during the production of the SI. Only a concise summary of the FED-2B SLERA is presented in this SI Report (Section 6.3, page 6-11 'Ecological Setting at Transfer Parcel FED-2B'), but the FED-2B SLERA could be included in an appendix on the CD-ROM. Please revise the SI Report to incorporate the Neptune 2002 evaluation as well as the Agency recommendations regarding this assessment.	**Response to General Comment 1.** The Runway Wetland Human Health and Ecological Risk Screening Report (Neptune, 2002) will be included as an appendix on the CD.
General Comment 2. The SLERA is a fairly condensed and concise document, but there is no description of the suitable measurement or assessment endpoints for the receptors evaluated. The document does describe the suitable toxicity reference values for the identified target receptors which help to infer endpoints. However, there is no specific mention of the ecological values to be protected. Please revise the SLERA to provide clear statements describing both the measurement and assessment endpoints for each category of ecological receptor.	**Response to General Comment 2.** A description of the assessment and measurement endpoints will be added to the SLERA.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 3. The risk estimates for the SLERA would benefit from a spatial evaluation line of evidence. Given that the FED-1A site is comprised 'approximately 75 percent [290 acres] is covered by pavement or buildings, and 25 percent is bare soil or grassy areas' it would be useful to isolate the soil chemical of potential ecological concern (COPEC) results that occur in the habitat settings. The risk summaries provide broad characterization statements such as "there is potential screening-level ecological risk for terrestrial ecological receptors from 12 organic and 15 inorganic COPECs."(Page 6-10, section 6.2.6). Given the fact that certain COPECs yielded significant HQs after the Step 3(a) refinement procedures (i.e. lead, cadmium), it is important to understand whether these COPECs are co-located, thereby creating a hot spot of contamination, site-wide, or located under impermeable structures or barriers. It is also important to understand the relationship of the COPEC occurrences in relation to the California Least Tern nesting area. Please revise the risk conclusions to incorporate a discussion of the spatial extent of the COPECs.	**Response to General Comment 3.** In accordance with the accepted procedures for a streamlined ERA, an analysis of spatial distribution of chemicals has not been done for ecological risk assessments for other Alameda Point sites, including IR Sites 26, 27, 28, 30, 31 and 35. Removal of pavement/structures may occur in the future, so spatial distributions or hot spots would not change the conclusions of the SLERA. Statements regarding HQs (Page 6-10, Section 6.2.6) are in regards to the SLERA (Step 2 of the Navy guidance) which is very conservative. Refined evaluations (Baseline Ecological Risk Assessment [BERA] – Step 3a) were also completed and included adjustments to exposure factors, Lowest Observed Adverse Effect Level (LOAEL)-based evaluation, and comparison to site background. The Refined evaluation indicated that all HQs were <1 with the exception of aluminum in soil. Aluminum is only considered a potential ecological risk when soil pH is below 5.5, which is not expected at this site. Text in Section 6.2.6 will be revised to more clearly demonstrate the progression from SLERA (Step 1 and 2) to BERA (Step 3a) and the associated conclusions. Conclusions of the ERA (screening and refined) indicate little or no potential ecological risk from COPECs in Transfer Parcel FED -1A. No further ecological evaluation is warranted for Transfer Parcel FED-2B and Transfer Parcel FED-2C consists of barren habitat (pavement) with no potentially complete exposure pathways for ecological receptors. Revisions to the conclusions are not warranted.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 4. The risk estimates for the SLERA rely upon a limited number of lines of evidence and could benefit from additional data analysis. A geospatial interpretation would yield important information relating the occurrence of COPECs to the limited habitat setting. As indicated within the text, FED-1A will retain an industrial land use which is the most compelling line of evidence that future exposure conditions will be incomplete. This information should be brought into the risk conclusions and it is also recommended that the frequency of detection be reviewed, as well as comparison of inorganic COPEC HQs to background-derived HQs. Further discussion regarding source areas and their relationship to the observed COPEC concentrations could also be beneficial. Please review the risk characterization portions and perform additional data analysis where available.	**Response to General Comment 4.** As noted in Response to General Comment 3, spatial analysis of chemicals will not be included in this ecological risk assessment. The risk conclusion will be revised to include information about the land use. Frequency of detection and comparison to background information is presented in Section G9.2 and G9.3 of the risk characterization and summary. Evaluation of source areas and COPEC concentrations is not typically done as part of ERAs at Alameda Point, and will not be added to this ERA.
General Comment 5. The risk assessment provides a Hazard Index (HI) estimate for COPEC groupings including metals, but the results of the HI estimates are not presented in any of the risk conclusions. Furthermore, while the metals COPEC HI is a conservative method, it is a highly uncertain risk estimate since metals toxicity is extremely variable. The document needs to be revised to more thoroughly present the risk conclusions associated with the cumulative HIs, as well as the uncertainty associated with these values.	**Response to General Comment 5.** The ecological risk assessments at Alameda Point (including IR Sites 26, 27, 28, 30, 31 and 35) have discussed the risk estimates primarily in terms of individual chemical HQs. The HIs for chemical groups have been discussed only if all the HQs for chemicals within the group are less than one. In this way, the HIs can serve as a conservative supplemental step following the evaluation of the individual chemical HQs. Since the discussion of HIs is not typically included in Alameda Point ERAs unless all HQs within the group are less than one, it will not be added for this ERA. The risk characterization for terrestrial wildlife receptors will be revised for consistency to present the HI for the Pesticides group (HI 2). Since none of the HQs for individual VOCs is greater than one the chemical group, this level of information is appropriate.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 6. Tables G-2 and G-3 (Soil and Groundwater Chemicals of Potential Ecological Concern summarizes the chemicals detected in soil and groundwater at FED-1A, but they only show the data for chemicals detected at least once, and exclude all non-detected data. Such an approach implicitly assumes that chemicals with all non-detect values have detection limits below their corresponding ecological screening benchmarks. This assumption could not be verified since chemicals with all non-detect data are not provided in the report. Please include a comprehensive data summary table. All non-detected chemicals with a detection limit above their screening benchmark must be retained as COPECs for evaluation in the baseline ecological risk assessment (BERA).	**Response to General Comment 6.** A comparison of detection limits and screening criteria is presented in Appendix F, which reviewed chemicals in groundwater against water quality criteria. All of the chemicals for which there are U.S. EPA soil screening criteria are listed among the COPECs, except for dieldrin. Inclusion of dieldrin among the COPECs would not change the SLERA conclusions since pesticides as a group are listed as a COPEC. While there is uncertainty associated with eliminating chemicals as COPECs due to all concentrations being non-detects, it is not expected to affect the risk assessment conclusions. In addition, this approach has been the standard approach for ERAs at Alameda Point.
General Comment 7. There are multiple occasions in the FED-1A SLERA where HQs were not calculated because certain chemicals lacked benchmarks. The 1997 USEPA Ecological Risk Assessment Guidance for Superfund states that HQs below 1.0 indicates that the contaminant is not a COPEC. Based on this guidance, all of the chemicals with HQs above 1.0 and those chemicals for which an HQ was not calculated (i.e. no screening benchmark was available) should be further evaluated in a BERA. It is incorrect to assume that a HQ would be below 1.0 if it cannot be calculated. Please retain all chemicals with HQs above 1.0 and chemicals with no HQs for further evaluation in the BERA.	**Response to General Comment 7.** COPECs that lacked benchmarks were retained after the SLERA and evaluated in the first step of the refined exposure estimate (Step 3a of the BERA process; see Tables G-19 through G-22). COPECs that lacked benchmarks were not included in the LOAEL-based refined risk estimates (see Table G-24 and G-25). Text in Section G6 will be revised to reflect this. This process is consistent with U.S. EPA 1997 guidance and is typical for a refined ERA at Alameda Point.

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Dated MAY 2008
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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. **Appendix G, Section G1.1, Page G-2:** This section should describe the anticipated future land use and how it will affect the existing natural setting features. Please revise the text to include this information.	**Response to Specific Comment 1.** Section G1.1 will be revised to discuss the anticipated future land use.
Specific Comment 2. **Section G6.1, Soil COPEC Concentrations, Page G-20:** It is stated that Pro UCL software was used to calculate 95% Upper Confidence Levels (UCLs). However, this section does not indicate which version of Pro UCL was used. Please state which version of Pro UCL was used in this SLERA. There is also no discussion on how non-detects were handled. Older versions of Pro UCL use one half of the detection limit for non-detects while the most recent version (Pro UCL 4.0) does not. Please explain in this section how non-detect data was evaluated when calculating the 95% UCL in Pro UCL.	**Response to Specific Comment 2.** ProUCL Version 3.0 was used to calculate 95 percent upper confidence limits of the mean COPEC concentrations. Non-detect data were evaluated as one half the detection limits. Section G6.1 will be revised to include this information.

References:

Bechtel Environmental, Inc. (Bechtel). 2003. Final Remedial Investigation Report, IR Site 26, Western Hangar Zone, Alameda Point, Alameda, California. November.

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Department of the Navy (DON). 1996. Naval Air Station Alameda, Site 18 Fact Sheet, Number 8. December.

International Technology Corporation (IT). 2001. Environmental Baseline Survey Data Evaluation Summary – Final, Alameda Point, California. January.

Neptune and Company, Inc. (Neptune). 2002. Draft Runway Wetland Human Health and Ecological Risk Screening Report, Alameda Point, Alameda, California. February 22.

SulTech, a Joint Venture of Sullivan Consulting Group and Tetra Tech EM Inc. (SulTech). 2005. Solid Waste Management Unit Evaluation Report for Economic Development Conveyance Parcel FED-1A, Alameda Point, Alameda, California. November 11.

Tetra Tech EM Inc. (TtEMI). 2000. Draft Final Storm Sewer Study Report, Alameda Point, Alameda, California. Prepared for the Department of the Navy, Southwest Division, Naval Facilities Engineering Command, San Diego, California. December 4.

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ALAMEDA POINT, ALAMEDA, CALIFORNIA
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_____. 2001. Summary of Background Concentrations in Soil and Groundwater, Alameda Point, Alameda, California. November.

———. 2004. Final Remedial Investigation Report, Sites 6, 7, 8 and 16, Alameda Point, Alameda, California. November 18.

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DATED OCTOBER 2010

CTO-FZN0 COMMENTS FROM: MELINDA GARVEY, USEPA, 12/20/10

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 1. USEPA recommends the monitoring wells that the Navy recommended for further sampling (with the addition of well M108-B, see Specific Comment #2) be incorporated into Installation Restoration (IR) Site 33 to facilitate a more comprehensive record of sampling and monitoring. Alternatively, the monitoring wells could be added to IR Site 1 or IR Site 2. Also, please expand the IR Site 33 boundary to include nearby areas with PAH exceedances. Finally, please include a figure depicting the Section 8 recommendations in the Report and highlight the wells that are selected for further monitoring.	**Response to General Comment 1.** The monitoring wells that the Navy recommended for further sampling (with the addition of well M108-B) will be included in the Alameda Basewide Monitoring Program and results will be documented into IR site or Transfer Parcel investigation as appropriate. In addition, a figure depicting the Section 8 recommendations will be created. The following sentence will be added to the last paragraph of Section 8.0: "Sampling locations recommended for further investigations can be seen in Figure 8-1."
General Comment 2. The Report appears to use different health screening scenarios at different times in the text, such as Section ES.3, Human Health Risk, Page v, which states, "The human health risk screening evaluation assumed that future land use would be residential;" Section ES.5, Conclusions and Recommendations, Page vii, which states, "concentrations were within acceptable ranges for vapor intrusion concentrations for commercial/industrial scenario;" Section 6.0, Human Health Risk Evaluation, Page 6-1 which states, "The most stringent of the residential reuse scenarios was assumed, although not proposed, as part of the current development plan;" and Section 8.1.2 EBS Parcel 23 on Page 8-5, which states, "Using industrial risk based guidelines, which is *[sic]* current and potential future use scenario." Please include a discussion in the Report specifying which risk screening criteria were agreed for evaluation (for future land use, as well as for ecologically sensitive receptors such as the endangered California least tern), specify the criteria (on) that will be used uniformly in the Report, and revise the Report accordingly, or provide a discussion explaining the fluctuating application of screening scenarios.	**Response to General Comment 2.** The Department of Veteran Affair's (VA's) Site Plan (dated September 1, 2010) proposes an outpatient clinic in 30 acres of the northern portion of the site, a 50-acre columbarium in the northwestern part of the site, a 20-acre columbarium in the northeastern portion of the site, a 10-acre wildlife refuge for the endangered California least tern, and undeveloped parcels including Installation Restoration Sites 2 and 33. The risk screening scenarios discussed in the text are based on this plan for future use. The following revision will be made: The last sentence in the third paragraph of ES.1, the last sentence of Section 1.4.1, and the second paragraph of Section 3.1.7 currently say that the total acreage of the development is estimated to be "approximately 115 acres," but will be revised to say "approximately 100 acres." The second sentence in the first paragraph of ES.3 will be revised to read: "The human health risk screening evaluation was based on the planned future land uses of the site, which include residential areas (VA medical facilities), commercial/industrial areas (the two columbaria), wetlands/open space, and the California least tern sanctuary." The third sentence of this paragraph ("Therefore, residential risks are hypothetical.") will be removed. The second sentence of the sixth paragraph of Section 3.2.1.1 will be clarified to reflect that the future land use is industrial. It will be revised to read as follows:

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
	"Aroclor 1260 was reported at a concentration of 370 µg/kg at location A-1, below the industrial screening criterion of 740 µg/kg." The third sentence of the fourth paragraph of Section ES.3 will be deleted, so that the paragraph reads: "Human health target risk levels were exceeded at Transfer Parcel FED-1A, including EBS Parcels 5, 23, and 24. The incremental risk for EBS Parcel 23 is above the target risk levels using industrial risk-based guidelines; however, this is due to the elevated levels of PAH concentrations from samples located in a portion of this parcel (IR Site 33). Incremental risks were calculated for EBS Parcel 23 without the IR Site 33 samples and were below target levels using industrial risk-based guidelines."
General Comment 3. Several inconsistencies were noted in the cancer risk and noncancer hazard indices (HI) results with respect to the exclusion of radionuclide results from the total risk calculations, as well as discrepancies between the noncancer HIs presented in Table 6-1, Cancer Risk and Noncancer Hazard Indices, relative to the information presented in Appendix G, Human Health Risk Evaluation Results. Thus, a determination of the acceptability of risks and hazards cannot be made until these exclusions and inconsistencies have been addressed. Please ensure that the Executive Summary and risk summaries are revised to include radiological risks in order that risk management decisions can be made with respect to human health risks.	**Response to General Comment 3.** The values presented in Table 6-1 and Appendix G will be reviewed and revised for consistency. Radionuclide data were not included in the risk screening evaluation completed as part of the SI because the intent of the sampling was for screening purposes and the type of radionuclide analysis performed was not meant for use in risk assessment. Results of the radionuclide screening are presented in Section 5.10.

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GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 4. The human health risk assessment (HHRA) must include a breakdown of the cancer risks associated with the radionuclides since radionuclides were sampled and detected at FED-1A. This step is necessary to obtain a complete understanding of total site risks from both chemicals and radionuclides. According to Section 3.2, Historical Uses and Previous Sampling Results by EBS Parcel (Page 3-14), the radionuclide data collected at FED-1A were determined to be "consistent with the Alameda Point background levels and are not indicative of contamination" and as a result, "radionuclide data collected at Transfer Parcel FED-1A...were not included in the risk screening evaluation completed as part of this SI Report." Further, Table 6-1, Cancer Risks and Noncancer Hazard Indices, confirms that radionuclides were excluded from the HHRA as indicated in footnote "a", which states that "Radionuclide data were not included in the risk screening evaluation completed as part of this SI because results are consistent with the established background concentrations at Alameda Point." The exclusion of radionuclides in the HHRA is not consistent with how PAHs and metals were evaluated in the HHRA. Radionuclides should be included in the risk assessment of FED-1A to provide an estimate of total risk in this area by all constituents detected (i.e., including chemicals and radionuclides). Finally, according to Section 5.10.2, Transfer Parcel FED-2B, radionuclides were sampled also at Transfer Parcel FED-2B, EBS Parcel 27, yet there is no mention of this in the risk assessment or Table 6-1, Cancer Risk and Noncancer Hazard Indices. Please revise the HHRA to ensure that the radionuclides are considered in the total risk for all parcels for which the radionuclide data are available.	**Response to General Comment 4.** Radionuclide data were not included in the HHRA completed as part of the SI because the intent of the sampling was for screening purposes and the type of radionuclide analysis performed was not meant for use in risk assessment. The following changes will be made to clarify: Section 3.2 will be revised to say "The radionuclide data collected at FED-1A were determined to be consistent with the Site 1 radionuclide levels, which indicates no widespread radiological contamination. Because radionuclide data collected at Transfer Parcel FED-1A were collected for screening level purposes, these data were not included in the risk screening evaluation completed as part of this SI Report." The note on Table 6-1 will be revised to say "Radionuclide data were not included in the risk screening evaluation completed as part of the SI because the intent of the sampling was for screening purposes and the type of radionuclide analysis performed was not meant for use in risk assessment." Section 5.10 will be revised to present radionuclide soil results screened against the background concentration of radium-226 established in the Final Time Critical Removal action Post-Construction Report for Installation Restoration Sites 1, 2, and 32 (August 2009). In addition, the screening results of the radionuclides detected in Transfer Parcel FED-2B are discussed in Section 5.10.2. Based on the results of the screening evaluation, the California Department of Public Health said in their review of the April 2010 radionuclide data that "the sites do not contain high levels of widespread radiological contamination near the immediate areas and depths of sampling".

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. **Section ES.5, Conclusions and Recommendations, Page vii:** Section ES.5 states that "Vinyl chloride concentrations have been detected above the MCL [maximum contaminant level] of 0.5 µg/L [micrograms per Liter] in this monitoring well M025A, but the concentrations were within acceptable ranges for vapor intrusion concentrations for commercial/industrial scenario." However earlier text states that data from EBS Parcel 5 was screened against a residential risk scenario for human health. Since the Department of Veteran Affairs requested a 'Federal-to-Federal' property transfer of all three Transfer Parcels, with the intention of building an outpatient clinic and long-term care facility at the northern end of Transfer Parcel FED-1A, please explain why the scenario for vapor intrusion was not screened against a residential scenario, especially considering the sensitive patient population. Please resolve the discrepancy between scenarios and acknowledge the sensitivity of this receptor population in the text, and revise the text of the Executive Summary, Section 4.1.1 AOC 2 Vinyl Chloride in Groundwater summary on Page 4-1, and the conclusions and recommendations to reflect the sensitive receptors (residential scenario).	**Response to Specific Comment 1.** Area of Concern (AOC) 2, which contains monitoring well M025-A, is located along the western edge of Alameda Point along the shore of San Francisco Bay. According to the Department of Veteran Affairs Site Plan dated September 1, 2010, AOC 2, including the vicinity of monitoring well M025-A, will be used for a columbarium. The hospital will be built approximately 3,000 feet to the west of AOC 2. Since the planned reuse of AOC 2 is a columbarium, the commercial/industrial scenario was used to assess the vapor intrusion pathway this AOC.
Specific Comment 2. **Section ES.5, Conclusions and Recommendations, Page viii and Section 8.1.2, EBS Transfer Parcel 23, Page 8-4:** These sections should recommend sampling monitoring well M108-B for radium in addition to well DRA-01, since the highest concentration of radium was detected in well M108-B and the text in Section 5.10.1 (page 5-8) recommends this well for sampling. Please revise the text in these sections to recommend sampling monitoring well M108-B for radium.	**Response to Specific Comment 2.** The recommendations for monitoring well M108-B are presented in Section 8.1.3 and in Section ES.5 as part of the EBS Parcel 24 discussion. Text will be added to Section 3.2.1.3 to clarify the locations of M108-A and M108-B and their association with EBS Parcel 24.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 3. **Section 4.1.1, AOC 2 Vinyl Chloride in Groundwater, Page 4-1:** A search of the Report indicates that Section 4.1.1 is the only place in the Report that specifies that Area of Concern (AOC) 2 will be used as the location of a national columbarium, and not a facility for sensitive populations (patients), as suggested by other references in the Report that merely state 115 acres of the northern end of Transfer Parcel FED-1A will house an outpatient clinic, long term care facility, and a national columbarium. Please provide a reference that confirms that AOC 2 will only house a national columbarium and no medical facilities.	**Response to Specific Comment 3.** According to the Department of Veterans Affair's presentation to the Alameda City Council on September 7, 2010 and the Site Plan dated September 1, 2010, AOC 2 will be part of a 70-acre columbarium.
Specific Comment 4. **Section 5.1.2, Screening Criteria for Sediment, Pages 5-2 and 5-3:** According to the text, sediment concentrations were screened against soil PRGs, but contaminant concentrations in sediment samples should be screened against the National Oceanic and Atmospheric Administration (NOAA) sediment screening levels. In addition, the PRGs have been replaced by RSLs, which were most recently updated in November 2010. Please revise the Report to use the NOAA sediment screening criteria or the November 2010 RSLs to screen sediment data.	**Response to Specific Comment 4.** Wetland sediment data were evaluated in previous investigations as part of the human health and ecological screening level risk assessments. At EBS Parcel 25, both residential and industrial criteria were used as a conservative measure in the Draft SI Report (BEI, 2008). However, human exposure would be insignificant because the wetland habitat would be restricted from residential use. This evaluation has been removed from the HHRA in the Draft Final SI Report. The screening level ecological risk assessment evaluated aquatic life and aquatic dependent birds (Neptune, 2002). The chemicals of potential ecological concern in sediment were screened using screening level ecotoxicity estimates. This evaluation is described in Section 7.2.6 of the Draft Final SI Report. Appendix J includes the hazard quotient calculations for this assessment. Section 5.1.2 will be revised to state the following: "Chemical concentrations in wetland sediments were compared to screening level ecotoxicity estimates. Manhole sediment data were not evaluated because they are not considered to be representative of site activities or indicative of current conditions."

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 5. **Section 5.6, Polychlorinated Biphenyls, Pages 5-5 and 5-6:** The results of the concrete chip sampling are not discussed in this section. Please revise the text to include a discussion of the results of the concrete chip sampling.	**Response to Specific Comment 5.** The results of the concrete chip sampling are discussed in the fourth paragraph of Section 5.6 on page 5-6. These samples were not reported to contain PCBs above the screening level.
Specific Comment 6. **Section 5.9.1, Transfer Parcel FED-1A, Page 5-7; Section 5.9.2, Transfer Parcel FED-2B, Page 5-8; and Figure 5-7, Sampling Locations and Screening Criteria Exceedances — Metals:** The text states, "the distribution pattern of arsenic concentrations at EBS Parcels 5 and 23 is similar to background arsenic as shown in Figure 5-7," but Figure 5-7 does not include the distribution of background arsenic concentrations. As a result, the meaning of the quoted statement is unclear. There is a similar statement in Section 5.9.2. Please clarify the intended meaning of this statement by revising the text in Sections 5.9.1 and 5.9.2 or by revising the Figure 5-7 to include the distribution of background concentrations.	**Response to Specific Comment 6.** The statements about and references to Figure 5-7 in Sections 5.9.1 and 5.9.2 refer to a previous version of this figure and will be deleted from the text in both sections.
Specific Comment 7. **Section 5 Figures:** The Section 5 figures do not include detected concentrations or specific COCs to allow evaluation of the data. Please revise all Section 5 figures to include detected concentrations for specific COCs.	**Response to Specific Comment 7.** Section 5 figures are intended to show sample locations analyzed for a specific chemical group and which of those locations had detected concentrations of that chemical group that exceeded applicable screening criteria. Specific analytical data screening against applicable screening levels are presented in Appendix A. This approach of data presentation was chosen to ensure readability of the figures.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 8. **Section 6.0, Human Health Risk Evaluation, Page 6-1:** The second paragraph states that "Transfer Parcels FED-1A, FED-2B and FED-2C encompass approximately 439 acres, most of which is unpaved and unused open space;" however, according to Section 1.4, Transfer Parcel Descriptions and Histories (Page 1-3), seventy five percent of the 400-acre FED-1A parcel is paved and open space; and all 12 acres of FED-2C is paved. As a result, 312 of the 439 acres are paved. Please revise the text in this section to accurately reflect that most of the area is paved and unused open space. Also, please ensure that exposure pathways are appropriately identified based on this revision.	**Response to Specific Comment 8.** The third sentence in the second paragraph of Section 6.0 will be revised to state: "Transfer Parcels FED-1A, FED-2B and FED-2C encompass approximately 439 acres, most of which is unused open space. Approximately 75 percent of Transfer Parcel FED-1A is paved, Transfer Parcel FED-2B is entirely unpaved, and Transfer Parcel FED-2C is entirely paved."
Specific Comment 9. **Section 6.4.2, Risk Evaluation Results for 5 EBS Parcels, Page 6-3:** Specific Human Health Risk Evaluation Comment 5 on the Draft May 2003 SI report requested clarification of the last sentence in Section 5.4.2, Risk Evaluation Results, Page 5-5, to clarify that incremental soil risks represents total risk less background metals risk; however, this change was not made in Section 6.4.2 of the Report. It is recommended that the different categories of risk as presented in Table 6-1, Cancer Risk and Noncancer Hazard Indices, be clarified in this section to promote clarity in the understanding of each risk and hazard category.	**Response to Specific Comment 9.** The last sentence of Section 6.4.2 will be revised to read: "Total and incremental soil risks and groundwater risks for these EBS parcels are presented in Appendix G and summarized in Table 6-1. Incremental risk is total risk less risk from background metals."

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 10. **Section 6.4.3, Risk Evaluation Results for 2010 Investigation, Page 6-5:** This section states that in addition to evaluating the 2010 data with their associated parcels, it was also evaluated as one exposure unit "to help determine the areas of concern where risk and hazards are concentrated," but it is unclear how consolidating data collected from different parcels into one exposure unit can help differentiate areas of concern based on risk and hazard. The integration of this data by parcel should result in identifying where risk and hazards are concentrated in each parcel or area within a parcel. Please explain how combining 2010 data from different areas into one exposure unit helps to differentiate risk and hazard drivers. In addition, several discrepancies were identified: The first paragraph indicates that PAH samples were "removed from the data set to reach the target risk level," but sample results should not be removed from a data set before soil is remediated. Please revise the approach to include all data and delete all text describing removal of sample results from the data set or explain what the quoted statement means and provide detailed justification for this approach. The text does not clearly explain how the 2010 data was integrated into the exposure units for each parcel as the maximum lead result in soil of 163 mg/kg is only discussed with respect to the risk evaluation of the combined 2010 results and is not discussed in association with any of the parcel-specific risks. This section does not identify where this elevated lead detection was located. Please revise the text to clarify how the 2010 results were integrated in the parcel-specific risk assessments and specify where the elevated lead detection is located.	**Response to Specific Comment 10.** Grouping the 2010 investigation data results together was initially performed to see what effects these newly collected data would have on the existing data set. Section 6.4.3, Risk Evaluation Results for 2010 Investigation, has been removed as well as Tables G-13 through G-15, and parcel-specific risk and hazard discussions have been updated with the corrected lead concentrations.

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SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 11. **Section 6.6, Risk Summary, Page 6-6:** The first sentence states that potential cancer risks and hazards exceeded target levels for a residential scenario at EBS Parcels 5, 23, 25, and 26; however, Parcels 25 and 26 were not included in the residential risk evaluation since this parcel is located in a wetland. Please revise the text to accurately reflect the risk and hazard summaries as presented in Table 6-1.	**Response to Specific Comment 11.** Section 6.6 will be revised to read: "Although potential cancer risks and hazards exceeded target levels for a residential scenario at EBS Parcels 5 and 23, when evaluated for an industrial scenario, EBS Parcel 5 has a cancer risk and HI within target levels. As discussed in detail in Section 6.4.2, at EBS Parcel 23, only the area associated with IR Site 33 has cancer risks and HIs that exceed target levels."
Specific Comment 12. **Table 6-1, Cancer Risk and Noncancer Hazard Indices:** Specific Human Health Risk Evaluation Comment 6c on the Draft May 2003 SI report requested a clarification of which values in Table 6-1 represent industrial risk; however, a clarification should also be included in the table on what the other risks represent (e.g., residential). Please revise the table title as per the response to indicate that the risks and hazards reflect a residential land use scenario while those values denoted by footnote "h" represent industrial values. Further, Comment 6d was partially addressed. A majority of the risk and hazard values presented in Table 6-1 could be cross-walked to the values presented in Appendix G except for the hazard values for transfer parcels FED-2B and FED-2C. According to Table 6-1, the total hazard for soil and groundwater at FED-2B, Site 27 is 2.2; however, the total hazard from groundwater is stated as "NA" or not available. The total hazard of soil is 0.77 (also reflected in Appendix G); thus, it is unclear how the total hazard for soil and groundwater is 2.2 when groundwater is NA. Further, according to Table 6-1, the total hazard for soil and the incremental hazard for soil at FED-2C, Site 23E are both listed as 1.8E-04; however, Table G-11, Screening-Level Risk Results - Soil Transfer Parcel FED-2C, EBS Parcel 23E lists the total hazard for soil as 1.3 and the incremental hazard for soil as 0.93. Please reconcile the discrepancies between Table 6-1 and Appendix G for Transfer Parcels FED-2B and FED-2C to accurately reflect the risk and hazard summaries evaluated. Finally, please revise Section 6.4.2, Risk Evaluation Results for 5 EBS Parcels, to accurately reflect the corrected hazard indices for FED-2B and FED-2C.	**Response to Specific Comment 12.** Table 6-1 and Section 6.4.2 will be updated to present the correct values (that match those tables in Appendix G).

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CTO-FZN0 COMMENTS FROM: MELINDA GARVEY, USEPA, 12/20/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 13. **Section 8.1.1, EBS Parcel 5, Page 8-2; Section 8.1.2 EBS Parcel 23, Page 8-3, Figure 3-1, EBS Parcels in Transfer Parcels FED-1A, FED-2B, FED-2C:** The cobalt exceedance noted on Page 8-5 of 23.1 mg/kg (AP1AW467B-DP01) is neither the maximum detection for cobalt in EBS Parcel 23 (59.3 mg/kg at AP1AAPS-DP25), nor is it in EBS Parcel 23, according to EBS section breakdown presented on Figure 4-1 (i.e., this location is in EBS Parcel 5). Please resolve these discrepancies. Also, please revise the discussion of exceedances and detections to include all maximum detected concentrations in each EBS Parcel and discuss how the resulting revisions impact conclusions and recommendations.	**Response to Specific Comment 13.** The second paragraph of Section 5.9.1 and the eighth paragraph of Section 8.1.2 will be revised to each read the following: "Cobalt was reported to exceed the background value and the residential screening level at several soil sample locations. The maximum concentration detected was collected from APlAAPS-DP22 at a concentration of 156 mg/kg. This value exceeds the background value of 9.4 mg/kg and the residential screening level of 23 mg/kg." The discussion of exceedances and detections has been reviewed to ensure that the wells cited to have the maximum concentrations were correct. No issues were found in these sections; therefore no additional changes will be made in the conclusions and recommendations.

References:

Bechtel Environmental, Inc. (BEI). 2008. Draft Site Inspection Report, Transfer Parcels FED-1A, FED-2B, and FED-2C, Alameda Point, Alameda, California. May.

Neptune and Company, Inc. (Neptune). 2002. Draft Runway Wetland Human Health and Ecological Risk Screening Report, Alameda Point, Alameda, California. February 22.

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010

CTO- FZN0 COMMENTS FROM: JAMES M. POLISINI, DTSC, DECEMBER 13, 2010.

GENERAL COMMENTS	RESPONSE TO GENERAL COMMENTS
General Comment 1. HERO has only minor recommendations, mainly regarding additions of small sections reflected in the responses to the text of the Final Site Inspection Report.	Comment noted. No response is necessary.

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. **[Note: The Specific Comment Numbers referenced below in the lead-ins in this column refer to the previous set of responses to Mr. Polisini's comments issued in August 2008 for the Draft SI Report.]** Response to the Response to Specific Comment Number 1: HERO agrees with the statement that groundwater is a more reliable predictor of indoor air concentrations where groundwater is the major source. The intent of this comment was that only the groundwater source, and not any potential contribution from contaminated soils, was being evaluated. This could have been addressed by developing separate estimates of indoor air concentrations separately attributable to soil and groundwater. However, the approach taken appears to provide health-protective assessment of indoor air.	Comment noted. No response is necessary.
Specific Comment 2. Response to the Response to Specific Comment Number 2: The response indicates that a discussion of the uncertainty associated with the substitution of EBS Parcel 25 results in the evaluation of EBS Parcel 26 will be added to Section 5. HERO was unable to locate this discussion anywhere in Section 5 of the Draft Final SI Report. Please provide the text location of the discussion of this data gap.	**Response to Specific Comment 2.** The initial comment says "No sample data exists for EBS Parcel 26 and EBS Parcel 25 sample results are substituted as 'representative' of EBS Parcel 26 (Section 5, page 5-1). This is a data gap that should be considered when evaluating the results of the HHRA for FED-2B." The response to this comment has been updated to "The report no longer presents human health risk results for either EBS Parcels 25 or 26. These parcels have been classified as wetlands habitat and are not evaluated in the HHRA because human exposure would be insignificant in a wetland habitat."

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010

CTO- FZN0 COMMENTS FROM: JAMES M. POLISINI, DTSC, DECEMBER 13, 2010.

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 3. Response to the Response to Specific Comment Number 5: The response indicates that the following sentence will be added to the last paragraph of Section 5.2: "Metals were categorized as below background if the maximum concentrations were equal to or less than the 95th percentile in the Alameda Point data set (TtEMI, 2004)." Section 5.2 of the Draft Final SI Report (Page 5-4) addresses volatile organic compounds (VOCs), not inorganic elements. HERO was, however, able to locate the sentence, as described, in Section 6.2, page 6-2). This comment is meant for the DTSC Project Manager and no response is required from the Navy or CH2M HILL.	Comment noted. No response necessary.

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 4. Response to the Response to Specific Comment Number 6: The response indicates that wetland delineations have not "typically" been completed as part of ERAs at Alameda Point. While wetland delineations are not "typically" included in terrestrial ERAs, the fact there is a Runway Wetland in Parcel FED-2B and all of these parcels were originally evaluated with a potential future use as a FWS property would indicate a wetland delineation is appropriate. In addition, the approximately 2.5 acres of grassland in FED-1A described as potential seasonal wetland is fairly small and should not require extensive wetland evaluation. Wetland delineations were performed as part of the IR Site 34 investigation (ChaduxTt, 2009).	**Response to Specific Comment 4.** Although wetland delineations are not typically performed as part of ERAs at Alameda Point, an updated Wetland Delineation and Preliminary Jurisdictional Determination Report was published by the Department of Veterans Affairs Facilities in August 2008 (EDAW, 2008). The report confirms that the area has few native plants, but instead is dominated by nonnative plants, primarily of Mediterranean origin. In addition, the report describes the Runway Wetland as follows: "The grassland found in the Runway Wetland area is typical of the nonnative grasslands across the project site, with some areas of the grassland well developed and other areas where the vegetation appears stunted." The response to this comment will be revised to incorporate this new information.

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010

CTO- FZN0 COMMENTS FROM: JAMES M. POLISINI, DTSC, DECEMBER 13, 2010.

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 5. Response to the Response to Specific Comment Number 9: The response indicates the U.S. Fish and Wildlife Service is currently preparing a revised Biological Opinion (BO) on the potential effect of the revised Veterans Administration (VA) use on the California Least Tern nesting. This comment is meant for the DTSC Project Manager, to indicate areas requiring future consultation with the California Department of Fish and Game (DFG) as well as the USFWS, and no response is required for the Navy or CH2M HILL.	Comment noted. No response necessary.
Specific Comment 6. Response to the Response to Appendix B Specific Comment Number 12: HERO accepts the additional use of Environmental Soil Screening (ESL) soil screening concentrations protective of indoor air coupled with screening of groundwater sources to indoor air as protective. This response is intended for the DTSC Project Manager and no response is required from the Navy or CH2M HILL.	Comment noted. No response necessary.
Specific Comment 7. Response to the Response to Appendix G Specific Comment Number 15: The original comment was based on potential outliers in the soil and groundwater background data sets for chromium in soil and chromium and lead in groundwater. The response outlines the low soil and groundwater Hazard Quotients (HQs) associated with chromium in soil and chromium and lead in groundwater. HERO recommends that the response, as provided, be included in the characterization section of the ERA to provide the conclusion that retaining these Contaminants of Potential Ecological Concern (COPECs) would not alter the conclusions of the ERA.	**Response to Specific Comment 7.** The following paragraph has been added to Appendix J (previously Appendix G), Section J7.2: "The maximum terrestrial wildlife hazard quotient (HQ) for chromium is 2. Retaining chromium as a soil COPEC would not change the ERA conclusions, which identify five other COPECs that are not expected to cause adverse ecological effects due to low refined HQs, low frequency of detection, or similarity to Alameda Point background concentrations." The following paragraph has been added to Appendix J, Section J7.3: "The maximum aquatic receptor HQ for chromium is less than 1. The maximum aquatic receptor HQ for lead is 2. Retaining chromium and lead as groundwater COPECs would not change the ERA conclusions, which identify two other COPECs that are not expected to cause adverse ecological effects due to low refined HQs or low frequency of detection."

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010

CTO- FZN0 COMMENTS FROM: JAMES M. POLISINI, DTSC, DECEMBER 13, 2010.

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 8. Response to Conclusions: The response indicates that the Navy may recommend (emphasis added) that use of the Runway Wetland by biological resources will be considered with any future use of the area. DTSC, as a California co-trustee for natural resources under CERCLA with the California DFG, is required to consider potential impact to biological resources and consult with other natural resource trustees. This comment is meant as a point of clarification for the DTSC Project Manager and no response is required from the Navy or CH2M HILL.	Comment noted. No response necessary.

CONCLUSIONS

Conclusion 1.

Once the specific comments are addressed the Draft Final Site Investigation Report will be acceptable. However, changes associated with future land use (e.g., removal of significant portions of runway pavement) may require reevaluation of human health risk and/or hazard and/or ecological hazard.

Conclusion 2.

Consultation with the California DFG and the USFWS, to protect the largest nesting colony of California Least Terns, is likely to be critical should the Veteran's Administration plans for future land use proceed.

References:

ChaduxTt, 2009. Draft Wetland Delineation Report for Installation Restoration Site 34, Alameda Point, Alameda, California. Prepared by ChaduxTt, A Joint Venture of St. George Chadux and Tetra Tech EM Inc. Contract Number N62473-07-D-3213, Contract Task Order 0034. July 10, 2009

EDAW, Inc. 2008. Wetland Delineation and Preliminary Jurisdictional Determination, Proposed Department of Veterans Affairs Facilities at the former NAS Alameda, Alameda County, California. August 13.

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT, TRANSFER PARCELS FED-1A, FED-2B, AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010

CTO- FZN0 COMMENTS FROM: LARRY MORGAN, CDPH, 12/7/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. **Appendix L "Response to Comments, Navy Response to CDPH Comment (RTC) 2:** a) RTC (2b): Groundwater sampling results for Radium-226 at location M-108-B were not presented on page 3-22 of this Site Inspection Report (SIR), please correct as necessary. In addition, the clarifying sentence, as stated in the Navy RTC, needs to be added to section 3.1.4 of this SIR. b) Please reference Figure 4-1, which includes some references to sampling sites from investigations for radionuclides. While Figure 4-1 ("2010 Sampling Locations...") does provide an overview of sampling sites, some of the sampling sites referenced in section 3.1.13 "2007 Investigation" could be located, but Figure 4-1: M015-A, MO25-E, M106-A and M107-A appear to be missing, please include.	**Response to Specific Comment 1.** a) The groundwater sampling results of M108-B are discussed in the last sentence of the third paragraph in Section 3.1.2.3 on page 3-21. The following sentence will be added to the fifth paragraph of Section 3.1.1: "No information regarding the data validation for these samples is known." b) Sampling locations M015-A, M025-E, M106-A and M107-A will be added to Figure 4-1: 2010 Sampling Locations. The following sentence will be added as the last sentence of the third paragraph of Section 4.0: "All sampled locations can be seen on Figure 4-1."
Specific Comment 2. **Section 3.1.13, "2007 Investigation", Page 3-12:** It appears that a conflict of information may exist between section 3.1.13 and Appendix A, Table A2-9. While section 3.1.13 provides some reference to "nine previously sampled locations" that were resampled in 2007 and directs the reader to view the analytical results from the 2007 investigation in Appendix A, the information referencing the locations and depths of sampling in Appendix A do not match with the sampling locations and depths mentioned in section 3.1.13. Please revise section 3.1.13 by providing appropriate analytical results for the sampling sites and depths mentioned in this section and provide commentary for the analytical results presented in Appendix A, Table A2-9 for radionuclides.	**Response to Specific Comment 2.** The last sentence of the second paragraph of Section 3.1.13 will be revised to read: "Analytical results of the 2007 investigation are presented in Appendix A, Table A1-2c." Appendix A1 has the results of investigations conducted prior to the 2010 Investigation, whereas Appendix A2 has the results of the 2010 Investigation. No changes will be made to Table A2-9. The location and depth of sampling information in Section 3.1.13 is consistent with the 2007 investigation data presented in Table A1-2c and does not require further revision.

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT, TRANSFER PARCELS FED-1A, FED-2B, AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010

CTO- FZN0 COMMENTS FROM: LARRY MORGAN, CDPH, 12/7/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 3. **Section 3.2.1.2, last paragraph, Page 3-21:** The second sentence of the paragraph is confusing to the reader. Does the last sentence of the designated paragraph conclude that Transfer Parcels FED-1A, 2B and 2C contain radionuclide activities consistent with background levels in Alameda? Or, is the statement based only upon the results of the limited number of samples analyzed from the 2007 investigation? The reader must conclude that Transfer Parcels FED-1A, 2B and 2C contain radionuclide activities "consistent with established background levels at Alameda Point" based on the assumption that 25 soil samples can adequately represent radiological activity of approximately 700 acres of landfill to a limited depth. In addition, these generalized conclusions can be misinterpreted to classifying the Transfer Parcels as suitable for radiological unrestricted use based upon an assumptive radiological perspective. CDPH cannot concur with the conclusions stated in (1) the last sentence of this paragraph in section 3.2.1.2 and (2) section 3.1.13 ("2007 Investigation) referencing Transfer Parcel FED-1A. Please revise your conclusions to provide clarity and reflect accurate intent.	**Response to Specific Comment 3.** The second to the last sentence of the last paragraph in Section 3.1.13 and the sentence in the second paragraph of Section 3.2.1.2 on page 3-21 will be revised to the following: "The mean radium-226 activity in the soil samples collected during the 2007 Investigation was 0.37 pCi/g, which is very close to the mean activity for background radium at adjacent IR Site 1 of 0.365 pCi/g (TtFW, 2005)." In addition, the following sentences will be added to each of the paragraphs the paragraph: "Based on this limited screening, the parcels do not contain high levels of widespread radiological contamination near the immediate areas and depths of sampling."

References:

Tetra Tech FW, Inc. (TtFW). 2005. Final Installation Restoration Site 1 Radiological Characterization Survey Report, Revision 0, Alameda Point, Alameda, California. August 5.

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010
CTO- FZN0

COMMENTS FROM: DALE SMITH, RAB, 12/18/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 1. Cleanup goals are set for humans rather than ecological receptors. This site attracts several rare and endangered species and should be investigated with those receptors in mind rather than higher tropic receptors and certainly not at industrial levels. VOCs in parcel 5 have not be delineated; the depth of cobalt contamination appears to be limited to an investigation of three feet, and TPH concentrations for soil do not meet safety levels for flora and fauna. There is a lack of adequate data to support the determination for a bioaccumulation factor for several inorganic compounds. This is a significantly different conclusion from assuming a BAF of 1 (as a result of the lack of data) and thus no need for further evaluation. (7-15)	**Response to Specific Comment 1.** There were no unacceptable risks to ecological receptors in Transfer Parcels FED-1A, FED-2B, and FED-2C. As such, cleanup goals were not developed based on ecological receptors. Per Table A2-4, cobalt (and other metals) were sampled down to 8 feet bgs. TPHs are not evaluated as a single analyte in the ecological risk assessment; rather, the individual polycyclic aromatic hydrocarbons are evaluated. Per conclusions of the screening-level ecological risk assessment (SLERA), there were no unacceptable ecological risks. Vinyl chloride was the only volatile organic compound (VOC) reported at concentrations above its maximum contaminant level (MCL) at one of the monitoring wells located at EBS Parcel 5. Vinyl chloride concentrations have been detected above the MCL of 0.5 micrograms per liter in this monitoring well (M025-A) and the concentrations were within acceptable ranges for vapor intrusion concerns for a commercial/industrial scenario. Continuation of annual sampling of M025-A for VOCs (8260) analysis is recommended for a minimum of 1 year. Vinyl chloride has not been detected in monitoring well M025-C, paired with monitoring well M025-A. Further monitoring of M025-C for VOCs is recommended to confirm that VOC levels remain within acceptable ranges and to ensure that VOCs are not migrating to the second water bearing zone. It is common and accepted practice to use literature bioaccumulation factors or regression models in lieu of site-specific bioaccumulation factors (BAFs), especially during a SLERA. Data collection for site-specific BAFs is not usually recommended until later in the Baseline Ecological Risk Assessment process. The SLERA was completed using routinely accepted BAFs and regression models. A default BAF of 1 was used for two metals (beryllium soil to mammal and titanium soil to invertebrate and soil to mammal.).

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010
CTO- FZN0
COMMENTS FROM: DALE SMITH, RAB, 12/18/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 2. Industrial cleanup standards are used to determine risk in the runway wetland area, yet the site is of importance for ecological receptors, in part because of proximity to the tern nesting area, not for human use.	**Response to Specific Comment 2.** A screening-level ecological risk assessment was prepared for the Runway Wetland Area (Neptune, 2002), which provided site-specific ecological information. The screening-level ecological risk assessment concluded that the magnitude and extent of the risk in the Runway Wetland is likely too small to impact populations of plants or animals that utilize the area.
Specific Comment 3. The panhandle is now included in FED-1A, but has not been thoroughly investigated for radiation contamination. Site 32 is just on the other side of the fence and is covered with high concentrations of low-level radiation that may be in dust form. This material could easily have blown into the panhandle over the years and warrants investigation along with other contaminants.	**Response to Specific Comment 3.** A radiological scan, which will detect radiation in the soil, will be conducted in the area between Installation Restoration (IR) Site 1 and IR Site 2, also referred to as the "panhandle area," as part of IR Site 32 radiological survey. The IR Site 32 radiological survey is scheduled for 2011.
Specific Comment 4. The document states that there are few if any native plants in the area, although Audubon has documented many species. This area deserves a qualified biological scientist to investigate the quality of habitat both throughout the runway area and in the runway wetlands that have been described as degraded. I have observed them and don't agree with that assessment. This is the prime time to perform a plant survey, as this is the beginning of our spring for plants and animals and is before nesting season.	**Response to Specific Comment 4.** An updated Wetland Delineation and Preliminary Jurisdictional Determination Report was published by the Department of Veterans Affairs Facilities in August 2008 (EDAW, 2008), and the report agrees that the area has few native plants, but instead is dominated by nonnative plants, primarily of Mediterranean origin. In addition, the report describes the Runway Wetland as follows: "The grassland found in the Runway Wetland area is typical of the nonnative grasslands across the project site, white some areas of the grassland well developed and other areas where the vegetation appears stunted." Therefore, an additional survey in the Runway Wetland is not necessary.

RESPONSE TO COMMENTS ON DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010
CTO- FZN0
COMMENTS FROM: DALE SMITH, RAB, 12/18/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 5. Firefighting chemicals have never been identified, in spite of repeated requests by the RAB. Treasure Island has identified those chemicals used at the USS Pandemonium and both DTSC and the Water Board have required cleanup.	**Response to Specific Comment 5.** As mentioned in the report, there is little information pertaining to the materials and methods used for fire training activities within Transfer Parcel FED-1A. However, IR Site 14, which is located directly to the north of Transfer Parcel FED-1A, has documentation describing fire training activities that occurred within its boundaries. IR Site 14's proximity to the Fire Training Area within Transfer Parcel Fed-1A leads to a reasonable conclusion that materials and methods were likely consistent throughout both areas. As stated in the Final Remedial Investigation Report for IR Sites 14 and 15 (TtEMI, 2003), the fire training activities performed in IR Site 14 involved the use of Ansulite® firefighting foam, carbon dioxide, potassium chloride, and purple K (a compound used to extinguish fires that contains specially fluidized and siliconized potassium bicarbonate dry chemical). Given this information, soil samples were analyzed for volatile organic compounds (VOCs), metals, dioxins/furans, and petroleum (i.e., total petroleum hydrocarbon (TPH)-gasoline, TPH-diesel, and TPH-motor oil).
Specific Comment 6. Will the RAB get to review the USFWS revised biological opinion?	**Response to Specific Comment 6.** The USFWS determines who reviews the biological opinions.
Specific Comment 7. It is doubtful that radium is naturally occurring at the tern nesting area as the site consists of artificial fill.	**Response to Specific Comment 7.** Soil samples analyzed for radium were not collected within the least tern area. Radium has been detected in groundwater at monitoring well M108-B, located within the least tern area and in monitoring well DRA-01, located near the least tern area. These monitoring wells have been added to the Alameda Point Basewide Groundwater Monitoring Program to verify the detected total radium concentrations. If total radium concentrations are detected above screening levels, the samples will be speciated and the results will be further assessed to determine path forward.

RESPONSE TO COMMENTS ON
DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010
CTO- FZN0
COMMENTS FROM: DALE SMITH, RAB, 12/18/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 8. On page 3-14 there is a reference to runway 7 that is not identified on any figures and, as a result, cannot be viewed within the context of this document.	**Response to Specific Comment 8.** The second, third and fourth paragraphs of Section 3.2.1.1 will be revised to read as follows: "EBS Parcel 5 was historically used as a taxiway and runway; grass-covered open space occupied the remainder of the parcel. Structure 467, serving as aircraft-arresting gear, was formerly located along the runway and was associated with AST 467A, located outside the transfer parcel boundary, and 467B, located within the transfer parcel. During the 1994 EBS open space survey, staining was observed beneath AST 467B. Additionally, small stains, generally less than one square foot in size, were observed sporadically along paved areas of the runway in EBS Parcel 5. A dark stain, less than five square feet in size, was observed beneath a cable associated with the arresting gear. One area of asphalt deterioration attributed to jet engine blasts was observed on the western end of the runway. However, during the aerial photograph review conducted during preparation of this SI Report, no significant staining was observed at this EBS parcel. To address staining observed near AST 467B, one surface soil sample was collected during the EBS survey at the location of former AST 467B and analyzed for TPH. TPH was not reported at concentrations above screening criteria."

RESPONSE TO COMMENTS ON
DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C, NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010
CTO- FZN0
COMMENTS FROM: DALE SMITH, RAB, 12/18/10

SPECIFIC COMMENTS	RESPONSE TO SPECIFIC COMMENTS
Specific Comment 9. On page 4-2 naphthalene and lead in groundwater are attributed to background sediment characteristics. At numerous sites naphthalene and lead are found. There has never been a definitive explanation of how this is associated with background conditions as opposed to military or industrial activities.	**Response to Specific Comment 9.** The elevated levels of naphthalene and lead were detected in a grab groundwater sample collected at the bottom of the UST excavation in Area of Concern 3. These elevated levels are most likely a result of sediments in the grab groundwater samples, and are not considered representative of site conditions. To get analytical results that are more representative of site conditions, monitoring well M108-A, located downgradient of the UST excavation, was added to the Alameda Point Basewide Groundwater Monitoring Program. This monitoring well will be sampled quarterly for one year for lead and polycyclic aromatic hydrocarbons, which includes naphthalene. If lead or polycyclic aromatic hydrocarbons are detected above screening levels, the results will be further assessed to determine path forward.

References:

EDAW, Inc. 2008. Wetland Delineation and Preliminary Jurisdictional Determination, Proposed Department of Veterans Affairs Facilities at the former NAS Alameda, Alameda County, California. August 13.

Neptune and Company, Inc. (Neptune). 2002. Draft Runway Wetland Human Health and Ecological Risk Screening Report, Alameda Point, Alameda, California. February 22.

Tetra Tech EM Inc. (TtEMI). 2003c. Final Remediation Investigation Report: Sites 14 and 15, Alameda Point. June 6.

RESPONSE TO COMMENTS ON
DRAFT FINAL SITE INSPECTION REPORT FOR TRANSFER PARCELS FED-1A, FED-2B AND FED-2C,
NAVAL AIR STATION ALAMEDA (ALAMEDA POINT), ALAMEDA, CALIFORNIA

DATED OCTOBER 2010
CTO- FZN0

COMMENTS FROM: DALE SMITH, RAB, 12/18/10

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Appendix M
Solid Waste Management Unit Evaluation Report for Transfer Parcel FED-1A (Prepared by SulTech, 2005) (On CD-ROM)

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Draft

APPENDIX D
SOLID WASTE MANAGEMENT UNIT EVALUATION REPORT FOR FEDERAL TRANSFER PARCEL 1A
Hazardous Waste Permit
EPA ID Number CA 2170023236

Naval Air Station Alameda
(Now Known as Alameda Point)
Alameda, California

NOVEMBER 11, 2005

Prepared for:
Base Realignment and Closure
Program Management Office West
San Diego, California

Prepared by:
SulTech, A Joint Venture of Sullivan Consulting Group and Tetra Tech EM Inc.
1230 Columbia Street, Suite 1000
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Prepared under:
Naval Facilities Engineering Command
Contract Number N687-1103-D-5104
Contract Task Order 012

TC.B012.12245

Draft

Appendix D
Solid Waste Management Unit Evaluation Report for
Federal Transfer Parcel 1A
Hazardous Waste Permit EPA ID Number CA 2170023236
Alameda Point
Alameda, California

Contract Task Order 012
TC.B012.12245

PREPARED FOR:

DEPARTMENT OF THE NAVY

REVIEW AND APPROVAL

Project Manager: _____ Date: 11-11-05
Glynis Foulk, SulTech

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ACRONYMS AND ABBREVIATIONS

AST	Aboveground storage tank
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DTSC	California Environmental Protection Agency Department of Toxic Substances Control
EBS	Environmental baseline survey
EPA	U.S. Environmental Protection Agency
FED	Federal transfer
GAP	Generator accumulation point
ID	Identification
NADEP	Naval Aviation Depot
NAS	Naval Air Station
NFA	No further action
RCRA	Resource Conservation and Recovery Act
RFA	RCRA facility assessment
RFI	RCRA facility investigation
RI	Remedial investigation
SI	Site investigation
SulTech	A joint venture of Sullivan Consulting Group and Tetra Tech EM Inc.
SWMU	Solid waste management unit
Tetra Tech	Tetra Tech EM Inc.
TPH	Total petroleum hydrocarbon
UST	Underground storage tank

EXECUTIVE SUMMARY

The U.S. Department of the Navy, Base Realignment and Closure Program Management Office West, requested that SulTech prepare this solid waste management unit (SWMU) evaluation report to summarize the results of all past assessments and investigations of the SWMUs within federal transfer (FED) parcel 1A at Alameda Point (formerly Naval Air Station [NAS] Alameda) in Alameda County, California. SulTech is a joint venture of Sullivan Consulting Group and Tetra Tech EM Inc. This report was prepared in accordance with Contract Task Order 012, issued under the Architectural-Engineering Services to Provide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Resource Conservation and Recovery Act/Underground Storage Tank Studies, Contract Number N68711-03-D-5104.

A total of 14 SWMUs are located in FED 1A. This report applied the Navy SWMU integration approach to all 14 of the SWMUs in FED 1A; all of these SWMUs are inactive. The integration approach resulted in a recommendation that three of the SWMUs be integrated with the Navy CERCLA program and that 11 be integrated with the Navy's Total Petroleum Hydrocarbon (TPH) program. The three SWMUs recommended for the CERCLA program were evaluated further using the requirements stipulated in the final hazardous waste facility permit for former NAS Alameda (U.S. Environmental Protection Agency Identification Number CA 2170023236) to support further corrective action decisions at Alameda Point (The SWMUs recommended for the TPH program were not evaluated). Based on the evaluations, this report recommends no further action for all three SWMUs. The Navy is requesting concurrence on these recommendations.

D.1.0 INTRODUCTION

The U.S. Department of the Navy, Base Realignment and Closure Program Management Office West, requested that SulTech prepare this solid waste management unit (SWMU) evaluation report to summarize the results of all past assessments and investigations of the SWMUs within federal transfer (FED) parcel 1A at Alameda Point (formerly Naval Air Station [NAS] Alameda) in Alameda County, California. SulTech is a joint venture of Sullivan Consulting Group and Tetra Tech EM Inc. (Tetra Tech). This report was prepared in accordance with Contract Task Order 012, issued under the Architectural-Engineering Services to Provide Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/Resource Conservation and Recovery Act (RCRA)/Underground Storage Tank (UST) Studies, Contract Number N68711-03-D-5104.

This evaluation report describes the procedures for, methods used in, and results of facility assessments and investigations of the SWMUs in FED 1A and describes the general approach to investigating and evaluating potential remedies pertaining to SWMU corrective measures and closure at Alameda Point.

The SWMUs addressed in this report were evaluated using the requirements stipulated in the final hazardous waste facility permit for former NAS Alameda (U.S. Environmental Protection Agency [EPA] Identification [ID] Number CA 2170023236) to support further corrective action decisions at Alameda Point (California Environmental Protection Agency Department of Toxic Substances Control [DTSC] 1993).

The remainder of this appendix is divided into four sections. Section D.2.0 provides background information and the Navy's approaches for evaluating the SWMUs at Alameda Point. Section D.3.0 presents an evaluation for the SWMUs in FED 1A, and Section D.4.0 summarizes recommendations for the SWMUs. Finally, Section D.5.0 provides the references used to prepare this evaluation report.

D.2.0 BACKGROUND AND APPROACHES FOR EVALUATIONS OF SOLID WASTE MANAGEMENT UNITS

A "SWMU" is any unit at a hazardous waste facility from which hazardous constituents might migrate, irrespective of whether the unit was intended to manage wastes (Title 22 *California Code of Regulations* Section 66260.10). SWMUs at Alameda Point include areas of concern, generator accumulation points (GAP), CERCLA sites, oil-water separators, aboveground storage tanks (AST), USTs, washdown areas, and miscellaneous sites.

The following sections describe the history of SWMU assessments and investigations at Alameda Point (see Figure D2-1) and the Navy's approaches for ensuring that the results of the

assessments and investigations are evaluated in a manner consistent with the requirements of RCRA.

D.2.1 HISTORY OF SOLID WASTE MANAGEMENT UNIT ASSESSMENTS AND INVESTIGATIONS

Most of the SWMUs at Alameda Point were first identified in 1991 in an initial RCRA facility assessment (RFA) (DTSC 1992), which was required to obtain a permit to manage hazardous wastes in a number of specific management units that were no longer in operation at Alameda Point. According to Sections V.F through V.J of the final hazardous waste facility permit for Alameda Point (EPA ID CA 2170023236), information to support corrective action decisions for each SWMU was to be collected and submitted to DTSC. The permit described a typical RCRA corrective action process, which involves an analysis of RFA data to identify the SWMUs that require further evaluation in a RCRA facility investigation (RFI) and requires the Navy to identify additional SWMUs, as appropriate, and include them in the corrective action process.

The initial RFA identified 151 SWMUs and concluded that a number of them would need further investigation under an RFI, which is usually conducted under a series of RCRA permit modifications. After the final RCRA permit was issued, however, the Navy and the regulatory agencies concluded that the most efficient and effective approach for assessing any additional SWMUs and conducting RFIs would be to take advantage of functionally equivalent investigations. These investigations have been and continue to be conducted under a number of other Navy environmental programs. Types of investigations include environmental baseline surveys (EBS) under the Base Realignment and Closure property transfer program; investigations of possible releases of total petroleum hydrocarbons (TPH) from sources such as pipelines, USTs, and ASTs under the TPH program; and SIs and remedial investigations (RI) under the CERCLA program. Subsequent to the RFA and as a result of the investigations described previously, 215 additional SWMUs were identified and assessed at Alameda Point. These additional SWMUs were included in the final supplemental EBS (Tetra Tech 2003a).

The Navy received a letter dated November 1999 from DTSC with comments on the SWMUs after DTSC had reviewed the draft EBS; the final EBS was submitted in 2001 (International Technology Corporation 2001). DTSC concurred with the recommendation in the EBS for no further action (NFA) for some of the SWMUs. DTSC withheld concurrence with NFA for most of the SWMUs located within a CERCLA site, however, pending resolution of each site's RI report (DTSC 1999).

Recognizing that the investigation and management of SWMUs had been divided among a number of Navy programs, the Navy developed a SWMU evaluation approach coupled with a SWMU integration approach to ensure that all the SWMUs at Alameda Point would be managed under the appropriate Navy program and would receive appropriate response actions. These two SWMU approaches are described in Sections D.2.2 and D.2.3 of this report.

D.2.2 SOLID WASTE MANAGEMENT UNIT EVALUATION APPROACH

The SWMU evaluation approach is a three-step process that begins by listing the SWMUs identified and investigated under each Navy program. In the next step, a SWMU profile is compiled for each SWMU; these profiles consist of descriptive information on each SWMU, the name of the Navy program that provided the functional equivalent of an RFA (and in some cases, an RFI) for the SWMU, and the results of all investigations conducted on the SWMU, including figures and tables, as needed. In the final step, each SWMU profile is analyzed to determine whether the functional equivalents of the elements of a RCRA corrective action process have been conducted and whether any additional actions are needed.

D.2.3 SOLID WASTE MANAGEMENT UNIT INTEGRATION APPROACH

The purpose of the SWMU integration approach is to facilitate appropriate actions for all SWMUs under the appropriate Navy and regulatory programs. The approach allows final decisions to be made for basewide integration concerning each SWMU, so that petroleum-related SWMUs are addressed under the TPH program and most other SWMUs are addressed under the CERCLA program. Under the integration approach, CERCLA remedial actions or TPH corrective actions will comply with any RCRA corrective action requirements for the SWMUs. Figure D2-2 shows the SWMU integration approach.

Based on an evaluation of each of the SWMU profiles according to the steps in the SWMU evaluation process (see Section D.2.2), the Navy is recommending either NFA or further action for each SWMU. If further action is recommended, the appropriate Navy program will comply with any future RCRA corrective action requirements for the SWMUs. On an ongoing basis, the SWMUs will be evaluated to determine whether a SWMU has been or is being investigated under the appropriate Navy program. If a SWMU is found to be in the wrong program, it will be moved to the appropriate program.

Before the integration approach was developed, the Navy and the regulators had decided that the "regulated" waste management units originally included in the interim status document and final permit for Alameda Point (EPA ID CA 2170023236) would continue to be investigated and closed under the Navy's RCRA program, with oversight from DTSC. These regulated units are, therefore, not included in the integration approach and are not described in this report.

As a result of the SWMU integration approach, some of the SWMUs located within FED 1A were integrated with the CERCLA program and are evaluated in this report (see Table D2-1). The remaining SWMUs located in FED 1A were integrated with the TPH program and are not evaluated in this report (see Table D2-2).

The SWMU integration approach was submitted to DTSC in May 2004 for review; DTSC has not yet decided to accept the integration approach.

D.3.0 SOLID WASTE MANAGEMENT UNIT EVALUATION

Figure D3-1 shows the location of all of the SWMUs within FED 1A, including the SWMUs integrated with the CERCLA and TPH programs. Table D3-1 presents profiles for each of the SWMUs integrated with the CERCLA program. Each profile provides descriptive information on a SWMU, identifies the Navy program that was used to investigate the SWMU, and presents the results of the investigation. Each profile also recommends either NFA or further action. One profile refers to a figure (see Figure D3-2) that provides analytical data from soil or groundwater samples collected near the SWMU to examine potential sources of contamination and migration pathways. The analytical results are compared with preliminary remediation criteria for TPH listed in the closure strategy for petroleum-contaminated sites (Navy 2001), residential preliminary remediation goals for soil (EPA 1996, 2002, 2004), background concentrations for metals in soil (Tetra Tech 2001b), or maximum contaminant levels for groundwater (California Department of Health Services 2003), as appropriate.

D.4.0 RECOMMENDATIONS

Of the 14 SWMUs within FED 1A evaluated in this report, three are recommended for integration into the CERCLA program and 11 are recommended for integration into the TPH program. Evaluation of the three SWMUs recommended for the CERCLA program resulted in recommendations of NFA for all of them. The SWMUs recommended for the TPH program were not evaluated. The Navy is requesting concurrence on these recommendations.

D.5.0 REFERENCES

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EPA. 2004. "Region 9 Preliminary Remediation Goals." October.

FIGURES

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE D2-1 – ALAMEDA POINT LOCATION

FOR ADDITIONAL INFORMATION, CONTACT:

DIANE C. SILVA, COMMAND RECORDS MANAGER, CODE EV33
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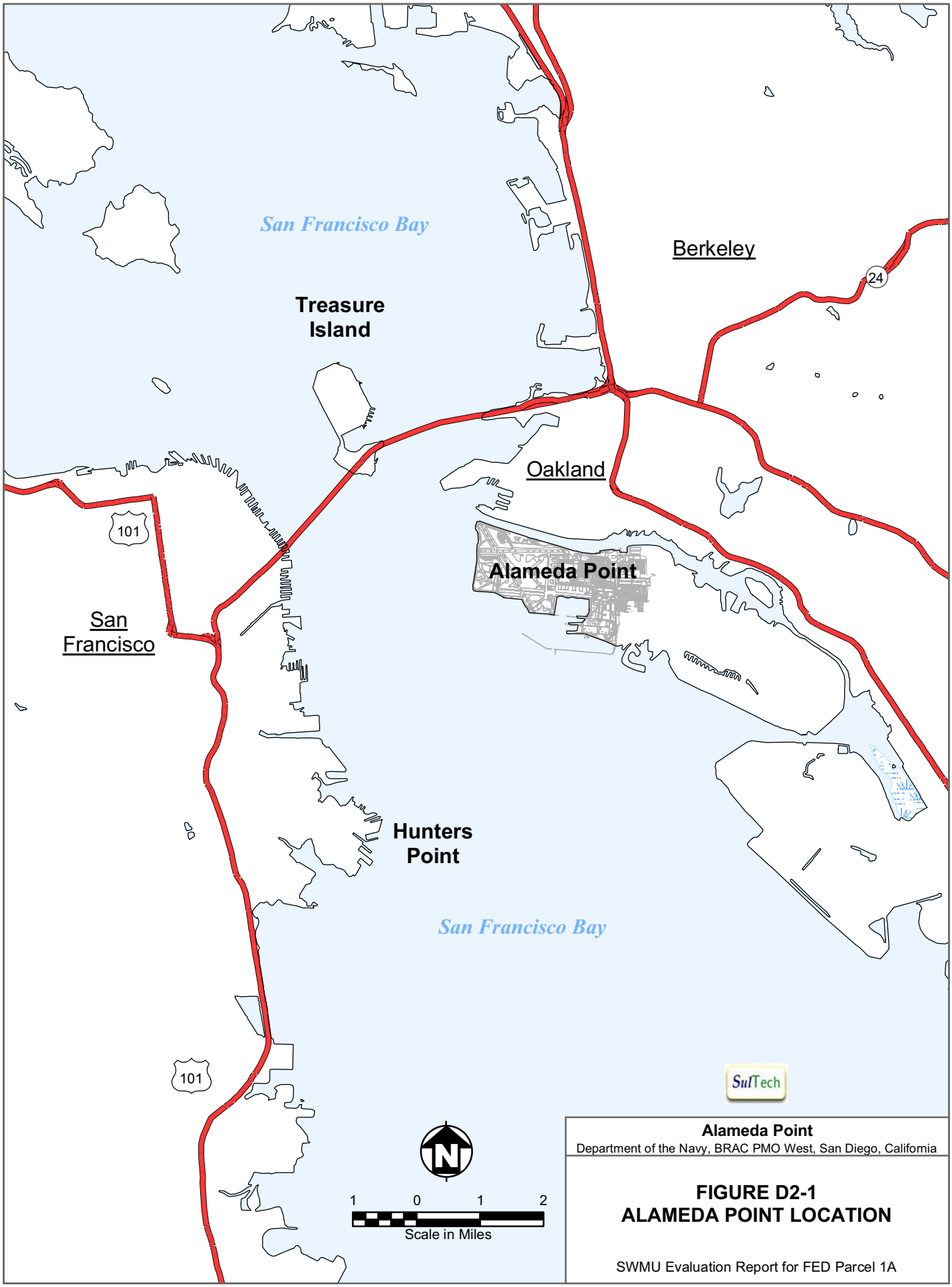
1220 PACIFIC HIGHWAY (NBSD BLDG. 3519)
SAN DIEGO, CA 92132

TELEPHONE: (619) 556-1280
E-MAIL: diane.silva@navy.mil

SENSITIVE



Alameda Point
Department of the Navy, BRAC PMO West, San Diego, California

FIGURE D2-1
ALAMEDA POINT LOCATION

SWMU Evaluation Report for FED Parcel 1A

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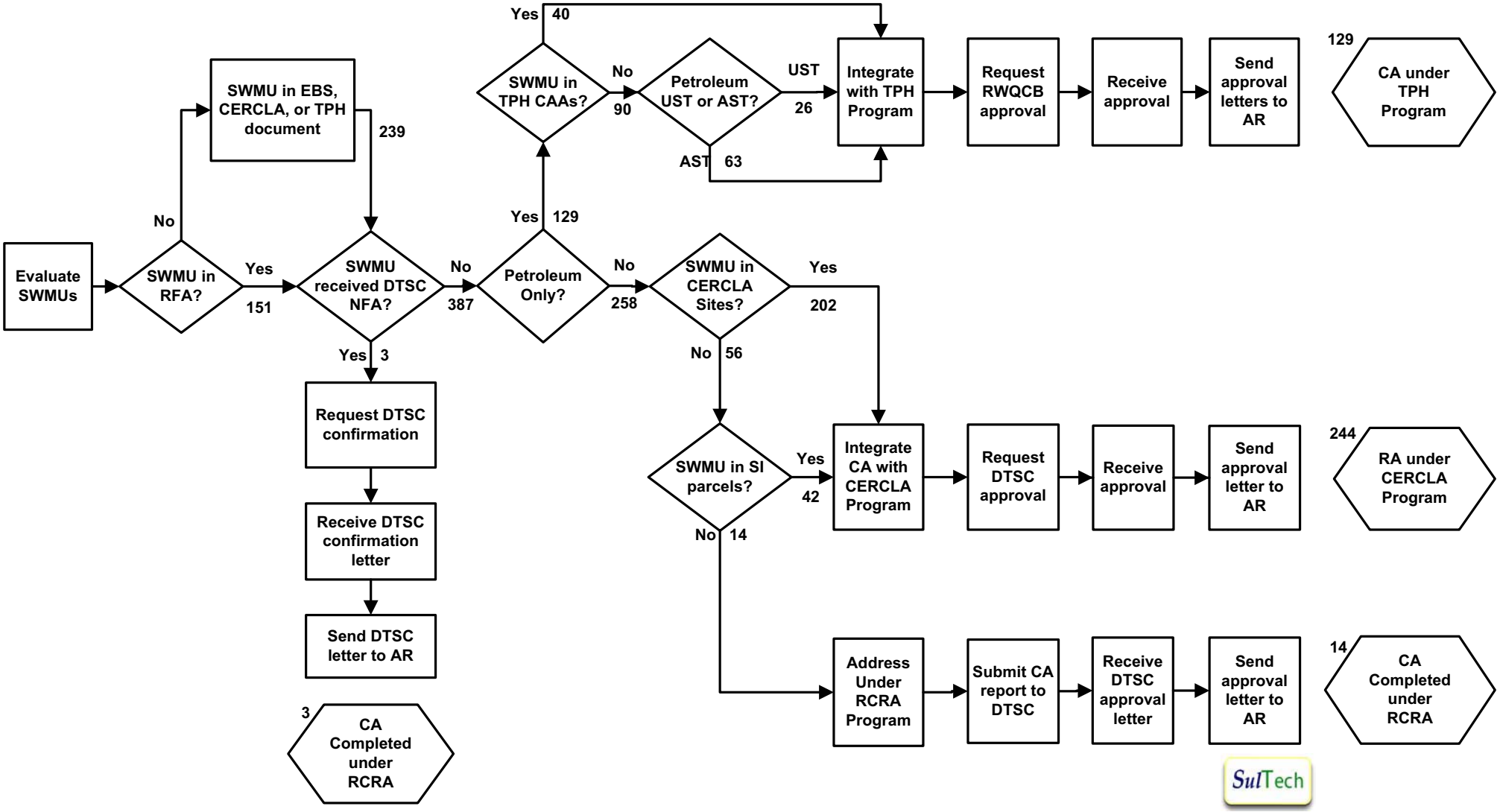
SENSITIVE



NOTES

1. SWMUs include CERCLA sites, USTs, ASTs, oil-water separators, washdown areas, and underground fuel pipelines but exclude RCRA-regulated units
2. Numbers indicate number of SWMUs

ACRONYMS

AR	Administrative Record
AST	Aboveground Storage Tank
CA	Corrective Action
CAA	Corrective Action Area
CERCLA	Comp. Env. Resp., Compensation, and Liability Act
DTSC	Cal EPA Department of Toxic Substances Control
EBS	Environmental Baseline Survey
NFA	No Further Action
RA	Response Action
RCRA	Resource Conservation and Recovery Act
RFA	RCRA Facility Assessment
RWQCB	Regional Water Quality Control Board
SI	Site Investigation
SWMU	Solid Waste Management Unit
TPH	Total Petroleum Hydrocarbon
UST	Underground Storage Tank

Alameda Point
Department of the Navy, BRAC PMO West, San Diego, CA

FIGURE D2-2
SOLID WASTE MANAGEMENT UNIT INTEGRATION APPROACH
RCRA Hazardous Waste Facility Permit
EPA ID CA 2170023236
NAS Alameda, Alameda, CA

Updated October 26, 2005

N00236_003722
ALAMEDA POINT

SENSITIVE RECORD

PORTIONS OF THIS RECORD ARE CONSIDERED SENSITIVE AND ARE NOT AVAILABLE FOR PUBLIC VIEWING

FIGURE D3-1 – SWMUs LOCATED WITHIN PARCEL 1A

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SENSITIVE

ABOVEGROUND STORAGE TANK, REMOVED

SWMUs INTEGRATED WITH THE TPH PROGRAM

BUILDING

Present

Removed

CERCLA SITE

DISPOSAL PARCEL FED-1A

ENVIRONMENTAL BASELINE SURVEY PARCEL AND NUMBER

LAND COVER

WASHDOWN AREA

WATER

Notes:

AST = Aboveground storage tank
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act of 1980
FED = Federal transfer
SWMU = Solid Waste Management Unit
TPH = Total petroleum hydrocarbon
WD = Washdown area

N

300 0 300 600 Feet

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Alameda Point
Department of the Navy, BRAC PMO West, San Diego, California

FIGURE D3-1
SWMUs LOCATED WITHIN FED PARCEL 1A

SWMU Evaluation Report for FED Parcel 1A

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SENSITIVE

023-005-028	023-0046
Depth (feet)	3.0 to 4.0
Sample Date	11/07/95
Petroleum products in soil (mg/kg):	
TPH-diesel	NA
TPH-gasoline	0.56 U
TPH-motor oil	NA
Volatile organic compounds in soil not detected at reported values.	
Only the following detection of semivolatile organic compounds occurred in soil (units are mg/kg):	
Butylbenzylphthalate	0.039 J

023-005-028	023-0047
Depth (feet)	8 to 9
Sample Date	11/07/95
Petroleum products in shallow groundwater (µg/L):	
TPH-diesel	130 dYJ
TPH-gasoline	50 U
TPH-motor oil	200 U
Volatile organic compounds in shallow water not detected at reported values.	
Semivolatile organic compounds in shallow water not detected at reported values.	

023-005-029	023-0075	023-0048
Depth (feet)	3.0 to 4.0	3.0 to 4.0
Sample Date	11/07/95	11/07/95
Petroleum products in soil (mg/kg):		
TPH-diesel	27 U	28 U
TPH-gasoline	0.56 U	0.58 U
TPH-motor oil	27 U	28 U
Only the following detection of volatile organic compounds occurred in soil (units are mg/kg):		
Acetone	0.015 J	0.011 U
Methylene chloride	0.005 J	0.011 U
Only the following detection of semivolatile organic compounds occurred in soil (units are mg/kg):		
Bis(2-ethylhexyl)phthalate	0.54 U	0.066 J
Butylbenzylphthalate	0.12 J	0.27 J

023-005-029	023-0049
Depth (feet)	8 to 9
Sample Date	11/07/95
Petroleum products in shallow groundwater (µg/L):	
TPH-diesel	140 dYJ
TPH-gasoline	50 U
TPH-motor oil	200 U
Volatile organic compounds in shallow water not detected at reported values.	
Semivolatile organic compounds in shallow water not detected at reported values.	

AST 407A
AST 407B
AST 599B
WD 259
SITE 26
SITE 5
SITE 33
OTH 23-1
OTH 23-2

SOIL AND GROUNDWATER SAMPLING LOCATION
ABOVEGROUND STORAGE TANK, REMOVED
CATCH BASIN
MANHOLE
STORM SEWER LINE

BUILDING
Present
Removed

CERCLA SITE
DISPOSAL PARCEL FED-1A
ENVIRONMENTAL BASELINE SURVEY PARCEL AND NUMBER
LAND COVER
WASHDOWN AREA

Notes:

µg/L = Micrograms per liter
AST = Aboveground storage tank
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act of 1980
EBS = Environmental Baseline Survey
FED = Federal transfer
J = Analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample
mg/kg = Milligrams per kilogram
NA = Not analyzed
TPH = Total petroleum hydrocarbons
U = Analyzed for, but not detected (at reported value)
WD = Washdown area
Y = Hydrocarbon mixture did not exhibit a reasonable pattern match with the calibration standard

100 0 100 200 Feet

SulTech

Alameda Point
Department of the Navy, BRAC PMO West, San Diego, California

FIGURE D3-2
EBS PARCEL 23
SAMPLING RESULTS

SWMU Evaluation Report for FED Parcel 1A

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TABLES

TABLE D2-1: SOLID WASTE MANAGEMENT UNITS INTEGRATED WITH THE CERCLA PROGRAM IN FED PARCEL 1A AT ALAMEDA POINT

Solid Waste Management Unit Evaluation Report for Federal Transfer Parcel 1A

EBS Subparcel	Identification	Navy Recommendation/ Closure Status	Refer to Figure for Sample Results
23	AST 407A	NFA Recommended	NA
23	AST 407B	NFA Recommended	NA
23	WD 259	NFA Recommended	Figure D3-2

Notes:

AOC	Area of concern
AST	Aboveground storage tank
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
EBS	Environmental baseline survey
EDC	Economic development conveyance
GAP	Generator accumulation point
NA	Not applicable
NADEP	Naval Aviation Depot
NAS	Naval Air Station
NFA	No further action
OWS	Oil-water separator
(R)	RCRA
RCRA	Resource Conservation and Recovery Act
SWMU	Solid waste management unit
UST	Underground storage tank
WD	Washdown

TABLE D2-2: SOLID WASTE MANAGEMENT UNITS INTEGRATED WITH THE TOTAL PETROLEUM HYDROCARBON PROGRAM IN FED PARCEL 1A AT ALAMEDA POINT

Solid Waste Management Unit Evaluation Report for Federal Transfer Parcel 1A

EBS Subparcel	Identification	Material Stored/Disposed	Navy Recommendation/ Closure Status
5	AST 467B	Diesel	NFA Recommended
23	AST 483A	Diesel	NFA Recommended
23	AST 483B	Diesel	NFA Recommended
23	AST 485B	Diesel	NFA Recommended
23	AST 488	AVGAS	Further Action Recommended
23	AST 495A	Diesel	NFA Recommended
23	AST 495B	Diesel	NFA Recommended
23	AST 496	Diesel	NFA Recommended
23	AST 499	Diesel	NFA Recommended
23	AST 599A	Diesel	NFA Recommended
23	AST 599B	Diesel	NFA Recommended

Notes:

ASTs and USTs containing petroleum are being addressed by RWQCB. ASTs evaluated in assessment report (SulTech 2004).

AOC	Area of concern
AST	Aboveground storage tank
AVGAS	Aviation gas
EBS	Environmental baseline survey
EDC	Economic development conveyance
GAP	Generator accumulation point
NA	Not applicable
NAS	Naval Air Station
NFA	No further action
OWS	Oil-water separator
(R)	RCRA
RCRA	Resource Conservation and Recovery Act
RWQCB	Regional Water Quality Control Board
SWMU	Solid waste management unit
UST	Underground storage tank

TABLE D3-1: PROFILES FOR SOLID WASTE MANAGEMENT UNITS IN FED PARCEL 1A INTEGRATED WITH CERCLA PROGRAM

SWMU Identifier **AST 407A** **Refer to Figure #** NA

Navy Recommendation/Closure Status **NFA Recommended**

Location Description

Disposal Parcel FED 01A **CERCLA Site** NA

EBS Subparcel 23 **TPH CAA** NA

Associated Building 407 **Building Status** Present **Leasing Status** Not leased by ARRA

Building Name Liquid Nitrogen and Oxygen Storage

Additional Information South of Building 407; approximate location

Operational Information for SWMU

Type of Unit Aboveground Storage Tank(s)

Capacity (gallons) 6,000

Period of Operation Unknown

Material Managed at SWMU Liquid oxygen

Source of Initial SWMU Identification

SWMU # in RFA Not identified in RFA **Recommendation in RFA** NA

Recommendation for NFA from DTSC in 1999 NA

SWMU Identified in Other Sources EBS (IT 2001)

Tank-Related Information

Status of Tank Removed

Status of Associated Aboveground Pipes Removed

Data Analysis

Former content of tank does not meet the definition of a hazardous material, hazardous waste, or petroleum product. Oxygen is a gas at standard temperature and atmospheric pressure. Any release would immediately volatilize. Oxygen is not a chemical contaminant of concern. There is no reason to suspect subsurface contamination from this tank. No further action is recommended for AST 407A.

Nondetect Review:

NA

Site Visit(s)

AST removed prior to 2002 site visit.

SWMU Identifier **AST 407B** **Refer to Figure #** NA

Navy Recommendation/Closure Status **NFA Recommended**

Location Description

Disposal Parcel FED 01A **CERCLA Site** NA

EBS Subparcel 23 **TPH CAA** NA

Associated Building 407 **Building Status** Present **Leasing Status** Not leased by ARRA

Building Name Liquid Nitrogen and Oxygen Storage

Additional Information South of Building 407; approximate location

Operational Information for SWMU

Type of Unit Aboveground Storage Tank(s)

Capacity (gallons) 6,000

Period of Operation Unknown

Material Managed at SWMU Liquid oxygen

Source of Initial SWMU Identification

SWMU # in RFA Not identified in RFA **Recommendation in RFA** NA

Recommendation for NFA from DTSC in 1999 NA

SWMU Identified in Other Sources EBS (IT 2001)

Tank-Related Information

Status of Tank Removed **Status of Associated Aboveground Pipes** Removed

Data Analysis

Former content of tank does not meet the definition of hazardous material, hazardous waste, or petroleum product. Oxygen is a gas at standard temperature and atmospheric pressure. Any release would immediately volatilize. Oxygen is not a chemical contaminant of concern. There is no reason to suspect subsurface contamination from this tank. No further action is recommended for AST 407B.

Nondetect Review:

NA

Site Visit(s)

AST removed prior to 2002 site visit.

SWMU Identifier **WD 259** **Refer to Figure #** Figure D3-2

Navy Recommendation/Closure Status **NFA Recommended**

Location Description

Disposal Parcel FED 01A **CERCLA Site** NA

EBS Subparcel 23 **TPH CAA** NA

Associated Building 259 **Building Status** Present **Leasing Status** Not leased by ARRA

Building Name Aircraft Rinse Facility

Additional Information Building 259 Aircraft Rinse Facility; no OWS

Operational Information for SWMU

Type of Unit Washdown Area

Capacity (gallons) NA

Period of Operation Unknown

Material Managed at SWMU Wastewater from cleaning aircraft or large machinery

Source of Initial SWMU Identification

SWMU # in RFA Not identified in RFA **Recommendation in RFA** NA

Recommendation for NFA from DTSC in 1999 NA

SWMU Identified in Other Sources CERFA EBS (ERM-West 1994); EBS (IT 2001)

Tank-Related Information

Status of Tank NA **Status of Associated Aboveground Pipes** NA

Data Analysis

WD 259 is located in the southeast portion of EBS Parcel 23 and is not within a CAA or a CERCLA site boundary. This area was previously used as an aircraft rinse facility and for plane taxiing, plane parking, and munitions storage (ERM-West 1994). The WD activities began around 1983 and involved the rinsing of residuals (for example, fuel and dirt) from aircraft exteriors. Fluids appear to have drained to the storm sewer (IT 2001). WD 259 was investigated as part of the Phase 2B EBS, Zone 4, Parcel 23, evaluation data summary report (IT 2001). As depicted on the figure for Site 14, subsurface soil and groundwater samples were collected from the WD area and analyzed for TPH, VOCs, and SVOCs. TPHs in soil and groundwater were either not detected or detected at concentrations below PRC (Navy 2001). VOCs and SVOCs in soil were either not detected or detected at concentrations below residential PRGs (EPA 2004). VOCs and SVOCs in groundwater were either not detected or detected at concentrations below tap water PRGs (EPA 2004) and MCLs (California Department of Human Health 2003). No further investigation was recommended (IT 2001). Based on the evaluation data summary report, no further action is recommended for WD 259.

Nondetect Review:

Nondetect values were compared with 2004 Region 9 residential PRGs and Cal-modified PRGs, when available; groundwater nondetect values were also compared to California MCLs. All nondetect values for VOCs in soil less than PRGs. All nondetect values for SVOCs in soil less than PRGs except benzo(a)pyrene, bis(2-chloroethyl)ether, dibenzo(a,h)anthracene, and hexachlorobenzene.

All nondetect values for VOCs in groundwater less than PRGs and MCLs (when available) except chloroform, dibromochloromethane, and bromodichloromethane; the nondetect values were greater than PRGs but less than or equal to MCLs for benzene, carbon tetrachloride, cis-1,3-dichloropropene, 1,2-dichloroethane, 1,2-dichloropropane, tetrachloroethene, 1,1,2-trichloroethane, 1,1,2,2-tetrachloroethane, trans-1,3-dichloropropene, and vinyl chloride. All nondetect values for SVOCs in groundwater less than PRGs and MCLs (when available) except benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, bis(2-chloroethyl)ether, bis(2-ethylhexyl)phthalate, carbazole, chrysene, 1,4-dichlorobenzene, dibenzo(a,h)anthracene, 3,3-dichlorobenzidine, hexachlorobenzene, hexachlorobutadiene, hexachloroethane, indeno(1,2,3-cd)pyrene, naphthalene, 3-nitroaniline, 4-nitroaniline, nitrobenzene, N-nitroso-di-N-propylamine, pentachlorophenol, 2,4,6-trichlorophenol, and 1,2,4-trichlorobenzene.

Site Visit(s)

2002 visit: Area is vacant with exception of WD water supply pump equipment. WD fluids appear to flow to underground piping.

TABLE D3-1: PROFILES FOR SOLID WASTE MANAGEMENT UNITS IN FED PARCEL 1A INTEGRATED WITH CERCLA PROGRAM

Solid Waste Management Unit Evaluation Report for Federal Transfer Parcel 1A
Listed in EBS Parcel Order

Notes:

% = Percentage
ug/kg = Micrograms per kilogram
ug/L = Micrograms per liter
AOC = Area of concern
ARRA = Alameda Reuse and Redevelopment Authority
AST = Aboveground storage tank
bgs = Below ground surface
BTEX = Benzene, toluene, ethylbenzene, and xylenes
CAA = Corrective action area
CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act
CERFA = Community Environmental Response Facilitation Act
CRS = Coolant Recovery System
DTSC = California Environmental Protection Agency Department of Toxic Substances Control
EBS = Environmental baseline survey
EDC = Economic development conveyance
EPA = U.S. Environmental Protection Agency
ERM-West = Environmental Resource Management - West
FED = Federal agency-to-agency transfer
FSP = Field sampling plan
ft = Foot
Gal = gallon
GAP = Generator accumulation point
GW = Groundwater
ID = Identification
IT = International Technology Corporation
IWTP = Industrial wastewater treatment plant
JP = Jet propellant
M = Miscellaneous area identified in the RFA
MCL = Maximum contaminant level
MEK = Methyl ethyl ketone
mg/kg = Milligrams per kilogram
mg/L = milligrams per liter
MINS = Mare Island Naval Shipyard
mL = milliliter
NA = Not applicable
NADEP = Naval Aviation Depot Alameda
NARF = Naval Air Rework Facility Alameda
NAS = Naval Air Station
Navy = U.S. Department of the Navy
ND = Not detected
NE = Northeast
NFA = No further action
NW = Northwest
OU = Operable Unit
OWS = Oil-water separator
PAH = Polynuclear aromatic hydrocarbons
PCB = Polychlorinated biphenyl
PMB = Plastic material blasting
PPM = Parts per million
PRC = Preliminary remediation criteria
PRG = Preliminary remediation goal
PWC = Navy Public Works Center
(R) = RCRA-related UST
RCRA = Resource Conservation and Recovery Act
RFA = RCRA facility assessment
RFI = RCRA facility investigation
RI = Remedial investigation
RI/FS = Remedial investigation and feasibility study
RWQCB = Regional Water Quality Control Board
SE = Southeast
SEBS = Supplemental environmental baseline survey
SSPORTS = Supervisor of Shipbuilding, Conversion, and Repair, Portsmouth, Virginia
SVOC = Semivolatile organic compound
SW = Southwest
SWARF = Refers to machine and grinding coolant
SWMU = Solid waste management unit
TCA = Trichloroethane
Tetra Tech = Tetra Tech EM Inc.
TPH = Total petroleum hydrocarbons
TPHd = Total petroleum hydrocarbons as diesel
TPHg = Total petroleum hydrocarbons as gasoline
TPHmo = Total petroleum hydrocarbons as motor oil
USFWS = U.S. Fish and Wildlife Service
UST = Underground storage tank
VOC = Volatile organic compound
WD = Washdown area